GENESYS™

Framework Deployment Guide

SNMP Master Agent

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SNMP Master Agent

For the Management Layer to use SNMP, you must configure an SNMP Master Agent Application object in the Configuration Database, and configure a connection to this Application object in Solution Control Server (SCS). You must create an Application object of type Genesys SNMP Master Agent regardless of the type (Genesys or third party) of the actual Master Agent you are deploying. If you deploy a Genesys Master Agent object, use the Application Template from its installation package; otherwise, use the SNMP Master Agent template shipped with SCS to create an object to represent the third-party SNMP Master Agent.

This section provides instructions for deploying a stand-alone SNMP Master Agent application. See Redundant (HA) SNMP Master Agents for information about deploying SNMP Master Agents as an HA pair.

Depending on the solutions for which you want to enable SNMP monitoring, you may need to install several instances of SNMP Master Agent, using the same approach given in this section. Generally, you have to install and configure one instance of SNMP Master Agent on each computer on which you will be using SNMP functionality.

Starting in release 8.5.1, configuration of an SNMP Master Agent on a host is somewhat different, depending on how you are implementing SNMP on that host (Genesys SNMP Master Agent or Net-SNMP), as determined by the **netsnmp-enable** configuration option in the **[snmp]** section. If set to true, the Management Layer considers this Application object associated with a third-party Net-SNMP Master Agent; otherwise, it is considered to be associated with Genesys SNMP Master Agent. SCS and LCA support both implementations, and use this option to determine how to work with the particular Master Agent.

You can also re-configure an existing Genesys SNMP Master Agent object to use Net-SNMP, as described in the *Framework Migration Guide*.

To deploy a new SNMP Master Agent, do the following:

> ### Important
> Genesys recommends using Net-SNMP for your deployments. Refer to Net-SNMP Master Agent for prerequisites for deploying Net-SNMP.

1. Configure an SNMP Master Agent Application object.

   Prerequisites

   - You are logged in to Genesys Administrator.
   - If you are configuring a Net-SNMP Master Agent:
     - Net-SNMP is installed on any host that will be running Net-SNMP Master Agents.
     - Batch or shell scripts for starting and stopping the Net-SNMP application are available.

Procedure

a. In Genesys Administrator, go to **Provisioning > Environment > Applications**, and select **New** in the toolbar. This opens a **Browse** dialog box that lists available application templates. If an SNMP Master Agent template file is not listed, import the **SNMP_Master_Agent_*current-version*.apd** file from the Management Framework 8.5 product CD.

b. In the **Browse** dialog box, select the SNMP Master Agent template file. The **Configuration** tab for the new SNMP Master Agent Application object appears in the Details panel.

c. In the **General** section, enter a descriptive name in the **Name** field, for example SNMP_MA.

d. In the **Server Info** section:

   1. In the **Host** field, select the Host object on which this SNMP Master Agent is running.

   2. For each listening port that an application must use to connect to SNMP Master Agent:

      a. In the **Listening Ports** field, click **Add**.

      b. Enter the port properties in the **Port Info** dialog box.

      c. Click **OK**.

   3. For the **Working Directory**, **Command Line**, and **Command Line Arguments** fields, enter the appropriate information, as follows:

      • If this SNMP Master Agent is to implement SNMP using Genesys SNMP Master Agent, do one of the following:

         • Enter the appropriate information in the three text boxes. For information about command-line parameters, see SNMP Master Agent.

         • Type a period (.) in the **Working Directory** and **Command Line** text boxes, and leave the **Command Line Arguments** text box blank. The information will be filled in automatically when you install SNMP Master Agent, but only if the Installation Package can connect to Configuration Server.

      • Otherwise, this SNMP Master Agent is to implement SNMP using Net-SNMP. Do the following:

         1. In the **Working Directory** field, enter the path to the Net-SNMP installation folder.

         2. In the **Command Line** field, enter the name of the Net-SNMP executable or binary file.

         3. In the **Command Line Arguments** field,specify the same command-line argurments that are used to start the service/process. This information is used by LCA to identify that Net-SNMP is started and running as a third-party application.

e. (For Net-SNMP Master Agents only) In the **Options** tab, specify the SNMP implementation used by this SNMP Master Agent, as follows:

   1. Create the section **[snmp]**, if it does not already exist.

   2. In the **[snmp]** section, set the **netsnmp-enable** option to `true`. This enables Net-SNMP in this SNMP Master Agent object. If this option is not set, or set to `false` (the default), SCS and LCA will treat the object as a Genesys SNMP Master Agent.

f. (For Net-SNMP Master Agents only) In the **Annex** tab, specify how to start and stop Net-SNMP, as follows:

   1. Create the section **[start_stop]** if it does not already exist.

   2. In the **[start_stop]** section, set the **start_command** and **stop_command** options to the path and filename of the batch or shell scripts to start and stop (respectively) the Net-SNMP

application.

> ### Important
>
> SCS reads the configuration settings of the SNMP Master Agent Application object and uses the option values to connect to Net-SNMP. Therefore, you must ensure that the option values configured for the SNMP Master Agent Application object in the Configuration Database match the actual configuration settings in your SNMP Master Agent.

g. Click **Save** or **Apply** in the toolbar to save the new object. The new object will appear in the list of Applications.

2. Install an SNMP Master Agent.

On UNIX

> ### Warning
>
> During installation on UNIX, all files are copied into the directory you specify. The installation process does not create any subdirectories within this directory, so do not install different products into the same directory.

Prerequisite

- An SNMP Master Agent Application object exists.

Procedure

a. On the Management Framework 8.5 product CD in the appropriate **management_layer/ snmp_master_agent/*operating_system*** directory, locate a shell script called **install.sh**.

b. Type the file name at the command prompt, and press **Enter**.

c. To specify the host name for this SNMP Master Agent, do one of the following:

- Type the name of the host, and press **Enter**.

- Press **Enter** to select the current host.

d. Enter the Configuration Server host name, and press **Enter**.

e. Enter the Configuration Server network port, and press **Enter**.

f. Enter the Configuration Server user name, and press **Enter**.

g. Enter the Configuration Server password, and press **Enter**.

h. The installation displays the list of Application objects of the specified type configured on this Host object. Type the number corresponding to the SNMP Master Agent Application object you configured above, and press **Enter**.

i. To specify the destination directory, do one of the following:

- Press **Enter** to accept the default.

- Enter the full path of the directory, and press **Enter**.

j. If the target installation directory has files in it, do one of the following:

- Type 1 to back up all the files in the directory, and press **Enter**. Specify the path to which you want the files backed up, and press **Enter**.

- Type 2 to overwrite only the files in this installation package, and press **Enter**. Then type y to confirm your selection, and press **Enter**.
  Use this option only if the application already installed operates properly.

- Type 3 to erase all files in this directory before continuing with the installation, and press **Enter**. Then type y to confirm your selection, and press **Enter**.

  The list of file names will appear on the screen as the files are copied to the destination directory.

k. For the product version to install, do one of the following:

- Type 32 to select the 32-bit version, and press **Enter**.

- Type 64 to select the 64-bit version, and press **Enter**.

On Windows

> ### Warning
>
> Genesys does not recommend installation of its components via a Microsoft Remote Desktop connection. The installation should be performed locally.

Prerequisite

- An SNMP Master Agent Application object exists.

Procedure

1. On the Management Framework 8.5 product CD in the appropriate **management_layer\ snmp_master_agent\windows** directory, locate and double-click **setup.exe** to start the Genesys Installation Wizard.

2. Click **About** on the wizard's **Welcome** page to review the read_me file. The file also contains a link to the server's Release Notes file.

3. Click **Next** to start the installation.

4. On the **Connection Parameters to the Genesys Configuration Server** page, specify the host name, port, user name, and password of Configuration Server, and then click **Next**.

5. On the **Select Application** page, select the name of the SNMP Master Agent Application object that you configured above, and then click **Next**.

6. On the **Choose Destination Location** page, the wizard displays the destination directory if specified in the **Working Directory** property of the server's Application object during

configuration. If you entered a period (**.**) in this field when configuring the object, or if the path specified in this property is invalid, the wizard generates a path to the destination directory in the **c:\Program Files\GCTI***Product Name* format.
If necessary, do one of the following:

- Click **Browse** to select another destination folder. In this case, the wizard will update the Application object's **Working Directory** property in the Configuration Database.

- Click **Default** to reinstate the path specified in the **Working Directory** property.

  Click **Next** to proceed.

7. On the **Ready to Install** page, click:

   - **Back** to update any installation information.

   - **Install** to proceed with the installation.

8. On the **Installation Complete** page, click **Finish**.

As a result of the installation, the wizard adds Application icons to the:

- Windows **Start** menu, under **Programs > Genesys Solutions > Management Layer**.

- Windows **Add or Remove Programs** window, as a Genesys server.

- Windows **Services** list, as a Genesys service, with Automatic startup type.

3. Add a connection from Solution Control Server to this SNMP Master Agent.

   a. Open the Solution Control Server Application object's **Configuration** tab.

   b. In the **General** section, add the connection to the SNMP Master Agent object just created. In the **Connections** field:

      1. Click **Add** to open the **Connection Info** dialog box.

      2. Enter the properties of the connection.

      3. Click **OK**.

   c. Click **Save** or **Apply** in the toolbar to save the configuration changes for SCS.

For more information about using SNMP Master Agents, refer to the *Framework Management Layer User's Guide*.