



Performance Management Advisors 8.0

Advisors Platform

Deployment Guide

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Preface

Welcome to the *Genesys Performance Management Advisors 8.0 Advisors Platform Deployment Guide*. This document describes how to deploy the core Advisors Platform.

This document is valid only for 8.0.x releases of this product.

Note: For versions of this document created for other releases of this product, visit the Genesys Technical Support website, or request the Documentation Library DVD, which you can order by e-mail from Genesys Order Management at orderman@genesyslab.com.

This preface contains the following sections:

- [About Advisors Platform, page 7](#)
- [Installation Process, page 8](#)
- [Intended Audience, page 8](#)
- [Making Comments on This Document, page 9](#)
- [Contacting Genesys Technical Support, page 9](#)
- [Document History, page 10](#)

For information about related resources and about the conventions that are used in this document, see the supplementary material starting on [page 49](#).

About Advisors Platform

Each Web-based application (such as Dashboards, System Administration Module, and Workforce Web Service) requires the installation of the Advisors Platform. The Advisors Platform installer installs the following base services:

- Geronimo
- Base Web
- Navigation Service
- Mail-Delivery Service
- Security Realm (optionally, LDAP)
- The data source

- Cluster Manager
In release 8.0, the Platform JMS URL configuration is renamed Cluster Node configuration.

Installation Process

The installation process for Advisors Platform is as follows:

1. Install Java 6 SDK (JDK 1.6 update 22).
2. Install MS SQL Server 2005 with mixed authentication mode. Obtain the latest service pack for SQL Server 2005 from Microsoft and apply it.
3. Install Flash player version 10.x in any non-IE browser environment, such as Firefox.
4. Create the Platform database. See “Creating the Advisor Platform Database” on [page 11](#).
5. Unzip `platform-distribution-<version>.zip` into a temporary directory. The build artifacts detailed earlier should be present.
6. Install the Platform service, including Geronimo. See “Installing Platform” on [page 26](#) and Chapter 3, “Installing Geronimo Server,” on [page 39](#)
7. Optionally, install the Genesys Adapter or Cisco Adapter database and core service. See the relevant Genesys or Cisco Adapter *Deployment Guide* for details of how to do this.
8. Optionally install Contact Center Advisor, Workforce Advisor and XML Generator. Refer to the *Performance Management Advisors 8.0 Contact Center Advisor/Workforce Advisor Deployment Guide* for full details.
9. Optionally, complete the Genesys Adapter or Cisco Adapter installation. See the relevant Genesys or Cisco Adapter *Deployment Guide* for details of how to do this.

Intended Audience

This document is primarily intended for system implementers and system administrators. It has been written with the assumption that you have a basic understanding of:

- Computer-telephony integration (CTI) concepts, processes, terminology, and applications.
- Network design and operation.
- Your own network configurations.

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Before contacting technical support, refer to the <i>Genesys Technical Support Guide</i> for complete contact information and procedures.		

Document History

New in Document Version 8.0.001.02

- The install procedure for LDAP has been modified. See [page 33](#).
- Minor textual and screenshot corrections have been made in this release of this document.
- Configuration notes for Apache have been updated to include additional lines for all installable Advisors modules. See “Installing and Configuring Apache” on [page 45](#).



Chapter

1

Creating the Databases

This chapter describes how to create the Advisor Platform database. It contains the following section:

- [Creating the Advisor Platform Database, page 11](#)

Creating the Advisor Platform Database

Procedure: **Creating the Advisor Platform database**

Note: If due to security restrictions administrator or security administrator access cannot be granted, the local DBA should implement the steps described in this section.

Start of procedure

1. Connect to the SQL Server 2005 instance using Microsoft SQL Server Management Studio with the LoginID assigned to the SQL Server sysadmin server role. It can be sa or any other login assigned to the sysadmin server role and created for you for temporary use during the deployment.
2. In the object explorer right-click on Databases and choose New Database. Open the General screen (Figure 1 on [page 12](#)).

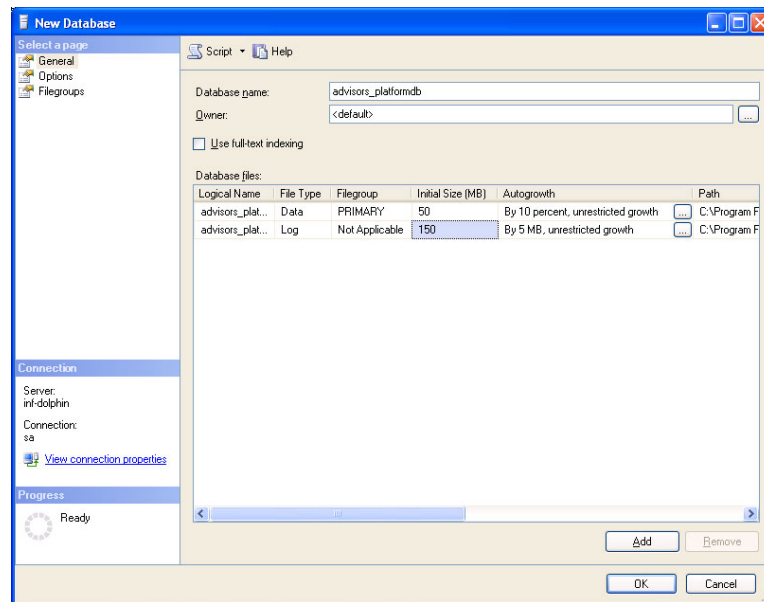


Figure 1: Database Properties—General

- a. Specify the database name—advisors_platformdb.
 - b. Leave the owner as <default>.
 - c. Specify 50 Mb as the initial data file size with Autogrowth set to By 10%, unrestricted file growth.
 - d. Specify 150 Mb as the initial log file size with Autogrowth set to By 5MB, unrestricted file growth.
 - e. Change the pathnames to the data and log files if necessary.
3. Open the Options screen. See Figure 2 on [page 13](#).

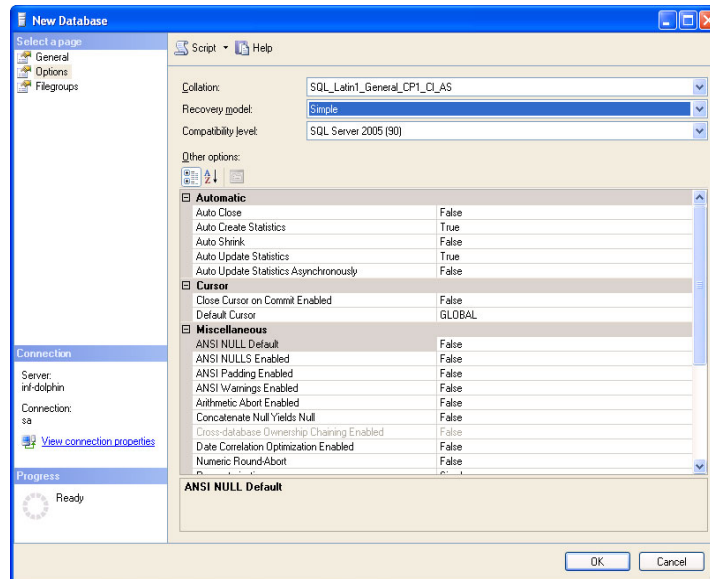


Figure 2: Database Properties, Options

- a. In the Collation field, select SQL_Latin1_General_CP1_CI_AS.
 - b. In the Recovery model field, select Simple.
 - c. Set Auto Create Statistics and Auto Update Statistics to the value true.
4. Click OK.
 5. If you want to use a separate schema as a container for the database objects related to the Advisors applications, implement steps 6 and 7. Otherwise proceed to “Creating a login to be used by the Advisors Platform” on [page 14](#).
 6. In the Object Explorer, expand Databases, advisors_platformdb, Security, and Schemas.

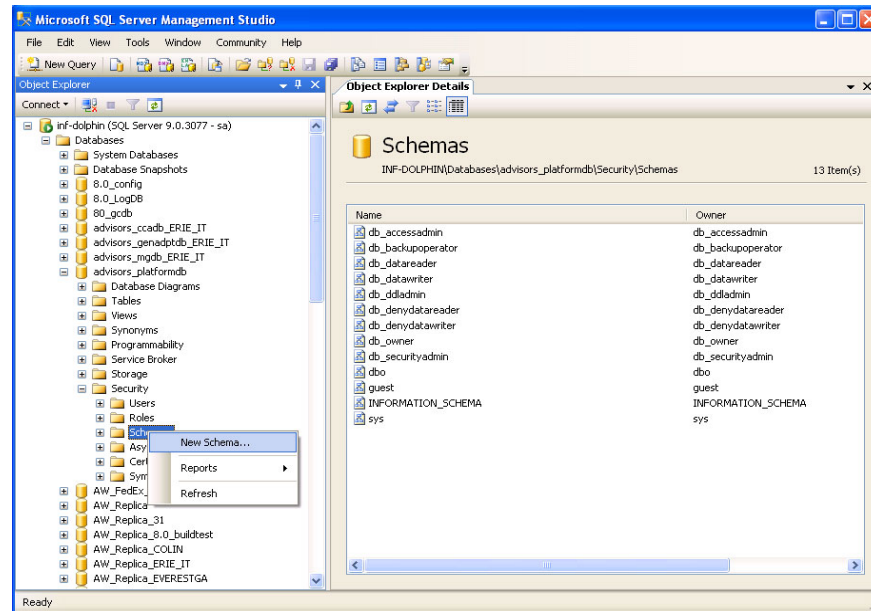


Figure 3: Database Security—Schemas

7. Right-click on Schemas, choose New Schema, then specify the schema name. You can choose any schema name that corresponds to your company and SQL Server naming conventions; for example, callcenter01.
8. Click OK. The database is created and properties are configured.

End of procedure

Procedure: Creating a login to be used by the Advisors Platform

Note: If due to security restrictions administrator or security administrator access cannot be granted, have the customer's DBA implement the steps described in this section.

Start of procedure

1. In the Microsoft SQL Server Management Studio object explorer, select **Server** and then **Security**.

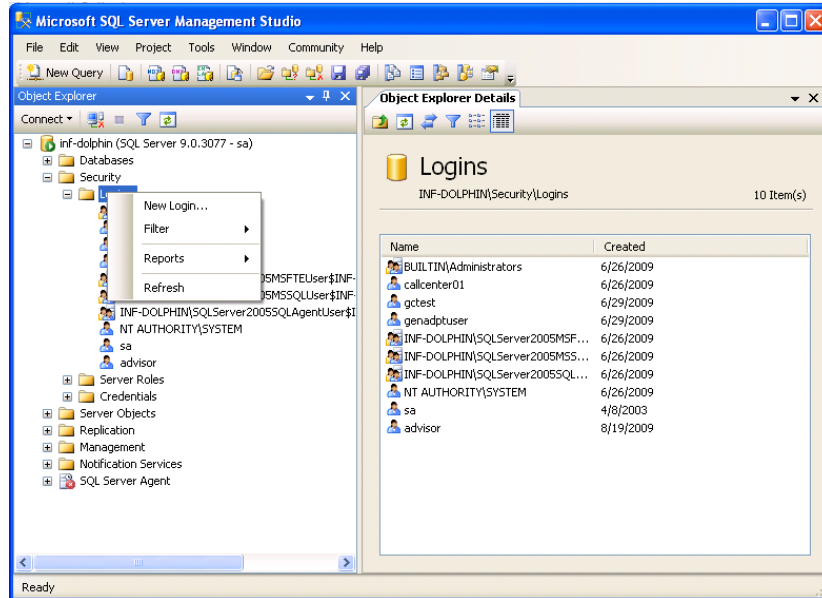


Figure 4: Server-Level Security

2. Right-click Logins and choose **New Login**.
 - a. Specify the login name (in this example, `callcenter01`).
 - b. Click **SQL Server Authentication**.
 - c. Specify a password that complies with the organization's security policy.
 - d. If strong passwords are part of the security policy, check the **Enforce password policy** check box.
3. Open the **Login Properties - User Mapping** screen (Figure 4).

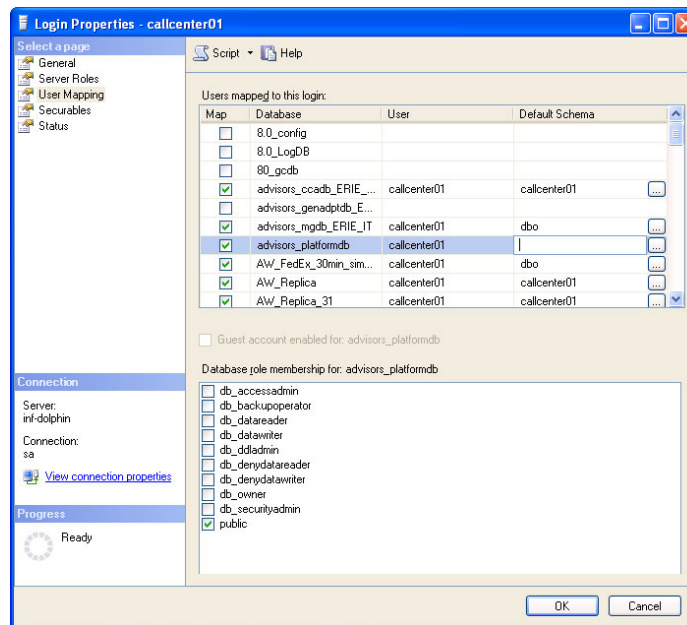


Figure 5: Login Properties—User Mapping 1

- a. Map the user (callcenter01 in this example) to the newly created database (advisors_platformdb in this example) by checking the appropriate check box.
- b. Choose dbo as a default schema if you skipped steps 5 and 6 in the procedure “Creating the Advisor Platform database” on page 11. Otherwise select the name of the created schema.

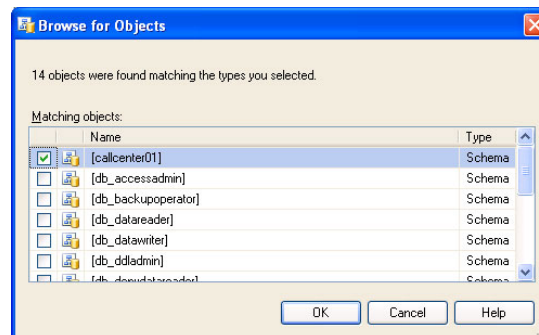


Figure 6: Browse for Objects

- c. Click OK, then confirm your selection by highlighting it and clicking OK again in the Select Schema dialog. This returns you to the User Mapping screen.

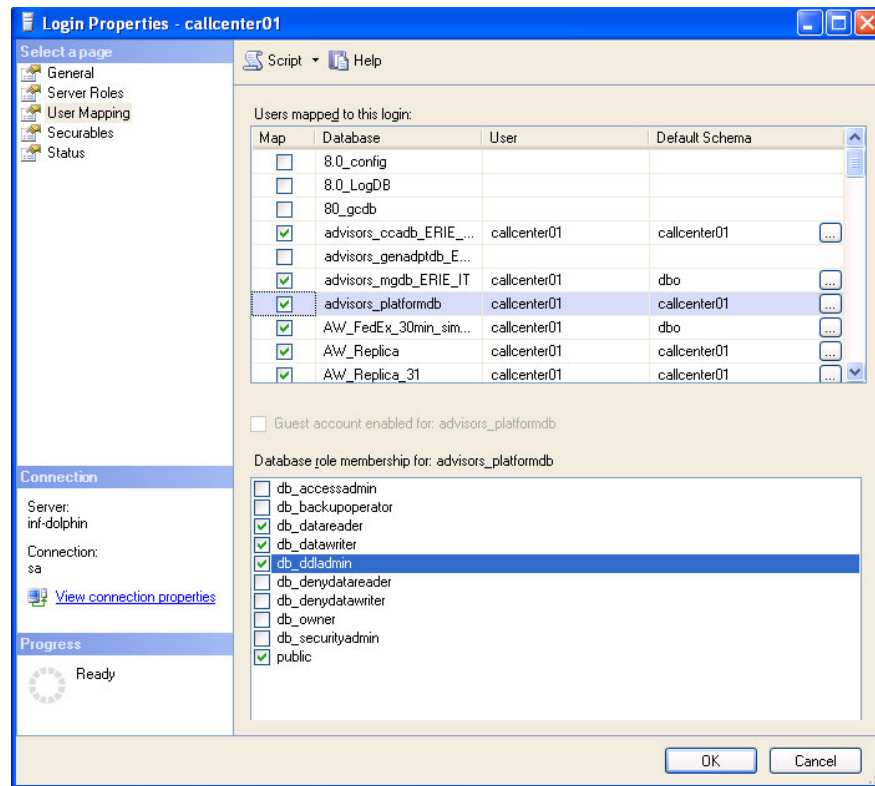


Figure 7: Login Properties—User Mapping 2

- d. Add the user to the db_owner database role (Figure 7) or to all three of the following roles: db_datareader, db_datawriter, and db_ddladmin.

Note: If you choose db_datareader, db_datawriter, db_ddladmin option, ensure that after you create all of the database objects, you then complete the step described in “Assigning Additional User Permissions” on page 23.

The login to be used by Advisors Platform is created and configured.

End of procedure

Procedure: Creating linked servers for the Advisors Platform database

Note: If, due to security restrictions, administrator or security administrator access cannot be granted, the local DBA should implement the steps described in this section.

Prerequisites

Before you start the procedure, identify the data sources that must be accessed. If the customer uses a Cisco environment, then an ICM DBA must create a login and password for this application in all ICM databases that must be accessed. Each Genesys Adapter metrics database must be accessible by the user defined in the Advisors Platform database.

Start of procedure

1. In the Microsoft SQL Server Management Studio object explorer, click Server Objects.

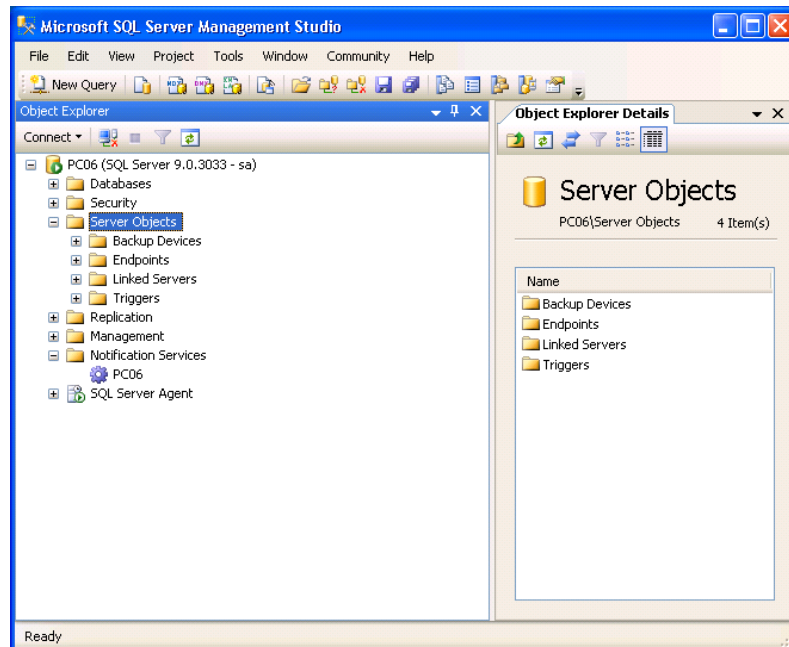


Figure 8: Server Objects

2. Right-click on Linked Servers and choose New Linked Server...The New Linked Servers screen displays (Figure 9 on [page 19](#)).

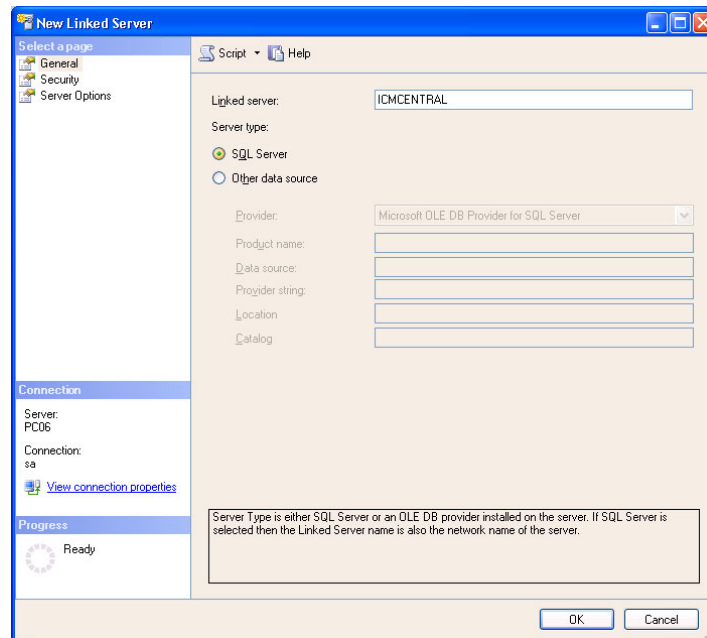


Figure 9: New Linked Server Screen

3. For the Server type, select SQL Server.
4. Specify the name of the external SQL database server to be accessed. Click OK. The New Linked Server—Security Screen displays.

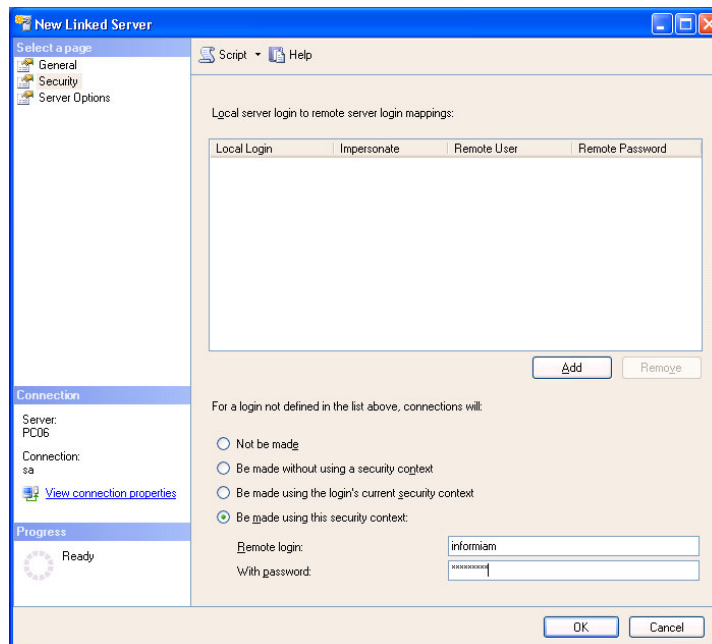


Figure 10: New Linked Server—Security Screen

5. On the Security screen:
 - a. Select Be made using this security context.
 - b. Specify the remote login and password created by the external administrator for access to the external awdb (in this example, advisors/<password>) from Advisors Platform.

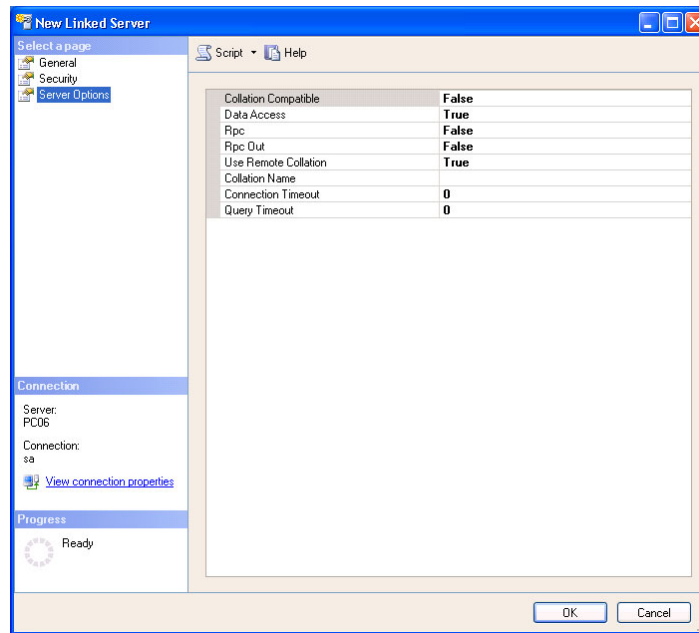


Figure 11: New Linked Server—Server Options

6. On the Server Options screen:
 - a. Check the Data Access check box and User Remote Collation check box.
 - b. Click OK.
7. To test the linked server connectivity run some SQL statements from the Microsoft SQL Server Management Studio.

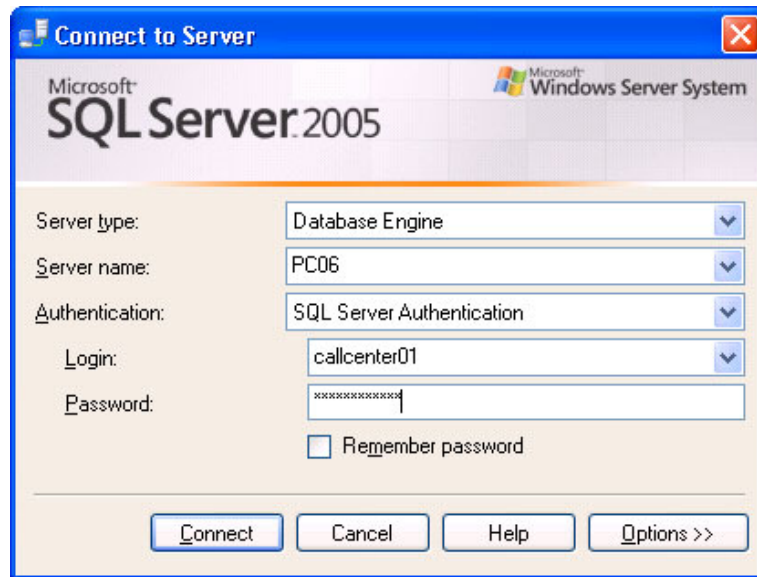


Figure 12: Connecting to Database Engine

8. Enter the correct connection details and click Connect. The New Query screen displays (Figure 10 on page 19).

9. Click New Query

10. Type a query using the following notation:

- `Select <...> from <Linked Server Name>.<Remote Database Name>.<Remote Database Owner>.<Remote Table Name>`

Or:

- `Select <...> from openquery(<Linked Server Name>, 'select <...> from >.<Remote Database Name>.<Remote Database Owner>.<Remote Table Name> [with (<locking hint>)]`

Example–Cisco

```
Select * from ICM_AWDB1.company_awdb.dbo.Controller_Time
```

Or:

```
Select * from OpenQuery([ICM_AWDB1], 'select * from
company_awdb.dbo.Controller_Time
(noLock)')
```

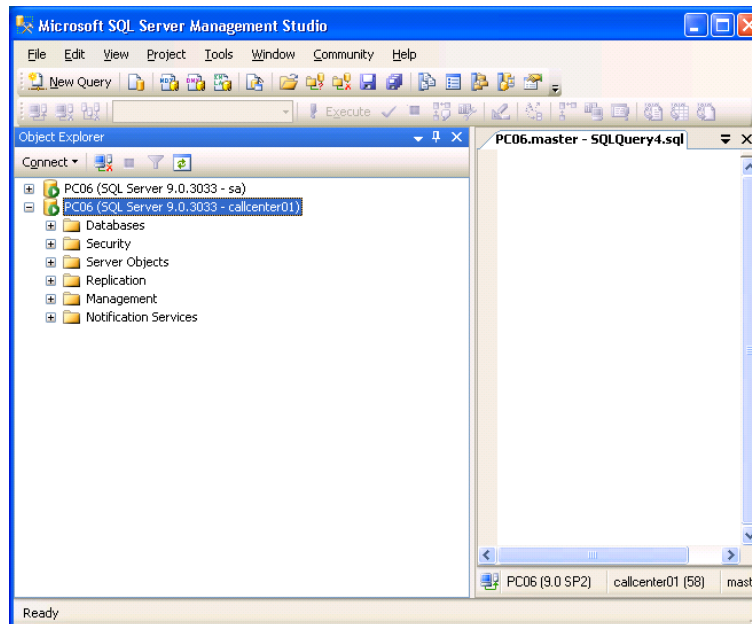


Figure 13: Microsoft SQL Management Studio—New Query

11. For each external data source, repeat this procedure.

End of procedure

Procedure: Creating objects in the database

Prerequisites

This step must be run either with the system administrator account or with a user having `db_owner` permissions to the database. In addition, the user must have the same default schema as that assigned to the Advisors user (created in the [“Creating a login to be used by the Advisors Platform”](#) section).

The `db_owner` can be given temporarily to the Advisors user for the purpose of running these steps.

Start of procedure

1. From Microsoft SQL Server Management Studio click **F**ile . Connect to the database engine as a user meeting the criteria above.
2. Make sure that you choose the Advisors Platform database from the list of available databases (in this example, `advisors_platformdb`).

3. From the `./sql_files` folder in the distribution folder, run the SQL script `platform-new-database-<version>.sql` against the newly created database (`advisors_platformdb` in this example). This script creates the database user objects and populates some tables with default configuration data.
4. Scroll down the query results tab and check for errors. Ignore warnings. The objects are created.

End of procedure

Assigning Additional User Permissions

Assigning additional user permissions is necessary if the created database user is assigned to `db_datareader`, `db_datawriter` and `ddl_admin` roles but is not assigned to the `db_owner` role.

The user assigned to `db_datareader`, `db_datawriter` and `ddl_admin` roles must be granted execute permissions only, on all user stored procedures that exist in the database after the objects are created.

You can use the SQL Server interface to assign the permissions or create a grant permissions script and execute it against the newly created database. The following statement when executed against the newly created database will produce a set of grant permission statements.

To run the script press `CTRL/T`, then `CTRL/E`.

Copy the result from the result pane. That is, click on the `Result` pane, then click `CTRL/A` then `CTRL/C`. Paste the content (`CTRL/V`) into the query pane and execute the following:

```
select 'grant execute on
['+ routine_catalog+'].['+routine_schema+'].['+routine_name+'] to
<database user>' from INFORMATION_SCHEMA.ROUTINES where
ROUTINE_TYPE='PROCEDURE'
```

Note: Before executing the script, please change `<database user>` to the ID for your database user.



Chapter

2

Advisor Platform Deployment

This chapter describes how to install and configure the Advisors Platform. It contains the following section:

- [Installation Notes, page 25](#)
- [Installing Platform, page 26](#)
- [Automated Installation Options, page 34](#)
- [Troubleshooting Installation Errors, page 37](#)

Installation Notes

- For each physical server on which you install a Web application (Contact Center Advisor, Workforce Advisor, and so on) or the XMLGen Application, you must install an instance of Platform.
- You must provide a unique node ID for each Platform installation. Additional details are included in the installation steps.
- Alert e-mail templates are located in the `<install dir>\conf\templates`.

The installation process has several distinct sections, in order to accommodate different stages of system preparation. If some or all of the infrastructure software systems are already installed, various steps can be bypassed. It is important to get specific information about the location of these components from the original installer or the package manager.

A single zip file, `platform-distribution-<version>.zip`, contains the following distribution artifacts:

- `platform-installer-<version>.jar`—The installer for the Platform. See “LDAP-Related Notes” on [page 26](#).
- `baseweb-<version>-static-web.zip`—A copy of the static files that can be served by Apache.

- `platform-new-database-<version>.sql`—The creation and migration script for the Platform database.
- `installer-support-<version>-jar-with-dependencies.jar`—The utility tools used for changing LDAP passwords.

LDAP-Related Notes

1. Administrators must manually delete users from the Advisors administration component if they are deleted from LDAP. This prevents the scenario where a subsequent creation of an LDAP user with the same name would be granted the same permissions as the old Advisors' user.
2. For a new Platform database, the default administrator user must be updated to enable login. Once the Platform database has been created, the following manual steps are required:
 - a. Using SQL Server Management Studio, open the `USERS` table in the new Platform database. A single row for the admin user displays.
 - b. Update the `USERNAME` field for this row to match that of an administrator in the Active Directory.
 - c. Ensure that the `ROLE_ID` field for this row is set to 1.
3. The installer that runs last on a specific database overwrites the configuration changes of the prior ones. If the database is configured and the installer must be re-run, ensure that the LDAP settings are the same. All nodes in the cluster must be configured properly (that is, do not skip LDAP for non-authenticating nodes).

Custom Logo

Your custom logo must be in .png format, and can have maximum dimensions of 210 x 52 pixels.

Installing Platform

The installer will not upgrade an existing installation. The old installation must be completely removed by deleting its installation directory.

If you plan to do this, uninstall the Windows services for the Contact Center Advisor, XMLGen Application and the Genesys Advisors Server before you delete the installation directory. You must do this if you are going to re-install Genesys Advisors in a different directory from the one in which it is currently installed. This is because uninstalling the Windows services requires files that are in the installation directories you are going to delete. Once you delete them you cannot uninstall the Windows services.

Procedure: Uninstalling Windows services

Start of procedure

1. Stop the Windows services for Advisor's components.
2. Close the Services window.
3. Open a command prompt window.
4. Change directory to the one in which you installed Genesys Advisors, and then change it into `bin\windows-x86-32`.
5. Run the command: `UninstallAdvisorsServer.bat`.
6. Change the directory to the one in which XMLGen is installed.
7. Run the command `uninstallXmlgen`.
8. Change the directory to the one in which the Genesys Adapter is installed, then change it into `bin`.
9. Run the command `Uninstall-Adapter-NT.bat`.

End of procedure

Installing Platform

If the Advisors Browser is installed in the installation directory, uninstall it before deleting the directory. Then reinstall the Advisors Browser again after you have installed Genesys Advisor's modules.

Each web-based application (such as Dashboards, System Administration module, Workforce Web Service and the XMLGen application) requires the installation of the Advisors Platform. The Platform installer installs the base services:

- Geronimo
- Base web
- Navigation service
- Mail-Delivery service
- Security Realm (optionally, LDAP)
- The data source
- Cluster Manager

Note: The Platform JMS URL configuration is named Cluster Node configuration.

Procedure: Installing Platform

Start of procedure

1. Launch the Platform installer: `platform-installer-<version>.jar`. The Installer screen displays.



Figure 14: Installer Screen

2. Click Next. The Module to Install screen displays (see Figure 15 on [page 29](#)).

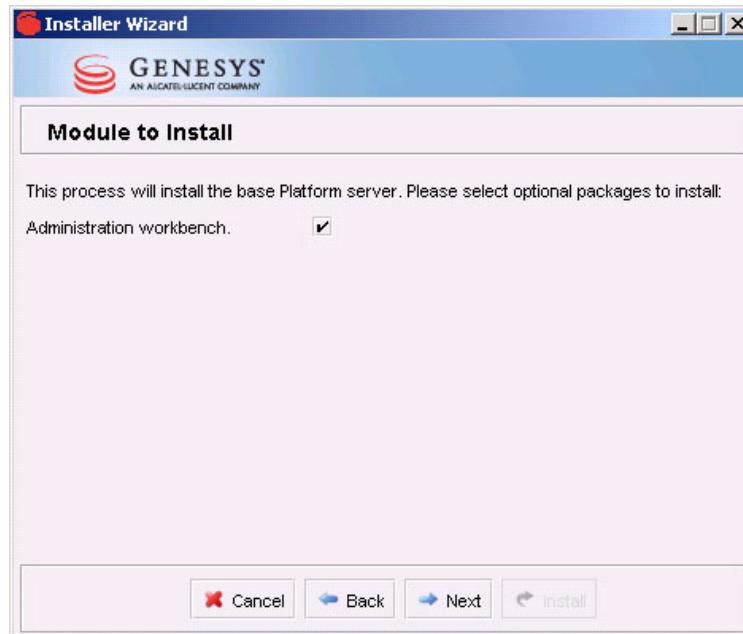


Figure 15: Module to Install Screen

3. Check the Administration workbench checkbox and click Next. The Destination Directory screen displays.

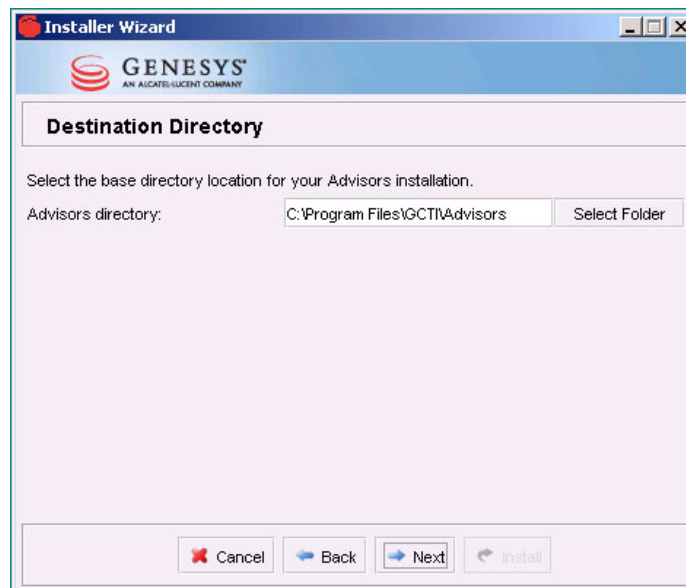


Figure 16: Destination Directory Screen

4. Select the destination directory in which the files will be installed and click Next. The Java Development Kit screen displays (Figure 17 on [page 30](#)).



Figure 17: Java Development Kit Screen

5. Enter or select the JDK folder location for the Java Development Kit and click Next. The Cluster Node Configuration screen displays (Figure 18).

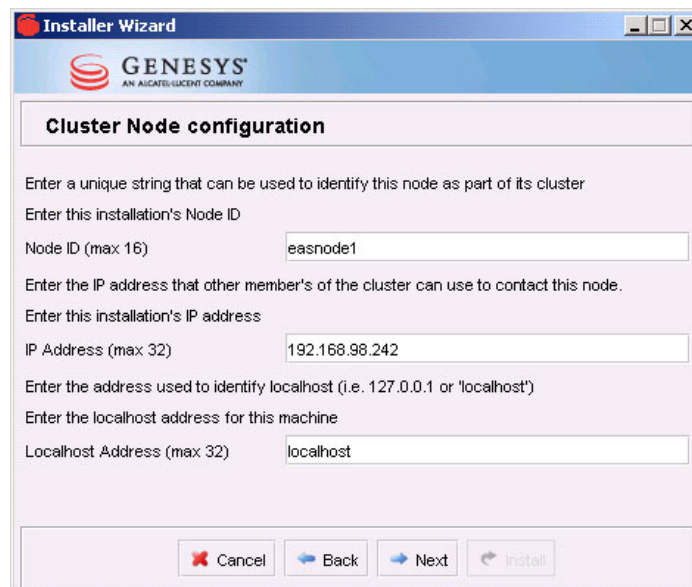
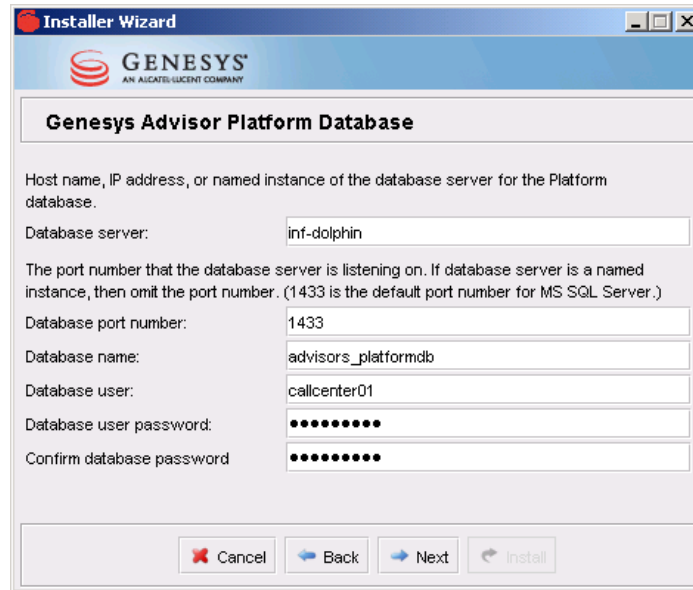


Figure 18: Cluster Node Configuration Screen

6. Each server that installs Platform requires a unique cluster node. Configure the node with the following information:
 - Node ID—A unique ID across all Platform installations. Must not contain spaces or any special characters, must be only alpha numeric. For example; node1; node2.

- IP Address—The address that will be used to contact this node, not localhost nor 127.0.0.1, for example, 192.168.100.1.
 - Localhost address—The local host address, localhost or 127.0.0.1.
- Click Next. The Genesys Advisor Platform Database screen is displayed.



The screenshot shows a window titled "Installer Wizard" with the Genesys logo. The main heading is "Genesys Advisor Platform Database". Below this, there is a text prompt: "Host name, IP address, or named instance of the database server for the Platform database." The form contains the following fields:

Database server:	inf-dolphin
Database port number:	1433
Database name:	advisors_platformdb
Database user:	callcenter01
Database user password:	••••••••
Confirm database password:	••••••••

At the bottom of the window, there are four buttons: "Cancel" (with a red X icon), "Back" (with a left arrow icon), "Next" (with a right arrow icon), and "Install" (with a circular arrow icon).

Figure 19: Genesys Advisor Database Screen

7. Enter the database connectivity parameters for the already created or upgraded database (that is, the database must be present and at the current version prior to running the installer). These parameters are server (machine), port number, name, user, and password.
If the database server is a named instance, then omit the port number. Click Next. The Mail Service Configuration screen is displayed (Figure 20 on [page 32](#)).



The screenshot shows the "Mail Service Configuration" screen within the "Installer Wizard" window. The window title is "Installer Wizard" and the Genesys logo is visible at the top. The screen contains the following fields and text:

- SMTP service to be used for notification messages sent from the mail service:**
- SMTP server:** [Empty text box]
- Default address from which to send application notification E-Mails:**
- Application from address:** DO-NOT-REPLY@genesyslab.com
- Default address to which to send application notification E-Mails:**
- Application to address:** [Empty text box]

At the bottom of the window, there are four buttons: "Cancel" (with a red X icon), "Back" (with a left arrow icon), "Next" (with a right arrow icon), and "Install" (with a circular arrow icon).

Figure 20: Mail Service Configuration Screen

8. Enter the SMTP and e-mail parameters.
9. Click Next. The Security Realm Configuration screen displays.



The screenshot shows the "Security Realm Configuration" screen within the "Installer Wizard" window. The window title is "Installer Wizard" and the Genesys logo is visible at the top. The screen contains the following fields and text:

- Enable LDAP authentication:**
- When LDAP-authenticated users are first discovered, a new user will be created.**
- A notification E-Mail will be sent with a description of the newly created user.**
- Address from which to send the login notification E-Mail:**
- From address:** DO-NOT-REPLY@genesyslab.com
- Address to which to send the login notification E-Mail:**
- To address:** [Empty text box]

At the bottom of the window, there are four buttons: "Cancel" (with a red X icon), "Back" (with a left arrow icon), "Next" (with a right arrow icon), and "Install" (with a circular arrow icon).

Figure 21: Security Realm Configuration Screen

10. Check the **Enable LDAP Authentication** checkbox if LDAP authentication is required, and enter the LDAP e-mail parameters.

Note: If LDAP is enabled for any Advisors Platform installation (not just the current one), please see “LDAP-Related Notes” on [page 26](#).

11. Click **Next**.
12. Enter the first set of LDAP authentication parameters on the first LDAP Authentication screen displayed.



The screenshot shows a window titled "Installer Wizard" with the Genesys logo. The main heading is "LDAP Authentication". Below the heading, there are instructions: "Enter the host address and port for the LDAP server." and "Enter the username and password used for authentication with the LDAP server." The form contains the following fields and values:

LDAP Host:	192.168.100.124
LDAP Port:	389
Username:	padl
Password:
Confirm password:

At the bottom of the window, there are four buttons: "Cancel" (with a red X icon), "Back" (with a blue arrow icon), "Next" (with a blue arrow icon), and "Install" (with a blue arrow icon).

Figure 22: LDAP Authentication Screen 1

13. To authenticate LDAP:
 - a. Enter the LDAP host.
 - b. Enter the LDAP port.
 - c. Enter the user name for the LDAP server authentication.
 - d. Enter the password for the LDAP server authentication.
 - e. Confirm the password, and click **Next**.
14. The LDAP Authentication-continued screen displays.

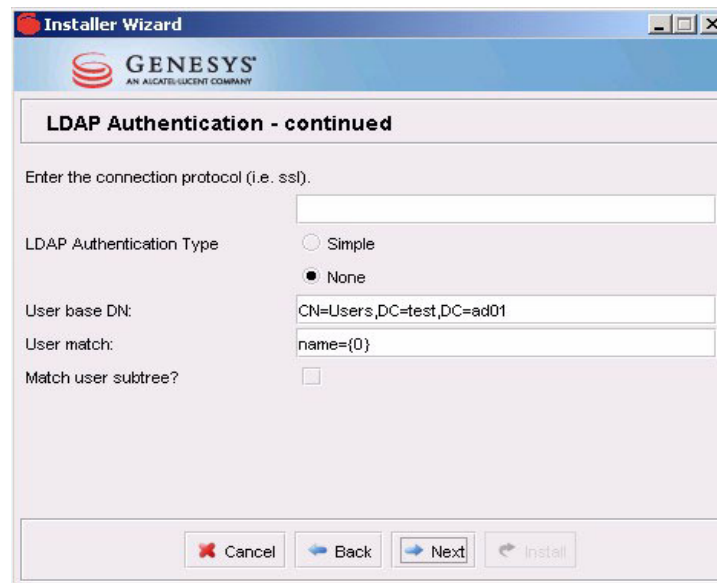


Figure 23: LDAP Authentication—continued Screen

15. Complete the LDAP authentication details:
 - a. Enter the LDAP connection protocol.
 - b. If the LDAP authentication type is simple, select Simple.
 - c. Enter the user base DN.
 - d. Enter the user match.
 - e. Uncheck the Match user subtree? check box. Click Next.
16. The Installation Progress screen is displayed. Click Install. The progress displays on the Output tab. Any errors display in the Errors tab.
17. If no errors display, dismiss the Finished popup. The Output tab displays the message Build Successful and the total time taken for the deployment.
18. If errors display, diagnose them in the Errors tab. Delete the installation directory and, after diagnosis, reinstall.

End of procedure

Automated Installation Options

In addition to installing Platform by entering all properties in the installer UI screens (*normal mode*), two automated installation modes are also available: *semi-silent* and *silent*.

- Semi-silent mode pre-populates all values in the installer UI. The user will be able to review these values and make corrections if necessary.

- Silent mode is similar to semi-silent mode, except that only the Installation Progress screen is displayed. Installation will proceed without confirmation, and will exit automatically with log output being written to file.

Specifying Input Properties

For both semi-silent and silent installation modes, all required properties for the installation options, including installation targets, passwords, and so on, must be present in a property file named `ant.install.properties`. This file must be located in the same directory from which the installer runs.

Generate an initial template by running the installer in normal mode, and then supply values for the targets and other installation options. The installer saves these values (excluding passwords) in a file named `ant.userinstall.properties` in the same directory as `platform-installer-<version>.jar`. Obtain the input property file by copying this file to `ant.install.properties`, and then modifying the installation options as required for the specific configuration.

In order to reduce the risk of revealing sensitive information, password values are not written by the installer to the properties file. When the installer creates the `ant.userinstall.properties` file, password properties are created and commented out. For example:

```
#cp.database.password=
```

Once the `ant.userinstall.properties` file is copied to `ant.install.properties`, you must locate the necessary password properties, uncomment them, and then add the actual password values. For example:

```
cp.database.password=supersecurepassword
```

Performing a Semi-Silent Installation

Enable semi-silent installation by running the installation jar with the `ant.install.properties` file present in the installer directory. No other changes are required.

Performing a Silent Installation

Enable the silent installation mode by adding the `swing-auto` parameter when running an installation jar on the command line. For example, to perform a silent installation of Platform, open a command prompt, navigate to the directory containing the installer jar, then run the following command (using the proper version number for “<version #>”):

```
java -jar platform-installer-<version #>.jar swing-auto
```

Note: Note that the `ant.install.properties` file must be present in the same directory.

The installer runs using the values in the `ant.install.properties` file, and upon exit indicates success or failure with a message and error codes. A successful installation looks similar to the following:

```
$ java -jar platform-installer-<version #>.jar swing-auto
Loading self extractor...
Install Successful.
```

A failed installation looks like the following:

```
$ java -jar platform-installer-<version #>.jar swing-auto
Loading self extractor...
Install Failed.
```

After the installer runs, these additional files contain log and installer output information:

```
ant.install.log
installation-output.log
```

In the case of installation failure, consult the `installation-output.log` file for further information. (Possible reasons for failure include a missing input properties file, incorrect property values—for example, database passwords—or any other error that would cause a failure during normal installation mode.)

Troubleshooting Installation Errors

The following are parameter validation errors that you may encounter at the end of installation:

Table 1: Installation Error Messages

Error Message	Cause
<pre>[java] Failed to connect to the database using connection URL: [java] jdbc:sqlserver://192.168.xx.yy:nnn;DatabaseName=ys_pldb;use r=sa;password=very_secure_pwd;selectMethod=cursor [java] The following exception was thrown: com.microsoft.sqlserver.jdbc.SQLServerException: The TCP/IP connection to the host 192.168.xx.yy, port nnn has failed. Error: "Connection refused. Verify the connection properties, check that an instance of SQL Server is running on the host and accepting TCP/IP connections at the port, and that no firewall is blocking TCP connections to the port.</pre>	Wrong database server name / IP address or port number
<pre>[java] Failed to connect to the database using connection URL: [java] jdbc:sqlserver://192.168.xx.yy:nnnn;DatabaseName=NotAPlatfo rmDB;selectMethod=cursor;user=sa;password=very_secure_pwd [java] The following exception was thrown: com.microsoft.sqlserver.jdbc.SQLServerException: The TCP/IP connection to the host 192.168.xx.yy, port nnnn has failed. Error: "connect timed out. Verify the connection properties, check that an instance of SQL Server is running on the host and accepting TCP/IP connections at the port, and that no firewall is blocking TCP connections to the port."</pre>	Wrong database name
<pre>[java] Exception while connecting: Login failed for user 'badUserId'. [java] url used: jdbc:sqlserver://192.168.xx.yy:nnnn;DatabaseName=ys_pldb;se lectMethod=cursor;user=badUserId;password=very_secure_passw ord</pre>	Wrong database user name or password

Table 1: Installation Error Messages (Continued)

Error Message	Cause
<pre>[echo] pinging cluster node IP address 138.120.yy.zz... [java] WARNING! Host 138.120.yy.zz is unknown - java.net.UnknownHostException: 138.120.yy.zz. This may be due to a firewall blocking requests or a specific server configuration, e.g.: permissions. [java] ERROR! Host 138.120.yy.zz is unknown - java.net.UnknownHostException: 138.120.yy.zz. This may be due to a firewall blocking requests or a specific server configuration, e.g.: permissions. [java] Exception in thread "main" java.security.InvalidParameterException: Host 138.120.yy.zz is unknown - java.net.UnknownHostException: 138.120.yy.zz. This may be due to a firewall blocking requests or a specific server configuration, e.g.: permissions.</pre>	<p>The cluster member node identified by the IP address specified is not reachable. This may be for one of the following reasons:</p> <ul style="list-style-type: none"> • The host is not online • A firewall is blocking access to the host • The IP address of the host is incorrect • The host is configured not to respond to ICMP ping requests
<pre>CheckLdapConnection: [echo] Checking connection to the LDAP Server on host 192.168.yy.zz, port 389... [echo] Checking connection to 192.168.yy.zz on port 389... ERROR! Failed to check connection to host 192.168.yy.zz, please see the error log for details.</pre>	<p>Wrong LDAP Server IP address and/or port specified.</p>



Chapter

3

Installing Geronimo Server

This chapter describes how to install and remove Geronimo server. It includes the following sections:

- [Installing Geronimo as a Windows Service, page 39](#)

Installing Geronimo as a Windows Service

Procedure:

Installing Geronimo as a Windows service

Start of procedure

1. Run the Windows service as a user who has these permissions:
 - a. Permission Log In as a Service. Services are installed to be run under the Windows local system account. This account is restricted from network I/O by Windows design.
 - b. Permission to do the necessary kind of operation, for example, reading from the directory on the network.
2. Navigate to the Genesys Advisors installation directory and find the `conf\advisors-server-wrapper.conf` file, modify the memory settings based on the size of the client installation. The sizes in a) and b) are examples and may need to be larger depending on the size of the system in which the Enterprise Advisor is installed and the processing requirements for Geronimo.
 - a. # Initial Java Heap Size (in MB)
`wrapper.java.initmemory=128`
 - b. # Maximum Java Heap Size (in MB)
`wrapper.java.maxmemory=1024`

3. Open the Command prompt.
4. Navigate to the Genesys Advisors installation directory, then to the `bin\windows-x86` subdirectory. Then run the command:
`InstallAdvisorsServer.bat`
This creates a Windows service named `Advisors Suite Server`.
For more options on these batch files, see `AdvisorsServerInstructions.txt` in the `bin` directory.
5. When it starts, the Windows service can create log files. To enable this, use the `log4j` logging properties defined in `advisors-server-wrapper.conf`. The instructions are in the file.

The log file is:

- `geronimo-tomcat6-minimal-2.1.3\advisors-server\wrapper.log`
6. If you have trouble starting the service, turn on the logging to look for issues.

End of procedure

Procedure: Removing the Geronimo server as an NT service

Start of procedure

1. Open a command prompt window.
2. Change the directory to the one in which you installed Genesys Advisors, and then into `bin\windows-x86`.
3. Run the command: `UninstallAdvisorsServer.bat`

End of procedure



Chapter

4

Other Considerations

This chapter describes how to change and (re)configure other system parameters and settings. It includes the following sections:

- [Changing Memory Allocations, page 41](#)
- [Installing Services under Windows 2008 Server, page 42](#)
- [Configuring Access to External Websites, page 42](#)
- [Changing the Mail Server Configuration After Server Installation, page 43](#)
- [Adding a Text Message on the Login Page, page 43](#)
- [Customizing the Logo and Colors in the Advisors Browser, page 43](#)
- [Installing and Configuring Apache, page 45](#)
- [Latency Getting to the Login page, page 48](#)
- [Encrypting LDAP Passwords , page 48](#)

Changing Memory Allocations

If the log is reporting an out of memory error, set the heap size higher by editing the `<install dir>/conf/advisors-server-wrapper.conf` file. About a third down the file, change the following lines:

```
# Initial Java Heap Size (in MB)
wrapper.java.initmemory=128

# Maximum Java Heap Size (in MB)
wrapper.java.maxmemory=1024
to
# Initial Java Heap Size (in MB)
wrapper.java.initmemory=800
```

```
# Maximum Java Heap Size (in MB)
```

```
wrapper.java.maxmemory=1200
```

If the log is reporting a PermGen out of memory error, increase the permanent generation memory by editing the following line in the same file:

```
wrapper.java.additional.13=-XX:MaxPermSize=128m
```

to

```
wrapper.java.additional.13=-XX:MaxPermSize=256m
```

This increase in PermGen memory is normally required only when Platform uses a 64-bit JVM.

If the problem persists, experiment with higher values; however, the service may fail to start if it is unable to allocate all of the memory requested from the operating system. This will be noticeable if the server fails to start (reports an error during start). Turn various log settings to `DEBUG` in the `conf` file to help diagnose problems.

Installing Services under Windows 2008 Server

For installations on Windows 2008 Server, the Administrator installing the Advisors components and the Apache Web server should have permissions to install an NT service.

If for some reason granting this access is not possible, you can create shortcuts to the service installers that you may run as an Administrator.

To install the Platform Geronimo NT service, create a shortcut for the `InstallAdvisorsServer.bat` file.

To install the XMLGen NT service, create a shortcut for the `InstallXMLGen.bat` file.

To install Apache (including its NT service), create a short cut for the MSI installer.

Once you have created a shortcut, right click on the shortcut, and use the `Run as administrator` option to install the NT service for that component.

Configuring Access to External Websites

If you want access external websites via the Genesys Browser, you need to add an extra entry in the `MODULE` tables in the Platform database.

Below is a sample `INSERT` statement:

```
insert into Module (NAME,APP_DEPLOY_URL, VISIBLE,
CODE,HELP_URL,MODULE_VERSION , ISEXTERNAL) values ('APEX',
'http://www.informiam.com', 'Y', 'APX', '', '', 'Y')
```

Changing the Mail Server Configuration After Server Installation

Procedure: **Changing the Mail Server configuration after Platform server is installed**

Start of procedure

1. In the conf directory, locate the MailService.properties.
2. Edit the settings.
3. For the new settings to take effect, restart the server.

End of procedure

Adding a Text Message on the Login Page

To add a message on the Login page, you must have administrative privileges on the machine where the Web components of Genesys Advisors offering reside. Once logged in, locate and modify the remote-message.txt file using a text editor.

Customizing the Logo and Colors in the Advisors Browser

You can change the logo and background on the Advisors Browser to display your company's logo and background. The dimensions of the new logo must be the same as the dimensions of the Genesys logo (maximum 210*52 pixels).

Procedure: Customizing the logo

Start of procedure

1. In the deploy directory, navigate to the folder:
C:\informiam\custom\browser.
2. Replace the existing logo file with the custom logo. The logo filename must be `remote-logo.png`. The logo file should have the same dimensions as `/chrome/skin/ea/ent-images/Logo.png`.
3. Replace the existing background file with the custom background. The background filename must be `remote-background.jpg`. The background file should have the same dimensions as `/chrome/skin/ea/ent-images/login-bkgnd.jpg`.

4. Change `informiam.js` and `skin.js` under the Apache Server directory to:

```
informiamCustom =
{ mainColor: '#0288D7',
  secondaryColor: '#59B1E4',
  thirdColor: '#BDE7FF',
  accentColor: '#024B7D',
  textColor: '#023E67',
```

End of procedure

Customizing the Colors for Alert Management

```
toolBarColor: '#6893cc',
borderColor: '#3b5984',
backgroundColor: '#d2e3f8' );
```

All properties from the skin object must be propagated out to Contact Center Advisor and Workforce Advisor.

```
setMainColor(informiamCustom.mainColor);
setSecondaryColor(informiamCustom.secondaryColor);
setThirdColor(informiamCustom.thirdColor);
setAccentColor(informiamCustom.accentColor);
setTextColor(informiamCustom.textColor);

setToolBarColor(informiamCustom.toolBarColor);
setBorderColor(informiamCustom.borderColor);
setBackgroundColor(informiamCustom.backgroundColor);
```

Installing and Configuring Apache

Procedure: **Installing and configuring Apache**

Purpose: To install an Apache Web Server 2.2+ instance to direct http requests to the appropriate server. It is recommended to install Apache Web Server on a separate box.

Start of procedure

1. To enable Apache Web Server serving different modules in the Advisors Browser (for example, Administration, Contact Center Advisor, Workforce Advisor), edit the `httpd.conf` file located in the `conf` folder of the Apache Web Server installation as outlined below.
 - a. Locate the following lines in the `httpd.conf` file:
 - `#LoadModule headers_module modules/mod_headers.so`
 - `#LoadModule proxy_module modules/mod_proxy.so`
 - `#LoadModule proxy_ajp_module modules/mod_proxy_ajp.so`
 - `#LoadModule proxy_http_module modules/mod_proxy_http.so`
 - b. Remove the hash mark (`#`) from the beginning of each line, so that these four lines appear like this:
 - `LoadModule headers_module modules/mod_headers.so`
 - `LoadModule proxy_module modules/mod_proxy.so`
 - `LoadModule proxy_ajp_module modules/mod_proxy_ajp.so`
 - `LoadModule proxy_http_module modules/mod_proxy_http.so`
 - c. Locate the following entry and add a `#` to comment out `Deny from all` and to add `Allow from all`:

```
<Directory />  
Options FollowSymLinks  
AllowOverride None  
Order deny,allow  
#Deny from all  
Allow from all  
Satisfy all  
</Directory>
```
 - d. Locate the following entry near line 133 and add a `#` to comment it out:

```
#ServerAdmin
```
 - e. Add the following line:

```
ProxyRequests off
```

- f. Add the following lines (with sample IP addresses) to the bottom of the file and change the IP addresses if necessary:

```
# Platform and Advisors Modules
ProxyPass /am/ ajp://192.168.40.234:8009/am/
ProxyPass /admin/ ajp://192.168.40.234:8009/admin/
ProxyPass /am-admin/ ajp://192.168.40.234:8009/am-admin/
ProxyPass /ca/ ajp://192.168.40.234:8009/ca/
ProxyPass /static/ ajp://192.168.40.234:8009/static/
ProxyPass /ca-ws/ ajp://192.168.40.234:8009/ca-ws/
ProxyPass /ea-ws/ ajp://192.168.40.234:8009/ea-ws/
ProxyPass /dashboard/ ajp://192.168.40.234:8009/dashboard/
ProxyPass /nav-service/ ajp://192.168.40.234:8009/nav-service/
ProxyPass /prefs-service/
ajp://192.168.40.234:8009/prefs-service/
ProxyPass /wu/ ajp://192.168.40.235:8009/wu/

# Genesys Resource Management Console Web Application
ProxyPass /rmc/ ajp://192.168.40.235:8009/rmc/

# Genesys Adapter Admin Web Application
ProxyPass /gc-admin/ ajp://192.168.40.235:8009/gc-admin/

# FA
ProxyPass /fa/ ajp://192.168.40.234:8009/fa/

# HA
ProxyPass /ha/ ajp://192.168.40.233:8009/ha/

## Note that a second copy of Apache must go on the XMLGen
server and serve /ca-xml/ "locally"
ProxyPass /ca-xml/ http://192.168.40.234/ca-xml/
```

Note: If you need to access external applications via the Genesys Browser should have lines for each of those applications.

For example:

```
ProxyPass /APEX/
http://www.cra-arc.gc.ca/formspubs/menu-eng.html
```

2. Copy the contents of the baseweb-<version>-static-web.zip from the Advisors Platform distribution (the directories within the static-web-content) into the Apache htdocs directory.

3. Install another instance of Apache Web Server 2.2+ onto the same box where the CCAAdv application server and XMLGen have been installed. This instance of Apache Web Server will be used to serve XML content produced by XMLGen.
 - a. Locate the following entry in the `httpd.conf` and add a `#` to comment out `Deny from all`, and add `Allow from all`:


```
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Order deny,allow
    #Deny from all
    Allow from all
    Satisfy all
</Directory>
```
 - b. Locate the following entry near line 133 and add a `#` to comment it out:


```
#ServerAdmin
```
 - c. Locate the following line and remove the `#` from the beginning of the line:


```
#LoadModule headers_module modules/mod_headers.so
```

 so that this line appears like this:


```
LoadModule headers_module modules/mod_headers.so
```
 - d. Point the Apache Web Server to the XMLGen output directory provided in Section 'XMLGen Services Option' above. Add the following line to the end of `httpd.conf` file:


```
Alias /ca-xml/ "D:/Program Files/genesys/ca-xml/"
```

Note: The directory `D:/Program Files/genesys/ca-xml/` is an example. This directory must be exactly the same as provided during XMLGen installation.

- e. Add the following lines to the bottom of the file:


```
<Location /ca-xml/>
    Header add "Cache-control" "no-cache"
    Header add "Pragma" "no-cache"
    Header add "Expires" "Thu, 01 Jan 1970 00:00:00 GMT"
</Location>
```

End of procedure

Latency Getting to the Login page

Consider raising the `ThreadsPerChild` setting to `1024` if Apache log files on the Web server show:

- `[warn] Server ran out of threads to serve requests.`
Consider raising the `ThreadsPerChild` setting
- `[notice] Child 5068: All worker threads have exited.`
- `[notice] Child 5068: Child process is exiting`

Encrypting LDAP Passwords

The password used to connect to the LDAP server is obfuscated in the `EASecurityRealm.properties` file. If the password needs to be changed after installation, the `ConfigurationObfuscator` tool, located in the distribution artifacts, can be used with the following syntax:

```
java -cp installer-support-<version #>-jar-with-dependencies.jar  
com.informiam.installer.ConfigurationObfuscator <configuration  
directory> EASecurityRealm.properties
```

(where `<version #>` is the current build version number.)

Note: The password must be saved in the `EASecurityRealm.properties` file in plain text to enable the `Configuration Obfuscator` to convert the password into obfuscated form.



Supplements

Related Documentation Resources

The following resources provide additional information that is relevant to this software. Consult these additional resources as necessary.

Performance Management Advisors

- *Performance Management Advisors 8.0 Platform Deployment Guide* describes how to install and configure the Advisor Platform.
- *Performance Management Advisors 8.0 Frontline Advisor Deployment Guide* describes how to install and configure Frontline Advisor.
- *Performance Management Advisors 8.0 Cisco Adapter Deployment Guide* describes how to configure and install the Cisco Adapter.
- *Performance Management Advisors 8.0 Genesys Adapter Deployment Guide* describes how to configure and install the Genesys Adapter.
- *Performance Management Advisors 8.0 Contact Center Advisor & Workforce Advisor Deployment Guide* describes how to configure and install Contact Center Advisor Workforce Advisor.
- *Performance Management Advisors 8.0 Contact Center Advisor & Workforce Advisor Administrator User's Guide* describes how to configure your enterprise hierarchy and set up threshold rules/goals and users.
- *Performance Management Advisors 8.0 Contact Center Advisor User's Guide* describes how to personalize your display of information for monitoring and root cause analysis.
- *Performance Management Advisors 8.0 Workforce Advisor User's Guide* describes how to personalize your display of information for monitoring and root cause analysis.
- *Performance Management Advisors 8.0 Frontline Advisor Administrator User's Guide* describes how to perform administration functions for Frontline Advisor.
- *Performance Management Advisors 8.0 Frontline Advisor Manager User's Guide* describes how to perform manager functions for Frontline Advisor.

- *Performance Management Advisors 8.0 Frontline Advisor Agent Advisor User's Guide* describes how to perform agent functions for Frontline Advisor.
- *Performance Management Advisors 8.0 Alert Management User's Guide* describes how to manage the actions taken to resolve alerts and use the database to learn and repeat successes.
- *Performance Management Advisors 8.0 Resource Management User's Guide* describes how to maintain skill levels and agents.
- *Performance Management Advisors 8.0 Performance Monitor User's Guide* summarizes how to personalize your display of information for monitoring.
- *Performance Management Advisors 8.0 Workforce What-If Tool User's Guide* describes and gives examples of scenarios that illustrate how to adjust resource levels to achieve optimal outcomes.

Genesys

- *Genesys Technical Publications Glossary*, which ships on the Genesys Documentation Library DVD and which provides a comprehensive list of the Genesys and computer-telephony integration (CTI) terminology and acronyms used in this document.
- *Genesys Migration Guide*, which ships on the Genesys Documentation Library DVD, and which provides documented migration strategies for Genesys product releases. Contact Genesys Technical Support for more information.
- Release Notes and Product Advisories for this product, which are available on the Genesys Technical Support website at <http://genesyslab.com/support>.

Information about supported hardware and third-party software is available on the Genesys Technical Support website in the following documents:

- [Genesys Supported Operating Environment Reference Manual](#)
- [Genesys Supported Media Interfaces Reference Manual](#)

Consult these additional resources as necessary:

- *Genesys Hardware Sizing Guide*, which provides information about Genesys hardware sizing guidelines for Genesys releases.
- *Genesys Interoperability Guide*, which provides information on the compatibility of Genesys products with various Configuration Layer Environments; Interoperability of Reporting Templates and Solutions; and GPlus Adapters Interoperability.
- *Genesys Licensing Guide*, which introduces you to the concepts, terminology, and procedures relevant to the Genesys licensing system.

For additional system-wide planning tools and information, see the release-specific listings of System Level Documents on the Genesys Technical Support website, accessible from the [system level documents by release](#) tab in the Knowledge Base Browse Documents Section.

Genesys product documentation is available on the:

- Genesys Technical Support website at <http://genesyslab.com/support>.
- Genesys Documentation Library DVD, which you can order by e-mail from Genesys Order Management at orderman@genesyslab.com.

Document Conventions

This document uses certain stylistic and typographical conventions—introduced here—that serve as shorthands for particular kinds of information.

Document Version Number

A version number appears at the bottom of the inside front cover of this document. Version numbers change as new information is added to this document. Here is a sample version number:

```
80fr_ref_06-2008_v8.0.001.00
```

You will need this number when you are talking with Genesys Technical Support about this product.

Screen Captures Used in This Document

Screen captures from the product graphical user interface (GUI), as used in this document, may sometimes contain minor spelling, capitalization, or grammatical errors. The text accompanying and explaining the screen captures corrects such errors *except* when such a correction would prevent you from installing, configuring, or successfully using the product. For example, if the name of an option contains a usage error, the name would be presented exactly as it appears in the product GUI; the error would not be corrected in any accompanying text.

Type Styles

[Table 2](#) describes and illustrates the type conventions that are used in this document.

Table 2: Type Styles

Type Style	Used For	Examples
Italic	<ul style="list-style-type: none"> Document titles Emphasis Definitions of (or first references to) unfamiliar terms Mathematical variables <p>Also used to indicate placeholder text within code samples or commands, in the special case where angle brackets are a required part of the syntax (see the note about angle brackets on page 53).</p>	<p>Please consult the <i>Genesys Migration Guide</i> for more information.</p> <p>Do <i>not</i> use this value for this option.</p> <p>A <i>customary and usual</i> practice is one that is widely accepted and used within a particular industry or profession.</p> <p>The formula, $x + 1 = 7$ where x stands for . . .</p>

Table 2: Type Styles (Continued)

Type Style	Used For	Examples
<p>Monospace font (Looks like teletype or typewriter text)</p>	<p>All programming identifiers and GUI elements. This convention includes:</p> <ul style="list-style-type: none"> • The <i>names</i> of directories, files, folders, configuration objects, paths, scripts, dialog boxes, options, fields, text and list boxes, operational modes, all buttons (including radio buttons), check boxes, commands, tabs, CTI events, and error messages. • The values of options. • Logical arguments and command syntax. • Code samples. <p>Also used for any text that users must manually enter during a configuration or installation procedure, or on a command line.</p>	<p>Select the Show variables on screen check box.</p> <p>In the Operand text box, enter your formula.</p> <p>Click OK to exit the Properties dialog box.</p> <p>T-Server distributes the error messages in EventError events.</p> <p>If you select true for the inbound-bsns-calls option, all established inbound calls on a local agent are considered business calls.</p> <p>Enter exit on the command line.</p>
<p>Square brackets ([])</p>	<p>A particular parameter or value that is optional within a logical argument, a command, or some programming syntax. That is, the presence of the parameter or value is not required to resolve the argument, command, or block of code. The user decides whether to include this optional information.</p>	<p>smcp_server -host [/flags]</p>
<p>Angle brackets (< >)</p>	<p>A placeholder for a value that the user must specify. This might be a DN or a port number specific to your enterprise.</p> <p>Note: In some cases, angle brackets are required characters in code syntax (for example, in XML schemas). In these cases, italic text is used for placeholder values.</p>	<p>smcp_server -host <confighost></p>



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