

# **HP Operations Smart Plug-in for IBM's DB2 Universal Database**

**for the HP Operations Manager Software**



## **Reference Guide**

**Software Version 03.80**

## Print History

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## Legend

The area tables below show an overview of the DB2SPI Metrics.  
More information may be found in the document "DB2SPI\_RefGuide.pdf".

**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 your system with too many metrics. If the load on your system is high, you may want

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

5 min
10 min
30 min
60 min
Not collected

Not available for DB2 V9.5 and later

## DB2SPI Metrics

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0011c_LckTO_db</b> Lock timeout in the database in the monitoring interval	database	Locks and deadlocks	yes	c	yes	Warning	60 min	15	Max	9	OVP	-	yes	global snapshot
<b>DB2_0012c_LckTO_ap</b> Lock timeout in an application in the monitoring interval	application	Locks and deadlocks	yes	c	yes	Warning	-	8	Max	5	-	Ascii Report 0012	no	global snapshot
<b>DB2_0021c_LckWaiting_db</b> Lock waits in the database in the monitoring interval	database	Locks and deadlocks	yes	c	no	-	60 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0022c_LckWaiting_ap</b> Lock waits in an application in the monitoring interval	application	Locks and deadlocks	yes	c	no	-	-	-	-	-	-	Ascii Report 0022	no	global snapshot
<b>DB2_0031p_BufPIHit_db</b> The buffer pool hit ratio for the database expressed as a percentage	database	Buffer pool	no	p	yes	Minor	10 min	40%	Min	70%	OVP	-	yes	global snapshot
<b>DB2_0032p_BufPIHit_ap</b> The buffer pool hit ratio for an application expressed as a percentage	application	Buffer pool	no	p	yes	Minor	-	40%	Min	70%	-	Ascii Report 0032	no	global snapshot
<b>DB2_0033p_BufPIHit_ts</b> The buffer pool hit ratio for the tablespace expressed as a percentage	tablespace	Buffer pool	no	p	yes	Minor	30 min	40%	Min	70%	-	-	yes	per partition
<b>DB2_0035p_BufPIHit_bp</b> The buffer pool hit ratio for a particular buffer pool	bufferpool	Buffer pool	no	p	yes	Minor	30 min	60%	Min	80%	-	OVPI	yes	per partition
<b>DB2_0044c_PgReorg_tb</b> Page reorganisations in a table in the monitoring interval	table	Table activity	yes	c	yes	Minor	60 min	10	Max	6	-	-	no	global snapshot
<b>DB2_0051c_PkgCacheOvfl_db</b> Package cache overflows in the database in the monitoring interval	database	Package cache	yes	c	yes	Minor	60 min	18	Max	12	-	-	yes	global snapshot
<b>DB2_0061p_SortOvfl_db</b> Percent sort overflows in the database	database	Sorts	no	p	yes	Minor	30 min	3%	Max	2%	OVP	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0062p_SortOvfl_ap</b> Percent sort overflows in the application	application	Sorts	no	p	yes	Minor	-	3%	Max	2%	-	Ascii Report 0062	no	global snapshot
<b>DB2_0071g_ApplConnCur_db</b> Applications connected currently in the database	database	Agents and applications	no	g	yes	Warning	30 min	36	Max	30	OVP	-	yes	global snapshot
<b>DB2_0081p_InxHit_db</b> The buffer pool index hit ratio for the database expressed as a percentage	database	Buffer pool	no	p	yes	Minor	10 min	40%	Min	60%	OVP	-	yes	global snapshot
<b>DB2_0082p_InxHit_ap</b> The buffer pool index hit ratio for an application expressed as a percentage	application	Buffer pool	no	p	yes	Minor	-	40%	Min	60%	-	Ascii Report 0082	no	global snapshot
<b>DB2_0083p_InxHit_ts</b> The buffer pool index hit ratio for the tablespace expressed as a percentage	tablespace	Buffer pool	no	p	yes	Minor	-	40%	Min	60%	-	-	no	per partition
<b>DB2_0085p_InxHit_bp</b> Indicates the percentage of read requests for index pages that have gone through a particular buffer pool	bufferpool	Buffer pool	no	p	yes	Minor	30 min	60%	Min	80%	-	OVPI	yes	per partition
<b>DB2_0091a_DirRdTime_db</b> Average direct read time for the database	database	Direct I/O	no	a	yes	Major	10 min	500ms	Max	300ms	OVP	-	yes	global snapshot
<b>DB2_0092a_DirRdTime_ap</b> Average direct read time for an application	application	Direct I/O	no	a	yes	Major	-	500ms	Max	300ms	-	Ascii Report 0092	no	global snapshot
<b>DB2_0093a_DirRdTime_ts</b> Average direct read time for a tablespace	tablespace	Direct I/O	no	a	yes	Major	-	500ms	Max	300ms	-	-	no	per partition
<b>DB2_0101a_DirWrtTime_db</b> Average direct write time for the database	database	Direct I/O	no	a	yes	Major	10 min	500ms	Max	300ms	OVP	-	yes	global snapshot
<b>DB2_0102a_DirWrtTime_ap</b> Average direct write time for an application	application	Direct I/O	no	a	yes	Major	-	500ms	Max	300ms	-	Ascii Report 0102	no	global snapshot
<b>DB2_0103a_DirWrtTime_ts</b> Average direct write time for a tablespace	tablespace	Direct I/O	no	a	yes	Major	-	500ms	Max	300ms	-	-	no	per partition

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0111p_CatCacheHit_db</b> The catalog cache hit ratio for the database expressed as a percentage	database	Catalog cache	no	p	yes	Minor	10 min	40%	Min	60%	-	-	yes	global snapshot
<b>DB2_0112p_CatCacheHit_ap</b> The catalog cache hit ratio for an application expressed as a percentage	application	Catalog cache	no	p	yes	Minor	-	40%	Min	60%	-	Ascii Report 0112	no	global snapshot
<b>DB2_0120p_PipeSortAccep_in</b> Percent piped sorts accepted in the database manager	instance	Sorts	no	p	yes	Major	30 min	10%	Min	15%	OVP	-	yes	global snapshot
<b>DB2_0130c_PostThrSort_in</b> Post threshold sorts in the instance	instance	Sorts	no	c	yes	Minor	30 min	3	Max	2	OVP	-	yes	global snapshot
<b>DB2_0141a_LckWaitTime_db</b> Average lock wait time for the database	database	Locks and deadlocks	no	a	yes	Major	10 min	10ms	Max	8ms	OVP	-	yes	global snapshot
<b>DB2_0142a_LckWaitTime_ap</b> Average lock wait time for an application	application	Locks and deadlocks	no	a	yes	Major	-	10ms	Max	8ms	-	Ascii Report 0142	no	global snapshot
<b>DB2_0151p_ApplWaitOnLck_db</b> Percent applications in the database that are waiting on locks	database	Agents and applications	no	p	yes	Major	10 min	85%	Max	75%	-	-	yes	global snapshot
<b>DB2_0161c_IntDckRollb_db</b> Internal deadlocked rollbacks in the database	database	Statements	no	c	yes	Minor	10 min	2	Max	1.4	OVP	-	yes	-
<b>DB2_0162c_IntDckRollb_ap</b> Internal deadlocked rollbacks in an application	application	Statements	no	c	yes	Minor	-	3	Max	2.1	-	Ascii Report 0162	no	-
<b>DB2_0172p_OpnLocCursBlk_ap</b> Percent open local cursors with blocking	application	SQL Cursors	no	p	yes	Minor	-	20%	Min	30%	-	Ascii Report 0172	no	global snapshot
<b>DB2_0180g_SortHeapAlloc_in</b> Sort heap allocated in the database manager	instance	Sorts	no	g	yes	Warning	30 min	18000	Max	15000	-	-	yes	global snapshot
<b>DB2_0191c_LckEscal_db</b> Lock escalations in the database	database	Locks and deadlocks	no	c	yes	Minor	60 min	2	Max	1.5	OVP	-	yes	global snapshot
<b>DB2_0192c_LckEscal_ap</b> Lock escalations in an application	application	Locks and deadlocks	no	c	yes	Minor	-	3	Max	2.1	-	Ascii Report 0192	no	global snapshot
<b>DB2_0201c_ExclLckEscal_db</b> Exclusive lock escalations in the database	database	Locks and deadlocks	no	c	yes	Major	60 min	2	Max	1.5	OVP	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0202c_ExcLckEscal_ap</b> Exclusive lock escalations in an application	application	Locks and deadlocks	no	c	yes	Major	-	3	Max	2.1	-	Ascii Report 0202	no	global snapshot
<b>DB2_0211c_Dlck_db</b> Deadlocks in the database	database	Locks and deadlocks	no	c	yes	Major	60 min	2	Max	1.5	OVPM	-	yes	global snapshot
<b>DB2_0212c_Dlck_ap</b> Deadlocks in an application	application	Locks and deadlocks	no	c	yes	Minor	-	3	Max	2.1	-	Ascii Report 0212	no	global snapshot
<b>DB2_0221a_LckWaitTime_db</b> Lock wait time for the database	database	Locks and deadlocks	no	c	no	-	30 min	-	-	-	OVPM	-	yes	global snapshot
<b>DB2_0222a_LckWaitTime_ap</b> Lock wait time for an application	application	Locks and deadlocks	no	c	no	-	-	-	-	-	-	Ascii Report 0222	no	global snapshot
<b>DB2_0232w_MaxAssocAgt_ap</b> Maximum number of associated agents	application	Agents and applications	no	w	yes	Major	-	180	Max	150	-	Ascii Report 0232	no	global snapshot
<b>DB2_0240c_AgtStolen_in</b> Stolen agents in the instance	instance	Agents and applications	no	c	yes	Minor	30 min	80	Max	60	OVPM	-	yes	global snapshot
<b>DB2_0242c_AgtStolen_ap</b> Stolen agents in an application	application	Agents and applications	no	c	yes	Minor	-	5	Max	3	-	Ascii Report 0242	no	global snapshot
<b>DB2_0250w_MaxCoordAgt_in</b> Maximum number of coordinating agents in the instance	instance	Agents and applications	no	w	yes	Minor	30 min	180	Max	150	OVPM	-	yes	global snapshot
<b>DB2_0251w_MaxCoordAgt_db</b> Maximum number of coordinating agents in the database	database	Agents and applications	no	w	yes	Minor	-	180	Max	150	-	Ascii Report 0251	no	global snapshot
<b>DB2_0261i_DBStatus_db</b> Database status	database	Database	no	i	yes	Critical	5 min	-	-	-	OVPM	OV Reporter OVPI	yes	yes
<b>DB2_0271p_AsyPIDtRdpReq_db</b> Percentage asynchronous data reads per request for the database	database	Buffer pool	no	p	yes	Warning	10 min	50%	Min	60%	-	Ascii Report 0271	yes	global snapshot
<b>DB2_0273p_AsyPIDtRdpReq_ts</b> Percentage asynchronous data reads per request for a tablespace	tablespace	Buffer pool	no	p	yes	Warning	-	50%	Min	60%	-	Ascii Report 0273	no	per partition
<b>DB2_0281a_AsyncRdTime_db</b> Average asynchronous read time for the database	database	Buffer pool	no	a	yes	Warning	30 min	200ms	Max	150ms	OVPM	Ascii Report 0281	yes	global snapshot
<b>DB2_0283a_AsyncRdTime_ts</b> Average asynchronous read time for a tablespace	tablespace	Buffer pool	no	a	yes	Warning	-	200ms	Max	150ms	-	Ascii Report 0283	no	per partition



DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0291a_AsyncWrtTime_db</b> Average asynchronous write time for the database	database	Buffer pool	no	a	yes	Warning	30 min	200ms	Max	150ms	OVP	Ascii Report 0291	yes	global snapshot
<b>DB2_0293a_AsyncWrtTime_ts</b> Average asynchronous write time for a tablespace	tablespace	Buffer pool	no	a	yes	Warning	-	200ms	Max	150ms	-	Ascii Report 0293	no	per partition
<b>DB2_0301r_AsyPIDataRd_db</b> The ratio of asynchronous pool data reads to synchronous pool data reads for the database	database	Buffer pool	no	r	yes	Warning	30 min	4	Min	6	OVP	Ascii Report 0301	yes	global snapshot
<b>DB2_0303r_AsyPIDataRd_ts</b> The ratio of asynchronous pool data reads to synchronous pool data reads in the tablespace	tablespace	Buffer pool	no	r	yes	Warning	-	4	Min	6	-	Ascii Report 0303	no	per partition
<b>DB2_0311r_AsyPIDataWrt_db</b> The ratio of asynchronous pool data writes to synchronous pool data writes for the database	database	Buffer pool	no	r	yes	Warning	30 min	4	Min	6	OVP	Ascii Report 0311	yes	global snapshot
<b>DB2_0313r_AsyPIDataWrt_ts</b> The ratio of asynchronous pool data writes to synchronous pool data writes in the tablespace	tablespace	Buffer pool	no	r	yes	Warning	-	4	Min	6	-	Ascii Report 0313	no	per partition
<b>DB2_0321r_AsyPIIdxRd_db</b> The ratio of asynchronous pool index reads to synchronous pool index reads for the database	database	Buffer pool	no	r	yes	Warning	30 min	4	Min	6	OVP	Ascii Report 0321	yes	global snapshot
<b>DB2_0323r_AsyPIIdxRd_ts</b> The ratio of asynchronous pool index reads to synchronous pool index reads in the tablespace	tablespace	Buffer pool	no	r	yes	Warning	-	4	Min	6	-	Ascii Report 0323	no	per partition
<b>DB2_0331r_AsyPIIdxWrt_db</b> The ratio of asynchronous pool index writes to synchronous pool index writes for the database	database	Buffer pool	no	r	yes	Warning	30 min	4	Min	6	OVP	Ascii Report 0331	yes	global snapshot
<b>DB2_0333r_AsyPIIdxWrt_ts</b> The ratio of asynchronous pool index writes to synchronous pool index writes in the tablespace	tablespace	Buffer pool	no	r	yes	Warning	-	4	Min	6	-	Ascii Report 0333	no	per partition
<b>DB2_0341c_PIDataLogRd_db</b> Buffer pool data logical reads for the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0351c_PlIdxLogRd_db</b> Buffer pool index logical reads for the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0361a_DirRdpReq_db</b> Average sectors read by a direct read in the database	database	Direct I/O	no	a	yes	Minor	10 min	50	Max	30	OVP	-	yes	global snapshot
<b>DB2_0362a_DirRdpReq_ap</b> Average sectors read by a direct read in an application	application	Direct I/O	no	a	yes	Minor	-	50	Max	30	-	Ascii Report 0362	no	global snapshot
<b>DB2_0363a_DirRdpReq_ts</b> Average sectors read by a direct read in a tablespace	tablespace	Direct I/O	no	a	yes	Minor	-	50	Max	30	-	-	no	per partition
<b>DB2_0371a_DirWrtpReq_db</b> Average sectors written by a direct write in the database	database	Direct I/O	no	a	yes	Minor	10 min	50	Max	30	OVP	-	yes	global snapshot
<b>DB2_0372a_DirWrtpReq_ap</b> Average sectors written by a direct write in an application	application	Direct I/O	no	a	yes	Minor	-	50	Max	30	-	Ascii Report 0372	no	global snapshot
<b>DB2_0373a_DirWrtpReq_ts</b> Average sectors written by a direct write in a tablespace	tablespace	Direct I/O	no	a	yes	Minor	-	50	Max	30	-	-	no	per partition
<b>DB2_0380g_LocConns_in</b> Local connections in the database manager	instance	Connections	no	g	no	-	30 min	-	-	-	OVP	OV Reporter OVPI	yes	global snapshot
<b>DB2_0391w_MaxSecLogSpcU_db</b> Maximum secondary log space used (in MB) in the database	database	Transaction Logging	no	w	yes	Minor	10 min	7MB	Max	5MB	OVP	Ascii Report 0391	yes	global snapshot
<b>DB2_0401w_MaxTotLogSpcU_db</b> Maximum total log space used (in MB) in the database	database	Transaction Logging	no	w	yes	Minor	10 min	18MB	Max	15MB	OVP	-	yes	global snapshot
<b>DB2_0411g_SecLogAlloc_db</b> Secondary logs allocated in the database	database	Transaction Logging	no	g	yes	Minor	10 min	10	Max	7	OVP	-	yes	global snapshot
<b>DB2_0421p_SecLogRemain_db</b> Secondary logs remaining to be allocated in the database	database	Transaction Logging	no	p	yes	Minor	10 min	15%	Min	25%	OVP	Ascii Report 0421	yes	global snapshot
<b>DB2_0431a_SortTime_db</b> Average sort time in the database	database	Sorts	no	a	yes	Minor	30 min	100ms	Max	80ms	OVP	-	yes	global snapshot
<b>DB2_0432a_SortTime_ap</b> Average sort time for an application	application	Sorts	no	a	yes	Minor	30 min	100ms	Max	80ms	-	Ascii Report 0432	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0440p_AgtAssignPI_in</b> Percent agents assigned from agent pool	instance	Agents and applications	no	p	no	-	30 min	-	-	-	-	Ascii Report 0440	yes	global snapshot
<b>DB2_0451a_SortHeapAlloc_db</b> Average sort heap allocated for a sort	database	Sorts	no	a	yes	Minor	30 min	230 MB	Max	180 MB	-	-	yes	global snapshot
<b>DB2_0461p_LckLstMemUsed_db</b> Percent lock list memory used in the database	database	Locks and deadlocks	no	p	yes	Minor	10 min	50%	Max	45%	OVP	-	yes	global snapshot
<b>DB2_0471p_LckHeld_db</b> Percent locks held in the database	database	Locks and deadlocks	no	p	no	-	10 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0472p_LckHeld_ap</b> Percent locks held by an application	application	Locks and deadlocks	no	p	yes	Minor	30 min	90%	Max	75%	-	-	yes	global snapshot
<b>DB2_0482g_LckAvail_ap</b> Number of available locks in an application	application	Locks and deadlocks	no	g	yes	Minor	30 min	120	Min	180	-	Ascii Report 0482	yes	global snapshot
<b>DB2_0490g_AgtReg_in</b> Agents registered in the instance	instance	Agents and applications	no	g	yes	Minor	30 min	360	Max	270	OVP	-	yes	global snapshot
<b>DB2_0500g_AgtIdle_in</b> Agents idle in the instance	instance	Agents and applications	no	g	yes	Minor	30 min	40	Min	60	OVP	-	yes	global snapshot
<b>DB2_0511c_CommAtmpt_db</b> Commit statements attempted in the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0512c_CommAtmpt_ap</b> Commit statements attempted by an application	application	Statements	no	c	no	-	-	-	-	-	-	Ascii Report 0512	no	global snapshot
<b>DB2_0521c_DdlStmtdone_db</b> DDL statements executed in the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0522c_DdlStmtdone_ap</b> DDL statements executed by an application	application	Statements	no	c	no	-	-	-	-	-	-	Ascii Report 0522	no	global snapshot
<b>DB2_0531c_ModStmtdone_db</b> UID statements executed in the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0532c_ModStmtdone_ap</b> UID statements executed by an application	application	Statements	no	c	no	-	-	-	-	-	-	Ascii Report 0532	no	global snapshot
<b>DB2_0541c_SelStmtdone_db</b> Select statements executed in the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0542c_SelStmntDone_ap</b> Select statements executed by an application	application	Statements	no	c	no	-	-	-	-	-	-	Ascii Report 0542	no	global snapshot
<b>DB2_0550g_AgtWaitTok_in</b> Agents waiting on a token in the database manager	instance	Agents and applications	no	g	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0560r_AgtEmptyPI_in</b> Ratio of agents created due to empty pool to agents assigned from pool	instance	Agents and applications	no	r	yes	Minor	30 min	2	Max	1.4	-	Ascii Report 0560	yes	global snapshot
<b>DB2_0571p_PkgCacheHit_db</b> Percentage of package cache hits for the database	database	Package cache	no	p	yes	Minor	30 min	80%	Min	90%	OVP	-	yes	global snapshot
<b>DB2_0582p_OpnRemCursBlk_ap</b> Percent open remote cursors with blocking	application	SQL Cursors	no	p	yes	Minor	-	20%	Min	30%	-	Ascii Report 0582	no	global snapshot
<b>DB2_0621p_ApplSectHit_db</b> The hit ratio for the SQL work area in the database	database	SQL work area	no	p	yes	Minor	-	50%	Min	70%	-	-	no	global snapshot
<b>DB2_0622p_ApplSectHit_ap</b> The hit ratio for the SQL work area for an application	application	SQL work area	no	p	yes	Minor	-	50%	Min	70%	-	Ascii Report 0622	no	global snapshot
<b>DB2_0631g_ApplExecDbmgr_db</b> Applications currently executing in the database manager	database	Agents and applications	no	g	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0640g_RemConnsExec_in</b> Remote connections executing in the database manager	instance	Connections	no	g	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0650g_LocConnsExec_in</b> Local connections executing in the database manager	instance	Connections	no	g	no	-	30 min	-	-	-	OVP	Ascii Report 0650	yes	global snapshot
<b>DB2_0661c_PIDataPhyRds_db</b> Buffer pool data physical reads in the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0671c_PIDataWrts_db</b> Buffer pool data writes in the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0681c_PIdxPhyRds_db</b> Buffer pool index physical reads in the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0691c_PIdxWrts_db</b> Buffer pool index writes in the database	database	Buffer pool	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0701c_DrctRds_db</b> Direct reads by the database	database	Direct I/O	no	c	no	-	-	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0703c_DrctRds_ts</b> The number of direct reads of one or more sectors of data for a particular table space	tablespace	Direct I/O	no	c	no	-	-	-	-	-	-	OVPI	no	per partition
<b>DB2_0711c_DrctWrts_db</b> Direct writes by the database	database	Direct I/O	no	c	no	-	-	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0713c_DrctWrts_ts</b> The number of requests to perform a direct write of one or more sectors of data for a particular table space	tablespace	Direct I/O	no	c	no	-	-	-	-	-	-	OVPI	no	per partition
<b>DB2_0721c_RollbAttmpt_db</b> Rollbacks attempted by the database	database	Statements	no	c	no	-	30 min	-	-	-	-	OV Reporter	yes	global snapshot
<b>DB2_0731c_IntRollbacks_db</b> Internal rollbacks attempted by the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0741c_IntCommits_db</b> Internal commits attempted by the database	database	Statements	no	c	no	-	30 min	-	-	-	OVP	OV Reporter	yes	global snapshot
<b>DB2_0750g_RemConns_in</b> Remote connections to the database manager	instance	Connections	no	g	no	-	30 min	-	-	-	OVP	OV Reporter OVPI	yes	global snapshot
<b>DB2_0771g_AgtAssocAppl_db</b> Agents associated with applications in the database	database	Agents and applications	no	c	no	-	30 min	-	-	-	OVP	-	yes	global snapshot
<b>DB2_0772g_AgtAssocAppl_ap</b> Agents associated with the application	application	Agents and applications	no	c	no	-	-	-	-	-	-	Ascii Report 0772	no	global snapshot
<b>DB2_0781a_PIRdTime_db</b> Average buffer pool read time for the database	database	Buffer pool	no	a	yes	Major	30 min	200ms	Max	100ms	OVP	-	yes	global snapshot
<b>DB2_0782a_PIRdTime_ap</b> Average buffer pool read time for an application	application	Buffer pool	no	a	yes	Major	-	200ms	Max	100ms	-	Ascii Report 0782	no	global snapshot
<b>DB2_0783a_PIRdTime_ts</b> Average buffer pool read time for a tablespace	tablespace	Buffer pool	no	a	yes	Major	-	200ms	Max	100ms	-	-	no	per partition
<b>DB2_0785a_PIRdTime_bp</b> Average buffer pool read time for a particular buffer pool	bufferpool	Buffer pool	no	a	yes	Major	30 min	200ms	Max	100ms	-	OVPI	yes	per partition

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0791a_PIWrtTime_db</b> Average buffer pool write time for the database	database	Buffer pool	no	a	yes	Major	30 min	200ms	Max	100ms	OVP	-	yes	global snapshot
<b>DB2_0792a_PIWrtTime_ap</b> Average buffer pool write time for an application	application	Buffer pool	no	a	yes	Major	-	200ms	Max	100ms	-	Ascii Report 0792	no	global snapshot
<b>DB2_0793a_PIWrtTime_ts</b> Average buffer pool write time for a tablespace	tablespace	Buffer pool	no	a	yes	Major	-	200ms	Max	100ms	-	-	no	per partition
<b>DB2_0795a_PIWrtTime_ts</b> Average buffer pool write time for a particular bufferpool	bufferpool	Buffer pool	no	a	yes	Major	-	200ms	Max	100ms	-	-	no	per partition
<b>DB2_0801w_MaxConns_db</b> Maximum simultaneous connections to the database	database	Connections	no	w	yes	Major	10 min	36	Max	27	OVP	-	yes	global snapshot
<b>DB2_0811c_LogPgsRd_db</b> Log pages read in the database	database	Transaction Logging	no	c	no	-	-	-	-	-	-	-	no	global snapshot
<b>DB2_0821c_LogPgsWrt_db</b> Growth rate of Log pages written in the database in the monitoring interval	database	Transaction Logging	yes	c	no	-	-	-	-	-	-	-	no	global snapshot
<b>DB2_0831w_MaxPriLogSpcU_db</b> Percentage of the primary log space used per database in the monitoring interval	database	Transaction Logging	yes	w	yes	Minor	10 min	10%	Max	7%	OVP	-	yes	global snapshot
<b>DB2_0841g_PriLogAlloc_db</b> Primary logs allocated	database	Transaction Logging	no	g	yes	Major	10 min	2	Max	1.4	OVP	-	yes	global snapshot
<b>DB2_0851p_LogSpcUsed_db</b> Percent log space used by the database	database	Transaction Logging	no	p	yes	Major	10 min	85%	Max	50%	OVP	-	yes	global snapshot
<b>DB2_0861p_LogSpcAvail_db</b> Percent log space available in the database	database	Transaction Logging	no	p	yes	Major	10 min	20%	Min	30%	OVP	-	yes	global snapshot
<b>DB2_0871p_FailedSQL_db</b> Percent failed SQL statements in the database	database	Statements	no	p	yes	Major	30 min	90%	Max	75%	-	-	yes	global snapshot
<b>DB2_0872p_FailedSQL_ap</b> Percent failed SQL statements in an application	application	Statements	no	p	yes	Major	30 min	90%	Max	75%	-	Ascii Report 0872	yes	global snapshot
<b>DB2_0881c_BndPrcomp_db</b> Binds precompiles in the database	database	Statements	no	c	yes	Warning	30 min	5	Max	3	-	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_0882c_BndPrcomp_ap</b> Binds precompiles in an application	application	Statements	no	c	no	Warning	-	3	Max	2	-	Ascii Report 0882	no	global snapshot
<b>DB2_0896p_FCMBuffFree_ptn</b> Percent FCM buffers currently free	partition	FCM	no	p	yes	Major	-	10%	Min	15%	-	Ascii Report 0896	no	only for V8 DPF (global)
<b>DB2_0906p_MsgAnchrFree_ptn</b> Percent message anchors currently free	partition	FCM	no	p	yes	Major	-	10%	Min	15%	-	Ascii Report 0906	no	only for V8 DPF (global)
<b>DB2_0916p_ConnEntrFree_ptn</b> Percent connection entries currently free	partition	FCM	no	p	yes	Major	-	10%	Min	15%	-	Ascii Report 0916	no	only for V8 DPF (global)
<b>DB2_0926p_ReqBlkFree_ptn</b> Percent request blocks currently free	partition	FCM	no	p	yes	Major	-	10%	Min	15%	-	Ascii Report 0926	no	only for V8 DPF (global)
<b>DB2_0933p_FreeTblSpC_ts</b> Percent free space in a particular tablespace	tablespace	Table Space	no	p	yes	Major	30 min	50%	Min	60%	-	OV Reporter, OVPI, ASCII Report 0933	yes	per partition
<b>DB2_0943g_TblSpCSize_ts</b> Size of a particular table space	tablespace	Table Space	no	g	no	-	30 min	-	-	-	-	OVPI	yes	per partition
<b>DB2_0953i_iTblSpCStt_ts</b> State for a particular table space	tablespace	Table Space	no	i	yes	Major	30 min	-	-	-	-	-	yes	per partition
<b>DB2_0963p_TblSpCgrwth_ts</b> Saves the growth rate of a particular table space within the monitoring interval	tablespace	Table Space	yes	p	no	-	30 min	-	-	-	-	OVPI	yes	per partition
<b>DB2_0991g_DBGrowth_db</b> The growth rate of a database in MB in the monitoring interval	database	Database	yes	g	no	-	30 min	-	-	-	-	OVPI	yes	global snapshot
<b>DB2_2071p_ApplMax_db</b> The percentage of application currently connected per database configuration parameter "MAXAPPL"	database	Agents and applications	no	p	yes	Minor	30 min	80%	Max	70%	-	-	yes	global snapshot

DB2 SPI Metric	Level	Area	Delta	Type	Alarming	Severity	Interval	Threshold	Min / Max	Reset	Graph	Reports	Monitoring Enabled	Applicable for DPF
<b>DB2_2490p_AgtMax_in</b> Percentage of agents registered in the instance per database manager configuration parameter MAXAGENTS	<b>instance</b>	Agents and applications	no	p	yes	Minor	30 min	80%	Max	70%	-	-	yes	global snapshot
<b>DB2_2600p_MaxConns_in</b> Percentage of connections per database manager configuration parameter MAX_CONNECTIONS	<b>instance</b>	Connections	no	p	yes	Minor	30 min	80%	Max	70%	-	-	yes	global snapshot
<b>DB2s_0481g_LckAvail_db</b> Number of available locks in the database	<b>database</b>	Locks and deadlocks	no	g	no	-	10 min	-	-	-	-	-	yes	global snapshot



## DB2SPI Tool groups

Tool group	Toolgroup	Tool group	Description
SPI for DB2			Administrative and Operator Tools for the SPI for DB2
SPI for DB2	DB2SPI for OS400		Operation of DB2SPI on OS400 nodes
SPI for DB2	DB2		Operation of DB2 on managed nodes
SPI for DB2	DB2	DB2 Management	Applications for DB2 Management
SPI for DB2	DB2SPI Admin		DB2SPI Administration
SPI for DB2	DB2SPI Admin	DB2SPI Maintenance	DB2SPI Maintenance

## DB2SPI Tools

Tool	Toolgroup	Running on	Description
Collection Stop	DB2SPI for OS400	Node	Stop the performance data collection on the OS400 Host
Collection Start	DB2SPI for OS400	Node	Start the performance data collection on the OS400 Host
AdmUser Config	DB2SPI for OS400	Server	Change the user credentials for the OS400 connection
Queue Transfer Stop	DB2SPI for OS400	Node	Stop the transfer of message queue data from the OS400 host
Snapshot Disable	DB2SPI for OS400	Node	Stop the performance snapshot on the OS400 host
Snapshot Enable	DB2SPI for OS400	Node	Start the performance snapshot on the OS400 host
Queue Transfer Start	DB2SPI for OS400	Server	Start the transfer of message queue data from the OS400 host
DB2 CLP	DB2	Node	Starts the command line processor
Show DB Config	DB2	Node	Show the database configuration
Replication Status	DB2	Node	Check the status of DB2 Replication
ASCII Report	DB2	Node	Starts the ASCII Reports selection/creation
Show Mgr Config	DB2	Node	Displays the DB2 manager configuration data
Show Snapshot	DB2	Node	Show snapshot data for a selected database
Instance List	DB2	Node	Lists instances
Instance Stop	DB2	Node	Stops a DB2 instance
Instance Start	DB2	Node	Starts a DB2 instance
Tablespace Mgmt	DB2 Management	Node	Manages Database Tablespaces
Data Mgmt	DB2 Management	Node	Import and Export Data
Instance Mgmt	DB2 Management	Node	Manages Database Instances
Table Mgmt	DB2 Management	Node	Manages Database Tables
Database Mgmt	DB2 Management	Node	Manages Database
Applic Mgmt	DB2 Management	Node	Manages Applications
Node Mgmt	DB2 Management	Node	Manages Node and Node Groups
Miscellaneous	DB2 Management	Node	List Monitor Switches, Prune History/Logfile
Database Migr	DB2 Management	Node	Migrates Database
Backup/Restore	DB2 Management	Node	Backup and Restore Database
Config Setup	DB2SPI Admin	Node	Initializes settings on selected node
OPCMON Enable	DB2SPI Admin	Node	Enables the metric forwarding to OVO via opcmon
Discovery Filter	DB2SPI Admin	Node	This tool allows the maintenance of DB2SPI's discovery filter. The Discovery Filter defines which DB2 instances are visible to DB2SPI discovery.
License Check	DB2SPI Admin	Node	Check the DB2SPI licenses for managed nodes
License List	DB2SPI Admin	Server	List all DB2SPI licenses added on the MgmtSvr

Tool	Toolgroup	Running on	Description
Entity Filter	DB2SPI Admin	Node	Define the list of entities to be monitored.
Datastore Delete	DB2SPI Admin	Node	Delete the metric stores
DB2SPI Enable	DB2SPI Admin	Node	Enables the monitoring capability of the DB2SPI
Config Delete	DB2SPI Admin	Node	Erase settings on selected node
License Add	DB2SPI Admin	Server	Install new DB2SPI licenses
PerfRep Disable	DB2SPI Admin	Node	Disables the forwarding of metric data to performance agents
Datastore Setup	DB2SPI Admin	Node	Set up the metric stores
OPCMON Disable	DB2SPI Admin	Node	Disables metric forwarding to OVO via opcmon
Snapshot Enable	DB2SPI Admin	Node	Starts the DB2 snapshots to be created
DB2SPI Disable	DB2SPI Admin	Node	Disables monitoring capability of the DB2SPI
Snapshot Disable	DB2SPI Admin	Node	Stops the DB2 snapshots from being created
PerfRep Enable	DB2SPI Admin	Node	Enables the forwarding of metric data to performance agents
Trace Define	DB2SPI Maintenance	Node	Defines tracing of the DB2SPI
Show DB2SPI Version	DB2SPI Maintenance	Node	Show the DB2SPI version string
Self-Healing Info DB2 Server	DB2SPI Maintenance	Node	Runs SHS data collector on the DB2 server
Change AdmUser	DB2SPI Maintenance	Node	Changes the admin user account (Windows only)
Rebind DB2SPI	DB2SPI Maintenance	Node	Rebind the DB2SPI applications to the DB2 databases
Export DB2SPI Config	DB2SPI Maintenance	Node	Export the DB2SPI configuration to an XML file
Import DB2SPI Config	DB2SPI Maintenance	Node	Import the DB2SPI configuration from an XML file
Self-Healing Info OVO Server	DB2SPI Maintenance	Server	Runs SHS data collector on the OVO server
Show DB2SPI Log	DB2SPI Maintenance	Node	Shows the DB2SPI log file
ServiceTree Update	DB2SPI Maintenance	Node	Enforce update of the DB2 service tree

## DB2SPI Graphs

Graph Family	Graph	Metrics
Agents and applications	HP Application	DB2_G_APPLCONNCUR (0071)
Agents and applications		DB2_AGTASSOAPPL(0771)
Agents and applications	Current Applications	DB2_G_APPLEXECDBMGR (0631)
Agents and applications	Agents	DB2_G_AGTREG (0490)
Agents and applications		DB2_W_MAXCOORDAGT (0250)
Agents and applications		DB2_G_AGTIDLE (0500)
Agents and applications	Conspicuous Agents	DB2_C_AGTSTOLEN (0240)
Agents and applications		DB2_G_AGTWAITTO (0550)
Buffer pools	Buffer pool hit ratio	DB2_P_BUFPLHIT (0031)
Buffer pools		DB2_P_INXHIT (0081)
Buffer pools	Asynchronous times	DB2_A_ASYNCRDTIME (0281)
Buffer pools		DB2_A_ASYNCWRRTIME (0291)
Buffer pools	Ratio of data read / write	DB2_R_ASYPIDATARD (0301)
Buffer pools		DB2_R_ASYPIDATAWRT (0311)
Buffer pools	Ratio of Index Read / Write	DB2_R_ASYPLIDXRD (0321)
Buffer pools		DB2_R_ASYPLIDXWRT (0331)
Buffer pools	Data Logical / Physical Reads	DB2_C_PLDATLOGRD (0341)
Buffer pools		DB2_C_PLDATAPHYRDS (0661)
Buffer pools	Index Logical / Physical Reads	DB2_C_PLIDXLOGRD (0351)
Buffer pools		DB2_C_PLIDXPHYRDS (0681)
Buffer pools	Data / Index Physical Writes	DB2_C_PLDATAWRTS (0671)
Buffer pools		DB2_C_PLIDXWRTS (0691)
Buffer pools	Average Read / Write Times	DB2_A_PLRDTIME (0781)
Buffer pools		DB2_A_PLWRRTIME (0791)
Connections	Connections to the database manager	DB2_W_MAXCONNS (0800)
Connections		DB2_G_LOCCONNS (0380)
Connections		DB2G_REMCONNS (0750)
Connections	Connections executing in the database manager	DB2_G_LOCCONNSEXEC (0650)
Connections		DB2_G_REMCONNSEXEC (0640)
Database	Database State	DB2_I_DBSTATUS (0261)

Graph Family	Graph	Metrics
Direct I/O	Average direct read / write time for an application	DB2_A_DIRRDTIME (0091)
Direct I/O		DB2_A_DIRWRRTIME (0101)
Direct I/O	Average sector read / writes in the database	DB2_A_DIRRDPREQ (0361)
Direct I/O		DB2_A_DIRWRTPREQ (0371)
Direct I/O	Direct read / writes in the database	DB2_C_DRCTRDS (0701)
Direct I/O		DB2_C_DRCTWRTS (0711)
Locks and deadlocks	Lock list	DB2_P_LCKLSTMUSED (0461)
Locks and deadlocks		DB2_P_LCKHELD (0471)
Locks and deadlocks	Escalation	DB2_C_LCKESCAL (0191)
Locks and deadlocks		DB2_C_EXCLLCKESCAL (0201)
Locks and deadlocks	Number of locks / deadlocks	DB2_C_LCKTO (0011)
Locks and deadlocks		DB2_C_DLCK (0211)
Locks and deadlocks	Wait time	DB2_A_LCKWAITTIME (0221)
Locks and deadlocks	Agents waiting	DB2_C_LCKWAITING (0021)
Locks and deadlocks	Available Locks	DB2_C_LCKAVAIL (0481)
Sorts	Sort heap	DB2_G_SORTHEAPALLOC (0181)
Sorts	Sort time	DB2_A_SORTTIME (0431)
Sorts	Conspicuous sorts	DB2_P_SORTOVFL (0061)
Sorts		DB2_P_PIPESORTACCEP (0120)
Sorts		DB2_C_POSTTHRSORT (0130)
Statements	Internal Statements	DB2_C_INTCOMMITTS (0741)
Statements		DB2_C_INTROLLBACKS (0731)
Statements		DB2_C_INTDLCKROLLB (0161)
Statements	Commit attempts	DB2_C_COMMATTMPT (0511)
Statements	Other statements	DB2_C_SELSTMTDONE (0541)
Statements		DB2_C_DDLSTMTDONE (0521)
Statements		DB2_C_MODSTMTDONE (0531)
Transaction logging	Maximum total space used	DB2_W_MAXTOTLOGSPCU (0401)
Transaction logging		DB2_W_MAXSECLOGSPCU (0391)
Transaction logging	Maximum Primary log space used	DB2_W_MAXPRILOGSPCU (0381)
Transaction logging	Logs Allocated	DB2_G_PRILOGALLOC (0841)
Transaction logging		DB2_G_SECLOGALLOC (0411)

Graph Family	Graph	Metrics
Transaction logging	Log space in the database	DB2_P_LOGSPCAVAIL (0861)
Transaction logging		DB2_P_LOGSPCUSED (0851)
Transaction logging	Secondary logs remaining	DB2_P_SECLOGREMAIN (0421)