

DB2SPI

Smart Plug-In for DB2 Databases

Metric Reference Guide



Version 03.50

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Print History

The manual printing date and part number indicate its current edition. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. The manual part number will change when extensive changes are made.

Manual updates may be issued between editions to correct errors or document product changes. To ensure that you receive the updated or new editions, you should subscribe to the appropriate product support service. See your HP sales representative for details:

First edition: October 2003

Second edition: January 2005

Third Edition: September 2005

Fourth Edition: February 2006

Fifth Edition: Mai 2006

Sixth Edition: November 2006

Seventh Edition: January 2008

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DB2SPI Metrics

The area tables below show an overview of the DB2SPI Metrics. More information may be found in the following Chapter “Metric Details”.

Note: Not all metrics are collected out-of-the-box. To collect them, you have to schedule the collection with the help of a schedule template. How this is done is described in the DB2SPI User’s Guide. However, be careful not to overload the system with too many metrics. If the load on the system is high, you may want to consider switching off some metrics, which are not important to you.

The default collection interval is with marked with the following colors:

- 5 min
- 10 min
- 30 min
- 60 min
- Not collected

Area: Agents and Applications

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0071g_ApplConnCur_db	no	g	yes	Warning	30 min	OVPM	-	yes	Global Snapshot	yes
Applications connected currently in the database										
DB2_0151p_ApplWaitOnLck_db	no	p	yes	Major	10 min	-	-	yes	Global Snapshot	yes
Percent applications in the database that are waiting on locks										
DB2_0232w_MaxAssocAgt_ap	no	w	yes	Major	-	-	Ascii Report 0232	no	Global Snapshot	no
Maximum number of associated agents										
DB2_0240c_AgtStolen_in	no	c	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	yes
Stolen agents in the instance										
DB2_0242c_AgtStolen_ap	no	c	yes	Minor	-	-	Ascii Report 0242	no	Global Snapshot	yes
Stolen agents in an application										
DB2_0250w_MaxCoordAgt_in	no	w	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	yes
Maximum number of coordinating agents in the instance										
DB2_0251w_MaxCoordAgt_db	no	w	yes	Minor	-	-	Ascii Report	no	Global	yes

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Maximum number of coordinating agents in the database										
DB2_0440p_AgtAssignPI_in										
Percent agents assigned from agent pool	no	p	no	-	30 min	-	Ascii Report 0440	yes	Global Snapshot	no
DB2_0490g_AgtReg_in										
Agents registered in the instance	no	g	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0500g_AgtIdle_in										
Agents idle in the instance	no	g	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0550g_AgtWaitTok_in										
Agents waiting on a token in the database manager	no	g	no	-	30 min	OVPM	-	yes	Global Snapshot	yes
DB2_0560r_AgtEmptyPI_in										
Ratio of agents created due to empty pool to agents assigned from pool	no	r	yes	Minor	30 min	-	Ascii Report 0560	yes	Global Snapshot	no
DB2_0631g_AplExecDbmgr_db										
Applications currently executing in the database manager	no	g	no	-	30 min	OVPM	-	yes	Global Snapshot	yes
DB2_0771g_AgtAssocApl_db										
Agents associated with applications in the database	no	c	no	-	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0772g_AgtAssocApl_ap										
Agents associated with the application	no	c	no	-	-	-	Ascii Report 0772	no	Global Snapshot	No
DB2_2071p_AplMax_db										
The percentage of application currently connected per database configuration parameter "MAXAPPL"	no	p	yes	Minor	30 min	-	-	yes	global snapshot	yes
DB2_2490p_AgtMax_in										
Percentage of agents registered in the instance per database manager configuration parameter MAXAGENTS	no	p	yes	Minor	30 min	-	-	yes	global snapshot	yes

Area: Bufferpool

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0031p_BufPIHit_db	no	p	yes	Minor	10 min	OVPM	-	yes	Global	yes

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The buffer pool hit ratio for the database expressed as a percentage										
DB2_0032p_BufPIHit_ap										
The buffer pool hit ratio for an application expressed as a percentage	no	p	yes	Minor	-	-	Ascii Report 0032	no	Global Snapshot	no
DB2_0033p_BufPIHit_ts										
The buffer pool hit ratio for the tablespace expressed as a percentage	no	p	yes	Minor	30 min	-	-	yes	per Partition	no
DB2_0035p_BufPIHit_bp										
The buffer pool hit ratio for a particular buffer pool	no	p	yes	Minor	30 min	-	OVPI	yes	per Partition	no
DB2_0081p_InxHit_db										
The buffer pool index hit ratio for the database expressed as a percentage	no	p	yes	Minor	10 min	OVPM	-	yes	Global Snapshot	yes
DB2_0082p_InxHit_ap										
The buffer pool index hit ratio for an application expressed as a percentage	no	p	yes	Minor	-	-	Ascii Report 0082	no	Global Snapshot	no
DB2_0083p_InxHit_ts										
The buffer pool index hit ratio for the tablespace expressed as a percentage	no	p	yes	Minor	-	-	-	no	per Partition	no
DB2_0085p_InxHit_bp										
Indicates the percentage of read requests for index pages that have gone through a particular buffer pool	no	p	yes	Minor	30 min	-	OVPI	yes	per Partition	no
DB2_0271p_AsyPIDtRdpReq_db										
Percentage asynchronous data reads per request for the database	no	p	yes	Warning	10 min	-	Ascii Report 0271	yes	Global Snapshot	yes
DB2_0273p_AsyPIDtRdpReq_ts										
Percentage asynchronous data reads per request for a tablespace	no	p	yes	Warning	-	-	Ascii Report 0273	no	per Partition	no
DB2_0281a_AsyncRdTime_db										
Average asynchronous read time for the database	no	a	yes	Warning	30 min	OVPM	Ascii Report 0281	yes	Global Snapshot	yes
DB2_0283a_AsyncRdTime_ts										
Average asynchronous read time for a tablespace	no	a	yes	Warning	-	-	Ascii Report 0283	no	Per Partition	no
DB2_0291a_AsyncWrtTime_db										
	no	a	yes	Warning	30 min	OVPM	Ascii Report	yes	Global	yes

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Average asynchronous write time for the database										
DB2_0293a_AsyncWrtTime_ts										
Average asynchronous write time for a tablespace	no	a	yes	Warning	-	-	Ascii Report 0293	no	per Partition	no
DB2_0301r_AsyPIDataRd_db										
The ratio of asynchronous pool data reads to synchronous pool data reads for the database	no	r	yes	Warning	30 min	OVP	Ascii Report 0301	yes	Global Snapshot	yes
DB2_0303r_AsyPIDataRd_ts										
The ratio of asynchronous pool data reads to synchronous pool data reads in the tablespace	no	r	yes	Warning	-	-	Ascii Report 0303	no	per Partition	no
DB2_0311r_AsyPIDataWrt_db										
The ratio of asynchronous pool data writes to synchronous pool data writes for the database	no	r	yes	Warning	30 min	OVP	Ascii Report 0311	yes	Global Snapshot	yes
DB2_0313r_AsyPIDataWrt_ts										
The ratio of asynchronous pool data writes to synchronous pool data writes in the tablespace	no	r	yes	Warning	-	-	Ascii Report 0313	no	per Partition	no
DB2_0321r_AsyPIIdxRd_db										
The ratio of asynchronous pool index reads to synchronous pool index reads for the database	no	r	yes	Warning	30 min	OVP	Ascii Report 0321	yes	Global Snapshot	yes
DB2_0323r_AsyPIIdxRd_ts										
The ratio of asynchronous pool index reads to synchronous pool index reads in the tablespace	no	r	yes	Warning	-	-	Ascii Report 0323	no	per Partition	no
DB2_0331r_AsyPIIdxWrt_db										
The ratio of asynchronous pool index writes to synchronous pool index writes for the database	no	r	yes	Warning	30 min	OVP	Ascii Report 0331	yes	Global Snapshot	yes
DB2_0333r_AsyPIIdxWrt_ts										
The ratio of asynchronous pool index writes to synchronous pool index writes in the tablespace	no	r	yes	Warning	-	-	Ascii Report 0333	no	per Partition	no
DB2_0341c_PIDataLogRd_db	no	c	no	-	30 min	OVP	-	yes	Global	no

Buffer pool data logical reads for the database										
DB2_0351c_PlIdxLogRd_db										
Buffer pool index logical reads for the database	no	c	no	-	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0661c_PIDataPhyRds_db										
Buffer pool data physical reads in the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0671c_PIDataWrts_db										
Buffer pool data writes in the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0681c_PlIdxPhyRds_db										
Buffer pool index physical reads in the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0691c_PlIdxWrts_db										
Buffer pool index writes in the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0781a_PIRdTime_db										
Average buffer pool read time for the database	no	a	yes	Major	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0782a_PIRdTime_ap										
Average buffer pool read time for an application	no	a	yes	Major	-	-	Ascii Report 0782	no	Global Snapshot	no
DB2_0783a_PIRdTime_ts										
Average buffer pool read time for a tablespace	no	a	yes	Major	-	-	-	no	per Partition	no
DB2_0785a_PIRdTime_bp										
Average buffer pool read time for a particular buffer pool	no	a	yes	Major	30 min	-	OVPI	yes	per Partition	no
DB2_0791a_PIWrtTime_db										
Average buffer pool write time for the database	no	a	yes	Major	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0792a_PIWrtTime_ap										
Average buffer pool write time for an application	no	a	yes	Major	-	-	Ascii Report 0792	no	Global Snapshot	no
DB2_0793a_PIWrtTime_ts										
Average buffer pool write time for a tablespace	no	a	yes	Major	-	-	-	no	per Partition	no
DB2_0795a_PIWrtTime_ts										
Average buffer pool write time for a particular bufferpool	no	a	yes	Major	-	-	-	no	per Partition	no

Area: Catalog Cache

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0111p_CatCacheHit_db	no	p	yes	Minor	10 min	-	-	yes	Global Snapshot	yes
The catalog cache hit ratio for the database expressed as a percentage										
DB2_0112p_CatCacheHit_ap	no	p	yes	Minor	-	-	Ascii Report 0112	no	Global Snapshot	no
The catalog cache hit ratio for an application expressed as a percentage										

Area: Connections

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0380g_LocConns_in	no	g	no	-	30 min	OVPM	OV Reporter OVPI	yes	Global Snapshot	yes
Local connections in the database manager										
DB2_0640g_RemConnsExec_in	no	g	no	-	30 min	OVPM	-	yes	Global Snapshot	yes
Remote connections executing in the database manager										
DB2_0650g_LocConnsExec_in	no	g	no	-	30 min	OVPM	Ascii Report 0650	yes	Global Snapshot	yes
Local connections executing in the database manager										
DB2_0750g_RemConns_in	no	g	no	-	30 min	OVPM	OV Reporter OVPI	yes	Global Snapshot	no
Remote connections to the database manager										
DB2_0800w_MaxConns_in	no	w	yes	Major	10 min	OVPM	-	yes	Global Snapshot	no
Maximum simultaneous connections to the database										
DB2_2600p_MaxConns_in	no	p	yes	Minor	30 min	-	-	yes	global snapshot	yes
Percentage of connections per database manager configuration parameter MAX_CONNECTIONS										

Area: Database

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0261i_DBStatus_db	no	i	yes	Critical	5 min	OVPM	OV Reporter OVPI	yes	Yes ¹	yes
Database status										
DB2_0991g_DBGrowth_db	yes	g	no	-	30 min	-	OVPI	yes	Global Snapshot	no
The growth rate of a database in MB in the monitoring interval										

Area: Direct I/O

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0091a_DirRdTime_db	no	a	yes	Major	10 min	OVPM	-	yes	Global Snapshot	yes
Average direct read time for the database										
DB2_0092a_DirRdTime_ap	no	a	yes	Major	-	-	Ascii Report 0092	no	Global Snapshot	no
Average direct read time for an application										
DB2_0093a_DirRdTime_ts	no	a	yes	Major	-	-	-	no	per Partition	no
Average direct read time for a tablespace										
DB2_0101a_DirWrtTime_db	no	a	no	Major	10 min	OVPM	-	yes	Global Snapshot	yes
Average direct write time for the database										
DB2_0102a_DirWrtTime_ap	no	a	yes	Major	-	-	Ascii Report 0102	no	Global Snapshot	no
Average direct write time for an application										
DB2_0103a_DirWrtTime_ts	no	a	yes	Major	-	-	-	no	per Partition	no
Average direct write time for a tablespace										

¹¹ This is not a snapshot metric. Availability is checked according to the IBM definition: 1. Instance attach, 2. database connect, 3.execution of one statement. Metric 0261 additionally uses an API call to activate the database on all partitions to guarantee availability of all monitored partitions other than the catalog partition.

DB2_0361a_DirRdpReq_db										
Average sectors read by a direct read in the database	no	a	yes	Minor	10 min	OVRM	-	yes	Global Snapshot	no
DB2_0362a_DirRdpReq_ap										
Average sectors read by a direct read in an application	no	a	yes	Minor	-	-	Ascii Report 0362	no	Global Snapshot	no
DB2_0363a_DirRdpReq_ts										
Average sectors read by a direct read in a tablespace	no	a	yes	Minor	-	-	-	no	per Partition	no
DB2_0371a_DirWrtpReq_db										
Average sectors written by a direct write in the database	no	a	yes	Minor	10 min	OVRM	-	yes	Global Snapshot	no
DB2_0372a_DirWrtpReq_ap										
Average sectors written by a direct write in an application	no	a	yes	Minor	-	-	Ascii Report 0372	no	Global Snapshot	no
DB2_0373a_DirWrtpReq_ts										
Average sectors written by a direct write in a tablespace	no	a	yes	Minor	-	-	-	no	per Partition	no
DB2_0701c_DrctRds_db										
Direct reads by the database	no	c	no	-	30 min	OVRM	OV Reporter	yes	Global Snapshot	no
DB2_0703c_DrctRds_ts										
The number of direct reads of one or more sectors of data for a particular table space	no	c	no	-	30 min	-	OVPI	yes	per Partition	no
DB2_0711c_DrctWrts_db										
Direct writes by the database	no	c	no	-	30 min	OVRM	OV Reporter	yes	Global Snapshot	no
DB2_0713c_DrctWrts_ts										
The number of requests to perform a direct write of one or more sectors of data for a particular table space	no	c	no	-	30 min	-	OVPI	yes	per Partition	no

Area: FCM

Note: These metrics are available only for DB2 V8 DPF systems.

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0896p_FCMBuffFree_ptn	no	p	yes	Major	-	-	Ascii Report	no	only for V8	no

Percent FCM buffers currently free							0896		DPF (global)	
DB2_0906p_MsgAnchrFree_ptn									only for V8 DPF (global)	
Percent message anchors currently free	no	p	yes	Major	-	-	Ascii Report 0906	no	DPF (global)	no
DB2_0916p_ConnEntrFree_ptn									only for V8 DPF (global)	
Percent connection entries currently free	no	p	yes	Major	-	-	Ascii Report 0916	no	DPF (global)	no
DB2_0926p_ReqBlkFree_ptn									only for V8 DPF (global)	
Percent request blocks currently free	no	p	yes	Major	-	-	Ascii Report 0926	no	DPF (global)	no

Area: Locks and Deadlocks

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0011c_LckTO_db										
Lock timeout in the database in the monitoring interval	yes	c	yes	Warning	60 min	OVPM	-	yes	Global Snapshot	yes
DB2_0012c_LckTO_ap										
Lock timeout in an application in the monitoring interval	yes	c	yes	Warning	-	-	Ascii Report 0012	no	Global Snapshot	no
DB2_0021c_LckWaiting_db										
Lock waits in the database in the monitoring interval	yes	c	no	-	60 min	OVPM	-	yes	Global Snapshot	yes
DB2_0022c_LckWaiting_ap										
Lock waits in an application in the monitoring interval	yes	c	no	-	-	-	Ascii Report 0022	no	Global Snapshot	yes
DB2_0141a_LckWaitTime_db										
Average lock wait time for the database	no	a	yes	Major	10 min	OVPM	-	yes	Global Snapshot	yes
DB2_0142a_LckWaitTime_ap										
Average lock wait time for an application	no	a	yes	Major	-	-	Ascii Report 0142	no	Global Snapshot	no
DB2_0191c_LckEscal_db										
Lock escalations in the database	no	c	yes	Minor	60 min	OVPM	-	yes	Global Snapshot	yes
DB2_0192c_LckEscal_ap										
Lock escalations in an application	no	c	yes	Minor	-	-	Ascii Report 0192	no	Global Snapshot	no
DB2_0201c_ExclLckEscal_db										
Exclusive lock escalations in the	no	c	yes	Major	60 min	OVPM	-	yes	Global Snapshot	yes

database										
DB2_0202c_ExclLckEscal_ap										
Exclusive lock escalations in an application	no	c	yes	Major	-	-	Ascii Report 0202	no	Global Snapshot	no
DB2_0211c_Dlck_db										
Deadlocks in the database	no	c	yes	Major	60 min	OVRM	-	yes	Global Snapshot	yes
DB2_0212c_Dlck_ap										
Deadlocks in an application	no	c	yes	Minor	-	-	Ascii Report 0212	no	Global Snapshot	no
DB2_0221a_LckWaitTime_db										
Lock wait time for the database	no	c	no	-	30 min	OVRM	-	yes	Global Snapshot	yes
DB2_0222a_LckWaitTime_ap										
Lock wait time for an application	no	c	no	-	-	-	Ascii Report 0222	no	Global Snapshot	no
DB2_0461p_LckLstMemUsed_db										
Percent lock list memory used in the database	no	p	yes	Minor	10 min	OVRM	-	yes	Global Snapshot	yes
DB2_0471p_LckHeld_db										
Percent locks held in the database	no	p	no	-	10 min	OVRM	-	yes	Global Snapshot	no
DB2_0472p_LckHeld_ap										
Percent locks held by an application	no	p	yes	Minor	30 min	-	-	yes	Global Snapshot	no
DB2s_0481g_LckAvail_db										
Number of available locks in the database	no	g	no	-	10 min	-	-	no	Global Snapshot	yes
DB2_0482g_LckAvail_ap										
Number of available locks in an application	no	g	yes	Minor	30 min	-	Ascii Report 0482	yes	Global Snapshot	no

Area: Package Cache

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0051c_PkgCacheOvfl_db										
Package cache overflows in the database in the monitoring interval	yes	c	yes	Minor	60 min	-	-	yes	Global Snapshot	yes
DB2_0571p_PkgCacheHit_db										
The package cache hit ratio for the database	no	p	yes	Minor	30 min	OVRM	-	yes	Global Snapshot	no

Area: Sorts

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0061p_SortOvfl_db	no	p	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	yes
Percent sort overflows in the database										
DB2_0062p_SortOvfl_ap	no	p	yes	Minor	-	-	Ascii Report 0062	no	Global Snapshot	no
Percent sort overflows for an application										
DB2_0120p_PipeSortAccep_in	no	p	yes	Major	30 min	OVPM	-	yes	Global Snapshot	yes
Percent piped sorts accepted in the database manager										
DB2_0130c_PostThrSort_in	no	c	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	yes
Post threshold sorts in the instance										
DB2_0180g_SortHeapAlloc_in	no	g	yes	Warning	30 min	-	-	yes	Global Snapshot	yes
Sort heap allocated in the database manager										
DB2_0181g_SortHeapAlloc_db	no	g	no	-	30 min	OVPM	Ascii Report 0181	yes	Global Snapshot	no
Sort heap allocated in the database										
DB2_0431a_SortTime_db	no	a	yes	Minor	30 min	OVPM	-	yes	Global Snapshot	yes
Average sort time in the database										
DB2_0432a_SortTime_ap	no	a	yes	Minor	30 min	-	Ascii Report 0432	yes	Global Snapshot	no
Average sort time for an application										
DB2_0451a_SortHeapAlloc_db	no	a	yes	Minor	30 min	-	-	yes	Global Snapshot	no
Average sort heap allocated for an application										

Area: SQL Cursor

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0172p_OpnLocCursBlk_ap	no	p	yes	Minor	-	-	Ascii Report 0172	no	Global Snapshot	no
Percent open local cursors with blocking										
DB2_0582p_OpnRemCursBlk_ap	no	p	yes	Minor	-	-	Ascii Report	no	Global	no

Percent open remote cursors with blocking							0582		Snapshot	
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Area: SQL work area

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0621p_ApplSectHit_db	no	p	yes	Minor	-	-	-	no	Global Snapshot	no
The hit ratio for the SQL work area in the database										
DB2_0622p_ApplSectHit_ap	no	p	yes	Minor	-	-	Ascii Report 0622	no	Global Snapshot	no
The hit ratio for the SQL work area for an application										

Area: Statements

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0161c_IntDlckRollb_db	no	c	yes	Minor	10 min	OVPM	-	yes	Global Snapshot	yes
Internal deadlocked rollbacks in the database										
DB2_0162c_IntDlckRollb_ap	no	c	yes	Minor	-	-	Ascii Report 0162	no	Global Snapshot	no
Internal deadlocked rollbacks in an application										
DB2_0511c_CommAttmpt_db	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
Commit statements attempted in the database										
DB2_0512c_CommAttmpt_ap	no	c	no	-	-	-	Ascii Report 0512	no	Global Snapshot	no
Commit statements attempted by an application										
DB2_0521c_DdlStmntDone_db	no	c	no	-	30 min	OVPM	-	yes	Global Snapshot	no
DDL statements executed in the database										
DB2_0522c_DdlStmntDone_ap	no	c	no	-	-	-	Ascii Report	no	Global	no

DDL statements executed by an application							0522		Snapshot	
DB2_0531c_ModStmtDone_db										
UID statements executed in the database	no	c	no	-	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0532c_ModStmtDone_ap										
UID statements executed by an application	no	c	no	-	-	-	Ascii Report 0532	no	Global Snapshot	no
DB2_0541c_SelStmtDone_db										
Select statements executed in the database	no	c	no	-	30 min	OVPM	-	yes	Global Snapshot	no
DB2_0542c_SelStmtDone_ap										
Select statements executed by an application	no	c	no	-	-	-	Ascii Report 0542	no	Global Snapshot	no
DB2_0721c_RollbAttmpt_db										
Rollbacks attempted by the database	no	c	no	-	30 min	-	OV Reporter	yes	Global Snapshot	no
DB2_0731c_IntRollbacks_db										
Internal rollbacks attempted by the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0741c_IntCommits_db										
Internal commits attempted by the database	no	c	no	-	30 min	OVPM	OV Reporter	yes	Global Snapshot	no
DB2_0871p_FailedSQL_db										
Percent failed SQL statements in the database	no	p	yes	Major	30 min	-	-	yes	Global Snapshot	no
DB2_0872p_FailedSQL_ap										
Percent failed SQL statements in an application	no	p	yes	Major	30 min	-	Ascii Report 0872	yes	Global Snapshot	no
DB2_0881c_BndPrcomp_db										
Binds precompiles in the database	no	c	yes	Warning	30 min	-	-	yes	Global Snapshot	no
DB2_0882c_BndPrcomp_ap										
Binds precompiles in an application	no	c	no	Warning	-	-	Ascii Report 0882	no	Global Snapshot	no

Area: Table Activity

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
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DB2_0044c_PgReorg_tb										
Page reorganisations in a table in the monitoring interval	yes	c	yes	Minor	60 min	-	-	yes	Global Snapshot	yes

Area: Tablespace

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0933p_FreeTblSpc_ts	no	p	yes	Major	30 min	-	OV Reporter, OVPI, ASCII Report 0933	yes	per Partition	no
Percent free space in a particular tablespace										
DB2_0943g_TblSpcSize_ts	no	g	no	-	30 min	-	OVPI	yes	per Partition	no
Size of a particular table space										
DB2_0953i iTblSpcStt_ts	no	i	yes	Major	30 min	-	-	yes	per Partition	no
State for a particular table space										
DB2_0963p_TblSpcgrwth_ts	yes	p	no	-	30 min	-	OVPI	yes	per Partition	no
Saves the growth rate of a particular table space within the monitoring interval										

Area: Transaction Logging

DB2 SPI Metric	Delta	Type	Alarming	Severity	Interval	Graph	Reports	Monitoring Enabled	Applicable for DPF	Instructions available
DB2_0391w_MaxSecLogSpcU_db	no	w	yes	Minor	10 min	OVPM	Ascii Report 0391	yes	Global Snapshot	yes
Maximum secondary total space used (in MB) in the database										
DB2_0401w_MaxTotLogSpcU_db	no	w	yes	Minor	10 min	OVPM	-	yes	Global Snapshot	yes
Maximum primary total space used (in MB) in the database										
DB2_0411g_SecLogAlloc_db	no	g	yes	Minor	10 min	OVPM	-	yes	Global Snapshot	yes
Secondary logs allocated in the database										
DB2_0421p_SecLogRemain_db	no	p	yes	Minor	10 min	OVPM	Ascii Report	yes	Global	yes

Secondary logs remaining to be allocated in the database							0421		Snapshot	
DB2_0811c_LogPgsRd_db									Global Snapshot	
Log pages read in the database	no	c	no	-	-	-	-	no	Global Snapshot	no
DB2_0821c_LogPgsWrt_db									Global Snapshot	
Growth rate of Log pages written in the database in the monitoring interval	no	c	no	-	-	-	-	no	Global Snapshot	no
DB2_0831w_MaxPriLogSpcU_db									Global Snapshot	
Percentage of the primary log space used per database in the monitoring interval	yes	w	yes	Minor	10 min	OVPM	-	yes	Global Snapshot	no
DB2_0841g_PriLogAlloc_db									Global Snapshot	
Primary logs allocated	no	g	yes	Major	10 min	OVPM	-	yes	Global Snapshot	no
DB2_0851p_LogSpcUsed_db									Global Snapshot	
Percent log space used by the database	no	p	yes	Major	10 min	OVPM	-	yes	Global Snapshot	no
DB2_0861p_LogSpcAvail_db									Global Snapshot	
Percent log space available in the database	no	p	yes	Major	10 min	OVPM	-	yes	Global Snapshot	no

Metric Details

Note that not all fields are given for every metric. If they are not applicable, they were left out.

Metrics which are neither used for alarming nor graphing are used for creation of reports (ASCII Report, OV Reporter or OVPI reports).

Metric Number	<p>The identification number assigned to the metric.</p> <p>All DB2SPI metrics are in the numbered as xxxy where the first 3 digits (xxx) can be used to determine the metric and the last digit (y) can be used to determine the level. The levels and the corresponding numbers used to represent them are given below.</p> <ul style="list-style-type: none">0: Database Manager1: Database2: Application3: Tablespace4: Table5: Bufferpool <p>For example the metric Buffer Pool Hit Ratio is calculated at Database, Application, Tablespace and Bufferpool levels. Accordingly the 4 level specific metrics are numbered:</p> <ul style="list-style-type: none">0031 (DB2_0031p_BufPIHit_db)0032 (DB2_0032p_BufPIHit_ap)0033 (DB2_0033p_BufPIHit_ts)0035 (DB2_0035p_BufPIHit_bp) <p>Here the first 3 digits from the left (003) identify the metric BufPIHit (Buffer Pool Hit Ratio). The last digit changes according to the level at which data is being collected in this case 1 for database, 2 for Application, 3 for Tablespace and 5 for Bufferpool.</p>
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<p>Name</p>	<p>The name assigned to the metric. All DB2SPI metrics have the following format: DB2_xxyQ_name_LV All metrics start with 'DB2_' followed by the metric number as explained above. After the metric number follows the metric identifying name in the format 'Q_name_LV' where: Q is a letter used to represent what type of metric it is or how the metric has been calculated. The values for Q and what each value represents is provided below:</p> <ul style="list-style-type: none"> a average c counter g gauge i information p percentage r ratio w watermark <p>_name is the name of the metric and is as self explanatory as possible. Please note that there may be 2 or more metrics with the same name if they are being monitored at more than one database level. _LV is the level at which this metric is being monitored. Values</p> <ul style="list-style-type: none"> _in Database Manager _db Database _ap Application _ts Tablespace _tb Table _bp Bufferpool
<p>Severity</p>	<p>The severity of the metric (Critical, Major, Minor, Warning, Normal) if it is monitored</p>
<p>Description</p>	<p>The description of the metric</p>
<p>Alarming, Graphing, Reporting</p>	<p>If the metric may be used for alarming, graphing and/or Reporting the appropriate character is provided. (A, G, and/or R) If Alarming is provided, it needs to be collected with the help of a schedule template. To see whether it is collected out-of-the-box, please refer to the document "DB2SPI_Metrics.pdf".</p>

	If Graphing is provided, the Graph may be displayed with OVPM, arrange in categories as in field Area . If Reporting is provided, the kind of Report is given in the field Report Type .
Collection Interval	How often this metric is collected and analyzed
Delta	Whether the metric is calculated based on delta values. This is usually the case where metrics or metric components are provided by the database as continuous counters.
Min/Max Threshold	Whether the OVO threshold represent a Minimum or Maximum value
Threshold	The default OVO threshold
Reset (value)	The reset value for this metric.
Message Text	Message that is displayed for each condition
Instruction Text	Problem-solving information
Automatic Action Report	If the metric is an alarming metric and has an automatic action report associated with it, then the number of this automatic action report is shown here
Report Type	If the metric is used to generate a report, the application which generates it: <ul style="list-style-type: none"> ○ ASCII Report ○ OV Report ○ OVPI Report
Area	The logical area to which this metric belongs. This denotes also the Graph category if an OVPM graph is defined.

DB2_0011c_LckTO_db

Metric Number	0011
Name	DB2_0011c_LckTO_db
Severity	Warning
Type	c
Description	Lock timeouts in the database in the monitoring interval
Alarming, Graphing, Reporting	A, G
Collection Interval	60 min
Delta	Yes
Min / Max Threshold	Max
Threshold	15
Reset value	9
Message Text	<\$VALUE> datalock(s) on the database timed out and have been removed
Instruction text	<p>The number of times that a request to lock an object timed-out instead of being granted. This element can help you adjust the setting for the locktimeout database configuration parameter. If the number of lock time-outs becomes excessive when compared to normal operating levels, you may have an application that is holding locks for long durations. In this case, this element may indicate that you should analyze some of the other elements related to 'Locks and Deadlocks'.</p> <p>You could also have too few lock time-outs if your locktimeout database configuration parameter is set too high. In this case, your applications may wait excessively to obtain a lock.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Number of locks / deadlocks

DB2_0012c_LckTO_ap

Metric Number	0012
Name	DB2_0012c_LckTO_ap
Severity	Warning
Type	c
Description	Lock timeouts in an application in the monitoring interval
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	yes
Min / Max Threshold	Max
Threshold	8
Reset value	5
Message Text	<\$VALUE> datalock(s) in the application <\$OPTION(appl)> timed out and have been removed
Instruction text	<p>The number of times that a request to lock an object timed-out instead of being granted. This element can help you adjust the setting for the locktimeout database configuration parameter. If the number of lock time-outs becomes excessive when compared to normal operating levels, you may have an application that is holding locks for long durations. In this case, this element may indicate that you should analyze some of the other elements related to 'Locks and Deadlocks'.</p> <p>You could also have too few lock time-outs if your locktimeout database configuration parameter is set too high. In this case, your applications may wait excessively to obtain a lock.</p>
Automatic Action Report	0012
Report Type	ASCII
Area	Locks and deadlocks
Graph	-

DB2_0021c_LckWaiting_db

Metric Number	0021
Name	DB2_0021c_LckWaiting_db
Severity	-
Type	c
Description	Lock waits in the database in the monitoring interval
Alarming, Graphing, Reporting	G
Collection Interval	60 min
Delta	yes
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>The total number of times that applications or connections waited for locks.</p> <p>At the database level, this is the total number of times that applications have had to wait for locks within this database.</p> <p>At the application-connection level, this is the total number of times that this connection requested a lock but had to wait because another connection was already holding a lock on the data.</p> <p>This element may be used with Time Waited On Locks to calculate, at the database level, the average wait time for a lock. This calculation can be done at either the database or the application-connection level. If the average lock wait time is high, you should look for applications that hold many locks, or have lock escalations, with a focus on tuning your applications to improve concurrency, if appropriate. If escalations are the reason for a high average lock wait time, then the values of one or both of the locklist and maxlocks configuration parameters may be too low.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Agents waiting

DB2_0022c_LckWaiting_ap

Metric Number	0022
Name	DB2_0022c_LckWaiting_ap
Severity	-
Type	c
Description	Lock waits in an application in the monitoring interval
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	yes
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>The total number of times that applications or connections waited for locks. At the database level, this is the total number of times that applications have had to wait for locks within this database. At the application-connection level, this is the total number of times that this connection requested a lock but had to wait because another connection was already holding a lock on the data. This element may be used with Time Waited On Locks to calculate, at the database level, the average wait time for a lock. This calculation can be done at either the database or the application-connection level. If the average lock wait time is high, you should look for applications that hold many locks, or have lock escalations, with a focus on tuning your applications to improve concurrency, if appropriate. If escalations are the reason for a high average lock wait time, then the values of one or both of the locklist and maxlocks configuration parameters may be too low.</p>
Automatic Action Report	-
Report Type	ASCII
Area	Locks and deadlocks

DB2_0031p_BufPIHit_db

Metric Number	0031
Name	DB2_0031p_BufPIHit_db
Severity	Minor
Type	p
Description	The buffer pool hit ratio for the database expressed as a percentage
Alarming, Graphing, Reporting	A, G
Collection Interval	10
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	70%
Message Text	The database Buffer Pool Hit Ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%)
Instruction text	<p>The overall buffer pool hit ratio is calculated using the following formula:</p> $1 - ((\text{buffer pool data physical reads} + \text{buffer pool index physical reads}) / (\text{buffer pool data logical reads} + \text{buffer pool index logical reads}))$ <p>Increasing buffer pool size will generally improve the hit ratio, but you will reach a point of diminishing return. Ideally, if you could allocate a buffer pool large enough to store Your entire database, then once the system is up and running you would Get a hit ratio of 100%. However, this is unrealistic in most cases. The significance of the hit ratio really depends on the size of Your data, and the way it is accessed. A very large database where Data is accessed evenly would have a poor hit ratio. There is little You can do with very large tables. In such case, you would focus your Attention on smaller, frequently accessed tables, and on the indices. Perhaps, assigning them to an individual buffer pools, for which you can aim for higher hit ratios.</p>
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	Buffer pool hit ratio

DB2_0032p_BufPIHit_ap

Metric Number	0032
Name	DB2_0032p_BufPIHit_ap
Severity	Minor
Type	p
Description	The buffer pool hit ratio for an application expressed as a percentage
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	70%
Message Text	The Buffer Pool Hit Ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for application <\$OPTION(add)>
Instruction text	<p>The overall buffer pool hit ratio is calculated using the following formula:</p> $1 - ((\text{buffer pool data physical reads} + \text{buffer pool index physical reads}) / (\text{buffer pool data logical reads} + \text{buffer pool index logical reads}))$ <p>Increasing buffer pool size will generally improve the hit ratio, but you will reach a point of diminishing return. Ideally, if you could allocate a buffer pool large enough to store Your entire database, then once the system is up and running you would Get a hit ratio of 100%. However, this is unrealistic in most cases. The significance of the hit ratio really depends on the size of Your data, and the way it is accessed. A very large database where Data is accessed evenly would have a poor hit ratio. There is little You can do with very large tables. In such case, you would focus your Attention on smaller, frequently accessed tables, and on the indices. Perhaps, assigning them to an individual buffer pools, for which you can aim for higher hit ratios.</p>
Automatic Action Report	0032
Report Type	ASCII
Area	Buffer pool

DB2_0033p_BufPIHit_ts

Metric Number	0033
Name	DB2_0033p_BufPIHit_ts
Severity	Minor
Type	p
Description	The buffer pool hit ratio for the tablespace expressed as a percentage
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	70%
Message Text	The Buffer Pool Hit Ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for tablespace <\$OPTION(add)>
Instruction text	<p>The overall buffer pool hit ratio is calculated using the following formula:</p> $1 - ((\text{buffer pool data physical reads} + \text{buffer pool index physical reads}) / (\text{buffer pool data logical reads} + \text{buffer pool index logical reads}))$ <p>Increasing buffer pool size will generally improve the hit ratio, but you will reach a point of diminishing return. Ideally, if you could allocate a buffer pool large enough to store Your entire database, then once the system is up and running you would Get a hit ratio of 100%. However, this is unrealistic in most cases. The significance of the hit ratio really depends on the size of Your data, and the way it is accessed. A very large database where Data is accessed evenly would have a poor hit ratio. There is little You can do with very large tables. In such case, you would focus your Attention on smaller, frequently accessed tables, and on the indices. Perhaps, assigning them to an individual buffer pools, for which you can aim for higher hit ratios.</p>
Automatic Action Report	-
Report Type	-
Area	Buffer pool

DB2_0035p_BufPIHit_bp

Metric Number	0035
Name	DB2_0035p_BufPIHit_bp
Severity	Minor
Type	p
Description	The buffer pool hit ratio for a particular buffer pool expressed as a percentage
Alarming, Graphing, Reporting	A, R
Collection Interval	30 min
Delta	No
Min / Max Threshold	Min
Threshold	60%
Reset value	80%
Message Text	The Buffer Pool Hit Ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for bufferpool <\$OPTION(add)>
Instruction text	-
Automatic Action Report	-
Report Type	OVPI
Area	Buffer pool

DB2_0044c_PgReorg_tb

Metric Number	0044
Name	DB2_0044c_PgReorg_tb
Severity	Minor
Type	c
Description	Page reorganizations in a table in the monitoring interval
Alarming, Graphing, Reporting	A
Collection Interval	60 min
Delta	yes
Min / Max Threshold	Max
Threshold	10
Reset value	6
Message Text	The number of Page Reorganizations (<\$VALUE>%) exceeds configured threshold (<\$THRESHOLD>%)
Instruction text	<p>The number of page reorganizations executed for a table.</p> <p>Too many page reorganizations can result in less than optimal insert performance. You can use the REORG TABLE utility to reorganize a table and eliminate fragmentation. You can also use the APPEND parameter for the ALTER TABLE statement to indicate that all inserts are appended at the end of a table and so avoid page reorgs.</p> <p>In situations where update to rows causes the row length to increase, the page may have enough space to accommodate the new row, but a page reorg may be required to defragment that space.</p> <p>Or if the page does not have enough space for the new larger row, an overflow record is created being created causing Accesses to Overflowed Records during reads.</p> <p>You can avoid both situations by using fixed length columns instead of varying length columns.</p>
Automatic Action Report	-
Report Type	-
Area	Table activity

DB2_0051c_PkgCacheOvfl_db

Metric Number	0051
Name	DB2_0051c_PkgCacheOvfl_db
Severity	Minor
Type	C
Description	Package cache overflows in the database in the monitoring interval
Alarming, Graphing, Reporting	A
Collection Interval	60 min
Delta	Yes
Min / Max Threshold	Max
Threshold	18
Reset value	12
Message Text	A package cache overflow has occurred
Instruction text	<p>The number of times that the package cache overflowed the bounds of its allocated memory. Use this element with pkg_cache_size_top to determine whether the size of the package cache needs to be increased to avoid overflowing.</p> <p>Overflows of the package cache can cause unnecessary lock escalations, resulting in loss of concurrency, or out of memory errors from the other heaps allocated out of the database shared memory, as well as performance degradation.</p>
Automatic Action Report	-
Report Type	-
Area	Package cache

DB2_0061p_SortOvfl_db

Metric Number	0061
Name	DB2_0061p_SortOvfl_db
Severity	Minor
Type	p
Description	Percent sort overflows in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	3%
Reset value	2%
Message Text	Sort overflow / total overflow (<\$VALUE>%) exceeds configured threshold (<\$THRESHOLD>%) for database
Instruction text	<p>The percentage of sorts that ran out of sort heap and may have required disk space for temporary storage. If this percentage is high, you may want adjust the database configuration by increasing the value of <i>sortheap</i>.</p> <p>When a sort overflows, additional overhead will be incurred because the sort will require a merge phase and can potentially require more I/O, if data needs to be written to disk.</p> <p>This element provides information for all applications accessing one database.</p>
Automatic Action Report	-
Report Type	-
Area	Sorts
Graph	Conspicuous sorts

DB2_0062p_SortOvfl_ap

Metric Number	0062
Name	DB2_0062p_SortOvfl_ap
Severity	Minor
Type	p
Description	Percent sort overflows for an application
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3%
Reset value	2%
Message Text	Sort overflow / total overflow (<\$VALUE>%) exceeds configured threshold (<\$THRESHOLD>%) for application <\$OPTION(add)>
Instruction text	<p>The percentage of sorts that ran out of sort heap and may have required disk space for temporary storage. If this percentage is high, you may want adjust the database configuration by increasing the value of sortheap.</p> <p>When a sort overflows, additional overhead will be incurred because the sort will require a merge phase and can potentially require more I/O, if data needs to be written to disk. This element provides information for one application.</p>
Automatic Action Report	0062
Report Type	Both
Area	Sorts

DB2_0071g_ApplConnCur_db

Metric Number	0071
Name	DB2_0071g_ApplConnCur_db
Severity	Warning
Type	g
Description	Applications connected currently in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	36
Reset value	30
Message Text	High application load (<\$VALUE>) on the DB2 server
Instruction text	Indicates the number of applications that are currently connected to the database. You may use this element to help you understand the level of activity within a database and the amount of system resource being used. It can help you adjust the setting of the maxappls and max_coordagents configuration parameters, which are described in the IBM DB2 Administration Guide. For example, its value is always the same as maxappls, you may want to increase the value of maxappls.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Applications

DB2_0081p_InxHit_db

Metric Number	0081
Name	DB2_0081p_InxHit_db
Severity	Minor
Type	p
Description	Indicates the percentage of read requests for index pages that have gone through the buffer pool.
Alarming, Graphing, Reporting	A, G
Collection Interval	10 Minutes
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	60%
Message Text	Index read page hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for the database
Instruction text	<p>The index page hit ratio for the buffer pool using one of the following:</p> <p>1 - (buffer pool index physical reads / buffer pool index logical reads)</p> <p>If the hit ratio is low, increasing the number of buffer pool pages may improve performance. See the Administration Guide provided by IBM for more information about buffer pool size.</p>
Automatic Action Report	-
Report Type	-
Area	Buffer Pool
Graph	Buffer pool hit ratio

DB2_0082p_InxHit_ap

Metric Number	0082
Name	DB2_0082p_InxHit_ap
Severity	Minor
Type	P
Description	Indicates the percentage of read requests for index pages that have gone through the buffer pool.
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	60%
Message Text	Index read page hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for the application <\$OPTION(add)>
Instruction text	<p>The index page hit ratio for the buffer pool using one of the following:</p> <p>1 - (buffer pool index physical reads / buffer pool index logical reads)</p> <p>If the hit ratio is low, increasing the number of buffer pool pages may improve performance. See the Administration Guide provided by IBM for more information about buffer pool size.</p>
Automatic Action Report	0082
Report Type	ASCII
Area	Buffer Pool

DB2_0083p_InxHit_ts

Metric Number	0083
Name	DB2_0083p_InxHit_ts
Severity	Minor
Type	p
Description	Indicates the percentage of read requests for index pages that have gone through the buffer pool.
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	60%
Message Text	Index read page hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for table space <\$OPTION(add)>
Instruction text	<p>The index page hit ratio for the buffer pool using one of the following:</p> <p>1 - (buffer pool index physical reads / buffer pool index logical reads)</p> <p>If the hit ratio is low, increasing the number of buffer pool pages may improve performance. See the Administration Guide provided by IBM for more information about buffer pool size.</p>
Automatic Action Report	-
Report Type	-
Area	Buffer pool

DB2_0085p_InxHit_bp

Metric Number	0085
Name	DB2_0085p_InxHit_bp
Severity	Minor
Type	p
Description	Indicates the percentage of read requests for index pages that have gone through a particular buffer pool – Index Hit Ratio.
Alarming, Graphing, Reporting	A, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	60%
Reset value	80%
Message Text	Index read page hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for bufferpool <\$OPTION(add)>
Instruction text	-
Automatic Action Report	-
Report Type	OVPI
Area	Buffer pool

DB2_0091a_DirRdTime_db

Metric Number	0091
Name	DB2_0091a_DirRdTime_db
Severity	Major
Type	a
Description	Average direct read time for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	500 ms
Reset value	300 ms
Message Text	Direct read time (<\$VALUE>) from DB2 database exceeds threshold
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct reads. Formula is: direct read time / direct reads from database A high average time may indicate an I/O conflict.
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	Average direct read / write time for an application

DB2_0092a_DirRdTime_ap

Metric Number	0092
Name	DB2_0092a_DirRdTime_ap
Severity	Major
Type	a
Description	Average direct read time for all applications connected to the database
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	500 ms
Reset value	300 ms
Message Text	Direct read time (<\$VALUE>) from DB2 database exceeds threshold for application <\$OPTION(add)>
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct reads. Formula is: direct read time / direct reads from all applications A high average time may indicate an I/O conflict.
Automatic Action Report	0092
Report Type	ASCII
Area	Direct I/O

DB2_0093a_DirRdTime_ts

Metric Number	0093
Name	DB2_0093a_DirRdTime_ts
Severity	Major
Type	a
Description	Average direct read time for a table space
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	500 ms
Reset value	300 ms
Message Text	Direct read time (<\$VALUE>) from DB2 database exceeds threshold for tablespace <\$OPTION(add)>
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct reads. Formula is: direct read time / direct reads from database A high average time may indicate an I/O conflict.
Automatic Action Report	-
Report Type	-
Area	Direct I/O

DB2_0101a_DirWrtTime_db

Metric Number	0101
Name	DB2_0101a_DirWrtTime_db
Severity	Major
Type	a
Description	Average direct write time for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	500 ms
Reset value	300 ms
Message Text	Direct write time (<\$VALUE>) to database exceeds threshold
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct writes. direct write time / direct writes from database A high average time may indicate an I/O conflict.
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	Average direct read / write time for an application

DB2_0102a_DirWrtTime_ap

Metric Number	0102
Name	DB2_0102a_DirWrtTime_ap
Severity	Major
Type	a
Description	Average direct write time for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	500 ms
Reset value	300 ms
Message Text	Direct write time (<\$VALUE>) to application <\$OPTION(add)> exceeds threshold
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct writes. direct write time / direct writes from database A high average time may indicate an I/O conflict.
Automatic Action Report	0102
Report Type	Both
Area	Direct I/O

DB2_0103a_DirWrtTime_ts

Metric Number	0103
Name	DB2_0103a_DirWrtTime_ts
Severity	Major
Type	a
Description	Average direct write time for a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	500ms
Reset value	300ms
Message Text	Direct write time (<\$VALUE>) to tablespace <\$OPTION(add)> exceeds threshold
Instruction text	The average elapsed time (in milliseconds) per sector required to perform the direct writes. direct write time / direct writes from database A high average time may indicate an I/O conflict.
Automatic Action Report	-
Report Type	-
Area	Direct I/O

DB2_0111p_CatCacheHit_db

Metric Number	0111
Name	DB2_0111p_CatCacheHit_db
Severity	Minor
Type	p
Description	The catalog cache hit ratio for the database expressed as a percentage
Alarming, Graphing, Reporting	A
Collection Interval	10 min
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	45%
Message Text	Catalog cache hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for database
Instruction text	The ratio indicates how well the catalog cache is avoiding catalog accesses. If the ratio is high (more than 0.8), then the cache is performing well. A smaller ratio might suggest that the catalogcache_sz should be increased. You should expect a large ratio immediately following the first connection to the database. The execution of Data Definition Language (DDL) SQL statements involving a table, view, or alias will evict the table descriptor information for that object from the catalog cache causing it to be re-inserted on the next reference. Therefore, the heavy use of DDLs may also increase the ratio.
Automatic Action Report	-
Report Type	-
Area	Catalog cache

DB2_0112p_CatCacheHit_ap

Metric Number	0112
Name	DB2_0112p_CatCacheHit_ap
Severity	Minor
Type	p
Description	The catalog cache hit ratio for an application expressed as a percentage
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	40%
Reset value	60%
Message Text	Catalog cache hit ratio (<\$VALUE>%) below configured threshold (<\$THRESHOLD>%) for application <\$OPTION(add)>>
Instruction text	The ratio indicates how well the catalog cache is avoiding catalog accesses. If the ratio is high (more than 0.8), then the cache is performing well. A smaller ratio might suggest that the catalogcache_sz should be increased. You should expect a large ratio immediately following the first connection to the database. The execution of Data Definition Language (DDL) SQL statements involving a table, view, or alias will evict the table descriptor. Information for that object from the catalog cache causing it to be re-inserted on the next reference. Therefore, the heavy use of DDLs may also increase the ratio.
Automatic Action Report	0112
Report Type	ASCII
Area	Catalog cache

DB2_0120p_PipeSortAccep_in

Metric Number	0120
Name	DB2_0120p_PipeSortAccep_in
Severity	Major
Type	p
Description	Percent piped sorts accepted in the database manager
Alarming, Graphing, Reporting	A, G
Collection Interval	30 Minutes
Delta	no
Min / Max Threshold	Min
Threshold	10%
Reset value	15%
Message Text	Very low percentage of accepted piped sorts (<\$VALUE>) on the DB2 server
Instruction text	<p>Calculation: Pipe sorts requested / Pipe sorts accepted</p> <p>The percentage of piped sorts that have been accepted. Each active sort on the system allocates memory, which may result in sorting taking up too much of the available system memory. When the number of accepted piped sorts is low compared to the number requested, you can improve sort performance by adjusting one or both of the following configuration parameters:</p> <ul style="list-style-type: none"> (1) sorthheap (2) sheapthres <p>If piped sorts are being rejected, you might consider decreasing your sort heap or increasing your sort heap threshold. You should be aware of the possible implications of either of these options. If you increase the sort heap threshold, then there is the possibility that more memory will remain allocated for sorting. This could cause the paging of memory to disk. If you decrease the sort heap, you might require an extra merge phase that could slow down the sort.</p>
Automatic Action Report	-
Report Type	-
Area	Sorts
Graph	Conspicuous sorts

DB2_0130c_PostThrSort_in

Metric Number	0130
Name	DB2_0130c_PostThrSort_in
Severity	Minor
Type	c
Description	Post threshold sorts in the instance
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2
Message Text	Number of post threshold sorts (<\$VALUE>) exceeds alert limit (<\$THRESHOLD>)
Instruction text	<p>The number of sorts that have requested heaps after the sort heap threshold has been reached. Under normal conditions, the database manager will allocate sort heap using the value specified by the sortheap configuration parameter. If the amount of memory allocated to sort heaps exceeds the sort heap threshold (sheapthres configuration parameter), the database manager will allocate sort heap using a value less than that specified by the sortheap configuration parameter. Each active sort on the system allocates memory, which may result in sorting taking up too much of the system memory available. Sorts that start after the sort heap threshold has been reached may not receive an optimum amount of memory to execute, but, as a result, the entire system may benefit. By modifying the sort heap threshold and sort heap size configuration parameters, the performance of sort operations and/or the overall system can be improved.</p> <p>If this element's value is high, you can:</p> <ol style="list-style-type: none"> (1) Increase the sort heap threshold (sheapthres) or, (2) Adjust applications to use fewer or smaller sorts via SQL query changes.
Automatic Action Report	-
Report Type	-
Area	Sorts
Graph	Conspicuous sorts

DB2_0141a_LckWaitTime_db

Metric Number	0141
Name	DB2_0141a_LckWaitTime_db
Severity	Major
Type	A
Description	Average lock wait time for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	10ms
Reset value	8ms
Message Text	Average lock wait time (<\$VALUE>) from DB2 database exceeds threshold
Instruction text	<p>The average elapsed time waited for a lock. At the database level, this is the average amount of elapsed time that all applications were waiting for a lock within this database. Calculation: Time database waited on lock / Lock Waits When using data elements providing elapsed times, you should consider elapsed times are affected by system load, so the more processes you have running, the higher this elapsed time value. If the average lock wait time is high, you should look for applications that hold many locks, or have lock escalations, with a focus on tuning your applications to improve concurrency, if appropriate. If escalations are the reason for a high average lock wait time, then the values of one or both of the locklist and maxlocks configuration parameters may be too low.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks

DB2_0142a_LckWaitTime_ap

Metric Number	0142
Name	DB2_0142a_LckWaitTime_ap
Severity	Major
Type	a
Description	Average lock wait time for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	10ms
Reset value	8
Message Text	Average lock wait time (<\$VALUE>) for application <\$OPTION(add)> exceeds threshold
Instruction text	<p>The average elapsed time waited for a lock.</p> <p>At the database level, this is the average amount of elapsed time that all applications were waiting for a lock within this database.</p> <p>When using data elements providing elapsed times, you should consider elapsed times are affected by system load, so the more processes you have running, the higher this elapsed time value.</p> <p>If the average lock wait time is high, you should look for applications that hold many locks, or have lock escalations, with a focus on tuning your applications to improve concurrency, if appropriate.</p> <p>If escalations are the reason for a high average lock wait time, then the values of one or both of the locklist and maxlocks configuration parameters may be too low.</p>
Automatic Action Report	0142
Report Type	ASCII
Area	Locks and deadlocks

DB2_0151p_ApplWaitOnLck_db

Metric Number	0151
Name	DB2_0151p_ApplWaitOnLck_db
Severity	Major
Type	p
Description	Percent applications in the database that are waiting on locks
Alarming, Graphing, Reporting	A
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	85%
Reset value	75%
Message Text	High percentage of applications waiting for locks (<\$VALUE>%) exceeds configured threshold (<\$THRESHOLD>%)
Instruction text	Indicates the percentage of agents waiting on a lock. This element indicates the percentage of applications currently waiting on locks. If this number is high, the applications may have concurrency problems, and you should identify applications that are holding locks or exclusive locks for long periods of time.
Automatic Action Report	-
Report Type	-
Area	Agents and applications

DB2_0161c_IntDlckRollb_db

Metric Number	0161
Name	DB2_0161c_IntDlckRollb_db
Severity	Minor
Type	c
Description	Internal deadlocked rollbacks in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	2
Reset value	1.4
Message Text	Number of internal deadlock rollbacks (<\$VALUE>) exceeds alert limit
Instruction text	<p>The total number of forced rollbacks initiated by the database manager due to a deadlock. A rollback is performed on the current unit of work in an application selected by the database manager to resolve the deadlock.</p> <p>This element shows the number of deadlocks that have been broken and can be used as an indicator of concurrency problems.</p> <p>It is important, since internal rollbacks due to deadlocks lower the throughput of the database.</p> <p>This value is included in the value given by Internal Rollbacks.</p>
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	Internal Statements

DB2_0162c_IntDlckRollb_ap

Metric Number	0162
Name	DB2_0162c_IntDlckRollb_ap
Severity	Minor
Type	c
Description	Internal deadlocked rollbacks in an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2.1
Message Text	Number of internal deadlock rollbacks (<\$VALUE>) exceeds alert limit for application <\$OPTION(add)>
Instruction text	<p>The total number of forced rollbacks initiated by the database manager due to a deadlock. A rollback is performed on the current unit of work in an application selected by the database manager to resolve the deadlock.</p> <p>This element shows the number of deadlocks that have been broken and can be used as an indicator of concurrency problems.</p> <p>It is important, since internal rollbacks due to deadlocks lower the throughput of the database.</p> <p>This value is included in the value given by Internal Rollbacks.</p>
Automatic Action Report	0162
Report Type	ASCII Report
Area	Statements

DB2_0172p_OpnLocCursBlk_ap

Metric Number	0172
Name	DB2_0172p_OpnLocCursBlk_ap
Severity	Minor
Type	p
Description	Percent open local cursors with blocking
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	20%
Reset value	30%
Message Text	Percentage of local open cursors (<\$VALUE>) is below limit (<\$THRESHOLD>)
Instruction text	<p>The percentage of local blocking cursors currently open for this application calculated as</p> $\text{Open local cursors with blocking} / \text{Open local cursors} * 100$ <p>If the percentage is low, you may be able to improve performance by improving the row blocking in the application:</p> <ol style="list-style-type: none"> 1. Check the pre-compile options for record blocking for treatment of ambiguous cursors 2. Redefine cursors to allow for blocking (for example, if possible, specify FOR FETCH ONLY on your cursors). <p>Rejected Block Cursor Requests and Accepted Block Cursor Requests in the snapshot provide additional information that may help you tune your configuration parameters to improve row blocking in your application.</p>
Automatic Action Report	0172
Report Type	ASCII Report
Area	SQL Cursor

DB2_0180g_SortHeapAlloc_in

Metric Number	0180
Name	DB2_0180g_SortHeapAlloc_in
Severity	Warning
Type	g
Description	Sort heap allocated in the database manager
Alarming, Graphing, Reporting	A
Collection Interval	30min
Delta	no
Min / Max Threshold	Max
Threshold	18000
Reset value	15000
Message Text	Number of memory pages allocated for the sort heap (<\$VALUE>) on the DB2 server exceeds limit
Instruction text	<p>The total number of allocated pages of sort heap space for all sorts at the level chosen and at the time the snapshot was taken.</p> <p>The amount of memory allocated for each sort may be some or all of the available sort heap size. Sort heap size is the amount of memory available for each sort as defined in the database configuration parameter sortheap. It is possible for a single application to have concurrent sorts active. For example, in some cases a SELECT statement with a subquery can cause concurrent sorts.</p> <p>Information may be collected at two levels:</p> <p>(1) At the database manager level, it represents the sum of sort heap space allocated for all sorts in all active databases in the database manager</p> <p>(2) At the database level, it represents the sum of the sort heap space allocated for all sorts in a database. Normal memory estimates do not include sort heap space.</p> <p>If excessive sorting is occurring, the extra memory used for the sort heap should be added to the base memory requirements for running the database manager. Generally, the larger the sort heap, the more efficient the sort. Appropriate use of indexes can reduce the amount of sorting required. You may use the information returned at the database manager level to help you tune the sheapthres configuration parameter. If the element value is greater than or equal to sheapthres, it means that the sorts are not getting the full sort heap as defined by the sortheap parameter.</p>
Automatic Action Report	-
Report Type	-

Area	Sorts
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DB2_0181g_SortHeapAlloc_db

Metric Number	0181
Name	DB2_0181g_SortHeapAlloc_db
Severity	-
Type	g
Description	Sort heap allocated in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	
Instruction text	<p>The total number of allocated pages of sort heap space for all sorts at the level chosen and at the time the snapshot was taken.</p> <p>The amount of memory allocated for each sort may be some or all of the available sort heap size. Sort heap size is the amount of memory available for each sort as defined in the database configuration parameter sortheap. It is possible for a single application to have concurrent sorts active. For example, in some cases a SELECT statement with a subquery can cause concurrent sorts.</p> <p>Information may be collected at two levels:</p> <p>(1) At the database manager level, it represents the sum of sort heap space allocated for all sorts in all active databases in the database manager</p> <p>(2) At the database level, it represents the sum of the sort heap space allocated for all sorts in a database. Normal memory estimates do not include sort heap space.</p> <p>If excessive sorting is occurring, the extra memory used for the sort heap should be added to the base memory requirements for running the database manager. Generally, the larger the sort heap, the more efficient the sort. Appropriate use of indexes can reduce the amount of sorting required. You may use the information returned at the database manager level to help you tune the sheapthres configuration parameter. If the element value is greater than or equal to sheapthres, it means that the sorts are not getting the full sort heap as defined by the sortheap parameter.</p>
Automatic Action Report	-
Report Type	ASCII Report
Area	Sorts

Graph	Sort heap
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DB2_0191c_LckEscal_db

Metric Number	0191
Name	DB2_0191c_LckEscal_db
Severity	Minor
Type	C
Description	Lock escalations in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	60 min
Delta	no
Min / Max Threshold	Max
Threshold	2
Reset value	1.5
Message Text	Number of lock escalations (<\$VALUE>) on the DB2 server exceeds limit
Instruction text	<p>The number of times that locks have been escalated from several row locks to a table lock. A lock is escalated when the total number of locks held by an application reaches the maximum amount of lock list space available to the application, or the lock list space consumed by all applications is approaching the total lock list space.</p> <p>The amount of lock list space available is determined by the maxlocks and locklist configuration parameters. When an application reaches the maximum number of locks allowed and there are no more locks to escalate, it will then use space in the lock list allocated for other applications. When the entire lock list is full, an error occurs. This data item includes a count of all lock escalations, including exclusive lock escalations.</p> <p>There are several possible causes for excessive lock escalations:</p> <ol style="list-style-type: none"> (1) The lock list size (locklist) may be too small for the number of concurrent applications (2) The percent of the lock list usable by each application (maxlocks) may be too small (3) One or more applications may be using an excessive number of locks. <p>To resolve these problems, you may be able to:</p> <ol style="list-style-type: none"> (1) Increase the locklist configuration parameter value. (2) Increase the maxlocks configuration parameter value. (3) Identify the applications with large numbers of locks or those that are holding too much of the lock list, using the following formula: $(((locks\ held * 36) / (locklist * 4096)) * 100)$ and comparing the value to maxlocks. <p>These applications can also cause lock escalations in other applications by using too large a portion of the lock list.</p>

	These applications may need to resort to using table locks instead of row locks, although table locks may cause an increase in 'Lock Waits' and 'Time Waited On Locks'.
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Escalation

DB2_0192c_LckEscal_ap

Metric Number	0192
Name	DB2_0192c_LckEscal_ap
Severity	Minor
Type	c
Description	Lock escalations in an application
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2.1
Message Text	Number of lock escalations (<\$VALUE>) for application <\$OPTION(add)> exceeds limit
Instruction text	<p>The number of times that locks have been escalated from several row locks to a table lock. A lock is escalated when the total number of locks held by an application reaches the maximum amount of lock list space available to the application, or the lock list space consumed by all applications is approaching the total lock list space.</p> <p>The amount of lock list space available is determined by the maxlocks and locklist configuration parameters. When an application reaches the maximum number of locks allowed and there are no more locks to escalate, it will then use space in the lock list allocated for other applications. When the entire lock list is full, an error occurs. This data item includes a count of all lock escalations, including exclusive lock escalations.</p> <p>There are several possible causes for excessive lock escalations:</p> <ol style="list-style-type: none"> (1) The lock list size (locklist) may be too small for the number of concurrent applications (2) The percent of the lock list usable by each application (maxlocks) may be too small (3) One or more applications may be using an excessive number of locks. <p>To resolve these problems, you may be able to:</p> <ol style="list-style-type: none"> (1) Increase the locklist configuration parameter value. (2) Increase the maxlocks configuration parameter value. (3) Identify the applications with large numbers of locks or those that are holding too much of the lock list, using the following formula: $(((locks\ held * 36) / (locklist * 4096)) * 100)$ and comparing the value to maxlocks. <p>These applications can also cause lock escalations in other applications by using too large a portion of the lock list.</p>

	These applications may need to resort to using table locks instead of row locks, although table locks may cause an increase in 'Lock Waits' and 'Time Waited On Locks'.
Automatic Action Report	0192
Report Type	ASCII Report
Area	Locks and deadlocks

DB2_0201c_ExclLckEscal_db

Metric Number	0201
Name	DB2_0201c_ExclLckEscal_db
Severity	Major
Type	c
Description	Exclusive lock escalations in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	60 min
Delta	no
Min / Max Threshold	Max
Threshold	2
Reset value	1.5
Message Text	Number of exclusive lock escalations (<\$VALUE>) on the DB2 server exceeds limit
Instruction text	<p>The number of times that locks have been escalated from several row locks to one exclusive table lock, or the number of times an exclusive lock on a row caused the table lock to become an exclusive lock.</p> <p>Other applications cannot access data held by an exclusive lock; therefore it is important to track exclusive locks since they can impact the concurrency of your data. A lock is escalated when the total number of locks held by an application reaches the maximum amount of lock list space available to the application.</p> <p>The amount of lock list space available is determined by the locklist and maxlocks configuration parameters.</p> <p>When an application reaches the maximum number of locks allowed and there are no more locks to escalate, it will then use space in the lock list allocated for other applications. When the entire lock list is full, an error occurs. See 'Number of Lock Escalations' for possible causes and resolutions to excessive exclusive lock escalations. An application may be using exclusive locks when share locks are sufficient. Although share locks may not reduce the total number of lock escalations share lock escalations may be preferable to exclusive lock escalations.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Escalation

DB2_0202c_ExclLckEscal_ap

Metric Number	0202
Name	DB2_0202c_ExclLckEscal_ap
Severity	Major
Type	c
Description	Exclusive lock escalations in an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2.1
Message Text	Number of exclusive lock escalations (<\$VALUE>) for application <\$OPTION(add)> exceeds limit
Instruction text	<p>The number of times that locks have been escalated from several row locks to one exclusive table lock, or the number of times an exclusive lock on a row caused the table lock to become an exclusive lock.</p> <p>Other applications cannot access data held by an exclusive lock; therefore it is important to track exclusive locks since they can impact the concurrency of your data. A lock is escalated when the total number of locks held by an application reaches the maximum amount of lock list space available to the application.</p> <p>The amount of lock list space available is determined by the locklist and maxlocks configuration parameters.</p> <p>When an application reaches the maximum number of locks allowed and there are no more locks to escalate, it will then use space in the lock list allocated for other applications. When the entire lock list is full, an error occurs. See 'Number of Lock Escalations' for possible causes and resolutions to excessive exclusive lock escalations. An application may be using exclusive locks when share locks are sufficient. Although share locks may not reduce the total number of lock escalations share lock escalations may be preferable to exclusive lock escalations.</p>
Automatic Action Report	0202
Report Type	ASCII Report
Area	Locks and deadlocks

DB2_0211c_Dlck_db

Metric Number	0211
Name	DB2_0211c_Dlck_db
Severity	Major
Type	c
Description	Deadlocks in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	60 min
Delta	no
Min / Max Threshold	Max
Threshold	2
Reset value	1.5
Message Text	Number of deadlocks (<\$VALUE>) exceeds alert limit (<\$THRESHOLD>)
Instruction text	<p>The total number of deadlocks that have occurred. This element can indicate that applications are experiencing contention problems. These problems could be caused by the following situations:</p> <ol style="list-style-type: none"> (1) Lock escalations are occurring for the database (2) An application may be locking tables explicitly when system-generated row locks may be sufficient (3) An application may be using an inappropriate isolation level when binding (4) Catalog tables are locked for repeatable read (5) Applications are getting the same locks in different orders, resulting in deadlock. <p>You may be able to resolve the problem by determining in which applications (or application processes) the deadlocks are occurring. You may then be able to modify the application to better enable it to execute concurrently. Some applications, however, may not be capable of running concurrently. 10 deadlocks in 5 minutes is much more severe than 10 deadlocks in 5 hours.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Number of locks / deadlocks

DB2_0212c_Dlck_ap

Metric Number	0212
Name	DB2_0212c_Dlck_ap
Severity	Minor
Type	c
Description	Deadlocks in an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2.1
Message Text	Number of deadlocks (<\$VALUE>) exceeds alert limit (<\$THRESHOLD>) for application <\$OPTION(add)>
Instruction text	<p>The total number of deadlocks that have occurred.</p> <p>This element can indicate that applications are experiencing contention problems. These problems could be caused by the following situations:</p> <ol style="list-style-type: none"> (1) Lock escalations are occurring for the database (2) An application may be locking tables explicitly when system-generated row locks may be sufficient (3) An application may be using an inappropriate isolation level when binding (4) Catalog tables are locked for repeatable read (5) Applications are getting the same locks in different orders, resulting in deadlock. <p>You may be able to resolve the problem by determining in which applications (or application processes) the deadlocks are occurring.</p> <p>You may then be able to modify the application to better enable it to execute concurrently. Some applications, however, may not be capable of running concurrently. 10 deadlocks in 5 minutes are much more severe than 10 deadlocks in 5 hours.</p>
Automatic Action Report	0212
Report Type	ASCII Report
Area	Locks and deadlocks

DB2_0221a_LckWaitTime_db

Metric Number	0221
Name	DB2_0221a_LckWaitTime_db
Severity	-
Type	a
Description	Lock wait time for the database
Alarming, Graphing, Reporting	G
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>The total elapsed time waited for a lock.</p> <p>At the database level, this is the total amount of elapsed time that all applications were waiting for a lock within this database.</p> <p>This element may be used in conjunction with the Lock Waits monitor element to calculate the average wait time for a lock.</p> <p>This calculation can be performed at either the database or the application-connection level. When using data elements providing elapsed times, you should consider:</p> <p>(1) Elapsed times are affected by system load, so the more processes you have running, the higher this elapsed time value.</p> <p>(2) To calculate this data element at the database level, the database system monitor sums the application-level times. This can result in double counting elapsed times at a database level, since more than one application process can be running at the same time.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Wait time

DB2_0222a_LckWaitTime_ap

Metric Number	0222
Name	DB2_0222a_LckWaitTime_ap
Severity	-
Type	a
Description	Lock wait time for an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>The total elapsed time waited for a lock.</p> <p>At the database level, this is the total amount of elapsed time that all applications were waiting for a lock within this database.</p> <p>This element may be used in conjunction with the Lock Waits monitor element to calculate the average wait time for a lock.</p> <p>This calculation can be performed at either the database or the application-connection level. When using data elements providing elapsed times, you should consider:</p> <p>(1) Elapsed times are affected by system load, so the more processes you have running, the higher this elapsed time value.</p> <p>(2) To calculate this data element at the database level, the database system monitor sums the application-level times. This can result in double counting elapsed times at a database level, since more than one application process can be running at the same time.</p>
Automatic Action Report	-
Report Type	ASCII Report
Area	Locks and deadlocks

DB2_0232w_MaxAssocAgt_ap

Metric Number	0232
Name	DB2_0232w_MaxAssocAgt_ap
Severity	Major
Type	w
Description	Maximum number of associated agents
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	180
Reset value	150
Message Text	Number of associated agents (<\$VALUE>) from application <\$OPTION(add)> exceeds threshold
Instruction text	The maximum number of subagents associated with this application. If the peak number of subagents is close to the num_poolagents configuration parameter, this might indicate too high a workload for this node.
Automatic Action Report	0232
Report Type	ASCII Report
Area	Agents and applications

DB2_0240c_AgtStolen_in

Metric Number	0240
Name	DB2_0240c_AgtStolen_in
Severity	Minor
Type	c
Description	Stolen agents in the instance
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	80
Reset value	60
Message Text	-
Instruction text	The number of times that agents are stolen from an application. Agents are stolen when an idle agent associated with an application is reassigned to work on a different application. This element can be used in conjunction with 'Maximum Number of Associated Agents' to evaluate the load that this application places on the system.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Conspicuous agents

DB2_0242c_AgtStolen_ap

Metric Number	0242
Name	DB2_0242c_AgtStolen_ap
Severity	Minor
Type	C
Description	Stolen agents in an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	5
Reset value	3
Message Text	-
Instruction text	-
Automatic Action Report	0242
Report Type	ASCII Report
Area	Agents and applications

DB2_0250w_MaxCoordAgt_in

Metric Number	0250
Name	DB2_0250w_MaxCoordAgt_in
Severity	Minor
Type	w
Description	Maximum number of coordinating agents in the instance
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	180
Reset value	150
Message Text	Watermark of coordinating agents (<\$VALUE>) exceeds alert limit (<\$THRESHOLD>)
Instruction text	The maximum number of coordinating agents working at one time. If the peak number of coordinating agents represents too high a workload for this node, you can reduce the number that can be concurrently executing a transaction by changing the maxcagents configuration parameter. See the Administration Guide for more information on the Maximum Number of Concurrent Coordinating Agents (maxcagents) configuration parameter.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Agents

DB2_0251w_MaxCoordAgt_db

Metric Number	0251
Name	DB2_0251w_MaxCoordAgt_db
Severity	Minor
Type	w
Description	Maximum number of coordinating agents in the database
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	180
Reset value	150
Message Text	Watermark of coordinating agents (<\$VALUE>) exceeds alert limit (<\$THRESHOLD>) for database
Instruction text	The maximum number of coordinating agents working at one time. If the peak number of coordinating agents represents too high a workload for this node, you can reduce the number that can be concurrently executing a transaction by changing the maxcagents configuration parameter. See the Administration Guide for more information on the Maximum Number of Concurrent Coordinating Agents (maxcagents) configuration parameter.
Automatic Action Report	0251
Report Type	ASCII Report
Area	Agents and applications

DB2_0261i_DBStatus_db

Metric Number	0261
Name	DB2_0261i_DBStatus_db
Severity	Critical
Type	i
Description	Database status
Alarming, Graphing, Reporting	A, G, R
Collection Interval	5 min
Delta	no
Min / Max Threshold	-
Threshold	Active
Reset value	-
Message Text	
Instruction text	<p>The current status of the database. You can use this element to determine the state of your database. Values for this field are:</p> <p>SQLM_DB_ACTIVE The database is active. SQLM_DB_QUIESCE_PEND The database is in quiesce-pending state. New connections to the database are not permitted and new units of work cannot be started. Depending on the quiesce request, active units of work will be allowed to complete or will be rolled back immediately. SQLM_DB_QUIESCED The database has been quiesced. New connections to the database are not permitted and new units of work cannot be started. SQLM_DB_ROLLFWD A rollforward is in progress on the database.</p>
Automatic Action Report	-
Report Type	OV Report, OVPI Report
Area	Database
Graph	Database Status

DB2_0271p_AsyPIDtRdpReq_db

Metric Number	0271
Name	DB2_0271p_AsyPIDtRdpReq_db
Severity	Warning
Type	p
Description	Percentage asynchronous data reads per request for the database
Alarming, Graphing, Reporting	A, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	Min
Threshold	50%
Reset value	60%
Message Text	Average percentage of data pages read by asynchronous read requests (<\$VALUE>) from DB2 database exceeds threshold
Instruction text	<p>The average number of buffer pool reads per asynchronous read request. Formula:</p> <p>buffer pool asynchronous data reads / buffer pool asynchronous read requests</p> <p>This average can help you determine the amount of asynchronous I/O one in each interaction with the prefetcher</p>
Automatic Action Report	0271
Report Type	ASCII Report
Area	Buffer pool

DB2_0273p_AsyPIDtRdpReq_ts

Metric Number	0273
Name	DB2_0273p_AsyPIDtRdpReq_ts
Severity	Warning
Type	p
Description	Percentage asynchronous data reads per request for a tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	50%
Reset value	60%
Message Text	Average percentage of data pages read by asynchronous read requests (<\$VALUE>) for tablespace <\$OPTION(add)> exceeds threshold
Instruction text	The average number of buffer pool reads per asynchronous read request. Formula: buffer pool asynchronous data reads / buffer pool asynchronous read requests This average can help you determine the amount of asynchronous I/O one in each interaction with the prefetcher
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool

DB2_0281a_AsyncRdTime_db

Metric Number	0281
Name	DB2_0281a_AsyncRdTime_db
Severity	Warning
Type	a
Description	Average asynchronous read time for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	200 ms
Reset value	150 ms
Message Text	Average time of asynchronous data pages read (<\$VALUE>) from DB2 database exceeds threshold
Instruction text	<p>This element calculates the average asynchronous read time using the following formula:</p> <p>buffer pool asynchronous read time / buffer pool asynchronous data reads</p> <p>These calculations can be used to understand the I/O work being performed.</p>
Automatic Action Report	0281
Report Type	ASCII Report
Area	Buffer pool
Graph	Asynchronous times

DB2_0283a_AsyncRdTime_ts

Metric Number	0283
Name	DB2_0283a_AsyncRdTime_ts
Severity	Warning
Type	a
Description	Average asynchronous read time for a tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200 ms
Reset value	150 ms
Message Text	Average time of asynchronous data pages read (<\$VALUE>) for tablespace <\$OPTION(add)> exceeds threshold
Instruction text	<p>This element calculates the average asynchronous read time using the following formula:</p> <p>buffer pool asynchronous read time / buffer pool asynchronous data reads</p> <p>These calculations can be used to understand the I/O work being performed.</p>
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool

DB2_0291a_AsyncWrtTime_db

Metric Number	0291
Name	DB2_0291a_AsyncWrtTime_db
Severity	Warning
Type	a
Description	Average asynchronous write time for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	150 ms
Message Text	Average time of asynchronous data/index pages write (<\$VALUE>) to DB2 database exceeds threshold
Instruction text	<p>This element calculates the average asynchronous read time using the following formula:</p> $\text{buffer pool asynchronous write time} / (\text{buffer pool asynchronous data writes} + \text{buffer pool asynchronous index writes})$ <p>These calculations can be used to understand the I/O work being performed.</p>
Automatic Action Report	0291
Report Type	ASCII Report
Area	Buffer pool
Graph	Asynchronous times

DB2_0293a_AsyncWrtTime_ts

Metric Number	0293
Name	DB2_0293a_AsyncWrtTime_ts
Severity	Warning
Type	a
Description	Average asynchronous write time for a tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	150 ms
Message Text	Average time of asynchronous data/index pages write (<\$VALUE>) to tablespace <\$OPTION(add)> exceeds threshold
Instruction text	<p>This element calculates the average asynchronous read time using the following formula:</p> $\text{buffer pool asynchronous write time} / (\text{buffer pool asynchronous data writes} + \text{buffer pool asynchronous index writes})$ <p>These calculations can be used to understand the I/O work being performed.</p>
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0301r_AsyPIDataRd_db

Metric Number	0301
Name	DB2_0301r_AsyPIDataRd_db
Severity	Warning
Type	r
Description	The ratio of asynchronous pool data reads to synchronous pool data reads for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous data reads (<\$VALUE>) to DB2 database below threshold
Instruction text	The ratio of asynchronous data reads to synchronous data reads. Comparing the ratio of asynchronous to synchronous reads, you gain an insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the Administration Guide provided by IBM).
Automatic Action Report	0301
Report Type	ASCII Report
Area	Buffer pool
Graph	Ratio of data read / write

DB2_0303_AsyPIDataRd_ts

Metric Number	0303
Name	DB2_0303r_AsyPIDataRd_ts
Severity	Warning
Type	r
Description	The ratio of asynchronous pool data reads to synchronous pool data reads in the tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous data reads (<\$VALUE>) to tablespace <\$OPTION(add)> below threshold
Instruction text	The ratio of asynchronous data reads to synchronous data reads. Comparing the ratio of asynchronous to synchronous reads, you gain an insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the Administration Guide provided by IBM).
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0311r_AsyPIDataWrt_db

Metric Number	0311
Name	DB2_0311r_AsyPIDataWrt_db
Severity	Warning
Type	r
Description	The ratio of asynchronous pool data writes to synchronous pool data writes for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous data writes (<\$VALUE>) to DB2 database below threshold
Instruction text	The ratio of asynchronous data reads to synchronous data writes. By comparing the ratio of asynchronous to synchronous writes, you can gain insight into how well the buffer pool page cleaners are performing. This ratio can be helpful when you are tuning the num_iocleaners configuration parameter.
Automatic Action Report	0311
Report Type	ASCII Report
Area	Buffer pool
Graph	Ratio of data read / write

DB2_0313r_AsyPIDataWrt_ts

Metric Number	0313
Name	DB2_0313r_AsyPIDataWrt_ts
Severity	Warning
Type	r
Description	The ratio of asynchronous pool data writes to synchronous pool data writes in the tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous data writes (<\$VALUE>) to tablespace <\$OPTION(add)> below threshold
Instruction text	The ratio of asynchronous data reads to synchronous data writes. By comparing the ratio of asynchronous to synchronous writes, you can gain insight into how well the buffer pool page cleaners are performing. This ratio can be helpful when you are tuning the num_io cleaners configuration parameter.
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0321r_AsyPIIdxRd_db

Metric Number	0321
Name	DB2_0321r_AsyPIIdxRd_db
Severity	Warning
Type	r
Description	The ratio of asynchronous pool index reads to synchronous pool index reads for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous index reads (<\$VALUE>) from DB2 database below threshold
Instruction text	The ratio of asynchronous index reads to synchronous index reads. By comparing the ratio of asynchronous to synchronous reads, you can gain insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the IBM DB2 Administration Guide)
Automatic Action Report	0321
Report Type	ASCII Report
Area	Buffer pool
Graph	Ratio of Index Read / Write

DB2_0323r_AsyPIIdxRd_ts

Metric Number	0323
Name	DB2_0323r_AsyPIIdxRd_ts
Severity	Warning
Type	r
Description	The ratio of asynchronous pool index reads to synchronous pool index reads in the tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous index reads (<\$VALUE>) from tablespace <\$OPTION(add)> below threshold
Instruction text	The ratio of asynchronous index reads to synchronous index reads. By comparing the ratio of asynchronous to synchronous reads, you can gain insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the IBM DB2 Administration Guide)
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0331r_AsyPIIdxWrt_db

Metric Number	0331
Name	DB2_0331r_AsyPIIdxWrt_db
Severity	Warning
Type	r
Description	The ratio of asynchronous pool index writes to synchronous pool index writes for the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous index writes (<\$VALUE>) to DB2 database exceeds threshold
Instruction text	The ratio of asynchronous index reads to synchronous index writes. By comparing the ratio of asynchronous to synchronous writes, you can gain insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the IBM DB2 Administration Guide).
Automatic Action Report	0331
Report Type	ASCII Report
Area	Buffer pool
Graph	Ratio of Index Read / Write

DB2_0333r_AsyPIIdxWrt_ts

Metric Number	0333
Name	DB2_0333r_AsyPIIdxWrt_ts
Severity	Warning
Type	r
Description	The ratio of asynchronous pool index writes to synchronous pool index writes in the tablespace
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	4
Reset value	6
Message Text	Ratio of asynchronous to synchronous index writes (<\$VALUE>) to tablespace <\$OPTION(add)> exceeds threshold
Instruction text	The ratio of asynchronous index reads to synchronous index writes. By comparing the ratio of asynchronous to synchronous writes, you can gain insight into how well the prefetchers are working. This element can be helpful when you are tuning the num_ioservers configuration parameter (see the IBM DB2 Administration Guide).
Automatic Action Report	-
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0341c_PIDataLogRd_db

Metric Number	0341
Name	DB2_0341c_PIDataLogRd_db
Severity	-
Type	c
Description	Buffer pool data logical reads for the database
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	Data Logical / Physical Reads

DB2_0351c_PlIdxLogRd_db

Metric Number	0351
Name	DB2_0351c_PlIdxLogRd_db
Severity	-
Type	c
Description	Buffer pool index logical reads for the database
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	Index Logical / Physical Reads

DB2_0361a_DirRdpReq_db

Metric Number	0361
Name	DB2_0361a_DirRdpReq_db
Severity	Minor
Type	a
Description	Average sectors read by a direct read in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors read by direct read (<\$VALUE>) from database exceeds threshold
Instruction text	<p>The average number of sectors that are read by a direct read:</p> <p>direct reads from database / direct read requests</p> <p>Direct reads are those of read operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct reads are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Reading LONG VARCHAR columns 2 Reading LOB (large object) columns 3 Performing a backup
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	Average sector read / writes in the database

DB2_0362a_DirRdpReq_ap

Metric Number	0362
Name	DB2_0362a_DirRdpReq_ap
Severity	Minor
Type	a
Description	Average sectors read by a direct read in an application
Alarming, Graphing, Reporting	A, G
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors read by direct read (<\$VALUE>) by application <\$OPTION(add)> exceeds threshold
Instruction text	<p>The average number of sectors that are read by a direct read:</p> <p>direct reads from database / direct read requests</p> <p>Direct reads are those of read operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct reads are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Reading LONG VARCHAR columns 2 Reading LOB (large object) columns 3 Performing a backup
Automatic Action Report	0362
Report Type	ASCII Report
Area	Direct I/O
Graph	-

DB2_0363a_DirRdpReq_ts

Metric Number	0363
Name	DB2_0363a_DirRdpReq_ts
Severity	Minor
Type	a
Description	Average sectors read by a direct read in a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors read by direct read (<\$VALUE>) by tablespace <\$OPTION(add)> exceeds threshold
Instruction text	<p>The average number of sectors that are read by a direct read:</p> <p>direct reads from database / direct read requests</p> <p>Direct reads are those of read operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct reads are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Reading LONG VARCHAR columns 2 Reading LOB (large object) columns 3 Performing a backup
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	-

DB2_0371a_DirWrtpReq_db

Metric Number	0371
Name	DB2_0371a_DirWrtpReq_db
Severity	Minor
Type	a
Description	Average sectors written by a direct write in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors written by direct write (<\$VALUE>) from database exceeds threshold
Instruction text	<p>The average number of sectors that are written by a direct write.</p> <p>direct writes to database / direct write requests</p> <p>The number of write operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct writes are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Writing LONG VARCHAR columns 2 Writing LOB (large object) columns 3 Performing a restore 4 Performing a load.
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	Average sector read / writes in the database

DB2_0372a_DirWrtpReq_ap

Metric Number	0372
Name	DB2_0372a_DirWrtpReq_ap
Severity	Minor
Type	a
Description	Average sectors written by a direct write in an application
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors written by direct write (<\$VALUE>) by application <\$OPTION(add)> exceeds threshold
Instruction text	<p>The average number of sectors that are written by a direct write.</p> <p>direct writes to database / direct write requests</p> <p>The number of write operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct writes are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Writing LONG VARCHAR columns 2 Writing LOB (large object) columns 3 Performing a restore 4 Performing a load.
Automatic Action Report	0372
Report Type	ASCII Report
Area	Direct I/O
Graph	-

DB2_0373a_DirWrtpReq_ts

Metric Number	0373
Name	DB2_0373a_DirWrtpReq_ts
Severity	Minor
Type	a
Description	Average sectors written by a direct write in a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	50
Reset value	30
Message Text	Average sectors written by direct write (<\$VALUE>) by tablespace <\$OPTION(add)> exceeds threshold
Instruction text	<p>The average number of sectors that are written by a direct write.</p> <p>direct writes to database / direct write requests</p> <p>The number of write operations that do not use the buffer pool. When using system monitors to track I/O, this data element helps you distinguish database I/O from non-database I/O on the device. Direct writes are performed in units, the smallest being a 512-byte sector. They are used when:</p> <ol style="list-style-type: none"> 1 Writing LONG VARCHAR columns 2 Writing LOB (large object) columns 3 Performing a restore 4 Performing a load.
Automatic Action Report	-
Report Type	-
Area	Direct I/O
Graph	-

DB2_0380g_LocConns_in

Metric Number	0380
Name	DB2_0380g_LocConns_in
Severity	-
Type	g
Description	Local connections in the database manager
Alarming, Graphing, Reporting	G, R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	
Instruction text	<p>The number of local applications that are currently connected to a database within the database manager instance being monitored. This number can help you determine the level of concurrent processing occurring in the database manager. This value will change frequently, so you may need to sample it at specific intervals over an extended period of time to get a realistic view of system usage.</p> <p>This number only includes applications that were initiated from the same instance as the database manager. The applications are connected, but may or may not be executing a unit of work in the database. When used in conjunction with the Remote Connections To Database Manager monitor element, this element can help you adjust the setting of the maxagents configuration parameter.</p>
Automatic Action Report	-
Report Type	OV Reporter, OVPI
Area	Connections
Graph	Connections to the database manager

DB2_0391w_MaxSecLogSpcU_db

Metric Number	0391
Name	DB2_0391w_MaxSecLogSpcU_db
Severity	Minor
Type	w
Description	Maximum secondary total space used (in MB) in the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	7MB
Reset value	5 MB
Message Text	Maximum secondary log space used (<\$VALUE> MB) exceeds alert limit (<\$THRESHOLD> MB)
Instruction text	<p>The maximum amount of secondary log space used (in bytes). You may use this element in conjunction with Secondary Logs Allocated Currently and Maximum Total Log Space Used to show your current dependency on secondary logs. If this value is high, you may need larger log files, or more primary log files, or more frequent COMMIT statements within your application. As a result, you may need to adjust the following configuration parameters:</p> <ul style="list-style-type: none"> (1) logfilsz (2) logprimary (3) logsecond (4) logretain <p>The value will be zero if the database does not have any secondary log files. This would be the case if there were none defined.</p> <p>Note: While the database system metric information is given in megabytes, the configuration parameters are set in pages, which are each 4K bytes.</p>
Automatic Action Report	0391
Report Type	ASCII Report
Area	Transaction logs
Graph	Maximum total space used

DB2_0401w_MaxTotLogSpcU_db

Metric Number	0401
Name	DB2_0401w_MaxTotLogSpcU_db
Severity	Minor
Type	w
Description	Maximum primary total space used (in MB) in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	18MB
Reset value	15 MB
Message Text	Maximum total log space used (<\$VALUE> MB) exceeds alert limit (<\$THRESHOLD> MB)
Instruction text	<p>The maximum amount of total log space used (in bytes). You can use this element to help you evaluate the amount of primary log space that you have allocated. Comparing the value of this element with the amount of primary log space you have allocated can help you to evaluate your configuration parameter settings. Your primary log space allocation can be calculated using the following formula:</p> $\text{logprimary} \times \text{logfilsiz} \times 4096$ <p>You can use this element in conjunction with Maximum Secondary Log Space Used and Secondary Logs Allocated Currently to show your current dependency on secondary logs. This value includes space used in both primary and secondary log files, and is only returned if circular logging is used. (That is, it is not returned if either the logretain or userexit configuration parameter is enabled.) As a result, you may need to adjust the following configuration parameters:</p> <ol style="list-style-type: none"> (1) logfilsz (2) logprimary (3) logsecond (4) logretain <p>Note: While the database system metric information is given in megabytes, the configuration parameters are set in pages, which are each 4K bytes.</p>
Automatic Action Report	-

Report Type	-
Area	Transaction logs
Graph	Maximum total space used

DB2_0411g_SecLogAlloc_db

Metric Number	0411
Name	DB2_0411g_SecLogAlloc_db
Severity	Minor
Type	g
Description	Secondary logs allocated in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	No
Min / Max Threshold	Max
Threshold	10
Reset value	7
Message Text	Number of actual secondary logs (<\$VALUE>) of DB2 database exceeds threshold
Instruction text	<p>The number of secondary log files that are currently being used for the database. You may use this element in conjunction with Maximum Secondary Log Space Used and Maximum Total Log Space Used to show your current dependency on secondary logs. If this value is consistently high, you may need larger log files, or more primary log files, or more frequent COMMIT statements within your application. As a result, you may need to adjust the following configuration parameters:</p> <ul style="list-style-type: none"> (1) logfilsz (2) logprimary (3) logsecond (4) logretain
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	Logs Allocated

DB2_0421p_SecLogRemain_db

Metric Number	0421
Name	DB2_0421p_SecLogRemain_db
Severity	Minor
Type	p
Description	Secondary logs remaining to be allocated in the database
Alarming, Graphing, Reporting	A, G, R
Collection Interval	10 min
Delta	No
Min / Max Threshold	Min
Threshold	15%
Reset value	25 %
Message Text	Percentage of remaining secondary logs (<\$VALUE>) of DB2 database is below threshold
Instruction text	<p>The number of secondary log files that are currently remaining.</p> <p>You may use this element in conjunction with Maximum Secondary Log Space Used and Maximum Total Log Space Used to show your current dependency on secondary logs. If this value is consistently low, you may need larger log files, or more primary log files, or more frequent COMMIT statements within your application. As a result, you may need to adjust the following configuration parameters:</p> <ul style="list-style-type: none"> (1) logfilsz (2) logprimary (3) logsecond (4) logretain
Automatic Action Report	0421
Report Type	ASCII Report
Area	Transaction logs
Graph	Secondary logs remaining

DB2_0431a_SortTime_db

Metric Number	0431
Name	DB2_0431a_SortTime_db
Severity	Minor
Type	a
Description	Average sort time in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	100ms
Reset value	80 ms
Message Text	Average sort time (<\$VALUE>) in DB2 database exceeds threshold
Instruction text	<p>The average elapsed time (in milliseconds) for all sorts that have been executed. At a database or application level, this can indicate whether or not sorting is an issue as far as performance is concerned. This count also includes sort time of temporary tables created during related operations. It provides information for all applications accessing one database. When using data elements providing elapsed times, you should consider:</p> <p>(1) Elapsed times are affected by system load, so the more processes you have running, the higher this elapsed time value.</p> <p>(2) To calculate this data element at a database level, the database system monitor sums the application-level times. This can result in double counting elapsed times at a database level, since more than one application process can be running at the same time. To provide meaningful data from the database level, has been normalized to a lower level by providing the average elapsed time for each sort.</p>
Automatic Action Report	-
Report Type	-
Area	Sorts
Graph	Sort time

DB2_0432a_SortTime_ap

Metric Number	0432
Name	DB2_0432a_SortTime_ap
Severity	Minor
Type	a
Description	Average sort time for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	100ms
Reset value	80 ms
Message Text	Average sort time (<\$VALUE>) of application <\$OPTION(add)> exceeds threshold
Instruction text	The average elapsed time (in milliseconds) for all sorts that have been executed. At a database or application level, this can indicate whether or not sorting is an issue as far as performance is concerned. This count also includes sort time of temporary tables created during related operations. It provides information for one statement, one application, or all applications accessing one database.
Automatic Action Report	0432
Report Type	ASCII Report
Area	Sorts
Graph	-

DB2_0440p_AgtAssignPI_in

Metric Number	0440
Name	DB2_0440p_AgtAssignPI_in
Severity	-
Type	p
Description	Percent agents assigned from agent pool
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	0440
Report Type	ASCII Report
Area	Agents and applications
Graph	-

DB2_0451a_SortHeapAlloc_db

Metric Number	0451
Name	DB2_0451a_SortHeapAlloc_db
Severity	Minor
Type	a
Description	Average sort heap allocated for an application
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	230 MB
Reset value	180 MB
Message Text	Average sort heap allocated for an application (<\$VALUE>%) exceeds threshold
Instruction text	<p>The average sort heap space used by each sort.</p> <p>Total Sort Heap Allocated / Active Sorts</p> <p>If the sortheap configuration parameter is substantially larger than the average sort heap used, you may be able to lower the value of this parameter. This value includes heaps for sorts of temporary tables that were created during relational operations.</p>
Automatic Action Report	-
Report Type	-
Area	Sorts
Graph	-

DB2_0461p_LckLstMemUsed_db

Metric Number	0461
Name	DB2_0461p_LckLstMemUsed_db
Severity	Minor
Type	p
Description	Percent lock list memory used in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	No
Min / Max Threshold	Max
Threshold	50%
Reset value	45 %
Message Text	Percentage of locklist memory in use (<\$VALUE>%) of DB2 database exceeds threshold
Instruction text	The percentage amount of lock list memory (in bytes) that is in use. This element may be used to calculate the lock list utilization. If the lock list utilization is high, you may want to consider increasing the size of that parameter.
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	Lock list

DB2_0471p_LckHeld_db

Metric Number	0471
Name	DB2_0471p_LckHeld_db
Severity	-
Type	p
Description	Percent locks held in the database
Alarming, Graphing, Reporting	G
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	
Report Type	-
Area	Locks and deadlocks
Graph	Lock list

DB2_0472p_LckHeld_ap

Metric Number	0472
Name	DB2_0472p_LckHeld_ap
Severity	Minor
Type	p
Description	Percent locks held by an application
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	90%
Reset value	75 %
Message Text	Percentage of locks currently held (<\$VALUE>%) of application <\$OPTION(add)> exceeds threshold
Instruction text	<p>The percentage of allowed locks currently held.</p> $\text{Locks held} / ((\text{locklist} * 4096 / 36) * (\text{maxlocks} / 100)) * 100$ <p>At the application level, this is the total number of locks currently held by all agents for the application. How you use this element depends on the level of information being returned from the database system monitor.</p> <p>You can use this counter to determine if the application is approaching the maximum number of locks available to it, as defined by the <i>maxlocks</i> configuration parameter. This parameter indicates the percentage of the lock list that each application can use before lock escalations occur. Lock escalations can result in a decrease in concurrency between applications connected to a database. Since the <i>maxlocks</i> parameter is specified as a percentage and this element is a counter, you can compare the count provided by this element against the total number of locks that can be held by an application, as calculated using the following formula: $(\text{locklist} * 4096 / 36) * (\text{maxlocks} / 100)$</p> <p>If you have a large number of locks, you may need to perform more commits within your application so that some of the locks can be released.</p>
Automatic Action Report	-
Report Type	-
Area	Locks and deadlocks
Graph	-

DB2_0481g_LckAvail_db

Metric Number	0481
Name	DB2_0481g_LckAvail_db
Severity	-
Type	g
Description	Number of available locks in the database
Alarming, Graphing, Reporting	-
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	
Instruction text	
Automatic Action Report	-
Report Type	-
Area	-
Graph	-

DB2_0482g_LckAvail_ap

Metric Number	0482
Name	DB2_0482g_LckAvail_ap
Severity	Minor
Type	g
Description	Number of available locks in an application
Alarming, Graphing, Reporting	A, R
Collection Interval	10 min
Delta	No
Min / Max Threshold	Min
Threshold	120
Reset value	180
Message Text	Number of available locks (<\$VALUE>) of application <\$OPTION(add)> is below threshold
Instruction text	<p>The percentage of allowed locks currently held. $((\text{locklist} * 4096 / 36) * (\text{maxlocks} / 100)) - \text{locks held}$</p> <p>At the application level, this is the total number of locks currently available by all agents for the application. You can use this counter to determine if the application is approaching the maximum number of locks available to it, as defined by the <i>maxlocks</i> configuration parameter. This parameter indicates the percentage of the lock list that each application can use before lock escalations occur. Lock escalations can result in a decrease in concurrency between applications connected to a database. Since the <i>maxlocks</i> parameter is specified as a percentage and this element is a counter, you can compare the count provided by this element against the total number of locks that can be held by an application, as calculated using the following formula: $(\text{locklist} * 4096 / 36) * (\text{maxlocks} / 100)$</p> <p>If you have a few available locks, you may need to perform more commits within your application so that some of the locks can be released.</p>
Automatic Action Report	0482
Report Type	ASCII Report
Area	Locks and deadlocks
Graph	-

DB2_0490g_AgtReg_in

Metric Number	0490
Name	DB2_0490g_AgtReg_in
Severity	Minor
Type	g
Description	Agents registered in the instance
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	360
Reset value	270
Message Text	
Instruction text	The number of agents registered in the database manager instance that is being monitored (coordinator agents and subagents). You can use this element to help evaluate your setting for the maxagents configuration parameter.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Agents

DB2_0500g_AgtIdle_in

Metric Number	0500
Name	DB2_0500g_AgtIdle_in
Severity	Minor
Type	g
Description	Agents idle in the instance
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	40
Reset value	60
Message Text	Number of agents registered in the instance (<\$VALUE>) is above threshold
Instruction text	The number of agents in the agent pool that are currently unassigned to an application and are, therefore, "idle". You can use this element to help set the num_poolagents configuration parameter. Having idle agents available to service requests for agents can improve performance.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Agents

DB2_0511c_CommAttmpt_db

Metric Number	0511
Name	DB2_0511c_CommAttmpt_db
Severity	-
Type	c
Description	Commit statements attempted in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Statement s
Graph	Commit attempts

DB2_0512c_CommAttmpt_ap

Metric Number	0512
Name	DB2_0512c_CommAttmpt_ap
Severity	-
Type	c
Description	Commit statements attempted by an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0521c_DdlStmtDone_db

Metric Number	0521
Name	DB2_0521c_DdlStmtDone_db
Severity	-
Type	c
Description	DDL statements executed in the database
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	Other statements

DB2_0522c_DdlStmtDone_ap

Metric Number	0522
Name	DB2_0522c_DdlStmtDone_ap
Severity	-
Type	c
Description	DDL statements executed by an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0531c_ModStmtDone_db

Metric Number	0531
Name	DB2_0531c_ModStmtDone_db
Severity	-
Type	c
Description	UID statements executed in the database
Alarming, Graphing, Reporting	G
Collection Interval	30min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	Other statements

DB2_0532c_ModStmtDone_ap

Metric Number	0532
Name	DB2_0532c_ModStmtDone_ap
Severity	-
Type	c
Description	UID statements executed by an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0541c_SelStmtDone_db

Metric Number	0541
Name	DB2_0541c_SelStmtDone_db
Severity	-
Type	c
Description	Select statements executed in the database
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	Other statements

DB2_0542c_SelStmtDone_ap

Metric Number	0542
Name	DB2_0542c_SelStmtDone_ap
Severity	-
Type	c
Description	Select statements executed by an application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0550g_AgtWaitTok_in

Metric Number	0550
Name	DB2_0550g_AgtWaitTok_in
Severity	-
Type	g
Description	Agents waiting on a token in the database manager
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	The number of agents waiting for a token so they can execute a transaction in the database manager. You can use this element to help evaluate your setting for the maxcagents configuration parameter. Each application has a dedicated coordinator agent to process database requests within the database manager. Each agent has to get a token before it can execute a transaction. The maximum number of agents that can execute database manager transactions is limited by the configuration parameter maxcagents. For more information about this parameter, see the IBM DB2 Administration Guide.
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Agents and applications

DB2_0560r_AgtEmptyPI_in

Metric Number	0560
Name	DB2_0560r_AgtEmptyPI_in
Severity	Minor
Type	r
Description	Ratio of agents created due to empty pool to agents assigned from pool
Alarming, Graphing, Reporting	A, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	2
Reset value	1.4
Message Text	Ratio of agents due to empty pool (<\$VALUE>) is above threshold
Instruction text	<p>The ratio of agents created because the agent pool was empty to the agents assigned from pool. The agents created due to empty pool include the number of agents started at DB2 start up (num_initagents).</p> <p>Agents Created Due to Empty Agent Pool / Agents Assigned From Pool</p> <p>This ratio can be used to determine how often an agent must be created because the pool is empty. If the ratio of</p> <p>Agents Created Due to Empty Agent Pool / Agents Assigned From Pool</p> <p>is high, it may indicate that the num_poolagents configuration parameter should be increased. A low ratio suggests that num_poolagents is set too high, and that some of the agents in the pool are rarely used and are wasting system resources.</p> <p>A high ratio can indicate that the overall workload for this node is too high. You can adjust the workload by lowering the maximum number of coordinating agents specified by the maxcagents configuration parameter, or by redistributing data among the nodes.</p>
Automatic Action Report	0560
Report Type	ASCII Report
Area	Agents and applications

Graph	-
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DB2_0571p_PkgCacheHit_db

Metric Number	0571
Name	DB2_0571p_PkgCacheHit_db
Severity	Minor
Type	p
Description	The package cache hit ratio for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Min
Threshold	80%
Reset value	90 %
Message Text	Package cache hit ratio for the database (<\$VALUE>) is below threshold
Instruction text	<p>The package cache hit ratio calculated as follows:</p> $1 - (\text{Package Cache Inserts} / \text{Package Cache Lookups})$ <p>The package cache hit ratio tells you whether or not the package cache is being used effectively. If the hit ratio is high (more than 0.8), the cache is performing well. A smaller ratio may indicate that the package cache should be increased.</p>
Automatic Action Report	-
Report Type	-
Area	Package cache
Graph	

DB2_0582p_OpnRemCursBlk_ap

Metric Number	0582
Name	DB2_0582p_OpnRemCursBlk_ap
Severity	Minor
Type	p
Description	Percent open remote cursors with blocking
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	20%
Reset value	30 %
Message Text	Percentage open remote cursors with blocking (<\$VALUE>) is below threshold for application <\$OPTION(add)>
Instruction text	<p>The percentage of remote blocking cursors currently open for this application.</p> <p>Open remote cursors with blocking / Open remote cursors * 100</p> <p>If the percentage is low, you may be able to improve performance by improving the row blocking in the application:</p> <ol style="list-style-type: none"> 1. Check the pre-compile options for record blocking for treatment of ambiguous cursors 2. Redefine cursors to allow for blocking (for example, if possible, specify FOR FETCH ONLY on your cursors). <p>Rejected Block Cursor Requests and Accepted Block Cursor Requests in the snapshot provide additional information that may help you tune your configuration parameters to improve row blocking in your application.</p>
Automatic Action Report	0582
Report Type	ASCII Report
Area	SQL Cursor
Graph	-

DB2_0621p_ApplSectHit_db

Metric Number	0621
Name	DB2_0621p_ApplSectHit_db
Severity	Minor
Type	p
Description	The hit ratio for the SQL work area in the database
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	50%
Reset value	70 %
Message Text	Hit ratio of SQL work areas in the database (<\$VALUE>) is below threshold
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	SQL work area
Graph	-

DB2_0622p_ApplSectHit_ap

Metric Number	0622
Name	DB2_0622p_ApplSectHit_ap
Severity	Minor
Type	p
Description	The hit ratio for the SQL work area for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Min
Threshold	50%
Reset value	70%
Message Text	Hit ratio of SQL work areas in the database (<\$VALUE>) is below threshold
Instruction text	-
Automatic Action Report	0622
Report Type	ASCII Report
Area	SQL work area
Graph	-

DB2_0631g_ApplExecDbmgr_db

Metric Number	0631
Name	DB2_0631g_ApplExecDbmgr_db
Severity	-
Type	g
Description	Applications currently executing in the database manager
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>Indicates the number of applications that are currently connected to the database, and for which the database manager is currently processing a request.</p> <p>You can use this element to understand how many of the database manager agent tokens are being used by applications connected to this database. If the sum of Remote Connections Executing in the Database Manager and Local Connections Executing in the Database Manager is equal to the value of the maxcagents configuration parameter, you may want to increase the value of that parameter, as described in the IBM DB2 Administration Guide.</p>
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Current Applications

DB2_0640g_RemConnsExec_in

Metric Number	0640
Name	DB2_0640g_RemConnsExec_in
Severity	-
Type	g
Description	Remote connections executing in the database manager
Alarming, Graphing, Reporting	G
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	<p>The current number of connections initiated from remote clients to the instance of the database manager that is being monitored. Shows the number of connections from remote clients to databases in this instance. This value will change frequently, so you may need to sample it at specific intervals over an extended period of time to get a realistic view of system usage. This number does not include applications that were initiated from the same instance as the database manager.</p> <p>When used in conjunction with the Local Connections monitor element, these elements can help you adjust the setting of the max_coordagents configuration parameter.</p>
Automatic Action Report	-
Report Type	-
Area	Connections
Graph	Connections executing in the database manager

DB2_0650g_LocConnsExec_in

Metric Number	0650
Name	DB2_0650g_LocConnsExec_in
Severity	-
Type	g
Description	Local connections executing in the database manager
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	The number of local applications that are currently connected to a database within the database manager instance being monitored and are currently processing a unit of work. This number can help you determine the level of concurrent processing occurring in the database manager. This value will change frequently, so you may need to sample it at specific intervals over an extended period of time to get a realistic view of system usage. This number only includes applications that were initiated from the same instance as the database manager. When used in conjunction with the Remote Connections Executing in the Database Manager monitor element, this element can help you adjust the setting of the maxcagents configuration parameter.
Automatic Action Report	-
Report Type	ASCII Report
Area	Connections
Graph	Connections executing in the database manager

DB2_0661c_PIDataPhyRds_db

Metric Number	0661
Name	DB2_0661c_PIDataPhyRds_db
Severity	-
Type	c
Description	Buffer pool data physical reads in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	
Automatic Action Report	-
Report Type	OV Reporter
Area	Buffer pool
Graph	Data Logical / Physical Reads

DB2_0671c_PIDataWrts_db

Metric Number	0671
Name	DB2_0671c_PIDataWrts_db
Severity	-
Type	c
Description	Buffer pool data writes in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Buffer pool
Graph	Data / Index Physical Writes

DB2_0681c_PlIdxPhyRds_db

Metric Number	0681
Name	DB2_0681c_PlIdxPhyRds_db
Severity	-
Type	c
Description	Buffer pool index physical reads in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Buffer pool
Graph	Index Logical / Physical Reads

DB2_0691c_PlIdxWrts_db

Metric Number	0691
Name	DB2_0691c_PlIdxWrts_db
Severity	-
Type	c
Description	Buffer pool index writes in the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Buffer pool
Graph	Data / Index Physical Writes

DB2_0701c_DrctRds_db

Metric Number	0701
Name	DB2_0701c_DrctRds_db
Severity	-
Type	c
Description	Direct reads by the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Direct I/O
Graph	Direct read / writes in the database

DB2_0703c_DrctRds_ts

Metric Number	0703
Name	DB2_0703c_DrctRds_ts
Severity	-
Type	C
Description	The number of direct reads of one or more sectors of data for a particular table space
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OVPI
Area	Direct I/O
Graph	-

DB2_0711c_DrctWrts_db

Metric Number	0711
Name	DB2_0711c_DrctWrts_db
Severity	-
Type	c
Description	Direct writes by the database
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Direct I/O
Graph	Direct read / writes in the database

DB2_0713c_DrctWrts_ts

Metric Number	0713
Name	DB2_0713c_DrctWrts_ts
Severity	-
Type	C
Description	Direct writes of one or more sectors of data for a particular table space
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OVPI
Area	Direct I/O
Graph	-

DB2_0721c_RollbAttmpt_db

Metric Number	0721
Name	DB2_0721c_RollbAttmpt_db
Severity	-
Type	c
Description	Rollbacks attempted by the database
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Statements
Graph	-

DB2_0731c_IntRollbacks_db

Metric Number	0731
Name	DB2_0731c_IntRollbacks_db
Severity	-
Type	c
Description	Internal rollbacks attempted by the database
Alarming, Graphing, Reporting	G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Statements
Graph	Internal Statements

DB2_0741c_IntCommits_db

Metric Number	0741
Name	DB2_0741c_IntCommits_db
Severity	-
Type	c
Description	Internal commits attempted by the database
Alarming, Graphing, Reporting	G, R
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter
Area	Statements
Graph	Internal Statements

DB2_0750g_RemConns_in

Metric Number	0750
Name	DB2_0750g_RemConns_in
Severity	-
Type	g
Description	Remote connections to the database manager
Alarming, Graphing, Reporting	G, R
Collection Interval	10 min
Delta	No
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OV Reporter, OVPI
Area	Connections
Graph	Connections to the database manager

DB2_0771g_AgtAssocAppl_db

Metric Number	0771
Name	DB2_0771g_AgtAssocAppl_db
Severity	-
Type	g
Description	Agents associated with applications in the database
Alarming, Graphing, Reporting	G
Collection Interval	30 min
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Agents and applications
Graph	Applications

DB2_0772g_AgtAssocAppl_ap

Metric Number	0772
Name	DB2_0772g_AgtAssocAppl_ap
Severity	-
Type	g
Description	Agents associated with the application
Alarming, Graphing, Reporting	R
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	ASCII Report
Area	Agents and applications
Graph	-

DB2_0781a_PIRdTime_db

Metric Number	0781
Name	DB2_0781a_PIRdTime_db
Severity	Major
Type	a
Description	Average buffer pool read time for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	200 ms
Reset value	100 ms
Message Text	High average buffer pool read time (<\$VALUE>) on the database
Instruction text	Provides the average amount page read time for processing read requests that caused data or index pages to be physically read from disk to buffer pool. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Read Time.
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	Average Read / Write Times

DB2_0782a_PIRdTime_ap

Metric Number	0782
Name	DB2_0782a_PIRdTime_ap
Severity	Major
Type	a
Description	Average buffer pool read time for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	100 ms
Message Text	High average buffer pool read time (<\$VALUE>) for an application <\$OPTION(add)>
Instruction text	Provides the average amount page read time for processing read requests that caused data or index pages to be physically read from disk to buffer pool. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Read Time.
Automatic Action Report	0782
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0783a_PIRdTime_ts

Metric Number	0783
Name	DB2_0783a_PIRdTime_ts
Severity	Major
Type	a
Description	Average buffer pool read time for a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200 ms
Reset value	100 ms
Message Text	High average buffer pool read time (<\$VALUE>) for a tablespace <\$OPTION(add)>
Instruction text	Provides the average amount page read time for processing read requests that caused data or index pages to be physically read from disk to buffer pool. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Read Time.
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	-

DB2_0785a_PIRdTime_bp

Metric Number	0785
Name	DB2_0785a_PIRdTime_bp
Severity	Major
Type	A
Description	Average buffer pool read time for a particular buffer pool
Alarming, Graphing, Reporting	A, R
Collection Interval	10 min
Delta	no
Min / Max Threshold	Max
Threshold	200 ms
Reset value	100 ms
Message Text	High average buffer pool read time (<\$VALUE>) for bufferpool <\$OPTION(add)> (Threshold <\$THRESHOLD>)
Instruction text	-
Automatic Action Report	-
Report Type	OVPI
Area	Buffer pool
Graph	-

DB2_0791a_PIWrtTime_db

Metric Number	0791
Name	DB2_0791a_PIWrtTime_db
Severity	Major
Type	a
Description	Average buffer pool write time for the database
Alarming, Graphing, Reporting	A, G
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	100 ms
Message Text	High average buffer pool write time (<\$VALUE>) on the database
Instruction text	The average page write time spent physically writing data or index pages from the buffer pool to disk. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Write Time.
Automatic Action Report	.
Report Type	-
Area	Buffer pool
Graph	Average Read / Write Times

DB2_0792a_PIWrtTime_ap

Metric Number	0792
Name	DB2_0792a_PIWrtTime_ap
Severity	Major
Type	a
Description	Average buffer pool write time for an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	100 ms
Message Text	High average buffer pool write time (<\$VALUE>) for an application <\$OPTION(add)>
Instruction text	The average page write time spent physically writing data or index pages from the buffer pool to disk. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Write Time.
Automatic Action Report	0792
Report Type	ASCII Report
Area	Buffer pool
Graph	-

DB2_0793a_PIWrtTime_ts

Metric Number	0793
Name	DB2_0793a_PIWrtTime_ts
Severity	Major
Type	a
Description	Average buffer pool write time for a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	100 ms
Message Text	High average buffer pool write time (<\$VALUE>) for a tablespace <\$OPTION(add)>
Instruction text	The average page write time spent physically writing data or index pages from the buffer pool to disk. This average is important since it may indicate the presence of an I/O wait, which in turn may indicate that you should be moving data to a different device. At the database and table space levels, this element includes the value of Buffer Pool Asynchronous Write Time.
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	-

DB2_0795a_PIWrtTime_bp

Metric Number	0795
Name	DB2_0795a_PIWrtTime_bp
Severity	Major
Type	a
Description	Average buffer pool write time for a tablespace
Alarming, Graphing, Reporting	A
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	200ms
Reset value	100 ms
Message Text	High average buffer pool write time (<\$VALUE>) for bufferpool <\$OPTION(add)> (Threshold <\$THRESHOLD>)
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Buffer pool
Graph	-

DB2_0800w_MaxConns_in

Metric Number	0800
Name	DB2_0800w_MaxConns_in
Severity	Major
Type	w
Description	Maximum simultaneous connections to the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	No
Min / Max Threshold	Max
Threshold	36
Reset value	27
Message Text	High connection load (<\$VALUE>) on the DB2 server
Instruction text	<p>The highest number of simultaneous connections to the database since the database was activated. You may use this element to evaluate the setting of the maxappls configuration parameter. If the value of this element is the same as the maxappls parameter, it is likely that some database connection requests were rejected, since maxappls limits the number of database connections allowed. The current number of connections at the time the snapshot was taken can be calculated using the following formula:</p> <p>remote connections to database manager + local connections</p>
Automatic Action Report	-
Report Type	-
Area	Connections
Graph	Connections to the database manager

DB2_0811c_LogPgsRd_db

Metric Number	0811
Name	DB2_0811c_LogPgsRd_db
Severity	-
Type	c
Description	Log pages read in the database
Alarming, Graphing, Reporting	-
Collection Interval	-
Delta	no
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	High number of log pages read in the database (<\$VALUE>%)
Instruction text	The number of log pages read from disk by the logger. You can use this element with an operating system monitor to quantify the amount of I/O on a device that is attributable to database activity.
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	-

DB2_0821c_LogPgsWrt_db

Metric Number	0821
Name	DB2_0821c_LogPgsWrt_db
Severity	-
Type	c
Description	Growth of Log pages written in the database in the monitoring interval
Alarming, Graphing, Reporting	-
Collection Interval	-
Delta	yes
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	High number of log pages written in the database (<\$VALUE>%)
Instruction text	<p>The number of log pages written to disk by the logger.</p> <p>You may use this element with an operating system monitor to quantify the amount of I/O on a device that is attributable to database activity.</p> <p>Note: When log pages are written to disk, the last page might not be full. In such cases, the partial log page remains in the log buffer, and additional log records are written to the page. Therefore log pages might be written to disk by the logger more than once. You should not use this data element to measure the number of pages produced by DB2.</p>
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	-

DB2_0831w_MaxPriLogSpcU_db

Metric Number	0831
Name	DB2_0831w_MaxPriLogSpcU_db
Severity	Minor
Type	w
Description	Percentage of the primary log space used in the database in the monitoring interval
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	yes
Min / Max Threshold	Max
Threshold	10%
Reset value	7%
Message Text	High maximum primary logspace used in the database (<\$VALUE>%)
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	Maximum Primary log space used

DB2_0841g_PriLogAlloc_db

Metric Number	0841
Name	DB2_0841g_PriLogAlloc_db
Severity	Major
Type	g
Description	Primary logs allocated
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	No
Min / Max Threshold	Max
Threshold	2
Reset value	1.4
Message Text	High number of primary logs allocated (<\$VALUE>%) in the database
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	Logs Allocated

DB2_0851p_LogSpcUsed_db

Metric Number	0851
Name	DB2_0851p_LogSpcUsed_db
Severity	Major
Type	p
Description	Percent log space used by the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	No
Min / Max Threshold	Max
Threshold	85%
Reset value	50%
Message Text	High usage of active logspace (<\$VALUE>%) in the database
Instruction text	<p>The total amount of active log space currently used (in megabytes) in the database. Use this element to determine whether you may need to adjust the following configuration parameters to avoid running out of log space:</p> <ol style="list-style-type: none"> 1. logfilisz 2. logprimary 3. logsecond <p>Note: While the database system monitor information is given in bytes, the configuration parameters are set in pages, which are each 4K bytes.</p>
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	Log space in the database

DB2_0861p_LogSpcAvail_db

Metric Number	0861
Name	DB2_0861p_LogSpcAvail_db
Severity	Major
Type	p
Description	Percent log space available in the database
Alarming, Graphing, Reporting	A, G
Collection Interval	10 min
Delta	no
Min / Max Threshold	Min
Threshold	20%
Reset value	30%
Message Text	Low available active logspace (<\$VALUE>%) in the database
Instruction text	<p>The total amount of active log space currently available (in megabytes) in the database. Use this element to determine whether you may need to adjust the following configuration parameters to avoid running out of log space:</p> <ol style="list-style-type: none"> 1. logfilsz 2. logprimary 3. logsecond <p>Note: While the database system monitor information is given in bytes, the configuration parameters are set in pages, which are each 4K bytes.</p>
Automatic Action Report	-
Report Type	-
Area	Transaction logs
Graph	Log space in the database

DB2_0871p_FailedSQL_db

Metric Number	0871
Name	DB2_0871p_FailedSQL_db
Severity	Major
Type	p
Description	Percent failed SQL statements in the database
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	90%
Reset value	75%
Message Text	High percentage of failed SQL statements (<\$VALUE>) in the database
Instruction text	The number of SQL statements that were attempted, but failed. This count includes all SQL statements that received a negative SQLCODE. This element may also help you in determining reasons for poor performance, since failed statements mean time wasted by the database manager and as a result, lower throughput for the database.
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	-

DB2_0872p_FailedSQL_ap

Metric Number	0872
Name	DB2_0872p_FailedSQL_ap
Severity	Major
Type	p
Description	Percent failed SQL statements in an application
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	90%
Reset value	75
Message Text	High percentage of failed SQL statements (<\$VALUE>) in the application <\$OPTION(add)>
Instruction text	The number of SQL statements that were attempted, but failed. This count includes all SQL statements that received a negative SQLCODE. This element may also help you in determining reasons for poor performance, since failed statements mean time wasted by the database manager and as a result, lower throughput for the database.
Automatic Action Report	0872
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0881c_BndPrcomp_db

Metric Number	0881
Name	DB2_0881c_BndPrcomp_db
Severity	Warning
Type	c
Description	Binds precompiled in the database
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	no
Min / Max Threshold	Max
Threshold	5
Reset value	3
Message Text	High number of binds precompiled (<\$VALUE>) in the database
Instruction text	The number of binds and pre-compiles attempted. You can use this element to gain insight into the current level of activity within the database manager. This value does not include the count of Internal Automatic Rebinds, but it does include binds that occur as a result of the REBIND PACKAGE command.
Automatic Action Report	-
Report Type	-
Area	Statements
Graph	-

DB2_0882c_BndPrcomp_ap

Metric Number	0882
Name	DB2_0882c_BndPrcomp_ap
Severity	Warning
Type	c
Description	Binds precompiled in an application
Alarming, Graphing, Reporting	A, R
Collection Interval	-
Delta	no
Min / Max Threshold	Max
Threshold	3
Reset value	2
Message Text	High number of binds precompiled (<\$VALUE>) in the application <\$OPTION(add)>
Instruction text	The number of binds and pre-compiles attempted. You can use this element to gain insight into the current level of activity within the database manager. This value does not include the count of Internal Automatic Rebinds, but it does include binds that occur as a result of the REBIND PACKAGE command.
Automatic Action Report	0882
Report Type	ASCII Report
Area	Statements
Graph	-

DB2_0896p_FCMBuffFree_ptn

Metric Number	0896
Name	DB2_0896p_FCMBuffFree_ptn
Severity	Major
Type	p
Description	Percent FCM buffers currently free - available only for V8 DPF (global)
Alarming, Graphing, Reporting	A, G, R
Collection Interval	- (Applicable only in Partitioned Database Environment)
Delta	no
Min / Max Threshold	Min
Threshold	10%
Reset value	15 %
Message Text	Low percentage of FCM buffers currently free (<\$VALUE>) for the instance
Instruction text	This element indicates the percentage of FCM buffers currently free. Use this to determine the current FCM buffer pool utilization. You can use this information to tune fcm_num_buffers.
Automatic Action Report	0896
Report Type	ASCII Report
Area	Fast Communications Manager
Graph	Fast Communications Manager

DB2_0906p_MsgAnchrFree_ptn

Metric Number	0906
Name	DB2_0906p_MsgAnchrFree_ptn
Severity	Major
Type	P
Description	Percent message anchors currently free - available only for V8 DPF (global)
Alarming, Graphing, Reporting	A, G, R
Collection Interval	- (Applicable only in Partitioned Database Environment)
Delta	No
Min / Max Threshold	Min
Threshold	10%
Reset value	15 %
Message Text	Low percentage of message anchors currently free (<\$VALUE>) for the instance
Instruction text	This metric indicates the percentage of message anchors currently free. Use this to determine the current message anchor utilization. You can use this information to tune fcm_num_anchors.
Automatic Action Report	0906
Report Type	ASCII Report
Area	Fast Communications Manager
Graph	Fast Communications Manager

DB2_0916p_ConnEntrFree_ptn

Metric Number	0916
Name	DB2_0916p_ConnEntrFree_ptn
Severity	Major
Type	P
Description	Percent connection entries currently free - available only for V8 DPF (global)
Alarming, Graphing, Reporting	A, G, R
Collection Interval	- (Applicable only in Partitioned Database Environment)
Delta	No
Min / Max Threshold	Min
Threshold	10%
Reset value	15 %
Message Text	Low percentage of connection entries currently free (<\$VALUE>) for the instance
Instruction text	This element indicates the percentage of message anchors currently free. Use this to determine the current message anchor utilization. You can use this information to tune fcm_num_anchors.
Automatic Action Report	0916
Report Type	ASCII Report
Area	Fast Communications Manager
Graph	Fast Communications Manager

DB2_0926p_ReqBlkFree_ptn

Metric Number	0926
Name	DB2_0926p_ReqBlkFree_ptn
Severity	Major
Type	P
Description	Percent request blocks currently free - available only for V8 DPF (global)
Alarming, Graphing, Reporting	A, G, R
Collection Interval	- (Applicable only in Partitioned Database Environment)
Delta	No
Min / Max Threshold	Min
Threshold	10%
Reset value	15 %
Message Text	Low percentage of requested block currently free (<\$VALUE>) for the instance
Instruction text	This element indicates the percentage of request blocks currently free. Use this to determine the current request block utilization. You can use this information to tune fcm_num_rqb.
Automatic Action Report	0926
Report Type	ASCII Report
Area	Fast Communications Manager
Graph	Fast Communications Manager

DB2_0933p_FreeTblSpc_ts

Metric Number	0933
Name	DB2_0933g_FreeTblSpc_ts
Severity	Major
Type	P
Description	Percent free space in the table space in the monitoring interval
Alarming, Graphing, Reporting	A, R
Collection Interval	10 min
Delta	No
Min / Max Threshold	Min
Threshold	50%
Reset value	60 %
Message Text	High percentage request blocks currently free (<\$VALUE>%) in the table space <\$OPTION(add)>
Instruction text	
Automatic Action Report	-
Report Type	OV Reporter, OVPI, ASCII Report
Area	Tablespace
Graph	-

DB2_0943g_TblSpcSize_ts

Metric Number	0943
Name	DB2_0943g_TblSpcSize_ts
Severity	-
Type	G
Description	Size of a particular table space
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	No
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OVPI Report
Area	Tablespace
Graph	-

DB2_0953i_TblSpcStt_ts

Metric Number	0953
Name	DB2_0953i_TblSpcStt_ts
Severity	Major
Type	i
Description	State for a particular table space
Alarming, Graphing, Reporting	A
Collection Interval	10 min
Delta	No
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	Tablespace <\$OPTION(add)> on partition <\$OPTION(ptn)> is available (Status: normal). Tablespace <\$OPTION(add)> on partition <\$OPTION(ptn)> is currently unavailable.
Instruction text	-
Automatic Action Report	-
Report Type	-
Area	Tablespace
Graph	-

DB2_0963p_TblSpcGrwth_ts

Metric Number	0963
Name	DB2_0963g_TblSpcGrwth_ts
Severity	-
Type	p
Description	Saves the growth rate of a particular table space within the monitoring interval
Alarming, Graphing, Reporting	R
Collection Interval	60 min
Delta	Yes
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OVPI, Report
Area	Tablespace
Graph	-

DB2_0991g_DBGrowth_db

Metric Number	0991
Name	DB2_0991g_DBGrowth_db
Severity	-
Type	g
Description	The growth rate and size of a database in MB in the monitoring interval
Alarming, Graphing, Reporting	R
Collection Interval	30 min
Delta	Yes
Min / Max Threshold	-
Threshold	-
Reset value	-
Message Text	-
Instruction text	-
Automatic Action Report	-
Report Type	OVPI Report
Area	Database
Graph	-

DB2_2071p_ApplMax_db

Metric Number	2071
Name	DB2_2071p_ApplMax_db
Severity	Minor
Type	P
Description	The percentage of application currently connected calculated from the maximum number of applications defined in the database configuration parameter "MAXAPPL"
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	80%
Reset value	70 %
Message Text	High application load (<\$VALUE>%) on the DB2 server exceeding threshold (<\$THRESHOLD>%)
Instruction text	You may use this element to help you understand the level of activity within a database and the amount of system resource being used. It can help you adjust the setting of the maxappls and max_coordagents configuration parameters, which are described in the IBM DB2 Administration Guide.
Automatic Action Report	-
Report Type	-
Area	Agents and Applications
Graph	-

DB2_2490p_AgtMax_in

Metric Number	2490
Name	DB2_2490p_AgtMax_in
Severity	Minor
Type	P
Description	Percentage of agents registered in the instance per Database manager configuration parameter MAXAGENTS
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	80 %
Reset value	70 %
Message Text	Percentage of agents registered in the instance (<\$VALUE>%) is above threshold (<\$THRESHOLD>%)
Instruction text	You may use this element to help you understand the level of activity within an instance and the amount of system resource being used. It can help you adjust the setting of the database manager configuration parameters maxagents, max_cagents and max_coordagents. This is described in the IBM DB2 Administration Guide.
Automatic Action Report	-
Report Type	-
Area	Agents and Applications
Graph	-

DB2_2600p_ConnMax_in

Metric Number	2600
Name	DB2_2600p_ConnMax_in
Severity	Minor
Type	P
Description	Percentage of connections per database manager configuration parameter MAX_CONNECTIONS
Alarming, Graphing, Reporting	A
Collection Interval	30 min
Delta	No
Min / Max Threshold	Max
Threshold	80 %
Reset value	70 %
Message Text	Connections open for the instance (<\$VALUE>%) is above threshold (<\$THRESHOLD>%)
Instruction text	You may use this element to help you understand the level of activity within an instance and the amount of system resource being used. It can help you adjust the setting of the database manager configuration parameters max_connections and max_coordagents. This is described in the IBM DB2 Administration Guide (Performance).
Automatic Action Report	-
Report Type	-
Area	Connections
Graph	-

