DB2 Query Monitor for z/OS V3.2 User's Guide - Tech Doc Updates

Abstract

Updates that apply to DB2 Query Monitor for z/OS V3.2 User's Guide (SC19-4143-01)

Content

The most recent update is listed first.

Update 1

Date of change: October 2014

Change Description: Installing a single CAE Server on USS

Location of update: Chapter 4: Customizing DB2 Query Monitor's CAE components > Installing a single CAE Server on USS

Update: The text in the section noted above is to be replaced with the following:

DB2 Query Monitor provides you with the option of configuring the CAE Server on USS. This option is available for sites that do not want to configure the CAE Server on the standard CAE Server platform (Windows) and would prefer to implement the CAE Server under USS instead.

> **Important:**
>
> 1. Read all the information in this section before you begin the installation of the CAE Server on USS to ensure that you fully understand the required configuration.
>
> 2. The topics in this section apply to sites running the CAE Server on USS. The topics in this section do not apply to sites running the CAE Server on Windows.
>
> 3. The CAE Server is typically deployed on Windows in order to reduce resource consumption on the mainframe.
>
> 4. Failover installation on USS involves fewer steps than failover installation on Windows.

The installation of the CAE Server involves data/components that reside in three different locations:

- **Location 1**: Contains the executables and jar files

- **Location 2**: Contains the configuration and data files

- **Location 3**: Contains the log files.

NOTE: Location 1 and Location 2 are required to be separate File System (FS) mount points. Location 3 can be a separate FS mount point or the log files can be written to SYSOUT. The default allocation is currently defined to create an HFS, but a ZFS could be used in its place.

The table below describes these three locations in more detail:

	Location 1: Executables and jar files	Location 2: Configuration and data files	Location 3: Log files (if using FS)*
Table 1. Description of the three File Systems (FSs) required for the CAE Server on USS.			
What does this location store?	The CAE Server's executables and jar files.	The CAE Server's configuration and data files.	The CAE Server's log files.
How is this location created?	This FS is allocated during installation (you do not need to manually allocate this FS).	This FS must be manually allocated.	If you use an FS to hold log files, it must be manually allocated.
With what permissions should the FS be mounted?	Mount the FS with read/write permissions during installation and maintenance. Mount the FS with read-only permissions when using product.	Mount the FS read/write permissions when using product.	Mount the FS read/write permissions when using product.
What permissions should these files and directories have?	The directories and the files in the bin directory should all have read and execute permissions for the user ID of the CAE server address space. All other files need at least read permission for that user ID.	The user ID of the CAE server address space must have read, write, and execute permission for all directories, and must have at least read and write permissions for all files. All directories and files should be owned by the user ID of the CAE server address space.	The user ID of the CAE server address space must have read, write, and execute permission for all directories, and must have at least read and write permissions for all files. All directories and files should be owned by the user ID of the CAE server address space.
Where do I specify the location in TCz?	Select the **Create the USS CAE Server for DB2 Query Monitor for z/OS** option and specify the FS path in the **USS Binary File Path** variable	Select the **Create the USS CAE Server for DB2 Query Monitor for z/OS** option and specify the FS path in the **USS VAR_HOME Path** variable	Select the **Create the USS CAE Server for DB2 Query Monitor for z/OS** option and specify the FS path in the **USS LOG Path** variable
Where do I specify the location in CQMCAESV?	Replace all instances of */u/username/cqm* with the FS directory that holds the executables and jar files.	Replace */configuration/location* in the CQM_VAR_HOME variable in the STDENV DD with the path to the configuration and data files FS directory you manually allocated.	Replace */var/cqm/logs* in the STDOUT DD path and the CQM_LOGS STDENV DD with the path to the logs FS directory you manually allocated.
Should I allocate the directory to separate location?	Yes, the executables and jar files should reside in their own FS.	Yes, the configuration and data files should reside in their own FS.	If using FS to store log files, the log files should reside in their own FS.
What if I have an existing installation of the CAE Server?	Ensure the target FS to which you are installing the new executables and jar files is empty.	Ensure the target FS to which you are installing the new configuration and data files is empty.	Ensure the target FS to which you are installing the new log files is empty.

* This information applies when writing log files to an FS directory. If you choose instead to write logs to SYSOUT, refer to "*Writing CAE Server Log Files to FS*" for more information.

Procedure

The preferred method for installing a single CAE Server on USS is to use **Tools Customizer**. For more information, see "Worksheets: Gathering parameter values for DB2 Query Monitor".

NOTES:

(1) You should still review the sections that follow to understand the manner in which the environment variables must be customized.

(2) When you generate the TCz jobs unpax for server, you should generate the unpax for the PTF job at same time.

Alternatively, you can follow these steps to install it **manually**:

1. After you complete the SMP/E installation, if you want to run the CAE Server under USS, you must customize and run SCQMSAMP library member CQMCUNPX to UNPAX the USS installation.

   There are two environment variables that must be customized: CQM_VAR_HOME and CQM_CAE_CFG_PAX.

   - **CQM_VAR_HOME** - The value for CQM_VAR_HOME environment variable must match that specified in the CQMCAESV JCL. The CQM_VAR_HOME FS location requires at least 250 available MB and it must be mounted read/write while the CAE Server is running. In the fault-tolerant deployment, the directory must be visible to both the Primary CAE Server and Backup CAE Servers and must be the CQM_VAR_HOME for both Primary CAE Server and Backup CAE Servers.

   - **CQM_CAE_CFG_PAX** – The value for CQM_CAE_CFG_PAX environment variable must be set to the PAX member of the data set. For example: CQM_CAE_CFG_PAX=CQM.CQM0320.SCQMTRAN(CQMCFPAX)

2. Check the file SCQMTRAN for a member name CQMCPXPT. That member will contain the cumulative maintenance for the files in the CQM_VAR_HOME FS location. If there is a CQMCPXPT member, then you must customize and run SCQMSAMP library member CQMCUPPT.

3. Run SCQMSAMP library member CQMUPPT whenever you have maintenance that affects the CAE, to apply the updates from the latest PTF to CQM_VAR_HOME.

   IMPORTANT:

   - **CQM_VAR_HOME** – The value for CQM_VAR_HOME value must be the same in CQMCAESV, CQMCPXPT, and CQMCUPPT.

   - **CQM_CAE_CFG_PAX** – The value for CQM_CAE_CFG_PAX_PTF environment variable must be set to the PAX PTF member of the data set. For example: CQM_CAE_CFG_PAX_PTF=CQM.CQM0320.SCQMTRAN(CQMCPXPT)

Writing CAE Server Log Files to SYSOUT

Writing the CAE Server log files to SYSOUT instead of to an FS location enables easy access to the CAE Server log files.

NOTE: If you choose to write the CAE Server log files to SYSOUT, ensure that the spool is sufficiently large to hold the output that might be produced.

When you run the CAE Server as a PROC and you want to write the CAE Server log files to SYSOUT, change DD STDOUT to SYSOUT=*

For example, change the following:

```
//*---------------------------------------------------------------------*
/*MESSAGE STARTING CQM CAE SERVER
//SERVER   EXEC PGM=BPXBATCH,REGION=500M,TIME=NOLIMIT,
//            PARM='SH /u/username/cqm/bin/start_cae_server'
//*           PARM='SH /u/username/cqm/bin/start_cae_server -shutdown'
//STDOUT   DD PATH='/var/cqm/logs/cae_server.log',
//            PATHOPTS=(OWRONLY,OCREAT,OAPPEND),
//            PATHMODE=(SIRWXU,SIRWXG,SIRWXO)
//STDENV   DD *
CQM_VAR_HOME=/configuration/location
CQM_JAVA=/usr/lpp/java/IBM/J1.6
CQM_LOGS=/var/cqm/logs
CQM_HEAP=300
/*
```

To:

```
//*---------------------------------------------------------------------*
/*MESSAGE STARTING CQM CAE SERVER
//SERVER EXEC PGM=BPXBATCH,REGION=500M,TIME=NOLIMIT,
//            PARM='SH /u/username/cqm/bin/start_cae_server'
//*           PARM='SH /u/username/cqm/bin/start_cae_server -shutdown'
//STDOUT   DD SYSOUT=*
//*STDOUT  DD PATH='/var/cqm/logs/cae_server.log',
//*           PATHOPTS=(OWRONLY,OCREAT,OAPPEND),
//*           PATHMODE=(SIRWXU,SIRWXG,SIRWXO)
//STDENV   DD *
CQM_VAR_HOME=/configuration/location
CQM_JAVA=/usr/lpp/java/IBM/J1.6
CQM_LOGS=/var/cqm/logs
CQM_HEAP=300
/*
```