

HP IT Executive Scorecard

For the Windows® operating system

Software Version: 9.31 Cumulative Update Package 1 (CUP1)

Release Notes

Document Release Date: January 2013

Software Release Date: January 2013



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Contents

Release Notes	1
Contents	5
Release Notes	6
XS 9.31 CUP1 Files and Components	6
System Requirements	7
Supported Environments	7
Supported Data Sources	7
What's New	8
Storage Management Context	8
KPIs and Metrics	20
% of Storage Utilization	21
Average Number of Storage Paths	22
Number of Critical Storage Events	23
Storage Path Compliance	24
Install 9.31 CUP1	25
Fixed Issues	28

Release Notes

This document provides information about the Cumulative Update Package (CUP) for Executive Scorecard 9.31.

This document is an overview of the changes made to Executive Scorecard. It contains important information that is not included in books or Help.

Note: This document is also available on the HP Software Manuals site.

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This CUP extends the integration with HP Storage Essentials. It is a post-installation feature providing an additional KPI, and extending the Storage Management context to support the KPI. The patch is installed on top of Executive Scorecard version 9.31.

Note: Before installing the Cumulative Update Package it is recommended to perform a full database backup. See [Back Up Executive Scorecard](#) and [Data Warehouse Backups](#) in the *Administrator Guide*.

XS 9.31 CUP1 Files and Components

HP IT Executive Scorecard 9.31 CUP1 is packaged in the **SE Patch.rarfile** (Available with the download of the version from the HP Software Support Online web site at:

<http://www.hp.com/go/hpsoftwaresupport>) that includes the following components:

- The extended HP Storage Essentials Content Pack and the files needed to install it.
- Documentation file: Release Notes for the 9.31 Cumulative Update Package 1 (CUP1) document (in PDF format).

System Requirements

For a list of system requirements, see *IT Executive Scorecard Support Matrix*. Check the previous Release Notes for any addition or change to the matrix.

This patch complies with the system requirements of Executive Scorecard 9.31.

Supported Environments

The environments supported by Executive Scorecard are described in the 9.31 Support Matrix document available from the [HP Software Product Manual Site](http://h20230.www2.hp.com/selfsolve/manuals) (<http://h20230.www2.hp.com/selfsolve/manuals>) or from the installation DVD.

Supported Data Sources

In addition to the data sources supported versions described in the Support Matrix document, the supported version of HP Storage Essentials is as follows:

Product	Versions	Supported Databases
HP Storage Essentials (SE)	9.5.1 with hotfix: 1868_hotfix.zip	Only sources based on Oracle 11g are supported

What's New

This section describes the new KPI and the changes made to the Storage Essentials context.

This section includes the following sections:

Storage Management Context	8
KPIs and Metrics	20

Storage Management Context

The HP Storage Essentials (SE) application management server enables you to obtain the latest information about your applications, such as Microsoft Exchange and Oracle. HP Storage Essentials software is a central console for managing all aspects of storage operations—assets, configuration, topology, capacity optimization, performance management, chargeback, provisioning, compliance and more. HP Storage Essentials enables you to manage complexity and growth, improve storage utilization and reduce cost, and align storage service to business needs. By integrating the tasks involved in storage management, it enables you to better align IT with your business needs.

HP Storage Essentials is the data source used by the Storage Management Context (universe).

To access:

In Executive Scorecard, click **Admin > Semantic Layer > Semantic Layer**. In the Context Management page, click **Launch Context Designer**. In the Context Designer page, click **Open an existing context**, and select the Context.

Tasks

Display the Context

1. In Executive Scorecard, click **Admin > Semantic Layer > Semantic Layer**. The Context Management page opens.
2. The list of out-of-the-box Contexts is displayed.
3. Click **Launch Context Designer**.
4. In the Context Designer page that opens, click **Open an existing context**.
5. Select the relevant Context.

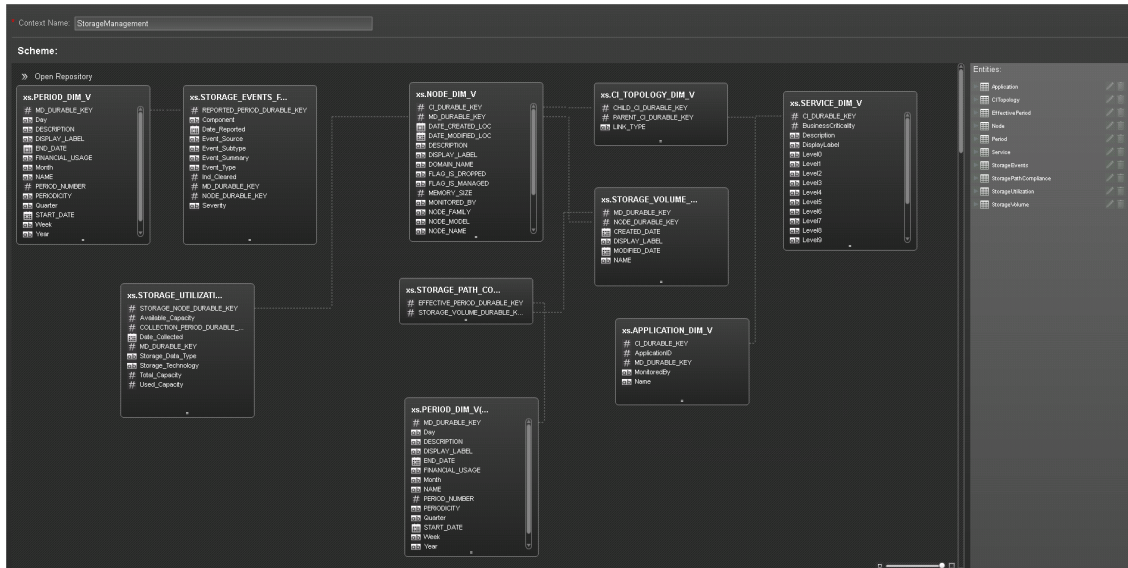
The structure of the Context is displayed.

For additional details about Context Designer, see "[Create and Manage Contexts Using Context Designer](#)" in the *Administrator Guide*.

Reference

Context Tables and Structure

The context includes the following tables and relationships:



Statistics

Entity Count	Field Count	Table Count	Alias Count	Join Count
10	91	10	1	8

Model Structure

The table lists all the views and fields included in the model even when the corresponding objects have not been selected to be part of the corresponding Context.

Table Name	Name	Type
xs.APPLICATION_DIM_V	ApplicationID	numeric
xs.APPLICATION_DIM_V	CI_DURABLE_KEY	numeric
xs.APPLICATION_DIM_V	MD_DURABLE_KEY	numeric
xs.APPLICATION_DIM_V	MonitoredBy	nvarchar
xs.APPLICATION_DIM_V	Name	nvarchar
xs.CI_TOPOLOGY_DIM_V	CHILD_CI_DURABLE_KEY	numeric
xs.CI_TOPOLOGY_DIM_V	LINK_TYPE	nvarchar
xs.CI_TOPOLOGY_DIM_V	PARENT_CI_DURABLE_KEY	numeric

Table Name	Name	Type
xs.NODE_DIM_V	CI_DURABLE_KEY	numeric
xs.NODE_DIM_V	DATE_CREATED_LOC	datetime
xs.NODE_DIM_V	DATE_MODIFIED_LOC	datetime
xs.NODE_DIM_V	DESCRIPTION	nvarchar
xs.NODE_DIM_V	DISPLAY_LABEL	nvarchar
xs.NODE_DIM_V	DOMAIN_NAME	nvarchar
xs.NODE_DIM_V	FLAG_IS_DROPPED	nvarchar
xs.NODE_DIM_V	FLAG_IS_MANAGED	nvarchar
xs.NODE_DIM_V	MD_DURABLE_KEY	numeric
xs.NODE_DIM_V	MEMORY_SIZE	numeric
xs.NODE_DIM_V	MONITORED_BY	nvarchar
xs.NODE_DIM_V	NODE_FAMILY	nvarchar
xs.NODE_DIM_V	NODE_MODEL	nvarchar
xs.NODE_DIM_V	NODE_NAME	nvarchar
xs.NODE_DIM_V	NODE_ROLE	nvarchar
xs.NODE_DIM_V	OS	nvarchar
xs.NODE_DIM_V	OS_VENDOR	nvarchar
xs.NODE_DIM_V	TIME_ZONE	nvarchar
xs.NODE_DIM_V	VENDOR	nvarchar
xs.PERIOD_DIM_V	Day	nvarchar
xs.PERIOD_DIM_V	DESCRIPTION	nvarchar
xs.PERIOD_DIM_V	DISPLAY_LABEL	nvarchar
xs.PERIOD_DIM_V	END_DATE	datetime
xs.PERIOD_DIM_V	FINANCIAL_USAGE	nvarchar
xs.PERIOD_DIM_V	MD_DURABLE_KEY	numeric
xs.PERIOD_DIM_V	Month	nvarchar
xs.PERIOD_DIM_V	NAME	nvarchar

Release Notes

Table Name	Name	Type
xs.PERIOD_DIM_V	PERIODICITY	nvarchar
xs.PERIOD_DIM_V	PERIOD_NUMBER	numeric
xs.PERIOD_DIM_V	Quarter	nvarchar
xs.PERIOD_DIM_V	START_DATE	datetime
xs.PERIOD_DIM_V	Week	nvarchar
xs.PERIOD_DIM_V	Year	nvarchar
xs.PERIOD_DIM_V	Year_Number	numeric
xs.SERVICE_DIM_V	BusinessCriticality	numeric
xs.SERVICE_DIM_V	CI_DURABLE_KEY	numeric
xs.SERVICE_DIM_V	Description	nvarchar
xs.SERVICE_DIM_V	DisplayLabel	nvarchar
xs.SERVICE_DIM_V	Level0	nvarchar
xs.SERVICE_DIM_V	Level1	nvarchar
xs.SERVICE_DIM_V	Level2	nvarchar
xs.SERVICE_DIM_V	Level3	nvarchar
xs.SERVICE_DIM_V	Level4	nvarchar
xs.SERVICE_DIM_V	Level5	nvarchar
xs.SERVICE_DIM_V	Level6	nvarchar
xs.SERVICE_DIM_V	Level7	nvarchar
xs.SERVICE_DIM_V	Level8	nvarchar
xs.SERVICE_DIM_V	Level9	nvarchar
xs.SERVICE_DIM_V	MANAGER_DURABLE_KEY	numeric
xs.SERVICE_DIM_V	MD_DURABLE_KEY	numeric
xs.SERVICE_DIM_V	Name	nvarchar
xs.SERVICE_DIM_V	State	nvarchar
xs.SERVICE_DIM_V	Type	nvarchar
xs.STORAGE_EVENTS_FACT_V	Component	nvarchar

Release Notes

Table Name	Name	Type
xs.STORAGE_EVENTS_FACT_V	Date_Reported	datetime
xs.STORAGE_EVENTS_FACT_V	Event_Source	nvarchar
xs.STORAGE_EVENTS_FACT_V	Event_Subtype	nvarchar
xs.STORAGE_EVENTS_FACT_V	Event_Summary	nvarchar
xs.STORAGE_EVENTS_FACT_V	Event_Type	nvarchar
xs.STORAGE_EVENTS_FACT_V	Ind_Cleared	numeric
xs.STORAGE_EVENTS_FACT_V	MD_DURABLE_KEY	numeric
xs.STORAGE_EVENTS_FACT_V	NODE_DURABLE_KEY	numeric
xs.STORAGE_EVENTS_FACT_V	REPORTED_PERIOD_DURABLE_KEY	numeric
xs.STORAGE_EVENTS_FACT_V	Severity	nvarchar
xs.STORAGE_UTILIZATION_FACT_V	Available_Capacity	float
xs.STORAGE_UTILIZATION_FACT_V	COLLECTION_PERIOD_DURABLE_KEY	numeric
xs.STORAGE_UTILIZATION_FACT_V	Date_Collected	datetime
xs.STORAGE_UTILIZATION_FACT_V	MD_DURABLE_KEY	numeric
xs.STORAGE_UTILIZATION_FACT_V	Storage_Data_Type	nvarchar
xs.STORAGE_UTILIZATION_FACT_V	STORAGE_NODE_DURABLE_KEY	numeric
xs.STORAGE_UTILIZATION_FACT_V	Storage_Technology	nvarchar
xs.STORAGE_UTILIZATION_FACT_V	Total_Capacity	float
xs.STORAGE_UTILIZATION_FACT_V	Used_Capacity	float
xs.STORAGE_PATH_COMPLIANCE_FACT_V	MD_DURABLE_KEY	NUMERIC
xs.STORAGE_PATH_COMPLIANCE_FACT_V	STORAGE_VOLUME_DURABLE_KEY	NUMERIC
xs.STORAGE_PATH_COMPLIANCE_FACT_V	EFFECTIVE_PERIOD_DURABLE_KEY	NUMERIC
xs.STORAGE_PATH_COMPLIANCE_FACT_V	EFFECTIVE_DATE	DATE

Table Name	Name	Type
xs.STORAGE_PATH_COMPLIANCE_FACT_V	COUNT_PATHS	NUMERIC
xs.STORAGE_VOLUME_DIM_V	MD_DURABLE_KEY	NUMERIC
xs.STORAGE_VOLUME_DIM_V	NODE_DURABLE_KEY	NUMERIC
xs.STORAGE_VOLUME_DIM_V	CREATED_DATE	DATE
xs.STORAGE_VOLUME_DIM_V	MODIFIED_DATE	DATE
xs.STORAGE_VOLUME_DIM_V	DISPLAY_LABEL	NVARCHAR
xs.STORAGE_VOLUME_DIM_V	NAME	NVARCHAR

Object List

The table lists all the entities and fields of the model that were selected to be part of the Context.

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
Application	ApplicationID	xs.A-PPLICATION_DIM_V		ApplicationID	NUMERIC
Application	MonitoredBy	xs.A-PPLICATION_DIM_V		MonitoredBy	STRING
Application	Name	xs.A-PPLICATION_DIM_V		Name	STRING
CITopology	LinkType	xs.CI_TOPOLOGY_DIM_V		LINK_TYPE	STRING
EffectivePeriod	Day	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Day	STRING
EffectivePeriod	DESCRIPTION	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	DESCRIPTION	STRING
EffectivePeriod	DISPLAY_LABEL	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	DISPLAY_LABEL	STRING

Release Notes

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
EffectivePeriod	END_DATE	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	END_DATE	DATE
EffectivePeriod	FINANCIAL_USAGE	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	FINANCIAL_USAGE	STRING
EffectivePeriod	MD_DURABLE_KEY	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	MD_DURABLE_KEY	NUMERIC
EffectivePeriod	Month	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Month	STRING
EffectivePeriod	NAME	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	NAME	STRING
EffectivePeriod	PERIODICITY	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	PERIODICITY	STRING
EffectivePeriod	PERIOD_NUMBER	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	PERIOD_NUMBER	NUMERIC
EffectivePeriod	Quarter	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Quarter	STRING
EffectivePeriod	START_DATE	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	START_DATE	DATE
EffectivePeriod	Week	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Week	STRING
EffectivePeriod	Year	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Year	STRING
EffectivePeriod	Year_Number	xs.PERIOD_DIM_V	xs.PERIOD_DIM_V1	Year_Number	NUMERIC

Release Notes

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
Node	DateCreatedLoc	xs.NODE_DIM_V		DATE_CREATED_LOC	DATE
Node	DateModifiedLoc	xs.NODE_DIM_V		DATE_MODIFIED_LOC	DATE
Node	Description	xs.NODE_DIM_V		DESCRIPTION	STRING
Node	DisplayLabel	xs.NODE_DIM_V		DISPLAY_LABEL	STRING
Node	DomainName	xs.NODE_DIM_V		DOMAIN_NAME	STRING
Node	FlagsDropped	xs.NODE_DIM_V		FLAG_IS_DROPPED	STRING
Node	FlagsManaged	xs.NODE_DIM_V		FLAG_IS_MANAGED	STRING
Node	MemorySize	xs.NODE_DIM_V		MEMORY_SIZE	NUMERIC
Node	MonitoredBy	xs.NODE_DIM_V		MONITORED_BY	STRING
Node	NodeFamily	xs.NODE_DIM_V		NODE_FAMILY	STRING
Node	NodeModel	xs.NODE_DIM_V		NODE_MODEL	STRING
Node	NodeName	xs.NODE_DIM_V		NODE_NAME	STRING
Node	NodeRule	xs.NODE_DIM_V		NODE_ROLE	STRING
Node	OS	xs.NODE_DIM_V		OS	STRING
Node	OsVendor	xs.NODE_DIM_V		OS_VENDOR	STRING
Node	TimeZone	xs.NODE_DIM_V		TIME_ZONE	STRING

Release Notes

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
Node	Vendor	xs.NODE_DIM_V		VENDOR	STRING
Period	Day	xs.PERIOD_DIM_V		Day	STRING
Period	Description	xs.PERIOD_DIM_V		DESCRIPTION	STRING
Period	DisplayLabel	xs.PERIOD_DIM_V		DISPLAY_LABEL	STRING
Period	EndDate	xs.PERIOD_DIM_V		END_DATE	DATE
Period	FinancialUsage	xs.PERIOD_DIM_V		FINANCIAL_USAGE	STRING
Period	Month	xs.PERIOD_DIM_V		Month	STRING
Period	Name	xs.PERIOD_DIM_V		NAME	STRING
Period	Periodicity	xs.PERIOD_DIM_V		PERIODICITY	STRING
Period	PeriodNumber	xs.PERIOD_DIM_V		PERIOD_NUMBER	NUMERIC
Period	Quarter	xs.PERIOD_DIM_V		Quarter	STRING
Period	StartDate	xs.PERIOD_DIM_V		START_DATE	DATE
Period	Week	xs.PERIOD_DIM_V		Week	STRING
Period	Year	xs.PERIOD_DIM_V		Year	STRING
Period	YearNumber	xs.PERIOD_DIM_V		Year_Number	NUMERIC
Service	BusinessCriticality	xs.SERVICE_DIM_V		BusinessCriticality	NUMERIC

Release Notes

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
Service	Description	xs.SERVICE_DIM_V		Description	STRING
Service	DisplayLabel	xs.SERVICE_DIM_V		DisplayLabel	STRING
Service	Level0	xs.SERVICE_DIM_V		Level0	STRING
Service	Level1	xs.SERVICE_DIM_V		Level1	STRING
Service	Level2	xs.SERVICE_DIM_V		Level2	STRING
Service	Level3	xs.SERVICE_DIM_V		Level3	STRING
Service	Level4	xs.SERVICE_DIM_V		Level4	STRING
Service	Level5	xs.SERVICE_DIM_V		Level5	STRING
Service	Level6	xs.SERVICE_DIM_V		Level6	STRING
Service	Level7	xs.SERVICE_DIM_V		Level7	STRING
Service	Level8	xs.SERVICE_DIM_V		Level8	STRING
Service	Level9	xs.SERVICE_DIM_V		Level9	STRING
Service	Name	xs.SERVICE_DIM_V		Name	STRING
Service	State	xs.SERVICE_DIM_V		State	STRING
Service	Type	xs.SERVICE_DIM_V		Type	STRING
StorageEvents	Component	xs.STORAGE_EVENTS_FACT_V		Component	STRING

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
StorageEvents	DateReported	xs.STORAGE_EVENTS_FACT_V		Date_Reported	DATE
StorageEvents	EventSource	xs.STORAGE_EVENTS_FACT_V		Event_Source	STRING
StorageEvents	EventSubtype	xs.STORAGE_EVENTS_FACT_V		Event_Subtype	STRING
StorageEvents	EventSummary	xs.STORAGE_EVENTS_FACT_V		Event_Summary	STRING
StorageEvents	EventType	xs.STORAGE_EVENTS_FACT_V		Event_Type	STRING
StorageEvents	IndCleared	xs.STORAGE_EVENTS_FACT_V		Ind_Cleared	NUMERIC
StorageEvents	Severity	xs.STORAGE_EVENTS_FACT_V		Severity	STRING
StoragePath Compliance	COUNT_PATHS	xs.STORAGE_PATH_COMPLIANCE_FACT_V		COUNT_PATHS	NUMERIC
StoragePath Compliance	EFFECTIVE_DATE	xs.STORAGE_PATH_COMPLIANCE_FACT_V		EFFECTIVE_DATE	DATE
StoragePath Compliance	EFFECTIVE_PERIOD_DURABLE_KEY	xs.STORAGE_PATH_COMPLIANCE_FACT_V		EFFECTIVE_PERIOD_DURABLE_KEY	NUMERIC
StoragePath Compliance	MD_DURABLE_KEY	xs.STORAGE_PATH_COMPLIANCE_FACT_V		MD_DURABLE_KEY	NUMERIC

Release Notes

Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
StoragePath Compliance	STORAGE_VOLUME_DURABLE_KEY	xs.STORAGE_PATH_COMPLIANCE_FACT_V		STORAGE_VOLUME_DURABLE_KEY	NUMERIC
StorageUtilization	AvailableCapacity	xs.STORAGE_UTILIZATION_FACT_V		Available_Capacity	NUMERIC
StorageUtilization	DateCollected	xs.STORAGE_UTILIZATION_FACT_V		Date_Collected	DATE
StorageUtilization	StorageDataType	xs.STORAGE_UTILIZATION_FACT_V		Storage_Data_Type	STRING
StorageUtilization	StorageTechnology	xs.STORAGE_UTILIZATION_FACT_V		Storage_Technology	STRING
StorageUtilization	TotalCapacity	xs.STORAGE_UTILIZATION_FACT_V		Total_Capacity	NUMERIC
StorageUtilization	UsedCapacity	xs.STORAGE_UTILIZATION_FACT_V		Used_Capacity	NUMERIC
StorageVolume	CREATED_DATE	xs.STORAGE_VOLUME_DIM_V		CREATED_DATE	DATE
StorageVolume	DISPLAY_LABEL	xs.STORAGE_VOLUME_DIM_V		DISPLAY_LABEL	STRING
StorageVolume	MD_DURABLE_KEY	xs.STORAGE_VOLUME_DIM_V		MD_DURABLE_KEY	NUMERIC
StorageVolume	MODIFIED_DATE	xs.STORAGE_VOLUME_DIM_V		MODIFIED_DATE	DATE
StorageVolume	NAME	xs.STORAGE_VOLUME_DIM_V		NAME	STRING


Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
StorageVolume	NODE_DURABLE_KEY	xs.STORAGE_VOLUME_DIM_V		NODE_DURABLE_KEY	NUMERIC

KPIs and Metrics

The KPIs and Metrics that are part of the extended HP Storage Essentials Content Pack are:

% of Storage Utilization	21
Average Number of Storage Paths	22
Number of Critical Storage Events	23
Storage Path Compliance	24


% of Storage Utilization

Component Type	KPI
Business Questions	<p>"The motivation for measuring this KPI is to receive an accurate measurement of the utilization rate of storage. If the storages are not utilized enough, it can provide a cost reduction opportunity. If they are over-utilized, it can imply that further investment is required.</p> <p>This allows the CIO/VP to verify how much capacity is used for SAN attached storage. This allows seeing quickly where capacity can be reassigned, where new storage needs to be purchased, where storage is growing rapidly, etc.</p>
Business Objective	Reduce Cost
Description	The total storage system capacity that is in use relative to the total storage system capacity.
Context	StorageManagement
Data source	SE
Formula	PERCENTAGE_MATH(SUM(StorageUtilization.UsedCapacity , Node.FlagsDropped='N'), SUM(StorageUtilization.TotalCapacity , Node.FlagsDropped ='N'),0)
KPI Formula Filter	N/A
Unit Type	%
Time Period	Monthly
Direction	Maximize
Thresholds	
Release	9.31


Average Number of Storage Paths

Component Type	Metric
Business Questions	
Business Objective	N/A
Description	<p>The average number of storage volume paths in the environment. Note:</p> <ol style="list-style-type: none">1. It will count from both host side (mounted) and storage side (not mounted).2. It will not return storage volumes for devices connected in a DAS configuration.3. If any of the path elements (switch, hosts or array) are missing in SE Discovery, it will not be able to get paths information.
Context	StorageManagement
Data source	SE
Formula	AVG(StoragePathCompliance.COUNT_PATHS , StorageVolume.DISPLAY_LABEL = 'Storage Volume' and Node.FlagsDropped = 'N' and Node.MonitoredBy = 'Storage Essential')
KPI Formula Filter	N/A
Unit Type	#
Time Period	Monthly
Direction	N/A
Thresholds	N/A
Release	9.31

Number of Critical Storage Events

Component Type	KPI
Business Questions	<p>This use case would allow the CIO/VP to see what critical issues need urgent attention. This may allow doing some high level event analysis to see the impact of downtime, or service interventions needed. The customer can define the criteria for the alarm levels, and which alarm levels they want to monitor, for instance critical only, major and above, minor and above, warning and above. A drill-down into the details is offered as well:</p> <ul style="list-style-type: none"> • If # of Critical + major events shows greater than or equal to 10, the status shows red. • If # of Critical + major events shows between 5 and 10, the status shows yellow. • If # of Critical + major events shows less than or equal to=5, the status shows green.
Business Objective	Reduce Risk
Description	List of storage events from storage devices with critical or major severity.
Context	StorageManagement
Data source	SE
Formula	COUNT(StorageEvents.Component , StorageEvents.DateReported IN_PERIOD And (StorageEvents.Severity = 'critical' Or StorageEvents.Severity = 'major'))
KPI Formula Filter	N/A
Unit Type	#
Time Period	Monthly
Direction	Maximize
Thresholds	
Release	9.31

Storage Path Compliance

Component Type	KPI
Business Questions	
Business Objective	Reduce Cost
Description	<p>The total storage volume paths in the environment where the paths to a particular storage volume meet the minimum standard relative to the total storage volume paths in the environment . Note:</p> <ol style="list-style-type: none"> 1. The path compliance is default to 2, but it could be customizable by the customer in the KPI formula. 2. It will count from both host side (mounted) and storage side (not mounted). 3. It will not return storage volumes for devices connected in a DAS configuration. 4. If any of the path elements (switch, hosts or array) are missing in SE Discovery, it will not be able to get paths information."
Context	StorageManagement
Data source	SE
Formula	PERCENTAGE(StoragePathCompliance, StoragePathCompliance.COUNT_PATHS >= 2 , * , 100)
KPI Formula Filter	N/A
Unit Type	%
Time Period	Monthly
Direction	Maximize
Thresholds	
Release	9.31

Install 9.31 CUP1

The installation of CUP for HP IT Executive Scorecard is performed using an automated procedure that includes the installation wizard.

1. Prerequisites:

- a. Install the **1868_hotfix.zip** over the supported version of HP Storage Essentials.
- b. Make sure that you have installed Executive Scorecard version 9.31.

Important: The XS 9.31 CUP1 can be installed only on top of HP IT Executive Scorecard version 9.31. If your version is not 9.31, you must upgrade to the 9.31 version before deploying the CUP.

2. Perform a full database backup, as follows:

- Check for Invalid objects inside the database. There should be no invalid objects, especially in the Master, Staging, or Target schemas. You should fix them by recompiling them.
- Stop all applications and services (like ABC and ETLs) that make connections to the XS SQLServer 2008 instances.
- Make sure that there are no active connections in the databases.
- Note that the recommended disk space requirements are approximately 1.5 times the total size of the DB.
- Use backup compression, and schemas backup to speed up the backups, which make the files much smaller.
- Direct the backups to a central network share with different computers. Do not put the backups on the same physical store as your database files.
- Perform a backup using SQLServer 2008 backup utilities. Each of the databases below contain schemas:
 - Staging DB (including schemas like: dws, dwst, dwmetadata, dwabc)
 - Target DB
 - SAP BusinessObjects Data Services database (BODS repository)
- **Optional:** Gather Performance Data- Measure and gather key performance metrics, like ETL times, long running SQLs (using profiler), O/S, and machine resource utilizations metrics. This is useful for baseline references for later usage after applying the patch, and to check if performance degradation has occurred.
- **Optional:** Backup SQLServer system databases (master, model, and so on) and the Transaction LOG that will also truncate it, to keep it from becoming full during the upgrade.

Backup the system databases before the upgrade to allow for all of the unexpected instance changes during upgrade. This helps to recover to the point of time and structure before the upgrade.

Note: Keep the passwords for the Staging, Target, and SAP BusinessObjects Data Services database login users in a safe place for use in disaster recovery situations.

- It is recommended to practice recovery operations while simulating different failures. Examples below:

STAGING Backup Example:

```
BACKUP DATABASE [STAGING] TO
  DISK = '<FullPath>\STAGING.bak' WITH
  NOFORMAT, COMPRESS,
  INIT,
  NAME = 'STAGING-Full Database Backup',
  SKIP,
  NOREWIND,
  NOUNLOAD,
  STATS = 10,
  CHECKSUM

GO
```

Backup Verification (OPTIONAL)

```
DECLARE @backupSetId AS INT
SELECT @backupSetId = position
FROM msdb..backupset
WHERE database_name = '<STAGING>'
  AND backup_set_id = (SELECT max (backup_set_id)
  FROM msdb..backupset
  WHERE database_name = '<STAGING>')

IF @backupSetId IS NULL
  BEGIN
    RAISERROR ('Verify failed. Backup information for database
  'STAGING' not found.', 16, 1)
  END

RESTORE VERIFYONLY FROM DISK =
  '<FullPath>\STAGING.bak' WITH FILE = @backupSetId, NOUNLOAD, NOREWIND

GO
```

3. If you have received private patches you must delete them before performing the patch installation.

3. CUP Installation and Post Install wizard

Note: When you install the CUP 1 on a distributed environment, it must first be installed on the Data Warehouse server and then on the Executive Scorecard server.

4. Stop the Glassfish server before beginning installation. Navigate to: **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard.**
5. Unpack the .ZIP file into c:\HPXS\agora\ContentPacks to override the SE and Core folders.
6. Execute the command **C:\HPXS\agora\DataWarehouse\bin\dw_ds_automation.bat -task Redeploy -cp CORE** to redeploy the Core content pack.
7. If you have already installed XS 9.31:

- a. And you have already deployed the SE Content Pack, execute the command **C:\HPXS\agora\DataWarehouse\bin\dw_ds_automation.bat -task Redeploy -cp SE** to redeploy the SE Content Pack.
- b. And you have not yet deployed the SE Content Pack:
 - i. Go to **C:\HPXS\agora\ContentPacks\SE\conf** to configure the **dataSources.xml**.
 - ii. Execute the **dw_ds_automation.bat -task ConfigureInitial -cp SE -xmlFilePath C:\HPXS\agora\ContentPacks\SE\conf\dataSources.xml** command.
 - iii. Execute the command **C:\HPXS\agora\DataWarehouse\bin\dw_ds_automation.bat -task deploy -cp SE** to deploy the SE Content Pack.
8. Execute the command **C:\HPXS\agora\DataWarehouse\bin\dw_ds_automation.bat -task Activate -cp SE** to activate the SE Content Pack.
9. Copy the **[xs].[STORAGE_VOLUME_DIM_V]** and **[xs].[STORAGE_PATH_COMPLIANCE_FACT_V]** view creation statements from **dwh_target_views.sql**, and execute them in the target database to create the target view for the SE Context.
10. Copy **StorageManagement.xml** to the folder **C:\HPXS\agora\glassfish\glassfish\domains\BTOA\config\context\import\load**.
11. Open the **C:\HPXS\agora\jdk\bin\jconsole.exe** file:
 - a. Select the option **remote process**.
 - b. Input **localhost:10008**.
 - c. Click **MBeans** and select **com.hp.btoe.Xs2go.jmx->ContextImport->Operations->importForTenant**.
 - d. Click the **importForTenant** button to import the SE Context into the database.
12. Copy **IndustryStandard.xml**, **BusinessScorecards.xml**, **HPPortfolio.xml**, **Storage_Path_Compliance.xml**, **Average_Number_of_Storage_Paths.xml** to the **C:\HPXS\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\load** folder.
13. Open the Jconsole , select **com.hp.btoe.studio.jmx->KPITemplateLoader->Operations->importKPITemplatesAlltenant**; and click **importKPITemplatesAllTenants** to import the SE KPIS and Metrics into the KPI Library.

Fixed Issues

Issues are identified with a Change Request number (QCCR1A<CR_number>). Use this number when looking for more information about the problem on the [HP Software Support](#) web site, or when communicating with your HP Support representative.

Fixed Issues in Executive Scorecard 9.31 CUP1

This section lists the issues that have been fixed in CUP1.

QCCR1A Number	Description
QCCR1A155500	The XS. STORAGE_UTILIZATION_FACT_V table should include only the latest data of every storage system, but because it is a transaction table, it also includes the history data of every storage system, so the MD_BATCH_ID table was added to filter the latest data of the XS. STORAGE_UTILIZATION_FACT_V table.

