HP Storage Operations Manager

Software Version: 10.00
Linux® operating system

Content Pack for EMC DMX Performance Statistics Universe Reference

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Acknowledgements

This product includes software developed by the Apache Software Foundation.
(http://www.apache.org)

This product includes software developed by the Indiana University Extreme! Lab.
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Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
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Universe Parameters

Definition

Name:	SOM_EMCDMXPerfReporting Universe
Description:	
Connection:	MA0.015234868198070628

General information

Created:	2/5/2015 by Administrator
Modified:	2/25/2015 by Administrator
Comments:	
Statistics:	59 Classes 1309 Objects 27 Tables 0 Aliases 37 Joins 12 Contexts 8 Hierarchies 24 Conditions

Strategies

Join strategy:	Edit Manually (none)
Table strategy:	(Built-in) Standard
Object strategy:	(Built-in) Standard Renaming

Controls

Limit size of result set to:	unchecked
Limit size of long text objects to:	1000 characters
Limit execution time to:	10 minutes
Warn if cost estimate exceeds:	unchecked

SQL parameters

Query	
Allow use of subqueries:	yes
Allow use of union, intersect and minus operators:	yes
Allow complex conditions in Query Panel:	yes
Cartesian products:	warn
Multiple paths	
Generate several SQL statements for each context:	yes
Generate several SQL statements for each measure:	yes
Allow selection of multiple contexts:	no

Links

No links for this universe

Object Properties

Class:	SOM_EMCDMXPerfReporting_Core
Description:	

No objects

Class:	EMC Symmetrix Storag e System Performance Statistics
Description:	EMC Symmetrix Storage System Performance Statistics

No objects

Class:	SymmetrixStorageSyst em(EMC Symmetrix Sto rage System Performan ce Statistics)
Description:	

Object:	SOM Source Name
Type:	Character
Description:	Name of the source SOM server
Select equivalent:	K_SE_StorageSystem.SEiSourceName
Where equivalent:	
Qualification:	dimension
List of values:	001, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Tenant Name
Type:	Character
Description:	Tenant Name
Select equivalent:	K_SE_StorageSystem.TenantName
Where equivalent:	
Qualification:	dimension

List of values: 002, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Vendor
Type: Character
Description: Storage system vendor name
Select equivalent: K_SE_StorageSystem.Vendor
Where equivalent:

Qualification: dimension
List of values: 003, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Model
Type: Character
Description: Storage System Model Number
Select equivalent: K_SE_StorageSystem.Model
Where equivalent:

Qualification: dimension
List of values: 004, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System Name
Type: Character
Description: Name of the Storage System
Select equivalent: K_SE_StorageSystem.StorageSystemName
Where equivalent:

Qualification: dimension
List of values: 005, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System Description

Type:	Character
Description:	Description about Storage System
Select equivalent:	K_SE_StorageSystem.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	006, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Discovery Status
Type:	Character
Description:	The discovery status of th e storage system such as CREATED, CONTACTED, MISS ING, GENERIC
Select equivalent:	K_SE_StorageSystem.DiscoveryStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	007, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System IP Address
Type:	Character
Description:	IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.IPAddress
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	008, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System DNS
Type:	Character

Description:	DNS name of the Storage System
Select equivalent:	K_SE_StorageSystem.DNSName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	009, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System WWN
Type:	Character
Description:	World Wide Number of the Storage System
Select equivalent:	K_SE_StorageSystem.WWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00a, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System SerialNumber
Type:	Character
Description:	Serial Number of the Storage System
Select equivalent:	K_SE_StorageSystem.SerialNumber
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00b, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Status
Type:	Character
Description:	Operational status of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00c, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Reset Capability?
Type:	Character
Description:	Has Reset Capability (flag)
Select equivalent:	K_SE_StorageSystem.HasResetCapability
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00d, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Advanced Retention Management?
Type:	Character
Description:	Has Advanced Retention Management (flag)
Select equivalent:	K_SE_StorageSystem.HasAdvRetentionMgmt
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00e, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Cache Block Size
Type:	Number
Description:	Cache Block Size
Select equivalent:	K_SE_StorageSystem.CacheBlockSize
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00f, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Compliance Mode?
Type:	Character
Description:	Has Compliance Mode (flag)
Select equivalent:	K_SE_StorageSystem.HasComplianceMode
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00g, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Domain
Type:	Character
Description:	Domain of the Storage System
Select equivalent:	K_SE_StorageSystem.Domain
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00h, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Over Subscribed Capacity
Type:	Character
Description:	Over Subscribed Capacity
Select equivalent:	K_SE_StorageSystem.OverSubscribedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00i, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Requested Capacity
Type:	Character
Description:	Requested Capacity
Select equivalent:	K_SE_StorageSystem.RequestedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00j, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Is Manageable?
Type:	Character
Description:	Is Manageable
Select equivalent:	K_SE_StorageSystem.IsManageable
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00k, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Volume Name Length
Type:	Character
Description:	Maximum allowed length for Volume Names
Select equivalent:	K_SE_StorageSystem.MaxVolumeNameLength
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00l, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication IP
Type:	Character
Description:	Replication IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationIP

Where equivalent:

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00m, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Pools
Type:	Character
Description:	Replication Pools of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationPools
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00n, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Status
Type:	Character
Description:	Replication Status of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00o, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage On Access
Type:	Character
Description:	Storage On Access (flag)
Select equivalent:	K_SE_StorageSystem.StorageOnAccess
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name

List of values:	00p, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Business Cost
Type:	Number
Description:	Business Cost of the Storage System
Select equivalent:	K_SE_StorageSystem.BusinessCost
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00q, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	DKC Microcode Version
Type:	Character
Description:	DKC Microcode Version of the Storage System
Select equivalent:	K_SE_StorageSystem.DKCMicrocodeVersion
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00r, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Family
Type:	Character
Description:	Family of the Storage System
Select equivalent:	K_SE_StorageSystem.Family
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00s, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hardware Version
Type:	Character
Description:	Hardware Version of the Storage System
Select equivalent:	K_SE_StorageSystem.HardwareVersion
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00t, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Identifying Descriptions
Type:	Character
Description:	Identifying Descriptions for the Storage System
Select equivalent:	K_SE_StorageSystem.IdentifyingDescriptions
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00u, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Other Identifying Info
Type:	Character
Description:	Other Identifying Info for the Storage System
Select equivalent:	K_SE_StorageSystem.OtherIdentifyingInfo
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00v, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Provider Tag
Type:	Character

Description:	Provider Tag of the Storage System
Select equivalent:	K_SE_StorageSystem.ProviderTag
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00w, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent Name
Type:	Character
Description:	Parent Name for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00x, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent UUID
Type:	Character
Description:	Parent UUID for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentUUID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	00y, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Power Management
Type:	Character
Description:	Power Management
Select equivalent:	K_SE_StorageSystem.PowerManagement
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	010, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Roles
Type:	Character
Description:	Roles of the Storage System
Select equivalent:	K_SE_StorageSystem.Roles
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	011, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Name
Type:	Character
Description:	Primary Owner Name of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	012, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Contact
Type:	Character
Description:	Primary Owner Contact of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerContact
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	013, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Last Contacted Timestamp
Type:	Date
Description:	Shows the time stamp of w hen the storage system wa s last contacted
Select equivalent:	K_SE_StorageSystem.LastContactedTimestamp
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	014, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Management URL
Type:	Character
Description:	Management URL of the Storage System
Select equivalent:	K_SE_StorageSystem.ManagementURL
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	015, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Custom Name
Type:	Character
Description:	Custom Name of the Storage System
Select equivalent:	K_SE_StorageSystem.CustomName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	016, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Object Type
Type:	Character
Description:	Object Type
Select equivalent:	K_SE_StorageSystem.ObjectType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	017, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System UUID
Type:	Character
Description:	UUID of the Storage System
Select equivalent:	K_SE_StorageSystem.UUID
Where equivalent:	
Qualification:	dimension
List of values:	018, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	DATETIME(EMC Symmetrix Storage System Performance Statistics)
Description:	

Object:	Year
Type:	Number
Description:	Year
Select equivalent:	DATETIME.TIME_YEAR_NUMBER
Where equivalent:	
Qualification:	dimension
List of values:	019, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month
Type:	Character
Description:	Month Name first Three Characters
Select equivalent:	(SUBSTR(DATETIME.TIME_MONTH_NAME,1,3))
Where equivalent:	
Qualification:	dimension
List of values:	01a, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month Name
Type:	Character
Description:	Month Name
Select equivalent:	DATETIME.TIME_MONTH_NAME
Where equivalent:	
Qualification:	detail
Associated dimension name:	Month
List of values:	01b, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Day
Type:	Number
Description:	Day
Select equivalent:	DATETIME.TIME_DAY_MONTH_NUMBER
Where equivalent:	
Qualification:	dimension
List of values:	01c, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Day Name
Type:	Character
Description:	Day Name
Select equivalent:	DATETIME.TIME_DAY_NAME
Where equivalent:	

Qualification:	detail
Associated dimension name:	Day
List of values:	01d, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour
Type:	Number
Description:	Hour
Select equivalent:	DATETIME.TIME_HOUR_ID
Where equivalent:	

Qualification:	dimension
List of values:	01e, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Id
Type:	Number
Description:	Hour Id
Select equivalent:	DATETIME.TIME_HOUR_ID
Where equivalent:	

Qualification:	detail
Associated dimension name:	Hour
List of values:	01f, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Hour Description
Type:	Character
Description:	Time Hour Description
Select equivalent:	DATETIME.TIME_HOUR_DESCRIPTION
Where equivalent:	

Qualification:	detail
Associated dimension name:	Hour
List of values:	01g, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date
Type:	Date
Description:	Full Date
Select equivalent:	DATETIME.TIME_FULL_DATE
Where equivalent:	
Qualification:	dimension
List of values:	01h, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Holiday
Type:	Character
Description:	Time Is Holiday
Select equivalent:	DATETIME.TIME_IS_HOLIDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	01i, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Weekday
Type:	Character
Description:	Time Is Weekday
Select equivalent:	DATETIME.TIME_IS_WEEKDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	01j, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Boundary

Type:	Number
Description:	Hour Boundary
Select equivalent:	DATETIME.HOUR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	01k, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Day Boundary
Type:	Number
Description:	Day Boundary
Select equivalent:	DATETIME.DAY_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	01l, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Week Boundary
Type:	Number
Description:	Week Boundary
Select equivalent:	DATETIME.WEEK_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	01m, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Month Boundary
Type:	Number
Description:	Month Boundary
Select equivalent:	DATETIME.MONTH_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	01n, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Year Boundary
Type:	Number
Description:	Year Boundary
Select equivalent:	DATETIME.YEAR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	01o, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Class:	Symmetrix Storage System Performance Statistics
Description:	

Object:	Total I/O Rate (Req/Sec)
Type:	Number
Description:	I/O Rate - includes rando m reads and writes, but do es not include sequential reads
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.TotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Total Bytes read and write transferred through the S ymmetrix each second
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.TotalDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read I/O (Req/Sec)
Type:	Number
Description:	Read cache request rate (requests per second)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.ReadRate
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write I/O (Req/Sec)
Type:	Number
Description:	Write cache request rate (requests per second)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.WriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Hits (Req/Sec)
Type:	Number
Description:	Read Cache Hit Rate
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.ReadHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Hits (Req/Sec)
Type:	Number
Description:	Write Cache Hit Rate
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.WriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Read throughput rate
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.ReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Write Throughput Rate
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.WriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Reads
Type:	Number
Description:	Ratio of read I/Os to total I/Os
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Writes
Type:	Number
Description:	Ratio of write I/Os to total I/Os
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Hits
Type:	Number
Description:	Percentage Hits
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Size (Bytes)
Type:	Number
Description:	Average Read Size
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.AvgReadSize

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Size (Bytes)
Type:	Number
Description:	Average Write Size
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.AvgWriteSize
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Read Hits
Type:	Number
Description:	Read cache hit ratio (percentage of read hits)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctReadHitIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Write Hits
Type:	Number
Description:	Write cache hit ratio (percentage of write hits)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctWriteHitIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	None

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	% Read Seq
Type:	Number
Description:	Sequential read ratio (per centage of Sequential read s to TotalIOs including se quentialReads)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PctSeqReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Rate Seq (Req/Sec)
Type:	Number
Description:	Sequential read rate
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.SeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Number of prefetched Bytes per second
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PrefetchRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Number of Bytes written per sec from cache to disks
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.WriteFlushRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Deferred Write Rate (Req/Sec)
Type:	Number
Description:	A deferred write, which is a write hit, occurs when the I/O write operations are staged in cache and will be written to disk at a later time.
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.DeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	A delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was re

	ached and the cache had t o destage slots to the dis ks before the writes could be written to cache.
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.DelayedDFWRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Rate Total (Req/Sec)
Type:	Number
Description:	Read request rate that includes both random and sequential reads
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.ReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Hits Seq (Req/Sec)
Type:	Number
Description:	Rate of read cache hits per second (sequential hits only)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.SeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Rate Seq (Req/Sec)
Type:	Number
Description:	Write cache request rate (

	requests per second) and i ncludes only sequential wr ites
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.SeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Hits Seq (Req/Sec)
Type:	Number
Description:	Rate of write cache hits per second (sequential hits only)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.SeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Maximum number of write-p ending slots for the entir e Symmetrix. System write -pending limit is equal to 80% of the available cach e slots. Symmetrix write-p ending limit is not simply a sum of all Symmetrix de vice write-pending slots. It depends on other factor s such as cache size and t he Symmetrix configuratio n.
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.MaxPendingFlushLimit
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Pending Flush (Bytes)
Type:	Number
Description:	Number of tracks (express ed in Bytes) in cache that are waiting to be destage d to disk and cannot be ov erwritten.
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PendingFlush
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Pending Format (Bytes)
Type:	Number
Description:	Number of format pending tracks (expressed in Bytes)
Select equivalent:	SR_SE_Sym_Storage_Sys_Stats.PendingFormat
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Hourly Symmetrix Stor age System Performan ce Statistics
Description:	

Object:	Maximum Total I/O Rate (Req/Sec)

Type:	Number
Description:	Maximum I/O Rate - includ es random reads and write s, but does not include se quential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum I/O Rate - includ es random reads and write s, but does not include se quential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average I/O Rate - include s random reads and writes , but does not include seq uential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGTotalDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read I/O (Req/Sec)
Type:	Number
Description:	Maximum Read cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXReadRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read I/O (Req/Sec)
Type:	Number
Description:	Minimum Read cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINReadRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read I/O (Req/Sec)
Type:	Number
Description:	Average Read cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGReadRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write I/O (Req/Sec)
Type:	Number
Description:	Maximum Write cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write I/O (Req/Sec)
Type:	Number
Description:	Minimum Write cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write I/O (Req/Sec)
Type:	Number
Description:	Average Write cache request rate (requests per second)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits (Req/Sec)
Type:	Number
Description:	Maximum Read Cache Hit Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits (Req/Sec)
Type:	Number
Description:	Minimum Read Cache Hit Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits (Req/Sec)
Type:	Number
Description:	Average Read Cache Hit Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits (Req/Sec)
Type:	Number
Description:	Maximum Write Cache Hit Rate

Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits (Req/Sec)
Type:	Number
Description:	Minimum Write Cache Hit Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits (Req/Sec)
Type:	Number
Description:	Average Write Cache Hit Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Read throughput rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXReadDataRate
Where equivalent:	
Qualification:	measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Read throughput rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Read throughput rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Write Throughput Rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXWriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Minimum Write Data Rate (Bytes/Sec)
Type: Number
Description: Minimum Write Throughput Rate
Select equivalent: SH_SE_Sym_Storage_Sys_Stats.MINWriteDataRate
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Write Data Rate (Bytes/Sec)
Type: Number
Description: Average Write Throughput Rate
Select equivalent: SH_SE_Sym_Storage_Sys_Stats.AVGWriteDataRate
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum % Reads
Type: Number
Description: Maximum Ratio of read I/Os to total I/Os
Select equivalent: SH_SE_Sym_Storage_Sys_Stats.MAXPctReadIOS
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum % Reads

Type:	Number
Description:	Minimum Ratio of read I/Os to total I/Os
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Writes
Type:	Number
Description:	Maximum Ratio of write I/Os to total I/Os
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Writes
Type:	Number
Description:	Minimum Ratio of write I/Os to total I/Os
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Hits
Type:	Number
Description:	Maximum Percentage Hits
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPctHitIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Hits
Type:	Number
Description:	Minimum Percentage Hits
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctHitIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Read Size
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXAvgReadSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Read Size
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINAvgReadSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Write Size
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXAvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Write Size
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINAvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Hits
Type:	Number
Description:	Maximum Read cache hit ratio (percentage of read hits)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPctReadHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Hits
Type:	Number
Description:	Minimum Read cache hit ratio (percentage of read hits)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctReadHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Write Hits
Type:	Number
Description:	Maximum Write cache hit ratio (percentage of write hits)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Write Hits
Type:	Number
Description:	Minimum Write cache hit ratio (percentage of write hits)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Seq
Type:	Number
Description:	Maximum Sequential read r

	atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPctSeqReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Seq
Type:	Number
Description:	Minimum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPctSeqReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Sequential read rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Minimum Read Rate Seq (Req/Sec)

Type:	Number
Description:	Minimum Sequential read rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Seq (Req/Sec)
Type:	Number
Description:	Average Sequential read rate
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of prefetched Bytes per second
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPrefetchRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of prefetched Bytes per second
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPrefetchRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of prefetched Bytes per second
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGPrefetchRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes written per sec from cache to disks
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXWriteFlushRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes written per sec from cache to disks
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINWriteFlushRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes written per sec from cache to disks
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGWriteFlushRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Maximum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXDeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Minimum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.

Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINDeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Average deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGDeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Maximum delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela yed because the system or device write-pending limi t was reached and the cac he had to destage slots to the disks before the writ es could be written to cac he.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXDelayedDFWRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Minimum delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINDelayedDFWRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Average delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGDelayedDFWRate

Where equivalent:

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate that includes both random and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXReadRateTotal
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate that includes both random and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINReadRateTotal
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate that includes both random

	and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of read cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of read cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of read cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGSeqReadHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXSeqWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINSeqWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Seq (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco

	nd) and includes only sequ ential writes
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of write cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of write cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of write cache hits per second (sequential hits only)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGSeqWriteHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXMaxPendingFlushLimit
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Minimum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin

	g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINMaxPendingFlushLimit
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Average Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGMaxPendingFlushLimit
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of tracks (expressed in Bytes) in ca che that are waiting to be

	destaged to disk and cann ot be overwritten.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Maximum Pending Format (Bytes)
Type:	Number
Description:	Maximum Number of format pending tracks (expressed in Bytes)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MAXPendingFormat
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Format (Bytes)
Type:	Number
Description:	Minimum Number of format pending tracks (expressed in Bytes)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.MINPendingFormat
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Format (Bytes)
Type:	Number
Description:	Average Number of format pending tracks (expressed in Bytes)
Select equivalent:	SH_SE_Sym_Storage_Sys_Stats.AVGPendingFormat
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: Daily Symmetrix Stora
ge System Performanc

e Statistics

Description:

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum I/O Rate - includ es random reads and write s, but does not include se quential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum I/O Rate - includ es random reads and write s, but does not include se quential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average I/O Rate - include s random reads and writes , but does not include seq uential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGTotalIORate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and write transferred through the Symmetrix each second
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXTotalDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and write transferred through the Symmetrix each second
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINTotalDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read

	and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read I/O (Req/Sec)
Type:	Number
Description:	Maximum Read cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read I/O (Req/Sec)
Type:	Number
Description:	Minimum Read cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read I/O (Req/Sec)
Type:	Number
Description:	Average Read cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGReadRate

Where equivalent:

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write I/O (Req/Sec)
Type:	Number
Description:	Maximum Write cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write I/O (Req/Sec)
Type:	Number
Description:	Minimum Write cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write I/O (Req/Sec)
Type:	Number
Description:	Average Write cache request rate (requests per second)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits (Req/Sec)
Type:	Number
Description:	Maximum Read Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits (Req/Sec)
Type:	Number
Description:	Minimum Read Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits (Req/Sec)
Type:	Number
Description:	Average Read Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits (Req/Sec)
Type:	Number
Description:	Maximum Write Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits (Req/Sec)
Type:	Number
Description:	Minimum Write Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits (Req/Sec)
Type:	Number
Description:	Average Write Cache Hit Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number

Description:	Maximum Read throughput rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Read throughput rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Read throughput rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Write Throughput Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXWriteDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Write Throughput Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINWriteDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Write Throughput Rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGWriteDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Reads
Type:	Number
Description:	Maximum Ratio of read I/Os to total I/Os
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctReadIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Reads
Type:	Number
Description:	Minimum Ratio of read I/Os to total I/Os
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Writes
Type:	Number
Description:	Maximum Ratio of write I/Os to total I/Os
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Writes
Type:	Number
Description:	Minimum Ratio of write I/Os to total I/Os
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Hits
Type:	Number
Description:	Maximum Percentage Hits
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Hits
Type:	Number
Description:	Minimum Percentage Hits
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Read Size
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXAvgReadSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Read Size
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINAvgReadSize

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Write Size
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXAvgWriteSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Write Size
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINAvgWriteSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Hits
Type:	Number
Description:	Maximum Read cache hit ratio (percentage of read hits)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctReadHitIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Hits
Type:	Number
Description:	Minimum Read cache hit ratio (percentage of read hits)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctReadHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Write Hits
Type:	Number
Description:	Maximum Write cache hit ratio (percentage of write hits)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Write Hits
Type:	Number
Description:	Minimum Write cache hit ratio (percentage of write hits)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Seq
Type:	Number
Description:	Maximum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPctSeqReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Seq
Type:	Number
Description:	Minimum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPctSeqReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Sequential read rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Sequential read rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Seq (Req/Sec)
Type:	Number
Description:	Average Sequential read rate
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of prefetched Bytes per second
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPrefetchRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of prefetched Bytes per second
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPrefetchRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of prefetched Bytes per second
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGPrefetchRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes written per sec from cache to disks
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXWriteFlushRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes written per sec from cache to disks
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINWriteFlushRate

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes written per sec from cache to disks
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGWriteFlushRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Maximum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXDeferredWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Minimum deferred write, w

	hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINDeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Average deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGDeferredWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Maximum delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela yed because the system or device write-pending limi t was reached and the cac he had to destage slots to the disks before the writ

	es could be written to cac he.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXDelayedDFWRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Minimum delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela yed because the system or device write-pending limi t was reached and the cac he had to destage slots to the disks before the writ es could be written to cac he.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINDelayedDFWRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Average delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela yed because the system or device write-pending limi t was reached and the cac

	he had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGDelayedDFWRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate that includes both random and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate that includes both random and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate that includes both random and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of read cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of read cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits Seq (Req/Sec)

Type:	Number
Description:	Average Rate of read cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Seq (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of write cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of write cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of write cache hits per second (sequential hits only)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXMaxPendingFlushLimit
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Minimum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is

	equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINMaxPendingFlushLimit
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Average Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGMaxPendingFlushLimit
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGPendingFlush
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Format (Bytes)
Type:	Number
Description:	Maximum Number of format pending tracks (expressed in Bytes)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MAXPendingFormat
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Format (Bytes)
Type:	Number
Description:	Minimum Number of format pending tracks (expressed in Bytes)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.MINPendingFormat
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Format (Bytes)
Type:	Number
Description:	Average Number of format pending tracks (expressed in Bytes)
Select equivalent:	SD_SE_Sym_Storage_Sys_Stats.AVGPendingFormat
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0

Can be used: in result, in condition, in sort
Object status: show

Class: HourlyOLAP-Symmetrix Storage System Performance Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum I/O Rate - includes random reads and writes, but does not include sequential reads
Select equivalent: max(SH_SE_Sym_Storage_Sys_Stats.MAXTotalIORate)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total I/O Rate (Req/Sec)
Type: Number
Description: Minimum I/O Rate - includes random reads and writes, but does not include sequential reads
Select equivalent: min(SH_SE_Sym_Storage_Sys_Stats.MINTotalIORate)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Total I/O Rate (Req/Sec)
Type: Number
Description: Average I/O Rate - include

	s random reads and writes , but does not include seq uential reads
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read I/O (Req/Sec)
Type:	Number
Description:	Maximum Read cache request rate (requests per second)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read I/O (Req/Sec)
Type:	Number
Description:	Minimum Read cache request rate (requests per second)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read I/O (Req/Sec)
Type:	Number
Description:	Average Read cache request rate (requests per second)
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write I/O (Req/Sec)
Type:	Number
Description:	Maximum Write cache request rate (requests per second)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write I/O (Req/Sec)
Type:	Number
Description:	Minimum Write cache request rate (requests per second)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write I/O (Req/Sec)
Type:	Number
Description:	Average Write cache request rate (requests per second)

Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits (Req/Sec)
Type:	Number
Description:	Maximum Read Cache Hit Rate
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits (Req/Sec)
Type:	Number
Description:	Minimum Read Cache Hit Rate
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits (Req/Sec)
Type:	Number
Description:	Average Read Cache Hit Rate
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGReadHitRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits (Req/Sec)
Type:	Number
Description:	Maximum Write Cache Hit Rate
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits (Req/Sec)
Type:	Number
Description:	Minimum Write Cache Hit Rate
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits (Req/Sec)
Type:	Number
Description:	Average Write Cache Hit Rate
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Read throughput rate
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Read throughput rate
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Read throughput rate
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)

Type:	Number
Description:	Maximum Write Throughput Rate
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Write Throughput Rate
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Write Throughput Rate
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Reads
Type:	Number
Description:	Maximum Ratio of read I/Os to total I/Os
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctReadIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Reads
Type:	Number
Description:	Minimum Ratio of read I/Os to total I/Os
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctReadIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Writes
Type:	Number
Description:	Maximum Ratio of write I/Os to total I/Os
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctWriteIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Writes
Type:	Number
Description:	Minimum Ratio of write I/Os to total I/Os
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctWriteIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Hits
Type:	Number
Description:	Maximum Percentage Hits
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Hits
Type:	Number
Description:	Minimum Percentage Hits
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Read Size
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Read Size
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Write Size
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Write Size
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Hits
Type:	Number
Description:	Maximum Read cache hit ratio (percentage of read hits)

Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctReadHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Hits
Type:	Number
Description:	Minimum Read cache hit ratio (percentage of read hits)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctReadHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Write Hits
Type:	Number
Description:	Maximum Write cache hit ratio (percentage of write hits)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctWriteHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Write Hits
Type:	Number
Description:	Minimum Write cache hit ratio (percentage of write hits)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctWriteHitIOS)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Seq
Type:	Number
Description:	Maximum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPctSeqReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Seq
Type:	Number
Description:	Minimum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPctSeqReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Sequential read rate
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Sequential read rate
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Seq (Req/Sec)
Type:	Number
Description:	Average Sequential read rate
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of prefetched Bytes per second
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPrefetchRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of prefetched Bytes per second
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPrefetchRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of prefetched Bytes per second
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGPrefetchRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes written per sec from cache to disks
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXWriteFlushRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes written per sec from cache to disks
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINWriteFlushRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes written per sec from cache to disks
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGWriteFlushRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Maximum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXDeferredWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Minimum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINDeferredWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Average deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGDeferredWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Maximum delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela

	yed because the system or device write-pending limi t was reached and the cac he had to destage slots to the disks before the writ es could be written to cac he.
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Minimum delayed deferred fast write (DFW), a write- miss, occurs when the I/O write operations are dela yed because the system or device write-pending limi t was reached and the cac he had to destage slots to the disks before the writ es could be written to cac he.
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Average delayed deferred fast write (DFW), a write-

	miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate that includes both random and sequential reads
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate that includes both random and sequential reads
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate that includes both random and sequential reads
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of read cache hits per second (sequential hits only)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of read cache hits per second (sequential hits only)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of read cache hits per second (sequential hits only)
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Seq (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of write cache hits per second (sequential hits only)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of write cache hits per second (sequential hits only)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of write cache hits per second (sequential hits only)
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXMaxPendingFlushLimit)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Max Pending Flush Limit (Bytes)

Type:	Number
Description:	Minimum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINMaxPendingFlushLimit)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Average Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGMaxPendingFlushLimit)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of tracks (expressed in Bytes) in ca che that are waiting to be

	destaged to disk and cann ot be overwritten.
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Format (Bytes)
Type:	Number
Description:	Maximum Number of format pending tracks (expressed in Bytes)
Select equivalent:	max(SH_SE_Sym_Storage_Sys_Stats.MAXPendingFormat)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Format (Bytes)
Type:	Number
Description:	Minimum Number of format pending tracks (expressed in Bytes)
Select equivalent:	min(SH_SE_Sym_Storage_Sys_Stats.MINPendingFormat)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Format (Bytes)
Type:	Number
Description:	Average Number of format pending tracks (expressed in Bytes)
Select equivalent:	avg(SH_SE_Sym_Storage_Sys_Stats.AVGPendingFormat)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	DailyOLAP-Symmetrix Storage System Performance Statistics
Description:	

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum I/O Rate - includes random reads and writes, but does not include sequential reads
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXTotalIORate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum I/O Rate - includes random reads and writes, but does not include sequential reads
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINTotalIORate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average I/O Rate - include s random reads and writes , but does not include seq uential reads
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and write transferred thro ugh the Symmetrix each se cond
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and write transferred through the Symmetrix each second
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read I/O (Req/Sec)
Type:	Number
Description:	Maximum Read cache request rate (requests per second)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read I/O (Req/Sec)
Type:	Number
Description:	Minimum Read cache request rate (requests per second)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read I/O (Req/Sec)
Type:	Number
Description:	Average Read cache request rate (requests per second)
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write I/O (Req/Sec)
Type:	Number
Description:	Maximum Write cache request rate (requests per second)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write I/O (Req/Sec)
Type:	Number
Description:	Minimum Write cache request rate (requests per second)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write I/O (Req/Sec)
Type:	Number
Description:	Average Write cache request rate (requests per second)
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits (Req/Sec)
Type:	Number
Description:	Maximum Read Cache Hit Rate
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits (Req/Sec)
Type:	Number
Description:	Minimum Read Cache Hit Rate
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits (Req/Sec)
Type:	Number

Description:	Average Read Cache Hit Rate
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hits (Req/Sec)
Type:	Number
Description:	Maximum Write Cache Hit Rate
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hits (Req/Sec)
Type:	Number
Description:	Minimum Write Cache Hit Rate
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits (Req/Sec)
Type:	Number
Description:	Average Write Cache Hit Rate
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGWriteHitRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Read throughput rate
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXReadDataRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Read throughput rate
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINReadDataRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Read throughput rate
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGReadDataRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Write Throughput Rate
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Write Throughput Rate
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Write Throughput Rate
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Reads
Type:	Number
Description:	Maximum Ratio of read I/Os to total I/Os
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Reads
Type:	Number
Description:	Minimum Ratio of read I/Os to total I/Os
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Writes
Type:	Number
Description:	Maximum Ratio of write I/Os to total I/Os
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctWriteIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Writes
Type:	Number
Description:	Minimum Ratio of write I/Os to total I/Os
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctWriteIOS)

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Hits
Type:	Number
Description:	Maximum Percentage Hits
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctHitIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Hits
Type:	Number
Description:	Minimum Percentage Hits
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctHitIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Read Size
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXAvgReadSize)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Read Size
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Write Size
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Write Size
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Hits
Type:	Number
Description:	Maximum Read cache hit ratio (percentage of read hits)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctReadHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Hits
Type:	Number
Description:	Minimum Read cache hit ratio (percentage of read hits)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctReadHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Write Hits
Type:	Number
Description:	Maximum Write cache hit ratio (percentage of write hits)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctWriteHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Write Hits
Type:	Number

Description:	Minimum Write cache hit ratio (percentage of write hits)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctWriteHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum % Read Seq
Type:	Number
Description:	Maximum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPctSeqReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum % Read Seq
Type:	Number
Description:	Minimum Sequential read r atio (percentage of Seque ntial reads to TotalIOs in cluding sequentialReads)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPctSeqReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Sequential read rate
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Sequential read rate
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Seq (Req/Sec)
Type:	Number
Description:	Average Sequential read rate
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of prefetched Bytes per second
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPrefetchRate)

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of prefetched Bytes per second
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPrefetchRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Prefetch Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of prefetched Bytes per second
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGPrefetchRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Flush Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes written per sec from cache to disks
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXWriteFlushRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Write Flush Data Rate (Bytes/Sec)
Type: Number
Description: Minimum Number of Bytes written per sec from cache to disks
Select equivalent: min(SD_SE_Sym_Storage_Sys_Stats.MINWriteFlushRate)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Write Flush Data Rate (Bytes/Sec)
Type: Number
Description: Average Number of Bytes written per sec from cache to disks
Select equivalent: avg(SD_SE_Sym_Storage_Sys_Stats.AVGWriteFlushRate)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Deferred Write Rate (Req/Sec)
Type: Number
Description: Maximum deferred write, w
hich is a write hit, occur
s when the I/O write oper
ations are staged in cache
and will be written to di
sk at a later time.
Select equivalent: max(SD_SE_Sym_Storage_Sys_Stats.MAXDeferredWriteRate)
Where equivalent:

Qualification: measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Minimum deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINDeferredWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Deferred Write Rate (Req/Sec)
Type:	Number
Description:	Average deferred write, w hich is a write hit, occur s when the I/O write oper ations are staged in cache and will be written to di sk at a later time.
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGDeferredWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Delayed DFW Rate (Req/Sec)

Type:	Number
Description:	Maximum delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Minimum delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Delayed DFW Rate (Req/Sec)
Type:	Number
Description:	Average delayed deferred fast write (DFW), a write-miss, occurs when the I/O write operations are delayed because the system or device write-pending limit was reached and the cache had to destage slots to the disks before the writes could be written to cache.
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGDelayedDFWRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate that includes both random and sequential reads
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate that includes both random and sequential reads

Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate that includes both random and sequential reads
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Maximum Rate of read cache hits per second (sequential hits only)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hits Seq (Req/Sec)
Type:	Number
Description:	Minimum Rate of read cache hits per second (sequential hits only)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINSeqReadHitRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of read cache hits per second (sequential hits only)
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGSeqReadHitRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXSeqWriteRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Seq (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and includes only sequ ential writes

Select equivalent: min(SD_SE_Sym_Storage_Sys_Stats.MINSeqWriteRate)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Write Rate Seq (Req/Sec)
Type: Number
Description: Average Write cache reque st rate (requests per seco nd) and includes only sequ ential writes
Select equivalent: avg(SD_SE_Sym_Storage_Sys_Stats.AVGSeqWriteRate)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Write Hits Seq (Req/Sec)
Type: Number
Description: Maximum Rate of write cache hits per second (sequential hits only)
Select equivalent: max(SD_SE_Sym_Storage_Sys_Stats.MAXSeqWriteHitRate)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Write Hits Seq (Req/Sec)
Type: Number
Description: Minimum Rate of write cache hits per second (sequential hits only)
Select equivalent: min(SD_SE_Sym_Storage_Sys_Stats.MINSeqWriteHitRate)

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hits Seq (Req/Sec)
Type:	Number
Description:	Average Rate of write cache hits per second (sequential hits only)
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGSeqWriteHitRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXMaxPendingFlushLimit)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Minimum Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINMaxPendingFlushLimit)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Max Pending Flush Limit (Bytes)
Type:	Number
Description:	Average Maximum number o f write-pending slots for the entire Symmetrix. Syst em write-pending limit is equal to 80% of the availa ble cache slots. Symmetrix write-pending limit is no t simply a sum of all Sym metrix device write-pendin g slots. It depends on oth er factors such as cache s ize and the Symmetrix con figuration.
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGMaxPendingFlushLimit)

Where equivalent:

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPendingFlush)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of tracks (expressed in Bytes) in ca che that are waiting to be destaged to disk and cann ot be overwritten.
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPendingFlush)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of tracks (expressed in Bytes) in cache that are waiting to be destaged to disk and cannot be overwritten.
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Format (Bytes)
Type:	Number
Description:	Maximum Number of format pending tracks (expressed in Bytes)
Select equivalent:	max(SD_SE_Sym_Storage_Sys_Stats.MAXPendingFormat)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Format (Bytes)
Type:	Number
Description:	Minimum Number of format pending tracks (expressed in Bytes)
Select equivalent:	min(SD_SE_Sym_Storage_Sys_Stats.MINPendingFormat)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Format (Bytes)
Type:	Number
Description:	Average Number of format pending tracks (expressed in Bytes)
Select equivalent:	avg(SD_SE_Sym_Storage_Sys_Stats.AVGPendingFormat)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	EMC Symmetrix Storag e Volume Performance Statistics
Description:	EMC Symmetrix Storage Volume Performance Statistics

No objects

Class:	Symmetrix Storage Vol ume(EMC Symmetrix St orage Volume Perform ance Statistics)
Description:	

Object:	SOM Source Name
Type:	Character
Description:	Name of the source SOM server
Select equivalent:	K_SE_StorageSystem.SEiSourceName
Where equivalent:	
Qualification:	dimension
List of values:	0bk, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Tenant Name
Type:	Character
Description:	Tenant Name
Select equivalent:	K_SE_StorageSystem.TenantName
Where equivalent:	

Qualification:	dimension
List of values:	0bl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Vendor
Type:	Character
Description:	Storage system vendor name
Select equivalent:	K_SE_StorageSystem.Vendor
Where equivalent:	

Qualification:	dimension
List of values:	0bm, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Model
Type:	Character
Description:	Storage System Model Number
Select equivalent:	K_SE_StorageSystem.Model
Where equivalent:	

Qualification:	dimension
List of values:	0bn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Name
Type:	Character
Description:	Name of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemName
Where equivalent:	

Qualification:	dimension
List of values:	0bo, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Description
Type:	Character
Description:	Description about Storage System
Select equivalent:	K_SE_StorageSystem.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Discovery Status
Type:	Character
Description:	The discovery status of th e storage system such as CREATED, CONTACTED, MISS ING, GENERIC
Select equivalent:	K_SE_StorageSystem.DiscoveryStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System IP Address
Type:	Character
Description:	IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.IPAddress
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0br, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Storage System DNS

Type:	Character
Description:	DNS name of the Storage System
Select equivalent:	K_SE_StorageSystem.DNSName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bs, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System WWN
Type:	Character
Description:	World Wide Number of the Storage System
Select equivalent:	K_SE_StorageSystem.WWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bt, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System SerialNumber
Type:	Character
Description:	Serial Number of the Storage System
Select equivalent:	K_SE_StorageSystem.SerialNumber
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bu, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Status
Type:	Character
Description:	Operational status of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bv, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Reset Capability?
Type:	Character
Description:	Has Reset Capability (flag)
Select equivalent:	K_SE_StorageSystem.HasResetCapability
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Advanced Retention Management?
Type:	Character
Description:	Has Advanced Retention Management (flag)
Select equivalent:	K_SE_StorageSystem.HasAdvRetentionMgmt
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0bx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Cache Block Size
Type:	Number
Description:	Cache Block Size
Select equivalent:	K_SE_StorageSystem.CacheBlockSize
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0by, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Compliance Mode?
Type:	Character
Description:	Has Compliance Mode (flag)
Select equivalent:	K_SE_StorageSystem.HasComplianceMode
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Domain
Type:	Character
Description:	Domain of the Storage System
Select equivalent:	K_SE_StorageSystem.Domain
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Over Subscribed Capacity
Type:	Character
Description:	Over Subscribed Capacity
Select equivalent:	K_SE_StorageSystem.OverSubscribedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Requested Capacity
Type:	Character
Description:	Requested Capacity
Select equivalent:	K_SE_StorageSystem.RequestedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c3, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Is Manageable?
Type:	Character
Description:	Is Manageable
Select equivalent:	K_SE_StorageSystem.IsManageable
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Volume Name Length
Type:	Character
Description:	Maximum allowed length for Volume Names
Select equivalent:	K_SE_StorageSystem.MaxVolumeNameLength
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication IP
Type:	Character
Description:	Replication IP Address of the Storage System

Select equivalent:	K_SE_StorageSystem.ReplicationIP
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Pools
Type:	Character
Description:	Replication Pools of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationPools
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c7, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Status
Type:	Character
Description:	Replication Status of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0c8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage On Access
Type:	Character
Description:	Storage On Access (flag)
Select equivalent:	K_SE_StorageSystem.StorageOnAccess
Where equivalent:	
Qualification:	detail

Associated dimension name:	Storage System Name
List of values:	0c9, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Business Cost
Type:	Number
Description:	Business Cost of the Storage System
Select equivalent:	K_SE_StorageSystem.BusinessCost
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ca, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	DKC Microcode Version
Type:	Character
Description:	DKC Microcode Version of the Storage System
Select equivalent:	K_SE_StorageSystem.DKCMicrocodeVersion
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cb, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Family
Type:	Character
Description:	Family of the Storage System
Select equivalent:	K_SE_StorageSystem.Family
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cc, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Hardware Version
Type:	Character
Description:	Hardware Version of the Storage System
Select equivalent:	K_SE_StorageSystem.HardwareVersion
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cd, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Identifying Descriptions
Type:	Character
Description:	Identifying Descriptions for the Storage System
Select equivalent:	K_SE_StorageSystem.IdentifyingDescriptions
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ce, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Other Identifying Info
Type:	Character
Description:	Other Identifying Info for the Storage System
Select equivalent:	K_SE_StorageSystem.OtherIdentifyingInfo
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cf, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Provider Tag

Type:	Character
Description:	Provider Tag of the Storage System
Select equivalent:	K_SE_StorageSystem.ProviderTag
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cg, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent Name
Type:	Character
Description:	Parent Name for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ch, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent UUID
Type:	Character
Description:	Parent UUID for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentUUID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ci, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Power Management
Type:	Character
Description:	Power Management
Select equivalent:	K_SE_StorageSystem.PowerManagement
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Roles
Type:	Character
Description:	Roles of the Storage System
Select equivalent:	K_SE_StorageSystem.Roles
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ck, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Name
Type:	Character
Description:	Primary Owner Name of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Contact
Type:	Character
Description:	Primary Owner Contact of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerContact
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cm, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Last Contacted Timestamp
Type:	Date
Description:	Shows the time stamp of w hen the storage system wa s last contacted
Select equivalent:	K_SE_StorageSystem.LastContactedTimestamp
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Management URL
Type:	Character
Description:	Management URL of the Storage System
Select equivalent:	K_SE_StorageSystem.ManagementURL
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0co, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Custom Name
Type:	Character
Description:	Custom Name of the Storage System
Select equivalent:	K_SE_StorageSystem.CustomName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0cp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Object Type
Type: Character
Description: Object Type
Select equivalent: K_SE_StorageSystem.ObjectType
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0cq, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Block Pool Name
Type: Character
Description: Block Pool Name
Select equivalent: K_SE_Storage_Pool.SANPoolName
Where equivalent:

Qualification: dimension
List of values: 0cr, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Block Pool Description
Type: Character
Description: Description about Block Pool
Select equivalent: K_SE_Storage_Pool.SANPoolDescription
Where equivalent:

Qualification: detail
Associated dimension name: Block Pool Name
List of values: 0cs, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Parent Pool Name
Type: Character

Description:	Parent Pool Name
Select equivalent:	K_SE_Storage_Pool.ParentPoolName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0ct, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Available Space (GB)
Type:	Number
Description:	Total Available Space in GB
Select equivalent:	K_SE_Storage_Pool.TotalAvailableSpaceGB
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0cu, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Available Space (GiB)
Type:	Number
Description:	Total Available Space in GiB
Select equivalent:	K_SE_Storage_Pool.TotalAvailableSpaceGiB
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0cv, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Capability Name
Type:	Character
Description:	Storage Capability Name
Select equivalent:	K_SE_Storage_Pool.StorageCapabilityName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0cw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Capability Common Name
Type:	Character
Description:	Storage Capability Common Name
Select equivalent:	K_SE_Storage_Pool.StorageCapabilityCommonName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0cx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Capability Description
Type:	Character
Description:	Storage Capability Description
Select equivalent:	K_SE_Storage_Pool.StorageCapabilityDescription
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0cy, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	No Single Point Of Failure
Type:	Character
Description:	No Single Point Of Failure
Select equivalent:	K_SE_Storage_Pool.NoSinglePtOfFailure
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d0, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Default No Single Point Of Failure
Type:	Character
Description:	Default No Single Point Of Failure
Select equivalent:	K_SE_Storage_Pool.DefaultNoSinglePtOfFailure
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Min Data Redundancy
Type:	Number
Description:	Minimum Data Redundancy
Select equivalent:	K_SE_Storage_Pool.MinDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Max Data Redundancy
Type:	Number
Description:	Maximum Data Redundancy
Select equivalent:	K_SE_Storage_Pool.MaxDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d3, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Default Data Redundancy
Type:	Number
Description:	Default Data Redundancy
Select equivalent:	K_SE_Storage_Pool.DefaultDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Min Spindle Redundancy
Type:	Number
Description:	Minimum Spindle Redundancy
Select equivalent:	K_SE_Storage_Pool.MinSpindleRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Max Spindle Redundancy
Type:	Number
Description:	Maximum Spindle Redundancy
Select equivalent:	K_SE_Storage_Pool.MaxSpindleRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Default Spindle Redundancy
Type:	Number
Description:	Default Spindle Redundancy
Select equivalent:	K_SE_Storage_Pool.DefaultSpindleRedundancy

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d7, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Min Delta Reservation
Type:	Number
Description:	Minimum Delta Reservation
Select equivalent:	K_SE_Storage_Pool.MinDeltaReservation
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Max Delta Reservation
Type:	Number
Description:	Maximum Delta Reservation
Select equivalent:	K_SE_Storage_Pool.MaxDeltaReservation
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0d9, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Default Delta Reservation
Type:	Number
Description:	Default Delta Reservation
Select equivalent:	K_SE_Storage_Pool.DefaultDeltaReservation
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Pool Name

List of values:	0da, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Space Limit (GB)
Type:	Number
Description:	Space Limit in GB
Select equivalent:	K_SE_Storage_Pool.SpaceLimitGB
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0db, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Space Limit (GiB)
Type:	Number
Description:	Space Limit in GiB
Select equivalent:	K_SE_Storage_Pool.SpaceLimitGiB
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0dc, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Space Limit Determination
Type:	Number
Description:	Space Limit Determination
Select equivalent:	K_SE_Storage_Pool.SpaceLimitDetermination
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0dd, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Composition
Type:	Character
Description:	Shows type of pool like Internal, External, Hybrid ....
Select equivalent:	K_SE_Storage_Pool.Composition
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0de, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Pool Type
Type:	Character
Description:	Block Pool type - Primordi al, Concrete, Open, Mainfr ame, Snapshot, Reserved, Parent concrete ...
Select equivalent:	K_SE_Storage_Pool.SANPoolType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Pool Name
List of values:	0df, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Name
Type:	Character
Description:	Name of the Block Volume
Select equivalent:	K_SE_Storage_Volume.SANVolumeName
Where equivalent:	
Qualification:	dimension
List of values:	0dg, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	OID
Type:	Character
Description:	Unique Identifier for Block Volume
Select equivalent:	K_SE_Storage_Volume.OID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dh, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Device ID
Type:	Character
Description:	Block Volume Device ID
Select equivalent:	K_SE_Storage_Volume.VolumeDeviceId
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0di, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Access Type
Type:	Character
Description:	Block Volume Access Type
Select equivalent:	K_SE_Storage_Volume.AccessType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Block Size in Bytes
Type:	Number
Description:	Block Volume Block Size in Bytes
Select equivalent:	K_SE_Storage_Volume.BlockSize

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dk, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Number of Blocks
Type:	Number
Description:	Number of blocks in Block Volume
Select equivalent:	K_SE_Storage_Volume.NumberOfBlocks
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Size Bytes
Type:	Number
Description:	Source Block Volume Size in Bytes
Select equivalent:	K_SE_Storage_Volume.VolumeSizeBytes
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dm, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Consumable Blocks
Type:	Number
Description:	Number of consumable blocks in Block Volume
Select equivalent:	K_SE_Storage_Volume.ConsumableBlocks
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name

List of values:	0dn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Consumed Blocks
Type:	Number
Description:	Actual consumed physical space of the volume. Note : This object only applicable for Block systems that support Thin Provisioning
Select equivalent:	K_SE_Storage_Volume.ConsumedBlocks
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0do, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Is Thinly Provisioned?
Type:	Character
Description:	Indicates Whether Block Volume is Thinly Provisioned or not
Select equivalent:	K_SE_Storage_Volume.IsThinlyProvisioned
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Raw Space (Bytes)
Type:	Number
Description:	Raw Space in Bytes that is consumed by the Block volume from the underlying Block extents
Select equivalent:	K_SE_Storage_Volume.RawSpace
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Raw Space (GB)
Type:	Number
Description:	Raw Space in GB that is co nsumed by the Block volum e from the underlying Bloc k extents
Select equivalent:	K_SE_Storage_Volume.RawSpaceGB
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dr, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Raw Space (GiB)
Type:	Number
Description:	Raw Space in GiB that is c onsumed by the Block volu me from the underlying Bl ock extents
Select equivalent:	K_SE_Storage_Volume.RawSpaceGiB
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ds, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	RAID Type
Type:	Character
Description:	RAID Type - A String repre

	sentation of the RAID leve l and configuration of the underlying Block extent(s) that the volume is based on. E.g. 'RAID5(7D+1P)'.
Select equivalent:	K_SE_Storage_Volume.RaidType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dt, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Sequential Access?
Type:	Character
Description:	Indicates whether sequential access or not
Select equivalent:	K_SE_Storage_Volume.SeqAccess
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0du, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Availability
Type:	Character
Description:	Whether Block Volume is Available
Select equivalent:	K_SE_Storage_Volume.Availability
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dv, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Status Information
Type:	Character

Description:	Block Volume Status Information
Select equivalent:	K_SE_Storage_Volume.StatusInfo
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Type
Type:	Character
Description:	Volume Type - {'Open','Ma inframe','Mainframe Mappe d' - Volume known to be m apped from FINCON or ESCO N port. EFile - Volume kno wn to be mapped through a File port}
Select equivalent:	K_SE_Storage_Volume.VolumeType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Purpose
Type:	Character
Description:	Volume Purpose represents the Block Volume Emulati on type for supported Bloc k Arrays
Select equivalent:	K_SE_Storage_Volume.VolumePurpose
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0dy, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Volume Default Single Point of Failure
Type:	Number
Description:	Default Single Point of Failure for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolDfltSnglPtofFailure
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume No Single Point of Failure
Type:	Character
Description:	No Single Point of Failure for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolNoSinglePointofFailure
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Minimum Data Redundancy
Type:	Number
Description:	Minimum Data Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMinDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Maximum Data Redundancy

Type:	Number
Description:	Maximum Data Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMaxDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e3, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Default Data Redundancy
Type:	Number
Description:	Default Data Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolDefaultDataRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Minimum Spindle Redundancy
Type:	Number
Description:	Minimum Spindle Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMinSpindleRedundancy
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Maximum Spindle Redundancy
Type:	Number
Description:	Maximum Spindle Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMaxSpindleRedundancy
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Default Spindle Redundancy
Type:	Number
Description:	Default Spindle Redundancy for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolDefaultSpindleRedundancy
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e7, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Minimum Delta Reservation
Type:	Number
Description:	Minimum Delta Reservation for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMinDeltaReservation
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Volume Maximum Delta Reservation
Type:	Number
Description:	Maximum Delta Reservation for Block Volume
Select equivalent:	K_SE_Storage_Volume.VolMaxDeltaReservation
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0e9, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Default Delta Reservation
Type:	Number
Description:	Default Delta Reservation for Block Volume
Select equivalent:	K_SE_Storage_Volume.DefaultDeltaReservation
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ea, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Actual Blocks
Type:	Number
Description:	Actual Number of Blocks
Select equivalent:	K_SE_Storage_Volume.ActualBlocks
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0eb, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Used Blocks
Type:	Number
Description:	Number of Used Blocks
Select equivalent:	K_SE_Storage_Volume.UsedBlocks
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ec, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Controller Name
Type:	Character
Description:	Controller Name
Select equivalent:	K_SE_Storage_Volume.ControllerName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ed, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Composition
Type:	Character
Description:	Shows type of volume like Internal, External, Hybrid...
Select equivalent:	K_SE_Storage_Volume.Composition
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ee, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Volume Description
Type:	Character
Description:	Block Volume Description
Select equivalent:	K_SE_Storage_Volume.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Volume Name
List of values:	0ef, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Capabilities
Type:	Character
Description:	Storage Capabilities

Select equivalent: K_SE_Storage_Volume.StorageCapabilities
Where equivalent:

Qualification: detail
Associated dimension name: Block Volume Name
List of values: 0eg, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System UUID
Type: Character
Description: UUID of the Storage System
Select equivalent: K_SE_StorageSystem.UUID
Where equivalent:

Qualification: dimension
List of values: 0eh, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Block Pool UUID
Type: Character
Description: UUID of the Block Pool
Select equivalent: K_SE_Storage_Pool.SANPoolUUID
Where equivalent:

Qualification: dimension
List of values: 0ei, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Block Volume UUID
Type: Character
Description: UUID of the Block Volume
Select equivalent: K_SE_Storage_Volume.SANVolumeUUID
Where equivalent:

Qualification: dimension
List of values: 0ej, editable, manual refresh, not exportable
Security access level: 0

Can be used: in result, in condition, in sort
Object status: show

Class: DATETIME(EMC Symmetrix Storage Volume Performance Statistics)
Description:

Object: Year
Type: Number
Description: Year
Select equivalent: DATETIME.TIME_YEAR_NUMBER
Where equivalent:

Qualification: dimension
List of values: 0ek, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Month
Type: Character
Description: Month Name first Three Characters
Select equivalent: (SUBSTR(DATETIME.TIME_MONTH_NAME,1,3))
Where equivalent:

Qualification: dimension
List of values: 0el, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Month Name
Type: Character
Description: Month Name
Select equivalent: DATETIME.TIME_MONTH_NAME
Where equivalent:

Qualification: detail
Associated dimension name: Month
List of values: 0em, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort

Object status: show

Object: Day
Type: Number
Description: Day
Select equivalent: DATETIME.TIME_DAY_MONTH_NUMBER
Where equivalent:

Qualification: dimension
List of values: 0en, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Day Name
Type: Character
Description: Day Name
Select equivalent: DATETIME.TIME_DAY_NAME
Where equivalent:

Qualification: detail
Associated dimension name: Day
List of values: 0eo, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Hour
Type: Number
Description: Hour
Select equivalent: DATETIME.TIME_HOUR_ID
Where equivalent:

Qualification: dimension
List of values: 0ep, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Hour Id
Type: Number
Description: Hour Id

Select equivalent:	DATETIME.TIME_HOUR_ID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Hour
List of values:	0eq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Hour Description
Type:	Character
Description:	Time Hour Description
Select equivalent:	DATETIME.TIME_HOUR_DESCRIPTION
Where equivalent:	
Qualification:	detail
Associated dimension name:	Hour
List of values:	0er, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date
Type:	Date
Description:	Full Date
Select equivalent:	DATETIME.TIME_FULL_DATE
Where equivalent:	
Qualification:	dimension
List of values:	0es, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Holiday
Type:	Character
Description:	Time Is Holiday
Select equivalent:	DATETIME.TIME_IS_HOLIDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date

List of values:	0et, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Weekday
Type:	Character
Description:	Time Is Weekday
Select equivalent:	DATETIME.TIME_IS_WEEKDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	0eu, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Boundary
Type:	Number
Description:	Hour Boundary
Select equivalent:	DATETIME.HOUR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0ev, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Day Boundary
Type:	Number
Description:	Day Boundary
Select equivalent:	DATETIME.DAY_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0ew, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Week Boundary
Type:	Number
Description:	Week Boundary
Select equivalent:	DATETIME.WEEK_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0ex, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Month Boundary
Type:	Number
Description:	Month Boundary
Select equivalent:	DATETIME.MONTH_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0ey, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Year Boundary
Type:	Number
Description:	Year Boundary
Select equivalent:	DATETIME.YEAR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0f0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Class:	Symmetrix Storage Volume Performance Statistics
Description:	

Object:	Total IO Rate Random (Req/Sec)
Type:	Number
Description:	Number of IO operations p erformed each second by t

	he Symmetrix device inclu ding writes and random re ads.In contrast the metric 'Total IO Rate' includes writes, random reads and sequential reads
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.TotalIORateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total IO Rate (Req/Sec)
Type:	Number
Description:	Total number of read I/O and write I/O operations (random and sequential) pe rformed each second by th e Symmetrix device, includ es writes, random reads a nd sequential reads
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.TotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Hit Rate (Req/Sec)
Type:	Number
Description:	Total number of read I/O and write I/O operations (random and sequential) pe rformed each second by th e Symmetrix device that w ere immediately satisfied by the cache

Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.TotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Miss Rate (Req/Sec)
Type:	Number
Description:	Total number of read I/O and write I/O operations (random and sequential) pe rformed each second by th e Symmetrix device that w ere NOT immediately satis fied by the cache
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.TotalMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Hits
Type:	Number
Description:	Percentage of IO operatio ns, performed by the Symm etrix device, immediately satisfied by the cache
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Misses
Type:	Number
Description:	Percentage of IO operatio ns, performed by the Symm etrix device that were mis ses
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctMissIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average IO Size (Bytes)
Type:	Number
Description:	Average Size of an I/O op eration performed by the S ymmetrix device.
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.AvgIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Number of Bytes read by the Symmetrix device each second
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.ReadDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Read Rate Random (Req/Sec)
Type: Number
Description: Number of I/O operations performed each second by the Symmetrix device that were random reads. This Random Read per sec metric for the Symmetrix device does not include the sequential reads. In contrast the 'Read Data Total' metric includes both random and sequential hits per sec
Select equivalent: SR_SE_Sym_Storage_Vol_Stats.ReadRateRandom
Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Read Rate Total (Req/Sec)
Type: Number
Description: Read request rate including both random and sequential reads performed each second by the Symmetrix device
Select equivalent: SR_SE_Sym_Storage_Vol_Stats.ReadRateTotal
Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Read Hit Rate Random (Req/Sec)

Type:	Number
Description:	Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.ReadHitRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Total number of read hit operations(random and sequential) performed each second by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.ReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Reads
Type:	Number
Description:	Percentage of read I/O operations to total I/O operations(including both rand

	om and sequential)
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Read Hits Random
Type:	Number
Description:	Percentage of read hit I/Os to total I/Os(only random reads).
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctReadHitIOsRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Read Hits Total
Type:	Number
Description:	Percentage of read hit I/O s to total I/Os(including random and sequential rea ds).
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctReadHitIOsTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Read Misses Random
Type:	Number
Description:	Percentage of read miss I/Os to total I/Os(only random reads).

Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctReadMissIOsRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Read Misses Total
Type:	Number
Description:	Percentage of read miss I/Os to total I/Os(including random and sequential reads).
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctReadMissIOsTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Size (Bytes)
Type:	Number
Description:	Average Size of read I/O operation performed each second by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.AvgReadSize
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Write Data Rate (Bytes/Sec)

Type:	Number
Description:	Number of bytes written by the Symmetrix device each second
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.WriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Rate (Req/Sec)
Type:	Number
Description:	Number of write I/O opera tions performed each seco nd by the Symmetrix devic e
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.WriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Number of write hit operat ions performed each secon d by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.WriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Miss Rate (Req/Sec)
Type:	Number
Description:	Number of write misses th at has occurred for the Sy mmetrix device each secon d.
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.WriteMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Writes
Type:	Number
Description:	Percentage of total write I/O operations performed by the Symmetrix device.
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctWriteIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Write Hits
Type:	Number
Description:	Percentage of cache write hit I/O operations perform ed by the Symmetrix devic e.
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctWriteHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Write Misses
Type:	Number
Description:	Percentage of write miss I /Os to total miss I/Os(inc luding both random and se quential).
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PctWriteMissIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Size (Bytes)
Type:	Number
Description:	Average Size of write I/O operation performed by th e Symmetrix device.
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.AvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Maximum number of write-p ending slots available(exp ressed in Bytes) for the S ymmetrix device. Max Writ e Pending Threshold is not a static number. It depen ds on the Symmetrix activi

	ty. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.MaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Pending Flush (Bytes)
Type:	Number
Description:	Number of cache slots (expressed in Bytes) that were write pending for the logical volume at a point in time. This number changes according on the cache destage activity rate and number of writes
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.PendingFlush

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Sampled Average Read Time (ms)
Type:	Number
Description:	Completion time of a read as measured by the host d irector. Measurements are taken for a sample set of approximately 30% of the I/Os
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SampledAvgReadTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Sampled Average Write Time (ms)
Type:	Number
Description:	Completion time of a write as measured by the host director. Measurements ar e taken for a sample set o f approximately 30% of th e I/Os
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Total Bytes read and written each second
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.TotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Seq Read Rate (Req/Sec)
Type:	Number
Description:	Number of Sequential read operations performed each second by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Number of sequential read hit requests performed(per second) by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Rate Total (Req/Sec)
Type:	Number
Description:	Write cache request rate (requests per second) and i ncluding both random and sequential I/Os performed by the Symmetrix device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.WriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Seq Write Rate (Req/Sec)
Type:	Number
Description:	Number of sequential writ e operations performed ea ch second by the Symmetri x device
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Number of sequential writ e hit requests performed(p er second) for the Symmet rix device)
Select equivalent:	SR_SE_Sym_Storage_Vol_Stats.SeqWriteHitRate

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Hourly Symmetrix Stor age Volume Performan ce Statistics
Description:	

Object:	Maximum Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of IO ope rations performed each se cond by the Symmetrix dev ice including writes and r andom reads.In contrast t he metric 'Total IO Rate' includes writes, random re ads and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXTotalIORateRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of IO oper ations performed each sec ond by the Symmetrix devi ce including writes and ra ndom reads.In contrast th e metric 'Total IO Rate' i ncludes writes, random re ads and sequential reads

Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINTotalIORateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of IO oper ations performed each sec ond by the Symmetrix devi ce including writes and ra ndom reads.In contrast th e metric 'Total IO Rate' i ncludes writes, random re ads and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGTotalIORateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon

	d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXTotalMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINTotalMissRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Miss Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGTotalMissRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPercentIOHits
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPercentIOHits
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Misses
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPercentIOMiss
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Misses
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPercentIOMiss
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Average IO Size (Bytes)
Type: Number
Description: Maximum Average Size of a
n I/O operation performed
by the Symmetrix device.
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MAXAverageIOSize
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Average IO Size (Bytes)
Type: Number
Description: Minimum Average Size of a
n I/O operation performed
by the Symmetrix device.
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MINAverageIOSize
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Read Data Rate (Bytes/Sec)
Type: Number
Description: Maximum Number of Bytes r
ead by the Symmetrix devi
ce each second
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MAXReadDataRate
Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINReadDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes read by the Symmetrix device each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGReadDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix de vice that were random rea ds. This Random Read per sec metric for the Symmet

	rix device does not includ e the sequential reads. In contrast the 'Read Data T otal' metric includes both random and sequential hit s per sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXReadRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits per sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINReadRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se

	cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits per sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGReadRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device

Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGReadRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of random read hit I/O operations p erformed each second by t he Symmetrix device. The Read hits per sec metric f or the Symmetrix device d oes not include the sequen tial read hits. In contrast the 'Total Hit Rate' metr ic includes both random a nd sequential read hits pe r sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXReadHitRateRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINReadHitRateRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per

	sec
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGReadHitRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctReadIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctReadIOS
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSTotal

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSTotal
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Misses
Type:	Number
Description:	Maximum Percentage of rea d miss I/Os to total I/Os(only random reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Misses
Type:	Number
Description:	Minimum Percentage of rea

	d miss I/Os to total I/Os(
	only random reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Misses Total
Type:	Number
Description:	Maximum Percentage of rea
	d miss I/Os to total I/Os(
	including random and sequ
	ential reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Misses Total
Type:	Number
Description:	Minimum Percentage of rea
	d miss I/Os to total I/Os(
	including random and sequ
	ential reads).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXAvgReadSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINAvgReadSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of bytes written by the Symmetrix device each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXWriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINWriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGWriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Number of write h it operations performed ea

	ch second by the Symmetri
	x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Number of write h
	it operations performed ea
	ch second by the Symmetri
	x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Number of write h
	it operations performed ea
	ch second by the Symmetri
	x device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write misses that has occurred for the Symmetrix device each second.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write misses that has occurred for the Symmetrix device each second.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINWriteMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Miss Rate (Req/Sec)
Type:	Number
Description:	Average Number of write misses that has occurred for the Symmetrix device each second.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Hits
Type:	Number
Description:	Maximum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.

Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteHitIOS
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum %Write Hits
Type: Number
Description: Minimum Percentage of cac
he write hit I/O operation
s performed by the Symmet
rix device.
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MINPctWriteHitIOS
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum %Write Misses
Type: Number
Description: Maximum Percentage of wri
te miss I/Os to total miss
I/Os(including both rando
m and sequential).
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteMissIOS
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum %Write Misses

Type:	Number
Description:	Minimum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPctWriteMissIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXAvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINAvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Maximum Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Minimum Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Average Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Average Pending Flush (Bytes)
Type: Number
Description: Average Number of cache s
lots (expressed in Bytes)
that were write pending fo
r the logical volume at a
point in time. This number
changes according on the
cache destage activity ra
te and number of writes
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.AVGPendingFlush
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Sampled Average Read Time (ms)
Type: Number
Description: Maximum Completion time o
f a read as measured by th
e host director. Measurem
ents are taken for a sampl
e set of approximately 30
% of the I/Os
Select equivalent: SH_SE_Sym_Storage_Vol_Stats.MAXSampledAvgReadTimeMs
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Sampled Average Read Time (ms)
Type: Number
Description: Minimum Completion time o

	f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSampledAvgReadTimeMs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Read Time (ms)
Type:	Number
Description:	Average Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSampledAvgReadTimeMs
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Write Time (ms)
Type:	Number
Description:	Maximum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXSampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Write Time (ms)
Type:	Number
Description:	Minimum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Write Time (ms)
Type:	Number
Description:	Average Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and written each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and written each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and written each second
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of Sequen tial read operations perfo

	rmed each second by the S ymmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of Sequent ial read operations perfor med each second by the Sy mmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial read hit requests per formed(per second) by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXWriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINWriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Total (Req/Sec)
Type:	Number

Description:	Average Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGWriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write operations perf ormed each second by the Symmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSeqWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write hit requests pe rformed(per second) for th e Symmetrix device)
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MAXSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.MINSeqWriteHitRate

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent:	SH_SE_Sym_Storage_Vol_Stats.AVGSeqWriteHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Daily Symmetrix Stora ge Volume Performanc e Statistics
Description:	

Object:	Maximum Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of IO ope rations performed each se cond by the Symmetrix dev ice including writes and r andom reads.In contrast t he metric 'Total IO Rate' includes writes, random re ads and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXTotalIORateRandom
Where equivalent:	

Qualification:	measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of IO oper ations performed each sec ond by the Symmetrix devi ce including writes and ra ndom reads.In contrast th e metric 'Total IO Rate' i ncludes writes, random re ads and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINTotalIORateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of IO oper ations performed each sec ond by the Symmetrix devi ce including writes and ra ndom reads.In contrast th e metric 'Total IO Rate' i ncludes writes, random re ads and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGTotalIORateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Total number of r
ead I/O and write I/O oper
ations (random and sequen
tial) performed each secon
d by the Symmetrix device
, includes writes, random
reads and sequential reads
Select equivalent: SD_SE_Sym_Storage_Vol_Stats.MAXTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total I/O Rate (Req/Sec)
Type: Number
Description: Minimum Total number of r
ead I/O and write I/O oper
ations (random and sequen
tial) performed each secon
d by the Symmetrix device
, includes writes, random
reads and sequential reads
Select equivalent: SD_SE_Sym_Storage_Vol_Stats.MINTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Total I/O Rate (Req/Sec)
Type: Number
Description: Average Total number of r

	ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache

Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXTotalMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINTotalMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Miss Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGTotalMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Maximum %Hits

Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPercentIOHits
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPercentIOHits
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Misses
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPercentIOMiss
Where equivalent:	
Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Misses
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPercentIOMiss
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average Size of a n I/O operation performed by the Symmetrix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXAverageIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average IO Size (Bytes)
Type:	Number
Description:	Minimum Average Size of a n I/O operation performed by the Symmetrix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINAverageIOSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXReadDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINReadDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes read by the Symmetrix device each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGReadDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix de vice that were random rea ds. This Random Read per sec metric for the Symmet rix device does not includ e the sequential reads. In contrast the 'Read Data T otal' metric includes both random and sequential hit s per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXReadRateRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r

	andom and sequential hits per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINReadRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of I/O operations performed each second by the Symmetrix device that were random reads. This Random Read per sec metric for the Symmetrix device does not include the sequential reads. In contrast the 'Read Data Total' metric includes both random and sequential hits per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGReadRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate including both random and sequential reads performed each second by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXReadRateTotal

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINReadRateTotal

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGReadRateTotal

Where equivalent:

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXReadHitRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINReadHitRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGReadHitRateRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Total number of read hit operations(random and sequential) performed each second by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGReadHitRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctReadIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctReadIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSRandom
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Hits
Type:	Number
Description:	Minimum Percentage of rea

	d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Misses
Type:	Number
Description:	Maximum Percentage of rea d miss I/Os to total I/Os(only random reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Misses
Type:	Number
Description:	Minimum Percentage of rea d miss I/Os to total I/Os(only random reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSRandom
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Misses Total
Type:	Number
Description:	Maximum Percentage of rea d miss I/Os to total I/Os(including random and sequ ential reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Misses Total
Type:	Number
Description:	Minimum Percentage of rea d miss I/Os to total I/Os(including random and sequ ential reads).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXAvgReadSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINAvgReadSize
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of bytes written by the Symmetrix device each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXWriteDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINWriteDataRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of bytes w ritten by the Symmetrix de vice each second

Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGWriteDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Average Write Rate (Req/Sec)

Type:	Number
Description:	Average Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write misses that has occurred f or the Symmetrix device e ach second.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINWriteMissRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Miss Rate (Req/Sec)
Type:	Number
Description:	Average Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of tot

	al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Hits
Type:	Number
Description:	Maximum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Hits
Type:	Number
Description:	Minimum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctWriteHitIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Misses
Type:	Number
Description:	Maximum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteMissIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Misses
Type:	Number
Description:	Minimum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPctWriteMissIOS
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXAvgWriteSize
Where equivalent:	
Qualification:	measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINAvgWriteSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Maximum Wr ite Pending Threshol d (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots avai lable(expressed in Bytes) for the Symmetrix device. Max Write Pending Thresho ld is not a static number. It depends on the Symmet rix activity. Each Symmetr ix device is assigned a li mit of write-pending slots that can dynamically chan ge between a base value a nd a value three times the base(the maximum value). Once the Max Write Pendi ng Threshold has reached three times the base value ,writes to the device are

	delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Minimum Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value

	,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Average Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached

	three times the base value ,writes to the device are delayed so that the cache can destage, which frees t he cache slot. As the cach e slot are freed, the writ e resumes. While the write -pending limit is reached, the disk directors operat e in priority destage writ e mode. This gives write d ata higher priority than u sual. During the delay, th e writes to this Symmetrix device are counted as wri te misses
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGMaxWritePendingThreshold
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGPendingFlush
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Read Time (ms)
Type:	Number

Description:	Maximum Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSampledAvgReadTimeMs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Read Time (ms)
Type:	Number
Description:	Minimum Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSampledAvgReadTimeMs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Read Time (ms)
Type:	Number
Description:	Average Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSampledAvgReadTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Write Time (ms)
Type:	Number
Description:	Maximum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Write Time (ms)
Type:	Number
Description:	Minimum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSampledAvgWriteTimeMs
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Write Time (ms)
Type:	Number
Description:	Average Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSampledAvgWriteTimeMs
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and written each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and written each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and written each second
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of Sequent ial read operations perfor med each second by the Sy mmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSeqReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial read hit requests per formed(per second) by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSeqReadHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSeqReadHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSeqReadHitRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXWriteRateTotal
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Total (Req/Sec)

Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINWriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Total (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGWriteRateTotal
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write operations perf ormed each second by the Symmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSeqWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSeqWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSeqWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write hit requests pe

	rformed(per second) for th
	e Symmetrix device)
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MAXSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent
	ial write hit requests per
	formed(per second) for th
	e Symmetrix device)
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.MINSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent
	ial write hit requests per
	formed(per second) for th
	e Symmetrix device)
Select equivalent:	SD_SE_Sym_Storage_Vol_Stats.AVGSeqWriteHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: HourlyOLAP-Symmetrix Storage Volume Performance Statistics

Description:

Object: Maximum Total I/O Rate Random (Req/Sec)
Type: Number
Description: Maximum Number of IO operations performed each second by the Symmetrix device including writes and random reads.In contrast the metric 'Total IO Rate' includes writes, random reads and sequential reads
Select equivalent: max(SH_SE_Sym_Storage_Vol_Stats.MAXTotalIORateRandom)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total I/O Rate Random (Req/Sec)
Type: Number
Description: Minimum Number of IO operations performed each second by the Symmetrix device including writes and random reads.In contrast the metric 'Total IO Rate' includes writes, random reads and sequential reads
Select equivalent: min(SH_SE_Sym_Storage_Vol_Stats.MINTotalIORateRandom)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object:	Average Total I/O Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of IO oper ations performed each sec ond by the Symmetrix devi ce including writes and ra ndom reads.In contrast th e metric 'Total IO Rate' i ncludes writes, random re ads and sequential reads
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGTotalIORateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r

	ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache

Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Average Total Miss Rate (Req/Sec)

Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPercentIOHits)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPercentIOHits)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Misses
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPercentIOMiss)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Misses
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPercentIOMiss)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average Size of a

	n I/O operation performed by the Symmetrix device.
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXAverageIOSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average IO Size (Bytes)
Type:	Number
Description:	Minimum Average Size of a n I/O operation performed by the Symmetrix device.
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINAverageIOSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)

Type:	Number
Description:	Minimum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes read by the Symmetrix device each second
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix de vice that were random rea ds. This Random Read per sec metric for the Symmet rix device does not includ e the sequential reads. In contrast the 'Read Data T otal' metric includes both random and sequential hit s per sec
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXReadRateRandom)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits per sec
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINReadRateRandom)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits

	per sec
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGReadRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Total (Req/Sec)
Type:	Number
Description:	Average Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGReadRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of random read hit I/O operations p erformed each second by t he Symmetrix device. The Read hits per sec metric f or the Symmetrix device d oes not include the sequen tial read hits. In contrast the 'Total Hit Rate' metr ic includes both random a nd sequential read hits pe r sec
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Random (Req/Sec)

Type:	Number
Description:	Minimum Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of random read hit I/O operations performed each second by the Symmetrix device. The Read hits per sec metric for the Symmetrix device does not include the sequential read hits. In contrast the 'Total Hit Rate' metric includes both random and sequential read hits per sec
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Maximum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device

Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(o nly random reads).
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Misses
Type:	Number
Description:	Maximum Percentage of rea d miss I/Os to total I/Os(only random reads).
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Misses
Type:	Number
Description:	Minimum Percentage of rea d miss I/Os to total I/Os(only random reads).
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSRandom)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Misses Total
Type:	Number
Description:	Maximum Percentage of rea d miss I/Os to total I/Os(including random and sequ ential reads).
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Misses Total
Type:	Number
Description:	Minimum Percentage of rea d miss I/Os to total I/Os(including random and sequ ential reads).
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Size of r ead I/O operation perform ed each second by the Sym

	metrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of bytes written by the Symmetrix device each second
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)

Type:	Number
Description:	Minimum Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write misses that has occurred f or the Symmetrix device e

	ach second.
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Miss Rate (Req/Sec)
Type:	Number
Description:	Average Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Hits
Type:	Number
Description:	Maximum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Hits
Type:	Number
Description:	Minimum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctWriteHitIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Misses
Type:	Number
Description:	Maximum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteMissIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Misses
Type:	Number
Description:	Minimum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINPctWriteMissIOS)

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXAvgWriteSize)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINAvgWriteSize)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Maximum Wr ite Pending Threshol

d (Bytes)

Type:	Number
Description:	Maximum Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXMaxWritePendingThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Minimum Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINMaxWritePendingThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Maximum Write Pending Threshold (Bytes)
Type:	Number
Description:	Average Maximum number of write-pending slots available(expressed in Bytes) for the Symmetrix device. Max Write Pending Threshold is not a static number. It depends on the Symmetrix activity. Each Symmetrix device is assigned a limit of write-pending slots that can dynamically change between a base value and a value three times the base(the maximum value). Once the Max Write Pending Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGMaxWritePendingThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Maximum Pending Flush (Bytes)
Type: Number
Description: Maximum Number of cache s
lots (expressed in Bytes)
that were write pending fo
r the logical volume at a
point in time. This number
changes according on the
cache destage activity ra
te and number of writes
Select equivalent: max(SH_SE_Sym_Storage_Vol_Stats.MAXPendingFlush)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Pending Flush (Bytes)
Type: Number
Description: Minimum Number of cache s
lots (expressed in Bytes)
that were write pending fo
r the logical volume at a
point in time. This number
changes according on the
cache destage activity ra
te and number of writes
Select equivalent: min(SH_SE_Sym_Storage_Vol_Stats.MINPendingFlush)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Pending Flush (Bytes)

Type:	Number
Description:	Average Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Read Time (ms)
Type:	Number
Description:	Maximum Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Read Time (ms)
Type:	Number
Description:	Minimum Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30

	% of the I/Os
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Read Time (ms)
Type:	Number
Description:	Average Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Write Time (ms)
Type:	Number
Description:	Maximum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Write Time (ms)
Type:	Number
Description:	Minimum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Write Time (ms)
Type:	Number
Description:	Average Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and written each second
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXTotalDataRate)

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and written each second
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINTotalDataRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and written each second
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGTotalDataRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of Sequent ial read operations perfor med each second by the Sy mmetrix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGSeqReadRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen

	tial read hit requests per formed(per second) by the Symmetrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Total (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p

	erformed by the Symmetrix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write operations perf ormed each second by the Symmetrix device
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	avg(SH_SE_Sym_Storage_Vol_Stats.AVGSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write hit requests pe rformed(per second) for th e Symmetrix device)
Select equivalent:	max(SH_SE_Sym_Storage_Vol_Stats.MAXSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent:	min(SH_SE_Sym_Storage_Vol_Stats.MINSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Seq Write Hit Rate (Req/Sec)
Type: Number
Description: Average Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent: avg(SH_SE_Sym_Storage_Vol_Stats.AVGSeqWriteHitRate)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DailyOLAP-Symmetrix Storage Volume Perfor mance Statistics
Description:

Object: Maximum Total I/O Rate Random (Req/Sec)
Type: Number
Description: Maximum Number of IO ope rations performed each se cond by the Symmetrix dev ice including writes and r andom reads.In contrast t he metric 'Total IO Rate' includes writes, random re ads and sequential reads
Select equivalent: max(SD_SE_Sym_Storage_Vol_Stats.MAXTotalIORateRandom)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort

Object status: show

Object: Minimum Total I/O Rate Random (Req/Sec)
Type: Number
Description: Minimum Number of IO oper
ations performed each sec
ond by the Symmetrix devi
ce including writes and ra
ndom reads.In contrast th
e metric 'Total IO Rate' i
ncludes writes, random re
ads and sequential reads
Select equivalent: min(SD_SE_Sym_Storage_Vol_Stats.MINTotalIORateRandom)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Total I/O Rate Random (Req/Sec)
Type: Number
Description: Minimum Number of IO oper
ations performed each sec
ond by the Symmetrix devi
ce including writes and ra
ndom reads.In contrast th
e metric 'Total IO Rate' i
ncludes writes, random re
ads and sequential reads
Select equivalent: avg(SD_SE_Sym_Storage_Vol_Stats.AVGTotalIORateRandom)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Total I/O Rate (Req/Sec)

Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device , includes writes, random reads and sequential reads
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device

	, includes writes, random reads and sequential reads
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINTotalHitRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were immediately sat isfied by the cache
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Miss Rate (Req/Sec)
Type:	Number
Description:	Average Total number of r ead I/O and write I/O oper ations (random and sequen tial) performed each secon d by the Symmetrix device that were NOT immediatel y satisfied by the cache
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGTotalMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device, imme

	diately satisfied by the c ache
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPercentIOHits)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device, imme diately satisfied by the c ache
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPercentIOHits)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Misses
Type:	Number
Description:	Maximum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPercentIOMiss)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Misses
Type:	Number
Description:	Minimum Percentage of IO operations, performed by t he Symmetrix device that were misses
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPercentIOMiss)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average Size of a n I/O operation performed by the Symmetrix device.
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXAverageIOSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average IO Size (Bytes)
Type:	Number
Description:	Minimum Average Size of a n I/O operation performed by the Symmetrix device.
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINAverageIOSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes r ead by the Symmetrix devi ce each second
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes read by the Symmetrix device each second
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGReadDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Random (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix de vice that were random rea ds. This Random Read per sec metric for the Symmet rix device does not includ e the sequential reads. In contrast the 'Read Data T otal' metric includes both random and sequential hit s per sec
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXReadRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits per sec
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINReadRateRandom)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix dev ice that were random read s. This Random Read per s ec metric for the Symmetri x device does not include the sequential reads. In c ontrast the 'Read Data Tot al' metric includes both r andom and sequential hits per sec
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGReadRateRandom)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Read request rate including both random an d sequential reads perform ed each second by the Sym metrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXReadRateTotal)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Read Rate Total (Req/Sec)
Type: Number
Description: Minimum Read request rate
including both random an
d sequential reads perform
ed each second by the Sym
metrix device
Select equivalent: min(SD_SE_Sym_Storage_Vol_Stats.MINReadRateTotal)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Read Rate Total (Req/Sec)
Type: Number
Description: Average Read request rate
including both random an
d sequential reads perform
ed each second by the Sym
metrix device
Select equivalent: avg(SD_SE_Sym_Storage_Vol_Stats.AVGReadRateTotal)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Read Hit Rate Random (Req/Sec)
Type: Number
Description: Maximum Number of random
read hit I/O operations p

	erformed each second by t he Symmetrix device. The Read hits per sec metric f or the Symmetrix device d oes not include the sequen tial read hits. In contrast the 'Total Hit Rate' metr ic includes both random a nd sequential read hits pe r sec
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Minimum Number of random read hit I/O operations p erformed each second by t he Symmetrix device. The Read hits per sec metric f or the Symmetrix device d oes not include the sequen tial read hits. In contrast the 'Total Hit Rate' metr ic includes both random a nd sequential read hits pe r sec
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Random (Req/Sec)
Type:	Number
Description:	Average Number of random read hit I/O operations pe rformed each second by th e Symmetrix device. The R ead hits per sec metric fo r the Symmetrix device do es not include the sequent ial read hits. In contrast the 'Total Hit Rate' metri c includes both random an d sequential read hits per sec
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGReadHitRateRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Total number of r

	ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Total number of r ead hit operations(random and sequential) performe d each second by the Symm etrix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGReadHitRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d I/O operations to total I/O operations(including b oth random and sequential)
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctReadIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no

Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum %Reads
Type: Number
Description: Minimum Percentage of rea
d I/O operations to total
I/O operations(including b
oth random and sequential
)
Select equivalent: min(SD_SE_Sym_Storage_Vol_Stats.MINPctReadIOS)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum %Random Read Hits
Type: Number
Description: Maximum Percentage of rea
d hit I/Os to total I/Os(o
nly random reads).
Select equivalent: max(SD_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSRandom)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum %Random Read Hits
Type: Number
Description: Minimum Percentage of rea
d hit I/Os to total I/Os(o
nly random reads).
Select equivalent: min(SD_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSRandom)
Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Hits
Type:	Number
Description:	Maximum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctReadHitIOSTotal)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Hits
Type:	Number
Description:	Minimum Percentage of rea d hit I/Os to total I/Os(i ncluding random and seque ntial reads).
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctReadHitIOSTotal)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Random Read Misses
Type:	Number
Description:	Maximum Percentage of rea

	d miss I/Os to total I/Os(
	only random reads).
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Random Read Misses
Type:	Number
Description:	Minimum Percentage of rea
	d miss I/Os to total I/Os(
	only random reads).
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSRandom)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Read Misses Total
Type:	Number
Description:	Maximum Percentage of rea
	d miss I/Os to total I/Os(
	including random and sequ
	ential reads).
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctReadMissIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Read Misses Total
Type:	Number
Description:	Minimum Percentage of rea d miss I/Os to total I/Os(including random and sequ ential reads).
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctReadMissIOSTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Read Size (Bytes)
Type:	Number
Description:	Maximum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average Read Size (Bytes)
Type:	Number
Description:	Minimum Average Size of r ead I/O operation perform ed each second by the Sym metrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINAvgReadSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of bytes written by the Symmetrix device each second
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINWriteDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of bytes w ritten by the Symmetrix de vice each second
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGWriteDataRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write I /O operations performed e ach second by the Symmetr ix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write I /O operations performed e ach second by the Symmetr

	ix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Hit Rate Total (Req/Sec)
Type:	Number
Description:	Average Number of write h it operations performed ea ch second by the Symmetri x device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write misses that has occurred f or the Symmetrix device e ach second.
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Miss Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Miss Rate (Req/Sec)
Type:	Number
Description:	Average Number of write m isses that has occurred fo r the Symmetrix device ea ch second.
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of tot al write I/O operations pe rformed by the Symmetrix device.
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS)

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Hits
Type:	Number
Description:	Maximum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteHitIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Hits
Type:	Number
Description:	Minimum Percentage of cac he write hit I/O operation s performed by the Symmet rix device.
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctWriteHitIOS)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Write Misses
Type:	Number

Description:	Maximum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteMissIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Write Misses
Type:	Number
Description:	Minimum Percentage of wri te miss I/Os to total miss I/Os(including both rando m and sequential).
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPctWriteMissIOS)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average Write Size (Bytes)
Type:	Number
Description:	Maximum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status:	show

Object:	Minimum Average Write Size (Bytes)
Type:	Number
Description:	Minimum Average Size of w rite I/O operation perform ed by the Symmetrix devic e.
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINAvgWriteSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Maximum Wr ite Pending Threshol d (Bytes)
Type:	Number
Description:	Maximum Maximum number o f write-pending slots avai lable(expressed in Bytes) for the Symmetrix device. Max Write Pending Thresho ld is not a static number. It depends on the Symmet rix activity. Each Symmetr ix device is assigned a li mit of write-pending slots that can dynamically chan ge between a base value a nd a value three times the base(the maximum value). Once the Max Write Pendi ng Threshold has reached three times the base value ,writes to the device are delayed so that the cache can destage, which frees t he cache slot. As the cach e slot are freed, the writ

	e resumes. While the write -pending limit is reached, the disk directors operat e in priority destage writ e mode. This gives write d ata higher priority than u sual. During the delay, th e writes to this Symmetrix device are counted as wri te misses
Select equivalent:	max(SD_SE_Sym_Storage_Vo l_Stats.MAXMaxWritePendin gThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Maximum Wri te Pending Threshold (Bytes)
Type:	Number
Description:	Minimum Maximum number o f write-pending slots avai lable(expressed in Bytes) for the Symmetrix device. Max Write Pending Thresho ld is not a static number. It depends on the Symmet rix activity. Each Symmetr ix device is assigned a li mit of write-pending slots that can dynamically chan ge between a base value a nd a value three times the base(the maximum value). Once the Max Write Pendi ng Threshold has reached three times the base value ,writes to the device are delayed so that the cache

	can destage, which frees t he cache slot. As the cach e slot are freed, the writ e resumes. While the write -pending limit is reached, the disk directors operat e in priority destage writ e mode. This gives write d ata higher priority than u sual. During the delay, th e writes to this Symmetrix device are counted as wri te misses
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINMaxWritePendingThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Maximum Wri te Pending Threshold (Bytes)
Type:	Number
Description:	Average Maximum number o f write-pending slots avai lable(expressed in Bytes) for the Symmetrix device. Max Write Pending Thresho ld is not a static number. It depends on the Symmet rix activity. Each Symmetr ix device is assigned a li mit of write-pending slots that can dynamically chan ge between a base value a nd a value three times the base(the maximum value). Once the Max Write Pendi ng Threshold has reached three times the base value ,writes to the device are

	delayed so that the cache can destage, which frees the cache slot. As the cache slot are freed, the write resumes. While the write-pending limit is reached, the disk directors operate in priority destage write mode. This gives write data higher priority than usual. During the delay, the writes to this Symmetrix device are counted as write misses
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGMaxWritePendingThreshold)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Pending Flush (Bytes)
Type:	Number
Description:	Maximum Number of cache slots (expressed in Bytes) that were write pending for the logical volume at a point in time. This number changes according on the cache destage activity rate and number of writes
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Pending Flush (Bytes)
Type:	Number
Description:	Minimum Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Pending Flush (Bytes)
Type:	Number
Description:	Average Number of cache s lots (expressed in Bytes) that were write pending fo r the logical volume at a point in time. This number changes according on the cache destage activity ra te and number of writes
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGPendingFlush)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Read Time (ms)
Type:	Number
Description:	Maximum Completion time o f a read as measured by th

	e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Read Time (ms)
Type:	Number
Description:	Minimum Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Read Time (ms)
Type:	Number
Description:	Average Completion time o f a read as measured by th e host director. Measurem ents are taken for a sampl e set of approximately 30 % of the I/Os
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSampledAvgReadTimeMs)
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Sampled Average Write Time (ms)
Type:	Number
Description:	Maximum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Sampled Average Write Time (ms)
Type:	Number
Description:	Minimum Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Sampled Average Write Time (ms)

Type:	Number
Description:	Average Completion time o f a write as measured by t he host director. Measure ments are taken for a sam ple set of approximately 3 0% of the I/Os
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSampledAvgWriteTimeMs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Total Bytes read and written each second
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Total Bytes read and written each second
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Total Bytes read and written each second
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of Sequen tial read operations perfo rmed each second by the S ymmetrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of Sequent ial read operations perfor med each second by the Sy mmetrix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSeqReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial read hit requests per formed(per second) by the Symmetrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSeqReadHitRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Read Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial read hit requests perf ormed(per second) by the Symmetrix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSeqReadHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate Total (Req/Sec)
Type:	Number
Description:	Maximum Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate Total (Req/Sec)
Type:	Number
Description:	Minimum Write cache reque

	st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate Total (Req/Sec)
Type:	Number
Description:	Average Write cache reque st rate (requests per seco nd) and including both ran dom and sequential I/Os p erformed by the Symmetrix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGWriteRateTotal)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write operations perf ormed each second by the Symmetrix device
Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write operations perfo rmed each second by the S ymmetrix device
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSeqWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of sequen tial write hit requests pe rformed(per second) for th e Symmetrix device)

Select equivalent:	max(SD_SE_Sym_Storage_Vol_Stats.MAXSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent:	min(SD_SE_Sym_Storage_Vol_Stats.MINSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Seq Write Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of sequent ial write hit requests per formed(per second) for th e Symmetrix device)
Select equivalent:	avg(SD_SE_Sym_Storage_Vol_Stats.AVGSeqWriteHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	EMC Symmetrix Storag e Front-end Controlle

r Performance Statist
ics

Description: EMC Symmetrix Front-end Controller Performance Statistics

No objects

Class: SymmetrixStorageProc
essor(EMC Symmetrix
Front-end Controller
Performance Statistic
s)

Description:

Object: SOM Source Name
Type: Character
Description: Name of the source SOM server
Select equivalent: K_SE_StorageSystem.SEiSourceName
Where equivalent:

Qualification: dimension
List of values: 0ra, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Tenant Name
Type: Character
Description: Tenant Name
Select equivalent: K_SE_StorageSystem.TenantName
Where equivalent:

Qualification: dimension
List of values: 0rb, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Vendor
Type: Character
Description: Storage system vendor name
Select equivalent: K_SE_StorageSystem.Vendor
Where equivalent:

Qualification:	dimension
List of values:	0rc, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Model
Type:	Character
Description:	Storage System Model Number
Select equivalent:	K_SE_StorageSystem.Model
Where equivalent:	

Qualification:	dimension
List of values:	0rd, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Name
Type:	Character
Description:	Name of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemName
Where equivalent:	

Qualification:	dimension
List of values:	0re, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Description
Type:	Character
Description:	Description about Storage System
Select equivalent:	K_SE_StorageSystem.Description
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rf, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Discovery Status
Type:	Character
Description:	The discovery status of th e storage system such as CREATED, CONTACTED, MISS ING, GENERIC
Select equivalent:	K_SE_StorageSystem.DiscoveryStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rg, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System IP Address
Type:	Character
Description:	IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.IPAddress
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rh, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System DNS
Type:	Character
Description:	DNS name of the Storage System
Select equivalent:	K_SE_StorageSystem.DNSName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ri, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System WWN
Type:	Character
Description:	World Wide Number of the Storage System
Select equivalent:	K_SE_StorageSystem.WWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System SerialNumber
Type:	Character
Description:	Serial Number of the Storage System
Select equivalent:	K_SE_StorageSystem.SerialNumber
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rk, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Status
Type:	Character
Description:	Operational status of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Reset Capability?
Type:	Character
Description:	Has Reset Capability (flag)

Select equivalent:	K_SE_StorageSystem.HasResetCapability
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rm, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Advanced Retention Management?
Type:	Character
Description:	Has Advanced Retention Management (flag)
Select equivalent:	K_SE_StorageSystem.HasAdvRetentionMgmt
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Cache Block Size
Type:	Number
Description:	Cache Block Size
Select equivalent:	K_SE_StorageSystem.CacheBlockSize
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ro, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Compliance Mode?
Type:	Character
Description:	Has Compliance Mode (flag)
Select equivalent:	K_SE_StorageSystem.HasComplianceMode
Where equivalent:	
Qualification:	detail

Associated dimension name:	Storage System Name
List of values:	0rp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Domain
Type:	Character
Description:	Domain of the Storage System
Select equivalent:	K_SE_StorageSystem.Domain
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Over Subscribed Capacity
Type:	Character
Description:	Over Subscribed Capacity
Select equivalent:	K_SE_StorageSystem.OverSubscribedCapacity
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rr, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Requested Capacity
Type:	Character
Description:	Requested Capacity
Select equivalent:	K_SE_StorageSystem.RequestedCapacity
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rs, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Is Manageable?
Type: Character
Description: Is Manageable
Select equivalent: K_SE_StorageSystem.IsManageable
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0rt, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Volume Name Length
Type: Character
Description: Maximum allowed length for Volume Names
Select equivalent: K_SE_StorageSystem.MaxVolumeNameLength
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0ru, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Replication IP
Type: Character
Description: Replication IP Address of the Storage System
Select equivalent: K_SE_StorageSystem.ReplicationIP
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0rv, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Replication Pools

Type:	Character
Description:	Replication Pools of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationPools
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Status
Type:	Character
Description:	Replication Status of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0rx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage On Access
Type:	Character
Description:	Storage On Access (flag)
Select equivalent:	K_SE_StorageSystem.StorageOnAccess
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ry, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Business Cost
Type:	Number
Description:	Business Cost of the Storage System
Select equivalent:	K_SE_StorageSystem.BusinessCost
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	DKC Microcode Version
Type:	Character
Description:	DKC Microcode Version of the Storage System
Select equivalent:	K_SE_StorageSystem.DKCMicrocodeVersion
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Family
Type:	Character
Description:	Family of the Storage System
Select equivalent:	K_SE_StorageSystem.Family
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hardware Version
Type:	Character
Description:	Hardware Version of the Storage System
Select equivalent:	K_SE_StorageSystem.HardwareVersion
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s3, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Identifying Descriptions
Type:	Character
Description:	Identifying Descriptions for the Storage System
Select equivalent:	K_SE_StorageSystem.IdentifyingDescriptions
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Other Identifying Info
Type:	Character
Description:	Other Identifying Info for the Storage System
Select equivalent:	K_SE_StorageSystem.OtherIdentifyingInfo
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Provider Tag
Type:	Character
Description:	Provider Tag of the Storage System
Select equivalent:	K_SE_StorageSystem.ProviderTag
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent Name
Type:	Character
Description:	Parent Name for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s7, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent UUID
Type:	Character
Description:	Parent UUID for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentUUID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Power Management
Type:	Character
Description:	Power Management
Select equivalent:	K_SE_StorageSystem.PowerManagement
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0s9, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Roles
Type:	Character
Description:	Roles of the Storage System

Select equivalent: K_SE_StorageSystem.Roles
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0sa, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Primary Owner Name
Type: Character
Description: Primary Owner Name of Storage System
Select equivalent: K_SE_StorageSystem.PrimaryOwnerName
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0sb, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Primary Owner Contact
Type: Character
Description: Primary Owner Contact of Storage System
Select equivalent: K_SE_StorageSystem.PrimaryOwnerContact
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0sc, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Last Contacted Timestamp
Type: Date
Description: Shows the time stamp of w
hen the storage system wa
s last contacted
Select equivalent: K_SE_StorageSystem.LastContactedTimestamp
Where equivalent:

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0sd, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Management URL
Type:	Character
Description:	Management URL of the Storage System
Select equivalent:	K_SE_StorageSystem.ManagementURL
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0se, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Custom Name
Type:	Character
Description:	Custom Name of the Storage System
Select equivalent:	K_SE_StorageSystem.CustomName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0sf, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Object Type
Type:	Character
Description:	Object Type
Select equivalent:	K_SE_StorageSystem.ObjectType
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0sg, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Name
Type:	Character
Description:	Name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.SANProcessorName
Where equivalent:	
Qualification:	dimension
List of values:	0sh, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Vendor
Type:	Character
Description:	Vendor Name of Block System Processor
Select equivalent:	K_SE_Storage_Processor.Vendor
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0si, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Description
Type:	Character
Description:	Description of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	IP Address
Type:	Character
Description:	IP Address of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.IPAddress
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sk, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	DNS
Type:	Character
Description:	DNS name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.DNSName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	WWN
Type:	Character
Description:	World Wide Name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.WWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sm, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Model
Type:	Character
Description:	Model name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Model

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Processor Power Management
Type:	Character
Description:	Indicates whether Power m anagement is supported or not on the Block System P rocessor
Select equivalent:	K_SE_Storage_Processor.PowerManagement

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0so, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Serial Number
Type:	Character
Description:	Serial Number of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.SerialNumber

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Version
Type:	Character
Description:	Version of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Version

Where equivalent:

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Processor Status
Type:	Character
Description:	Status of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.ProcessorStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0sr, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Reset Capability
Type:	Character
Description:	Reset Capability of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.ResetCapability
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0ss, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Roles
Type:	Character
Description:	Roles of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Roles
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0st, editable, manual refresh, not exportable

Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System UUID
Type: Character
Description: UUID of the Storage System
Select equivalent: K_SE_StorageSystem.UUID
Where equivalent:

Qualification: dimension
List of values: 0su, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Block Processor UUID
Type: Character
Description: UUID of the Block Processor
Select equivalent: K_SE_Storage_Processor.SANProcessorUUID
Where equivalent:

Qualification: dimension
List of values: 0sv, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DATETIME(EMC Symmetrix Front-end Controller Performance Statistics)
Description:

Object: Year
Type: Number
Description: Year
Select equivalent: DATETIME.TIME_YEAR_NUMBER
Where equivalent:

Qualification: dimension
List of values: 0sw, editable, manual refresh, not exportable
Security access level: 0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month
Type:	Character
Description:	Month Name first Three Characters
Select equivalent:	(SUBSTR(DATETIME.TIME_MONTH_NAME,1,3))
Where equivalent:	
Qualification:	dimension
List of values:	0sx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month Name
Type:	Character
Description:	Month Name
Select equivalent:	DATETIME.TIME_MONTH_NAME
Where equivalent:	
Qualification:	detail
Associated dimension name:	Month
List of values:	0sy, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Day
Type:	Number
Description:	Day
Select equivalent:	DATETIME.TIME_DAY_MONTH_NUMBER
Where equivalent:	
Qualification:	dimension
List of values:	0t0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Day Name
Type:	Character

Description:	Day Name
Select equivalent:	DATETIME.TIME_DAY_NAME
Where equivalent:	
Qualification:	detail
Associated dimension name:	Day
List of values:	0t1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour
Type:	Number
Description:	Hour
Select equivalent:	DATETIME.TIME_HOUR_ID
Where equivalent:	
Qualification:	dimension
List of values:	0t2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Id
Type:	Number
Description:	Hour Id
Select equivalent:	DATETIME.TIME_HOUR_ID
Where equivalent:	
Qualification:	detail
Associated dimension name:	Hour
List of values:	0t3, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Hour Description
Type:	Character
Description:	Time Hour Description
Select equivalent:	DATETIME.TIME_HOUR_DESCRIPTION
Where equivalent:	
Qualification:	detail

Associated dimension name:	Hour
List of values:	0t4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date
Type:	Date
Description:	Full Date
Select equivalent:	DATETIME.TIME_FULL_DATE
Where equivalent:	
Qualification:	dimension
List of values:	0t5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Holiday
Type:	Character
Description:	Time Is Holiday
Select equivalent:	DATETIME.TIME_IS_HOLIDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	0t6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Weekday
Type:	Character
Description:	Time Is Weekday
Select equivalent:	DATETIME.TIME_IS_WEEKDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	0t7, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Boundary
Type:	Number
Description:	Hour Boundary
Select equivalent:	DATETIME.HOUR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0t8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Day Boundary
Type:	Number
Description:	Day Boundary
Select equivalent:	DATETIME.DAY_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0t9, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Week Boundary
Type:	Number
Description:	Week Boundary
Select equivalent:	DATETIME.WEEK_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	0ta, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Month Boundary
Type:	Number
Description:	Month Boundary
Select equivalent:	DATETIME.MONTH_BOUNDARY
Where equivalent:	

Qualification:	dimension
List of values:	0tb, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Year Boundary
Type:	Number
Description:	Year Boundary
Select equivalent:	DATETIME.YEAR_BOUNDARY
Where equivalent:	

Qualification:	dimension
List of values:	0tc, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Class:	Symmetrix Front-end C ontroller Performance Statistics
Description:	

Object:	Total I/O Rate (Req/Sec)
Type:	Number
Description:	Number of I/O operations performed each second by the Symmetrix host directo r. This metric represents the activity between the S ymmetrix device and the h ost or Block device.
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.TotalIORate
Where equivalent:	

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Hit Rate (Req/Sec)
Type:	Number
Description:	Number of read and write requests performed each s econd by the Symmetrix ho st director that was immed iately satisfied by the ca che.
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.TotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Number of Bytes transferr ed through the Symmetrix Director each second
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.TotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Read Rate (Req/Sec)
Type:	Number
Description:	Number of random read req uests performed each seco nd by the Symmetrix host director
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.ReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Write Rate (Req/Sec)
Type:	Number
Description:	Number of write requests performed each second by the host director.
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.WriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Reads
Type:	Number
Description:	Percentage of read requests performed by the host director
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.PctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Writes
Type:	Number
Description:	Percentage of write reque sts performed by the host director over the sample interval
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.PctWriteIOs
Where equivalent:	
Qualification:	measure

Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	%Hits
Type:	Number
Description:	Percentage of requests pe rformed by the host direct or and immediately satisfi ed by the cache.
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.PctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Number of slot collisions each second. A slot collis ion occurs when two or mo re directors try to access the same cache slot and t he slot happens to be lock ed for an update operation by one of the directors
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.SlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	System Write Pending Event Rate (Events/Sec)

Type:	Number
Description:	Number of times each seco nd that write activity was heavy enough to use up t he system limit set for wr ite tracks occupying cache . When the limit is reache d, writes are deferred unt il data in cache is writte n to disk
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.SystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Device Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Number of times, each sec ond that the write-pending limit for a Symmetrix dev ice was reached. When the limit is reached addition al write I/O operations ar e deferred while waiting f or the data in cache to be destaged to the disk.
Select equivalent:	SR_SE_Sym_FECntrlr_Stats.DeviceWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Hourly Symmetrix Fron t-end Controller Perf ormance Statistics
Description:	

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix ho st director. This metric r epresents the activity bet ween the Symmetrix device and the host or Block dev ice.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number

Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of read a nd write requests perform ed each second by the Sym metrix host director that was immediately satisfied by the cache.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.

Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of random read requests performed each second by the Symmet rix host director
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write requests performed each second by the host director.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXWriteRate

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write r equests performed each se cond by the host director.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write r equests performed each se cond by the host director.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGWriteRate
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d requests performed by t

	he host director
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXPctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of read requests performed by the host director
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINPctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXPctWriteIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of wri

	te requests performed by t he host director over the sample interval
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINPctWriteIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXPctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINPctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Maximum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXSlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Minimum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINSlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Average Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGSlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXSystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum System Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times each second that write activity was heavy enough to use up the system limit set for write tracks occupying cache. When the limit is reached, writes are deferred until data in cache is written to disk
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINSystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average System Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times each second that write activity was heavy enough to use up the system limit set for write tracks occupying cache. When the limit is reached, writes are deferred until data in cache is written to disk
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.AVGSystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MAXDeviceWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	SH_SE_Sym_FECntrlr_Stats.MINDeviceWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Device Write Pending Event Rate (Events/Sec)
Type: Number
Description: Average Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent: SH_SE_Sym_FECntrlr_Stats.AVGDeviceWritePendingEventRate
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Daily Symmetrix Front -end Controller Perfo rmance Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Number of I/O op erations performed each s econd by the Symmetrix ho st director. This metric r epresents the activity bet ween the Symmetrix device and the host or Block dev ice.

Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINTotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGTotalIORate
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of read a nd write requests perform ed each second by the Sym metrix host director that was immediately satisfied by the cache.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)

Type:	Number
Description:	Average Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGTotalHitRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of random read requests performed each second by the Symmet rix host director
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of random read requests performed each second by the Symmet rix host director

Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of random read requests performed e ach second by the Symmetr ix host director
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGReadRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write r equests performed each se cond by the host director.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number

Description:	Minimum Number of write r equests performed each se cond by the host director.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write r equests performed each se cond by the host director.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGWriteRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d requests performed by t he host director
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXPctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of read requests performed by the host director
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINPctReadIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXPctWriteIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINPctWriteIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXPctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINPctHitIOs
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Maximum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir

	ectors
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXSlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Minimum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINSlotCollisionRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Average Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGSlotCollisionRate

Where equivalent:

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXSystemWritePendingEventRate

Where equivalent:

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i

	s written to disk
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINSystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.AVGSystemWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera

	tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MAXDeviceWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	SD_SE_Sym_FECntrlr_Stats.MINDeviceWritePendingEventRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Device Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times, each second that the write

-pending limit for a Symm
etrix device was reached.
When the limit is reached
additional write I/O opera
tions are deferred while w
aiting for the data in cac
he to be destaged to the d
isk.

Select equivalent: SD_SE_Sym_FECntrlr_Stats.AVGDeviceWritePendingEventRate
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: HourlyOLAP-Symmetrix Front-end Controller Performance Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Number of I/O op
erations performed each s
econd by the Symmetrix ho
st director. This metric r
epresents the activity bet
ween the Symmetrix device
and the host or Block dev
ice.

Select equivalent: max(SH_SE_Sym_FECntrlr_Stats.MAXTotalIORate)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of read a nd write requests perform

	ed each second by the Sym
	metrix host director that
	was immediately satisfied
	by the cache.
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of read an
	d write requests performe
	d each second by the Symm
	etrix host director that w
	as immediately satisfied b
	y the cache.
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of read an
	d write requests performe
	d each second by the Symm
	etrix host director that w
	as immediately satisfied b
	y the cache.
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGTotalHitRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix Director each sec ond
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix Director each sec

	ond
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of random read requests performed each second by the Symmet rix host director
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of random read requests performed each second by the Symmet rix host director
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write requests performed each second by the host director.
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write requests performed each second by the host director.
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Average Write Rate (Req/Sec)
Type: Number
Description: Average Number of write r
equests performed each se
cond by the host director.
Select equivalent: avg(SH_SE_Sym_FECntrlr_Stats.AVGWriteRate)
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum %Reads
Type: Number
Description: Maximum Percentage of rea
d requests performed by t
he host director
Select equivalent: max(SH_SE_Sym_FECntrlr_Stats.MAXPctReadIOs)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum %Reads
Type: Number
Description: Minimum Percentage of read requests performed by the host director
Select equivalent: min(SH_SE_Sym_FECntrlr_Stats.MINPctReadIOs)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort

Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXPctWriteIOs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINPctWriteIOs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXPctHitIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINPctHitIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Maximum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXSlotCollisionRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Minimum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINSlotCollisionRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Average Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGSlotCollisionRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum System Writ

	e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average System Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times each second that write activity was heavy enough to use up the system limit set for write tracks occupying cache. When the limit is reached, writes are deferred until data in cache is written to disk
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Device Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times, each second that the write-pending limit for a Symmetrix device was reached. When the limit is reached additional write I/O operations are deferred while waiting for the data in cache to be destaged to the disk.
Select equivalent:	max(SH_SE_Sym_FECntrlr_Stats.MAXDeviceWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	min(SH_SE_Sym_FECntrlr_Stats.MINDeviceWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Device Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	avg(SH_SE_Sym_FECntrlr_Stats.AVGDeviceWritePendingEventRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	DailyOLAP-Symmetrix Front-end Controller Performance Statistic s
Description:	

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix ho st director. This metric r epresents the activity bet ween the Symmetrix device and the host or Block dev ice.
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXTotalIORate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t director. This metric re presents the activity betw een the Symmetrix device and the host or Block devi ce.
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINTotalIORate)

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Number of I/O operations performed each second by the Symmetrix host director. This metric represents the activity between the Symmetrix device and the host or Block device.
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGTotalIORate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of read and write requests performed each second by the Symmetrix host director that was immediately satisfied by the cache.
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXTotalHitRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Hit Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Hit Rate (Req/Sec)
Type:	Number
Description:	Average Number of read an d write requests performe d each second by the Symm etrix host director that w as immediately satisfied b y the cache.
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGTotalHitRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy

	mmetrix Director each sec
	ond
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t
	ransferred through the Sy
	mmetrix Director each sec
	ond
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t
	ransferred through the Sy
	mmetrix Director each sec
	ond
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Read Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Read Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Read Rate (Req/Sec)
Type:	Number
Description:	Average Number of random read requests performed each second by the Symmetrix host director
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGReadRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average

List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Write Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of write r equests performed each se cond by the host director.
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Write Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of write r equests performed each se cond by the host director.
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINWriteRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Write Rate (Req/Sec)
Type:	Number
Description:	Average Number of write r equests performed each se cond by the host director.
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGWriteRate)
Where equivalent:	

Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Reads
Type:	Number
Description:	Maximum Percentage of rea d requests performed by t he host director
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXPctReadIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Reads
Type:	Number
Description:	Minimum Percentage of read requests performed by the host director
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINPctReadIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Writes
Type:	Number
Description:	Maximum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXPctWriteIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Writes
Type:	Number
Description:	Minimum Percentage of wri te requests performed by t he host director over the sample interval
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINPctWriteIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum %Hits
Type:	Number
Description:	Maximum Percentage of req uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXPctHitIOs)
Where equivalent:	

Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum %Hits
Type:	Number
Description:	Minimum Percentage of req

	uests performed by the ho st director and immediatel y satisfied by the cache.
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINPctHitIOs)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Maximum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXSlotCollisionRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Minimum Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir

	ectors
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINSlotCollisionRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Slot Collision Rate (Collisions/Sec)
Type:	Number
Description:	Average Number of slot co llisions each second. A sl ot collision occurs when t wo or more directors try t o access the same cache sl ot and the slot happens to be locked for an update o peration by one of the dir ectors
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGSlotCollisionRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i

	s written to disk
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average System Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times e ach second that write acti vity was heavy enough to use up the system limit se t for write tracks occupyi ng cache. When the limit i

	s reached, writes are defe rred until data in cache i s written to disk
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGSystemWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Maximum Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	max(SD_SE_Sym_FECntrlr_Stats.MAXDeviceWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Device Writ e Pending Event Rate (Events/Sec)
Type:	Number
Description:	Minimum Number of times, each second that the write -pending limit for a Symm

	etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	min(SD_SE_Sym_FECntrlr_Stats.MINDeviceWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Device Write Pending Event Rate (Events/Sec)
Type:	Number
Description:	Average Number of times, each second that the write -pending limit for a Symm etrix device was reached. When the limit is reached additional write I/O opera tions are deferred while w aiting for the data in cac he to be destaged to the d isk.
Select equivalent:	avg(SD_SE_Sym_FECntrlr_Stats.AVGDeviceWritePendingEventRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	EMC Symmetrix Front-end Port Performance Statistics
Description:	EMC Front-end Port Performance Statistics

No objects

Class:	Symmetrix Storage Por t(EMC Symmetrix Front -end Port Performance Statistics)
Description:	

Object:	SOM Source Name
Type:	Character
Description:	Name of the source SOM server
Select equivalent:	K_SE_StorageSystem.SEiSourceName
Where equivalent:	
Qualification:	dimension
List of values:	0xh, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Tenant Name
Type:	Character
Description:	Tenant Name
Select equivalent:	K_SE_StorageSystem.TenantName
Where equivalent:	
Qualification:	dimension
List of values:	0xi, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Vendor
Type:	Character
Description:	Storage system vendor name
Select equivalent:	K_SE_StorageSystem.Vendor
Where equivalent:	
Qualification:	dimension
List of values:	0xj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Model
Type: Character
Description: Storage System Model Number
Select equivalent: K_SE_StorageSystem.Model
Where equivalent:

Qualification: dimension
List of values: 0xk, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System Name
Type: Character
Description: Name of the Storage System
Select equivalent: K_SE_StorageSystem.StorageSystemName
Where equivalent:

Qualification: dimension
List of values: 0xl, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System Description
Type: Character
Description: Description about Storage System
Select equivalent: K_SE_StorageSystem.Description
Where equivalent:

Qualification: detail
Associated dimension name: Storage System Name
List of values: 0xm, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Storage System Discovery Status
Type: Character
Description: The discovery status of th

	e storage system such as CREATED, CONTACTED, MISSING, GENERIC
Select equivalent:	K_SE_StorageSystem.DiscoveryStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System IP Address
Type:	Character
Description:	IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.IPAddress
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xo, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System DNS
Type:	Character
Description:	DNS name of the Storage System
Select equivalent:	K_SE_StorageSystem.DNSName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System WWN
Type:	Character
Description:	World Wide Number of the Storage System
Select equivalent:	K_SE_StorageSystem.WWN

Where equivalent:

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System SerialNumber
Type:	Character
Description:	Serial Number of the Storage System
Select equivalent:	K_SE_StorageSystem.SerialNumber
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xr, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System Status
Type:	Character
Description:	Operational status of the Storage System
Select equivalent:	K_SE_StorageSystem.StorageSystemStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xs, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Reset Capability?
Type:	Character
Description:	Has Reset Capability (flag)
Select equivalent:	K_SE_StorageSystem.HasResetCapability
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name

List of values:	0xt, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Advanced Retention Management?
Type:	Character
Description:	Has Advanced Retention Management (flag)
Select equivalent:	K_SE_StorageSystem.HasAdvRetentionMgmt
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xu, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Cache Block Size
Type:	Number
Description:	Cache Block Size
Select equivalent:	K_SE_StorageSystem.CacheBlockSize
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xv, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Has Compliance Mode?
Type:	Character
Description:	Has Compliance Mode (flag)
Select equivalent:	K_SE_StorageSystem.HasComplianceMode
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Domain
Type:	Character
Description:	Domain of the Storage System
Select equivalent:	K_SE_StorageSystem.Domain
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xx, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Over Subscribed Capacity
Type:	Character
Description:	Over Subscribed Capacity
Select equivalent:	K_SE_StorageSystem.OverSubscribedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0xy, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Requested Capacity
Type:	Character
Description:	Requested Capacity
Select equivalent:	K_SE_StorageSystem.RequestedCapacity
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y0, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Is Manageable?
Type:	Character

Description:	Is Manageable
Select equivalent:	K_SE_StorageSystem.IsManageable
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y1, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Volume Name Length
Type:	Character
Description:	Maximum allowed length for Volume Names
Select equivalent:	K_SE_StorageSystem.MaxVolumeNameLength
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y2, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication IP
Type:	Character
Description:	Replication IP Address of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationIP
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y3, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Pools
Type:	Character
Description:	Replication Pools of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationPools
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y4, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Replication Status
Type:	Character
Description:	Replication Status of the Storage System
Select equivalent:	K_SE_StorageSystem.ReplicationStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y5, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage On Access
Type:	Character
Description:	Storage On Access (flag)
Select equivalent:	K_SE_StorageSystem.StorageOnAccess
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y6, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Business Cost
Type:	Number
Description:	Business Cost of the Storage System
Select equivalent:	K_SE_StorageSystem.BusinessCost
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y7, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	DKC Microcode Version
Type:	Character
Description:	DKC Microcode Version of the Storage System
Select equivalent:	K_SE_StorageSystem.DKCMicrocodeVersion
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y8, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Family
Type:	Character
Description:	Family of the Storage System
Select equivalent:	K_SE_StorageSystem.Family
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0y9, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hardware Version
Type:	Character
Description:	Hardware Version of the Storage System
Select equivalent:	K_SE_StorageSystem.HardwareVersion
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ya, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Identifying Descriptions
Type:	Character
Description:	Identifying Descriptions for the Storage System
Select equivalent:	K_SE_StorageSystem.IdentifyingDescriptions
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yb, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Other Identifying Info
Type:	Character
Description:	Other Identifying Info for the Storage System
Select equivalent:	K_SE_StorageSystem.OtherIdentifyingInfo
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yc, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Provider Tag
Type:	Character
Description:	Provider Tag of the Storage System
Select equivalent:	K_SE_StorageSystem.ProviderTag
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yd, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent Name
Type:	Character
Description:	Parent Name for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentName

Where equivalent:

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ye, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Parent UUID
Type:	Character
Description:	Parent UUID for a File System Node/Virtual Server
Select equivalent:	K_SE_StorageSystem.ParentUUID
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yf, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Power Management
Type:	Character
Description:	Power Management
Select equivalent:	K_SE_StorageSystem.PowerManagement
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yg, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Roles
Type:	Character
Description:	Roles of the Storage System
Select equivalent:	K_SE_StorageSystem.Roles
Where equivalent:	

Qualification:	detail
Associated dimension name:	Storage System Name

List of values:	0yh, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Name
Type:	Character
Description:	Primary Owner Name of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yi, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Primary Owner Contact
Type:	Character
Description:	Primary Owner Contact of Storage System
Select equivalent:	K_SE_StorageSystem.PrimaryOwnerContact
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yj, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Last Contacted Timestamp
Type:	Date
Description:	Shows the time stamp of w hen the storage system wa s last contacted
Select equivalent:	K_SE_StorageSystem.LastContactedTimestamp
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yk, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Management URL
Type:	Character
Description:	Management URL of the Storage System
Select equivalent:	K_SE_StorageSystem.ManagementURL
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Custom Name
Type:	Character
Description:	Custom Name of the Storage System
Select equivalent:	K_SE_StorageSystem.CustomName
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0ym, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Object Type
Type:	Character
Description:	Object Type
Select equivalent:	K_SE_StorageSystem.ObjectType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Storage System Name
List of values:	0yn, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Name
Type:	Character
Description:	Name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.SANProcessorName
Where equivalent:	
Qualification:	dimension
List of values:	0yo, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Vendor
Type:	Character
Description:	Vendor Name of Block System Processor
Select equivalent:	K_SE_Storage_Processor.Vendor
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yp, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Description
Type:	Character
Description:	Description of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yq, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	IP Address
Type:	Character
Description:	IP Address of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.IPAddress
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yr, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	DNS
Type:	Character
Description:	DNS name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.DNSName
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0ys, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	WWN
Type:	Character
Description:	World Wide Name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.WWN
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yt, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Model
Type:	Character
Description:	Model name of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Model
Where equivalent:	

Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yu, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage Processor Power Management
Type:	Character
Description:	Indicates whether Power m anagement is supported or not on the Block System P rocessor
Select equivalent:	K_SE_Storage_Processor.PowerManagement
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yv, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Serial Number
Type:	Character
Description:	Serial Number of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.SerialNumber
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yw, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Version
Type:	Character
Description:	Version of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Version
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yx, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Object:	Processor Status
Type:	Character
Description:	Status of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.ProcessorStatus
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	0yy, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Reset Capability
Type:	Character
Description:	Reset Capability of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.ResetCapability
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	100, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor Roles
Type:	Character
Description:	Roles of the Block System Processor
Select equivalent:	K_SE_Storage_Processor.Roles
Where equivalent:	
Qualification:	detail
Associated dimension name:	Block Processor Name
List of values:	101, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port Name
Type:	Character
Description:	Block system port name
Select equivalent:	K_SE_Storage_Port.PortName
Where equivalent:	
Qualification:	dimension
List of values:	102, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Port Description
Type:	Character
Description:	Block system port description
Select equivalent:	K_SE_Storage_Port.Description
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	103, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Port WWN
Type:	Character
Description:	World Wide Name of the Block system port
Select equivalent:	K_SE_Storage_Port.WWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	104, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Connected To WWN
Type:	Character
Description:	Which WWN is this port connected to?
Select equivalent:	K_SE_Storage_Port.ConnectedToWWN
Where equivalent:	

Qualification:	detail
Associated dimension name:	Port Name
List of values:	105, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port State
Type:	Character
Description:	Port State
Select equivalent:	K_SE_Storage_Port.PortState
Where equivalent:	

Qualification:	detail
Associated dimension name:	Port Name
List of values:	106, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port Status
Type:	Character
Description:	Port Status
Select equivalent:	K_SE_Storage_Port.PortStatus
Where equivalent:	

Qualification:	detail
Associated dimension name:	Port Name
List of values:	107, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Physical State
Type:	Character
Description:	Physical State
Select equivalent:	K_SE_Storage_Port.PhysicalState
Where equivalent:	

Qualification:	detail
Associated dimension name:	Port Name
List of values:	108, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port Speed in Gb/s
Type:	Number
Description:	Port Speed in Gb/s
Select equivalent:	K_SE_Storage_Port.PortSpeed
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	109, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Max Speed in Gb/s
Type:	Number
Description:	Max Speed in Gb/s
Select equivalent:	K_SE_Storage_Port.MaxSpeed
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10a, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port Number
Type:	Number
Description:	Port Number
Select equivalent:	K_SE_Storage_Port.PortNumber
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10b, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	SCSIPort
Type:	Number
Description:	SCSI Port
Select equivalent:	K_SE_Storage_Port.SCSIPort
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10c, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Connected to Node WWN
Type:	Character
Description:	Which node WWN is the port connected to?
Select equivalent:	K_SE_Storage_Port.ConnectedToNodeWWN
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10d, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port Type
Type:	Character
Description:	Port Type
Select equivalent:	K_SE_Storage_Port.PortType
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10e, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Link Technology
Type:	Character
Description:	Link Technology

Select equivalent:	K_SE_Storage_Port.LinkTechnology
Where equivalent:	
Qualification:	detail
Associated dimension name:	Port Name
List of values:	10f, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Storage System UUID
Type:	Character
Description:	UUID of the Storage System
Select equivalent:	K_SE_StorageSystem.UUID
Where equivalent:	
Qualification:	dimension
List of values:	10g, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Block Processor UUID
Type:	Character
Description:	UUID of the Block Processor
Select equivalent:	K_SE_Storage_Processor.SANProcessorUUID
Where equivalent:	
Qualification:	dimension
List of values:	10h, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Port UUID
Type:	Character
Description:	UUID of the Block System Port
Select equivalent:	K_SE_Storage_Port.PortUUID
Where equivalent:	
Qualification:	dimension
List of values:	10i, editable, manual refresh, not exportable
Security access level:	0

Can be used:	in result, in condition, in sort
Object status:	show

Class:	DATETIME(EMC Symmetrix Front-end Port Performance Statistics)
Description:	

Object:	Year
Type:	Number
Description:	Year
Select equivalent:	DATETIME.TIME_YEAR_NUMBER
Where equivalent:	
Qualification:	dimension
List of values:	10j, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month
Type:	Character
Description:	Month Name first Three Characters
Select equivalent:	(SUBSTR(DATETIME.TIME_MONTH_NAME,1,3))
Where equivalent:	
Qualification:	dimension
List of values:	10k, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Month Name
Type:	Character
Description:	Month Name
Select equivalent:	DATETIME.TIME_MONTH_NAME
Where equivalent:	
Qualification:	detail
Associated dimension name:	Month
List of values:	10l, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Object: Day
Type: Number
Description: Day
Select equivalent: DATETIME.TIME_DAY_MONTH_NUMBER
Where equivalent:

Qualification: dimension
List of values: 10m, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Day Name
Type: Character
Description: Day Name
Select equivalent: DATETIME.TIME_DAY_NAME
Where equivalent:

Qualification: detail
Associated dimension name: Day
List of values: 10n, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Hour
Type: Number
Description: Hour
Select equivalent: DATETIME.TIME_HOUR_ID
Where equivalent:

Qualification: dimension
List of values: 10o, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Hour Id
Type: Number
Description: Hour Id

Select equivalent: DATETIME.TIME_HOUR_ID
Where equivalent:

Qualification: detail
Associated dimension name: Hour
List of values: 10p, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Time Hour Description
Type: Character
Description: Time Hour Description
Select equivalent: DATETIME.TIME_HOUR_DESCRIPTION
Where equivalent:

Qualification: detail
Associated dimension name: Hour
List of values: 10q, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Full Date
Type: Date
Description: Full Date
Select equivalent: DATETIME.TIME_FULL_DATE
Where equivalent:

Qualification: dimension
List of values: 10r, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Time Is Holiday
Type: Character
Description: Time Is Holiday
Select equivalent: DATETIME.TIME_IS_HOLIDAY
Where equivalent:

Qualification: detail
Associated dimension name: Full Date

List of values:	10s, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Time Is Weekday
Type:	Character
Description:	Time Is Weekday
Select equivalent:	DATETIME.TIME_IS_WEEKDAY
Where equivalent:	
Qualification:	detail
Associated dimension name:	Full Date
List of values:	10t, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Hour Boundary
Type:	Number
Description:	Hour Boundary
Select equivalent:	DATETIME.HOUR_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	10u, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Day Boundary
Type:	Number
Description:	Day Boundary
Select equivalent:	DATETIME.DAY_BOUNDARY
Where equivalent:	
Qualification:	dimension
List of values:	10v, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object: Week Boundary
Type: Number
Description: Week Boundary
Select equivalent: DATETIME.WEEK_BOUNDARY
Where equivalent:

Qualification: dimension
List of values: 10w, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Object: Month Boundary
Type: Number
Description: Month Boundary
Select equivalent: DATETIME.MONTH_BOUNDARY
Where equivalent:

Qualification: dimension
List of values: 10x, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Object: Year Boundary
Type: Number
Description: Year Boundary
Select equivalent: DATETIME.YEAR_BOUNDARY
Where equivalent:

Qualification: dimension
List of values: 10y, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Class: Symmetrix Front-end Port Performance Statistics
Description:

Object: Total IO Rate (Req/Sec)
Type: Number
Description: Number of I/O operations performed each second by

	the Symmetrix host port. T his metric represents the activity between the Symm etrix device and the host or the Block device
Select equivalent:	SR_SE_Sym_FCPort_Stats.TotalIORate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Number of Bytes transferr ed through the Symmetrix host port (entering the Sy mmetrix system) each seco nd
Select equivalent:	SR_SE_Sym_FCPort_Stats.TotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average IO Size (Bytes)
Type:	Number
Description:	Average number of Bytes t ransferred through the Sy mmetrix host port per I/O operation.
Select equivalent:	SR_SE_Sym_FCPort_Stats.AvgIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	None
List of values:	no

Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Hourly Symmetrix Fron t-end Port Performanc e Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Number of I/O op erations performed each s econd by the Symmetrix ho st port. This metric repre sents the activity between the Symmetrix device and the host or the Block dev ice
Select equivalent: SH_SE_Sym_FCPort_Stats.MAXTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total I/O Rate (Req/Sec)
Type: Number
Description: Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t port. This metric repres ents the activity between the Symmetrix device and the host or the Block devi ce
Select equivalent: SH_SE_Sym_FCPort_Stats.MINTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Min

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Total I/O Rate (Req/Sec)
Type: Number
Description: Average Number of I/O ope rations performed each se cond by the Symmetrix hos t port. This metric repres ents the activity between the Symmetrix device and the host or the Block devi ce
Select equivalent: SH_SE_Sym_FCPort_Stats.AVGTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Total Data Rate (Bytes/Sec)
Type: Number
Description: Maximum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent: SH_SE_Sym_FCPort_Stats.MAXTotalDataRate
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total Data Rate (Bytes/Sec)

Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	SH_SE_Sym_FCPort_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	SH_SE_Sym_FCPort_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average number o f Bytes transferred throug h the Symmetrix host port per I/O operation.
Select equivalent:	SH_SE_Sym_FCPort_Stats.MAXAverageIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max

List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Average IO Size (Bytes)
Type: Number
Description: Minimum Average number of Bytes transferred through the Symmetrix host port per I/O operation.
Select equivalent: SH_SE_Sym_FCPort_Stats.MINAverageIOSize
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Daily Symmetrix Front-end Port Performance Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Number of I/O operations performed each second by the Symmetrix host port. This metric represents the activity between the Symmetrix device and the host or the Block device
Select equivalent: SD_SE_Sym_FCPort_Stats.MAXTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort

Object status: show

Object: Minimum Total I/O Rate (Req/Sec)
Type: Number
Description: Minimum Number of I/O ope
rations performed each se
cond by the Symmetrix hos
t port. This metric repres
ents the activity between
the Symmetrix device and
the host or the Block devi
ce
Select equivalent: SD_SE_Sym_FCPort_Stats.MINTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Average Total I/O Rate (Req/Sec)
Type: Number
Description: Average Number of I/O ope
rations performed each se
cond by the Symmetrix hos
t port. This metric repres
ents the activity between
the Symmetrix device and
the host or the Block devi
ce
Select equivalent: SD_SE_Sym_FCPort_Stats.AVGTotalIORate
Where equivalent:

Qualification: measure
Aggregate function: Average
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Maximum Total Data Rate (Bytes/Sec)

Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	SD_SE_Sym_FCPort_Stats.MAXTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	SD_SE_Sym_FCPort_Stats.MINTotalDataRate
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	SD_SE_Sym_FCPort_Stats.AVGTotalDataRate
Where equivalent:	
Qualification:	measure

Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average number o f Bytes transferred throug h the Symmetrix host port per I/O operation.
Select equivalent:	SD_SE_Sym_FCPort_Stats.MAXAverageIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average IO Size (Bytes)
Type:	Number
Description:	Minimum Average number of Bytes transferred through the Symmetrix host port p er I/O operation.
Select equivalent:	SD_SE_Sym_FCPort_Stats.MINAverageIOSize
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	HourlyOLAP-Symmetrix Front-end Port Perfo rmance Statistics
Description:	

Object:	Maximum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Maximum Number of I/O op erations performed each s econd by the Symmetrix ho st port. This metric repre sents the activity between the Symmetrix device and the host or the Block dev ice
Select equivalent:	max(SH_SE_Sym_FCPort_Stats.MAXTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total I/O Rate (Req/Sec)
Type:	Number
Description:	Minimum Number of I/O ope rations performed each se cond by the Symmetrix hos t port. This metric repres ents the activity between the Symmetrix device and the host or the Block devi ce
Select equivalent:	min(SH_SE_Sym_FCPort_Stats.MINTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se

	cond by the Symmetrix hos t port. This metric repres ents the activity between the Symmetrix device and the host or the Block devi ce
Select equivalent:	avg(SH_SE_Sym_FCPort_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	max(SH_SE_Sym_FCPort_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	min(SH_SE_Sym_FCPort_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	avg(SH_SE_Sym_FCPort_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average number o f Bytes transferred throug h the Symmetrix host port per I/O operation.
Select equivalent:	max(SH_SE_Sym_FCPort_Stats.MAXAverageIOSize)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Average IO Size (Bytes)
Type:	Number
Description:	Minimum Average number of Bytes transferred through

the Symmetrix host port p
er I/O operation.

Select equivalent: min(SH_SE_Sym_FCPort_Stats.MINAverageIOSize)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DailyOLAP-Symmetrix Front-end Port Performance Statistics
Description:

Object: Maximum Total I/O Rate (Req/Sec)
Type: Number
Description: Maximum Number of I/O op
erations performed each s
econd by the Symmetrix ho
st port. This metric repre
sents the activity between
the Symmetrix device and
the host or the Block dev
ice

Select equivalent: max(SD_SE_Sym_FCPort_Stats.MAXTotalIORate)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Total I/O Rate (Req/Sec)
Type: Number
Description: Minimum Number of I/O ope
rations performed each se
cond by the Symmetrix hos
t port. This metric repres
ents the activity between

	the Symmetrix device and the host or the Block devi ce
Select equivalent:	min(SD_SE_Sym_FCPort_Stats.MINTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total I/O Rate (Req/Sec)
Type:	Number
Description:	Average Number of I/O ope rations performed each se cond by the Symmetrix hos t port. This metric repres ents the activity between the Symmetrix device and the host or the Block devi ce
Select equivalent:	avg(SD_SE_Sym_FCPort_Stats.AVGTotalIORate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Maximum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	max(SD_SE_Sym_FCPort_Stats.MAXTotalDataRate)
Where equivalent:	
Qualification:	measure

Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Minimum Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Minimum Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	min(SD_SE_Sym_FCPort_Stats.MINTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Average Total Data Rate (Bytes/Sec)
Type:	Number
Description:	Average Number of Bytes t ransferred through the Sy mmetrix host port (enterin g the Symmetrix system) e ach second
Select equivalent:	avg(SD_SE_Sym_FCPort_Stats.AVGTotalDataRate)
Where equivalent:	
Qualification:	measure
Aggregate function:	Average
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Maximum Average IO Size (Bytes)
Type:	Number
Description:	Maximum Average number o

f Bytes transferred throug
h the Symmetrix host port
per I/O operation.

Select equivalent: max(SD_SE_Sym_FCPort_Stats.MAXAverageIOSize)
Where equivalent:

Qualification: measure
Aggregate function: Max
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Minimum Average IO Size (Bytes)
Type: Number
Description: Minimum Average number of
Bytes transferred through
the Symmetrix host port p
er I/O operation.

Select equivalent: min(SD_SE_Sym_FCPort_Stats.MINAverageIOSize)
Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Supplemental
Description:

Object: FC Port Key
Type: Number
Description:

Select equivalent: K_SE_Storage_Port.dsi_key_id
Where equivalent:

Qualification: dimension
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Object:	Controller Key
Type:	Number
Description:	
Select equivalent:	K_SE_Storage_Processor.dsi_key_id
Where equivalent:	
Qualification:	dimension
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Storage Pool Key
Type:	Number
Description:	
Select equivalent:	K_SE_Storage_Pool.dsi_key_id
Where equivalent:	
Qualification:	dimension
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Storage Volume Key
Type:	Number
Description:	
Select equivalent:	K_SE_Storage_Volume.dsi_key_id
Where equivalent:	
Qualification:	dimension
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	hidden

Object:	Storage System Key
Type:	Number

Description:

Select equivalent: K_SE_StorageSystem.dsi_key_id
Where equivalent:

Qualification: dimension
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Class: Date Time Period
Description:

Object: Date
Type: Date
Description:

Select equivalent: convert(date,Dateformat(D
ATETIME.TIME_FULL_DATE,'
yyyy-mm-dd'))
Where equivalent:

Qualification: dimension
List of values: 3jj, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: SHRDate
Type: Date
Description: SHR Date
Select equivalent: Date(SHRDate.SHRDate)
Where equivalent:

Qualification: dimension
List of values: 1ny, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: hidden

Object: Start Date
Type: Date

Description:	Date Min Range
Select equivalent:	DATETIMERANGE.DATE_RANGE_MIN
Where equivalent:	
Qualification:	dimension
List of values:	3jk, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	End Date
Type:	Date
Description:	Date Max Range
Select equivalent:	DATETIMERANGE.DATE_RANGE_MAX
Where equivalent:	
Qualification:	dimension
List of values:	3jl, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Date Range
Type:	Character
Description:	Date Range
Select equivalent:	DATETIMERANGE.Date_Range
Where equivalent:	
Qualification:	dimension
List of values:	3jm, editable, automatic refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date-Hourly
Type:	Date
Description:	Full Date
Select equivalent:	cast(substring(Cast(DATET IME.TIME_FULL_DATE as ch ar(26)),1,10) as datetime)
Where equivalent:	DATETIME.HOUR_BOUNDARY=1
Qualification:	dimension
List of values:	1nm, editable, manual refresh, not exportable

Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date-Daily
Type:	Date
Description:	Full Date
Select equivalent:	cast(substring(Cast(DATETIME.TIME_FULL_DATE as char(26)),1,10) as datetime)
Where equivalent:	DATETIME.DAY_BOUNDARY=1
Qualification:	dimension
List of values:	1np, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date-Min
Type:	Date
Description:	Full Date
Select equivalent:	Min(DATETIME.TIME_FULL_DATE)
Where equivalent:	
Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Full Date-Max
Type:	Date
Description:	Full Date
Select equivalent:	Max(DATETIME.TIME_FULL_DATE)
Where equivalent:	
Qualification:	measure
Aggregate function:	Max
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: EMC Symmetrix Storage System Measures
Description:

No objects

Class: RAW Storage System Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_RAW_MEASURES.Measure
Where equivalent:

Qualification: dimension
List of values: 21t, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_RAW_MEASURES.Measure
When 'Total I/O Rate (Req
/Sec)' then SR_SE_Sym_Sto
rage_Sys_Stats.TotalIORat
e
When 'Total Data Rate (By
tes/Sec)' then SR_SE_Sym_
Storage_Sys_Stats.TotalDa
taRate
When 'Read I/O (Req/Sec)'
 then SR_SE_Sym_Storage_S
ys_Stats.ReadRate
When 'Write I/O (Req/Sec)
' then SR_SE_Sym_Storage_
Sys_Stats.WriteRate
When 'Read Hits (Req/Sec)
' then SR_SE_Sym_Storage_
Sys_Stats.ReadHitRate
```

When 'Write Hits (Req/Sec
)' then SR_SE_Sym_Storage
_Sys_Stats.WriteHitRate
When 'Read Data Rate (Byt
es/Sec)' then SR_SE_Sym_S
torage_Sys_Stats.ReadData
Rate
When 'Write Data Rate (By
tes/Sec)' then SR_SE_Sym_
Storage_Sys_Stats.WriteDa
taRate
When '% Reads' then SR_SE_Sym_Storage_Sys_Stats.PctReadIOS
When '% Writes' then SR_SE_Sym_Storage_Sys_Stats.PctWriteIOS
When '% Hits' then SR_SE_Sym_Storage_Sys_Stats.PctHitIOS
When 'Average Read Size (
Bytes)' then SR_SE_Sym_St
orage_Sys_Stats.AvgReadSi
ze
When 'Average Write Size
(Bytes)' then SR_SE_Sym_S
torage_Sys_Stats.AvgWrite
Size
When '% Read Hits' then S
R_SE_Sym_Storage_Sys_Sta
ts.PctReadHitIOS
When '% Write Hits' then
SR_SE_Sym_Storage_Sys_St
ats.PctWriteHitIOS
When '% Read Seq' then SR
_SE_Sym_Storage_Sys_Stats
.PctSeqReadIOS
When 'Read Rate Seq (Req/
Sec)' then SR_SE_Sym_Stor
age_Sys_Stats.SeqReadRate
When 'Prefetch Data Rate
(Bytes/Sec)' then SR_SE_S
ym_Storage_Sys_Stats.Pref
etchRate
When 'Write Flush Data Ra
te (Bytes/Sec)' then SR_SE
_Sym_Storage_Sys_Stats.Wr
iteFlushRate
When 'Deferred Write Rate
(Req/Sec)' then SR_SE_Sy
m_Storage_Sys_Stats.Defer
redWriteRate

When 'Delayed DFW Rate (Req/Sec)' then SR_SE_Sym_Storage_Sys_Stats.DelayedDFWRate
When 'Read Rate Total (Req/Sec)' then SR_SE_Sym_Storage_Sys_Stats.ReadRateTotal
When 'Read Hits Seq (Req/Sec)' then SR_SE_Sym_Storage_Sys_Stats.SeqReadHitRate
When 'Write Rate Seq (Req/Sec)' then SR_SE_Sym_Storage_Sys_Stats.SeqWriteRate
When 'Write Hits Seq (Req/Sec)' then SR_SE_Sym_Storage_Sys_Stats.SeqWriteHitRate
When 'Max Pending Flush Limit (Bytes)' then SR_SE_Sym_Storage_Sys_Stats.MaxPendingFlushLimit
When 'Pending Flush (Bytes)' then SR_SE_Sym_Storage_Sys_Stats.PendingFlush
When 'Pending Format (Bytes)' then SR_SE_Sym_Storage_Sys_Stats.PendingFormat
ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Hourly Storage System Measures
Description:	

Object:	Symmetrix Measure
Type:	Character
Description:	
Select equivalent:	EMC_SYM_HISTORICAL_MEASURES.MEASURE
Where equivalent:	
Qualification:	dimension
List of values:	21v, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_HISTORICAL_MEASURES.MEASURE When 'Maximum Total I/O R ate (Req/Sec)' Then SH_SE _Sym_Storage_Sys_Stats.MA XTotalIORate When 'Minimum Total I/O R ate (Req/Sec)' Then SH_SE _Sym_Storage_Sys_Stats.MI NTotalIORate When 'Average Total I/O R ate (Req/Sec)' Then SH_SE _Sym_Storage_Sys_Stats.AV GTotalIORate When 'Maximum Total Data Rate (Bytes/Sec)' Then SH _SE_Sym_Storage_Sys_Stats .MAXTotalDataRate When 'Minimum Total Data Rate (Bytes/Sec)' Then SH _SE_Sym_Storage_Sys_Stats .MINTotalDataRate When 'Average Total Data Rate (Bytes/Sec)' Then SH _SE_Sym_Storage_Sys_Stats .AVGTotalDataRate When 'Maximum Read I/O (

Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MAXRea
dRate
When 'Minimum Read I/O (R
eq/Sec)' Then SH_SE_Sym_S
torage_Sys_Stats.MINReadR
ate
When 'Average Read I/O (R
eq/Sec)' Then SH_SE_Sym_S
torage_Sys_Stats.AVGReadR
ate

When 'Maximum Write I/O (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MAXWri
teRate
When 'Minimum Write I/O (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MINWri
teRate
When 'Average Write I/O (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.AVGWri
teRate

When 'Maximum Read Hits (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MAXRea
dHitRate
When 'Minimum Read Hits (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MINRea
dHitRate
When 'Average Read Hits (
Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.AVGRea
dHitRate

When 'Maximum Write Hits
(Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MAXWri
teHitRate
When 'Minimum Write Hits
(Req/Sec)' Then SH_SE_Sym
_Storage_Sys_Stats.MINWri
teHitRate

When 'Average Write Hits (Req/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.AVGWriteHitRate

When 'Maximum Read Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.MAXReadDataRate
When 'Minimum Read Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.MINReadDataRate
When 'Average Read Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.AVGReadDataRate

When 'Maximum Write Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.MAXWriteDataRate
When 'Minimum Write Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.MINWriteDataRate
When 'Average Write Data Rate (Bytes/Sec)' Then SH_SE_Sym_Storage_Sys_Stats.AVGWriteDataRate

When 'Maximum % Reads' Then SH_SE_Sym_Storage_Sys_Stats.MAXPctReadIOS
When 'Minimum % Reads' Then SH_SE_Sym_Storage_Sys_Stats.MINPctReadIOS

When 'Maximum % Writes' Then SH_SE_Sym_Storage_Sys_Stats.MAXPctWriteIOS
When 'Minimum % Writes' Then SH_SE_Sym_Storage_Sys_Stats.MINPctWriteIOS

When 'Maximum % Hits' The
n SH_SE_Sym_Storage_Sys_
Stats.MAXPctHitIOS
When 'Minimum % Hits' The
n SH_SE_Sym_Storage_Sys_
Stats.MINPctHitIOS

When 'Maximum Average Re
ad Size (Bytes)' Then SH_
SE_Sym_Storage_Sys_Stats.
MAXAvgReadSize
When 'Minimum Average Re
ad Size (Bytes)' Then SH_
SE_Sym_Storage_Sys_Stats.
MINAvgReadSize

When 'Maximum Average Wr
ite Size (Bytes)' Then SH_
SE_Sym_Storage_Sys_Stats.
MAXAvgWriteSize
When 'Minimum Average Wri
te Size (Bytes)' Then SH_S
E_Sym_Storage_Sys_Stats.M
INAvgWriteSize

When 'Maximum % Read Hit
s' Then SH_SE_Sym_Storage
_Sys_Stats.MAXPctReadHitI
OS
When 'Minimum % Read Hit
s' Then SH_SE_Sym_Storage
_Sys_Stats.MINPctReadHitI
OS

When 'Maximum % Write Hit
s' Then SH_SE_Sym_Storage
_Sys_Stats.MAXPctWriteHit
IOS
When 'Minimum % Write Hit
s' Then SH_SE_Sym_Storage
_Sys_Stats.MINPctWriteHit
IOS

When 'Maximum % Read Seq
' Then SH_SE_Sym_Storage_
Sys_Stats.MAXPctSeqReadIO
S
When 'Minimum % Read Seq
' Then SH_SE_Sym_Storage_
Sys_Stats.MINPctSeqReadIO
S

When 'Maximum Read Rate
Seq (Req/Sec)' Then SH_SE
_Sym_Storage_Sys_Stats.MA
XSeqReadRate
When 'Minimum Read Rate S
eq (Req/Sec)' Then SH_SE_
Sym_Storage_Sys_Stats.MIN
SeqReadRate
When 'Average Read Rate S
eq (Req/Sec)' Then SH_SE_
Sym_Storage_Sys_Stats.AVG
SeqReadRate

When 'Maximum Prefetch Da
ta Rate (Bytes/Sec)' Then
SH_SE_Sym_Storage_Sys_St
ats.MAXPrefetchRate
When 'Minimum Prefetch Da
ta Rate (Bytes/Sec)' Then
SH_SE_Sym_Storage_Sys_St
ats.MINPrefetchRate
When 'Average Prefetch Da
ta Rate (Bytes/Sec)' Then
SH_SE_Sym_Storage_Sys_St
ats.AVGPrefetchRate

When 'Maximum Write Flush
 Data Rate (Bytes/Sec)' Th
en SH_SE_Sym_Storage_Sys
_Stats.MAXWriteFlushRate
When 'Minimum Write Flush
 Data Rate (Bytes/Sec)' Th
en SH_SE_Sym_Storage_Sys
_Stats.MINWriteFlushRate
When 'Average Write Flush

Data Rate (Bytes/Sec)' Th
en SH_SE_Sym_Storage_Sys
_Stats.AVGWriteFlushRate

When 'Maximum Deferred W
rite Rate (Req/Sec)' Then
SH_SE_Sym_Storage_Sys_St
ats.MAXDeferredWriteRate
When 'Minimum Deferred Wr
ite Rate (Req/Sec)' Then S
H_SE_Sym_Storage_Sys_Sta
ts.MINDeferredWriteRate
When 'Average Deferred Wr
ite Rate (Req/Sec)' Then S
H_SE_Sym_Storage_Sys_Sta
ts.AVGDeferredWriteRate

When 'Maximum Delayed DF
W Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Sys_Stats
.MAXDelayedDFWRate
When 'Minimum Delayed DF
W Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Sys_Stats
.MINDelayedDFWRate
When 'Average Delayed DF
W Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Sys_Stats
.AVGDelayedDFWRate

When 'Maximum Read Rate
Total (Req/Sec)' Then SH_
SE_Sym_Storage_Sys_Stats.
MAXReadRateTotal
When 'Minimum Read Rate T
otal (Req/Sec)' Then SH_S
E_Sym_Storage_Sys_Stats.M
INReadRateTotal
When 'Average Read Rate T
otal (Req/Sec)' Then SH_S
E_Sym_Storage_Sys_Stats.A
VGReadRateTotal

When 'Maximum Read Hits S
eq (Req/Sec)' Then SH_SE_
Sym_Storage_Sys_Stats.MAX

SeqReadHitRate
When 'Minimum Read Hits S
eq (Req/Sec)' Then SH_SE_
Sym_Storage_Sys_Stats.MIN
SeqReadHitRate
When 'Average Read Hits S
eq (Req/Sec)' Then SH_SE_
Sym_Storage_Sys_Stats.AVG
SeqReadHitRate

When 'Maximum Write Rate
Seq (Req/Sec)' Then SH_S
E_Sym_Storage_Sys_Stats.M
AXSeqWriteRate
When 'Minimum Write Rate
Seq (Req/Sec)' Then SH_S
E_Sym_Storage_Sys_Stats.M
INSeqWriteRate
When 'Average Write Rate
Seq (Req/Sec)' Then SH_S
E_Sym_Storage_Sys_Stats.A
VGSeqWriteRate

When 'Maximum Write Hits
Seq (Req/Sec)' Then SH_SE
_Sym_Storage_Sys_Stats.MA
XSeqWriteHitRate
When 'Minimum Write Hits
Seq (Req/Sec)' Then SH_SE
_Sym_Storage_Sys_Stats.MI
NSeqWriteHitRate
When 'Average Write Hits
Seq (Req/Sec)' Then SH_SE
_Sym_Storage_Sys_Stats.AV
GSeqWriteHitRate

When 'Maximum Max Pendin
g Flush Limit (Bytes)' The
n SH_SE_Sym_Storage_Sys_
Stats.MAXMaxPendingFlushL
imit
When 'Minimum Max Pendin
g Flush Limit (Bytes)' The
n SH_SE_Sym_Storage_Sys_
Stats.MINMaxPendingFlushL
imit

```
When 'Average Max Pending
 Flush Limit (Bytes)' Then
 SH_SE_Sym_Storage_Sys_S
tats.AVGMaxPendingFlushLi
mit

When 'Maximum Pending Flu
sh (Bytes)' Then SH_SE_Sy
m_Storage_Sys_Stats.MAXPe
ndingFlush
When 'Minimum Pending Flu
sh (Bytes)' Then SH_SE_Sy
m_Storage_Sys_Stats.MINPe
ndingFlush
When 'Average Pending Flu
sh (Bytes)' Then SH_SE_Sy
m_Storage_Sys_Stats.AVGPe
ndingFlush

When 'Maximum Pending Fo
rmat (Bytes)' Then SH_SE_
Sym_Storage_Sys_Stats.MAX
PendingFormat
When 'Minimum Pending For
mat (Bytes)' Then SH_SE_S
ym_Storage_Sys_Stats.MINP
endingFormat
When 'Average Pending For
mat (Bytes)' Then  SH_SE_
Sym_Storage_Sys_Stats.AVG
PendingFormat
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	Daily Storage System Measures
Description:	

Object:	Symmetrix Measure
Type:	Character
Description:	
Select equivalent:	EMC_SYM_HISTORICAL_MEASURES.MEASURE
Where equivalent:	
Qualification:	dimension
List of values:	21x, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_HISTORICAL_MEASURES.MEASURE When 'Maximum Total I/O R ate (Req/Sec)' Then SD_SE _Sym_Storage_Sys_Stats.MA XTotalIORate When 'Minimum Total I/O R ate (Req/Sec)' Then SD_SE _Sym_Storage_Sys_Stats.MI NTotalIORate When 'Average Total I/O R ate (Req/Sec)' Then SD_SE _Sym_Storage_Sys_Stats.AV GTotalIORate When 'Maximum Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_Storage_Sys_Stats .MAXTotalDataRate When 'Minimum Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_Storage_Sys_Stats .MINTotalDataRate When 'Average Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_Storage_Sys_Stats .AVGTotalDataRate

When 'Maximum Read I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MAXReadRate
When 'Minimum Read I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MINReadRate
When 'Average Read I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.AVGReadRate

When 'Maximum Write I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MAXWriteRate
When 'Minimum Write I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MINWriteRate
When 'Average Write I/O (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.AVGWriteRate

When 'Maximum Read Hits (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MAXReadHitRate
When 'Minimum Read Hits (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MINReadHitRate
When 'Average Read Hits (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.AVGReadHitRate

When 'Maximum Write Hits (Req/Sec)' Then SD_SE_Sym_Storage_Sys_Stats.MAXWriteHitRate
When 'Minimum Write Hits (Req/Sec)' Then SD_SE_Sym

_Storage_Sys_Stats.MINWri
teHitRate
When 'Average Write Hits
(Req/Sec)' Then SD_SE_Sym
_Storage_Sys_Stats.AVGWri
teHitRate

When 'Maximum Read Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MAXReadDataRate
When 'Minimum Read Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MINReadDataRate
When 'Average Read Data R
ate (Bytes/Sec)' Then SD_
SE_Sym_Storage_Sys_Stats.
AVGReadDataRate

When 'Maximum Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MAXWriteDataRate
When 'Minimum Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MINWriteDataRate
When 'Average Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.AVGWriteDataRate

When 'Maximum % Reads' T
hen SD_SE_Sym_Storage_Sy
s_Stats.MAXPctReadIOS
When 'Minimum % Reads' T
hen SD_SE_Sym_Storage_Sy
s_Stats.MINPctReadIOS

When 'Maximum % Writes' T
hen SD_SE_Sym_Storage_Sy
s_Stats.MAXPctWriteIOS
When 'Minimum % Writes' T
hen SD_SE_Sym_Storage_Sy

s_Stats.MINPctWriteIOS

When 'Maximum % Hits' The
n SD_SE_Sym_Storage_Sys_
Stats.MAXPctHitIOS
When 'Minimum % Hits' The
n SD_SE_Sym_Storage_Sys_
Stats.MINPctHitIOS

When 'Maximum Average Re
ad Size (Bytes)' Then SD_
SE_Sym_Storage_Sys_Stats.
MAXAvgReadSize
When 'Minimum Average Re
ad Size (Bytes)' Then SD_
SE_Sym_Storage_Sys_Stats.
MINAvgReadSize

When 'Maximum Average Wr
ite Size (Bytes)' Then SD_
SE_Sym_Storage_Sys_Stats.
MAXAvgWriteSize
When 'Minimum Average Wri
te Size (Bytes)' Then SD_S
E_Sym_Storage_Sys_Stats.M
INAvgWriteSize

When 'Maximum % Read Hit
s' Then SD_SE_Sym_Storage
_Sys_Stats.MAXPctReadHitI
OS
When 'Minimum % Read Hit
s' Then SD_SE_Sym_Storage
_Sys_Stats.MINPctReadHitI
OS

When 'Maximum % Write Hit
s' Then SD_SE_Sym_Storage
_Sys_Stats.MAXPctWriteHit
IOS
When 'Minimum % Write Hit
s' Then SD_SE_Sym_Storage
_Sys_Stats.MINPctWriteHit

IOS

When 'Maximum % Read Seq
' Then SD_SE_Sym_Storage_
Sys_Stats.MAXPctSeqReadIO
S
When 'Minimum % Read Seq
' Then SD_SE_Sym_Storage_
Sys_Stats.MINPctSeqReadIO
S

When 'Maximum Read Rate
Seq (Req/Sec)' Then SD_SE
_Sym_Storage_Sys_Stats.MA
XSeqReadRate
When 'Minimum Read Rate S
eq (Req/Sec)' Then SD_SE_
Sym_Storage_Sys_Stats.MIN
SeqReadRate
When 'Average Read Rate S
eq (Req/Sec)' Then SD_SE_
Sym_Storage_Sys_Stats.AVG
SeqReadRate

When 'Maximum Prefetch Da
ta Rate (Bytes/Sec)' Then
SD_SE_Sym_Storage_Sys_St
ats.MAXPrefetchRate
When 'Minimum Prefetch Da
ta Rate (Bytes/Sec)' Then
SD_SE_Sym_Storage_Sys_St
ats.MINPrefetchRate
When 'Average Prefetch Da
ta Rate (Bytes/Sec)' Then
SD_SE_Sym_Storage_Sys_St
ats.AVGPrefetchRate

When 'Maximum Write Flush
 Data Rate (Bytes/Sec)' Th
en SD_SE_Sym_Storage_Sys
_Stats.MAXWriteFlushRate
When 'Minimum Write Flush
 Data Rate (Bytes/Sec)' Th
en SD_SE_Sym_Storage_Sys

_Stats.MINWriteFlushRate
When 'Average Write Flush
 Data Rate (Bytes/Sec)' Th
en SD_SE_Sym_Storage_Sys
_Stats.AVGWriteFlushRate

When 'Maximum Deferred W
rite Rate (Req/Sec)' Then
SD_SE_Sym_Storage_Sys_St
ats.MAXDeferredWriteRate
When 'Minimum Deferred Wr
ite Rate (Req/Sec)' Then S
D_SE_Sym_Storage_Sys_Sta
ts.MINDeferredWriteRate
When 'Average Deferred Wr
ite Rate (Req/Sec)' Then S
D_SE_Sym_Storage_Sys_Sta
ts.AVGDeferredWriteRate

When 'Maximum Delayed DF
W Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MAXDelayedDFWRate
When 'Minimum Delayed DF
W Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.MINDelayedDFWRate
When 'Average Delayed DF
W Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Sys_Stats
.AVGDelayedDFWRate

When 'Maximum Read Rate
Total (Req/Sec)' Then SD_
SE_Sym_Storage_Sys_Stats.
MAXReadRateTotal
When 'Minimum Read Rate T
otal (Req/Sec)' Then SD_S
E_Sym_Storage_Sys_Stats.M
INReadRateTotal
When 'Average Read Rate T
otal (Req/Sec)' Then SD_S
E_Sym_Storage_Sys_Stats.A
VGReadRateTotal

When 'Maximum Read Hits S

eq (Req/Sec)' Then SD_SE_
Sym_Storage_Sys_Stats.MAX
SeqReadHitRate
When 'Minimum Read Hits S
eq (Req/Sec)' Then SD_SE_
Sym_Storage_Sys_Stats.MIN
SeqReadHitRate
When 'Average Read Hits S
eq (Req/Sec)' Then SD_SE_
Sym_Storage_Sys_Stats.AVG
SeqReadHitRate

When 'Maximum Write Rate
Seq (Req/Sec)' Then SD_S
E_Sym_Storage_Sys_Stats.M
AXSeqWriteRate
When 'Minimum Write Rate
Seq (Req/Sec)' Then SD_S
E_Sym_Storage_Sys_Stats.M
INSeqWriteRate
When 'Average Write Rate
Seq (Req/Sec)' Then SD_S
E_Sym_Storage_Sys_Stats.A
VGSeqWriteRate

When 'Maximum Write Hits
Seq (Req/Sec)' Then SD_SE
_Sym_Storage_Sys_Stats.MA
XSeqWriteHitRate
When 'Minimum Write Hits
Seq (Req/Sec)' Then SD_SE
_Sym_Storage_Sys_Stats.MI
NSeqWriteHitRate
When 'Average Write Hits
Seq (Req/Sec)' Then SD_SE
_Sym_Storage_Sys_Stats.AV
GSeqWriteHitRate

When 'Maximum Max Pendin
g Flush Limit (Bytes)' The
n SD_SE_Sym_Storage_Sys_
Stats.MAXMaxPendingFlushL
imit
When 'Minimum Max Pendin
g Flush Limit (Bytes)' The
n SD_SE_Sym_Storage_Sys_

```
Stats.MINMaxPendingFlushL
imit
When 'Average Max Pending
 Flush Limit (Bytes)' Then
 SD_SE_Sym_Storage_Sys_S
tats.AVGMaxPendingFlushLi
mit

When 'Maximum Pending Flu
sh (Bytes)' Then SD_SE_Sy
m_Storage_Sys_Stats.MAXPe
ndingFlush
When 'Minimum Pending Flu
sh (Bytes)' Then SD_SE_Sy
m_Storage_Sys_Stats.MINPe
ndingFlush
When 'Average Pending Flu
sh (Bytes)' Then SD_SE_Sy
m_Storage_Sys_Stats.AVGPe
ndingFlush

When 'Maximum Pending Fo
rmat (Bytes)' Then SD_SE_
Sym_Storage_Sys_Stats.MAX
PendingFormat
When 'Minimum Pending For
mat (Bytes)' Then SD_SE_S
ym_Storage_Sys_Stats.MINP
endingFormat
When 'Average Pending For
mat (Bytes)' Then  SD_SE_
Sym_Storage_Sys_Stats.AVG
PendingFormat
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: HourlyOLAP Storage System Measures

Description:

Object:	Symmetrix Measure
Type:	Character
Description:	
Select equivalent:	EMC_SYM_HISTORICAL_MEASURES.MEASURE
Where equivalent:	
Qualification:	dimension
List of values:	220, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_HISTORICAL_MEASURES.MEASURE When 'Maximum Total I/O R ate (Req/Sec)' Then max(S H_SE_Sym_Storage_Sys_Sta ts.MAXTotalIORate) When 'Minimum Total I/O R ate (Req/Sec)' Then min(S H_SE_Sym_Storage_Sys_Sta ts.MINTotalIORate) When 'Average Total I/O R ate (Req/Sec)' Then avg(S H_SE_Sym_Storage_Sys_Sta ts.AVGTotalIORate) When 'Maximum Total Data Rate (Bytes/Sec)' Then ma x(SH_SE_Sym_Storage_Sys_ Stats.MAXTotalDataRate) When 'Minimum Total Data Rate (Bytes/Sec)' Then mi n(SH_SE_Sym_Storage_Sys_ Stats.MINTotalDataRate) When 'Average Total Data Rate (Bytes/Sec)' Then av g(SH_SE_Sym_Storage_Sys_

Stats.AVGTotalDataRate)

When 'Maximum Read I/O (
Req/Sec)' Then max(SH_SE_
Sym_Storage_Sys_Stats.MAX
ReadRate)
When 'Minimum Read I/O (R
eq/Sec)' Then min(SH_SE_S
ym_Storage_Sys_Stats.MINR
eadRate)
When 'Average Read I/O (R
eq/Sec)' Then avg(SH_SE_S
ym_Storage_Sys_Stats.AVGR
eadRate)

When 'Maximum Write I/O (
Req/Sec)' Then max(SH_SE_
Sym_Storage_Sys_Stats.MAX
WriteRate)
When 'Minimum Write I/O (
Req/Sec)' Then min(SH_SE_
Sym_Storage_Sys_Stats.MIN
WriteRate)
When 'Average Write I/O (
Req/Sec)' Then avg(SH_SE_
Sym_Storage_Sys_Stats.AVG
WriteRate)

When 'Maximum Read Hits (
Req/Sec)' Then max(SH_SE_
Sym_Storage_Sys_Stats.MAX
ReadHitRate)
When 'Minimum Read Hits (
Req/Sec)' Then min(SH_SE_
Sym_Storage_Sys_Stats.MIN
ReadHitRate)
When 'Average Read Hits (
Req/Sec)' Then avg(SH_SE_
Sym_Storage_Sys_Stats.AVG
ReadHitRate)

When 'Maximum Write Hits
(Req/Sec)' Then max(SH_SE
_Sym_Storage_Sys_Stats.MA
XWriteHitRate)
When 'Minimum Write Hits

(Req/Sec)' Then min(SH_SE
_Sym_Storage_Sys_Stats.MI
NWriteHitRate)
When 'Average Write Hits
(Req/Sec)' Then avg(SH_SE
_Sym_Storage_Sys_Stats.AV
GWriteHitRate)

When 'Maximum Read Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_Storage_Sys_
Stats.MAXReadDataRate)
When 'Minimum Read Data
Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_Storage_Sys_
Stats.MINReadDataRate)
When 'Average Read Data R
ate (Bytes/Sec)' Then avg(
SH_SE_Sym_Storage_Sys_St
ats.AVGReadDataRate)

When 'Maximum Write Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_Storage_Sys_
Stats.MAXWriteDataRate)
When 'Minimum Write Data
Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_Storage_Sys_
Stats.MINWriteDataRate)
When 'Average Write Data
Rate (Bytes/Sec)' Then av
g(SH_SE_Sym_Storage_Sys_
Stats.AVGWriteDataRate)

When 'Maximum % Reads' T
hen max(SH_SE_Sym_Storag
e_Sys_Stats.MAXPctReadIOS
)
When 'Minimum % Reads' T
hen min(SH_SE_Sym_Storag
e_Sys_Stats.MINPctReadIOS
)

When 'Maximum % Writes' T
hen max(SH_SE_Sym_Storag

e_Sys_Stats.MAXPctWriteIO
S)
When 'Minimum % Writes' T
hen min(SH_SE_Sym_Storag
e_Sys_Stats.MINPctWriteIO
S)

When 'Maximum % Hits' The
n max(SH_SE_Sym_Storage_
Sys_Stats.MAXPctHitIOS)
When 'Minimum % Hits' The
n min(SH_SE_Sym_Storage_
Sys_Stats.MINPctHitIOS)

When 'Maximum Average Re
ad Size (Bytes)' Then max(
SH_SE_Sym_Storage_Sys_St
ats.MAXAvgReadSize)
When 'Minimum Average Re
ad Size (Bytes)' Then min(
SH_SE_Sym_Storage_Sys_St
ats.MINAvgReadSize)

When 'Maximum Average Wr
ite Size (Bytes)' Then max
(SH_SE_Sym_Storage_Sys_S
tats.MAXAvgWriteSize)
When 'Minimum Average Wri
te Size (Bytes)' Then min(
SH_SE_Sym_Storage_Sys_St
ats.MINAvgWriteSize)

When 'Maximum % Read Hit
s' Then max(SH_SE_Sym_St
orage_Sys_Stats.MAXPctRea
dHitIOS)
When 'Minimum % Read Hit
s' Then min(SH_SE_Sym_Sto
rage_Sys_Stats.MINPctRead
HitIOS)

When 'Maximum % Write Hit
s' Then max(SH_SE_Sym_St

orage_Sys_Stats.MAXPctWri
teHitIOS)
When 'Minimum % Write Hit
s' Then min(SH_SE_Sym_Sto
rage_Sys_Stats.MINPctWrit
eHitIOS)

When 'Maximum % Read Seq
' Then max(SH_SE_Sym_Sto
rage_Sys_Stats.MAXPctSeqR
eadIOS)
When 'Minimum % Read Seq
' Then min(SH_SE_Sym_Stor
age_Sys_Stats.MINPctSeqRe
adIOS)

When 'Maximum Read Rate
Seq (Req/Sec)' Then max(S
H_SE_Sym_Storage_Sys_Sta
ts.MAXSeqReadRate)
When 'Minimum Read Rate S
eq (Req/Sec)' Then min(SH
_SE_Sym_Storage_Sys_Stats
.MINSeqReadRate)
When 'Average Read Rate S
eq (Req/Sec)' Then avg(SH
_SE_Sym_Storage_Sys_Stats
.AVGSeqReadRate)

When 'Maximum Prefetch Da
ta Rate (Bytes/Sec)' Then
max(SH_SE_Sym_Storage_Sy
s_Stats.MAXPrefetchRate)
When 'Minimum Prefetch Da
ta Rate (Bytes/Sec)' Then
min(SH_SE_Sym_Storage_Sy
s_Stats.MINPrefetchRate)
When 'Average Prefetch Da
ta Rate (Bytes/Sec)' Then
avg(SH_SE_Sym_Storage_Sy
s_Stats.AVGPrefetchRate)

When 'Maximum Write Flush
Data Rate (Bytes/Sec)' Th

en max(SH_SE_Sym_Storage
_Sys_Stats.MAXWriteFlushR
ate)
When 'Minimum Write Flush
 Data Rate (Bytes/Sec)' Th
en min(SH_SE_Sym_Storage
_Sys_Stats.MINWriteFlushR
ate)
When 'Average Write Flush
 Data Rate (Bytes/Sec)' Th
en avg(SH_SE_Sym_Storage
_Sys_Stats.AVGWriteFlushR
ate)

When 'Maximum Deferred W
rite Rate (Req/Sec)' Then
max(SH_SE_Sym_Storage_Sy
s_Stats.MAXDeferredWriteR
ate)
When 'Minimum Deferred Wr
ite Rate (Req/Sec)' Then
min(SH_SE_Sym_Storage_Sy
s_Stats.MINDeferredWriteR
ate)
When 'Average Deferred Wr
ite Rate (Req/Sec)' Then a
vg(SH_SE_Sym_Storage_Sys
_Stats.AVGDeferredWriteRa
te)

When 'Maximum Delayed DF
W Rate (Req/Sec)' Then ma
x(SH_SE_Sym_Storage_Sys_
Stats.MAXDelayedDFWRate)
When 'Minimum Delayed DF
W Rate (Req/Sec)' Then mi
n(SH_SE_Sym_Storage_Sys_
Stats.MINDelayedDFWRate)
When 'Average Delayed DF
W Rate (Req/Sec)' Then av
g(SH_SE_Sym_Storage_Sys_
Stats.AVGDelayedDFWRate)

When 'Maximum Read Rate
Total (Req/Sec)' Then max
(SH_SE_Sym_Storage_Sys_S

```
tats.MAXReadRateTotal)
When 'Minimum Read Rate T
otal (Req/Sec)' Then min(
SH_SE_Sym_Storage_Sys_St
ats.MINReadRateTotal)
When 'Average Read Rate T
otal (Req/Sec)' Then avg(S
H_SE_Sym_Storage_Sys_Sta
ts.AVGReadRateTotal)

When 'Maximum Read Hits S
eq (Req/Sec)' Then max(SH
_SE_Sym_Storage_Sys_Stats
.MAXSeqReadHitRate)
When 'Minimum Read Hits S
eq (Req/Sec)' Then min(SH
_SE_Sym_Storage_Sys_Stats
.MINSeqReadHitRate)
When 'Average Read Hits S
eq (Req/Sec)' Then avg(SH
_SE_Sym_Storage_Sys_Stats
.AVGSeqReadHitRate)

When 'Maximum Write Rate
Seq  (Req/Sec)' Then max(
SH_SE_Sym_Storage_Sys_St
ats.MAXSeqWriteRate)
When 'Minimum Write Rate
Seq  (Req/Sec)' Then min(
SH_SE_Sym_Storage_Sys_St
ats.MINSeqWriteRate)
When 'Average Write Rate
Seq  (Req/Sec)' Then avg(
SH_SE_Sym_Storage_Sys_St
ats.AVGSeqWriteRate)

When 'Maximum Write Hits
Seq (Req/Sec)' Then max(S
H_SE_Sym_Storage_Sys_Sta
ts.MAXSeqWriteHitRate)
When 'Minimum Write Hits
Seq (Req/Sec)' Then min(S
H_SE_Sym_Storage_Sys_Sta
ts.MINSeqWriteHitRate)
When 'Average Write Hits
Seq (Req/Sec)' Then avg(S
```

```
H_SE_Sym_Storage_Sys_Sta
ts.AVGSeqWriteHitRate)

When 'Maximum Max Pendin
g Flush Limit (Bytes)' The
n max(SH_SE_Sym_Storage_
Sys_Stats.MAXMaxPendingFl
ushLimit)
When 'Minimum Max Pendin
g Flush Limit (Bytes)' The
n min(SH_SE_Sym_Storage_
Sys_Stats.MINMaxPendingFl
ushLimit)
When 'Average Max Pending
 Flush Limit (Bytes)' Then
 avg(SH_SE_Sym_Storage_S
ys_Stats.AVGMaxPendingFlu
shLimit)

When 'Maximum Pending Flu
sh (Bytes)' Then max(SH_S
E_Sym_Storage_Sys_Stats.M
AXPendingFlush)
When 'Minimum Pending Flu
sh (Bytes)' Then min(SH_S
E_Sym_Storage_Sys_Stats.M
INPendingFlush)
When 'Average Pending Flu
sh (Bytes)' Then avg(SH_S
E_Sym_Storage_Sys_Stats.A
VGPendingFlush)

When 'Maximum Pending Fo
rmat (Bytes)' Then max(SH
_SE_Sym_Storage_Sys_Stats
.MAXPendingFormat)
When 'Minimum Pending For
mat (Bytes)' Then min(SH_
SE_Sym_Storage_Sys_Stats.
MINPendingFormat)
When 'Average Pending For
mat (Bytes)' Then avg(SH_
SE_Sym_Storage_Sys_Stats.
AVGPendingFormat)
ELSE 0
END
```

Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DailyOLAP Storage System Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 222, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:
```
CASE EMC_SYM_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total I/O R
ate (Req/Sec)' Then max(S
D_SE_Sym_Storage_Sys_Sta
ts.MAXTotalIORate)
When 'Minimum Total I/O R
ate (Req/Sec)' Then min(S
D_SE_Sym_Storage_Sys_Sta
ts.MINTotalIORate)
When 'Average Total I/O R
ate (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Sys_Sta
ts.AVGTotalIORate)
```

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Sys_
Stats.MAXTotalDataRate)
When 'Minimum Total Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Sys_
Stats.MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SD_SE_Sym_Storage_Sys_
Stats.AVGTotalDataRate)

When 'Maximum Read I/O (
Req/Sec)' Then max(SD_SE_
Sym_Storage_Sys_Stats.MAX
ReadRate)
When 'Minimum Read I/O (R
eq/Sec)' Then min(SD_SE_S
ym_Storage_Sys_Stats.MINR
eadRate)
When 'Average Read I/O (R
eq/Sec)' Then avg(SD_SE_S
ym_Storage_Sys_Stats.AVGR
eadRate)

When 'Maximum Write I/O (
Req/Sec)' Then max(SD_SE_
Sym_Storage_Sys_Stats.MAX
WriteRate)
When 'Minimum Write I/O (
Req/Sec)' Then min(SD_SE_
Sym_Storage_Sys_Stats.MIN
WriteRate)
When 'Average Write I/O (
Req/Sec)' Then avg(SD_SE_
Sym_Storage_Sys_Stats.AVG
WriteRate)

When 'Maximum Read Hits (
Req/Sec)' Then max(SD_SE_
Sym_Storage_Sys_Stats.MAX
ReadHitRate)
When 'Minimum Read Hits (
Req/Sec)' Then min(SD_SE_
Sym_Storage_Sys_Stats.MIN

ReadHitRate)
When 'Average Read Hits (
Req/Sec)' Then avg(SD_SE_
Sym_Storage_Sys_Stats.AVG
ReadHitRate)

When 'Maximum Write Hits
(Req/Sec)' Then max(SD_SE
_Sym_Storage_Sys_Stats.MA
XWriteHitRate)
When 'Minimum Write Hits
(Req/Sec)' Then min(SD_SE
_Sym_Storage_Sys_Stats.MI
NWriteHitRate)
When 'Average Write Hits
(Req/Sec)' Then avg(SD_SE
_Sym_Storage_Sys_Stats.AV
GWriteHitRate)

When 'Maximum Read Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Sys_
Stats.MAXReadDataRate)
When 'Minimum Read Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Sys_
Stats.MINReadDataRate)
When 'Average Read Data R
ate (Bytes/Sec)' Then avg(
SD_SE_Sym_Storage_Sys_St
ats.AVGReadDataRate)

When 'Maximum Write Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Sys_
Stats.MAXWriteDataRate)
When 'Minimum Write Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Sys_
Stats.MINWriteDataRate)
When 'Average Write Data
Rate (Bytes/Sec)' Then av
g(SD_SE_Sym_Storage_Sys_
Stats.AVGWriteDataRate)

When 'Maximum % Reads' T

hen max(SD_SE_Sym_Storag
e_Sys_Stats.MAXPctReadIOS
)
When 'Minimum % Reads' T
hen min(SD_SE_Sym_Storag
e_Sys_Stats.MINPctReadIOS
)

When 'Maximum % Writes' T
hen max(SD_SE_Sym_Storag
e_Sys_Stats.MAXPctWriteIO
S)
When 'Minimum % Writes' T
hen min(SD_SE_Sym_Storag
e_Sys_Stats.MINPctWriteIO
S)

When 'Maximum % Hits' The
n max(SD_SE_Sym_Storage_
Sys_Stats.MAXPctHitIOS)
When 'Minimum % Hits' The
n min(SD_SE_Sym_Storage_
Sys_Stats.MINPctHitIOS)

When 'Maximum Average Re
ad Size (Bytes)' Then max(
SD_SE_Sym_Storage_Sys_St
ats.MAXAvgReadSize)
When 'Minimum Average Re
ad Size (Bytes)' Then min(
SD_SE_Sym_Storage_Sys_St
ats.MINAvgReadSize)

When 'Maximum Average Wr
ite Size (Bytes)' Then max
(SD_SE_Sym_Storage_Sys_S
tats.MAXAvgWriteSize)
When 'Minimum Average Wri
te Size (Bytes)' Then min(
SD_SE_Sym_Storage_Sys_St
ats.MINAvgWriteSize)

When 'Maximum % Read Hit

s' Then max(SD_SE_Sym_St
orage_Sys_Stats.MAXPctRea
dHitIOS)
When 'Minimum % Read Hit
s' Then min(SD_SE_Sym_Sto
rage_Sys_Stats.MINPctRead
HitIOS)

When 'Maximum % Write Hit
s' Then max(SD_SE_Sym_St
orage_Sys_Stats.MAXPctWri
teHitIOS)
When 'Minimum % Write Hit
s' Then min(SD_SE_Sym_Sto
rage_Sys_Stats.MINPctWrit
eHitIOS)

When 'Maximum % Read Seq
' Then max(SD_SE_Sym_Sto
rage_Sys_Stats.MAXPctSeqR
eadIOS)
When 'Minimum % Read Seq
' Then min(SD_SE_Sym_Stor
age_Sys_Stats.MINPctSeqRe
adIOS)

When 'Maximum Read Rate
Seq (Req/Sec)' Then max(S
D_SE_Sym_Storage_Sys_Sta
ts.MAXSeqReadRate)
When 'Minimum Read Rate S
eq (Req/Sec)' Then min(SD
_SE_Sym_Storage_Sys_Stats
.MINSeqReadRate)
When 'Average Read Rate S
eq (Req/Sec)' Then avg(SD
_SE_Sym_Storage_Sys_Stats
.AVGSeqReadRate)

When 'Maximum Prefetch Da
ta Rate (Bytes/Sec)' Then
max(SD_SE_Sym_Storage_Sy
s_Stats.MAXPrefetchRate)

When 'Minimum Prefetch Da
ta Rate (Bytes/Sec)' Then
min(SD_SE_Sym_Storage_Sy
s_Stats.MINPrefetchRate)
When 'Average Prefetch Da
ta Rate (Bytes/Sec)' Then
avg(SD_SE_Sym_Storage_Sy
s_Stats.AVGPrefetchRate)

When 'Maximum Write Flush
 Data Rate (Bytes/Sec)' Th
en max(SD_SE_Sym_Storage
_Sys_Stats.MAXWriteFlushR
ate)
When 'Minimum Write Flush
 Data Rate (Bytes/Sec)' Th
en min(SD_SE_Sym_Storage
_Sys_Stats.MINWriteFlushR
ate)
When 'Average Write Flush
 Data Rate (Bytes/Sec)' Th
en avg(SD_SE_Sym_Storage
_Sys_Stats.AVGWriteFlushR
ate)

When 'Maximum Deferred W
rite Rate (Req/Sec)' Then
max(SD_SE_Sym_Storage_Sy
s_Stats.MAXDeferredWriteR
ate)
When 'Minimum Deferred Wr
ite Rate (Req/Sec)' Then
min(SD_SE_Sym_Storage_Sy
s_Stats.MINDeferredWriteR
ate)
When 'Average Deferred Wr
ite Rate (Req/Sec)' Then a
vg(SD_SE_Sym_Storage_Sys
_Stats.AVGDeferredWriteRa
te)

When 'Maximum Delayed DF
W Rate (Req/Sec)' Then ma
x(SD_SE_Sym_Storage_Sys_
Stats.MAXDelayedDFWRate)
When 'Minimum Delayed DF

W Rate (Req/Sec)' Then mi
n(SD_SE_Sym_Storage_Sys_
Stats.MINDelayedDFWRate)
When 'Average Delayed DF
W Rate (Req/Sec)' Then av
g(SD_SE_Sym_Storage_Sys_
Stats.AVGDelayedDFWRate)

When 'Maximum Read Rate
Total (Req/Sec)' Then max
(SD_SE_Sym_Storage_Sys_S
tats.MAXReadRateTotal)
When 'Minimum Read Rate T
otal (Req/Sec)' Then min(
SD_SE_Sym_Storage_Sys_St
ats.MINReadRateTotal)
When 'Average Read Rate T
otal (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Sys_Sta
ts.AVGReadRateTotal)

When 'Maximum Read Hits S
eq (Req/Sec)' Then max(SD
_SE_Sym_Storage_Sys_Stats
.MAXSeqReadHitRate)
When 'Minimum Read Hits S
eq (Req/Sec)' Then min(SD
_SE_Sym_Storage_Sys_Stats
.MINSeqReadHitRate)
When 'Average Read Hits S
eq (Req/Sec)' Then avg(SD
_SE_Sym_Storage_Sys_Stats
.AVGSeqReadHitRate)

When 'Maximum Write Rate
Seq (Req/Sec)' Then max(
SD_SE_Sym_Storage_Sys_St
ats.MAXSeqWriteRate)
When 'Minimum Write Rate
Seq (Req/Sec)' Then min(
SD_SE_Sym_Storage_Sys_St
ats.MINSeqWriteRate)
When 'Average Write Rate
Seq (Req/Sec)' Then avg(
SD_SE_Sym_Storage_Sys_St
ats.AVGSeqWriteRate)

When 'Maximum Write Hits
Seq (Req/Sec)' Then max(S
D_SE_Sym_Storage_Sys_Sta
ts.MAXSeqWriteHitRate)
When 'Minimum Write Hits
Seq (Req/Sec)' Then min(S
D_SE_Sym_Storage_Sys_Sta
ts.MINSeqWriteHitRate)
When 'Average Write Hits
Seq (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Sys_Sta
ts.AVGSeqWriteHitRate)

When 'Maximum Max Pendin
g Flush Limit (Bytes)' The
n max(SD_SE_Sym_Storage_
Sys_Stats.MAXMaxPendingFl
ushLimit)
When 'Minimum Max Pendin
g Flush Limit (Bytes)' The
n min(SD_SE_Sym_Storage_
Sys_Stats.MINMaxPendingFl
ushLimit)
When 'Average Max Pending
 Flush Limit (Bytes)' Then
 avg(SD_SE_Sym_Storage_S
ys_Stats.AVGMaxPendingFlu
shLimit)

When 'Maximum Pending Flu
sh (Bytes)' Then max(SD_S
E_Sym_Storage_Sys_Stats.M
AXPendingFlush)
When 'Minimum Pending Flu
sh (Bytes)' Then min(SD_S
E_Sym_Storage_Sys_Stats.M
INPendingFlush)
When 'Average Pending Flu
sh (Bytes)' Then avg(SD_S
E_Sym_Storage_Sys_Stats.A
VGPendingFlush)

When 'Maximum Pending Fo
rmat (Bytes)' Then max(SD
_SE_Sym_Storage_Sys_Stats

.MAXPendingFormat)
When 'Minimum Pending For
mat (Bytes)' Then min(SD_
SE_Sym_Storage_Sys_Stats.
MINPendingFormat)
When 'Average Pending For
mat (Bytes)' Then avg(SD_
SE_Sym_Storage_Sys_Stats.
AVGPendingFormat)
ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: EMC Symmetrix Volume Measures
Description:

No objects

Class: RAW Storage Volume Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_RAW_MEASURES.Measure
Where equivalent:

Qualification:	dimension
List of values:	22i, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object: Symmetrix Aggregate measure

Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_VOLUME_RAW_MEASURES.Measure
When 'Total IO Rate Rando
m (Req/Sec)' Then SR_SE_S
ym_Storage_Vol_Stats.Tota
lIORateRandom
When 'Total IO Rate (Req/
Sec)' Then SR_SE_Sym_Stor
age_Vol_Stats.TotalIORate
When 'Total Hit Rate (Req
/Sec)' Then SR_SE_Sym_Sto
rage_Vol_Stats.TotalHitRat
e
When 'Total Miss Rate (Re
q/Sec)' Then SR_SE_Sym_St
orage_Vol_Stats.TotalMiss
Rate
When '%Hits' Then SR_SE_Sym_Storage_Vol_Stats.PctHitIOs
When '%Misses' Then SR_SE_Sym_Storage_Vol_Stats.PctMissIOs
When 'Average IO Size (By
tes)' Then SR_SE_Sym_Stor
age_Vol_Stats.AvgIOSize
When 'Read Data Rate (Byt
es/Sec)' Then SR_SE_Sym_S
torage_Vol_Stats.ReadData
Rate
When 'Read Rate Random (
Req/Sec)' Then SR_SE_Sym_
Storage_Vol_Stats.ReadRat
eRandom
When 'Read Rate Total (Re
q/Sec)' Then SR_SE_Sym_St
orage_Vol_Stats.ReadRateT
otal
When 'Read Hit Rate Rando
m (Req/Sec)' Then SR_SE_S
ym_Storage_Vol_Stats.Read
HitRateRandom
When 'Read Hit Rate Total
 (Req/Sec)' Then SR_SE_Sy
m_Storage_Vol_Stats.ReadH
itRateTotal
When '%Reads' Then SR_SE_Sym_Storage_Vol_Stats.PctReadIOs
When '%Read Hits Random'
```

Then SR_SE_Sym_Storage_V
ol_Stats.PctReadHitIOsRan
dom
When '%Read Hits Total' T
hen SR_SE_Sym_Storage_Vo
l_Stats.PctReadHitIOsTotal
When '%Read Misses Rando
m' Then SR_SE_Sym_Storag
e_Vol_Stats.PctReadMissIO
sRandom
When '%Read Misses Total'
Then SR_SE_Sym_Storage_
Vol_Stats.PctReadMissIOsT
otal
When 'Average Read Size (
Bytes)' Then SR_SE_Sym_St
orage_Vol_Stats.AvgReadSi
ze
When 'Write Data Rate (By
tes/Sec)' Then SR_SE_Sym_
Storage_Vol_Stats.WriteDa
taRate
When 'Write Rate (Req/Sec
)' Then SR_SE_Sym_Storage
_Vol_Stats.WriteRate
When 'Write Hit Rate Total
(Req/Sec)' Then SR_SE_Sy
m_Storage_Vol_Stats.Write
HitRate
When 'Write Miss Rate (Re
q/Sec)' Then SR_SE_Sym_St
orage_Vol_Stats.WriteMiss
Rate
When '%Writes' Then SR_SE_Sym_Storage_Vol_Stats.PctWriteIOs
When '%Write Hits' Then S
R_SE_Sym_Storage_Vol_Stat
s.PctWriteHitIOs
When '%Write Misses' Then
SR_SE_Sym_Storage_Vol_St
ats.PctWriteMissIOs
When 'Average Write Size
(Bytes)' Then SR_SE_Sym_S
torage_Vol_Stats.AvgWrite
Size
When 'Maximum Write Pendi
ng Threshold (Bytes)' The

n SR_SE_Sym_Storage_Vol_
Stats.MaxWritePendingThre
shold
When 'Pending Flush (Byte
s)' Then SR_SE_Sym_Storag
e_Vol_Stats.PendingFlush
When 'Sampled Average Rea
d Time (ms)' Then SR_SE_S
ym_Storage_Vol_Stats.Samp
ledAvgReadTimeMs
When 'Sampled Average Wri
te Time (ms)' Then SR_SE_
Sym_Storage_Vol_Stats.Sam
pledAvgWriteTimeMs
When 'Total Data Rate (By
tes/Sec)' Then SR_SE_Sym_
Storage_Vol_Stats.TotalDa
taRate
When 'Seq Read Rate (Req/
Sec)' Then SR_SE_Sym_Stor
age_Vol_Stats.SeqReadRate
When 'Seq Read Hit Rate (
Req/Sec)' Then SR_SE_Sym_
Storage_Vol_Stats.SeqRead
HitRate
When 'Write Rate Total (R
eq/Sec)' Then SR_SE_Sym_S
torage_Vol_Stats.WriteRat
eTotal
When 'Seq Write Rate (Req
/Sec)' Then SR_SE_Sym_Sto
rage_Vol_Stats.SeqWriteRa
te
When 'Seq Write Hit Rate
(Req/Sec)' Then SR_SE_Sym
_Storage_Vol_Stats.SeqWri
teHitRate
ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort

Object status: show

Class: Hourly Storage Volume Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22k, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te Random (Req/Sec)' Then
 SH_SE_Sym_Storage_Vol_S
tats.MAXTotalIORateRandom
When 'Minimum Total IO Ra
te Random (Req/Sec)' Then
 SH_SE_Sym_Storage_Vol_S
tats.MINTotalIORateRandom
When 'Average Total IO Ra
te Random (Req/Sec)' Then
 SH_SE_Sym_Storage_Vol_S
tats.AVGTotalIORateRandom

When 'Maximum Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_Storage_Vol_Stats.MAX
TotalIORate
When 'Minimum Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_Storage_Vol_Stats.MIN
TotalIORate
```

When 'Average Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_Storage_Vol_Stats.AVG
TotalIORate

When 'Maximum Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.MA
XTotalHitRate
When 'Minimum Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.MI
NTotalHitRate
When 'Average Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.AV
GTotalHitRate

When 'Maximum Total Miss
Rate (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.M
AXTotalMissRate
When 'Minimum Total Miss
Rate (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.M
INTotalMissRate
When 'Average Total Miss
Rate (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.A
VGTotalMissRate

When 'Maximum %Hits' The
n SH_SE_Sym_Storage_Vol_
Stats.MAXPercentIOHits
When 'Minimum %Hits' Then
 SH_SE_Sym_Storage_Vol_S
tats.MINPercentIOHits

When 'Maximum %Misses' T
hen SH_SE_Sym_Storage_Vo
l_Stats.MAXPercentIOMiss
When 'Minimum %Misses' T
hen SH_SE_Sym_Storage_Vo
l_Stats.MINPercentIOMiss

When 'Maximum Average IO

Size (Bytes)' Then SH_SE
_Sym_Storage_Vol_Stats.MA
XAverageIOSize
When 'Minimum Average IO
Size (Bytes)' Then SH_SE_
Sym_Storage_Vol_Stats.MIN
AverageIOSize

When 'Maximum Read Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MAXReadDataRate
When 'Minimum Read Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINReadDataRate
When 'Average Read Data R
ate (Bytes/Sec)' Then SH_
SE_Sym_Storage_Vol_Stats.
AVGReadDataRate

When 'Maximum Read Rate
Random (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MAXReadRateRandom
When 'Minimum Read Rate
Random (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINReadRateRandom
When 'Average Read Rate R
andom (Req/Sec)' Then SH_
SE_Sym_Storage_Vol_Stats.
AVGReadRateRandom

When 'Maximum Read Rate
Total (Req/Sec)' Then SH_
SE_Sym_Storage_Vol_Stats.
MAXReadRateTotal
When 'Minimum Read Rate T
otal (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.M
INReadRateTotal
When 'Average Read Rate T
otal (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.A
VGReadRateTotal

When 'Maximum Read Hit R
ate Random (Req/Sec)' The
n SH_SE_Sym_Storage_Vol_
Stats.MAXReadHitRateRando
m
When 'Minimum Read Hit Ra
te Random (Req/Sec)' Then
SH_SE_Sym_Storage_Vol_S
tats.MINReadHitRateRandom
When 'Average Read Hit Ra
te Random (Req/Sec)' Then
SH_SE_Sym_Storage_Vol_S
tats.AVGReadHitRateRandom

When 'Maximum Read Hit R
ate Total (Req/Sec)' Then
SH_SE_Sym_Storage_Vol_St
ats.MAXReadHitRateTotal
When 'Minimum Read Hit Ra
te Total (Req/Sec)' Then S
H_SE_Sym_Storage_Vol_Sta
ts.MINReadHitRateTotal
When 'Average Read Hit Ra
te Total (Req/Sec)' Then S
H_SE_Sym_Storage_Vol_Sta
ts.AVGReadHitRateTotal

When 'Maximum %Reads' Th
en SH_SE_Sym_Storage_Vol
_Stats.MAXPctReadIOS
When 'Minimum %Reads' Th
en SH_SE_Sym_Storage_Vol
_Stats.MINPctReadIOS

When 'Maximum %Read Hits
Random' Then SH_SE_Sym_
Storage_Vol_Stats.MAXPctR
eadHitIOSRandom
When 'Minimum %Read Hits
Random' Then SH_SE_Sym_
Storage_Vol_Stats.MINPctR
eadHitIOSRandom

When 'Maximum %Read Hits
Total' Then SH_SE_Sym_St

orage_Vol_Stats.MAXPctRea
dHitIOSTotal
When 'Minimum %Read Hits
Total' Then SH_SE_Sym_St
orage_Vol_Stats.MINPctRea
dHitIOSTotal

When 'Maximum %Read Miss
es Random' Then SH_SE_Sy
m_Storage_Vol_Stats.MAXPc
tReadMissIOSRandom
When 'Minimum %Read Miss
es Random' Then SH_SE_Sy
m_Storage_Vol_Stats.MINPc
tReadMissIOSRandom

When 'Maximum %Read Miss
es Total' Then SH_SE_Sym_
Storage_Vol_Stats.MAXPctR
eadMissIOSTotal
When 'Minimum %Read Miss
es Total' Then SH_SE_Sym_
Storage_Vol_Stats.MINPctR
eadMissIOSTotal

When 'Maximum Average Re
ad Size (Bytes)' Then SH_
SE_Sym_Storage_Vol_Stats.
MAXAvgReadSize
When 'Minimum Average Re
ad Size (Bytes)' Then SH_
SE_Sym_Storage_Vol_Stats.
MINAvgReadSize

When 'Maximum Write Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MAXWriteDataRate
When 'Minimum Write Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINWriteDataRate
When 'Average Write Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.AVGWriteDataRate

When 'Maximum Write Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MAXWriteRate
When 'Minimum Write Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MINWriteRate
When 'Average Write Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.AVGWriteRate

When 'Maximum Write Hit Rate Total (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate
When 'Minimum Write Hit Rate Total (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MINWriteHitRate
When 'Average Write Hit Rate Total (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate

When 'Maximum Write Miss Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate
When 'Minimum Write Miss Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.MINWriteMissRate
When 'Average Write Miss Rate (Req/Sec)' Then SH_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate

When 'Maximum %Writes' Then SH_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS
When 'Minimum %Writes' Then SH_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS

When 'Maximum %Write Hit
s' Then SH_SE_Sym_Storage
_Vol_Stats.MAXPctWriteHit
IOS
When 'Minimum %Write Hits
' Then SH_SE_Sym_Storage_
Vol_Stats.MINPctWriteHitI
OS

When 'Maximum %Write Mis
ses' Then SH_SE_Sym_Stora
ge_Vol_Stats.MAXPctWriteM
issIOS
When 'Minimum %Write Mis
ses' Then SH_SE_Sym_Stora
ge_Vol_Stats.MINPctWriteM
issIOS

When 'Maximum Average Wr
ite Size (Bytes)' Then SH_
SE_Sym_Storage_Vol_Stats.
MAXAvgWriteSize
When 'Minimum Average Wri
te Size (Bytes)' Then SH_S
E_Sym_Storage_Vol_Stats.M
INAvgWriteSize

When 'Maximum Maximum Wr
ite Pending Threshold (Byt
es)' Then SH_SE_Sym_Stora
ge_Vol_Stats.MAXMaxWriteP
endingThreshold
When 'Minimum Maximum Wr
ite Pending Threshold (Byt
es)' Then SH_SE_Sym_Stora
ge_Vol_Stats.MINMaxWriteP
endingThreshold
When 'Average Maximum Wr
ite Pending Threshold (Byt
es)' Then SH_SE_Sym_Stora
ge_Vol_Stats.AVGMaxWriteP
endingThreshold

When 'Maximum Pending Flu
sh (Bytes)' Then SH_SE_Sy

m_Storage_Vol_Stats.MAXPe
ndingFlush
When 'Minimum Pending Flu
sh (Bytes)' Then SH_SE_Sy
m_Storage_Vol_Stats.MINPe
ndingFlush
When 'Average Pending Flu
sh (Bytes)' Then SH_SE_Sy
m_Storage_Vol_Stats.AVGPe
ndingFlush

When 'Maximum Sampled Av
erage Read Time (ms)' The
n SH_SE_Sym_Storage_Vol_
Stats.MAXSampledAvgReadT
imeMs
When 'Minimum Sampled Av
erage Read Time (ms)' The
n SH_SE_Sym_Storage_Vol_
Stats.MINSampledAvgReadTi
meMs
When 'Average Sampled Ave
rage Read Time (ms)' Then
SH_SE_Sym_Storage_Vol_S
tats.AVGSampledAvgReadTi
meMs

When 'Maximum Sampled Av
erage Write Time (ms)' Th
en SH_SE_Sym_Storage_Vol
_Stats.MAXSampledAvgWrite
TimeMs
When 'Minimum Sampled Av
erage Write Time (ms)' Th
en SH_SE_Sym_Storage_Vol
_Stats.MINSampledAvgWrite
TimeMs
When 'Average Sampled Ave
rage Write Time (ms)' The
n SH_SE_Sym_Storage_Vol_
Stats.AVGSampledAvgWriteT
imeMs

When 'Maximum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats

.MAXTotalDataRate
When 'Minimum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINTotalDataRate
When 'Average Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.AVGTotalDataRate

When 'Maximum Seq Read R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.MA
XSeqReadRate
When 'Minimum Seq Read R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.MI
NSeqReadRate
When 'Average Seq Read Ra
te (Req/Sec)' Then SH_SE_
Sym_Storage_Vol_Stats.AVG
SeqReadRate

When 'Maximum Seq Read H
it Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MAXSeqReadHitRate
When 'Minimum Seq Read Hi
t Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINSeqReadHitRate
When 'Average Seq Read Hi
t Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.AVGSeqReadHitRate

When 'Maximum Write Rate
Total (Req/Sec)' Then SH_
SE_Sym_Storage_Vol_Stats.
MAXWriteRateTotal
When 'Minimum Write Rate
Total (Req/Sec)' Then SH_
SE_Sym_Storage_Vol_Stats.
MINWriteRateTotal
When 'Average Write Rate
Total (Req/Sec)' Then SH_

SE_Sym_Storage_Vol_Stats.
AVGWriteRateTotal

When 'Maximum Seq Write
Rate (Req/Sec)' Then SH_S
E_Sym_Storage_Vol_Stats.M
AXSeqWriteRate
When 'Minimum Seq Write R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.MI
NSeqWriteRate
When 'Average Seq Write R
ate (Req/Sec)' Then SH_SE
_Sym_Storage_Vol_Stats.AV
GSeqWriteRate

When 'Maximum Seq Write
Hit Rate (Req/Sec)' Then S
H_SE_Sym_Storage_Vol_Sta
ts.MAXSeqWriteHitRate
When 'Minimum Seq Write H
it Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.MINSeqWriteHitRate
When 'Average Seq Write H
it Rate (Req/Sec)' Then SH
_SE_Sym_Storage_Vol_Stats
.AVGSeqWriteHitRate
ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: Daily Storage Volume Measures
Description:

Object: Symmetrix Measure
Type: Character

Description:

Select equivalent: EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22m, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te Random (Req/Sec)' Then
 SD_SE_Sym_Storage_Vol_S
tats.MAXTotalIORateRandom
When 'Minimum Total IO Ra
te Random (Req/Sec)' Then
 SD_SE_Sym_Storage_Vol_S
tats.MINTotalIORateRandom
When 'Average Total IO Ra
te Random (Req/Sec)' Then
 SD_SE_Sym_Storage_Vol_S
tats.AVGTotalIORateRandom

When 'Maximum Total IO Ra
te (Req/Sec)' Then SD_SE_
Sym_Storage_Vol_Stats.MAX
TotalIORate
When 'Minimum Total IO Ra
te (Req/Sec)' Then SD_SE_
Sym_Storage_Vol_Stats.MIN
TotalIORate
When 'Average Total IO Ra
te (Req/Sec)' Then SD_SE_
Sym_Storage_Vol_Stats.AVG
TotalIORate

When 'Maximum Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.MA
```

XTotalHitRate
When 'Minimum Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.MI
NTotalHitRate
When 'Average Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.AV
GTotalHitRate

When 'Maximum Total Miss
Rate (Req/Sec)' Then SD_S
E_Sym_Storage_Vol_Stats.M
AXTotalMissRate
When 'Minimum Total Miss
Rate (Req/Sec)' Then SD_S
E_Sym_Storage_Vol_Stats.M
INTotalMissRate
When 'Average Total Miss
Rate (Req/Sec)' Then SD_S
E_Sym_Storage_Vol_Stats.A
VGTotalMissRate

When 'Maximum %Hits' The
n SD_SE_Sym_Storage_Vol_
Stats.MAXPercentIOHits
When 'Minimum %Hits' Then
SD_SE_Sym_Storage_Vol_S
tats.MINPercentIOHits

When 'Maximum %Misses' T
hen SD_SE_Sym_Storage_Vo
l_Stats.MAXPercentIOMiss
When 'Minimum %Misses' T
hen SD_SE_Sym_Storage_Vo
l_Stats.MINPercentIOMiss

When 'Maximum Average IO
Size (Bytes)' Then SD_SE
_Sym_Storage_Vol_Stats.MA
XAverageIOSize
When 'Minimum Average IO
Size (Bytes)' Then SD_SE_
Sym_Storage_Vol_Stats.MIN
AverageIOSize

When 'Maximum Read Data Rate (Bytes/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXReadDataRate
When 'Minimum Read Data Rate (Bytes/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MINReadDataRate
When 'Average Read Data Rate (Bytes/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGReadDataRate

When 'Maximum Read Rate Random (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXReadRateRandom
When 'Minimum Read Rate Random (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MINReadRateRandom
When 'Average Read Rate Random (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGReadRateRandom

When 'Maximum Read Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXReadRateTotal
When 'Minimum Read Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MINReadRateTotal
When 'Average Read Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGReadRateTotal

When 'Maximum Read Hit Rate Random (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXReadHitRateRandom
When 'Minimum Read Hit Rate Random (Req/Sec)' Then

SD_SE_Sym_Storage_Vol_S
tats.MINReadHitRateRandom
When 'Average Read Hit Ra
te Random (Req/Sec)' Then
SD_SE_Sym_Storage_Vol_S
tats.AVGReadHitRateRandom

When 'Maximum Read Hit R
ate Total (Req/Sec)' Then
SD_SE_Sym_Storage_Vol_St
ats.MAXReadHitRateTotal
When 'Minimum Read Hit Ra
te Total (Req/Sec)' Then S
D_SE_Sym_Storage_Vol_Sta
ts.MINReadHitRateTotal
When 'Average Read Hit Ra
te Total (Req/Sec)' Then S
D_SE_Sym_Storage_Vol_Sta
ts.AVGReadHitRateTotal

When 'Maximum %Reads' Th
en SD_SE_Sym_Storage_Vol
_Stats.MAXPctReadIOS
When 'Minimum %Reads' Th
en SD_SE_Sym_Storage_Vol
_Stats.MINPctReadIOS

When 'Maximum %Read Hits
Random' Then SD_SE_Sym_
Storage_Vol_Stats.MAXPctR
eadHitIOSRandom
When 'Minimum %Read Hits
Random' Then SD_SE_Sym_
Storage_Vol_Stats.MINPctR
eadHitIOSRandom

When 'Maximum %Read Hits
Total' Then SD_SE_Sym_St
orage_Vol_Stats.MAXPctRea
dHitIOSTotal
When 'Minimum %Read Hits
Total' Then SD_SE_Sym_St
orage_Vol_Stats.MINPctRea
dHitIOSTotal

When 'Maximum %Read Miss

es Random' Then SD_SE_Sy
m_Storage_Vol_Stats.MAXPc
tReadMissIOSRandom
When 'Minimum %Read Miss
es Random' Then SD_SE_Sy
m_Storage_Vol_Stats.MINPc
tReadMissIOSRandom

When 'Maximum %Read Miss
es Total' Then SD_SE_Sym_
Storage_Vol_Stats.MAXPctR
eadMissIOSTotal
When 'Minimum %Read Miss
es Total' Then SD_SE_Sym_
Storage_Vol_Stats.MINPctR
eadMissIOSTotal

When 'Maximum Average Re
ad Size (Bytes)' Then SD_
SE_Sym_Storage_Vol_Stats.
MAXAvgReadSize
When 'Minimum Average Re
ad Size (Bytes)' Then SD_
SE_Sym_Storage_Vol_Stats.
MINAvgReadSize

When 'Maximum Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MAXWriteDataRate
When 'Minimum Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MINWriteDataRate
When 'Average Write Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.AVGWriteDataRate

When 'Maximum Write Rate
(Req/Sec)' Then SD_SE_Sym
_Storage_Vol_Stats.MAXWri
teRate
When 'Minimum Write Rate
(Req/Sec)' Then SD_SE_Sym
_Storage_Vol_Stats.MINWri

teRate
When 'Average Write Rate (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGWriteRate

When 'Maximum Write Hit Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXWriteHitRate
When 'Minimum Write Hit Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MINWriteHitRate
When 'Average Write Hit Rate Total (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGWriteHitRate

When 'Maximum Write Miss Rate (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MAXWriteMissRate
When 'Minimum Write Miss Rate (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.MINWriteMissRate
When 'Average Write Miss Rate (Req/Sec)' Then SD_SE_Sym_Storage_Vol_Stats.AVGWriteMissRate

When 'Maximum %Writes' Then SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteIOS
When 'Minimum %Writes' Then SD_SE_Sym_Storage_Vol_Stats.MINPctWriteIOS

When 'Maximum %Write Hits' Then SD_SE_Sym_Storage_Vol_Stats.MAXPctWriteHitIOS
When 'Minimum %Write Hits' Then SD_SE_Sym_Storage_Vol_Stats.MINPctWriteHitI

OS

When 'Maximum %Write Mis
ses' Then SD_SE_Sym_Stora
ge_Vol_Stats.MAXPctWriteM
issIOS
When 'Minimum %Write Mis
ses' Then SD_SE_Sym_Stora
ge_Vol_Stats.MINPctWriteM
issIOS

When 'Maximum Average Wr
ite Size (Bytes)' Then SD_
SE_Sym_Storage_Vol_Stats.
MAXAvgWriteSize
When 'Minimum Average Wri
te Size (Bytes)' Then SD_S
E_Sym_Storage_Vol_Stats.M
INAvgWriteSize

When 'Maximum Maximum Wr
ite Pending Threshold (Byt
es)' Then SD_SE_Sym_Stora
ge_Vol_Stats.MAXMaxWriteP
endingThreshold
When 'Minimum Maximum Wr
ite Pending Threshold (Byt
es)' Then SD_SE_Sym_Stora
ge_Vol_Stats.MINMaxWriteP
endingThreshold
When 'Average Maximum Wr
ite Pending Threshold (Byt
es)' Then SD_SE_Sym_Stora
ge_Vol_Stats.AVGMaxWriteP
endingThreshold

When 'Maximum Pending Flu
sh (Bytes)' Then SD_SE_Sy
m_Storage_Vol_Stats.MAXPe
ndingFlush
When 'Minimum Pending Flu
sh (Bytes)' Then SD_SE_Sy
m_Storage_Vol_Stats.MINPe
ndingFlush
When 'Average Pending Flu
sh (Bytes)' Then SD_SE_Sy

m_Storage_Vol_Stats.AVGPe
ndingFlush

When 'Maximum Sampled Av
erage Read Time (ms)' The
n SD_SE_Sym_Storage_Vol_
Stats.MAXSampledAvgReadT
imeMs
When 'Minimum Sampled Av
erage Read Time (ms)' The
n SD_SE_Sym_Storage_Vol_
Stats.MINSampledAvgReadTi
meMs
When 'Average Sampled Ave
rage Read Time (ms)' Then
 SD_SE_Sym_Storage_Vol_S
tats.AVGSampledAvgReadTi
meMs

When 'Maximum Sampled Av
erage Write Time (ms)' Th
en SD_SE_Sym_Storage_Vol
_Stats.MAXSampledAvgWrite
TimeMs
When 'Minimum Sampled Av
erage Write Time (ms)' Th
en SD_SE_Sym_Storage_Vol
_Stats.MINSampledAvgWrite
TimeMs
When 'Average Sampled Ave
rage Write Time (ms)' The
n SD_SE_Sym_Storage_Vol_
Stats.AVGSampledAvgWriteT
imeMs

When 'Maximum Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MAXTotalDataRate
When 'Minimum Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MINTotalDataRate
When 'Average Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats

.AVGTotalDataRate

When 'Maximum Seq Read R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.MA
XSeqReadRate
When 'Minimum Seq Read R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.MI
NSeqReadRate
When 'Average Seq Read Ra
te (Req/Sec)' Then SD_SE_
Sym_Storage_Vol_Stats.AVG
SeqReadRate

When 'Maximum Seq Read H
it Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MAXSeqReadHitRate
When 'Minimum Seq Read Hi
t Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MINSeqReadHitRate
When 'Average Seq Read Hi
t Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.AVGSeqReadHitRate

When 'Maximum Write Rate
Total (Req/Sec)' Then SD_
SE_Sym_Storage_Vol_Stats.
MAXWriteRateTotal
When 'Minimum Write Rate
Total (Req/Sec)' Then SD_
SE_Sym_Storage_Vol_Stats.
MINWriteRateTotal
When 'Average Write Rate
Total (Req/Sec)' Then SD_
SE_Sym_Storage_Vol_Stats.
AVGWriteRateTotal

When 'Maximum Seq Write
Rate (Req/Sec)' Then SD_S
E_Sym_Storage_Vol_Stats.M
AXSeqWriteRate
When 'Minimum Seq Write R

```
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.MI
NSeqWriteRate
When 'Average Seq Write R
ate (Req/Sec)' Then SD_SE
_Sym_Storage_Vol_Stats.AV
GSeqWriteRate

When 'Maximum Seq Write
Hit Rate (Req/Sec)' Then S
D_SE_Sym_Storage_Vol_Sta
ts.MAXSeqWriteHitRate
When 'Minimum Seq Write H
it Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.MINSeqWriteHitRate
When 'Average Seq Write H
it Rate (Req/Sec)' Then SD
_SE_Sym_Storage_Vol_Stats
.AVGSeqWriteHitRate
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: HourlyOLAP Storage Volume Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification:	dimension
List of values:	22o, editable, manual refresh, not exportable
Security access level:	0

Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te Random (Req/Sec)' Then
 max(SH_SE_Sym_Storage_V
ol_Stats.MAXTotalIORateRa
ndom)
When 'Minimum Total IO Ra
te Random (Req/Sec)' Then
 min(SH_SE_Sym_Storage_V
ol_Stats.MINTotalIORateRa
ndom)
When 'Average Total IO Ra
te Random (Req/Sec)' Then
 avg(SH_SE_Sym_Storage_V
ol_Stats.AVGTotalIORateRa
ndom)

When 'Maximum Total IO Ra
te (Req/Sec)' Then max(SH
_SE_Sym_Storage_Vol_Stats
.MAXTotalIORate)
When 'Minimum Total IO Ra
te (Req/Sec)' Then min(SH
_SE_Sym_Storage_Vol_Stats
.MINTotalIORate)
When 'Average Total IO Ra
te (Req/Sec)' Then avg(SH
_SE_Sym_Storage_Vol_Stats
.AVGTotalIORate)

When 'Maximum Total Hit R
ate (Req/Sec)' Then max(S
H_SE_Sym_Storage_Vol_Sta
ts.MAXTotalHitRate)
When 'Minimum Total Hit R
ate (Req/Sec)' Then min(S
H_SE_Sym_Storage_Vol_Sta
ts.MINTotalHitRate)
```

When 'Average Total Hit R
ate (Req/Sec)' Then avg(S
H_SE_Sym_Storage_Vol_Sta
ts.AVGTotalHitRate)

When 'Maximum Total Miss
Rate (Req/Sec)' Then max(
SH_SE_Sym_Storage_Vol_St
ats.MAXTotalMissRate)
When 'Minimum Total Miss
Rate (Req/Sec)' Then min(
SH_SE_Sym_Storage_Vol_St
ats.MINTotalMissRate)
When 'Average Total Miss
Rate (Req/Sec)' Then avg(
SH_SE_Sym_Storage_Vol_St
ats.AVGTotalMissRate)

When 'Maximum %Hits' The
n max(SH_SE_Sym_Storage_
Vol_Stats.MAXPercentIOHit
s)
When 'Minimum %Hits' Then
 min(SH_SE_Sym_Storage_V
ol_Stats.MINPercentIOHits
)

When 'Maximum %Misses' T
hen max(SH_SE_Sym_Storag
e_Vol_Stats.MAXPercentIOM
iss)
When 'Minimum %Misses' T
hen min(SH_SE_Sym_Storag
e_Vol_Stats.MINPercentIOM
iss)

When 'Maximum Average IO
 Size (Bytes)' Then max(S
H_SE_Sym_Storage_Vol_Sta
ts.MAXAverageIOSize)
When 'Minimum Average IO
Size (Bytes)' Then min(SH
_SE_Sym_Storage_Vol_Stats
.MINAverageIOSize)

When 'Maximum Read Data

Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_Storage_Vol_
Stats.MAXReadDataRate)
When 'Minimum Read Data
Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINReadDataRate)
When 'Average Read Data R
ate (Bytes/Sec)' Then avg(
SH_SE_Sym_Storage_Vol_St
ats.AVGReadDataRate)

When 'Maximum Read Rate
Random (Req/Sec)' Then ma
x(SH_SE_Sym_Storage_Vol_
Stats.MAXReadRateRandom)
When 'Minimum Read Rate
Random (Req/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINReadRateRandom)
When 'Average Read Rate R
andom (Req/Sec)' Then avg
(SH_SE_Sym_Storage_Vol_S
tats.AVGReadRateRandom)

When 'Maximum Read Rate
Total (Req/Sec)' Then max
(SH_SE_Sym_Storage_Vol_S
tats.MAXReadRateTotal)
When 'Minimum Read Rate T
otal (Req/Sec)' Then min(
SH_SE_Sym_Storage_Vol_St
ats.MINReadRateTotal)
When 'Average Read Rate T
otal (Req/Sec)' Then avg(S
H_SE_Sym_Storage_Vol_Sta
ts.AVGReadRateTotal)

When 'Maximum Read Hit R
ate Random (Req/Sec)' The
n max(SH_SE_Sym_Storage_
Vol_Stats.MAXReadHitRateR
andom)
When 'Minimum Read Hit Ra
te Random (Req/Sec)' Then
min(SH_SE_Sym_Storage_V

```
ol_Stats.MINReadHitRateRa
ndom)
When 'Average Read Hit Ra
te Random (Req/Sec)' Then
 avg(SH_SE_Sym_Storage_V
ol_Stats.AVGReadHitRateRa
ndom)

When 'Maximum Read Hit R
ate Total (Req/Sec)' Then
max(SH_SE_Sym_Storage_Vo
l_Stats.MAXReadHitRateTot
al)
When 'Minimum Read Hit Ra
te Total (Req/Sec)' Then
min(SH_SE_Sym_Storage_Vo
l_Stats.MINReadHitRateTot
al)
When 'Average Read Hit Ra
te Total (Req/Sec)' Then a
vg(SH_SE_Sym_Storage_Vol
_Stats.AVGReadHitRateTota
l)

When 'Maximum %Reads' Th
en max(SH_SE_Sym_Storage
_Vol_Stats.MAXPctReadIOS)
When 'Minimum %Reads' Th
en min(SH_SE_Sym_Storage
_Vol_Stats.MINPctReadIOS)

When 'Maximum %Read Hits
 Random' Then max(SH_SE_
Sym_Storage_Vol_Stats.MAX
PctReadHitIOSRandom)
When 'Minimum %Read Hits
 Random' Then min(SH_SE_
Sym_Storage_Vol_Stats.MIN
PctReadHitIOSRandom)

When 'Maximum %Read Hits
 Total' Then max(SH_SE_Sy
m_Storage_Vol_Stats.MAXPc
tReadHitIOSTotal)
When 'Minimum %Read Hits
 Total' Then min(SH_SE_Sy
```

m_Storage_Vol_Stats.MINPc
tReadHitIOSTotal)

When 'Maximum %Read Miss
es Random' Then max(SH_S
E_Sym_Storage_Vol_Stats.M
AXPctReadMissIOSRandom)
When 'Minimum %Read Miss
es Random' Then min(SH_SE
_Sym_Storage_Vol_Stats.MI
NPctReadMissIOSRandom)

When 'Maximum %Read Miss
es Total' Then max(SH_SE_
Sym_Storage_Vol_Stats.MAX
PctReadMissIOSTotal)
When 'Minimum %Read Miss
es Total' Then min(SH_SE_
Sym_Storage_Vol_Stats.MIN
PctReadMissIOSTotal)

When 'Maximum Average Re
ad Size (Bytes)' Then max(
SH_SE_Sym_Storage_Vol_St
ats.MAXAvgReadSize)
When 'Minimum Average Re
ad Size (Bytes)' Then min(
SH_SE_Sym_Storage_Vol_St
ats.MINAvgReadSize)

When 'Maximum Write Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_Storage_Vol_
Stats.MAXWriteDataRate)
When 'Minimum Write Data
Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINWriteDataRate)
When 'Average Write Data
Rate (Bytes/Sec)' Then av
g(SH_SE_Sym_Storage_Vol_
Stats.AVGWriteDataRate)

When 'Maximum Write Rate
(Req/Sec)' Then max(SH_SE
_Sym_Storage_Vol_Stats.MA

XWriteRate)
When 'Minimum Write Rate
(Req/Sec)' Then min(SH_SE
_Sym_Storage_Vol_Stats.MI
NWriteRate)
When 'Average Write Rate
(Req/Sec)' Then avg(SH_SE
_Sym_Storage_Vol_Stats.AV
GWriteRate)

When 'Maximum Write Hit R
ate Total (Req/Sec)' Then
max(SH_SE_Sym_Storage_Vo
l_Stats.MAXWriteHitRate)
When 'Minimum Write Hit R
ate Total (Req/Sec)' Then
min(SH_SE_Sym_Storage_Vo
l_Stats.MINWriteHitRate)
When 'Average Write Hit R
ate Total (Req/Sec)' Then
avg(SH_SE_Sym_Storage_Vo
l_Stats.AVGWriteHitRate)

When 'Maximum Write Miss
Rate (Req/Sec)' Then max(
SH_SE_Sym_Storage_Vol_St
ats.MAXWriteMissRate)
When 'Minimum Write Miss
Rate (Req/Sec)' Then min(
SH_SE_Sym_Storage_Vol_St
ats.MINWriteMissRate)
When 'Average Write Miss
Rate (Req/Sec)' Then avg(
SH_SE_Sym_Storage_Vol_St
ats.AVGWriteMissRate)

When 'Maximum %Writes' T
hen max(SH_SE_Sym_Storag
e_Vol_Stats.MAXPctWriteIO
S)
When 'Minimum %Writes' Th
en min(SH_SE_Sym_Storage
_Vol_Stats.MINPctWriteIOS
)

When 'Maximum %Write Hit

s' Then max(SH_SE_Sym_St
orage_Vol_Stats.MAXPctWri
teHitIOS)
When 'Minimum %Write Hits
' Then min(SH_SE_Sym_Stor
age_Vol_Stats.MINPctWrite
HitIOS)

When 'Maximum %Write Mis
ses' Then max(SH_SE_Sym_
Storage_Vol_Stats.MAXPctW
riteMissIOS)
When 'Minimum %Write Mis
ses' Then min(SH_SE_Sym_
Storage_Vol_Stats.MINPctW
riteMissIOS)

When 'Maximum Average Wr
ite Size (Bytes)' Then max
(SH_SE_Sym_Storage_Vol_S
tats.MAXAvgWriteSize)
When 'Minimum Average Wri
te Size (Bytes)' Then min(
SH_SE_Sym_Storage_Vol_St
ats.MINAvgWriteSize)

When 'Maximum Maximum Wr
ite Pending Threshold (Byt
es)' Then max(SH_SE_Sym_
Storage_Vol_Stats.MAXMax
WritePendingThreshold)
When 'Minimum Maximum Wr
ite Pending Threshold (Byt
es)' Then min(SH_SE_Sym_S
torage_Vol_Stats.MINMaxWr
itePendingThreshold)
When 'Average Maximum Wr
ite Pending Threshold (Byt
es)' Then avg(SH_SE_Sym_S
torage_Vol_Stats.AVGMaxWr
itePendingThreshold)

When 'Maximum Pending Flu
sh (Bytes)' Then max(SH_S
E_Sym_Storage_Vol_Stats.M
AXPendingFlush)

When 'Minimum Pending Flu
sh (Bytes)' Then min(SH_S
E_Sym_Storage_Vol_Stats.M
INPendingFlush)
When 'Average Pending Flu
sh (Bytes)' Then avg(SH_S
E_Sym_Storage_Vol_Stats.A
VGPendingFlush)

When 'Maximum Sampled Av
erage Read Time (ms)' The
n max(SH_SE_Sym_Storage_
Vol_Stats.MAXSampledAvgR
eadTimeMs)
When 'Minimum Sampled Av
erage Read Time (ms)' The
n min(SH_SE_Sym_Storage_
Vol_Stats.MINSampledAvgRe
adTimeMs)
When 'Average Sampled Ave
rage Read Time (ms)' Then
avg(SH_SE_Sym_Storage_V
ol_Stats.AVGSampledAvgRea
dTimeMs)

When 'Maximum Sampled Av
erage Write Time (ms)' Th
en max(SH_SE_Sym_Storage
_Vol_Stats.MAXSampledAvg
WriteTimeMs)
When 'Minimum Sampled Av
erage Write Time (ms)' Th
en min(SH_SE_Sym_Storage
_Vol_Stats.MINSampledAvg
WriteTimeMs)
When 'Average Sampled Ave
rage Write Time (ms)' The
n avg(SH_SE_Sym_Storage_
Vol_Stats.AVGSampledAvgW
riteTimeMs)

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_Storage_Vol_
Stats.MAXTotalDataRate)
When 'Minimum Total Data

Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SH_SE_Sym_Storage_Vol_
Stats.AVGTotalDataRate)

When 'Maximum Seq Read R
ate (Req/Sec)' Then max(S
H_SE_Sym_Storage_Vol_Sta
ts.MAXSeqReadRate)
When 'Minimum Seq Read R
ate (Req/Sec)' Then min(S
H_SE_Sym_Storage_Vol_Sta
ts.MINSeqReadRate)
When 'Average Seq Read Ra
te (Req/Sec)' Then avg(SH
_SE_Sym_Storage_Vol_Stats
.AVGSeqReadRate)

When 'Maximum Seq Read H
it Rate (Req/Sec)' Then m
ax(SH_SE_Sym_Storage_Vol
_Stats.MAXSeqReadHitRate)
When 'Minimum Seq Read Hi
t Rate (Req/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINSeqReadHitRate)
When 'Average Seq Read Hi
t Rate (Req/Sec)' Then av
g(SH_SE_Sym_Storage_Vol_
Stats.AVGSeqReadHitRate)

When 'Maximum Write Rate
Total (Req/Sec)' Then max
(SH_SE_Sym_Storage_Vol_S
tats.MAXWriteRateTotal)
When 'Minimum Write Rate
Total (Req/Sec)' Then min
(SH_SE_Sym_Storage_Vol_S
tats.MINWriteRateTotal)
When 'Average Write Rate
Total (Req/Sec)' Then avg
(SH_SE_Sym_Storage_Vol_S
tats.AVGWriteRateTotal)

```
When 'Maximum Seq Write
Rate (Req/Sec)' Then max(
SH_SE_Sym_Storage_Vol_St
ats.MAXSeqWriteRate)
When 'Minimum Seq Write R
ate (Req/Sec)' Then min(S
H_SE_Sym_Storage_Vol_Sta
ts.MINSeqWriteRate)
When 'Average Seq Write R
ate (Req/Sec)' Then avg(S
H_SE_Sym_Storage_Vol_Sta
ts.AVGSeqWriteRate)

When 'Maximum Seq Write
Hit Rate (Req/Sec)' Then
max(SH_SE_Sym_Storage_Vo
l_Stats.MAXSeqWriteHitRat
e)
When 'Minimum Seq Write H
it Rate (Req/Sec)' Then mi
n(SH_SE_Sym_Storage_Vol_
Stats.MINSeqWriteHitRate)
When 'Average Seq Write H
it Rate (Req/Sec)' Then av
g(SH_SE_Sym_Storage_Vol_
Stats.AVGSeqWriteHitRate)
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	DailyOLAP Storage Volume Measures
Description:	

Object:	Symmetrix Measure
Type:	Character
Description:	

Select equivalent: EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22q, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_VOLUME_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te Random (Req/Sec)' Then
 max(SD_SE_Sym_Storage_V
ol_Stats.MAXTotalIORateRa
ndom)
When 'Minimum Total IO Ra
te Random (Req/Sec)' Then
 min(SD_SE_Sym_Storage_V
ol_Stats.MINTotalIORateRa
ndom)
When 'Average Total IO Ra
te Random (Req/Sec)' Then
 avg(SD_SE_Sym_Storage_V
ol_Stats.AVGTotalIORateRa
ndom)

When 'Maximum Total IO Ra
te (Req/Sec)' Then max(SD
_SE_Sym_Storage_Vol_Stats
.MAXTotalIORate)
When 'Minimum Total IO Ra
te (Req/Sec)' Then min(SD
_SE_Sym_Storage_Vol_Stats
.MINTotalIORate)
When 'Average Total IO Ra
te (Req/Sec)' Then avg(SD
_SE_Sym_Storage_Vol_Stats
.AVGTotalIORate)

When 'Maximum Total Hit R
```

```
ate (Req/Sec)' Then max(S
D_SE_Sym_Storage_Vol_Sta
ts.MAXTotalHitRate)
When 'Minimum Total Hit R
ate (Req/Sec)' Then min(S
D_SE_Sym_Storage_Vol_Sta
ts.MINTotalHitRate)
When 'Average Total Hit R
ate (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Vol_Sta
ts.AVGTotalHitRate)

When 'Maximum Total Miss
Rate (Req/Sec)' Then max(
SD_SE_Sym_Storage_Vol_St
ats.MAXTotalMissRate)
When 'Minimum Total Miss
Rate (Req/Sec)' Then min(
SD_SE_Sym_Storage_Vol_St
ats.MINTotalMissRate)
When 'Average Total Miss
Rate (Req/Sec)' Then avg(
SD_SE_Sym_Storage_Vol_St
ats.AVGTotalMissRate)

When 'Maximum %Hits' The
n max(SD_SE_Sym_Storage_
Vol_Stats.MAXPercentIOHit
s)
When 'Minimum %Hits' Then
 min(SD_SE_Sym_Storage_V
ol_Stats.MINPercentIOHits
)

When 'Maximum %Misses' T
hen max(SD_SE_Sym_Storag
e_Vol_Stats.MAXPercentIOM
iss)
When 'Minimum %Misses' T
hen min(SD_SE_Sym_Storag
e_Vol_Stats.MINPercentIOM
iss)

When 'Maximum Average IO
 Size (Bytes)' Then max(S
D_SE_Sym_Storage_Vol_Sta
```

```
ts.MAXAverageIOSize)
When 'Minimum Average IO
Size (Bytes)' Then min(SD
_SE_Sym_Storage_Vol_Stats
.MINAverageIOSize)

When 'Maximum Read Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Vol_
Stats.MAXReadDataRate)
When 'Minimum Read Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINReadDataRate)
When 'Average Read Data R
ate (Bytes/Sec)' Then avg(
SD_SE_Sym_Storage_Vol_St
ats.AVGReadDataRate)

When 'Maximum Read Rate
Random (Req/Sec)' Then ma
x(SD_SE_Sym_Storage_Vol_
Stats.MAXReadRateRandom)
When 'Minimum Read Rate
Random (Req/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINReadRateRandom)
When 'Average Read Rate R
andom (Req/Sec)' Then avg
(SD_SE_Sym_Storage_Vol_S
tats.AVGReadRateRandom)

When 'Maximum Read Rate
Total (Req/Sec)' Then max
(SD_SE_Sym_Storage_Vol_S
tats.MAXReadRateTotal)
When 'Minimum Read Rate T
otal (Req/Sec)' Then min(
SD_SE_Sym_Storage_Vol_St
ats.MINReadRateTotal)
When 'Average Read Rate T
otal (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Vol_Sta
ts.AVGReadRateTotal)

When 'Maximum Read Hit R
```

```
ate Random (Req/Sec)' The
n max(SD_SE_Sym_Storage_
Vol_Stats.MAXReadHitRateR
andom)
When 'Minimum Read Hit Ra
te Random (Req/Sec)' Then
 min(SD_SE_Sym_Storage_V
ol_Stats.MINReadHitRateRa
ndom)
When 'Average Read Hit Ra
te Random (Req/Sec)' Then
 avg(SD_SE_Sym_Storage_V
ol_Stats.AVGReadHitRateRa
ndom)

When 'Maximum Read Hit R
ate Total (Req/Sec)' Then
max(SD_SE_Sym_Storage_Vo
l_Stats.MAXReadHitRateTot
al)
When 'Minimum Read Hit Ra
te Total (Req/Sec)' Then
min(SD_SE_Sym_Storage_Vo
l_Stats.MINReadHitRateTot
al)
When 'Average Read Hit Ra
te Total (Req/Sec)' Then a
vg(SD_SE_Sym_Storage_Vol
_Stats.AVGReadHitRateTota
l)

When 'Maximum %Reads' Th
en max(SD_SE_Sym_Storage
_Vol_Stats.MAXPctReadIOS)
When 'Minimum %Reads' Th
en min(SD_SE_Sym_Storage
_Vol_Stats.MINPctReadIOS)

When 'Maximum %Read Hits
 Random' Then max(SD_SE_
Sym_Storage_Vol_Stats.MAX
PctReadHitIOSRandom)
When 'Minimum %Read Hits
 Random' Then min(SD_SE_
Sym_Storage_Vol_Stats.MIN
PctReadHitIOSRandom)
```

When 'Maximum %Read Hits
Total' Then max(SD_SE_Sy
m_Storage_Vol_Stats.MAXPc
tReadHitIOSTotal)
When 'Minimum %Read Hits
Total' Then min(SD_SE_Sy
m_Storage_Vol_Stats.MINPc
tReadHitIOSTotal)

When 'Maximum %Read Miss
es Random' Then max(SD_S
E_Sym_Storage_Vol_Stats.M
AXPctReadMissIOSRandom)
When 'Minimum %Read Miss
es Random' Then min(SD_SE
_Sym_Storage_Vol_Stats.MI
NPctReadMissIOSRandom)

When 'Maximum %Read Miss
es Total' Then max(SD_SE_
Sym_Storage_Vol_Stats.MAX
PctReadMissIOSTotal)
When 'Minimum %Read Miss
es Total' Then min(SD_SE_
Sym_Storage_Vol_Stats.MIN
PctReadMissIOSTotal)

When 'Maximum Average Re
ad Size (Bytes)' Then max(
SD_SE_Sym_Storage_Vol_St
ats.MAXAvgReadSize)
When 'Minimum Average Re
ad Size (Bytes)' Then min(
SD_SE_Sym_Storage_Vol_St
ats.MINAvgReadSize)

When 'Maximum Write Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Vol_
Stats.MAXWriteDataRate)
When 'Minimum Write Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINWriteDataRate)
When 'Average Write Data

Rate (Bytes/Sec)' Then av
g(SD_SE_Sym_Storage_Vol_
Stats.AVGWriteDataRate)

When 'Maximum Write Rate
(Req/Sec)' Then max(SD_SE
_Sym_Storage_Vol_Stats.MA
XWriteRate)
When 'Minimum Write Rate
(Req/Sec)' Then min(SD_SE
_Sym_Storage_Vol_Stats.MI
NWriteRate)
When 'Average Write Rate
(Req/Sec)' Then avg(SD_SE
_Sym_Storage_Vol_Stats.AV
GWriteRate)

When 'Maximum Write Hit R
ate Total (Req/Sec)' Then
max(SD_SE_Sym_Storage_Vo
l_Stats.MAXWriteHitRate)
When 'Minimum Write Hit R
ate Total (Req/Sec)' Then
min(SD_SE_Sym_Storage_Vo
l_Stats.MINWriteHitRate)
When 'Average Write Hit R
ate Total (Req/Sec)' Then
avg(SD_SE_Sym_Storage_Vo
l_Stats.AVGWriteHitRate)

When 'Maximum Write Miss
Rate (Req/Sec)' Then max(
SD_SE_Sym_Storage_Vol_St
ats.MAXWriteMissRate)
When 'Minimum Write Miss
Rate (Req/Sec)' Then min(
SD_SE_Sym_Storage_Vol_St
ats.MINWriteMissRate)
When 'Average Write Miss
Rate (Req/Sec)' Then avg(
SD_SE_Sym_Storage_Vol_St
ats.AVGWriteMissRate)

When 'Maximum %Writes' T
hen max(SD_SE_Sym_Storag
e_Vol_Stats.MAXPctWriteIO

S)
When 'Minimum %Writes' Th
en min(SD_SE_Sym_Storage
_Vol_Stats.MINPctWriteIOS
)

When 'Maximum %Write Hit
s' Then max(SD_SE_Sym_St
orage_Vol_Stats.MAXPctWri
teHitIOS)
When 'Minimum %Write Hits
' Then min(SD_SE_Sym_Stor
age_Vol_Stats.MINPctWrite
HitIOS)

When 'Maximum %Write Mis
ses' Then max(SD_SE_Sym_
Storage_Vol_Stats.MAXPctW
riteMissIOS)
When 'Minimum %Write Mis
ses' Then min(SD_SE_Sym_
Storage_Vol_Stats.MINPctW
riteMissIOS)

When 'Maximum Average Wr
ite Size (Bytes)' Then max
(SD_SE_Sym_Storage_Vol_S
tats.MAXAvgWriteSize)
When 'Minimum Average Wri
te Size (Bytes)' Then min(
SD_SE_Sym_Storage_Vol_St
ats.MINAvgWriteSize)

When 'Maximum Maximum Wr
ite Pending Threshold (Byt
es)' Then max(SD_SE_Sym_
Storage_Vol_Stats.MAXMax
WritePendingThreshold)
When 'Minimum Maximum Wr
ite Pending Threshold (Byt
es)' Then min(SD_SE_Sym_S
torage_Vol_Stats.MINMaxWr
itePendingThreshold)
When 'Average Maximum Wr
ite Pending Threshold (Byt
es)' Then avg(SD_SE_Sym_S

torage_Vol_Stats.AVGMaxWr
itePendingThreshold)

When 'Maximum Pending Flu
sh (Bytes)' Then max(SD_S
E_Sym_Storage_Vol_Stats.M
AXPendingFlush)
When 'Minimum Pending Flu
sh (Bytes)' Then min(SD_S
E_Sym_Storage_Vol_Stats.M
INPendingFlush)
When 'Average Pending Flu
sh (Bytes)' Then avg(SD_S
E_Sym_Storage_Vol_Stats.A
VGPendingFlush)

When 'Maximum Sampled Av
erage Read Time (ms)' The
n max(SD_SE_Sym_Storage_
Vol_Stats.MAXSampledAvgR
eadTimeMs)
When 'Minimum Sampled Av
erage Read Time (ms)' The
n min(SD_SE_Sym_Storage_
Vol_Stats.MINSampledAvgRe
adTimeMs)
When 'Average Sampled Ave
rage Read Time (ms)' Then
 avg(SD_SE_Sym_Storage_V
ol_Stats.AVGSampledAvgRea
dTimeMs)

When 'Maximum Sampled Av
erage Write Time (ms)' Th
en max(SD_SE_Sym_Storage
_Vol_Stats.MAXSampledAvg
WriteTimeMs)
When 'Minimum Sampled Av
erage Write Time (ms)' Th
en min(SD_SE_Sym_Storage
_Vol_Stats.MINSampledAvg
WriteTimeMs)
When 'Average Sampled Ave
rage Write Time (ms)' The
n avg(SD_SE_Sym_Storage_
Vol_Stats.AVGSampledAvgW

riteTimeMs)

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_Storage_Vol_
Stats.MAXTotalDataRate)
When 'Minimum Total Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SD_SE_Sym_Storage_Vol_
Stats.AVGTotalDataRate)

When 'Maximum Seq Read R
ate (Req/Sec)' Then max(S
D_SE_Sym_Storage_Vol_Sta
ts.MAXSeqReadRate)
When 'Minimum Seq Read R
ate (Req/Sec)' Then min(S
D_SE_Sym_Storage_Vol_Sta
ts.MINSeqReadRate)
When 'Average Seq Read Ra
te (Req/Sec)' Then avg(SD
_SE_Sym_Storage_Vol_Stats
.AVGSeqReadRate)

When 'Maximum Seq Read H
it Rate (Req/Sec)' Then m
ax(SD_SE_Sym_Storage_Vol
_Stats.MAXSeqReadHitRate)
When 'Minimum Seq Read Hi
t Rate (Req/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINSeqReadHitRate)
When 'Average Seq Read Hi
t Rate (Req/Sec)' Then av
g(SD_SE_Sym_Storage_Vol_
Stats.AVGSeqReadHitRate)

When 'Maximum Write Rate
Total (Req/Sec)' Then max
(SD_SE_Sym_Storage_Vol_S
tats.MAXWriteRateTotal)
When 'Minimum Write Rate

```
Total (Req/Sec)' Then min
(SD_SE_Sym_Storage_Vol_S
tats.MINWriteRateTotal)
When 'Average Write Rate
Total (Req/Sec)' Then avg
(SD_SE_Sym_Storage_Vol_S
tats.AVGWriteRateTotal)

When 'Maximum Seq Write
Rate (Req/Sec)' Then max(
SD_SE_Sym_Storage_Vol_St
ats.MAXSeqWriteRate)
When 'Minimum Seq Write R
ate (Req/Sec)' Then min(S
D_SE_Sym_Storage_Vol_Sta
ts.MINSeqWriteRate)
When 'Average Seq Write R
ate (Req/Sec)' Then avg(S
D_SE_Sym_Storage_Vol_Sta
ts.AVGSeqWriteRate)

When 'Maximum Seq Write
Hit Rate (Req/Sec)' Then
max(SD_SE_Sym_Storage_Vo
l_Stats.MAXSeqWriteHitRat
e)
When 'Minimum Seq Write H
it Rate (Req/Sec)' Then mi
n(SD_SE_Sym_Storage_Vol_
Stats.MINSeqWriteHitRate)
When 'Average Seq Write H
it Rate (Req/Sec)' Then av
g(SD_SE_Sym_Storage_Vol_
Stats.AVGSeqWriteHitRate)
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: EMC Symmetrix Storage Controller Measures
Description:

No objects

Class: RAW Storage Controller Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_CONTROLLER_RAW_MEASURES.Measure
Where equivalent:

Qualification: dimension
List of values: 225, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_CONTROLLER_RAW_MEASURES.Measure
When 'Total I/O Rate (Req
/Sec)' Then SR_SE_Sym_FEC
ntrlr_Stats.TotalIORate
When 'Total Hit Rate (Req
/Sec)' Then SR_SE_Sym_FEC
ntrlr_Stats.TotalHitRate
When 'Total Data Rate (By
tes/Sec)' Then SR_SE_Sym_
FECntrlr_Stats.TotalDataR
ate
When 'Read Rate (Req/Sec)
' Then SR_SE_Sym_FECntrlr
_Stats.ReadRate
When 'Write Rate (Req/Sec
)' Then SR_SE_Sym_FECntrl
r_Stats.WriteRate
```

When '%Reads' Then SR_SE_Sym_FECntrlr_Stats.PctReadIOs
When '%Writes' Then SR_SE_Sym_FECntrlr_Stats.PctWriteIOs
When '%Hits' Then SR_SE_Sym_FECntrlr_Stats.PctHitIOs
When 'Slot Collision Rate
(Collisions/Sec)' Then SR_
SE_Sym_FECntrlr_Stats.Slo
tCollisionRate
When 'System Write Pendin
g Event Rate (Events/Sec)'
Then SR_SE_Sym_FECntrlr_
Stats.SystemWritePendingE
ventRate
When 'Device Write Pendin
g Event Rate (Events/Sec)'
Then SR_SE_Sym_FECntrlr_
Stats.DeviceWritePendingE
ventRate
ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Hourly Storage Controller Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 227, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:

```
CASE EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total I/O R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.MAXTo
talIORate
When 'Minimum Total I/O R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.MINTo
talIORate
When 'Average Total I/O R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.AVGTo
talIORate

When 'Maximum Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.MAXTo
talHitRate
When 'Minimum Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.MINTo
talHitRate
When 'Average Total Hit R
ate (Req/Sec)' Then SH_SE
_Sym_FECntrlr_Stats.AVGTo
talHitRate

When 'Maximum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FECntrlr_Stats.MA
XTotalDataRate
When 'Minimum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FECntrlr_Stats.MI
NTotalDataRate
When 'Average Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FECntrlr_Stats.AV
GTotalDataRate

When 'Maximum Read Rate
```

(Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.MAXReadRa
te
When 'Minimum Read Rate (
Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.MINReadRa
te
When 'Average Read Rate (
Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.AVGReadRa
te

When 'Maximum Write Rate
(Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.MAXWriteR
ate
When 'Minimum Write Rate
(Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.MINWriteR
ate
When 'Average Write Rate
(Req/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.AVGWriteR
ate

When 'Maximum %Reads' Th
en SH_SE_Sym_FECntrlr_Sta
ts.MAXPctReadIOs
When 'Minimum %Reads' Th
en SH_SE_Sym_FECntrlr_Sta
ts.MINPctReadIOs

When 'Maximum %Writes' T
hen SH_SE_Sym_FECntrlr_St
ats.MAXPctWriteIOs
When 'Minimum %Writes' Th
en SH_SE_Sym_FECntrlr_Sta
ts.MINPctWriteIOs

When 'Maximum %Hits' The
n SH_SE_Sym_FECntrlr_Stat
s.MAXPctHitIOs
When 'Minimum %Hits' Then
SH_SE_Sym_FECntrlr_Stats
.MINPctHitIOs

```
When 'Maximum Slot Collis
ion Rate (Collisions/Sec)'
 Then SH_SE_Sym_FECntrlr_
Stats.MAXSlotCollisionRate
When 'Minimum Slot Collis
ion Rate (Collisions/Sec)'
 Then SH_SE_Sym_FECntrlr_
Stats.MINSlotCollisionRate
When 'Average Slot Collisi
on Rate (Collisions/Sec)'
Then SH_SE_Sym_FECntrlr_
Stats.AVGSlotCollisionRate

When 'Maximum System Wri
te Pending Event Rate (Ev
ents/Sec)' Then SH_SE_Sym
_FECntrlr_Stats.MAXSystem
WritePendingEventRate
When 'Minimum System Writ
e Pending Event Rate (Eve
nts/Sec)' Then SH_SE_Sym_
FECntrlr_Stats.MINSystemW
ritePendingEventRate
When 'Average System Writ
e Pending Event Rate (Eve
nts/Sec)' Then SH_SE_Sym_
FECntrlr_Stats.AVGSystemW
ritePendingEventRate

When 'Maximum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then SH_SE_Sym_
FECntrlr_Stats.MAXDeviceW
ritePendingEventRate
When 'Minimum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then SH_SE_Sym_
FECntrlr_Stats.MINDeviceW
ritePendingEventRate
When 'Average Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then  SH_SE_Sym
_FECntrlr_Stats.AVGDevice
WritePendingEventRate
ELSE 0
END
```

Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Daily Storage Controller Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 229, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent: CASE EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total I/O R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.MAXTo
talIORate
When 'Minimum Total I/O R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.MINTo
talIORate
When 'Average Total I/O R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.AVGTo
talIORate

When 'Maximum Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.MAXTo
talHitRate
When 'Minimum Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.MINTo
talHitRate
When 'Average Total Hit R
ate (Req/Sec)' Then SD_SE
_Sym_FECntrlr_Stats.AVGTo
talHitRate

When 'Maximum Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_FECntrlr_Stats.MA
XTotalDataRate
When 'Minimum Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_FECntrlr_Stats.MI
NTotalDataRate
When 'Average Total Data
Rate (Bytes/Sec)' Then SD
_SE_Sym_FECntrlr_Stats.AV
GTotalDataRate

When 'Maximum Read Rate
(Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.MAXReadRa
te
When 'Minimum Read Rate (
Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.MINReadRa
te
When 'Average Read Rate (
Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.AVGReadRa
te

When 'Maximum Write Rate
(Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.MAXWriteR
ate
When 'Minimum Write Rate
(Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.MINWriteR

ate
When 'Average Write Rate
(Req/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.AVGWriteR
ate

When 'Maximum %Reads' Th
en SD_SE_Sym_FECntrlr_Sta
ts.MAXPctReadIOs
When 'Minimum %Reads' Th
en SD_SE_Sym_FECntrlr_Sta
ts.MINPctReadIOs

When 'Maximum %Writes' T
hen SD_SE_Sym_FECntrlr_St
ats.MAXPctWriteIOs
When 'Minimum %Writes' Th
en SD_SE_Sym_FECntrlr_Sta
ts.MINPctWriteIOs

When 'Maximum %Hits' The
n SD_SE_Sym_FECntrlr_Stat
s.MAXPctHitIOs
When 'Minimum %Hits' Then
SD_SE_Sym_FECntrlr_Stats
.MINPctHitIOs

When 'Maximum Slot Collis
ion Rate (Collisions/Sec)'
Then SD_SE_Sym_FECntrlr_
Stats.MAXSlotCollisionRate
When 'Minimum Slot Collis
ion Rate (Collisions/Sec)'
Then SD_SE_Sym_FECntrlr_
Stats.MINSlotCollisionRate
When 'Average Slot Collisi
on Rate (Collisions/Sec)'
Then SD_SE_Sym_FECntrlr_
Stats.AVGSlotCollisionRate

When 'Maximum System Wri
te Pending Event Rate (Ev
ents/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.MAXSystem
WritePendingEventRate
When 'Minimum System Writ

e Pending Event Rate (Eve
nts/Sec)' Then SD_SE_Sym_
FECntrlr_Stats.MINSystemW
ritePendingEventRate
When 'Average System Writ
e Pending Event Rate (Eve
nts/Sec)' Then SD_SE_Sym_
FECntrlr_Stats.AVGSystemW
ritePendingEventRate

When 'Maximum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then SD_SE_Sym_
FECntrlr_Stats.MAXDeviceW
ritePendingEventRate
When 'Minimum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then SD_SE_Sym_
FECntrlr_Stats.MINDeviceW
ritePendingEventRate
When 'Average Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then SD_SE_Sym
_FECntrlr_Stats.AVGDevice
WritePendingEventRate
ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	None
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class: HourlyOLAP Storage Controller Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE

Where equivalent:

Qualification:	dimension
List of values:	22b, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	

Select equivalent:

```
CASE EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total I/O R
ate (Req/Sec)' Then max(S
H_SE_Sym_FECntrlr_Stats.M
AXTotalIORate)
When 'Minimum Total I/O R
ate (Req/Sec)' Then min(S
H_SE_Sym_FECntrlr_Stats.M
INTotalIORate)
When 'Average Total I/O R
ate (Req/Sec)' Then avg(S
H_SE_Sym_FECntrlr_Stats.A
VGTotalIORate)

When 'Maximum Total Hit R
ate (Req/Sec)' Then max(S
H_SE_Sym_FECntrlr_Stats.M
AXTotalHitRate)
When 'Minimum Total Hit R
ate (Req/Sec)' Then min(S
H_SE_Sym_FECntrlr_Stats.M
INTotalHitRate)
When 'Average Total Hit R
ate (Req/Sec)' Then avg(S
H_SE_Sym_FECntrlr_Stats.A
VGTotalHitRate)

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_FECntrlr_Stat
s.MAXTotalDataRate)
When 'Minimum Total Data
Rate (Bytes/Sec)' Then mi
```

n(SH_SE_Sym_FECntrlr_Stat
s.MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SH_SE_Sym_FECntrlr_Stat
s.AVGTotalDataRate)

When 'Maximum Read Rate
(Req/Sec)' Then max(SH_SE
_Sym_FECntrlr_Stats.MAXRe
adRate)
When 'Minimum Read Rate (
Req/Sec)' Then min(SH_SE_
Sym_FECntrlr_Stats.MINRea
dRate)
When 'Average Read Rate (
Req/Sec)' Then avg(SH_SE_
Sym_FECntrlr_Stats.AVGRea
dRate)

When 'Maximum Write Rate
(Req/Sec)' Then max(SH_SE
_Sym_FECntrlr_Stats.MAXWr
iteRate)
When 'Minimum Write Rate
(Req/Sec)' Then min(SH_SE
_Sym_FECntrlr_Stats.MINWr
iteRate)
When 'Average Write Rate
(Req/Sec)' Then avg(SH_SE
_Sym_FECntrlr_Stats.AVGWr
iteRate)

When 'Maximum %Reads' Th
en max(SH_SE_Sym_FECntrl
r_Stats.MAXPctReadIOs)
When 'Minimum %Reads' Th
en min(SH_SE_Sym_FECntrlr
_Stats.MINPctReadIOs)

When 'Maximum %Writes' T
hen max(SH_SE_Sym_FECntr
lr_Stats.MAXPctWriteIOs)
When 'Minimum %Writes' Th
en min(SH_SE_Sym_FECntrlr
_Stats.MINPctWriteIOs)

When 'Maximum %Hits' The
n max(SH_SE_Sym_FECntrlr
_Stats.MAXPctHitIOs)
When 'Minimum %Hits' Then
 min(SH_SE_Sym_FECntrlr_S
tats.MINPctHitIOs)

When 'Maximum Slot Collis
ion Rate (Collisions/Sec)'
 Then max(SH_SE_Sym_FECn
trlr_Stats.MAXSlotCollisio
nRate)
When 'Minimum Slot Collis
ion Rate (Collisions/Sec)'
 Then min(SH_SE_Sym_FECn
trlr_Stats.MINSlotCollisio
nRate)
When 'Average Slot Collisi
on Rate (Collisions/Sec)'
Then avg(SH_SE_Sym_FECnt
rlr_Stats.AVGSlotCollision
Rate)

When 'Maximum System Wri
te Pending Event Rate (Ev
ents/Sec)' Then max(SH_SE
_Sym_FECntrlr_Stats.MAXSy
stemWritePendingEventRate
)
When 'Minimum System Writ
e Pending Event Rate (Eve
nts/Sec)' Then min(SH_SE_
Sym_FECntrlr_Stats.MINSys
temWritePendingEventRate)
When 'Average System Writ
e Pending Event Rate (Eve
nts/Sec)' Then avg(SH_SE_
Sym_FECntrlr_Stats.AVGSys
temWritePendingEventRate)

When 'Maximum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then max(SH_SE_
Sym_FECntrlr_Stats.MAXDev
iceWritePendingEventRate)

When 'Minimum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then min(SH_SE_
Sym_FECntrlr_Stats.MINDev
iceWritePendingEventRate)
When 'Average Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then avg(SH_SE_
Sym_FECntrlr_Stats.AVGDev
iceWritePendingEventRate)
ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DailyOLAP Storage Controller Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22d, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent: CASE EMC_SYM_CNTLRL_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total I/O R

ate (Req/Sec)' Then max(S
D_SE_Sym_FECntrlr_Stats.M
AXTotalIORate)
When 'Minimum Total I/O R
ate (Req/Sec)' Then min(S
D_SE_Sym_FECntrlr_Stats.M
INTotalIORate)
When 'Average Total I/O R
ate (Req/Sec)' Then avg(S
D_SE_Sym_FECntrlr_Stats.A
VGTotalIORate)

When 'Maximum Total Hit R
ate (Req/Sec)' Then max(S
D_SE_Sym_FECntrlr_Stats.M
AXTotalHitRate)
When 'Minimum Total Hit R
ate (Req/Sec)' Then min(S
D_SE_Sym_FECntrlr_Stats.M
INTotalHitRate)
When 'Average Total Hit R
ate (Req/Sec)' Then avg(S
D_SE_Sym_FECntrlr_Stats.A
VGTotalHitRate)

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SD_SE_Sym_FECntrlr_Stat
s.MAXTotalDataRate)
When 'Minimum Total Data
Rate (Bytes/Sec)' Then mi
n(SD_SE_Sym_FECntrlr_Stat
s.MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SD_SE_Sym_FECntrlr_Stat
s.AVGTotalDataRate)

When 'Maximum Read Rate
(Req/Sec)' Then max(SD_SE
_Sym_FECntrlr_Stats.MAXRe
adRate)
When 'Minimum Read Rate (
Req/Sec)' Then min(SD_SE_
Sym_FECntrlr_Stats.MINRea
dRate)

When 'Average Read Rate (
Req/Sec)' Then avg(SD_SE_
Sym_FECntrlr_Stats.AVGRea
dRate)

When 'Maximum Write Rate
(Req/Sec)' Then max(SD_SE
_Sym_FECntrlr_Stats.MAXWr
iteRate)
When 'Minimum Write Rate
(Req/Sec)' Then min(SD_SE
_Sym_FECntrlr_Stats.MINWr
iteRate)
When 'Average Write Rate
(Req/Sec)' Then avg(SD_SE
_Sym_FECntrlr_Stats.AVGWr
iteRate)

When 'Maximum %Reads' Th
en max(SD_SE_Sym_FECntrl
r_Stats.MAXPctReadIOs)
When 'Minimum %Reads' Th
en min(SD_SE_Sym_FECntrlr
_Stats.MINPctReadIOs)

When 'Maximum %Writes' T
hen max(SD_SE_Sym_FECntr
lr_Stats.MAXPctWriteIOs)
When 'Minimum %Writes' Th
en min(SD_SE_Sym_FECntrlr
_Stats.MINPctWriteIOs)

When 'Maximum %Hits' The
n max(SD_SE_Sym_FECntrlr
_Stats.MAXPctHitIOs)
When 'Minimum %Hits' Then
 min(SD_SE_Sym_FECntrlr_S
tats.MINPctHitIOs)

When 'Maximum Slot Collis
ion Rate (Collisions/Sec)'
 Then max(SD_SE_Sym_FECn
trlr_Stats.MAXSlotCollisio
nRate)
When 'Minimum Slot Collis
ion Rate (Collisions/Sec)'

```
 Then min(SD_SE_Sym_FECn
trlr_Stats.MINSlotCollisio
nRate)
When 'Average Slot Collisi
on Rate (Collisions/Sec)'
Then avg(SD_SE_Sym_FECnt
rlr_Stats.AVGSlotCollision
Rate)

When 'Maximum System Wri
te Pending Event Rate (Ev
ents/Sec)' Then max(SD_SE
_Sym_FECntrlr_Stats.MAXSy
stemWritePendingEventRate
)
When 'Minimum System Writ
e Pending Event Rate (Eve
nts/Sec)' Then min(SD_SE_
Sym_FECntrlr_Stats.MINSys
temWritePendingEventRate)
When 'Average System Writ
e Pending Event Rate (Eve
nts/Sec)' Then avg(SD_SE_
Sym_FECntrlr_Stats.AVGSys
temWritePendingEventRate)

When 'Maximum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then max(SD_SE_
Sym_FECntrlr_Stats.MAXDev
iceWritePendingEventRate)
When 'Minimum Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then min(SD_SE_
Sym_FECntrlr_Stats.MINDev
iceWritePendingEventRate)
When 'Average Device Writ
e Pending Event Rate (Eve
nts/Sec)' Then avg(SD_SE_
Sym_FECntrlr_Stats.AVGDev
iceWritePendingEventRate)
ELSE 0
END
```

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Class:	EMC Symmetrix Storage Port Measures
Description:	

No objects

Class:	RAW Storage Port Measures
Description:	

Object:	Symmetrix Measure
Type:	Character
Description:	
Select equivalent:	EMC_SYM_PORT_RAW_MEASURES.Measure
Where equivalent:	
Qualification:	dimension
List of values:	22s, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_PORT_RAW_MEASURES.Measure When 'Total IO Rate (Req/ Sec)' Then SR_SE_Sym_FCP ort_Stats.TotalIORate When 'Total Data Rate (By tes/Sec)' Then SR_SE_Sym_ FCPort_Stats.TotalDataRat e When 'Average IO Size (By tes)' Then SR_SE_Sym_FCPo rt_Stats.AvgIOSize

ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Hourly Storage Port Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22u, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent: CASE EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_FCPort_Stats.MAXTotal
IORate
When 'Minimum Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_FCPort_Stats.MINTotal
IORate
When 'Average Total IO Ra
te (Req/Sec)' Then SH_SE_
Sym_FCPort_Stats.AVGTotal
IORate

When 'Maximum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FCPort_Stats.MAX
TotalDataRate
When 'Minimum Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FCPort_Stats.MIN
TotalDataRate
When 'Average Total Data
Rate (Bytes/Sec)' Then SH
_SE_Sym_FCPort_Stats.AVG
TotalDataRate

When 'Maximum Average IO
Size (Bytes)' Then SH_SE
_Sym_FCPort_Stats.MAXAver
ageIOSize
When 'Minimum Average IO
Size (Bytes)' Then SH_SE_
Sym_FCPort_Stats.MINAvera
geIOSize

ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: Daily Storage Port Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension

List of values:	22w, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE When 'Maximum Total IO Ra te (Req/Sec)' Then SD_SE_ Sym_FCPort_Stats.MAXTotal IORate When 'Minimum Total IO Ra te (Req/Sec)' Then SD_SE_ Sym_FCPort_Stats.MINTotal IORate When 'Average Total IO Ra te (Req/Sec)' Then SD_SE_ Sym_FCPort_Stats.AVGTotal IORate When 'Maximum Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_FCPort_Stats.MAX TotalDataRate When 'Minimum Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_FCPort_Stats.MIN TotalDataRate When 'Average Total Data Rate (Bytes/Sec)' Then SD _SE_Sym_FCPort_Stats.AVG TotalDataRate When 'Maximum Average IO Size (Bytes)' Then SD_SE _Sym_FCPort_Stats.MAXAver ageIOSize When 'Minimum Average IO Size (Bytes)' Then SD_SE_ Sym_FCPort_Stats.MINAvera geIOSize

ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: None
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: HourlyOLAP Storage Port Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension
List of values: 22y, editable, manual refresh, not exportable
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Object: Symmetrix Aggregate measure
Type: Number
Description:

Select equivalent:
```
CASE EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
When 'Maximum Total IO Ra
te (Req/Sec)' Then max(SH
_SE_Sym_FCPort_Stats.MAX
TotalIORate)
When 'Minimum Total IO Ra
te (Req/Sec)' Then min(SH
_SE_Sym_FCPort_Stats.MIN
TotalIORate)
When 'Average Total IO Ra
te (Req/Sec)' Then avg(SH
_SE_Sym_FCPort_Stats.AVG
TotalIORate)
```

When 'Maximum Total Data
Rate (Bytes/Sec)' Then ma
x(SH_SE_Sym_FCPort_Stats.
MAXTotalDataRate)
When 'Minimum Total Data
Rate (Bytes/Sec)' Then mi
n(SH_SE_Sym_FCPort_Stats.
MINTotalDataRate)
When 'Average Total Data
Rate (Bytes/Sec)' Then av
g(SH_SE_Sym_FCPort_Stats.
AVGTotalDataRate)

When 'Maximum Average IO
 Size (Bytes)' Then max(S
H_SE_Sym_FCPort_Stats.MA
XAverageIOSize)
When 'Minimum Average IO
Size (Bytes)' Then min(SH
_SE_Sym_FCPort_Stats.MIN
AverageIOSize)

ELSE 0
END

Where equivalent:

Qualification: measure
Aggregate function: Min
List of values: no
Security access level: 0
Can be used: in result, in condition, in sort
Object status: show

Class: DailyOLAP Storage Port Measures
Description:

Object: Symmetrix Measure
Type: Character
Description:

Select equivalent: EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE
Where equivalent:

Qualification: dimension

List of values:	231, editable, manual refresh, not exportable
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Object:	Symmetrix Aggregate measure
Type:	Number
Description:	
Select equivalent:	CASE EMC_SYM_PORT_HISTORICAL_MEASURES.MEASURE When 'Maximum Total IO Ra te (Req/Sec)' Then max(SD _SE_Sym_FCPort_Stats.MAX TotalIORate) When 'Minimum Total IO Ra te (Req/Sec)' Then min(SD _SE_Sym_FCPort_Stats.MIN TotalIORate) When 'Average Total IO Ra te (Req/Sec)' Then avg(SD _SE_Sym_FCPort_Stats.AVG TotalIORate) When 'Maximum Total Data Rate (Bytes/Sec)' Then ma x(SD_SE_Sym_FCPort_Stats. MAXTotalDataRate) When 'Minimum Total Data Rate (Bytes/Sec)' Then mi n(SD_SE_Sym_FCPort_Stats. MINTotalDataRate) When 'Average Total Data Rate (Bytes/Sec)' Then av g(SD_SE_Sym_FCPort_Stats. AVGTotalDataRate) When 'Maximum Average IO Size (Bytes)' Then max(S D_SE_Sym_FCPort_Stats.MA XAverageIOSize) When 'Minimum Average IO Size (Bytes)' Then min(SD _SE_Sym_FCPort_Stats.MIN AverageIOSize)

ELSE 0
END

Where equivalent:

Qualification:	measure
Aggregate function:	Min
List of values:	no
Security access level:	0
Can be used:	in result, in condition, in sort
Object status:	show

Conditions

Class:	SOM_EMCDMXPerfReporting_Core
Description:	

EMC_Sym_StorageSytems
Description:Displays only EMC Sym storage systems
Where Equivalent:charindex('Symmetrix DMX', K_SE_StorageSystem.Model)>0

Class:	Symmetrix Storage System Performance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Storage System Performance S
tatistics for the latest collection time
ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage System Performance S
tatistics)\Full Date) in (Select max(SR_
SE_Sym_Storage_Sys_Stats.ta_period) fro
m SR_SE_Sym_Storage_Sys_Stats, K_SE_St
orageSystem K WHERE SR_SE_Sym_Storage
_Sys_Stats.dsi_key_id_ = K.dsi_key_id a
nd K.dsi_key_id=@Select(Supplemental\
Storage System Key) Group By K.dsi_key_
id)

Class:	Hourly Symmetrix Stor age System Performan ce Statistics

Description:

Latest Collection Time

Description:Filters data to display EMC Symmetrix Storage System Performance S tatistics for the latest collection time ONLY.

Where Equivalent:@Select(DATETIME(EMC Symmetrix Storage System Performance S tatistics)\Full Date) in (Select max(SH_ SE_Sym_Storage_Sys_Stats.ta_period) fro m SH_SE_Sym_Storage_Sys_Stats, K_SE_St orageSystem K WHERE SH_SE_Sym_Storage _Sys_Stats.dsi_key_id_ = K.dsi_key_id a nd K.dsi_key_id=@Select(Supplemental\ Storage System Key) Group By K.dsi_key_ id)

Class:	Daily Symmetrix Stora ge System Performanc e Statistics
Description:	

Latest Collection Time

Description:Filters data to display EMC Symmetrix Storage System Performance S tatistics for the latest collection time ONLY.

Where Equivalent:@Select(DATETIME(EMC Symmetrix Storage System Performance S tatistics)\Full Date) in (Select max(SD_ SE_Sym_Storage_Sys_Stats.ta_period) fro m SD_SE_Sym_Storage_Sys_Stats, K_SE_St orageSystem K WHERE SD_SE_Sym_Storage _Sys_Stats.dsi_key_id_ = K.dsi_key_id a nd K.dsi_key_id=@Select(Supplemental\ Storage System Key) Group By K.dsi_key_ id)

Class:	HourlyOLAP-Symmetrix Storage System Perfo rmance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC Symmetrix Storage System Performance S tatistics for the latest collection time ONLY.
Where Equivalent:@Select(DATETIME(EMC Symmetrix Storage System Performance S tatistics)\Full Date) in (Select max(SH_ SE_Sym_Storage_Sys_Stats.ta_period) fro m SH_SE_Sym_Storage_Sys_Stats, K_SE_St orageSystem K WHERE SH_SE_Sym_Storage _Sys_Stats.dsi_key_id_ = K.dsi_key_id a nd K.dsi_key_id=@Select(Supplemental\ Storage System Key) Group By K.dsi_key_ id)

Class:	DailyOLAP-Symmetrix Storage System Perfor mance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC Symmetrix Storage System Performance S tatistics for the latest collection time ONLY.
Where Equivalent:@Select(DATETIME(EMC Symmetrix Storage System Performance S tatistics)\Full Date) in (Select max(SD_ SE_Sym_Storage_Sys_Stats.ta_period) fro m SD_SE_Sym_Storage_Sys_Stats, K_SE_St orageSystem K WHERE SD_SE_Sym_Storage _Sys_Stats.dsi_key_id_ = K.dsi_key_id a nd K.dsi_key_id=@Select(Supplemental\ Storage System Key) Group By K.dsi_key_ id)

Class:	Symmetrix Storage Volume Performance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC Symmetrix Storage Volume Performance S

tatistics for the latest collection time
ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage Volume Performance S
tatistics)\Full Date) in (Select max(SR_
SE_Sym_Storage_Vol_Stats.ta_period) fro
m SR_SE_Sym_Storage_Vol_Stats, K_SE_St
orage_Volume K WHERE SR_SE_Sym_Storag
e_Vol_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Storage Volume Key) Group By K.dsi_key
_id)

Class:	Hourly Symmetrix Stor age Volume Performan ce Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Storage Volume Performance S
tatistics for the latest collection time
ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage Volume Performance S
tatistics)\Full Date) in (Select max(SH_
SE_Sym_Storage_Vol_Stats.ta_period) fro
m SH_SE_Sym_Storage_Vol_Stats, K_SE_St
orage_Volume K WHERE SH_SE_Sym_Storag
e_Vol_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Storage Volume Key) Group By K.dsi_key
_id)

Class:	Daily Symmetrix Stora ge Volume Performanc e Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Storage Volume Performance S
tatistics for the latest collection time
ONLY.

Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage Volume Performance S
tatistics)\Full Date) in (Select max(SD_
SE_Sym_Storage_Vol_Stats.ta_period) fro
m SD_SE_Sym_Storage_Vol_Stats, K_SE_St
orage_Volume K WHERE SD_SE_Sym_Storag
e_Vol_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Storage Volume Key) Group By K.dsi_key
_id)

Class:	HourlyOLAP-Symmetrix Storage Volume Perfo rmance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Storage Volume Performance S
tatistics for the latest collection time
ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage Volume Performance S
tatistics)\Full Date) in (Select max(SH_
SE_Sym_Storage_Vol_Stats.ta_period) fro
m SH_SE_Sym_Storage_Vol_Stats, K_SE_St
orage_Volume K WHERE SH_SE_Sym_Storag
e_Vol_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Storage Volume Key) Group By K.dsi_key
_id)

Class:	DailyOLAP-Symmetrix Storage Volume Perfor mance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Storage Volume Performance S
tatistics for the latest collection time
ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Storage Volume Performance S

tatistics)\Full Date) in (Select max(SD_
SE_Sym_Storage_Vol_Stats.ta_period) fro
m SD_SE_Sym_Storage_Vol_Stats, K_SE_St
orage_Volume K WHERE SD_SE_Sym_Storag
e_Vol_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Storage Volume Key) Group By K.dsi_key
_id)

Class:	Symmetrix Front-end C ontroller Performance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Front-end Controller Performa
nce Statistics for the latest collection
time ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Controller Performa
nce Statistics)\Full Date) in (Select ma
x(SR_SE_Sym_FECntrlr_Stats.ta_period) f
rom SR_SE_Sym_FECntrlr_Stats, K_SE_St
orage_Processor K WHERE SR_SE_Sym_FEC
ntrlr_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Controller Key) Group By K.dsi_key_id)

Class:	Hourly Symmetrix Fron t-end Controller Perf ormance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Front-end Controller Performa
nce Statistics for the latest collection
time ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Controller Performa
nce Statistics)\Full Date) in (Select ma
x(SH_SE_Sym_FECntrlr_Stats.ta_period) f
rom SH_SE_Sym_FECntrlr_Stats, K_SE_St

orage_Processor K WHERE SH_SE_Sym_FEC
ntrlr_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Controller Key) Group By K.dsi_key_id)

Class:	Daily Symmetrix Front -end Controller Perfo rmance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Front-end Controller Performa
nce Statistics for the latest collection
time ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Controller Performa
nce Statistics)\Full Date) in (Select ma
x(SD_SE_Sym_FECntrlr_Stats.ta_period) f
rom SD_SE_Sym_FECntrlr_Stats, K_SE_St
orage_Processor K WHERE SD_SE_Sym_FEC
ntrlr_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental
\Controller Key) Group By K.dsi_key_id)

Class:	HourlyOLAP-Symmetrix Front-end Controller Performance Statisti cs
Description:	

Latest Collection Time
Description:Filters data to display EMC
Symmetrix Front-end Controller Performa
nce Statistics for the latest collection
time ONLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Controller Performa
nce Statistics)\Full Date) in (Select ma
x(SH_SE_Sym_FECntrlr_Stats.ta_period) f
rom SH_SE_Sym_FECntrlr_Stats, K_SE_St
orage_Processor K WHERE SH_SE_Sym_FEC
ntrlr_Stats.dsi_key_id_ = K.dsi_key_id
and K.dsi_key_id=@Select(Supplemental

\Controller Key) Group By K.dsi_key_id)

Class:	DailyOLAP-Symmetrix Front-end Controller Performance Statistic s
Description:	

Latest Collection Time
Description:Filters data to display EMC Symmetrix Front-end Controller Performa nce Statistics for the latest collection time ONLY.
Where Equivalent:@Select(DATETIME(EMC Symmetrix Front-end Controller Performa nce Statistics)\Full Date) in (Select ma x(SD_SE_Sym_FECntrlr_Stats.ta_period) f rom SD_SE_Sym_FECntrlr_Stats, K_SE_St orage_Processor K WHERE SD_SE_Sym_FEC ntrlr_Stats.dsi_key_id_ = K.dsi_key_id and K.dsi_key_id=@Select(Supplemental \Controller Key) Group By K.dsi_key_id)

Class:	Symmetrix Front-end Port Performance Statistics
Description:	

Latest Collection Time
Description:Filters data to display EMC Symmetrix Front-end Port Performance St atistics for the latest collection time O NLY.
Where Equivalent:@Select(DATETIME(EMC Symmetrix Front-end Port Performance St atistics)\Full Date) in (Select max(SR_S E_Sym_FCPort_Stats.ta_period) from SR_ SE_Sym_FCPort_Stats, K_SE_Storage_Port K WHERE SR_SE_Sym_FCPort_Stats.dsi_k ey_id_ = K.dsi_key_id and K.dsi_key_id =@Select(Supplemental\FC Port Key) Gro up By K.dsi_key_id)

Class:	Hourly Symmetrix Fron t-end Port Performanc e Statistics

Description:

Latest Collection Time

Description:Filters data to display EMC Symmetrix Front-end Port Performance Statistics for the latest collection time ONLY.

Where Equivalent:@Select(DATETIME(EMC Symmetrix Front-end Port Performance Statistics)\Full Date) in (Select max(SH_SE_Sym_FCPort_Stats.ta_period) from SH_SE_Sym_FCPort_Stats, K_SE_Storage_Port K WHERE SH_SE_Sym_FCPort_Stats.dsi_key_id_ = K.dsi_key_id and K.dsi_key_id =@Select(Supplemental\FC Port Key) Group By K.dsi_key_id)

Class: Daily Symmetrix Front-end Port Performance Statistics

Description:

Latest Collection Time

Description:Filters data to display EMC Symmetrix Front-end Port Performance Statistics for the latest collection time ONLY.

Where Equivalent:@Select(DATETIME(EMC Symmetrix Front-end Port Performance Statistics)\Full Date) in (Select max(SD_SE_Sym_FCPort_Stats.ta_period) from SD_SE_Sym_FCPort_Stats, K_SE_Storage_Port K WHERE SD_SE_Sym_FCPort_Stats.dsi_key_id_ = K.dsi_key_id and K.dsi_key_id =@Select(Supplemental\FC Port Key) Group By K.dsi_key_id)

Class: HourlyOLAP-Symmetrix Front-end Port Performance Statistics

Description:

Latest Collection Time

Description:Filters data to display EMC
Symmetrix Front-end Port Performance St
atistics for the latest collection time O
NLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Port Performance St
atistics)\Full Date) in (Select max(SH_S
E_Sym_FCPort_Stats.ta_period) from SH_
SE_Sym_FCPort_Stats, K_SE_Storage_Port
K WHERE SH_SE_Sym_FCPort_Stats.dsi_k
ey_id_ = K.dsi_key_id and K.dsi_key_id
=@Select(Supplemental\FC Port Key) Gro
up By K.dsi_key_id)

Class:	DailyOLAP-Symmetrix Front-end Port Performance Statistics
Description:	

Latest Collection Time

Description:Filters data to display EMC
Symmetrix Front-end Port Performance St
atistics for the latest collection time O
NLY.
Where Equivalent:@Select(DATETIME(EMC
Symmetrix Front-end Port Performance St
atistics)\Full Date) in (Select max(SD_S
E_Sym_FCPort_Stats.ta_period) from SD_
SE_Sym_FCPort_Stats, K_SE_Storage_Port
K WHERE SD_SE_Sym_FCPort_Stats.dsi_k
ey_id_ = K.dsi_key_id and K.dsi_key_id
=@Select(Supplemental\FC Port Key) Gro
up By K.dsi_key_id)

Class:	Date Time Period
Description:	

Gap Filter

Description:Used to fill the values for the missing date ranges
Where Equivalent:DATETIME.TIME_FULL_D
ATE < convert(date,cast(Year(getSHRDat
e())+1 as char(4))+ '-01-01')

Use Custom Range

Description:Use Custom Range Filter List of Values for Date Range Prompt
Where Equivalent:@Variable('Select Date Range')='Use Custom Range'

DateTimeRange
Description:Date Time Range Filter Prompt with Various List of Values for Time Period
Where Equivalent:DATETIMERANGE.DATE_R
ANGE = @Prompt('Select Date Range','A',
{'Current Month','Last Month','Last 3 Mo
nths','Use Custom Range'},mono,constrai
ned,persistent,{'Current Month'})

Hierarchies

MA_GEN_HIE_Symmetrix Storage System Hi
erarchy(SymmetrixStorageSystem(EMC Sym
metrix Storage System Performance Statis
tics))
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/SOM Source Name
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/Tenant Name
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/Vendor
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/Model
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/Storage System Name
SymmetrixStorageSystem(EMC Symmetrix Storage System Performance Statistics)/Storage System UUID
MA_GEN_HIE_DATETIMEHierarchy(DATETIME(EMC Symmetrix Storage System Performance Statistics))
DATETIME(EMC Symmetrix Storage System Performance Statistics)/Year
DATETIME(EMC Symmetrix Storage System Performance Statistics)/Month
DATETIME(EMC Symmetrix Storage System Performance Statistics)/Day
DATETIME(EMC Symmetrix Storage System Performance Statistics)/Hour
MA_GEN_HIE_Symmetrix Storage Volume Hi
erarchy(Symmetrix Storage Volume(EMC Sy
mmetrix Storage Volume Performance Stat
istics))
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/SOM Source Name
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Tenant Name
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Vendor
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Model
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Storage System Name
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Block Pool Name
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Block Volume Name
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Storage System UUID
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Block Pool UUID
Symmetrix Storage Volume(EMC Symmetrix Storage Volume Performance Statistics)/Block Volume UUID
MA_GEN_HIE_DATETIMEHierarchy(DATETIME(EMC Symmetrix Storage Volume Performance Statistics))
DATETIME(EMC Symmetrix Storage Volume Performance Statistics)/Year
DATETIME(EMC Symmetrix Storage Volume Performance Statistics)/Month

DATETIME(EMC Symmetrix Storage Volume Performance Statistics)/Day
DATETIME(EMC Symmetrix Storage Volume Performance Statistics)/Hour
MA_GEN_HIE_Symmetrix Processor System
Hierarchy(SymmetrixStorageProcessor(EMC
Symmetrix Front-end Controller Performa
nce Statistics))
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/SOM Source Name
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Tenant Name
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Vendor
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Model
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Storage System Name
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Block Processor Name
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Storage System UUID
SymmetrixStorageProcessor(EMC Symmetrix Front-end Controller Performance Statistics)/Block Processor UUID
MA_GEN_HIE_DATETIMEHierarchy(DATETIME(EMC Symmetrix Front-end Controller Performance Statistics))
DATETIME(EMC Symmetrix Front-end Controller Performance Statistics)/Year
DATETIME(EMC Symmetrix Front-end Controller Performance Statistics)/Month
DATETIME(EMC Symmetrix Front-end Controller Performance Statistics)/Day
DATETIME(EMC Symmetrix Front-end Controller Performance Statistics)/Hour
MA_GEN_HIE_Symmetrix Host System Hiera
rchy(Symmetrix Storage Port(EMC Symmetr
ix Front-end Port Performance Statistics
))
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/SOM Source Name
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Tenant Name
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Vendor
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Model
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Storage System Name
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Block Processor Name
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Port Name
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Storage System UUID
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Block Processor UUID
Symmetrix Storage Port(EMC Symmetrix Front-end Port Performance Statistics)/Port UUID
MA_GEN_HIE_DATETIMEHierarchy(DATETIME(EMC Symmetrix Front-end Port Performance Statistics))
DATETIME(EMC Symmetrix Front-end Port Performance Statistics)/Year
DATETIME(EMC Symmetrix Front-end Port Performance Statistics)/Month
DATETIME(EMC Symmetrix Front-end Port Performance Statistics)/Day
DATETIME(EMC Symmetrix Front-end Port Performance Statistics)/Hour

Context List

MA_GEN_CONT_SR_SE_Sym_FECntrlr_Stats
MA_GEN_CONT_SR_SE_Sym_FCPort_Stats
MA_GEN_CONT_SH_SE_Sym_Storage_Sys_Stats
MA_GEN_CONT_SR_SE_Sym_Storage_Sys_Stats
MA_GEN_CONT_SD_SE_Sym_FECntrlr_Stats

MA_GEN_CONT_SD_SE_Sym_Storage_Sys_Stats
MA_GEN_CONT_SH_SE_Sym_Storage_Vol_Stats
MA_GEN_CONT_SH_SE_Sym_FCPort_Stats
MA_GEN_CONT_SD_SE_Sym_FCPort_Stats
MA_GEN_CONT_SD_SE_Sym_Storage_Vol_Stats
MA_GEN_CONT_SR_SE_Sym_Storage_Vol_Stats
MA_GEN_CONT_SH_SE_Sym_FECntrlr_Stats

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Feedback on Content Pack for EMC DMX Performance Statistics Universe Reference, March 2015 (Storage Operations Manager 10.00)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to storage-management-doc-feedback@hp.com.