General Communication Service R6.2

System Acceptance Test Manual

Contents

1. PURPOSE

The purpose of this document is to describe the System Acceptance Test cases for General Communication Service (GCS) R6.2. The test cases are chosen to give as complete picture as possible about the usage of the GCS R6.2

2. SCOPE

This document should be used for System Acceptance Test of General Communication Service (GCS) R6.2. The main scope of system acceptance test is to verify that General CommunicationJ Service works correctly with Q1 management network elements.

This document is meant to be used only with General Communication Service R6.2 delivery.

General Communication Service R6.2 has an online help and User manual.

3. PREREQUISITES

Prerequisite for a successful General Communication Service R6.2 System Acceptance are as follows:

- Serial connection: Q1 element is commissioned and connected to GCS PC
- Q1 Pipe connection: Q1 elements are commissioned and connected to polling device (NMS/10 MF C2.0, AXC or DCN Adapter C3.0/C4.X). Network connection to polling device is operational
- Q1 Pipe connection via Q1 Agent: Q1 Agent is commissioned and network connection to Q1 Agent is operational
- BSC/BTS connection: Nokia Siemens Networks NetAct Framework has a standard configuration and commissioning has been carried out successfully. Q1 elements are commissioned and configured under BTS/BSC.
- Oracle Client is installed and NetAct database server details are configured successfully through Oracle Net Configuration Assistant, if acceptance testing is done in NetAct environment.

4. INSTALLATION

4.1 GCS R6.2 Installation

TEST PURPOSE:

The purpose of this test case is to verify GCS R6.2 installation.

PRECONDITIONS:

Oracle Client is installed, if GCS NetAct database integration feature will be used.

DOCUMENTATION:

GCS User Manual

TEST EXECUTION:

1. Install GCS R6.2 using the “General Communication Service R6.2.msi”
   a. Double click on “General Communication Service R6.2.msi” available in GCS installable disk.
   b. Click “Next” on General Communication Service R6.2 – InstallShield Wizard.
   c. Select “Complete” radio button in setup type dialog of the wizard and click on “Next” button
   d. Click on “Install” button in Ready to install the program dialog.
   e. Click on “Finish” to complete the installation.

2. Start GCS Connection Tool:
   Start -> Nokia Siemens Networks-> GCS Connection Tool.

3. Check if the below GCS Services are installed and started successfully in Services List from Control Panel -> Administrative Tools -> Services.
   a. General Communication Service
   b. General Communication Service Sync and
   c. General Communication Service Q1DB

EXPECTED RESULTS:

1. GCS is installed successfully without errors.
2. GCS is launched successfully.
3. Services are installed and started automatically.

5. UPGRADE

5.1 Upgrade from GCS R5.x to GCS R6.2

TEST PURPOSE:

The purpose of this test case is to verify upgrade from GCS R5.x to GCSR R6.2

PRECONDITIONS:

1. GCS R5.x installed

DOUMENTATION:

GCS User Manual

TEST EXECUTION:

1. Install GCS R6.2 using “General Communication Service R6.2.msi”
   a. Double click on “General Communication Service R6.2.msi” available in GCS installable disk.
   b. Click “Next” on General Communication Service R6.2 – InstallShield Wizard.
   c. Select “Complete” radio button in setup type dialog of the wizard and click on “Next” button
   d. Click on “Install” button in Ready to install the program dialog.
   e. Click on “Finish” to complete the installation.

2. Start GCS Connection Tool:
   Start -> Programs ->Nokia Siemens Networks-> GCS Connection Tool.
3. Check if the below GCS Services are installed and started successfully in Services List from Control Panel -> Administrative Tools -> Services
   a. General Communication Service
   b. General Communication Service Sync and
   c. General Communication Service Q1DB

EXPECTED RESULTS:

1. GCS is installed successfully without errors.
2. GCS is launched successfully.
3. Services are installed and started automatically.

5.2 Upgrade from GCS R6.0 to GCS R6.2

TEST PURPOSE:

The purpose of this test case is to verify upgrade from GCS R6.0 to GCSR R6.1

PRECONDITIONS:

GCS R6.0 installed

DOUMENTATION:

GCS User Manual

TEST EXECUTION:

1. Install GCS R6.2 using “General Communication Service R6.2.msi”
    a. Double click on “General Communication Service R6.2.msi” available in GCS installable disk.
    b. Click “Next” on General Communication Service R6.2 – InstallShield Wizard.
    c. Select “Complete” radio button in setup type dialog of the wizard and click on “Next” button
    d. Click on “Install” button in Ready to install the program dialog.
    e. Click on “Finish” to complete the installation.

2. Start GCS Connection Tool:
   Start -> Programs ->Nokia Siemens Networks-> GCS Connection Tool.
3. Check if the below GCS Services are installed and started successfully in Services List from Control Panel -> Administrative Tools -> Services
    a. General Communication Service
    b. General Communication Service Sync and
    c. General Communication Service Q1DB

EXPECTED RESULTS:

1. GCS is installed successfully without errors.
2. GCS is launched successfully.
3. Services are installed and started automatically.

5.3 Upgrade from GCS R6.1 to GCS R6.2

TEST PURPOSE:

The purpose of this test case is to verify upgrade from GCS R6.1 to GCSR R6.2

PRECONDITIONS:

GCS R6.1 installed

DOUMENTATION:

GCS User Manual

TEST EXECUTION:

1. Install GCS R6.2 using “General Communication Service R6.2.msi”
    a. Double click on “General Communication Service R6.2.msi” available in GCS installable disk.
    b. Click “Next” on General Communication Service R6.2 – InstallShield Wizard.
    c. Select “Complete” radio button in setup type dialog of the wizard and click on “Next” button
    d. Click on “Install” button in Ready to install the program dialog.
    e. Click on “Finish” to complete the installation.
2. Start GCS Connection Tool:
   Start -> Programs ->Nokia Siemens Networks-> GCS Connection Tool.
3. Check if the below GCS Services are installed and started successfully in Services List from Control Panel -> Administrative Tools -> Services
    a. General Communication Service
    b. General Communication Service Sync and
    c. General Communication Service Q1DB

EXPECTED RESULTS:

1. GCS is installed successfully without errors.
2. GCS is launched successfully.
3. Services are installed and started automatically.

6. Enhancements

6.1 Enhanced Import logging

TEST PURPOSE:

The purpose of this test case is to verify that the failure messages are logged into event viewer while scheduling of Q1DBTool for importing 2G Node details from NetAct database to GCS database. Also verify that the messages are logged into log file when `/logfile` switch is used.

PRECONDITIONS:

1. Oracle Client is installed and NetAct database server details are configured successfully through Oracle Net Configuration Assistant.
2. The passwords have been saved for Q1DBTool tool.

TEST EXECUTION:

1. Log in the Node Manager Server as an administrator (or with equivalent rights).
2. In the Node Manager Server select **Start -> Programs -> Accessories->System Tools -> Scheduled Tasks**.
3. Double-click Add Scheduled Task. And click “Next”.
4. In the Scheduled Task Wizard, Click Browse. Find and select the location where you have installed Q1DBTool.exe
5. The default installation path is: “`c:\Program Files\Nokia\Q1DBTool.exe`” and then Click Next.
6. Fill in the name for the import: and Set the frequency Click Next.
7. Select the values for the start time when this task is to be executed. Click Next.
8. Fill in the administrator user name and password. Click Next.
9. Check the Open Advanced properties for… marker. Click Finish.
10. In the Scheduled Q1DBtool dialog the Run field is modified to import data from NetAct db using command line
11. ‘“`C:\Program Files\Nokia\Q1DBTool.exe`” `/import /logfile <LogFilePath>`’.
12. After specifying the information in the Run field, click OK.
13. In the Set Account Information dialog retype the administrator password. Click OK.

EXPECTED RESULTS:

1. Logged in to the Node Manager Sever successfully
2. The Scheduled Tasks application opens.
3. The Scheduled Task Wizard opens.
4. The path of Q1DBTool is set.
5. Given path for Q1DBTool is selected
6. The name & frequency of schedule is set.
7. The time of schedule is set.

8. The administrator user name and password is provided.
9. The dialog opens for the created “Scheduled Q1DBtool” task.
10. The import functionality scheduled task is set.
11. The Set Account Information dialog opens and the scheduled task appears in the Scheduled Tasks window.
12. If the process import is completed successfully the information message should be logged in Event viewer and the log file (generated at <LogFilePath>). If any failures occurs in the process of import that should be logged into Event viewer and the log file.

6.2 Windows 7 Database file access privileges check

TEST PURPOSE:

The purpose of this test case is to verify that the currently logged in user has appropriate database file access privileges and all the nodes (added by another user) are visible.

PRECONDITIONS:

1. GCS R6.2 installed

TEST EXECUTION:

1. Launch GCS as an Administrator user
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Add some nodes to the Database
3. Close GCS Connection tool
4. Launch GCS as normal user other than Administrator user
5. Add some nodes to the Database
6. Close GCS connection tool
7. Again launch GCS as Administrator and check for the nodes added by other user are visible to the Administrator user
8. Close GCS connection tool
9. Again launch GCS as normal (other than Administrator user) and check for the nodes added by Administrator are visible to the current user

EXPECTED RESULTS:

1. GCS launched successfully
2. Both the administrator and normal users should be able to see all the nodes added in the database

7. CONNECTIONS

The aim of these test cases is to verify connection and node details can be added to GCS R6.2 database. These test cases also verify communication between GCS and Q1 node.

7.1 Serial Port Connection to Q1 Node

TEST PURPOSE:

The purpose of this test case is to verify Serial Port Connection to Q1 Node.

PRECONDITIONS:

PC is connected to Q1 Node via serial cable.
Node's Q1 address is known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a "Serial Port Connection" to Q1 Node.
   a. In database tab select "Connections" radio button,
   b. Click on "Add" button.
   c. Enter name to the connection in "Name" edit box.
   d. Select "Serial Port Connection" from "Type" drop down list box.
   e. Enter following parameters information by clicking on "Properties" button after selecting the each connection definition parameters.
      - Serial Port: "Serial Port" is to be given a numeric value 1 or 2
      - Baud Rate: "Baud Rate" for the serial port also can be changed; this has to be same as the baud rate set for Q1 NE.
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking "Save" button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select "Connections" radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on "Scan" button
   d. In Scan dialog Enter Q1 Address range in "Begin" and "End" edit boxes.
   e. Click on Start button.
5. Save the scanned node, if listed in grid box, by clicking the button "Save". Click on "Save" button in Save Node dialog window. Close Scan dialog window by clicking "Close" button.
6. Close GCS Connection Tool using Exit button.

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.2 Network Connection to Q1 Node

TEST PURPOSE:

The purpose of this test case is to verify Network Connection to Q1 node.

PRECONDITIONS:

PC is connected to LAN.
Q1 element is commissioned and network connection to node is operational.
Node's IP and Q1 address is known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a "Network Connection" to Q1 Node.
   a. In database tab select "Connections" radio button,
   b. Click on "Add" button.
   c. Enter name to the connection in "Name" edit box.
   d. Select "Network Connection" from "Type" drop down list box.
   e. Enter following parameters information by clicking on "Properties" button after selecting the each connection definition parameters.
      - Network Parameters: Enter the Host Name and Port of the Q1 Node.
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking "Save" button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select "Connections" radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in "Begin" and "End" edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box, by clicking the button "Save" and close the save and scan dialogs by clicking on "Close" buttons.
6. Close GCS Connection Tool using Exit button.

EXPECTED RESULTS:

1. Connection Tool started successfully

2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.3 Q1 Pipe Connection to MF Agent C2.0

TEST PURPOSE:

The purpose of this test case is to verify Q1 Pipe Connection to MF Agent C2.0.

PRECONDITIONS:

Q1 elements are commissioned and connected to MF C2.0
Network connection to MF C2.0 is operational and IP address NMS/10 MF, Q1 Pipe parameters: username, password and bus number are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a “Nokia Q1 Pipe Connection” to Q1 Node.
   a. In database tab select “Connections” radio button,
   b. Click on “Add” button.
   c. Enter name to the connection in “Name” edit box.
   d. Select “Nokia Q1 Pipe Connection” from “Type” drop down list box.
   e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
      - Network parameters: HOST NAME and PORT of the NMS/10 MF.
      - Q1 Pipe parameters: USERNAME, PASSWORD, BUS NUMBER.
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select “Connections” radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box,.
   a. By clicking the button “Save” button. Click on “Save” button in Save Node dialog window. Close Scan dialog window by clicking “Close” button.
   b. By Clicking on “Save All”, if want to Save all scanned nodes. Click on “OK” in “Scan
   c. Results: Save all” dialog window. Click on “Select All” and “Save” buttons in “Scan
   d. Results Selection for Database Saving” dialog and click on close button to close the window. Click on close button in Scan dialog window.

6. Close GCS Connection Tool using Exit button.

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.4 Q1 Pipe Connection to Q1Agent

TEST PURPOSE:

The purpose of this test case is to verify Q1 Pipe Connection to Q1Agent

PRECONDITIONS:

Q1 elements are commissioned and connected to Q1 Agent
Network connection to Q1 Agent is operational and
IP address Q1 Agent, Q1 Pipe parameters: username, password and bus number are known

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a “Nokia Q1 Pipe Connection” to Q1 Node.
   a. In database tab select “Connections” radio button,
   b. Click on “Add” button.
   c. Enter name to the connection in “Name” edit box.
   d. Select “Nokia Q1 Pipe Connection” from “Type” drop down list box.
   e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
      - Network parameters: HOST NAME and PORT of the Q1 Agent.
      - Q1 Pipe parameters: USERNAME, PASSWORD, BUS NUMBER.
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select “Connections” radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box,

a. By clicking the button “Save” button. Click on “Save” button in Save Node dialog window. Close Scan dialog window by clicking “Close” button.
b. By Clicking on “Save All”, if want to save all scanned nodes. Click on “OK” in “Scan
Results: Save all” dialog window. Click on “Select All” and “Save” buttons in “Scan
Results Selection for Database Saving” dialog and click on close button to close the window. Click on close button in Scan dialog window.

6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.5 Pipe Connection to DCN Adaptor C4.X

TEST PURPOSE:

The purpose of this test case is to verify Q1 Pipe Connection to DCN Adaptor C4.x.

PRECONDITIONS:

Q1 elements are commissioned and connected to DCN Adaptor C4.x
Network connection to DCN Adaptor C4.x is operational and
IP address of DCN Adaptor C4.x, Q1 Pipe parameters: username, password and bus number are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a “Nokia Q1 Pipe Connection” to Q1 Node.
   a. In database tab select “Connections” radio button,
   b. Click on “Add” button.
   c. Enter name to the connection in “Name” edit box.
   d. Select “Nokia Q1 Pipe Connection” from “Type” drop down list box.
   e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
      - Network parameters: HOST NAME and PORT of the DCN Adaptor.
      - Q1 Pipe parameters: USERNAME, PASSWORD, BUS NUMBER.
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.

4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select “Connections” radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box,
   a. By clicking the button “Save” button. Click on “Save” button in Save Node dialog window. Close Scan dialog window by clicking “Close” button.
   b. By Clicking on “Save All”, if want to save all scanned nodes. Click on “OK” in “Scan
      Results: Save all” dialog window. Click on “Select All” and “Save” buttons in “Scan
      Results Selection for Database Saving” dialog and click on close button to close the window. Click on close button in Scan dialog window
6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.6 BSC Connection

TEST PURPOSE:

The purpose of this test case is to verify BSC Connection.

PRECONDITIONS:

Nokia Siemens Networks NetAct Framework has a standard configuration and commissioning has been carried out successfully.
NetAct osscore IP, BSC ID, ornuser password and Q1 NE address are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a “BSC Connection” to Q1 Node.
   a. In database tab select “Connections” radio button,
   b. Click on “Add” button.
   c. Enter name to the connection in “Name” edit box.
   d. Select “BSC Connection” from “Type” drop down list box.
   e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.

- Network Parameters: HOST NAME and PORT of the NetAct.
- BSC Parameters: USERNAME, PASSWORD, BSC ID, BUS ID.
- Keep other parameters with default values.

3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select “Connections” radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box.
   a. By clicking the button “Save” button. Click on “Save” button in Save Node dialog window. Close Scan dialog window by clicking “Close” button.
   b. By Clicking on “Save All”, if want to save all scanned nodes. Click on “OK” in “Scan
      Results: Save all” dialog window. Click on “Select All” and “Save” buttons in “Scan
      Results Selection for Database Saving” dialog and click on close button to close the window. Click on close button in Scan dialog window
6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.7 BTS Connection

TEST PURPOSE:

The purpose of this test case is to verify BTS Connection.

PRECONDITIONS:

Nokia Siemens Networks NetAct Framework has a standard configuration and commissioning has been carried out successfully.
NetAct osscore IP, BSC ID, BCF ID, ornuser password and Q1 NE address are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.

2. Create a “BTS Connection” to Q1 Node.
    a. In database tab select “Connections” radio button,
    b. Click on “Add” button.
    c. Enter name to the connection in “Name” edit box.
    d. Select “BTS Connection” from “Type” drop down list box.
    e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
        - Network Parameters: HOST NAME and PORT of the NetAct.
        - BSC Parameters: USERNAME, PASSWORD, BSC ID, BUS ID.
        - BTS Parameters: BCF ID, TRX ID
        - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
    a. In database tab select “Connections” radio button,
    b. Select the saved connection in steps 2, 3
    c. Click on Scan button
    d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
    e. Click on Start button.
5. Save the scanned nodes, if listed in grid box, by clicking the button “Save” and close the save and scan dialogs by clicking on “Close” buttons.
6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.8 Q1 Pipe Connection to AXC

TEST PURPOSE:

The purpose of this test case is to verify Q1 Pipe Connection to AXC.

PRECONDITIONS:

Q1 elements are commissioned and connected to AXC.
Network connection to AXC is operational and
IP address of AXC, Q1 Pipe parameters: username, password and bus number are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
Start -> Nokia Siemens Networks-> GCS Connection Tool.

2. Create a “Nokia Q1 Pipe Connection” to Q1 Node.
    a. In database tab select “Connections” radio button,
    b. Click on “Add” button.
    c. Enter name to the connection in “Name” edit box.
    d. Select “Nokia Q1 Pipe Connection” from “Type” drop down list box.
    e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
        - Network parameters: HOST NAME and PORT of the AXC.
        - Q1 Pipe parameters: USERNAME, PASSWORD, BUS NUMBER.
        - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
    a. In database tab select “Connections” radio button,
    b. Select the saved connection in steps 2, 3
    c. Click on Scan button
    d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
    e. Click on Start button.
5. Save the scanned nodes, if listed in grid box.
    a. By clicking the button “Save” button. Click on “Save” button in Save Node dialog
    window. Close Scan dialog window by clicking “Close” button.
    b. By Clicking on “Save All”, if want to save all scanned nodes. Click on “OK” in “Scan
    Results: Save all” dialog window. Click on “Select All” and “Save” buttons in “Scan
    Results Selection for Database Saving” dialog and click on close button to close the window. Click on close button in Scan dialog window
6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.9 Telnet Connection to Q1 Node

TEST PURPOSE:

The purpose of this test case is to verify Telnet connection to Q1 Node.

PRECONDITIONS:

Q1 Node is connected to Spider port
Host name, PORT of the Spider Port and Terminal password are known.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Start GCS Connection Tool.
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Create a “Telnet connection” to Q1 Node.
   a. In database tab select “Connections” radio button,
   b. Click on “Add” button.
   c. Enter name to the connection in “Name” edit box.
   d. Select “Telnet connection” from “Type” drop down list box.
   e. Enter following parameters information by clicking on “Properties” button after selecting the each connection definition parameters.
      - Network Parameters: HOST NAME and PORT of the Spider Port.
      - Terminal Password Parameters :PASSWORD
      - Keep other parameters with default values.
3. Save it in the GCS database by clicking “Save” button.
4. Scan the above saved connection for a known range of Q1 addresses.
   a. In database tab select “Connections” radio button,
   b. Select the saved connection in steps 2, 3
   c. Click on Scan button
   d. In Scan dialog Enter Q1 Address range in “Begin” and “End” edit boxes.
   e. Click on Start button.
5. Save the scanned nodes, if listed in grid box, by clicking the button “Save” and close the save and scan dialogs by clicking on “Close” buttons.
6. Close GCS Connection Tool using Exit button

EXPECTED RESULTS:

1. Connection Tool started successfully
2. Connection is successfully created.
3. Connection is successfully saved to the GCS database.
4. Node is successfully scanned.
5. Node is saved in the GCS database without any errors.
6. GCS Connection tool is closed successfully.

7.10 Test Communication

TEST PURPOSE:

The aim of this test case is to verify that connections saved to GCS database can be used by other applications

PRECONDITIONS:

Node Manager or MSTE which is compatible with GCS R6.2 is available and installed to PC

DOCUMENTATION:

Node Manager’s on line help

TEST EXCECUTION:

To run this test case, follow instructions from node manager's user documentation

1. Open node manager
2. Make connection to node by using node details saved in GCS database
3. For example; View active alarms from element
4. Close node manager connection
5. exit manager

EXPECTED RESULTS:

1. Node manager is launched
2. Connection to node is established and node data is shown
3. For example: Active alarms are shown
4. Connection to node is closed
5. Node manager is closed

8. IMPORT DATA FROM NETACT DATABASE

8.1 Retrieve 2G Node details from NetAct database

TEST PURPOSE:

The purpose of this test case is to verify Retrieve 2G Node details from NetAct database using GCS Connection Tool

PRECONDITIONS:

NetAct database is having nodes with sobriquets
DB service should be configured in the net manager of oracle client and connection to NetAct database is working

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Launch Connection Tool
   Start -> Nokia Siemens Networks-> GCS Connection Tool.
2. Click on “Configure DB” button from GCS Connection Tool UI.
3. Enter the following information GCS DB Configuration Tool.
   - Enter the Service name, userID, Password of NetAct oracle database
   - Select the connection type to configure the respective connection parameters. BSC/BTS parameters are mandatory and Q1 pipe connection parameters are optional for configuration. But if the user wants to connect to the node using Q1 pipe connection while node details are not present in the MS Access database i.e. node details are present in oracle database, configuring Q1 pipe parameters are mandatory.
   - Enter the OSSPKG/CORE IP Address, Port, User and Password details of the NetAct core server
   - Enter the port number, user and password of Q1 pipe required for GCS to formulate the target string by selecting the Q1 pipe type of connection.
   - Click on “Add” button to configure the above values into the registry
   - Click on “Modify” button to modify the configured database parameters, if needed
   - After the changes occur in the dialog, restart the application using the GCS
4. Select "NetAct" from Database drop down list box from GCS Connection Tool UI.
5. Select service name which was saved in step 3 from “Service” drop down box in “NetAct database” tab.
6. Select ALL if you have only one node manager server installation or select current machine IP for "NM IP", if your system is having multiple node manager server installation.
7. Click on “DB Connect” button.

8. Click on “Import” button to import 2G element connection details which were displayed in grid box.
9. Select "Access" from Database list. Check the connections and nodes in “Database” tab to verify the new data imported.

EXPECTED RESULTS:

1. Connection Tool started successfully
2. GCS DB Configuration Tool is launched
3. Required data is entered.
4. NetAct UI is displayed.
5. Service is selected.
6. Selection can be done.
7. DB is connected and the 2G nodes data is displayed in grid box
8. 2G node details imported without any errors.
9. Imported data is verified from GCS access database tab.

8.2 Scheduling Q1DBTool for importing 2G Node details from NetAct

TEST PURPOSE:

The purpose of this test case is to verify scheduling of Q1DBTool for importing 2G Node details from NetAct database to GCS database

PRECONDITIONS:

1. Oracle Client is installed and NetAct database server details are configured successfully through Oracle Net Configuration Assistant.
2. The passwords have been saved for Q1DBTool tool.

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Log in the Node Manager Server as an administrator (or with equivalent rights).
2. In the Node Manager Server select Start ->Programs->Accessories->System Tools -> Scheduled Tasks.
3. Double-click Add Scheduled Task. And click “Next”.
4. In the Scheduled Task Wizard, Click Browse. Find and select the location where you have installed Q1DBTool.exe
5. The default installation path is: “c:\Program Files\Nokia\Q1DBTool.exe” and then Click Next.
6. Fill in the name for the import: and Set the frequency Click Next.
7. Select the values for the start time when this task is to be executed. Click Next.
8. Fill in the administrator user name and password. Click Next.
9. Check the Open Advanced properties for… marker. Click Finish.

10. In the Scheduled Q1DBtool dialog the Run field is modified to import data from NetAct db using command line '"c:\Program Files\Nokia\Q1DBTool.exe" /import'.
11. After specifying the information in the Run field, click OK.
12. In the Set Account Information dialog retype the administrator password. Click OK.
13. Create another task using the above mentioned steps but in the Run Field give the command line '"c:\Program Files\Nokia\Q1DBTool.exe" /compact' to compacts the database after the import.

EXPECTED RESULTS:

1. Logged in to the Node Manager Sever successfully.
2. The Scheduled Tasks application opens.
3. The Scheduled Task Wizard opens.
4. The path of Q1DBTool is set.
5. Given path for Q1DBTool is selected.
6. The name & frequency of schedule is set.
7. The time of schedule is set.
8. The administrator user name and password is provided.
9. The dialog opens for the created "Scheduled Q1DBtool" task.
10. The import functionality scheduled task is set.
11. The Set Account Information dialog opens and the scheduled task appears in the Scheduled Tasks window.
12. The GCS database is automatically updated as specified. Each time the GCS database is recreated; the previous one is backed up and named dms.mbd.001.
13. The compact db task is performed at its scheduled time and the database is compressed.

9. BACKUP/RESTORE OF GCS DATABASE

9.1 Backup of GCSDatabase

TEST PURPOSE:

The purpose of this test case is to verify backup of GCS Database

PRECONDITIONS:

GCS R6.2 should be installed.
Open “Command Prompt” in “Run as Administrator” mode

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Run the GCSdbBackup.bat file at the command prompt by specifying the destination path.
2. Run the GCSdbBackup.bat file at the command prompt with out giving the destination path.

EXPECTED RESULTS:

1. Path is specified Backup process should be successful.
   `Dbs.mdb` file should be copied to the specified path from GCS Database Path
2. No Path is specified Backup process should be successful.
   `Dbs.mdb` file should be copied to the
   `C:\Documents and Settings\All Users\Application Data\Nokia\GCS` (in XP and 2003 server)
   `C:\ProgramData\Application Data\Nokia\GCS` (In Vista, Windows 2008 server and Windows 7)

9.2 Restore of GCSDatabase

TEST PURPOSE:

The purpose of this test case is to verify restore of GCS Database

PRECONDITIONS:

GCS R6.2 should be installed.
Open “Command Prompt” in “Run as Administrator” mode

DOCUMENTATION:

GCS online help, User Manual

TEST EXECUTION:

1. Modify GCS database by adding/deleting/modifying Connection/Nodes
2. Run the GCSdbRestore.bat file at the command prompt by specifying the destination path.
3. Run the GCSdbRestore.bat file at the command prompt with out giving the destination path.
4. Scan for nodes to verify restored connections by executing test case 9.0 step.

EXPECTED RESULTS:

1. GCS database can be modified.
2. Path is specified Restore process should be successful.
   Dbs.mdb file should be copied from the specified path to
   `C:\Documents and Settings\All Users\Application Data\Nokia\GCS` (in XP and 2003 server)
   `C:\ProgramData\Application Data\Nokia\GCS` (In Vista, Windows 2008 server and Windows 7)
3. No Path is specified Restore process should be successful.
   `Dbs.mdb` file should be copied from the
   `C:\Documents and Settings\All Users\Application Data\Nokia\GCS` (in XP and 2003 server)
   `C:\ProgramData\Application Data\Nokia\GCS` (In Vista, Windows 2008 server and Windows 7)
4. Able to scan and save the Nodes successfully and Modified or added connections/node details should not be present.