HP OpenView Smart Plug-in for Databases

Rdb Reference Manual

UNIX – Version 08.20
Windows – Version 08.30

OpenVMS Operating System

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DB-SPI Metrics for Rdb

Introduction

This document provides detailed and summary listing of the DB-SPI metrics for Rdb, and explains pertinent information about how they work. The information provided here should prove valuable in understanding each metric, especially if customization is planned.

DB-SPI metrics templates are designed to be efficient and easy-to-use. In fact, you might want to use most of the templates without making any modifications whatsoever. However, this document provides the detailed information you need if you decide to customize any of the templates.

This document contains the following tables:

Table 1 - Summary of Rdb Metrics

Rdb Metric	Description	Area	Interval	Threshold	Min/Max	Reset	Severity
R001_AsynchPreFetchStat	Status of Asynchronous Pre-Fetch	Buffer Analysis	1d	0.5	Max	W/O	Warning
R002_DetectedAsynchPreFetchStat	Status of Detected Asynchronous Pre-Fetch	Buffer Analysis	1d	0.5	Max	W/O	Warning
R003_AsynchBatchWriteStat	Status of Asynchronous Batch-Write	Buffer Analysis	1d	0.5	Max	W/O	Warning
R004_AllocateSetEffectivenessPct	% pages found to page requests	Buffer Analysis	15m	75%	Min	W/O	Warning
R005_GlobalBufferPoolEffectivenessPct	% pages found in global buffer pool to page requests	Buffer Analysis	15m	85%	Min	W/O	Warning
R006_IOSavedPct	% page requests that saved a disk I/O	Buffer Analysis	15m	85%	Min	W/O	Warning
R015_AIJStatus	Status of after image journaling feature	AIJ Analysis	1d	0.5	Max	W/O	Warning
R016_ConfiguredAIJCnt	# of configured after image journals	AIJ Analysis	1d	0.5	Max	W/O	Major
R017_ReservedAIJCnt	# of reserved after image journals	AIJ Analysis	1d	0.5	Max	W/O	Major
R018_LogServerStatus	Status of AIJ Log Server (ALS)	AIJ Analysis	1d	0.5	Max	W/O	Warning
R019_AIJOverWriteStatus	Status of Journal overwrite	AIJ Analysis	1d	0.5	Max	W/O	Warning
R021_ABSStatus	Status of AIJ Backup Server (ABS)	AIJ Analysis	1d	0.5	Max	W/O	Major
R022_ABSExtJnlStatus	ABS and extensible after image journal status	AIJ Analysis	1d	0.5	Max	W/O	Major
R023_ABSOverwrittenJnlStatus	ABS and overwritten AIJ Status	AIJ Analysis	5m	0.5	Max	W/O	Critical
R024_ABSHardDataLossStatus	ABS and hard data loss	AIJ Analysis	5m	0.5	Max	W/O	Critical
R027_ARBPoolExhaustionCnt	# of times AIJ Request Block (ARB) exhausted	AIJ Analysis	1h	0.5	Max	W/O	Critical
R028_ARBsPerIORatio	Ratio of ARBs per I/O	AIJ Analysis	1d	2	Min	W/O	Minor
R029_BlocksPerIORatio	Ratio of blocks per AIJ I/O	AIJ Analysis	1d	2	Min	W/O	Minor
R030_ARBBackgroundFmtPct	% of ARBs formatted in background by ALS	AIJ Analysis	1h	50%	Min	W/O	Minor
R031_AIJCacheOverflowCnt	# of times AIJ cache has overflowed	AIJ Analysis	15m	0.5	Max	W/O	Critical
R032_AIJCacheOverflowPct	% of AIJ cache overflow	AIJ Analysis	1h	10%	Max	W/O	Major

Rdb Metric	Description	Area	Interval	Threshold	Min/Max	Reset	Severity	A or G
R033_EmergencyAIJStatus	Status of Emergency AIJ facility	AIJ Analysis	1h	0.5	Max	W/O	Warning	A
R039_RUJSyncIORatioPct	Average number of synchronous write operations to RUJ file	RUJ Analysis	5m	10%	Max	W/O	Warning	A
R040_RUJExtendRatioPct	Average number of file extension operations to RUJ file	RUJ Analysis	1h	2%	Max	W/O	Major	A
R043_ProcessFailureRatePct	% of DBR operations to database attaches	Recovery Analysis	1h	15%	Max	W/O	Warning	A
R044_ProcessRecoveryRate	Average Duration of DBR	Recovery Analysis	1h	2	Max	W/O	Warning	A
R046_DBSingleFileStatus	Single File Database Check	Recovery Analysis	1d	0.5	Max	W/O	Warning	A
R049_PageDiscardRate	% of pages discarded to pages checked	Record Analysis	1h	10%	Max	W/O	Warning	A
R050_SPAMFetchToTotalFetchRate	% SPAM fetched to total fetched	Record Analysis	1h	80%	Max	W/O	Warning	A
R051_SPAMFetchtoStoreRate	% SPAM fetched to total stored	Record Analysis	1h	20%	Max	W/O	Warning	A
R054_FragRecordsStored	% fragmented records stored to total stored	Record Analysis	1h	20%	Max	W/O	Warning	A
R055_FragRecordsFetched	% fragmented records fetched to total fetched	Record Analysis	1h	20%	Max	W/O	Warning	A
R060_AreaAsyncReadStalls	Duration of asynch read I/O stalls	Area Analysis	1d	0.5	Max	W/O	Warning	A
R061_AreaAsyncWriteStalls	Duration of asynch write I/O stalls	Area Analysis	1d	0.5	Max	W/O	Warning	A
R062_AreaSyncReadStalls	Duration of sync read I/O stalls	Area Analysis	1d	0.5	Max	W/O	Warning	A
R063_AreaSyncWriteStalls	Duration of sync write I/O stalls	Area Analysis	1d	0.5	Max	W/O	Warning	A
R071_BTRFetchDupRatioPct	Average number of b-tree duplicate node fetches	Index Analysis	1d	15%	Max	W/O	Warning	A
R072_BTRStoreDupRatioPct	Average number of b-tree duplicate node stores	Index Analysis	1d	15%	Max	W/O	Warning	A
R073_BTRLeafFetchRatioPct	Average number of b-tree index leaf-node fetches	Index Analysis	1d	25%	Min	W/O	Warning	A
R074_HashFetchDupRatioPct	Average number of hash index duplicate node fetches	Index Analysis	1d	15%	Max	W/O	Warning	A
R075_HashStoreDupRatioPct	Average number of hash index duplicate node stores	Index Analysis	1d	15%	Max	W/O	Warning	A
R078_RowCacheDisabledStatus	Row caching feature unavailable	Row Cache Analysis	1d	0.5	Max	W/O	Warning	A

Rdb Metric	Description	Area	Interval	Threshold	Min/Max	Reset	Severity	A or G
R083_ProcENQLMRatioPct	Process ENQCNT to ENQLM ratio	Process Analysis	1h	25%	Min	W/O	Warning	A
R084_ProcASTLMRatioPct	Process ASTCNT to ASTLM ratio	Process Analysis	1h	25%	Min	W/O	Warning	A
R085_ProcBIOLMRatioPct	Process BIOCNT to BIOLM ratio	Process Analysis	1h	25%	Min	W/O	warning	A
R086_ProcDIOLMRatioPct	Process DIOCNT to DIOLM ratio	Process Analysis	1h	25%	Min	W/O	Warning	A
R087_ProcPGFLQUOTARatioPct	Process PAGFILCNT to PGFLQUOTA ratio	Process Analysis	1h	25%	Min	W/O	Warning	A
R090_VerbRollbackPct	SQL Verb rollback percentage	Transaction Analysis	1h	25%	Max	W/O	Major	A
R091_RUJWritesPerTransRate	Rate of RUJ File Writes per Transaction	RUJ File Analysis	1d	1	Max	W/O	Minor	A
R092_RUJReadsWritesRatio	Ratio of RUJ File Reads to Writes	RUJ File Analysis	1d	10	Max	W/O	Warning	A
R093_RUJWritesReadsRatio	Ratio of RUJ File Writes to Reads	RUJ File Analysis	1d	10	Max	W/O	Warning	A
R094_SynchAsynchReadsRatio	Ratio of synchronous to asynchronous data file reads	Performance Analysis	1d	10	Max	W/O	Warning	A

Table 2 - Description of Rdb Metric Specification

Metric Number	The identification number assigned to the metric. All Rdb metrics are in the range 4000 to 4999.
	   4001 to 4099: Standard Metrics
	   4200 to 4299: Drill Down Metrics
	   4700 to 4799: UDM Metrics

Name	The name assigned to the metric. All Rdb metrics start with Rxxx, where xxx are the last 3 digits of the metric number.
Severity	The severity of the metric: (Critical, Major, Minor, Warning, Normal)
Description	What the metric means.
Favorites	Is the metric included in the DB-SPI Default metrics group? (Yes, No)
Alarming and/or Graphing Metric	Is the metric an alarming metric (A) or a graphing metric (G) or both (A & G)? (A, G, or A & G)
Collection Interval	How often is the metric collected and analyzed? (5 min, 15 min, 1 hour, 1 time daily)
Min/Max Threshold	Does the OVO threshold represent a Minimum or Maximum value?
Threshold	What is the default OVO threshold (if any)? (*=Threshold value is really 0, but OVO alarms occur at <= or >= values. Since a 0 value would trigger an alarm, the threshold is set to 0.5)
Reset (value)	What is the Reset (value) for this metric? (Without reset, With reset, Continuous)
Message Text	What messages can be displayed for each condition?
Instruction Text	Problem-solving information
Area	To what logical area (if any) does the metric belong? (Buffer Analysis, Transaction Analysis, AIJ Analysis, RUJ Analysis, Recovery Analysis, Record Analysis, Area Analysis, Locking Analysis, Index Analysis, Row Cache Analysis, Process Analysis)

Table 3 - Individual Rdb Metric Specifications

Metric Number	4001
Name	AsynchPreFetchStat
Severity	Warning
Description	Status of Asynchronous Pre-Fetch
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4001.1: Asynchronous pre-fetch is disabled
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4002
Name	DetectedAsynchPreFetchStat
Severity	Warning
Description	Status of Detected Asynchronous Pre-Fetch
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4002.1: Detected asynchronous pre-fetch is disabled
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4003
Name	AsynchBatchWriteStat
Severity	Warning
Description	Status of Asynchronous Batch-Write
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4003.1: Asynchronous batch-write is disabled
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4004
Name	AllocateSetEffectivenessPct
Severity	Warning
Description	% pages found to page requests
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	15 min
Min/Max Threshold	Minimum
Threshold	75%
Reset (value)	Without reset
Message Text	DBSPI-4004.1: LB/AS <Metric_Value>% page hit below <Threshold_Value>% threshold
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4005
Name	GlobalBufferPoolEffectivenessPct
Severity	Warning
Description	% pages found in global buffer pool to page requests
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	15 min
Min/Max Threshold	Minimum
Threshold	85%
Reset (value)	Without reset
Message Text	DBSPI-4005.1: GB <Metric_Value>% pool hit below <Threshold_Value>% threshold
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4006
Name	IOSavedPct
Severity	Warning
Description	% page requests that saved a disk I/O
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	15 min
Min/Max Threshold	Minimum
Threshold	85%
Reset (value)	Without reset
Message Text	DBSPI-4006.1: GB <Metric_Value>% IO-saved below <Threshold_Value>% threshold
Instruction Text	Refer to the Buffer Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Buffer Analysis

Metric Number	4015
Name	AIJStatus
Severity	Warning
Description	Status of after image journaling feature
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4015.1: After-image journaling is disabled
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4016
Name	ConfiguredAIJCnt
Severity	Major
Description	# of configured after image journals
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4016.1: Database should be configured for at least <Metric_Value> journals
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4017
Name	ReservedAIJCnt
Severity	Major
Description	# of reserved after image journals
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4017.1: At least <Metric_Value> journals should be reserved
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4018
Name	LogServerStatus
Severity	Warning
Description	Status of AIJ Log Server (ALS)
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4018.1: Log server is manual
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4019
Name	AIJOverWriteStatus
Severity	Warning
Description	Status of Journal overwrite
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4019.1: Journal overwrite is enabled
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4021
Name	ABSStatus
Severity	Major
Description	Status of AIJ Backup Server (ABS)
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4021.1: AIJ backup server is manual
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4022
Name	ABSExtJnlStatus
Severity	Major
Description	ABS and extensible after image journal status
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4022.1: ABS cannot be invoked because only 1 journal is active
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4023
Name	ABSOverwrittenJnlStatus
Severity	Critical
Description	ABS and overwritten AIJ Status
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	5 min
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4023.1: ABS cannot be invoked because a journal has been overwritten
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4024
Name	ABSHardDataLossStatus
Severity	Critical
Description	ABS and hard data loss
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	5 min
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4024.1: ABS cannot be invoked because hard data loss has occurred
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4027
Name	ARBPoolExhaustionCnt
Severity	Critical
Description	# of times AIJ Request Block (ARB) exhausted
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4027.1: ARB pool exhausted <Metric_Value> times
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4028
Name	ARBFormatRate
Severity	Minor
Description	Rate at which ARBs formatted
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Minimum
Threshold	2
Reset (value)	Without reset
Message Text	DBSPI-4028.1: <Metric_Value>% ARBs per I/O below <Threshold_Value>% threshold
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4029
Name	ARBWriteRate
Severity	Minor
Description	Rate at which ARBs written
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Minimum
Threshold	2
Reset (value)	Without reset
Message Text	DBSPI-4029.1: <Metric_Value>% blocks written per I/O below <Threshold_Value>% threshold
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4030
Name	ARBBackgroundFmtPct
Severity	Minor
Description	% of ARB formatted in background by ALS
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	50%
Reset (value)	Without reset
Message Text	DBSPI-4030.1: <Metric_Value>% background-formatted ARBs below <Threshold_Value>% threshold
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4031
Name	AIJCacheOverflowCnt
Severity	Critical
Description	# of times AIJ cache has overflowed
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	15 min
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4031.1: AIJ cache overflowed <Metric_Value> times
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4032
Name	AIJCacheOverflowPct
Severity	Major
Description	% of AIJ cache overflow
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	10%
Reset (value)	Without reset
Message Text	DBSPI-4032.1: <Metric_Value>% cache overflow above <Threshold_Value>% threshold
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4033
Name	EmergencyAIJStatus
Severity	Warning
Description	Status of Emergency AIJ facility
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4033.1: Emergency AIJ creation not enabled
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4035
Name	AIJNetworkBPSRate
Severity	Major
Description	Rate of current Hot Standby feature network transmission
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	15 min
Min/Max Threshold	Maximum
Threshold	60 seconds
Reset (value)	Without reset
Message Text	DBSPI-4035.1: AIJ network <Metric_Value> BPS above <Threshold_Value> BPS threshold
Instruction Text	Refer to the AIJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	AIJ Analysis

Metric Number	4039
Name	RUJSyncIORatioPct
Severity	Warning
Description	Average number of synchronous write operations to RUJ file
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	5 min
Min/Max Threshold	Maximum
Threshold	10%
Reset (value)	Without reset
Message Text	DBSPI-4039.1: <Metric_Value>% synchronous RUJ I/O above <Threshold_Value>% threshold
Instruction Text	Refer to the RUJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	RUJ Analysis

Metric Number	4040
Name	RUJExtendRatioPct
Severity	Major
Description	Average number of file extension operations to RUJ file
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	2%
Reset (value)	Without reset
Message Text	DBSPI-4040.1: <Metric_Value>% RUJ extends above <Threshold_Value>% threshold
Instruction Text	Refer to the RUJ Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	RUJ Analysis

Metric Number	4043
Name	ProcessFailureRatePct
Severity	Warning
Description	% of DBR operations to database attaches
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	15%
Reset (value)	Without reset
Message Text	DBSPI-4043.1: <Metric_Value>% process failure rate above <Threshold_Value>% threshold
Instruction Text	Refer to the Recovery Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Recovery Analysis

Metric Number	4044
Name	ProcessRecoveryRate
Severity	Warning
Description	Average Duration of DBR
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	2 seconds
Reset (value)	Without reset
Message Text	DBSPI-4044.1: <Metric_Value>% process recovery duration above <Threshold_Value>% threshold
Instruction Text	Refer to the Recovery Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Recovery Analysis

Metric Number	4046
Name	DBSingleFileStatus
Severity	Warning
Description	Single File Database Check
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4046.1: Database is single file
Instruction Text	Refer to the Recovery Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Recovery Analysis

Metric Number	4049
Name	PageDiscardRate
Severity	Warning
Description	% of pages discarded to pages checked
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	10%
Reset (value)	Without reset
Message Text	DBSPI-4049.1: <Metric_Value>% page discard rate above <Threshold_Value>% threshold (avg <n.m> I/Os)
Instruction Text	Refer to the Record Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Record Analysis

Metric Number	4050
Name	SPAMFetchToTotalFetchRate
Severity	Warning
Description	% SPAM fetched to total fetched
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	80%
Reset (value)	Without reset
Message Text	DBSPI-4050.1: <Metric_Value>% SPAM page fetch rate above <Threshold_Value>% total fetched threshold
Instruction Text	Refer to the Record Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Record Analysis

Metric Number	4051
Name	SPAMFetchtoStoreRate
Severity	Warning
Description	% SPAM fetched to total stored
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	20%
Reset (value)	Without reset
Message Text	DBSPI-4051.1: <Metric_Value>% SPAM page fetch rate above <Threshold_Value>% record stored threshold
Instruction Text	Refer to the Record Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Record Analysis

Metric Number	4054
Name	FragRecordsStored
Severity	Warning
Description	% fragmented records stored to total stored
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	20%
Reset (value)	Without reset
Message Text	DBSPI-4054.1: <Metric_Value>% fragmented records stored above <Threshold_Value>% threshold
Instruction Text	Refer to the Record Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Record Analysis

Metric Number	4055
Name	FragRecordsFetched
Severity	Warning
Description	% fragmented records fetched to total fetched
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	20%
Reset (value)	Without reset
Message Text	DBSPI-4055.1: <Metric_Value>% fragmented records fetched above <Threshold_Value>% threshold
Instruction Text	Refer to the Record Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Record Analysis

Metric Number	4060
Name	AreaAsyncReadStalls
Severity	Warning
Description	Duration of asynch read I/O stalls
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4060.1: <area_name> async read I/O stalls <Metric_Value> exceeded average <Threshold_Value>
Instruction Text	Refer to the Area Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Area Analysis

Metric Number	4061
Name	AreaAsyncWriteStalls
Severity	Warning
Description	Duration of asynch write I/O stalls
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4061.1: <area_name> async write I/O stalls <Metric_Value> exceeded average <Threshold_Value>
Instruction Text	Refer to the Area Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Area Analysis

Metric Number	4062
Name	AreaSyncReadStalls
Severity	Warning
Description	Duration of sync read I/O stalls
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4062.1: <area_name> sync read I/O stalls <Metric_Value> exceeded average <Threshold_Value>
Instruction Text	Refer to the Area Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Area Analysis

Metric Number	4063
Name	AreaSyncWriteStalls
Severity	Warning
Description	Duration of sync write I/O stalls
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4063.1: <area_name> sync write I/O stalls <Metric_Value> exceeded average <Threshold_Value>
Instruction Text	Refer to the Area Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Area Analysis

Metric Number	4071
Name	BTRFetchDupRatioPct
Severity	Warning
Description	Average number of b-tree duplicate node fetches
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	15%
Reset (value)	Without reset
Message Text	DBSPI-4071.1: <Metric_Value>% duplicate b-tree fetch above <Threshold_Value>% threshold
Instruction Text	Refer to the Index Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Index Analysis

Metric Number	4072
Name	BTRStoreDupRatioPct
Severity	Warning
Description	Average number of b-tree duplicate node stores
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	15%
Reset (value)	Without reset
Message Text	DBSPI-4072.1: <Metric_Value>% duplicate b-tree store above <Threshold_Value>% threshold
Instruction Text	Refer to the Index Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Index Analysis

Metric Number	4073
Name	BTRLeafFetchRatioPct
Severity	Warning
Description	Average number of b-tree index leaf-node fetches
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4073.1: <Metric_Value>% leaf-node b-tree fetch below <Threshold_Value>% threshold
Instruction Text	Refer to the Index Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Index Analysis

Metric Number	4074
Name	HashFetchDupRatioPct
Severity	Warning
Description	Average number of hash index duplicate node fetches
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	15%
Reset (value)	Without reset
Message Text	DBSPI-4074.1: <Metric_Value>% duplicate hash index fetch above <Threshold_Value>% threshold
Instruction Text	Refer to the Index Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Index Analysis

Metric Number	4075
Name	HashStoreDupRatioPct
Severity	Warning
Description	Average number of hash index duplicate node stores
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	15%
Reset (value)	Without reset
Message Text	DBSPI-4075.1: <Metric_Value>% duplicate hash index store above <Threshold_Value>% threshold
Instruction Text	Refer to the Index Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Index Analysis

Metric Number	4078
Name	RowCacheDisabledStatus
Severity	Warning
Description	Row caching feature unavailable
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	0.5 (*)
Reset (value)	Without reset
Message Text	DBSPI-4078.1: Row cache is not enabled
Instruction Text	Refer to the Row Cache Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Row Cache Analysis

Metric Number	4083
Name	ProcENQLMRatioPct
Severity	Warning
Description	Process ENQCNT to ENQLM ratio
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4083.1: Process n ENQLM <Metric_Value> ratio below <Threshold_Value>% threshold
Instruction Text	Refer to the Process Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Process Analysis

Metric Number	4084
Name	ProcASTLMRatioPct
Severity	Warning
Description	Process ASTCNT to ASTLM ratio
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4084.1: Process n ASTLM <Metric_Value> ratio below <Threshold_Value>% threshold
Instruction Text	Refer to the Process Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Process Analysis

Metric Number	4085
Name	ProcBIOLMRatioPct
Severity	Warning
Description	Process BIOCNT to BIOLM ratio
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4085.1: Process n BIOLM <Metric_Value> ratio below <Threshold_Value>% threshold
Instruction Text	Refer to the Process Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Process Analysis

Metric Number	4086
Name	ProcDIOLMRatioPct
Severity	Warning
Description	Process DIOCNT to DIOLM ratio
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4086.1: Process n DIOLM <Metric_Value> ratio below <Threshold_Value>% threshold
Instruction Text	Refer to the Process Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Process Analysis

Metric Number	4087
Name	ProcPGFLQUOTARatioPct
Severity	Warning
Description	Process PAGFILCNT to PGFLQUOTA ratio
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Minimum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4087.1: Process n PGFLQUOTA <Metric_Value> ratio below <Threshold_Value>% threshold
Instruction Text	Refer to the Process Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Process Analysis

Metric Number	4090
Name	VerbRollbackPct
Severity	Major
Description	SQL Verb rollback percentage
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 hour
Min/Max Threshold	Maximum
Threshold	25%
Reset (value)	Without reset
Message Text	DBSPI-4090.1: <Metric_Value>% verb rollback above <Threshold_Value>% threshold
Instruction Text	Refer to the Transaction Analysis section in the Online Analysis chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 1).
Area/Subarea	Transaction Analysis

Metric Number	4091
Name	RUJWritesPerTransRate
Severity	Minor
Description	Rate of RUJ File Writes per Transaction
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	1
Reset (value)	Without reset
Message Text	DBSPI-4091.1: <Metric_Value> RUJ File Writes per Transaction is more than the threshold <Threshold_Value>
Instruction Text	Refer to the Summary IO Statistics section in the Main Menu Screens chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 2).
Area/Subarea	RUJ File Analysis

Metric Number	4092
Name	RUJReadsWritesRatio
Severity	Warning
Description	Ratio of RUJ File Reads to Writes
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	10
Reset (value)	Without reset
Message Text	DBSPI-4092.1: RUJ File Reads to Writes Ratio <Metric_Value> too high (>=<Threshold_Value>)
Instruction Text	Refer to the Summary IO Statistics section in the Main Menu Screens chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 2).
Area/Subarea	RUJ File Analysis

Metric Number	4093
Name	RUJWritesReadsRatio
Severity	Warning
Description	Ratio of RUJ File Writes to Reads
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	10
Reset (value)	Without reset
Message Text	DBSPI-4093.1: RUJ File Writes to Reads Ratio <Metric_Value> too high (>=<Threshold_Value>)
Instruction Text	Refer to the Summary IO Statistics section in the Main Menu Screens chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 2).
Area/Subarea	RUJ File Analysis

Metric Number	4094
Name	SynchAsynchReadsRatio
Severity	Warning
Description	Ratio of synchronous to asynchronous data file reads
Favorites	Yes
Alarming and/or Graphing Metric	A
Collection Interval	1 time daily
Min/Max Threshold	Maximum
Threshold	10
Reset (value)	Without reset
Message Text	DBSPI-4094.1: Sync to Async data file reads Ratio <Metric_Value> is high (>=<Threshold_Value>)
Instruction Text	Refer to the Summary IO Statistics section in the Main Menu Screens chapter of the Oracle Corporation RMU SHOW STATISTICS DBA HANDBOOK (Volume 2).
Area/Subarea	Performance Analysis