N:\Technical Environment\SQLServer\WordMacros

Location where VBS macros should work for SQL team

Description of SQL Health Check 4.0

The solution consists of several scripts that are stored in subfolders. The main script for Health Check is “002\_HC\_check\_ver\_4.ps1” It is the only routine that will run TSQL check stored in the folder “\SQL” (and “\SQL\serviceSQL” for some exceptions/old versions of SQL Servers). The result will be saved as a set of CSV files in the folder “\Reports”. After the generation of CSVs, the TSQL script will create the new SQL Server database and make a bulk load of these CSV files int the tables. The last step would be the generation of Excel-based matrix report and individual Word reports for every SQL instance.

New TSQL checks can be organised by adding new .sql file to “\SQL” folder. It will create new CSV file and some updates for BULK LOAD, matrix and word generation scripts must be done.

The step by step instruction is:

1. Open the file hosts.txt and fill up it with the list of hosts – each from new line (REM – is commented lines)
2. Run 001\_HC\_access\_BD\_preparation\_41.ps1 script with administrative permission. This script will scan all hosts from hosts.txt for any installed SQL instances and write findings to the instances.txt file. This file will be used as the source for Health Check. As well several other reports can be created
   1. ”-BD\_helper.csv” - collects valuable information for BD configurations, as well as the result of administrative permissions for the host, SQL Server and access to SQL Server log files
   2. “-IPs.csv” - list of all IPs exist on the host
3. If required, you can run the script “000\_BD\_ports\_scan\_4.ps1” for testing all TCP/IP ports related to SQL Server. That step can be important for BD agent installation. Several options are configurable inside this script – full set or limited list of ports for scanning. This script generate report file like “Hosts\_ports\_20240328\_134625.txt”
4. After list of instances is reviewed and permissions resolved, the main script “002\_HC\_check\_ver\_4.ps1” . This script will loop through all instances and hosts from corresponding files. Please get confirmation that database fragmentation test can be run – this can be a performance intensive and can affects applications. So, probably the check \SQL\IndexFragmentation.sql needs to be updated. The results will be stored in CSV files in \Reports folder.
5. Create SQL Server database using script “\Analisys\003\_DB\_recreate.sql”
6. Load CSVs to the newly created database by script “\Analisys\004\_CSV\_load.sql”
7. Run “\Analisys \005\_views\_SPs.sql” to create all database objects.
8. Run “\Analisys\006\_Matrix.sql” This script will (re)create stored procedure that generates matrix report for Excel spreadsheet.
9. The last step - run “007\_HealthCheck\_v4.docm” word document. This will generate individual report for every SQL Server instance.
10. For better an