Database Table Definitions

The database tables in StorWatch Expert have descriptions that might be of use during problem determination procedures. Therefore, we provide this link to the database table definitions. Clicking the link launches a new browser window that displays all of the database table names, and allows you to drill down to more specific information about each entry. At this point, it is not our intention to provide information about using these tables for customizing your StorWatch Expert environment.

The StorWatch Expert database contains asset, capacity, and performance information for the IBM Enterprise Storage Server (ESS), IBM 3494 Magstar Tape Library, IBM 3494 Magstar Virtual Tape Server (VTS), and the IBM 3494 Magstar Peer-to-Peer VTS. The StorWatch Expert web interface offers a means of viewing this information through it's many reports and graphs. As an additional convenience we have published an example of the database table definitions to allow you to evaluate the information available with the EXPERT product. .

1. Root table: VMPDX
   - Contains serial number of each ESS, a corresponding index, a user-defined nickname, other ESS-level information

2. Asset and Capacity tables (updated by the Expert Asset/Capacity Data Collection task);
   (The indices in VMPDX identify the ESS's in these tables.)

   2a. "Historical" Tables (most tables updated only when content changes. VMCAP, VHOSTC, VCLUC are updated each time task runs)

   Asset data:
   - VCLUA, VCLUL - cluster IP and ESS micro code level information
   - VMASI, VMASE - expansion rack data

   Capacity data:
   - VMCAP - storage-server-level capacity data
   - VCLUC - cluster-level capacity data
   - VMDDM - number and type of ddm's per ESS
   - VCUIC, VCUIV - CKD capacity data

VHSTC, VHSTX - open systems host capacity data, indices for open systems hosts
VVOLX - indices for fixed block volumes per ESS

2b. "Current Data" Tables (an assembly of the most recently collected data for each ESS):
Tables starting with "VCM" - most recently collected capacity data (including host-volume relationships in VCMHOSTVOL)
Tables starting with "VSXDA" - most recently collected asset data

3. Performance Tables (sample data updated by Performance Data Collection task, hourly tables updated by Data Preparation task):

3a. Sample data:
VPCCH - sample interval data (volume statistics)
VPCRK - sample interval data (RAID array-level statistics)
VPVPD |
VPCFG |----- > tables for conversion of ESS "internal address" scheme to "location" of volumes and arrays
VPVOL |

3b. Hourly data:
VPHVOL - volume-level statistics
VPHAR, VPHARCAC - RAID array -level statistics
VPHAD, VPHADCAC - device adapter/loop level statistic s
VPHCLCAC - cluster-level statistics
VPHSS - ESS-level statistics (not displayed by the Expert)

VPSNX - index table for each ESS with performance statistics.
These indices identify the ESS's in the "VPH" tables.
The indices in VMPDX and VPSNX are correlated by ESS serial number.

4. Various tables related to the tasks themselves:
VSTATS - results of data collection tasks
VPCUT, VTSEQ, VSCHT - usage depends on type of task

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table	Description
CUSRS	list of users defined to StorWatch [key: I_USER]
CUAUT	list of authorities for users [key: I_USER, C_AUTH_FUNC]
CSCHD	scheduled tasks [key: I_USER, C_SCHD_TASK_TYPE, I_SCHD_TASK]
CSCHH	history of executed scheduled tasks [key: I_USER, C_SCHD_TASK_TYPE, I_SCHD_TASK, I_SCHH_TASK_SEQ]
CNODE	node names and IP addresses of hosts discovered by StorWatch [key: I_IP_ADDR, I_NODE_NAME]
CNGRP	general node group information [key: I_NODE_GROUP]
CNGDI	IP address patterns that define the node groups [key: I_NODE_GROUP, I_IP_ADDR]
CSIPA	IP address patterns that make up the StorWatch management scope [key: I_IP_ADDR]
CSSTY	service types that StorWatch will discover [key: C_SERVICE_TYPE, N_PORT]
CSRVH	history of services found on each discovered node [key: I_NODE_ENTITY, C_SERVICE_TYPE, N_PORT, I_SCHH_TASK_SEQ]
CNGRH	history of node group membership by node [key: I_NODE_ENTITY, I_NODE_GROUP, I_SCHH_TASK_SEQ]
CIGEN	index generation table [key: I_INDEX_NAME]
CMSGS	log, trace and alert messages [key: none]
CMSAU	alert message authorities [key: I_MSGID, D_ISSUED, C_AUTH_FUNC]
CDSTT	discovery summary statistics [key: I_SCHH_TASK_SEQ]
CDSSD	discovery detail statistics [key: I_SCHH_TASK_SEQ, C_SERVICE_TYPE, C_SERV_TYPE_STATUS]
CUPRF	user profile table [key: I_USER, I_PRF_KEY]
CURLE	user role description [key: I_USER_ROLE]
CURTA	user role to authority association [key: I_USER_ROLE, C_AUTH_FUNC]
CUSRV	user defined services [key: C_SERVICE_TYPE]
CUSPT	user defined service ports [key: C_SERVICE_TYPE, N_PORT]
CSNMP	SNMP managers [key: I_SNMP_IP_ADDR, N_SNMP_PORT]
CSWCS	configuration data [key: I_CFG_KEY]
CPARM	general parameters -- can be used by all StorWatch components [key: I_PRM_KEY, C_PRM_COMP, I_PRM_SCOPE]
VTSEQ	Historical list of asset/capacity task sequence numbers and the associated date and time that each task ran. [key: I_TASK_SEQ_IDX]
VMPDX	VMPDX contains the basic, seldom-changing attributes associated with each storage server the ESS Expert has communicated with. One record exists for each storage server "known" to the ESS Expert. [key: I_VSM_IDX]
VMASI	Historical table containing the basic attributes associated with asset information for each storage server. New row inserted whenever these attributes of a storage server changes.[key: I_VSM_IDX,I_TASK_SEQ_FIRST]
VMASE	Historical table containing expansion feature attributes for each storage server. New row inserted whenever these attributes of a storage server changes. [key: I_VSM_IDX,I_TASK_SEQ_FIRST,I_VSM_RACK_SN]
VCLUA	Historical table containing the asset management type attributes for each cluster in a storage server. New row inserted whenever these attributes of a cluster changes. [key: I_VSM_IDX,I_TASK_SEQ_FIRST,I_CLU_NO]
VCLUL	Historical table containing licensed internal code attributes for each cluster in a storage server. New row inserted whenever these attributes change [key: I_VSM_IDX,I_TASK_SEQ_FIRST,I_CLU_NO,I_CLU_LIC_SRC]

VMCAP	Historical storage server capacity table. New rows inserted each time asset/capacity collection runs. [key: I_VSM_IDX,I_TASK_SEQ_IDX]
VMDDM	historical list of types of DDMs (disk drive modules/actual physical disks) in the storage server, and their quantity. When the quantity changes, a new row is added. [key: I_VSM_IDX,I_DDM_TYPE,I_TASK_SEQ_FIRST]
VCLUC	historical cluster capacity table. New row added whenever the memory attributes of a cluster changes [key: I_VSM_IDX,I_CLU_NO,I_TASK_SEQ_FIRST]
VHSTC	Historical SCSI-attached host capacity table: records the capacity for all hosts, per storage server, each time asset/capacity data is collected from the storage servers [key: I_VSM_IDX,I_TASK_SEQ_IDX,I_HOST_IDX]
VHSTX	Index table for SCSI-attached and FC-attached hosts. New row added whenever a new host or host attachment type is detected or when the attributes of a host changes. [key: I_HOST_IDX,I_HOST_ATTACH,I_TASK_SEQ_FIRST]
VHSTV	Host-Volume association table. Recreated each time asset/capacity collection runs. [key: I_VSM_IDX,I_TASK_SEQ_IDX,I_HOST_IDX,I_VOL_IDX]
VVOLX	Index table for fixed block, logical volumes. New row added whenever a new fixed block volume is detected or the attributes of an existing volume changes. [key: I_VSM_IDX,I_VOL_IDX,I_TASK_SEQ_FIRST]
VCUIC	Historical table containing capacity data for logical control units in each storage server. New rows inserted with each capacity collection run. [key: I_VSM_IDX,I_CUI_IMAGE_NUM,I_TASK_SEQ_IDX]
VCUIV	Historical table summarizing CKD volumes of a given type and total capacity, per logical control unit. New rows added each capacity collection run. [key: I_VSM_IDX,I_CUI_IMAGE_NUM,I_CUI_VOL_TYPE,I_TASK_SEQ_IDX]
VCMTOP1	Most recently collected data for storage server capacity, logical control units, and SCSI-attached hosts. Table is recreated each capacity collection run. [key: I_VSM_IDX]
VCMTOP2	Most recently collected data for capacity-related hardware attributes in each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX]
VCMDDM	Most recently collected data for list of types of DDMs. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_DDM_GB_CAPACITY,I_DDM_RPM]
VCMCLUST	Most recently collected data for cluster capacity. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CLU_NO]
VCMCUISUM	Most recently collected data for capacity values of logical control units in each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CUI_IMAGE_NUM]
VCMCUIVOL	Most recently collected data for. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CUI_IMAGE_NUM,I_CUI_VOL_TYPE]
VCMCKD	Most recently collected data for CKD volumes in each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CUI_IMAGE_NUM,I_VOL_NUM]
VCMHOSTCAP	Most recently collected data for the capacity for SCSI-attached hosts, per storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_HOST_IDX]
VCMHOSTVOL	Most recently collected data for SCSI-attached hosts/fixed block volume connections in each storage server. Table is recreated with each capacity collection run. [key: I_VSM_IDX,I_HOST_IDX,I_VOL_IDX]
VSXDALVL	Most recently collected data for the basic identifying information for each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX]
VSXDALDT	Most recently collected data for the active level of licensed internal code for each cluster. Table is recreated each time capacity collection run. [key: I_VSM_IDX,I_CLU_NO]
VSXDATOP	Most recently collected data for the basic attributes associated with asset information for each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX]
VSXDARCK	Most recently collected data for the expansion feature attributes associated with each storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX]
VSXDACLU	Most recently collected data for the asset management type attributes for each cluster in a storage server. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CLU_NO]
VSXDALIC	Most recently collected data for the licensed internal code attributes for each cluster. Table is recreated each capacity collection run. [key: I_VSM_IDX,I_CLU_NO,I_CLU_LIC_SRC]
VSXDSTYP	Most recently collected data for storage server summary by type. Table is recreated each capacity collection run. [key: I_VSM_TYPE]

VPVPD	cluster-level and storage server-level configuration data; generated at start of Performance Collection [KEY: P_TASK,M_MACH_SN,M_CLUSTER_N]
VPCFG	logical array configuration data; generated at start of Performance Collection [key: P_TASK,M_MACH_SN,M_CLUSTER_N,M_CARD_NUM,M_LSS_LA,M_ARRAY_ID]
VPVOL	logical volume configuration data; generated at start of Performance Collection [key: P_TASK,M_MACH_SN,M_LSS_LA,M_VOL_NUM]
VPCRK	logical array-level performance data (for subsystem requests issued to the lower interface); updated by Performance Collection [key: P_TASK,PC_INDEX,M_MACH_SN,M_CLUSTER_N,M_LSS_LA,M_ARRAY_ID,PC_DATE_B,PC_TIME_B]
VPCCH	volume-level performance data (for I/O requests, or "command chains", including those causing cache/DASD transfers); updated by Performance Collection [key: P_TASK,PC_INDEX,M_MACH_SN,M_CLUSTER_N,M_LSS_LA,M_ARRAY_ID,M_VOL_NUM,PC_DATE_B,PC_TIME_B]
VPHVOL	hourly performance statistics for logical volumes (based on VPCCH); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_MACH_IDX,I_CLUSTER_NO,I_CARD_NO,I_LOOP_ID,I_DISK_GRP_NO,I_DISK_NUM,I_VOL_NUM,D_PR_DATE,I_PR_HOUR]
VPHARCAC	hourly performance statistics for logical arrays (based on VPCCH); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_MACH_IDX,I_CLUSTER_NO,I_CARD_NO,I_LOOP_ID,I_DISK_GRP_NO,I_DISK_NUM,D_PR_DATE,I_PR_HOUR]
VPHADCAC	hourly performance statistics for adapter/loops (from VPCCH data); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_MACH_IDX,I_CLUSTER_NO,I_CARD_NO,D_PR_DATE,I_PR_HOUR]
VPHCLCAC	hourly performance statistics for clusters (from VPCCH data); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_MACH_IDX,I_CLUSTER_NO,D_PR_DATE,I_PR_HOUR]
VPSNX	list of storage servers and their internal indices for which preparation of performance data has occurred. Updated by Perf. Rollup [key: I_VSM_IDX]
VPCUT	Container for the cutoff time for the most recently run Data Preparation task. Updated by Data Preparation task [key: I_ITEM_NO]
VPHSS	hourly performance statistics for storage servers (from data for logical arrays, mostly in VPCRK); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_VSM_PERF_IDX,D_PR_DATE,I_PR_HOUR]
VPHAR	hourly performance statistics for logical arrays (from data for logical arrays, mostly VPCRK); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_VSM_PERF_IDX,I_ARRAY_ID,D_PR_DATE,I_PR_HOUR]
VPHAD	hourly performance statistics for adapter/loops (from data for logical arrays, mostly in VPCRK); generated by Data Preparation task [key: I_PR_SEQ_IDX,I_VSM_PERF_IDX,I_LSS_LA,D_PR_DATE,I_PR_HOUR]
VSCHT	Contains information to assist ESS Expert identify the storage servers that belong to a scheduled data collection task. [key: I_SCHD_TASK,I_USER,C_SCHD_TASK_TYPE,I_VSM_IDX]
VTSTATM	Task completion table for ESS Expert tasks which initiate work concurrently on multiple storage servers. Updated when such a task completes. [key: I_SCHH_TASK_SEQ]
VTSTATS	Task completion table for ESS Expert tasks which perform work procedurally for a set of storage servers. [key: I_SCHH_TASK_SEQ]
VMKHCAP	Historical Capacity data to be kept for 4 years.
VCMPORT	Most recently collected data for Fibre Channel (FC) adapter ports and attached open system hosts, if any. [key: I_VSM_IDX,I_PORT_BAY,I_PORT_CARD,I_PORT_ID,I_HOST_EXISTS,I_HOST_WWPN]
TDATASRC	Data source Table
TDATA	Data Description Table
TTHRESHOLD	Threshold registration Table
TALARMDISPLAY	Alarm display registration Table
TSASSET	S3494 asset Table
TSPERF	S3494 performance Table
TVASSET	VTS asset Table
TVCAPC	VTS capacity Table
TVPERF	VTS performance Table

TVCHNDIST	VTS channel distribution Table
TVACTDIST	VTS active data distribution Table
TGPERF	Gemini performance Table
TVREAL	VTS-18 real-time data Table
TTEMP	Temporary storage Table
TREPINFO	ETL report information

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CUSRS	
Column	**Description**
I_USER	StorWatch user id [CHAR(20), NOT NULL]
I_PASSWORD	password, stored in an encrypted form [CHAR(32), NOT NULL]
D_PASSWORD_EXPIR	expiration date for password. The password is not valid starting on this date. (Time portion of timestamp is ignored) [TIMESTAMP, NOT NULL]
I_USER_NAME	full name of user [CHAR(40), NOT NULL]
I_USER_E_MAIL	e-mail address of user [VARCHAR(128)]
D_LAST_UPDATE	date and time of last update for this user [TIMESTAMP, NOT NULL]
I_LAST_UPDATE	userid that performed last update [CHAR(20), NOT NULL]
F_ADMIN	flag that indicates whether or not this user is an administrator, Y=yes, N=no [CHAR(1), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CUAUT	
Column	**Description**
I_USER	StorWatch user id [CHAR(20), NOT NULL]
I_USER_ROLE	role asigned to this user [CHAR(20), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSCHD	
Column	**Description**
I_USER	userid that owns this schedule [CHAR(20), NOT NULL]
C_SCHD_TASK_TYPE	type of schedule [CHAR(4), NOT NULL]
I_SCHD_TASK	identifier for the task [CHAR(32), NOT NULL]
C_SCHD_TASK_INTVL	interval type [CHAR(3), NOT NULL]
X_SCHD_TASK_NAME	descriptive task name [VARCHAR(128)]
D_SCHD_START	start date and time [TIMESTAMP, NOT NULL]
D_NEXT_SCHD_START	next scheduled run [TIMESTAMP, NOT NULL]
N_EVERY_NTH	period for cyclical schedules [INTEGER]
N_DAYS_ARRAY	an string of 32 characters being either Y or N. For day of week schedules, entries 0-6 coresond to Sun-Sat, for day of month schedules, the positions correspond to the day of the month, the 32nd position means "last day of the month". [CHAR(32)]
X_SCHD_MORE_PARAM	additional parameters [VARCHAR(128)]
I_LAST_SCHD_SEQ	last task sequence number used for this task [INTEGER]
D_SCHD_TASK_EXPIR	date that task expires. time portion of timestamp is ignored. Task will not run on expiration date. [TIMESTAMP, NOT NULL]
F_PRIVATE	indicates that this task and its output are private, Y=yes, N=no [CHAR(1), NOT NULL]
F_TRACE	indicates that trace should be turned on when this task is run, Y=yes, N=no [CHAR(1), NOT NULL]
I_CYCLE_LENGTH	cycle length for repeated Schedule - period [INTEGER]
I_WINDOW_LENGTH	window length for repeated Schedule [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSCHH	
Column	**Description**
I_USER	userid that owns this schedule [CHAR(20), NOT NULL]
C_SCHD_TASK_TYPE	type of schedule [CHAR(4), NOT NULL]
I_SCHD_TASK	identifier for the task [CHAR(32), NOT NULL]
I_SCHH_TASK_SEQ	sequence number for task execution [INTEGER, NOT NULL]
C_SCHD_TASK_STATUS	status of task execution, AC=active, IN=incactive, AB=aborted [CHAR(2), NOT NULL]
X_RPT_FILE_NAME	report file name [CHAR(18)]
D_SCHD_TASK_START	date and time that task started to run [TIMESTAMP]
D_SCHD_TASK_COMPLT	date and time that task finished running [TIMESTAMP]
X_SCHD_MORE_PARAM	additional parameters [VARCHAR(128)]
X_SCHD_TASK_NAME	description of this task when it was run [VARCHAR(128)]
F_PRIVATE	indicates that this task and its output are private, Y=yes, N=no [CHAR(1), NOT NULL]
F_TRACE	indicates that trace should be turned on when this task is run, Y=yes, N=no [CHAR(1), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CNODE	
Column	**Description**
I_IP_ADDR	full IP address in dotted decimal form, e.g. 9.113.42.250 [CHAR(30), NOT NULL]
I_NODE_NAME	fully qualified node name, e.g. douglas.sanjose.ibm.com [CHAR(224), NOT NULL]
I_NODE_ENTITY	internally generated node identifier [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CNGRP	
Column	**Description**
I_NODE_GROUP	identifier of node group [CHAR(16), NOT NULL]
X_NODE_GROUP_DESC	description of node group [VARCHAR(128), NOT NULL]
D_LAST_UPDATE	timestamp of last update to this definition [TIMESTAMP, NOT NULL]
I_LAST_UPDATE	user who lst updated definition [CHAR(20), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CNGDI	
Column	**Description**
I_NODE_GROUP	identifier of node group [CHAR(16), NOT NULL]
I_IP_ADDR	address pattern in node group [CHAR(30), NOT NULL]
X_COMMENT	descriptive comment for this pattern [VARCHAR(128)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSIPA	
Column	**Description**
I_IP_ADDR	full IP address in dotted decimal notation or pattern with ranges and *, e.g. 9.113.42.250 [CHAR(30), NOT NULL]
X_COMMENT	descriptive comment for this pattern [VARCHAR(128)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSSTY	
Column	**Description**
C_SERVICE_TYPE	identifier of service, e.g. AS, KS, ... [CHAR(4), NOT NULL]
N_PORT	port number in scope for service [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSRVH	
Column	**Description**
I_NODE_ENTITY	internally generated node identifier, joins with CNODE [INTEGER, NOT NULL]
C_SERVICE_TYPE	identifier of the discovered service type e.g. KS, AS, ... [CHAR(4), NOT NULL]
I_SCHH_TASK_SEQ	sequence number of task that discovered this service [INTEGER, NOT NULL]
N_PORT	port number where the service was discovered [INTEGER, NOT NULL]
C_SERV_TYPE_STATUS	status indicator for service, active=AC, inactive=IN [CHAR(2), NOT NULL]
I_SERVICE_VERSION	version indication, e.g. 1.1.0 [CHAR(10), NOT NULL]
C_PROTOCOL	protocol used by service, HTTP=H, HTTPS=S [CHAR(1), NOT NULL]
C_SERVICE_SUBTYPE	subtype of service [CHAR(4)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CNGRH	
Column	**Description**
I_NODE_ENTITY	internally generated node identifier [INTEGER, NOT NULL]
I_NODE_GROUP	name of node group [CHAR(16), NOT NULL]
I_SCHH_TASK_SEQ	sequence number of task that discovered this service [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CIGEN	
Column	**Description**
I_INDEX_NAME	identifier for the index [CHAR(32), NOT NULL]
N_LAST_USED_INDEX	last number used for this index. assumed to be zero if row is absent. [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CMSGS	
Column	**Description**
I_MSGID	identifier of the message, e.g. GSW1000I [CHAR(9), NOT NULL]
C_SEVERITY	severity of the message, S=severe, E=error, W=warning, I=informational [CHAR(1), NOT NULL]
D_ISSUED	date and time message was issued [TIMESTAMP, NOT NULL]
C_MSGTYPE	type of message, L=log, T=trace, A=alert [CHAR(1), NOT NULL]
I_COMPONENT	component that issued the message, e.g. CORE, VSX, RPTR, ... [CHAR(4),NOT NULL]
I_SCHH_TASK_SEQ	sequnce number of scheduled task that was running to produce record, null if not produced while a scheduled task was running [INTEGER]
I_THREADID	identifier of execution thread that produced this message [VARCHAR(128)]
X_MESSAGE	text of the message [VARCHAR(1024), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CMSAU	
Column	**Description**
I_MSGID	identifier of the message, e.g. GSW1000I [CHAR(9), NOT NULL]
D_ISSUED	date and time message was issued [TIMESTAMP, NOT NULL]
C_AUTH_FUNC	authority required to process alert [CHAR(4), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CDSTT	
Column	**Description**
I_SCHH_TASK_SEQ	sequence number of discovery task [INTEGER, NOT NULL]
N_NODES_TRIED	number of nodes contacted during discovery [INTEGER, NOT NULL]
N_SERVICES_PER	number of services tried at each node [INTEGER, NOT NULL]
N_ACTIVE_NODES	number of active nodes found [INTEGER, NOT NULL]
N_ACTIVE_SERVICES	number of active services found [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CDSSD	
Column	**Description**
I_SCHH_TASK_SEQ	sequence number of discovery task [INTEGER, NOT NULL]
C_SERVICE_TYPE	type of service, e.g. AS, KS, ... [CHAR(4), NOT NULL]
C_SERV_TYPE_STATUS	status indicator for service, active=AC, inactive=IN [CHAR(2), NOT NULL]
N_FOUND	number of services of the given type in the given status discovered during the indicated task [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CUPRF	
Column	**Description**
I_USER	StorWatch user id [CHAR(20), NOT NULL]
I_PRF_KEY	key for profile data [CHAR(32), NOT NULL]
X_PROFILE_DATA	profile data for user [VARCHAR(1024)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CURLE	
Column	**Description**
I_USER_ROLE	Role name [CHAR(20), NOT NULL]
X_ROLE_DESC	description of the role [VARCHAR(128), NOT NULL]
D_LAST_UPDATE	date and time of last update [TIMESTAMP, NOT NULL]
I_LAST_UPDATE	userid that performed last update [CHAR(20), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CURTA	
Column	**Description**
I_USER_ROLE	Role name [CHAR(20), NOT NULL]
C_AUTH_FUNC	authority belonging to this role [CHAR(4), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CUSRV	
Column	**Description**
C_SERVICE_TYPE	identifier of service, e.g. AS, KS, ... [CHAR(4), NOT NULL]
I_META_TAG	value in the IBMproduct meta tag which will indicate that a discovered service is of this type [VARCHAR(128), NOT NULL]
X_DISPLAY_NAME	name for this service in user-interfaces [VARCHAR(128), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CUSPT	
Column	**Description**
C_SERVICE_TYPE	identifier of service, e.g. AS, KS, ... [CHAR(4), NOT NULL]
N_PORT	port number this service might be listening on [INTEGER, NOT NULL]
X_DISPLAY_NAME	null

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSNMP	
Column	**Description**
I_SNMP_IP_ADDR	address of a SNMP manager [CHAR(30), NOT NULL]
N_SNMP_PORT	port number the manager runs on, default port is 162 [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CSWCS	
Column	**Description**
I_CFG_KEY	key for a piece of configuration data [CHAR(32), NOT NULL]
X_CFG_DATA	the configuration data associated with I_CFG_KEY [VARCHAR(1024), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : CPARM	
Column	**Description**
I_PRM_KEY	key for a parameter [CHAR(32), NOT NULL]
C_PRM_COMP	component to which parameter is applicable. "ALL" means applicable to any/all components. [CHAR(6), NOT NULL]
I_PRM_SCOPE	additional specification that may narrow the applicability. "SYSTEM" means no additional narrowing. [CHAR(22), NOT NULL]
X_PRM_VALUE	the data value associated with the key [VARCHAR(1024), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VTSEQ	
Column	**Description**
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task. [INTEGER, NOT NULL]
D_TASK_DATE	The date this asset/capacity task ran. [DATE, NOT NULL]
T_TASK_TIME	The time this asset/capacity task started to run. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMPDX	
Column	**Description**
I_VSM_IDX	An index for each unique storage server, generated when the storage server is first discovered by StorWatch. This index is used in many tables related to asset/capacity data. [INTEGER, NOT NULL]
I_VSM_SN	The serial number of the storage server. This field is filled in when the storage server is first discovered by StorWatch. [CHAR(16), NOT NULL]
I_VSM_TYPE	The higher level identifier for the storage server product, for example 2105. This field is filled in when the storage server is first discovered by StorWatch. [CHAR(16)]
I_VSM_MODEL_NO	The model number for the storage server, for example E10. This field is filled in when the storage server is first discovered by StorWatch. [CHAR(10)]
I_SHORT_NAME	An alias name provided by an authorized end user for this storage server. This field is empty until a user provides a name through the Web user interface. [CHAR(16)]
I_VSM_MANFR_DATE	The date of manufacture for this storage server. This field is filled in when the ESS Expert first successfully collects asset and capacity data from the storage server. [CHAR(32)]
I_TASK_SEQ_FIRST	A numeric identifier corresponding to the date and time when the ESS Expert first successfully collects asset and capacity data from the storage server. [INTEGER]
D_TASK_DATE_FIRST	The date when the ESS Expert first successfully collected asset and capacity data from the storage server. [DATE]
T_TASK_TIME_FIRST	The time of day when the ESS Expert first successfully collected asset and capacity data from the storage server. [TIME]
I_TASK_SEQ_LATEST	A numeric identifier corresponding to the date and time when the ESS Expert most recently collected asset and capacity data from the storage server. [INTEGER]
D_TASK_DATE_LATEST	The date when the ESS Expert most recently collected asset and capacity data from the storage server. [DATE]
T_TASK_TIME_LATEST	The time when the ESS Expert most recently collected asset and capacity data from the storage server. [TIME]
I_DU_THRESHOLD	The percentage (0-100) above which a disk utilization value is reported as an exception. If this field is NULL, a default value is used by data preparation. [SMALLINT]

I_AVH_THRESHOLD	The integral value for average holding time threshold. A holding time below this threshold is displayed as an exception. If this field is NULL, a default value is used by data preparation. [SMALLINT]
I_VSM_FC_WWNN	The World-Wide Node-Name for this storage server, where this storage server is attached to a Fibre Channel fabric. Otherwise this field is blank. [CHAR(16), NOT NULL]
I_FC_ACCESS_MODE	The Access mode for this storage server, 1 if Access-any, 0 if Access-restricted, else if not applicable. [SMALLINT NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMASI	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of the storage server. [INTEGER, NOT NULL]
Q_TOT_CLU_NO	Total number of cluster controllers in this storage server. [INTEGER]
Q_EXPN_RACKS	Total number of expansion racks for this storage server. [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMASE	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of the storage server racks. [INTEGER, NOT NULL]
I_VSM_RACK_SN	Serial number for this storage server rack. [CHAR(16), NOT NULL]
I_VSM_RACK_ID	The type amd model number for this storage server rack. [CHAR(16)]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCLUA	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of the clusters. [INTEGER, NOT NULL]
I_CLU_NO	An identifier assigned to this cluster controller (also referred to simply as the cluster number). [INTEGER, NOT NULL]
I_CLU_SN	Serial number of this cluster controller. [CHAR(16)]
I_CLU_MODEL_NO	Model number of this cluster controller. [CHAR(16)]
I_CLU_IP	The IP address of this cluster controller. [CHAR(254)]
I_CLU_PORT_NO	The value for the port number assigned to the ESS Specialist installed on the cluster controller. [CHAR(5)]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]
I_CLU_USERID	The userid assigned to the ESS Specialist installed on the cluster controller. [CHAR(20)]
I_CLU_PASSWORD	The password for the userid assigned to the ESS Specialist installed on the cluster controller. (encrypted) [VARCHAR(254)]
I_CLU_USERID64	The userid assigned to the ESS Specialist installed on the cluster controller. [CHAR(64)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCLUL	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of the storage server. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for the cluster) [INTEGER, NOT NULL]
I_CLU_LIC_SRC	A numeric identifier that represents a licensed internal code level such as "active", "previous", "next", "cdrom", "diskette" and "unknown". [INTEGER, NOT NULL]
I_CLU_LIC_VRSN	Version, release and modification level of the licensed internal code. [CHAR(16)]
I_CLU_LIC_ACTVDAT	Activation date for the associated level of licensed internal code. [CHAR(32)]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMCAP	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task that read and summarized this data from the storage server. [INTEGER, NOT NULL]
Q_VSM_HOSTS	Number of SCSI-attached hosts identified and/or connected to this storage server. [INTEGER]
Q_VSM_CUIS	Number of logical control units defined in this storage server [INTEGER]
Q_VSM_TOTAL_CAP	Total amount of capacity (counted as unformatted bytes) in this storage server, in gigabytes [INTEGER]
Q_VSM_RAID_GB	Amount of storage defined as RAID storage, in gigabytes [INTEGER]
Q_VSM_NONRAID_GB	Amount of storage defined as independent disks, in gigabytes [INTEGER]
Q_VSM_UNDEFND_GB	Amount of storage in this storage server that has not been defined as either RAID or independent disks, in gigabytes [INTEGER]
Q_VSM_FB_TOT_GB	Amount of storage formatted as fixed block storage, in gigabytes [INTEGER]
Q_VSM_FB_ASSIGNED	Amount of fixed block storage that is currently assigned (connected to) hosts, in gigabytes [INTEGER]
Q_VSM_FB_PENDING	Amount of fixed block storage that is defined as volumes, but not attached to any host, in gigabytes [INTEGER]
Q_VSM_FB_FREE	Amount of fixed block storage that is available for fixed block volume definition, in gigabytes [INTEGER]
Q_VSM_FB_RAID	Amount of fixed block storage that is defined as RAID storage, in gigabytes [INTEGER]
Q_VSM_CKD_TOT_GB	Amount of storage formatted as logical control units, in gigabytes [INTEGER]
Q_VSM_CKD_ASSIGNED	Amount of logical control unit storage that has CKD volumes assigned, in gigabytes [INTEGER]
Q_VSM_CKD_FREE	Amount of logical control unit storage that is available for CKD volume definition, in gigabytes [INTEGER]

Q_VSM_CKD_RAID	Amount of logical control unit storage that is defined as RAID storage, in gigabytes [INTEGER]
Q_VSM_UNFORMATD_GB	Amount of undefined storage (Q_VSM_UNDEFND_GB) plus amount of free disk space in "independent disk" disk groups, in gigabytes [INTEGER]
Q_VSM_SCSI_ADAPT	Total number of SCSI adapters installed in this storage server. [INTEGER]
Q_VSM_ESCON_ADAPT	Total number of ESCON adapters installed in this storage server. [INTEGER]
Q_VSM_SSA_ADAPT	Total number of SSA adapters installed in this storage server. [INTEGER]
Q_VSM_RAID_GRPS	Number of disk groups in this storage server defined as RAID storage [INTEGER]
Q_VSM_NONRAID_GRPS	Number of disk groups in this storage server defined as independent disk groups [INTEGER]
Q_VSM_FREE_RANKS	Number of disk groups in this storage server that have not yet been defined as either RAID or independent disk type [INTEGER]
Q_VSM_DDMS	Total number of DDMs that are installed in this storage server [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]
Q_VSM_FC_HOSTS	Number of FC-attached hosts connected to this storage server. [INTEGER NOT NULL DEAFULT 0]
Q_VSM_FC_ADAPT	Total number of FC adapters installed in this storage server. [SMALLINT NOT NULL DEFAULT 0]
Q_VSM_FC_FICON	Reserved, not in use. [SMALLINT NOT NULL DEFAULT 0]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMDDM	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_DDM_TYPE	An internally generated numeric value that uniquely identifies each type of DDM based on capacity and revolutions per minute (RPMs) [SMALLINT, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected a change in the number of DDMs of a certain type [INTEGER, NOT NULL]
I_DDM_RPM	the number of revolutions per minute (RPMs) for this type of DDM [SMALLINT]
Q_DDM_COUNT	Total number of DDMs of this type (i.e., a fixed capacity size and RPM speed), valid for the dates and times in the fields below [INTEGER]
Q_DDM_GB_CAPACITY	The capacity for this type of DDM, in gigabytes [CHAR(8)]
D_TASK_DATE_FIRST	The date the number (count) of DDMs of this type changed [DATE]
T_TASK_TIME_FIRST	The time the number (count) of DDMs of this type changed [TIME]
I_TASK_SEQ_LATEST	The task sequence index associated with the date and time of this change [INTEGER]
D_TASK_DATE_LATEST	The date the number (count) of DDMs of this type was most recently compared to the current count and found to be the same. [DATE]
T_TASK_TIME_LATEST	The time the number (count) of DDMs of this type was most recently compared to the current count and found to be the same. [TIME]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCLUC	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for the cluster) [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of a cluster. [INTEGER, NOT NULL]
Q_CLU_RAM	Total amount of installed memory (RAM) for a cluster, as of the date and time in this row, in megabytes [INTEGER]
Q_CLU_NVS	Total amount of installed Non Volatile Storage (NVS) for a cluster, as of the date and time in this row, in megabytes. [INTEGER]
Q_CLU_PS	Total amount of installed PowerStore (PS) memory for a cluster, as of the date and time in this row, in megabytes. [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VHSTC	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task that read and summarized this data from the storage server. [INTEGER, NOT NULL]
I_HOST_IDX	An internally generated identifier (index) for a SCSI-attached host connected to one or more storage servers. See VHSTX for host data associated with this index. [INTEGER, NOT NULL]
Q_HOST_ASSIGN_CAP	Amount of fixed block capacity assigned to this host in the given storage server, in gigabytes [INTEGER]
Q_HOST_ASSIGN_SHR	Amount of fixed block capacity assigned to this host in the given storage server that is also assigned to at least one other host, in gigabytes [INTEGER]
Q_HOST_VOLS	Total number of volumes connected to this host within this storage server. [INTEGER]
Q_HOST_VOLS_SHR	Among the volumes connected to this host, this is the number of these volumes connected to more than one SCSI-attached host. [INTERGER NOT NULL DEFAULT 0]
Q_HOST_VOLS_DAISY	Total number of volumes where this host and another host are connected to the volume on the same port, with different initiators. [SMALLINT]
D_TASK_DATE	The date when asset/capacity data collection occurred for this row. [DATE]
T_TASK_TIME	The time when asset/capacity data collection occurred for this row. [TIME]
Q_HOST_FC_VOL_SHR	Among the volumes connected to this host, this is the number of these volumes connected to more than one FC-attached host. [INTERGER NOT NULL DEFAULT 0]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VHSTX	
Column	**Description**
I_HOST_IDX	An internally generated identifier (index) for a SCSI-attached host connected to one or more storage servers. [INTEGER, NOT NULL]
I_HOST_NAME	The name of the host, as defined to the ESS Specialist [CHAR(254), NOT NULL]
I_HOST_HW_TYPE	Internally defined numeric indicator for the type of operating system of the host [SMALLINT]
I_HOST_IP	the IP address of the host (if available), otherwise zero [CHAR(254)]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of a SCSI-attached host. [INTEGER, NOT NULL]
D_TASK_DATE	The date when a change in the host attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the host attributes were first detected by the ESS Expert. [TIME]
I_HOST_ATTACH	Flag for a attached host connected to one or more storage servers, 2 if FC attached, 1 if SCSI attached. [INTEGER, NOT NULL DEFAULT 1]
I_HOST_FC_WWPN	The World-Wide Port-Name for this host on the Fibre Channel fabric. [CHAR(16), NOT NULL DEFAULT]
I_HOST_FC_CAPBL	Fibre channel capability of this host system, 0 if ReportLUNS, 1 WalkTheBus, else if not apllicable. [SMALLINT, NOT NULL DEFAULT 9]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VHSTV	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task that read and summarized this data from the storage server. [INTEGER, NOT NULL]
I_HOST_IDX	An internally generated identifier (index) for a SCSI-attached host connected to one or more storage servers. See VHSTX for host data associated with this index. [INTEGER, NOT NULL]
I_VOL_IDX	An internally generated identifier (index) for a fixed block, logical volume assigned to at least one SCSI-attached host. See VVOLX for volume data associated with this index. [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VVOLX	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_VOL_IDX	An internally generated identifier (index) for a fixed block, logical volume assigned to at least one SCSI-attached host. [INTEGER, NOT NULL]
I_TASK_SEQ_FIRST	The task sequence index corresponding to the date and time when the ESS Expert first detected this change in the attributes of a fixed block volume. [INTEGER, NOT NULL]
I_VOL_SN	serial number of the fixed block volume (LUN serial number) [CHAR(16), NOT NULL]
Q_VOL_SIZE	capacity of the fixed block volume, in gigabytes*100 units [INTEGER]
I_VOL_TYPE_ID	type of the fixed block volume (as defined by the ESS Specialist) [CHAR(16)]
I_VOL_STOR_TYPE	Value is 1 if volume resides on RAID storage; value is 0 otherwise [SMALLINT]
I_VOL_CLU_NUM	Cluster number for this fixed block volume [SMALLINT]
I_VOL_SLOT_NUM	Card number of adapter associated with this fixed block volume [SMALLINT]
I_VOL_SSALOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this fixed block volume [CHAR(1)]
I_VOL_DISK_GROUP	Identifying number of the disk group containing this fixed block volume [SMALLINT]
I_VOL_DISK_NUM	Disk number of the disk group, if an independent disk, 0 otherwise [SMALLINT]
I_VOL_NUM	Identifying number of this fixed block volume (and lowest level identifier of the volume) [SMALLINT]
Q_VOL_TOTAL_HOSTS	Number of SCSI-attached hosts connected to this volume [SMALLINT]
Q_VOL_DAISY_HOSTS	Number of SCSI-attached hosts connected to this volume through initiators sharing a common port [SMALLINT]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]

T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]
Q_VOL_SCSI_HOSTS	Number of SCSI-attached hosts connected to this storage server [SMALLINT, NOT NULL DEFAULT]
Q_VOL_FC_HOSTS	Number of FC-attached hosts connected to this storage server [SMALLINT, NOT NULL DEFAULT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCUIC	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CUI_IMAGE_NUM	The unique identifying number for this logical control unit in the storage server [INTEGER, NOT NULL]
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task that read and summarized this data from the storage server. [INTEGER, NOT NULL]
I_CUI_SSID	Storage Subsystem ID for this logical control unit [CHAR(4)]
I_CUI_EMULATION	The emulation type of this logical control unit (e.g., unique integer associated with 3990-6, 3990-3, 3990-3 TPF) [SMALLINT]
I_CUI_PAV_ENABLED	Value is 1 if parallel access volume addressing is enabled; value is 0 otherwise [SMALLINT]
Q_CUI_TOTAL_GB	Total capacity in the logical control unit, in gigabytes [INTEGER]
Q_CUI_TOTAL_CYL	Total capacity in the logical control unit, in cylinders [INTEGER]
Q_CUI_RAID_CYL	Number of RAID cylinders in the logical control unit [INTEGER]
Q_CUI_ASSIGNED_CYL	Assigned capacity (space assigned to CKD volumes) in the logical control unit, in cylinders [INTEGER]
Q_CUI_AVAIL_CYLS	Free capacity in the logical control unit, in cylinders [INTEGER]
Q_CUI_ASSIGNED_GB	Assigned capacity (space assigned to CKD volumes) in the logical control unit, in gigabytes [INTEGER]
Q_CUI_AVAIL_GB	Free capacity in the logical control unit, in gigabytes [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCUIV	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CUI_IMAGE_NUM	The unique identifying number for this logical control unit in the storage server [INTEGER, NOT NULL]
I_CUI_VOL_TYPE	One type of CKD volume allocated in the storge server (for example, 3390-2 or 3390-3) [CHAR(8), NOT NULL]
I_TASK_SEQ_IDX	Sequence number of the asset/capacity collection task that read and summarized this data from the storage server. [INTEGER, NOT NULL]
Q_CUI_TOT_VOLS	Number of CKD volumes of this type in this logical control unit [INTEGER]
Q_CUI_TOT_CYLS	Total cylinders for volumes of this type in the logical control unit [INTEGER]
Q_CUI_RAID_CYLS	Total RAID cylinders for volumes of this type in the logical control unit [INTEGER]
Q_CUI_NONRAID_CYLS	Total non-RAID cylinders for volumes of this type in the logical control unit [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMTOP1	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_SHORT_NAME	An alias name provided by an authorized end user for this storage server (optional) [CHAR(16)]
I_VSM_SN	The serial number of the storage server [CHAR(16), NOT NULL]
I_VSM_TYPE	The higher level identifier for the storage server product, for example 2105 for the IBM Enterprise Storage Server 2105 [CHAR(16)]
Q_VSM_RAID_GB	Amount of storage defined as RAID storage, in gigabytes [INTEGER]
Q_VSM_NONRAID_GB	Amount of storage defined as independent disks, in gigabytes [INTEGER]
Q_VSM_UNDEFND_GB	Amount of storage in this storage serer that has not been defined as either RAID or independent disks, in gigabytes [INTEGER]
Q_VSM_TOTAL_CAP	Total amount of capacity (counted as unformatted bytes) in this storage server, in gigabytes [INTEGER]
Q_VSM_FB_TOT_GB	Amount of storage formatted as fixed block storage, in gigabytes [INTEGER]
Q_VSM_CKD_TOT_GB	Amount of storage formatted as logical control units, in gigabytes [INTEGER]
Q_VSM_UNFORMATD_GB	Amount of undefined storage (Q_VSM_UNDEFND_GB) plus amount of free disk space in "independent disk" disk groups, in gigabytes [INTEGER]
Q_VSM_CUIS	Number of logical control units defined in this storage server [INTEGER]
Q_VSM_HOSTS	Number of SCSI-attached hosts identified and/or connected to this storage server. [INTEGER]
Q_VSM_FB_ASSIGNED	Amount of fixed block storage that is currently assigned (connected to) hosts, in gigabytes [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]

Q_VSM_FC_HOSTS	Number of FC-attached hosts connected to this storage server. [INTEGER NOT NULL DEAFULT 0]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMTOP2	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_SHORT_NAME	An alias name provided by an authorized end user for this storage server (optional) [CHAR(16)]
I_VSM_SN	The serial number of the storage server [CHAR(16), NOT NULL]
I_VSM_TYPE	The higher level identifier for the storage server product, for example 2105 [CHAR(16)]
Q_VSM_SCSI_ADAPT	Total number of SCSI adapters installed in this storage server [INTEGER]
Q_VSM_ESCON_ADAPT	Total number of ESCON adapters installed in this storage server [INTEGER]
Q_VSM_SSA_ADAPT	Total number of SSA adapters installed in this storage server [INTEGER]
Q_VSM_RAID_GRPS	Number of disk groups in this storage server defined as RAID storage [INTEGER]
Q_VSM_NONRAID_GRPS	Number of disk groups in this storage server defined as independent disk groups [INTEGER]
Q_VSM_FREE_RANKS	Number of disk groups in this storage server that have not yet been defined as either RAID or independent disk type [INTEGER]
Q_VSM_DDMS	Total number of DDMs that are installed in this storage server [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]
I_FC_ACCESS_MODE	The Access mode for this storage server, 1 if Access-any, 0 if Access-restricted, else if not applicable. [SMALLINT NOT NULL]
Q_VSM_FC_ADAPT	Total number of FC adapters installed in this storage server. [SMALLINT NOT NULL DEFAULT 0]
Q_VSM_FC_FICON	Reserved, not in use. [SMALLINT NOT NULL DEFAULT 0]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMDDM	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_DDM_GB_CAPACITY	Capacity for this type of DDM, in gigabytes [CHAR(8), NOT NULL]
I_DDM_RPM	Number of revolutions per minute (RPMs) for this type of DDM [SMALLINT, NOT NULL]
Q_DDM_COUNT	Total number of DDMs of this type (i.e., a fixed capacity size and RPM speed) [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMCLUST	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for this cluster) [INTEGER, NOT NULL]
Q_CLU_RAM	Total amount of installed memory (RAM) for this cluster, in megabytes [INTEGER]
Q_CLU_NVS	Total amount of installed Non Volatile Storage (NVS) for this cluster, in megabytes [INTEGER]
Q_CLU_PS	Total amount of installed PowerStore (PS) memory for this cluster, in megabytes [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMCUISUM	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CUI_IMAGE_NUM	The unique identifying number for this logical control unit in the storage server [INTEGER, NOT NULL]
I_CUI_SSID	Storage Subsystem ID for this logical control unit [CHAR(4)]
I_CUI_EMULATION	The emulation type of this logical control unit (e.g., unique integer associated with 3990-6, 3990-3, 3990-3 TPF) [SMALLINT]
I_CUI_PAV_ENABLED	Value is 1 if parallel access volume addressing is enabled; value is 0 otherwise [SMALLINT]
Q_CUI_ASSIGNED_CYL	Assigned capacity (space assigned to CKD volumes) in the logical control unit, in cylinders [INTEGER]
Q_CUI_AVAIL_CYLS	Free capacity in the logical control unit, in cylinders [INTEGER]
Q_CUI_ASSIGNED_GB	Assigned capacity (space assigned to CKD volumes) in the logical control unit, in gigabytes [INTEGER]
Q_CUI_AVAIL_GB	Free capacity in the logical control unit, in gigabytes [INTEGER]
Q_CUI_TOTAL_GB	Total capacity in the logical control unit, in gigabytes [INTEGER]
Q_CUI_TOT_VOLS	Number of CKD volumes in the logical control unit [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMCUIVOL	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CUI_IMAGE_NUM	The unique identifying number for this logical control unit in the storage server [INTEGER, NOT NULL]
I_CUI_VOL_TYPE	One type of CKD volume allocated in the storge server (for example, 3390-2 or 3390-3) [CHAR(8), NOT NULL]
Q_CUI_TOT_VOLS	Number of CKD volumes of this type in this logical control unit [INTEGER]
Q_CUI_RAID_CYLS	Total RAID cylinders for volumes of this type in the logical control unit [INTEGER]
Q_CUI_NONRAID_CYLS	Total non-RAID cylinders for volumes of this type in the logical control unit [INTEGER]
Q_CUI_TOT_CYLS	Total cylinders for volumes of this type in the logical control unit [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMCKD	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CUI_IMAGE_NUM	The unique identifying number for this logical control unit in the storage server [INTEGER, NOT NULL]
I_VOL_BASE_ADDR	Base device address value for this CKD volume (value is 0-255) [CHAR(4)]
Q_PAV_ADDR_NUM	Number of PAV addresses for this CKD volume (currently not used) [SMALLINT]
I_VOL_TYPE	The type of this volume (e.g., 3390-2, 3390-3, 3390-9) [CHAR(6)]
I_VOL_FORMAT	The format for this volume (for example, 3380 or 3390 track format) [CHAR(6)]
Q_VOL_CYLS	Number of cylinders in this volume (obsolete field, no longer used) [SMALLINT]
Q_VOL_GB	number of gigabytes in this volume, in gigabytes*100 units [SMALLINT]
I_VOL_STOR_TYPE	Value is 1 if this volume is defined on RAID storage, value is 0 otherwise [SMALLINT]
I_VOL_CLU_NUM	Cluster number for this CKD volume [SMALLINT]
I_VOL_SLOT_NUM	Card number of adapter associated with this CKD volume [SMALLINT]
I_VOL_SSALOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this CKD volume [CHAR(1)]
I_VOL_DISK_GRP	Identifying number of the disk group containing this CKD volume [SMALLINT]
I_VOL_DISK_NUM	Disk number of the disk group, if an independent disk, 0 otherwise [SMALLINT]
I_VOL_NUM	Identifying number of this CKD volume within the disk group [SMALLINT, NOT NULL]
Q_VOL_CYLS_X	Reserved, not in use [INTEGER]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMHOSTCAP	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_HOST_IDX	An internally generated identifier (index) for a SCSI-attached host connected to one or more storage servers. See VHSTX for host data associated with this index. [INTEGER, NOT NULL]
I_HOST_NAME	The name of the host, as defined to the ESS Specialist [CHAR(254)]
I_HOST_HW_TYPE	Internally defined numeric indicator for the type of operating system of the host [SMALLINT]
I_HOST_IP	the IP address of the host (if available), otherwise zero [CHAR(254)]
Q_HOST_ASSIGN_CAP	Amount of fixed block capacity assigned to this host in the given storage server, in gigabytes [INTEGER]
Q_HOST_ASSIGN_SHR	Amount of fixed block capacity assigned to this host in the given storage server that is also assigned to at least one other host, in gigabytes [INTEGER]
Q_HOST_VOLS	Total number of volumes connected to this host within this storage server. [INTEGER]
Q_HOST_VOLS_SHR	Among the volumes connected to this host, this is the number of these volumes connected to more than one SCSI-attached host. [INTERGER NOT NULL DEFAULT 0]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME]
I_HOST_ATTACH	Flag for a attached host connected to one or more storage servers, 2 if FC attached, 1 if SCSI attached. [INTEGER, NOT NULL DEFAULT 1]
I_HOST_FC_WWPN	The World-Wide Port-Name for this host on the Fibre Channel fabric. [CHAR(16), NOT NULL DEFAULT]
I_HOST_FC_CAPBL	Fibre channel capability of this host system, 0 if ReportLUNS, 1 WalkTheBus, else if not apllicable. [SMALLINT, NOT NULL DEFAULT 9]
Q_HOST_FC_VOL_SHR	Among the volumes connected to this host, this is the number of these volumes connected to more than one FC-attached host. [INTERGER NOT NULL DEFAULT 0]

Q_HOST_MIXD_VOLSHR	Among the volumes connected to this host, this is the number of these volumes connected to more than one host (either FC or SCSI attached). [INTERGER NOT NULL DEFAULT 0]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMHOSTVOL	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_HOST_IDX	An internally generated identifier (index) for a SCSI-attached host connected to one or more storage servers. See VHSTX for host data associated with this index. [INTEGER, NOT NULL]
I_VOL_IDX	An internally generated identifier (index) for a fixed block, logical volume assigned to at least one SCSI-attached host. See VVOLX for volume data associated with this index. [INTEGER, NOT NULL]
I_VOL_SN	Serial number of the fixed block volume (LUN serial number) [CHAR(16)]
Q_VOL_SIZE	capacity of the fixed block volume, in gigabytes*100 units [INTEGER]
I_VOL_TYPE_ID	type of the fixed block volume (as defined by the ESS Specialist). For example, open systems and AS/400 are volume types. [CHAR(16)]
I_VOL_STOR_TYPE	Value is 1 if volume resides on RAID storage; value is 0 otherwise [SMALLINT]
I_VOL_CLU_NUM	Cluster number for this fixed block volume [SMALLINT]
I_VOL_SLOT_NUM	Card number of adapter associated with this fixed block volume [SMALLINT]
I_VOL_SSALOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this fixed block volume [CHAR(1)]
I_VOL_DISK_GROUP	Identifying number of the disk group containing this fixed block volume [SMALLINT]
I_VOL_DISK_NUM	Disk number of the disk group, if an independent disk, 0 otherwise [SMALLINT]
I_VOL_NUM	Identifying number of this fixed block volume (and lowest level identifier of the volume) [SMALLINT]
Q_VOL_TOTAL_HOSTS	Total number of SCSI-attached hosts attached to this volume [SMALLINT]
Q_VOL_DAISY_HOSTS	Total number of SCSI-attached hosts attached to this volume on ports where other hosts are also connected to the volume. [SMALLINT]
I_VOL_DAISY_HOST	For this host/fixed block volume connection, value is 1 if this host shares a port with another host to connect to this volume, value is 0 otherwise [SMALLINT]

Q_VOL_HOST_PORTS	For this host/fixed block volume connection, the number of ports used by this host to connect to this volume [SMALLINT]
I_HOST_NAME	The name of the host, as defined to the ESS Specialist [CHAR(254)]
I_HOST_HW_TYPE	Internally defined numeric indicator for the type of operating system of the host [SMALLINT]
I_HOST_ATTACH	Flag for a attached host connected to one or more storage servers, 2 if FC attached, 1 if SCSI attached. [INTEGER, NOT NULL DEFAULT 1]
I_HOST_FC_WWPN	The World-Wide Port-Name for this host on the Fibre Channel fabric. [CHAR(16), NOT NULL DEFAULT]
I_HOST_FC_CAPBL	Fibre channel capability of this host system, 0 if ReportLUNS, 1 WalkTheBus, else if not apllicable. [SMALLINT, NOT NULL DEFAULT 9]
Q_VOL_SCSI_HOSTS	Number of SCSI-attached hosts connected to this storage server [SMALLINT, NOT NULL DEFAULT]
Q_VOL_FC_HOSTS	Number of FC-attached hosts connected to this storage server [SMALLINT, NOT NULL DEFAULT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDALVL	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_VSM_TYPE	The higher level identifier for the storage server product, for example 2105. [CHAR(16), NOT NULL]
I_VSM_MODEL_NO	The model number for the storage server, for example E20. [CHAR(10), NOT NULL]
I_VSM_SHORT_NAME	An alias name provided by an authorized end user for this storage server. [CHAR(16), NOT NULL]
I_VSM_SN	The serial number of the storage server. [CHAR(16), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDALDT	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for the cluster) [INTEGER, NOT NULL]
I_CLU_LIC_VRSN	Version, release and modification level of the current active licensed internal code. [CHAR(16)]
I_CLU_LIC_ACTVDAT	Activation date for this licensed internal code. [CHAR(32)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDATOP	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_VSM_TYPE	The higher level identifier for the storage server product, for example 2105. [CHAR(16), NOT NULL]
I_VSM_MODEL_NO	The model number for the storage server, for example E20. [CHAR(10), NOT NULL]
I_VSM_SHORT_NAME	An alias name provided by an authorized end user for this storage server. [CHAR(16), NOT NULL]
I_VSM_SN	The serial number of the storage server. [CHAR(16), NOT NULL]
I_VSM_NBR_CLUS	Total number of cluster controllers in this storage server. [INTEGER, NOT NULL]
I_VSM_NBR_EXPN	Total number of expansion racks for this storage server. [INTEGER, NOT NULL]
I_VSM_MANFR_DATE	The date of manufacture for this storage server. [CHAR(32), NOT NULL]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]
I_VSM_FC_WWNN	The World-Wide Node-Name for this storage server, where this storage server is attached to a Fibre Channel fabric. Otherwise this field is blank. [CHAR(16), NOT NULL]
I_VSM_FC_ACC_MODE	The access mode for this storage server. [SMALLINT NOT NULL DEFAULT 9]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDARCK	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_VSM_RACK_MODEL	The type amd model number for this storage server rack. [CHAR(16), NOT NULL]
I_VSM_RACK_SN	Serial number for this storage server rack. [CHAR(16), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDACLU	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	An identifier assigned to this cluster controller (also referred to simply as the cluster number). [INTEGER, NOT NULL]
I_CLU_MODEL_NO	Model number of this cluster controller. [CHAR(16), NOT NULL]
I_CLU_SN	Serial number of this cluster controller. [CHAR(16), NOT NULL]
I_CLU_IP	The IP address of this cluster controller. [CHAR(16), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDALIC	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for the cluster) [INTEGER, NOT NULL]
I_CLU_LIC_SRC	A numeric identifier that represents a licensed internal code level such as "active", "previous", "next", "cdrom", "diskette" and "unknown". [INTEGER, NOT NULL]
I_CLU_LIC_VRSN	Version, release and modification level of this level of licensed internal code. [CHAR(16)]
I_CLU_LIC_ACTVDAT	Activation date for the associated level of licensed internal code. [CHAR(32)]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSXDSTYP	
Column	**Description**
I_VSM_TYPE	The higher level identifier for the type of storage server product, for example 2105. [CHAR(16), NOT NULL]
I_VSM_TYPE_CNT	The number of these storage servers of this type known to this ESS Expert. [INTEGER, NOT NULL]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE, NOT NULL]
T_TASK_TIME	The time when a change in the attributes were first detected by the ESS Expert. [TIME, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPVPD	
Column	**Description**
P_TASK	Sequence number of the performance collection task that read this data from the storage server. [INTEGER, NOT NULL]
M_MACH_SN	Serial number of this storage server [CHAR(9), NOT NULL]
M_MACH_TY	The higher level identifier for the storage server product, for example 2105 for the IBM Enterprise Storage Server 2105. [CHAR(4)]
M_MODEL_N	The model number for the storage server, for example E20. [CHAR(3)]
M_CLUSTER_N	Cluster number for this cluster [SMALLINT, NOT NULL]
M_RAM	Amount of random access memory in this cluster, in megabytes [SMALLINT]
M_NVS	Amount of non-volatile storage in this clsuter, in megabytes [SMALLINT]
P_CDATE	The date of this snapshot of the configuration for this storage server, collected by the performance collector [DATE]
P_CTIME	The time of day of this configuration snapshot [TIME]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPCFG	
Column	**Description**
P_TASK	Sequence number of the performance collection task that read this data from the storage server. [INTEGER, NOT NULL]
M_MACH_SN	Serial number of this storage server [CHAR(9), NOT NULL]
M_CLUSTER_N	Cluster number for this logical array [SMALLINT, NOT NULL]
M_CARD_NUM	Card number of adapter associated with this logical array [SMALLINT, NOT NULL]
M_LSS_LA	An ESS internally generated logical subsystem identifier [INTEGER, NOT NULL]
M_ARRAY_ID	An ESS internally generated logical array identifier [CHAR(8), NOT NULL]
M_LOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this logical array [CHAR(1)]
M_GRP_NUM	Identifying number of the disk group containing this logical array [SMALLINT]
M_DISK_NUM	Disk number of the disk group (and final identifier of the logical array), if an independent disk, 0 otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPVOL	
Column	**Description**
P_TASK	Sequence number of the performance collection task that read this data from the storage server. [INTEGER, NOT NULL]
M_MACH_SN	Serial number of this storage server [CHAR(9), NOT NULL]
M_LSS_LA	An internally generated logical subsystem identifier [INTEGER, NOT NULL]
M_VOL_NUM	Identifying number of this logical volume (and lowest level identifier of the logical volume) [INTEGER, NOT NULL]
M_VOL_TY	Character F if a fixed block volume, C if a CKD volume [CHAR(1)]
M_VOL_ADDR	LUN serial number if the logical volume is a fixed block volume, SSID + Base device address if a CKD volume [CHAR(8)]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPCRK	
Column	**Description**
P_TASK	Sequence number of the performance collection task that read this data from the storage server. [INTEGER, NOT NULL]
PC_INDEX	An internally generated, consecutive number that uniquely identifies the sample statistics gathered for one collection time interval [INTEGER, NOT NULL]
M_MACH_SN	Serial number of the storage server [CHAR(9), NOT NULL]
M_CLUSTER_N	Cluster number for this logical array [SMALLINT, NOT NULL]
M_LSS_LA	An ESS internally generated logical subsystem identifier [INTEGER, NOT NULL]
M_ARRAY_ID	An ESS internally generated logical array identifier [CHAR(8), NOT NULL]
M_DDM_NUM	Number of disk drive modules (DDMs) in this logical array [SMALLINT]
PC_DATE_B	Date this sample time period began (i.e., performance counters were collected) [DATE, NOT NULL]
PC_TIME_B	The time of day this sample time period began (i.e., performance counters were collected) [TIME, NOT NULL]
PC_DATE_E	Date this sample time period ended (i.e., performance counters were collected again) [DATE]
PC_TIME_E	The time of day this sample time period ended (i.e., performance counters were collected again) [TIME]
PC_IO_WRITE	Number of subsystem write requests issued to this logical array in this time period [INTEGER]
PC_IO_READ	Number of subsystem read requests issued to this logical array in this time period [INTEGER]
PC_RT_READ	Total time, in milliseconds, to satisfy all read requests issued to this logical array in this time period [INTEGER]
PC_RT_WRITE	Total time, in milliseconds, to satisfy all write requests issued to this logical array in this time period [INTEGER]
PC_IOR_AVG	Average subsystem I/O rate for all requests issued to this logical array in this time period (total requests/interval seconds) [INTEGER]
PC_MSR_AVG	Average millisecond time to satisfy all subsystem I/O requests issued to this logical array in this time period. (total millisecond time/total requsts) [INTEGER]

PC_RBT_AVG	Number of bytes read from this logical array / Number of seconds in this time period [INTEGER]
PC_WBT_AVG	Number of bytes written to this logical array / Number of seconds in this time period [INTEGER]
Q_SAMP_DEV_UTIL	Percent (0 - 100) of time this array is busy, for this time period, or negative value if not available. Default: -1. [SMALLINT, NOT NULL DEFAULT -1]
PC_INT_SECS	Number of seconds in this time period. [SMALLINT]
PC_B_HR_PRCT	Percent (0 - 100) of this sample's time period which is in the hour of the start time. Default: 100. [SMALLINT, NOT NULL DEFAULT 100]
P_OWNER	Internally generated identifier of the creator of this record [INTEGER]
P_COMM	Zero if normal, a negative value if the location of this logical array cannot be identified using the VPCFG table contents [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPCCH	
Column	**Description**
P_TASK	Sequence number of the performance collection task that read this data from the storage server. [INTEGER, NOT NULL]
PC_INDEX	An internally generated, consecutive number that uniquely identifies the sample statistics gathered for one collection time interval [INTEGER, NOT NULL]
M_MACH_SN	Serial number of the storage server [CHAR(9), NOT NULL]
M_CLUSTER_N	Cluster number for this logical volume [SMALLINT, NOT NULL]
M_LSS_LA	An ESS internally generated logical subsystem identifier [INTEGER, NOT NULL]
M_ARRAY_ID	An ESS internally generated logical array identifier [CHAR(8), NOT NULL]
M_VOL_NUM	Identifying number of this logical volume (and lowest level identifier of the logical volume) [INTEGER, NOT NULL]
PC_DATE_B	Date this sample time period began (i.e., performance counters were collected) [DATE, NOT NULL]
PC_TIME_B	The time of day this sample time period began (i.e., performance counters were collected) [TIME, NOT NULL]
PC_DATE_E	Date this sample time period ended (i.e., performance counters were collected again) [DATE]
PC_TIME_E	The time of day this sample time period ended (i.e., performance counters were collected again) [TIME]
PC_N_IO_R	Number of normal (non-sequential) I/O read requests (command chains that contained at least one search or read command but no write command) in this time period for this logical volume [INTEGER]
PC_N_IO_W	Number of normal (non-sequential) I/O write requests (command chains that contained at least one write command) [INTEGER]
PC_N_CH_R	Number of cache hits for normal (non-sequential) I/O read requests ("normal, read" command chains that were completed without requiring access to any DASD). [INTEGER]
PC_N_CH_W	Number of cache hits for normal (non-sequential) I/O write requests ("normal, write" command chains that were completed without requiring access to any DASD). [INTEGER]
PC_S_IO_R	Number of sequential I/O read requests (sequential mode command chains which contain at least one search or read command but no write commands). [INTEGER]

PC_S_IO_W	Number of sequential I/O write requests (sequential mode command chains which contain at least one write command). [INTEGER]
PC_S_CH_R	Number of cache hits for sequential I/O read requests ("sequential mode, read" command chains that were completed without requiring access to any DASD). [INTEGER]
PC_S_CH_W	Number of cache hits for sequential I/O write requests ("sequential mode, write" command chains that were completed without requiring access to any DASD). [INTEGER]
PC_D2C	Number of disk to cache track transfers for non-sequential I/O requests (number of tracks transferred successfully from DASD to cache excluding sequential mode "next track" promotions). [INTEGER]
PC_SEQ_D2C	Number of disk to cache track transfers for sequential I/O requests (number of tracks transferred successfully from DASD to cache due to sequential mode "next track" promotions) [INTEGER]
PC_C2D	Number of cache to disk track transfers (number of tracks transferred from cache to DASD asynchronous to transfers from the channel) [INTEGER]
PC_RHR_AVG	Cache hit ratio for read I/Os (total number of cache hits for read requests / total number of read requests) [SMALLINT]
PC_WHR_AVG	Cache hit ratio for write I/Os (total number of cache hits for write requests / total number of write requests) [SMALLINT]
PC_THR_AVG	Overall cache hit ratio (total number of cache hits for all requests / total number of requests) [SMALLINT]
PC_SHR_AVG	Cache hit ratio for sequential I/Os (total number of cache hits for sequential requests / total number of sequential requests) [SMALLINT]
PC_NHR_AVG	Cache hit ratio for normal (non-sequential) I/Os (total number of cache hits for non-sequential requests / total number of non-sequential requests) [SMALLINT]
PC_RMR_IO	Number of record mode read I/O requests (number of command chains associated with a record access mode read operation, and the chain contains no write commands) [INTEGER]
PC_RMR_CH	Number of record mode read cache hits (number of record mode read requests which were completed without requiring any access to DASD). [INTEGER]
PC_RMRHR_AVG	Cache hit ratio for record mode reads (number of record mode read cache hits / number of record mode read requests) [SMALLINT]
PC_DFW_IO	Number of DASD fast write I/O requests (same as noraml write IO requests). [INTEGER]
PC_DFW_DELAY	Number of DASD fast write delayed requests (requests of this type delayed due to NVS space constraints) [INTEGER]
PC_DFW_AVG	(DASD fast write I/O requests / DASD fast writes delayed) * 100 [SMALLINT]
PC_INT_SECS	Number of seconds in this time period. [SMALLINT]

PC_B_HR_PRCT	Percent (0 - 100) of this sample's time period which is in the hour of the start time. Default: 100. [SMALLINT, NOT NULL DEFAULT 100]
P_OWNER	Internally generated identifier of the creator of this record [INTEGER]
P_COMM	Zero if normal, a negative value if the location of this logical volume cannot be identified using the VPCFG, VPVOL tables [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHVOL	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_MACH_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX)[INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this logical volume [SMALLINT, NOT NULL]
I_CARD_NO	Card number of adapter associated with this logical volume [SMALLINT, NOT NULL]
I_LOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this logical volume [CHAR(1), NOT NULL]
I_DISK_GRP_NO	Identifying number of the disk group containing this logical volume [SMALLINT, NOT NULL]
I_DISK_NUM	Disk number of the disk group, if an independent disk, 0 otherwise [SMALLINT, NOT NULL]
I_VOL_NUM	Identifying number of this logical volume within the disk group (and lowest level identifier of the logical volume) [SMALLINT, NOT NULL]
I_VOL_TYPE	Character F if a fixed block volume, C if a CKD volume [CHAR(1)]
I_VOL_ADDR	LUN serial number if the logical volume is a fixed block volume, SSID + Base device address if a CKD volume [CHAR(8)]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_SAMPLES	Number of performance sample records containing "active" I/O (number of I/O requests is greater than 0), collected for this logical volume, used in this summary [SMALLINT]
Q_HR_CACHE_HITS	Total number of cache hits occurring in this hour for this logical volume (command chains that were completed without requiring access to any DASD) [DOUBLE]
Q_HR_TOT_IO_REQS	Total number of I/O requests (command chains) occurring in this hour for this logical volume [DOUBLE]
Q_HR_TOT_IO_R	Total number of I/O read requests (command chains which contain at least one search or read command but no write commands) occurring in this hour for this logical volume [DOUBLE]

Q_HR_TOT_IO_W	Total number of I/O write requests (command chains which contain at least one write command) occurring in this hour for this logical volume [DOUBLE]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCCH) in this hour for this logical volume [INTEGER]
Q_HR_CACHE2DISK	Number of cache to disk track transfers in this hour for this logical volume (number of tracks transferred from cache to DASD asynchronous to transfers from the channel) [DOUBLE]
Q_HR_DISK2CACHE	Number of disk to cache track transfers in this hour for this logical volume (number of tracks transferred successfully from DASD to cache) [DOUBLE]
Q_HR_CACHE_HIT_R	Cache hit ratio * 1000 (total cache hits/IO requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_WR	Cache hit ratio * 1000 for write requests (total write cache hits/write I/O requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_RR	Cache hit ratio * 1000 for read requests (total read cache hits/read I/O requests * 1000) [SMALLINT]
Q_HR_IO_RATE	Number of I/O requests / number of sampling seconds [INTEGER]
Q_HR_CACHE2DISK_R	Number of cache to disk track transfers / number of sampling seconds [INTEGER]
Q_HR_DISK2CACHE_R	Number of disk to cache track transfers / number of sampling seconds [INTEGER]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHARCAC	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_MACH_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this logical array [SMALLINT, NOT NULL]
I_CARD_NO	Card number of adapter associated with this logical array [SMALLINT, NOT NULL]
I_LOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing the logical array [CHAR(1), NOT NULL]
I_DISK_GRP_NO	Identifying number of the disk group containing the logical array [SMALLINT, NOT NULL]
I_DISK_NUM	Disk number of the disk group (and lowest level identifier of the logical array), if an independent disk, 0 otherwise [SMALLINT, NOT NULL]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_VOLUMES	Number of logical volumes in this logical array [SMALLINT]
Q_HR_CACHE_HITS	Total number of cache hits occurring in this hour for this logical array (command chains that were completed without requiring access to any DASD) [DOUBLE]
Q_HR_TOT_IO_REQS	Total number of I/O requests (command chains) occurring in this hour for this logical array [DOUBLE]
Q_HR_TOT_IO_R	Total number of I/O read requests (command chains which contain at least one search or read command but no write commands) occurring in this hour for this logical array [DOUBLE]
Q_HR_TOT_IO_W	Total number of I/O write requests (command chains which contain at least one write command) occurring in this hour for this logical array [DOUBLE]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCCH) in this hour for this logical array [DOUBLE]
Q_HR_CACHE2DISK	Number of cache to disk track transfers in this hour for this logical array (number of tracks transferred from cache to DASD asynchronous to transfers from the channel) [DOUBLE]

Q_HR_DISK2CACHE	Number of disk to cache track transfers in this hour for this logical array (number of tracks transferred successfully from DASD to cache) [DOUBLE]
Q_HR_CACHE_HIT_R	Cache hit ratio * 1000 (total cache hits/IO requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_WR	Cache hit ratio * 1000 for write requests (total write cache hits/write I/O requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_RR	Cache hit ratio * 1000 for read requests (total read cache hits/read I/O requests * 1000) [SMALLINT]
Q_HR_IO_RATE	Number of I/O requests / number of sampling seconds [INTEGER]
Q_HR_CACHE2DISK_R	Number of cache to disk track transfers / number of sampling seconds [INTEGER]
Q_HR_DISK2CACHE_R	Number of disk to cache track transfers / number of sampling seconds [INTEGER]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHADCAC	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_MACH_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this adapter/loop [SMALLINT, NOT NULL]
I_CARD_NO	Card number of adapter associated with this adapter/loop [SMALLINT, NOT NULL]
I_LOOP_ID	SSA Loop Identifier (e.g., A or B) attached to the adapter [CHAR(1)]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_VOLUMES	Number of logical volumes in this adapter/loop [SMALLINT]
Q_HR_ARRAYS	Number of logical arrays in this adapter/loop [SMALLINT]
Q_HR_CACHE_HITS	Total number of cache hits occurring in this hour for this adapter/loop (command chains that were completed without requiring access to any DASD) [DOUBLE]
Q_HR_TOT_IO_REQS	Total number of I/O requests (command chains) occurring in this hour for this adapter/loop [DOUBLE]
Q_HR_TOT_IO_R	Total number of I/O read requests (command chains which contain at least one search or read command but no write commands) occurring in this hour for this adapter/loop [DOUBLE]
Q_HR_TOT_IO_W	Total number of I/O write requests (command chains which contain at least one write command) occurring in this hour for this adapater/loop [DOUBLE]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCCH) in this hour for this adapter/loop [DOUBLE]
Q_HR_CACHE2DISK	Number of cache to disk track transfers in this hour for this adapter/loop (number of tracks transferred from cache to DASD asynchronous to transfers from the channel) [DOUBLE]
Q_HR_DISK2CACHE	Number of disk to cache track transfers in this hour for this adapter/loop (number of tracks transferred successfully from DASD to cache) [DOUBLE]
Q_HR_CACHE_HIT_R	Cache hit ratio * 1000 (total cache hits/IO requests * 1000) [SMALLINT]

Q_HR_CACHE_HIT_WR	Cache hit ratio * 1000 for write requests (total write cache hits/write I/O requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_RR	Cache hit ratio * 1000 for read requests (total read cache hits/read I/O requests * 1000) [SMALLINT]
Q_HR_IO_RATE	Number of I/O requests / number of sampling seconds [INTEGER]
Q_HR_CACHE2DISK_R	Number of cache to disk track transfers / number of sampling seconds [INTEGER]
Q_HR_DISK2CACHE_R	Number of disk to cache track transfers / number of sampling seconds [INTEGER]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHCLCAC	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_MACH_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this cluster [SMALLINT, NOT NULL]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_VOLUMES	Number of logical volumes in this cluster [SMALLINT]
Q_HR_ARRAYS	Number of logical arrays in this cluster [SMALLINT]
Q_HR_ADAPTERS	Number of adapter/loops in this cluster [SMALLINT]
Q_HR_CACHE_HITS	Total number of cache hits occurring in this hour for this cluster (command chains that were completed without requiring access to any DASD) [DOUBLE]
Q_HR_TOT_IO_REQS	Total number of I/O requests (command chains) occurring in this hour for this cluster [DOUBLE]
Q_HR_TOT_IO_R	Total number of I/O read requests (command chains which contain at least one search or read command but no write commands) occurring in this hour for this cluster [DOUBLE]
Q_HR_TOT_IO_W	Total number of I/O write requests (command chains which contain at least one write command) occurring in this hour for this cluster [DOUBLE]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCCH) in this hour for this cluster [DOUBLE]
Q_HR_CACHE2DISK	Number of cache to disk track transfers in this hour for this cluster (number of tracks transferred from cache to DASD asynchronous to transfers from the channel) [DOUBLE]
Q_HR_DISK2CACHE	Number of disk to cache track transfers in this hour for this cluster (number of tracks transferred successfully from DASD to cache) [DOUBLE]
Q_HR_CACHE_HIT_R	Cache hit ratio * 1000 (total cache hits/IO requests * 1000) [SMALLINT]
Q_HR_CACHE_HIT_WR	Cache hit ratio * 1000 for write requests (total write cache hits/write I/O requests * 1000) [SMALLINT]

Q_HR_CACHE_HIT_RR	Cache hit ratio * 1000 for read requests (total read cache hits/read I/O requests * 1000) [SMALLINT]
Q_HR_IO_RATE	Number of I/O requests / number of sampling seconds [INTEGER]
Q_HR_AVG_HOLD_TIME	Average holding time for this cluster and this hour [INTEGER]
I_AVH_THRESHOLD	The integral value for average holding time threshold. A holding time below this threshold is displayed as an exception. [SMALLINT]
Q_HR_CACHE2DISK_R	Number of cache to disk track transfers / number of sampling second [INTEGER]
Q_HR_DISK2CACHE_R	Number of disk to cache track transfers / number of sampling seconds [INTEGER]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPSNX	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. [INTEGER, NOT NULL]
I_VSM_SN	The serial number of the associated storage server [CHAR(9), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPCUT	
Column	**Description**
I_ITEM_NO	Identifier of the row number (currently one row, this value always zero) [SMALLINT, NOT NULL]
D_PR_DATE	Date of most recent set of sample records (VPCCH and VPCRK) the Data Preparation task successfully processed (for all servers) [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) the most recent set of sample records (VPCCH and VPCRK) the Data Preparation task successfully processed [SMALLINT, NOT NULL]
I_PERF_DB_LEVEL	Level of vpcch and vpcrk tables. For automatic upgrade to latest level. [CHAR(8), NOT NULL]
HRS_TO_RESUM	Number of hours to reprocess the next time data preparation task executes. Updated internally each time task runs. [SMALLINT, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHSS	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_VSM_PERF_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_ADAPTERS	Number of adapter/loops in this storage server [SMALLINT]
Q_HR_ARRAYS	Number of logical arrays in this storage server [SMALLINT]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCRK) in this hour for this storage server [INTEGER]
Q_HR_TOT_IOS	Total number of subsystem I/O requests issued to logical arrays in this storage server in this hour [DOUBLE]
Q_HR_TOT_RESP_TIME	Total time, in milliseconds, to satisfy all subsystem I/O requests issued to logical arrays in this storage server [DOUBLE]
Q_HR_MAX_IOR	Maximum subsystem I/O rate for logical arrays in this storage server in this hour (max of the sample interval-level, average subsystem I/O rates, PC_IOR_AVG, for logical arrays in this storage server) [INTEGER]
Q_HR_MAX_MSR	Maximum time, in milliseconds, to satisfy subsystem I/O requests issued to logical arrays in this storage server in this hour (max of the sample interval-level, average millisecond times, PC_MSR_AVG) [INTEGER]
Q_HR_MAX_IOIN	Maximum I/O intensity in this hour (max of sample interval-level PC_IOR_AVG * PC_MSR_AVG * 1000 for all logical arrays in this storage server) [DOUBLE]
Q_HR_AVG_IOR	Average subsystem I/O rate for this storage server in this hour (number of subsystem I/O requests/average number of sampling seconds) [INTEGER]
Q_HR_AVG_MSR	Average millisecond time to satisfy all subsystem I/O requests issued to logical arrays in this storage server and in this hour (total time for all subsystem I/O requests/number of subsystem I/O requests) [INTEGER]

Q_HR_AVG_IOIN	Average I/O intensity for this storage server in this hour (Q_HR_AVG_IOR * Q_HR_AVG_MSR * 1000) [DOUBLE]
C_PR_CONFIG_CHG	Negative if a logical array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHAR	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_VSM_PERF_IDX	An ESS internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
I_ARRAY_ID	An ESS internally generated logical array identifier for the logical array [CHAR(8), NOT NULL]
I_LOOP_ID	SSA Loop Identifier (e.g., A or B) associated with the disk group containing this logical array [CHAR(1)]
I_DISK_GRP_NUM	Identifying number of the disk group containing the logical array [SMALLINT]
I_DISK_NUM	Disk number of the disk group (and lowest level identifier of the logical array), if an independent disk, 0 otherwise [SMALLINT]
I_LSS_LA	An internally generated logical subsystem identifier [INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this logical array [SMALLINT, NOT NULL]
I_CARD_NUM	Card number of adapter associated with this logical array [SMALLINT, NOT NULL]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_SAMPLES	Number of performance sample records, collected for this logical array, used in this summary [SMALLINT]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCRK) for this logical array in this hour [INTEGER]
Q_HR_TOT_IOS	Total number of subsystem I/O requests issued to this logical array in this hour [DOUBLE]
Q_HR_TOT_RESP_TIME	Total time, in milliseconds, to satisfy all subsystem I/O requests issued to this logical array, in milliseconds [DOUBLE]
Q_HR_MAX_IOR	Maximum subsystem I/O rate for this logical array and this hour (max of the sample interval-level, average subsystem I/O rates, PC_IOR_AVG, for this logical array) [INTEGER]

Q_HR_MAX_MSR	Maximum time, in milliseconds, to satisfy subsystem I/O requests issued to this logical array for this hour (max of the sample interval-level, average millisecond times, PC_MSR_AVG, for this logical array) [INTEGER]
Q_HR_MAX_IOIN	Maximum I/O intensity for this logical array in this hour (max of PC_IOR_AVG * PC_MSR_AVG * 1000) [DOUBLE]
Q_HR_AVG_IOR	Average subsystem I/O rate for all requests issued to this logical array in this hour (number of subsystem I/O requests/number of sampling seconds) [INTEGER]
Q_HR_AVG_MSR	Average millisecond time to satisfy all subsystem I/O requests issued to this logical array in this hour (total time for all subsystem I/O requests/number of subsystem I/O requests) [INTEGER]
Q_HR_AVG_IOIN	Average I/O intensity for this logical array in this hour (Q_HR_AVG_IOR * Q_HR_AVG_MSR * 1000) [DOUBLE]
Q_HR_DEV_UTIL	Average device utilization percent (value is 0-100) for the DDMs in this logical array (totals for the hour used in formula) [SMALLINT]
Q_HR_INTERVALS	Number of sample time periods detected in this hour [SMALLINT]
Q_HR_DU_NO_EXCEPTS	Number of sample time periods when the device utilization exceeded the threshold (values for each sample time period are used in the formula) [SMALLINT]
Q_HR_DU_MAX_EXCEPT	Maximum disk utilization value (0-100), for all sample time period disk utilization values exceeding the threshold (or zero, if threshold not exceeded) [SMALLINT]
I_DU_THRESHOLD	The percent (0-100) above which a disk utilization value is reported as an exception. [SMALLINT]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VPHAD	
Column	**Description**
I_PR_SEQ_IDX	Sequence number of the Data Preparation task that created this summary data. [INTEGER, NOT NULL]
I_VSM_PERF_IDX	An internally generated identifier (index) for a storage server that has performance summary data available in the database. (See VPSNX) [INTEGER, NOT NULL]
I_LSS_LA	An ESS internally generated logical subsystem identifier [INTEGER, NOT NULL]
I_CLUSTER_NO	Cluster number for this adapter/loop [SMALLINT, NOT NULL]
I_CARD_NO	Card number of adapter associated with this adapter/loop [SMALLINT, NOT NULL]
I_LOOP_ID	SSA Loop Identifier (e.g., A or B) attached to the adapter [CHAR(1)]
D_PR_DATE	Date to which this performance data applies [DATE, NOT NULL]
I_PR_HOUR	Hour of the day (0-23) to which this performance data applies [SMALLINT, NOT NULL]
Q_HR_ARRAYS	Number of logical arrays in this adapter/loop [SMALLINT]
Q_HR_TOT_SECS	Total number of sampling seconds (from VPCRK) for this adapter/loop in this hour [INTEGER]
Q_HR_TOT_IOS	Total number of subsystem I/O requests issued to this adapter/loop in this hour [DOUBLE]
Q_HR_TOT_RESP_TIME	Total time, in milliseconds, to satisfy all subsystem I/O requests issued to this adapter/loop, in milliseconds [DOUBLE]
Q_HR_MAX_IOR	Maximum subsystem I/O rate for this adapter/loop and this hour (max of the sample interval-level, average subsystem I/O rates, PC_IOR_AVG, for logical arrays associated with this adapter/loop) [INTEGER]
Q_HR_MAX_MSR	Maximum time, in milliseconds, to satisfy subsystem I/O requests issued to this adapter/loop (max of sample interval-level, average millisecond times, PC_MSR_AVG, for logical arrays in the adapter/loop)[INTEGER]
Q_HR_MAX_IOIN	Maximum I/O intensity for this adapter/loop in this hour (max of PC_IOR_AVG * PC_MSR_AVG * 1000 for all logical arrays and sample intervals) [DOUBLE]

Q_HR_AVG_IOR	Average subsystem I/O rate for all requests issued to this adapter/loop in this hour (number of I/O requests/average number of sampling seconds) [INTEGER]
Q_HR_AVG_MSR	Average millisecond time to satisfy all subsystem I/O requests issued to this adapter/loop in this hour (total time for all subsystem I/O requests/number of subsystem I/O requests) [INTEGER]
Q_HR_AVG_IOIN	Average I/O intensity for this adapter/loop in this hour (Q_HR_AVG_IOR * Q_HR_AVG_MSR * 1000) [DOUBLE]
Q_HR_DEV_UTIL	Average device utilization percent (value is 0-100) for the DDMs in this adapter/loop (weighted average of hourly disk utilization values for logical arrays in this adapter/loop) [SMALLINT]
Q_HR_INTERVALS	Number of sample time periods detected in this hour [SMALLINT]
Q_HR_DU_NO_EXCEPTS	Number of sample time periods when one or more logical array device utilization values, associated with this adapter/loop, exceeded the threshold [SMALLINT]
Q_HR_DU_MAX_EXCEPT	Maximum of all logical array disk utilization values (0-100) which exceeded the threshold (or zero, if threshold not exceeded by any logical array in this adapter/loop) [SMALLINT]
I_DU_THRESHOLD	The percent (0-100) above which a disk utilization value is reported as an exception. [SMALLINT]
C_PR_CONFIG_CHG	Negative if a logical volume or array cannot be found in the configuration snapshot for this storage server, zero otherwise [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VSCHT	
Column	**Description**
I_SCHD_TASK	An unique identifier for the scheduled task. (See CSCHD and CSCHH) [CHAR(32), NOT NULL]
I_USER	The userid of the creator of the scheduled task. [CHAR(20), NOT NULL]
C_SCHD_TASK_TYPE	The scheduled task type. For example "VPD" for performance data collection and "VAC" for asset and capacity data collection. [CHAR(4), NOT NULL]
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_CLU_NO	The cluster number (identifier for the cluster) for the cluster controller on the storage server this task will communicate with. [INTEGER, NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VTSTATM	
Column	**Description**
I_SCHH_TASK_SEQ	Task sequence number of the task execution (see CSCHH). [INTEGER, NOT NULL]
Q_MACH_TRIED	Number of storage servers for which this task attempted to perform work [SMALLINT]
Q_MACH_SUCCEEDED	Number of storage servers for which this task completed successfully [SMALLINT]
Q_MACH_FAILED	Number of storage servers for which this task failed [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VTSTATS	
Column	**Description**
I_SCHH_TASK_SEQ	Task sequence number of the task execution (See CSCHH). [INTEGER, NOT NULL]
Q_TOTAL_STEPS	Number of execution steps that are being tracked for this task [SMALLINT]
I_LAST_GOOD_STEP	Number of execution steps that succeeded (equal to Q_TOTAL_STEPS if the task completed successfully) [SMALLINT]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VMKHCAP	
Column	**Description**
D_MONTH_DATE	First-of-month date for the month when data was collected. [DATE, NOT NULL]
I_VSM_SN	The serial number of the storage server. [CHAR(16), NOT NULL]
I_SHORT_NAME	An alias name provided by an authorized end user for this storage server (optional) [CHAR(16)]
I_VSM_TYPE	The higher level identifier for the type of storage server product, for example 2105. [CHAR(16), NOT NULL]
Q_VSM_TOTAL_CAP	Total amount of capacity (counted as unformatted bytes) in this storage server, in gigabytes [INTEGER]
Q_VSM_FB_TOT_GB	Amount of storage formatted as fixed block storage, in gigabytes [INTEGER]
Q_VSM_CKD_TOT_GB	Amount of storage formatted as logical control units, in gigabytes [INTEGER]
Q_VSM_UNFORMATD_GB	Amount of undefined storage (Q_VSM_UNDEFND_GB) plus amount of free disk space in "independent disk" disk groups, in gigabytes [INTEGER]
D_TASK_DATE	The date when a change in the attributes were first detected by the ESS Expert. [DATE]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : VCMPORT	
Column	**Description**
I_VSM_IDX	An internally generated identifier (index) for a storage server. See VMPDX for storage server data associated with this index. [INTEGER, NOT NULL]
I_PORT_BAY	the host adapter bay for this port. [SMALLINT, NOT NULL]
I_PORT_CARD	the host adapter card (or slot) for this port. [SMALLINT, NOT NULL]
I_PORT_ID	the ID (A or B) of this FC adapter port. [CHAR(1), NOT NULL]
I_CLUST_AFF	cluster affinity of the FC adapter port (1 or 2). If there is no affinity, the value is -1. [SMALLINT, NOT NULL]
I_PORT_TOPOLOGY	the FC topology of the port (0 - not yet defined; 1 - point to point; 2 = arbitrated loop). [SMALLINT, NOT NULL]
I_PORT_WWPN	the world wide port name of this FC port (a string of 16 hexidecimal digits). [CHAR(16), NOT NULL]
I_HOST_EXISTS	indicator if at least one FC host is attached to this adapter port (value is 1); if no FC host is attached to this port, the value is 0. [SMALLINT, NOT NULL]
I_HOST_WWPN	the world wide port name of a host assigned to this FC port (a string of 16 hexidecimal digits). If no host is assigned to this port, this field contains an empty string. [CHAR(16), NOT NULL]
I_PORT_HOST	The name of the host, as defined to the ESS Specialist (the Nickname). If no host is assigned to this port, this field contains an empty string. [CHAR(254), NOT NULL]

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TDATASRC	
Column	**Description**
IP	IP address
SYSTYPE	Server type, "LS" for Library manager, "GS" for Gemini Controller
BASESYSID	S3494 ID or Gemini ID this data source reports about
ACTIVE	Flag for whether data collection should collect from this node
REALINTERVAL	Real-time data collection interval (in minute) that Expert collects data from, 0 for Gemini

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TDATA	
Column	**Description**
METRIC	Name of data, e.g., "VRA", "VPA"
TYPE	Database type
TABLE	Stored in which database table
SUMMARY	Method to sum up, e.g., "sum", "avg", "max"
SOURCE	Name in SMF94, VTS Real, Gemini, etc

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TTHRESHOLD	
Column	**Description**
METRIC	Metric of this threshold
LEVEL	Data level of this threshold , "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
SCOPE	Additional part of the key, for narrowing applicability. "SYSTEM" means no narrowing.
TYPE	Threshold type, "U"=upper limit, "L"=lower limit
CVALUE	The critical value
WVALUE	The warning value
ENABLED	Whether this threshold is enabled

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TALARMDISPLAY	
Column	**Description**
USERID	User ID
SEVERITY	Severity
DISPLAY	What to display

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TSASSET	
Column	**Description**
SYSID	System ID, use SNO 5 EBCDIC Library sequence number, uniquely identifies a ATL
SYSNAME	(Mnemonic) name of the system
VTS1ID	Sequence number for first VTS.
VTS2ID	Sequence number for second VTS.
SLT	Library type number. For example, "003495" represents the &atlds.
SLM	Library model number. For example, "L30" represents model L30
SMA	Library manufacturer. Always equals "IBM"
SPL	Library plant of manufacture. For example, "13" represents San Jose, California, and "77" represents Valencia, Spain

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TSPERF	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
SPAN	null
ENDTIMESTAMP	null
REF	Count of Hourly records involved in this record
LID	Number of drives installed
LMD	Number of drives mounted
LM1	Maximum number of drives mounted
LM2	Minimum number of drives mounted
LM3	Average number of drives mounted
LT1	Maximum duration of a drive stayed mounted
LT2	Minimum duration of a drive stayed mounted
LT3	Average duration of a drive stayed mounted
MPR	Number of mount requests currently pending
MP1	Maximum number of mount requests pending
MP2	Minimum number of mount requests pending
MP3	Average number of mount requests pending
MTO	Number of mounts
MIN	Index mounts. An index mount is a mount accomplished using the automatic cartridge loader of a 3490 tape drive
MPM	Pre-mounts. A single pre-mount operation causes a volume to be added to the automatic cartridge loader of a 3490 tape drive
MT1	Maximum amount of time, in seconds, required to perform any single mount operation
MT2	Minimum amount of time, in seconds, required to perform any single mount operation
MT3	Average amount of time, in seconds, required to perform a single mount operation
DPR	Number of demount requests currently pending
DP1	Maximum number of demount requests pending

DP2	Minimum number of demount requests pending
DP3	Average number of demount requests pending
DTO	Number of demounts
DIN	Index demounts. An index demount moves a volume from the feed station to the output stack of the automatic cartridge loader of a 3490 tape drive
DPM	Post-demounts. A post-demount operation moves a volume from the output stack of the automatic cartridge loader of a 3490 tape drive
DT1	Maximum amount of time, in seconds, required to perform any single demount operation
DT2	Minimum amount of time, in seconds, required to perform any single demount operation
DT3	Average amount of time, in seconds, required to perform a single demount operation
EPR	Number of eject requests currently pending. An eject operation moves one volume from the ATL to an output station for an operator to remove
EP1	Maximum number of eject requests pending
EP2	Minimum number of eject requests pending
EP3	Average number of eject requests pending
ETO	Totals number of ejects
ET1	Maximum amount of time, in seconds, required to perform any single eject operation
ET2	Minimum amount of time, in seconds, required to perform any single eject operation
ET3	Average amount of time, in seconds, required to perform a single eject operation
APR	Number of audit requests currently pending. When the host requests an audit operation, the accessor moves to a shelf location and ensures that a volume is present
AP1	Maximum number of audit requests pending
AP2	Minimum number of audit requests pending
AP3	Average number of audit requests pending
ATO	Number of audits
AT1	Maximum amount of time, in seconds, required to perform any single audit operation
AT2	Minimum amount of time, in seconds, required to perform any single audit operation
AT3	Average amount of time, in seconds, required to perform a single audit operation
INS	Number of insert stores. This number is the number of volumes moved from an input station to a location inside the ATL

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVASSET	
Column	**Description**
SYSID	System ID, use VLS 5 EBCDIC Library sequence number for the library segment for which VTS statistics are being reported
SYSNAME	(Mnemonic) name of the system
LIBID	The S3494 Library this VTS belongs to
GEMID	The Gemini system this VTS belongs to (if any)
VNO	Clustered library type: 1 - user-interface library; 2 - not; 255 - composite library
SYSTYPE	B16, B18, GEM
CHNTYPE	EHPO or not
DRVTYPE	B1A or E1A

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVCAPC	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
SPAN	null
ENDTIMESTAMP	null
REF	Count of Hourly records involved in this record
NUMBS	Channel blocks written
VBW	bytes written from hosts to cache
VBR	bytes read from cache to hosts
VTW	bytes written from cache to tapes
VTR	bytes read from tapes to cache
BSRAT	Backstore compression ration
HARAT	Host adapter compression ratio
VCA	average age of virtual volumes in cache, at end
MTVCA	max tape volume cache age
VCZ	average size of virtual volumes in cache, at end
VNM	number of virtual volumes in cache, at end
VBA	bytes of active data, at end
VLA	number of virtual volumes, at end
VEC	bytes of empty tapes, at end
SRTCT	Scratch stacked volume count, at end
PRICT	Private stacked volume count, at end
TVCS	Tape volume cache size, at end
ESCON	number of escon channel, at end
SCSI	number of scsi channel, at end
THRES	Reclaim threshold percentage, at end
MAXVOLUMESINVTS	Max Logical Volumes allowed to configurated
MAXACTIVEDATA	Max Active Data calculated
FREESTORAGEALARM	Level of Free Storage to set alarm

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVPERF	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
REF	Count of Hourly records involved in this record
VTI	number of physical drives installed, at end
VTA	number of physical drives available, at end
VTX	maximum number of physical drives mounted
VTN	minimum number of physical drives mounted
VTV	average number of physical drives mounted
VMX	maximum time to mount a physical drive
VMN	minimum time to mount a physical drive
VMV	average time to mount a physical drive
VPS	number of physical mounts for Staging
VPM	number of physical mounts for Migration
VPR	number of physical mounts for Reclamation
ACA	Accessor A mounts. The count of the number of mount operations accessor A completed during the last hour
ACB	Accessor B mounts. The count of the number of mount operations accessor B completed during the last hour
VDC	number of virtual drives configured, at end
VDX	maximum number of virtual drives mounted
VDN	minimum number of virtual drives mounted
VDA	average number of virtual drives mounted
VVX	maximum duration of a virtual drive stayed mounted
VVN	minimum duration of a virtual drive stayed mounted
VVA	average duration of a virtual drive stayed mounted
VRX	maximum time to mount a virtual drive
VRN	minimum time to mount a virtual drive
VRA	average time to mount a virtual drive
MAXFR	Maximum fast-ready mount time
MINFR	Minimum fast-ready mount time

AVGFR	Average fast-ready mount time
MAXCH	Maximum cache-hit mount time
MINCH	Minimum cache-hit mount time
AVGCH	Average cache-hit mount time
MAXRM	Maximum recall-mount mount time
MINRM	Minimum recall-mount mount time
AVGRM	Average recall-mount mount time
VFR	number of virtual mounts for Fast-Ready
VMH	number of virtual mounts for Cache-Hit
VMS	number of virtual mounts for Staging
VMP	number of virtual mounts for Migration
RCPRT	Recall predominate throttling percentage
WROVT	Write overrun predominate throttling percentage
AVRCT	Average recall throttle value
AVWOT	Average write overrun throttle value
TOTAT	Overall average throttle value
IM1	Number of physical volumes processed during import operations that completed in the last hour
EX1	Number of physical volumes that contain the successfully exported logical volumes exported during the last hour
IM2	Number of logical volumes successfully imported during import operations that completed during the last hour
EX2	Number of logical volumes successfully exported for export operations that completed during the last hour
IM3	Megabytes of data imported for import operations that completed in the last hour
EX3	Megabytes of data exported during export operations that completed in the last hour
IM4	Megabytes of data that was moved from one physical stacked volume to another as part of the import operations that completed in the last hour
EX4	Megabytes moved from one physical stacked volume to another as part of the export operations completed in the last hour

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVCHNDIST	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
REF	Count of Hourly records involved in this record
B0KB	Percentage of 0 to 2K channel blocks written
B2KB	Percentage of >2K to 4K channel blocks written
B4KB	Percentage of >4K to 8K channel blocks written
B8KB	Percentage of >8K to 16K channel blocks written
B16KB	Percentage of >16K to 32K channel blocks written
B32KB	Percentage of >32K to 64K channel blocks written
B64KB	Percentage of >64K channel blocks written

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVACTDIST	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
REF	Count of Hourly records involved in this record
ADV05	Number of volumes containing 0 to 5 percent active data
ADV10	Number of volumes containing greater than 5 to 10 percent active data
ADV15	Number of volumes containing greater than 10 to 15 percent active data
ADV20	Number of volumes containing greater than 15 to 20 percent active data
ADV25	Number of volumes containing greater than 20 to 25 percent active data
ADV30	Number of volumes containing greater than 25 to 30 percent active data
ADV35	Number of volumes containing greater than 30 to 35 percent active data
ADV40	Number of volumes containing greater than 35 to 40 percent active data
ADV45	Number of volumes containing greater than 40 to 45 percent active data
ADV50	Number of volumes containing greater than 45 to 50 percent active data
ADV55	Number of volumes containing greater than 50 to 55 percent active data
ADV60	Number of volumes containing greater than 55 to 60 percent active data
ADV65	Number of volumes containing greater than 60 to 65 percent active data
ADV70	Number of volumes containing greater than 65 to 70 percent active data
ADV75	Number of volumes containing greater than 70 to 75 percent active data
ADV80	Number of volumes containing greater than 75 to 80 percent active data
ADV85	Number of volumes containing greater than 80 to 85 percent active data
ADV90	Number of volumes containing greater than 85 to 90 percent active data
ADV95	Number of volumes containing greater than 90 to 95 percent active data
ADV00	Number of volumes containing greater than 95 to 100 percent active data

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TGPERF	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level, "H"=hourly, "D"=daily, "W"=weekly, "M"=monthly
DATE	Date of this record
TIME	Time of this record
SPAN	null
REF	Count of Hourly records involved in this record
CLLVC	Composite library logical volumes to be copied
CLDTC	Composite library data yet to be copied
CLMT0	Composite library mounts completed for B18-0
CLMT1	Composite library mounts completed for B18-1
CLDC0	Data copied by AX0 number 0
CLVC0	Volumes copied by AX0 number 0
CLRD0	Read data transferred through AX0 number 0
CLWD0	Write data transferred through AX0 number 0
CLCM0	Category mounts for AX0 number 0
CLSM0	Specific cache mounts for AX0 number 0
CLRM0	Specific recall mounts for AX0 number 0
CLDC1	Data copied by AX0 number 1
CLVC1	Volumes copied by AX0 number 1
CLRD1	Read data transferred through AX0 number 1
CLWD1	Write data transferred through AX0 number 1
CLCM1	Category mounts for AX0 number 1
CLSM1	Specific cache mounts for AX0 number 1
CLRM1	Specific recall mounts for AX0 number 1
CLDC2	Data copied by AX0 number 2
CLVC2	Volumes copied by AX0 number 2
CLRD2	Read data transferred through AX0 number 2
CLWD2	Write data transferred through AX0 number 2
CLCM2	Category mounts for AX0 number 2
CLSM2	Specific cache mounts for AX0 number 2
CLRM2	Specific recall mounts for AX0 number 2
CLDC3	Data copied by AX0 number 3

CLVC3	Volumes copied by AX0 number 3
CLRD3	Read data transferred through AX0 number 3
CLWD3	Write data transferred through AX0 number 3
CLCM3	Category mounts for AX0 number 3
CLSM3	Specific cache mounts for AX0 number 3
CLRM3	Specific recall mounts for AX0 number 3

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TVREAL	
Column	**Description**
SYSID	System ID of this record
LEVEL	Data level for real: reporting interval in minutes
DATE	Date of this record
TIME	Time of this record
SPAN	Time duration between the collection time of this record and last record, if SPAN is too long compared to the collect interval, it will be adjusted to the collect interval by a factor REF under the assumption that some collection(s) is lost
REF	Factor used to normalize metrics when span from last record is too long
PTPENABLED	PTPEnabled
EXPIMPENABLED	ExportImport
OPMODE	OpMode
RECENABLED	RecEnabled
RECINHIBITED	RecInhibited
RECING	RecInProgress
RECONCILEING	ReconcileInProgress
EXPORTING	ExportInProgress
IMPORTING	ImportInProgress
RAIDREBUILDING	RAIDRebuildInProgress
ROVRECOVERYING	ROVRecoveryInProgress
NUMROVOL	NumberROVolumes
ROVOLPROCESSED	ROVolumeBeingProcessed
VBW	ChannelWriteBytes
VBR	ChannelReadBytes
RECALLSQUEUED	RecallsQdOrInProg
MBTOCOPY	MBToCopyToBackstore
VPM	NumDrivesForMigration
VPS	NumDrivesForRecall
VPR	NumDrivesForReclamation
VPIX	NumDrivesForImport
VPEX	NumDrivesForExport

THRTRECALLPCNT	RecallPredominate
THRTWRITEPCNT	WriteOverrun
THRTRECALL	AverageRecall
THRTWRITE	AverageWrite
THRTALL	Overall
VOLTOEXPORT	TotalValidVolumesToExport
NUMVOLEXPORTED	NumberVolumesExported
VOLTOIMPORT	TotalValidVolumesToImport
NUMVOLIMPORTED	NumberVolumesImported
HOSTCHANNELADAPTER	HostChannelAdapter
RAIDARRAYADAPTER	RAIDArrayAdapter
BACKDATAPATH	BackstoreDataPath
POWERSUPPLY	RedundantPowerSupply
ALLRAIDHDDS	AllRAIDHDDs
SPAREHDDS	SpareHDDs
NUMVOLFILLING	NumberVolumesFilling:The number of volumes filling is the number of tapes which contain ADSM data but are not yet full tapes. ADSM will append new files to filling tapes, and a filling tape will generally be associated with each physical tape drive
NUMVOLACTIVEDATA	NumberVolumesActiveData
NUMEMPTYPHYVOL	NumberEmptyPhysicalVols
DEV0ST	Status of Backstore Device 0: 0:notInUse, 1:inUse
DEV1ST	Status of Backstore Device 1: 0:notInUse, 1:inUse
DEV2ST	Status of Backstore Device 2: 0:notInUse, 1:inUse
DEV3ST	Status of Backstore Device 3: 0:notInUse, 1:inUse
DEV4ST	Status of Backstore Device 4: 0:notInUse, 1:inUse
DEV5ST	Status of Backstore Device 5: 0:notInUse, 1:inUse
DEV0VOL	Physical Volume mounted on Backstore Device 0
DEV1VOL	Physical Volume mounted on Backstore Device 1
DEV2VOL	Physical Volume mounted on Backstore Device 2
DEV3VOL	Physical Volume mounted on Backstore Device 3
DEV4VOL	Physical Volume mounted on Backstore Device 4
DEV5VOL	Physical Volume mounted on Backstore Device 5

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TTEMP	
Column	**Description**
TYPE	Type of data stored temporarily: "GEM-VTS":their relationship
F1	Field 1: GEM ID
F2	Field 2: VTS ID
F3	Field 3

IBM StorWatch Enterprise Server Expert Database Table Descriptions

Table : TREPINFO	
Column	**Description**
REPID	report id
REPSOURCE	null
XML	all definition infomation related to the report
PARENTREP	parent report: report from where customerized report derived