IBM Security Guardium





Package name:	
Health Check for GPU and Upgrade installations (Mar 16 2020)	
Filename	MD5Sum:
SqlGuard-10.0p9997.tgz.enc.sig	ad1ac669719e78d8c8be66b50e11e893
Dependencies:	
Overview:	
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The purpose of the patch is to perform preliminary checks on the Guardium appliance before v10 GPU installation in order to prevent potential issues during the upgrade.

This patch can be installed more than once.

The following will be checked by the patch:

Appliance Configuration Check:

- There is NO issue with DB size (used DB space is less than 80%).
- In case DB used space is greater than 80%, the following message appears in the output file:

ERROR:DB is more than 80% full.

Please reduce size of your DB and run Health Check again.

• In case DB used space is between 50% and 80%, the following message appears in the output file: WARNING:DB is more than 50% full.

Please reduce size of your DB and run Health Check again.

In this case we do not fail the patch, but strongly recommend to ask support to investigate the issue before GPU installation.

- There is NO issue with disk space
- In case /var partition has less than 9G of free space, the following message appears in the output file: ERROR:/var partition has less than 9G of free space.
- In case / partition has less than 3G of free space, the following message appears in the output file: ERROR:/ partition has less than 3G of free space.

Note: Health Check will delete unnecessary metadata files from root partition.

Custom Query Check (the list of predefined queries has been provided from v10.5):

• In case customer has custom queries with the same name that are going to be added by GPU, the following message will appear in log file:

ERROR:. Duplicate query names found.

 In case no custom queries found with the same name that are going to be added by upgrade, the following message will appear in log file:

No duplicate queries found.

Outliers data backup:

• In case there is a lot of data in Outliers tables, the Health Check will back the data up.

This data can be restored after GPU installation by patch 201 and the following message will appear in log file:

ANALYTIC DB has been backed up for restoring by patch 201

In case there is not a lot of data in Outliers tables, it will not be backed up and the following message will appear in log file:

No need to backup ANALYTIC DB

MySQL Table Corruption Check:

• In case there are any crashed tables found in the main databases, the following message will appear in the log file:

WARNING: Crashed tables have been found.

In this case we do not fail the patch, but strongly recommend to ask support to investigate the issue before GPU installation.

In case no crashed tables are found, the following message will appear in the log file:
 No crashed tables found.

Custom Domain ID Check

• This patch finds and resolves Domain ID contentions in Custom Domain meta data and prints the following message in the log file:

Updating domain entity id completed

Preserving customized settings in Purge Object

• In case the latest successfully installed GPU is 200 or lower, the following message will appear in the log file:

BACKUP PURGE OBJECT table has been dropped.

Note: This list is subject to change/expand with later versions of the Health Check patch to include additional checks, if required.

Create Tivoli link

- In order to save space on / partition, we move tivoli directory to /var partition and create link to it. In case link already exists or successfully created by this patch, the following message will appear in the log file: "tivoli link points to /var/local/tivoli"
- In case there is no /opt/tivoli directory on the appliance, it not need to be removed and linked. The following message will appear in the log file "/opt/tivoli does not exist, no need to link it."
- In case the /opt/tivoli link exists but not valid, the following message will appear in the log file: "WARNING: link /opt/tivoli points to not existing directory.". This should not prevent GPU installation, but is recommended to check with support the possible reason for the warning.

Create solr7 link

- In case solr7 directory already exists, the following message will appear in the log file: "/var/IBM/Guardium/data/guard-solr7 exists, no need to create it."
- In case solr7 directory does not exist, the following message will appear in the log file: "/var/IBM/Guardium/data/guard-solr7 was created and linked."
- In both cases the status of the Health Check will not be affected

Check VALIDATE CERTIFICATE HOST parameter

- In case the parameter was set before GPU 600 or higher installation, it should be reset to default value 0 (disabled) in this case the following message appears in the log file: "VALIDATE_CERTIFICATE_HOST was set to 'disable' (default)."
- In case the value is not set or GPU 600 or higher is installed, the value of the parameter will not be updated and the following message appears in the log file:
 "VALIDATE_CERTIFICATE_HOST parameter was checked."

Handle GDM_SESSION_PARTITIONS table.

- In Case there are records with session_apartition value 'NONE', such records should be delete
 and the following message appears in the log file: "GDM_SESSION_PARTITIONS table has been
 updated."
- In Case there are NO records with session_apartition value 'NONE', the following message appears in the log file: GDM SESSION PARTITIONS is up to date.

Preserving Quick Search settings before GPU 600 installation

In order to prevent Quick Search schedule to be unintentionally turned on after GPU 600
installation, we preserve it's setting on collectors where GPU 600 is not installed and Quick
Search is turned off. In such case the following message will appear in the log file: "Quick Search
setting has been preserved.".

Check Hardware Version

In order to prevent failure of upgrade because of firmware version, we want to verify that current version of it will not cause upgrade issues.

- In case when hardware is not 3550 M4 or 3550 M5 or SR630 (M6), patch will NOT fail and the following message will appear in the log file: "Hardware is not a recognized type. Skipping version check."
- In case hardware version need to be checked and the check passes, the patch will NOT fail and the following message will appear in the log: "<Hardware version info>. Hardware version check passed."

For each of the supported models/types, the health check verifies the following:

x3550 M4 – Type 7914:

· DSA: >= 9.54

· IMM: >= 7.20

· UEFI: >= 3.00

x3550 M5 – Type 8869

· DSA: >= 10.5

· IMM2: >= 5.40

· UEFI: >= 3.11

SR630 (M6) – Type 7X02:

· BMC/XCC: >= 3.00

· LXPM: >= 1.70

· UEFI: >= 2.41

 In case hardware version does not pass the verification, the patch will fail and the following message will appear in the log file: "ERROR: Hardware version check failed. Please apply the latest firmware patch from IBM Fix Central"

Check Custom Partitions

This check is relevant ONLY for upgrade to v11, WARNINGs in log file can be ignored for v10 GPU installation.

- In case /boot partition is missing, the following message will appear in the log file:
 WARNING: FOR UPGRADE TO v11 APPLIANCE SHOULD BE REBUILT no boot partition.
- In case / partition is missing, the following message will appear in the log file:
 WARNING: FOR UPGRADE TO v11 APPLIANCE SHOULD BE REBUILT no root partition.
- In case /var partition is missing, the following message will appear in the log file:
 WARNING: FOR UPGRADE TO v11 APPLIANCE SHOULD BE REBUILT no var partition.
- In case any non-standard partition is found, the following message will appear in the log file:
 WARNING: FOR UPGRADE TO v11 APPLIANCE SHOULD BE REBUILT non-standard partition
- In case multi-disk installation is found, the following message will appear in the log file:
 WARNING: FOR UPGRADE TO v11 APPLIANCE SHOULD BE REBUILT multi-disk installation is not supported

Drop obsolete columns

In order to prevent failure during insertion of analytic data collected from collector, an obsolete column AVG_EXECUTION_TIME should be dropped from the AGG_ANALYTIC_INPUT table in DATAMART DB.

In case the column is found, the following message will appear in log file:

Obsolete column DATAMART.AGG_ANALYTIC_INPUT.AVG_EXECUTION_TIME has been dropped.

In case the column was not found, the following message will appear in log file:

Obsolete column DATAMART.AGG_ANALYTIC_INPUT.AVG_EXECUTION_TIME was not found.

The health check generates a log file named *health_check.<time_stamp>.log*.

In order to view the log file, perform the following actions:

1. type fileserver command in cli

- 2. open the fileserver in web browser
- 3. go to Sqlguard logs->diag->current folder and open the log file

The log file will contain a status of each validation.

In case any one of these validations has failed, the status of the failed validation will start with an "ERROR:" prefix and the following message will appear at the end of the log file:

Please send this log file and <file_name> file to support team.

In case when validation is completed with a warning (validation has failed but it will not fail the upgrade), the status of the failed validation will be "DONE", but the following message will appear at the end of the log file:

Please send this log file and <file_name> file to support team.

In this case the output has to be sent to support in order to prevent potential issue during the upgrade.

If no problem was found, the following message appears at the end of the log file:

Appliance is ready for GPU installation/upgrade.

Since GPU 10.6 output of each Health Check run is available in predefined UI Report "Health Check Log".

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