



Skills Assessor 8.1.127

Installation Guide (IIS6)

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Preface

Welcome to the *Genesys Skills Assessor Installation Guide for IIS6*. This *Installation Guide* has been designed to allow an administrator to install the Skills Assessor application.

This document is valid only for the 8.1.127 release of this product.

Note: For versions of this document created for other releases of this product, visit the [Genesys documentation website](#)

About Genesys Skills Assessor

Genesys Skills Assessor allows companies to use a combination of online tests, self-assessment, and observational feedback to assess the level of agent skills across their contact center. Agent skill levels are stored in a central skills database and can be combined with performance data from legacy systems—for example, CRM sales data and Learning Management System courses.

Centralizing agent skills information allows contact centers to build a “DNA profile” of skills for each agent to identify:

- What are the “must have” and “nice to have” skills for each job type?
- Who really knows what across the contact center?
- Who has what skills and skill levels?
- Who requires what type of training, and when?

Skillsroute enables companies to create and manage multiple agents, skills, and skill levels in Configuration Manager. Skill assessment results exported directly from Skills Assessor can be used to optimize multi-skilling and call routing, to ensure that the customer is always presented to the most knowledgeable agent available.

Intended Audience

This document is primarily intended for system administrators or other individuals who install Genesys Skills Assessor.

Making Comments on This Document

If you especially like or dislike anything about this document, feel free to e-mail your comments to Techpubs.webadmin@genesys.com.

You can comment on what you regard as specific errors or omissions, and on the accuracy, organization, subject matter, or completeness of this document. Please limit your comments to the scope of this document only and to the way in which the information is presented. Contact your Genesys Account Representative or Genesys Technical Support if you have suggestions about the product itself.

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Related Documentation Resources

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

- The *Framework 8.0 Configuration Manager Help*, which will help when using Configuration Manager.
- The Release Notes, Product Advisories, and all technical documentation for this product, which are available on the Genesys Documentation website at <http://docs.genesys.com>.

Document Conventions

This document uses certain stylistic and typographical conventions—introduced here—that serve as shorthand 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:

```
81skillsassessor_user_08-2013_v8.1.101.00
```

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

Type Styles

The Type Styles table describes and illustrates the type conventions that are used in this document.

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 below).</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><i>A 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>
Monospace font (Looks like teletype or typewriter text)	<p>All programming identifiers and GUI elements. This convention includes:</p> <ul style="list-style-type: none"> The <i>names</i> of directories, 	<p>Select the Show variables on screen check box.</p> <p>In the Operand text box, enter your formula.</p>

	<p>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.</p> <ul style="list-style-type: none"> • 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>Click OK to exit the <code>Properties</code> dialog box.</p> <p>T-Server distributes the error messages in <code>EventError</code> events.</p> <p>If you select <code>true</code> for the <code>inbound-bsns-calls</code> option, all established inbound calls on a local agent are considered business calls.</p> <p>Enter <code>exit</code> on the command line.</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>	<pre>smcp_server -host <confighost></pre>



Chapter

1 Prerequisites

Server prerequisites

SQL Server prerequisites

To install the database portion of the application you will need:

- Windows Server 2003 / 2008 / 2008R2 32 or 64bit.
- Microsoft SQL Server 2005 / 2008 (Standard or Enterprise required for DNA functionality)
- DNA requires SQL Server Agent, Analysis Services and Integration Services to be available on the server.
- Administrator access to the SQL Server
- SQL Server Collation settings:
 - SQL Server language: English (United States)
 - Database level collation: Latin1_General_CI_AS

Note: This installation document presumes that SQL Server is set to allow Mixed Mode Authentication. If this is not the case you will need to adjust the steps detailed in this document to adjust for this fact.

Web server prerequisites

- Windows Server 2003 / 2008 / 2008R2 32 or 64bit with latest available updates
- Microsoft .NET Framework 4.0 with latest available updates including KB 2656351.

Ensure that Microsoft .NET 4.0 is registered correctly. Run:

"C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -I" from a command prompt if unsure.

- Microsoft Windows Identity Foundation (KB974405) for the appropriate Windows version/architecture.
- The download required is available from:
<http://www.microsoft.com/en-gb/download/details.aspx?id=17331>
- Ensure you download the appropriate version for your web server.
- The following additional runtimes must also be installed to support the new Crystal Reports functionality in Skills Assessor:
- Java Runtime Environment, available from:
<http://www.java.com/en/download/index.jsp>
- Crystal Reports runtime, available from:
- <http://scn.sap.com/docs/DOC-7824> (download and install the latest available Support Pack .msi, 32 bit)

Note: The new Crystal Reports functionality is only supported for Internet Explorer version 8 or above and the latest versions of other browsers (e.g. Chrome, Firefox and Safari).

- To support the import of data from .XLSX documents, Skills Assessor requires that two Microsoft redistributables are installed on the web server. These can be downloaded from:
 - <http://www.microsoft.com/en-us/download/details.aspx?id=13255>
 - <http://www.microsoft.com/en-us/download/confirmation.aspx?id=23734>
 - Internet Information Services
 - IIS must be configured to allow ASP.NET v4.0.30319. For more information, see the following URLs:
<http://msdn.microsoft.com/en-us/library/k6h9cz8h.aspx>
<http://support.microsoft.com/kb/328360>
 - For x64 based OSes, the application pool used for the web application needs to allow 32 bit processes. For IIS6, more information can be found at:
<http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IS/405f5bb5-87a3-43d2-8138-54b75db73aa1.mspx?mfr=true>
 - Administrator access to the server

Required Files

You should have a ZIP file containing the following folders:

- **DB Installation Files**
 - This contains the files required to create the database.
- **NotificationService**

- **SkillsAssessor**
 - This contains the files and folders required to install the Skills Assessor web application.
- **OptimizerMenuWS**
- **ReportingWS**
- **Services.Correlation**
- **Services.DNACube**
- **Services.DNAData**
- **Services.LearningitemAssignment**
- **Services.LmsInterface**
- **Installation Guides**
 - **Contains install and upgrade guides.**

The release folder also includes the following installation **.MSI** files:

- **AssessmentEmailMessagingServiceSetup_vX.Y.ZZZZ.msi**
- **AutoRankCalculationApplication_vX.Y.ZZZZ.msi**
- **DNAImportSetup_vX.Y.ZZZZ**
- **LearningItemAutoAssignSetup_vX.Y.ZZZZ**
- **NotificationsUISetup_vX.Y.ZZZZ**
- **PrePostCourseAssessmentHelperSetup_vX.Y.ZZZZ**

The product will only be available for use once you have specified a valid software license. Please ensure you have this available before installing Skills Assessor.



Chapter

2 Database Installation

Preparation

Copy the `DB Installation Files` folder to the SQL Server.

Create the database

For illustrative purposes it is assumed throughout this document that the chosen database name is **SkillsAssessor**.

Click `New Query` within `SQL Server Management Studio`.

1. Drag the `SkillsAssessor_8.1.127.sql` script from the stored folder into the new query window within `SQL Server Management Studio`. This should cause the database creation script to be displayed in the new query pane.
2. Click the `Query` menu item and select `SQLCMD Mode` so that it is enabled.
3. Near the top of the database creation script are 3 variable settings: `DatabaseName`, `DefaultDataPath` and `DefaultLogPath`. These variables must be manually set before the script is executed:

`DatabaseName` should be set to the name of the database to be created, e.g. `SkillsAssessor`.

`DefaultDataPath` should be set to the default database data location on the server.

`DefaultLogPath` should be set to the default database log location on the server.

The `DefaultDataPath` and `DefaultLogPath` database settings can be found by following these steps:

- Right-click on the server in the object explorer of SQL Server Management Studio
- Click Properties
- Click Database Settings The default data and log locations will be displayed towards the bottom of the server properties window

Once these three variables are set, click the Execute button.

Create the database user

You should now create a new SQL Server user. This user will be used by the web application to access the database. For simplicity, the user should be added to the db_owner database role for the database you created in the previous section.

For illustrative purposes, it is assumed throughout this document that the user is called SLSUser and the password for this user is 515U53r.

Create the Reporting Database

1. Click New Query within SQL Server Management Studio.
2. Drag the ReportingDB SQL Script from the stored folder into the new query window within SQL Server Management Studio. This should cause the reporting database creation script to be displayed in the new query pane.
3. Click the Query menu item and select SQLCMD Mode so that it is enabled.
4. Near the top of the database creation script are 3 variable settings: DatabaseName, DefaultDataPath and DefaultLogPath. Set the DefaultDataPath and DefaultLogPath to the same settings used for the Skills Assessor database. The DatabaseName variable should be left at its default value.
5. Execute the script.
6. Either create a new user with db_owner permissions on the reporting database or grant db_owner permissions on the reporting database to the user created in the previous section.

Import the Integration Services package

Note: This step is only required if you require DNA as part of your application.

The final stage of the database installation requires you to import the Integration Services package to allow the web application to process of the DNA Cube.

1. Copy the RefreshDNACube.dtsx file from the DB Installation files folder.
2. Using SQL Server Management Studio, connect to the Integration Services server and navigate to Stored Packages/MSDB.
3. Right-click on the MSDB node and choose the New Folder option from the context menu. Give the folder a name (for example, SkillsAssessorIS).
4. Right-click the folder you just created and choose Import Package. The Import Package dialog will appear.
5. In the Package location drop-down list, choose File System.
6. Click on the [. .] button at the end of the Package path box, and browse to your copy of the DB Installation Files folder.
7. Select the RefreshDNACube.dtsx file then click Open.
8. Click on the [. .] button at the end of the Protection level box, and select Rely on server storage and roles for access control. Then click OK.
9. Click OK to complete the import of the package.

For illustrative purposes in this document it is assumed that the MSDB subfolder is called SkillsAssessorIS and that the package name was left as RefreshDNACube.



Chapter

3 Web Application Installation

Preparation

Application files

Copy the `SkillsAssessor` folder to a location on the web server. It is important to ensure that the website users have access to this folder. If you plan to run the site in anonymous access mode, ensure that the `IIS_WPG` and `IUSR_<machinename>` accounts have read access to the Skills Assessor folder.

The location you choose does not need to be a subfolder of `C:\inetpub`, although you can place it there if required. If you want the application to be accessed at the root of a URL, however, this is not recommended; instead, choose a folder elsewhere in the file system.

For illustrative purposes in this document it is assumed that the website folder is located at `C:\Websites\SkillsAssessor`.

Supporting folders

Skills Assessor requires a folder to store files uploaded by users of the system (for example, question images and media). This folder should not be a direct subfolder of the web application (but could exist alongside it). The physical folder should be created with the name `QMedia`.

For illustrative purposes in this document it is assumed that the folder is located at `C:\WebsiteData\SkillsAssessor\QMedia`

It is important to ensure that the website user accounts have full control to this folder. If you plan to run the site in anonymous access mode, ensure that the IIS_WPG and IUSR_<machinename> accounts have full control over the QMedia folder.

Create a folder to hold the services, e.g. C:\Websites\Services. Copy the service folders, i.e. OptimizerMenuWS, ReportingWS, Services.Correlation, Services.DnaCube, Services.DnaData, Services.LearningItemAssignment, Services.LmsInterface (if you wish to use the LMS integration features) and NotificationService (if you are configuring Skills Assessor to use Active Directory authentication via the STS Service) folders from the release package into the new folder.

Also create a folder to hold uploaded Crystal Reports (e.g. C:\WebsiteData\SkillsAssessor\CrystalReports\). Right click on this folder and click Properties. Select the Security tab. Add NETWORK SERVICE as a user with permissions on the folder and ensure it has read and write access.

Installation Instructions

Create an Application Pool

1. In IIS Manager, expand the Application Pools node below the server node.
2. Right-click and select New, then Application Pool from the context menu.
3. Give the application pool a name, and choose the Use default settings for new application pool option.
4. Click OK to create the application pool.

Note: As mentioned in the prerequisites section, if IIS is running on an x64 based operating system you should ensure that 32-bit applications are enabled as per the instructions at <http://goo.gl/XTQwj>

Creating the application in IIS

1. In IIS Manager, expand the Web Sites node and navigate to the web site (and any further subfolder levels) that you want to add Skills Assessor to.

2. Right-click on the website or subfolder within which you want Skills Assessor to appear, then select the New option, then the Virtual Directory option.
3. The Virtual Directory Creation Wizard will appear.
4. Click Next to continue.
5. Type the alias you want to use for accessing the site (for example, if the URL you wanted was `http://<servername.domain.com>/SkillsAssessor`, you would type SkillsAssessor here). Then click Next to continue.
6. Click the Browse button and select the folder you copied the application files to and click OK. Click Next to continue.
7. Leave the tick against the Read option, tick the Run scripts (such as ASP) option and click Next.
8. Click Finish to complete the wizard. The new virtual directory will appear on the left.
9. Right-click on your new virtual directory and choose the Properties option. The virtual directory properties dialog will appear.
10. From the Application Pool drop-down list, choose the application pool that you created previously for Skills Assessor.
11. Click on the ASP.NET tab in the top-right of the dialog. Ensure that the ASP.NET version drop-down contains the value 4.0.30319. If not, set this option to 4.0.30319 and apply changes.
12. Click OK to apply the settings and close the dialog.

Create a Virtual Directory for the Web Services

In IIS Manager, create a virtual directory that is independent of the Skills Assessor virtual directory (i.e. not underneath it in the IIS hierarchy). Give the new virtual directory an alias, e.g. `Services`, set the path to the folder previously created to hold the web services. Ensure that the virtual directory is granted Read, Run Scripts (Such as ASP) and Execute (such as ISAPI applications or CGI) permissions.

For each sub-directory within the new Services virtual directory:

- Right click on the directory and select **Properties**. Click the **Directory** tab, then click the **Create** button to convert the directory to an application. Set the new application to use the Skills Assessor application pool.
- Click **Directory Security**, then click **Edit**. Ensure that the **Enable anonymous access** option is enabled.
- Ensure that the service is set to use the Skills Assessor application pool and runs under **ASP .NET v 4.0.30319**. Repeat this for all the folders under the **Services** virtual directory.

Note: Ensure that the **Enable anonymous access** option is enabled for the **ReportingWS** web service.

Create MIME types to allow IIS to serve different audio and video formats

By default, IIS6 will not serve most modern audio or video file formats. To allow it to do this, you need to create a MIME type mapping. Please be aware that not all of the file formats supported by the media player used in Skills Assessor will be supported on all browsers / devices. It is recommended that media files using the .FLV, .MP3 or .MP4 formats are used in Skills Assessor. The in-built media player may work with other media formats but these are not supported. For more information on audio/video format support in browsers, visit the **JW Player 5** documentation page at <http://goo.gl/GflgX>

1. Right-click on the Skills Assessor virtual directory you created in IIS previously. Select the **Properties** option.
2. Click on the **HTTP Headers** tab, then click the **MIME Types...** button at the bottom of the dialog.
3. Click the **New** button to create a new MIME type.
4. From the table below, enter the appropriate file extension into the **Extension** box (for example, to allow Flash video, you would type .flv). For formats that support multiple extensions, you should create a new MIME type entry for each individual extension.
5. In the **MIME type** box, type the corresponding MIME type from the table below (for example, to allow Flash video, you would type video/x-flv)
6. Click **OK** to create the new MIME type.

7. Repeat steps 3 to 6 for any other audio or video types you want the application to support.
8. Click OK again to close the MIME types dialog.
9. Click OK again to close the Properties dialog.

Audio / Video file type	File extensions	MIME type
Flash video	.flv	video/x-flv
MPEG-4 video	.mp4 .mov .f4v .m4v	video/mp4
WebM video	.webm	video/webm
Ogg video	.ogv	video/ogg
AAC Audio	.aac .m4a .f4a	audio/aac
Ogg audio	.ogg .oga	audio/ogg

Note that MP3 audio is also supported by the application, however IIS6 should already serve MP3 file types with no additional configuration.

Creating the QMedia and Reports virtual directories

A link is required between the application and the QMedia and CrystalReports folders.

Right-click on the Skills Assessor virtual directory. Select the New option, then the Virtual Directory option.

1. The Virtual Directory Creation Wizard will appear; click Next to continue.
2. The alias for this virtual directory *must* be QMedia.

3. Click **Next**, then click the **Browse** button and select the folder you created in section 3.1.2 above and click **OK**. Click **Next** to continue.
4. Take the default options for this step (i.e. just leave the tick against the **Read** option) and click **Next**.
5. Click **Finish** to complete the wizard. The **QMed** i virtual directory will appear within your application.

Configuring the Application

Configuring Skills Assessor

The next step to install the application is to configure the database connection string.

1. Locate the file `WebSettings.Config` from the folder **Skills Assessor** folder.
2. Open the file in a text editor.
3. Edit the settings of the `DBConnection` part of the configuration file to match the database settings you used previously, following the template shown here:

```
<DBConnection>Server=sqlservername;Database=databasename;UID=databaseusername;PWD=databaseuserpassword;Trusted_Connection=False</DBConnection>
```

An example is shown below:

```
<DBConnection>Server=SQLServerName;Database=SkillsAssessor;UID=GenesysUser;PWD=GenesysU53r;Trusted_Connection=False</DBConnection>
```

Note: The `<DBConnection>` setting should be entered as a single line with no breaks.

Save and close the file.

Configuring web service endpoint in Skills Assessor and Training Manager Database Connection

Open the `web.config` from the `SkillsAssessor` folder via Notepad or similar text editor.

Locate the `appSettings/ReportsFolder` key and set the value to the location of the folder you created to hold uploaded reports, e.g.:

```
<add key="ReportsFolder"
value="C:\WebsiteData\CrystalReports\" />
```

Locate the `appSettings/LogPath` key and set the value to the location of the folder you wish to use for storing application logs, e.g.:

```
<add key="LogPath" value="C:\Logs" />
```

Locate the element:

```
<endpoint address="http://***/***/OptimizerMenuService.svc"
```

Edit the endpoint address to fit the URL of the `OptimizerMenuService.svc` in your environment.

Locate the element:

```
<endpoint address="http://***/***/reportadmin.svc"
```

Edit the endpoint address to fit the URL of the `OptimizerMenuService.svc` in your environment.

Locate the element:

```
<endpoint address="http://***/***/DnaService.svc"
```

Edit the endpoint address to fit the URL of the `OptimizerMenuService.svc` in your environment.

Locate the element:

```
<endpoint
address="http://***/***/LearningItemAssignmentService.svc"
```

Edit the endpoint address to fit the URL of the `OptimizerMenuService.svc` in your environment.

If you wish to use Skills Assessor's Learning Management System (LMS) integration features, ensure that you also edit the endpoint address of the `LmsInterface.svc`, e.g.:

```
<endpoint
address="http://localhost/Services/Services.LmsInterface/LmsInterface.svc"
```

Accessing these service URLs from a browser on the web server should result in the display of a page entitled with the service's name at the top.

If you intend to use reports that will require data from a Training Manager database, locate the <appSettings> section of the Skills Assessor web.config file.

Edit the ReportsPlannerDBConnectionString element values to match the database connection string details of your Training Manager database:

```
<add key="ReportsPlannerDBConnectionString"
value="Server=***; Database=***; UID=***; PWD=***; Trusted_Connection=False" />
```

The connectionString setting should be entered as a single line with no breaks.

Web Service Configuration

Configuring the Reporting Service

Open the Web.config file located in the ReportingWS folder in Notepad or similar text editor.

Locate the connectionStrings element and set the connectionString variables to the details of your reporting database and the user with dbo permissions on this database, e.g.:

```
<add name="ReportingWS.My.MySettings.ReportingDB"
connectionString="Data
Source=server; Database=ReportingDB; UID=user; PWD=password; Trusted_Connection=False" />
```

Configuring the Menu Web Service

Browse to the MenuWS folder on the web server. Open the contained Web.config document using a text editor, e.g. Microsoft Notepad.

Edit the connectionStrings parameters to reflect the Skills Assessor database settings used in your environment:

```
connectionString="Data
Source=yourserver; Database=SkillsAssessor; UID=DBUserID; PWD=DBUserPassword; Trusted_Connection=False" />
```

Configuring Log Directories

The correlation, DNA Data, LearningItemAssignment and LMSInterface (optional) web services include configurable elements for setting the location and verbosity of log files. To set the directory used for logs, set the LogPath

value to the directory of your choice, e.g. 'C:\Logs'. The verbosity setting supports four options: 'Minimal', 'Terse', 'Verbose' and 'Diagnostic' which range from providing minimal feedback of service activity to full detail.

Note: Take care not to leave the service logging in 'verbose' mode for extended periods as this may result in the creation of very large log files.

```
<appSettings>
<add key="LogPath" value="***" />
      <add key="Verbosity" value="Minimal"/>
</appSettings>
```

Configuring DNA

Prerequisites

Ensure that the following services are running, and are set to auto-start:

- SQL Server Agent
- SQL Server Analysis Services
- SQL Server Integration Services

Ensure that the Integration Services package is set up as per installation instructions.

Note: If you are configuring DNA on an Skills Assessor instance which is set up on separate servers for the application and the database you will need to create an identical (same username and password) account on both of these machines. This account must be added to the list of users in SQL Server and granted either the sysadmin or SQLAgentOperator role against the MSDB database. This user should also be set as the identity for the Skills Assessor application pool.

Creating the DNA Database

1. Create a new database to contain the DNA database tables for the company that you set up previously. The name of the database is not important; for illustrative purposes, the name used throughout this document is DNA_Example.
2. Ensure that the user that was set up for Skills Assessor has db_owner rights to this database.

3. In the Tenant Management screen, click on the Setup DNA link against the company you created; the DNA Setup screen will appear.
4. Complete the settings in the top half of the screen (above the Save DNA Database Settings button) as per your database setup:
 - a. In the Database Server box, enter the name of the SQL Server.
 - b. In the Database Name box, enter the tenant's DNA Database name (e.g. DNA_Example).
 - c. In the DNA Service URL, enter the URL to your DNA Data Service.
 - d. In the Username box enter the Skills Assessor database user's name.
 - e. In the Password box enter the Skills Assessor database user's password.
5. Click the Save DNA Database Settings button to create the database structure.
6. You should receive the message Setup has been successful.

Once the DNA database has been created, the supporting information for DNA must be entered to ensure that the packages are configured correctly for the tenant.

1. In the DNA SSIS package location box, type the full path to the DNA package in Integration Services (e.g. \MSDB\SkillsAssessorIS\RefreshDNACube).
2. In the DNA SSIS Server box, type the name of the Integration Services server that the package was installed to.
3. In the DNA SSIS Username and DNA SSIS Password boxes, type in the username and password of a user that is a member of the sysadmin fixed server role in the SQL Server that is hosting Integration Services.

This information is not stored anywhere and is only used to create the SQL Server Agent job to execute the Integration Services package.

4. In the SQL Analysis Server box, enter the name of the server that is running SQL Server Analysis Services.
5. Click the Save Package Settings button to save the settings.
6. In the DNA Database settings section, click on the DNA Enabled checkbox
7. Click OK when requested to confirm that you want to enable DNA.

Configuring the DNA Cube Web Service

Open the `Web.config` file in the DNA Cube service folder.

Locate the element:

```
<add name="Cube" connectionString="Data Source=***;Initial
Catalog=DNACube_X" providerName="System.Data.SqlClient" />
```

Edit the data source variable to suit the location of the Analysis Server to hold your DNA Cube database. Modify the Initial Catalog element to match the Analysis Server database; this is typically 'DNACube_' followed by your tenant ID, e.g. 'DNACube_2'.

Configuring the DNAData Web Service

Open the `web.config` file in the DNA data service folder and find the element:

```
<add name="DNA" connectionString="Data
Source=***;Database=***;UID=***;PWD=***;Trusted_Connection=Fal
se" providerName="System.Data.SqlClient" />
```

Edit the variables to suit your environment.

Locate the element containing the URL to the DNA Cube service:

```
<endpoint
address="http://localhost/services/services.dnacube/CubeService
.svc"
```

Edit the endpoint address to fit the URL of the Cube service in your environment.

Edit the Logpath key to the folder you wish to use for service logging, e.g. "C:\Logs\".

Configuring the Correlation Web Service

Open the `web.config` file in the DNA data service folder and find the element:

Edit the Logpath key to the folder you wish to use for service logging, e.g. "C:\Logs\"

Configuring the Learning Item Assignment Web Service

Open the `web.config` file in the LearningItemAssignment web service folder.

Edit the endpoints for the listed services (`DnaService.svc`, `LmsInterface.svc`, `AssessmentService.svc` and `Users.asmx`) to suit your environment:

```
<endpoint address="http://***/***/DnaService.svc"
<endpoint address="http://***/***/LmsInterface.svc"
```

```

<endpoint
address="http://***/SkillsAssessor/WS/AssessmentService.svc"
<endpoint address="http://***/SkillsAssessor/WS/Users.asmx"

```

The assessmentService.svc and Users.asmx services are located within the SkillsAssessor/WS folder.

Edit the Logpath key to the folder you wish to use for service logging, e.g. "C:\Logs\".

Configuring the LMS Interface Web Service

The following steps apply if you intend to use the LMS integration features, e.g., JLMS Learning Item integration.

Open the web.config file in the LmsInterface web service folder.

Locate and edit the endpoint address for the

jzeroskllsassist/assessment.asmx service to suit your environment:

```

<endpoint
address="http://***/***/jzeroskllsassist/assessment.asmx"

```

Edit the Logpath key to the folder you wish to use for service logging, e.g. "C:\Logs\"

DNA Architectural Overview

The DNA Setup creates several items on the SQL Server.

- The database you create (DNA-Example in this example) will have been populated with the tables required to hold DNA information for that company.
- There will be an Analysis Services database created called DNACube_<internal tenant ID> which is used to process the DNA data.
- There will be an SQL Server Agent Job called RunTheCube_<internal tenant ID>, which sets the parameters of the Integration Services Job before executing it to process the cube.
- The connection parameters for the job can be seen by:
 1. Right-click on the SQL Server Agent job and choose Properties.
 2. Selecting the Steps option on the left of the window.
 3. Double-click on the Run the Cube step.

4. Selecting the **Data sources** tab; the connection strings for the company's DNA database and Analysis Services database can be found here.



Chapter

4 Company Configuration

Tenant Administration

Login to the Tenant Administration part of the application

The Tenant Administration part of the application is by default only accessible through localhost.

Note: If you have set up SkillsAssessor to be accessed as a root site, we recommend you create a binding in IIS (for example localhost, port 8888) so the administration site is accessible.

1. Go to the SkillsAssessor site via localhost (for example `http://localhost/SkillsAssessor`).
2. The Select Tenant drop-down list should show Tenant Administration.
3. Use the (default) credentials admin and password to log into the Tenant Administration screens.

Licensing the Tenant Administrator User

On initial login, you will receive the message The licence key does not match the registered information.

1. Click on the Licensing tab, and enter the following details.
 - a. In the Company Name box, enter Genesys Telecommunications Laboratories
 - b. In the Number of licensed users box, enter 1
 - c. In the License expiry date box, enter 01/01/2020
 - d. In the Host name box, enter localhost
 - e. In the Enter License Key box, enter the licence key: UQ2CW-KWC2Y-5N3J3-A0VWF-QVT94
2. You will receive the message Licence key updated successfully.
3. Log out of the site, then log back in again to ensure the license has been applied.

Creating a new tenant

Once logged in you should see the Tenant Management screen.

1. Click the Create New Tenant button.
2. Enter the name and primary contact details for the company that will be using the application, then click Next.



The screenshot shows a web form titled "Tenant Details" with a sidebar menu on the left. The sidebar menu includes "Licence Details", "System Settings", and "Setup Admin User". The main form area contains the following fields:

Tenant Details	
Tenant Name	<input type="text" value="Example Company"/> *
Primary contact	<input type="text" value="Example Contact"/> *
Primary Contact Email	<input type="text" value="primary@example.com"/> *
Secondary Contact	<input type="text"/>
Secondary Contact Email	<input type="text"/>

At the bottom of the form, there is a "Next" button.

3. Enter the License details for this company into the boxes provided, then click Next.

The screenshot shows a web form titled "Licence Details" within a wizard. On the left, a sidebar lists "Tenant Details", "Licence Details" (highlighted), "System Settings", and "Setup Admin User". The main form area contains the following fields:

- Company Name: *
- Number of licensed users: *
- Licence expiry date: [calendar icon]
- Host Name: *
- Enter the licence key: *

At the bottom of the form, there are "Previous" and "Next" buttons.

4. Enter the administrator user details for the new tenant.

The screenshot shows a web form titled "Setup Admin User" within a wizard. On the left, a sidebar lists "Tenant Details", "Licence Details", "System Settings", and "Setup Admin User" (highlighted). The main form area contains the following fields:

- Login ID: *
- First Name: *
- Last Name: *
- New Password: *
- Confirm Password: *

At the bottom of the form, there are "Previous" and "Finish" buttons.

5. Click Finish to close the wizard.

If you have configured Skills Assessor to use DNA it will be necessary to setup the DNA Data Service URL:

1. Login to the tenant as the administrator
2. Go to the System Settings page
3. Click the General Settings tab
4. Enter the DNA Data Service URL into the field at the bottom of the form
5. Click Save Changes

5

Configuring Optional Features

Skills Assessor 8.1.127 also includes several new optional applications/services that provide the ability to:

- Automatically import DNA KPI data via the DNA Import Service (installer: `DNAImportSetup_vX.Y.ZZZZ.msi`)
- Automatically assign learning items to users via the Learning Item Auto-Assignment application (installer: `LearningItemAutoAssignSetup_vX.Y.ZZZZ.msi`)
- Automatically calculate the correlation between KPIs and learning items via the Learning Item Auto-Ranking application (installer: `AutoRankCalculationApplication_vX.Y.ZZZZ.msi`)
- Allow administrators to create JZero LMS learning items and assign them to users via the JLMS Learning Item Integration functionality.

The following sections provide instructions for installing and configuring these optional components.

Enabling JZero LMS Learning Item Integration

Pre-requisites: DNA, a JZero LMS instance accessible from the Skills Assessor web server.

The JLMS learning item integration feature allows Skills Assessor administrators to assign Skills Assessor assessments to JZero LMS users. These assessments can then be viewed and launched from the JLMS. Follow the steps below to enable JLMS Learning Item integration features.

Open the `web.config` document from the `Services.LmsInterface` folder on the web server.

Locate and edit the following element to match the location of the JLMS `assessment.asmx` web service in your environment:

```
<endpoint  
address="http://***/***/jzeroskillsassess/assessment.asmx"
```

Login to the SQL Server Management Studio on the database server.
Open the `dbo.Providings` table in the Skills Assessor database.
Add an additional row to the table with the following values:

TenantID: The ID of the tenant which should have JLMS features enabled. This can be found by checking the content of the `dbo.Tenants` table.

SystemID: This field should be set to '201'.

SystemName: This field should be set to 'JLMS'.

SystemTitle: This field should be set to 'JLMS'.

SystemVersion: This field should be set to '8.1.127'.

The remaining fields can be left empty.
Apply the table changes.

Login to the tenant you wish to enable JLMS features for as a tenant administrator.

Click on the **System Settings** link.

In the **User Fields** tab create a new user field to hold users' JLMS user names.

Login to the tenant administration area via localhost.

From the **Manage Tenants** table, click the **Edit** link for the tenant which should have JLMS features enabled.

Click **Next** in the **Tenant Details** page.

Click **Next** in the **Licence Details** page.

In the **JLMS Settings** page:

Tick the **JLMS Enabled** checkbox.

Enter the URL of the JLMS `assessment.asmx` web service URL into the **JLMS URL** field.

Sett the **Manager zone matching** field to the user field you created previously to store users' JLMS usernames.

The remaining checkboxes in the JLMS Settings page affect the layout of elements in the JLMS Manager and User Zones and the display of certain data elements.

Manager zone hide remaining: Ticking this option causes the number of ‘remaining’ and ‘complete’ assessments to be displayed in the manager zone.

Manager zone hide CORA: Ticking this option disables the display of the core, optional, resource library and all activity checkbox set under the all activities dropdown.

User Manager zone layout: Leaving this option un-ticked causes an additional ‘Average Score’ graph to be displayed on the right side of the User/Manager zone pages. Ticking the checkbox removes the graph.

Is pass/fail shown: This option toggles the display of results for completed Skills Assessor assessments.

Is pass mark shown: Toggles the display of the pass mark per assessment.

Click **Next** once you've finished making changes in this page.

Click **Finish** in the Setup Admin User page.

Login to the tenant you have configured to support JLMS.

Go to the Users & Hierarchy page. For each user you wish to have access to the JLMS Learning Item functionality:

1. Right click on them in the hierarchy
2. Click Edit user details
3. Select the user on the left side of the page.
4. Set a value for the JLMS login user field you created earlier. The username entered here must match a valid JLMS username in your environment.

Skills Assessor is now configured to support JLMS learning items. Any users with access to the Learning Items page will now be able to create JLMS course learning items, associate them with DNA components and assign them to users.

Learning Item Auto-Assignment Application

Pre-requisites: DNA

The Learning Item Auto-Assignment application can be used to automatically assign recommended learning items to users based on their DNA scores. This removes the need for administrators to manually and assign learning items that

fall into users' recommended ranges. Follow the steps below to install the application.

Double click the `LearningItemAutoAssignSetup_v.X.Y.ZZZZ.msi` in the release package.

Click **Next** on the Welcome to the Learning Item Auto-Assignment Setup Wizard screen.

Either leave the default installation location set or click the **Change** button to select an alternative location.

In the Web Service Connections page:

Enter the URL for the Learning Item Assignment service in the first text box excluding the Service name and the last forward slash. For example, if your learning item assignment service is located at:

<http://localhost/Services/Services.LearningItemAssignment/LearningItemAssignmentService.svc>

You should enter the following into the first text box:

<http://localhost/Services/Services.LearningItemAssignment>

Enter the equivalent value for the DNA Data Service into the second text box. Enter the Skills Assessor tenant ID into the third text box. This can be found by opening the Skills Assessor database and checking the ID of the tenant you wish to configure in the `dbo.Tenants` table.

The log file path text box sets the location of the application's log files. The log file path (4th text box) can either be left at its default value or an alternative folder can be selected.

Click the **Next** button.

Click the **Install** button.

Click the **Finish** button once the wizard has completed installing the application.

Once the application is installed it will be possible to start the application manually by browsing to the install location and double-clicking the `SilverLining.PerformanceDNA.Apps.LearningItemAutoAssign.exe` file. Alternatively, a scheduled task can be created on the server hosting application to run the task at a pre-defined schedule. Since the application may take some time to finish (depending on the number of users, KPIs and learning items) it is recommended that scheduled tasks running the application are set to run once per day.

Auto Rank Calculation Application

Pre-requisites: DNA

Learning items can be associated with DNA components. A priority can be assigned to the DNA component-learning item association. This priority can either be defined by admins manually or automatically by the auto rank calculation application.

The auto rank calculation application correlates learning item results (e.g. assessments) with DNA component scores. Items are ranked highly if there is a positive correlation between a learning item's scores and a subsequent improvement in the associated DNA component score. Items that have a weak or negative correlation are left un-ranked by the application.

Follow the steps below to install the application.

Double click the `AutoRankCalculationApplication_v.X.Y.ZZZZ.msi` in the release package.

Click **Next** on the **Welcome to the Learning Item Auto-Ranking Setup Wizard** screen.

Either leave the default installation location set or click the **Change** button to select an alternative location.

In the **Web Service Connections** screen enter the URL for the correlation, DNA data service and Skills Assessor. Be sure to exclude the service name and last forward slash from the entered URLs, e.g.:

Correlation service:

`http://localhost/Services/Services.Correlation`

DNA data service: `http://localhost/Services/Services.DnaData`

Skills Assessor: `http://localhost/SkillsAssessor`

Click **Install** on the **Ready to install Learning Item Auto-Ranking** screen.

Once the application is installed it will be possible to start the application manually by browsing to the install location and double-clicking the `SilverLining.PerformanceDNA.Apps.PerformAutoRankCalculation.exe` file. Alternatively, a scheduled task can be created on the server hosting application to run the task at a pre-defined schedule. Since the application may take some time to finish (depending on the number of users, KPIs and learning items) it is recommended that scheduled tasks running the application are set to run once per day.

DNA Import Setup

Pre-requisites: DNA installed and configured (users, DNA components and blocks should be present prior to setting up the DNA Import Service)

Notes:

- This application is currently not compatible with Skills Assessor instances that use Active Directory (STS) authentication.
- The service must have network access to the Skills Assessor web server.

The DNA Import Service allows for the automated import of KPI spreadsheets via a user-defined import folder. The service automatically processes any valid KPI spreadsheet files that are placed in the import folder. Once the files are processed they are moved from the import folder to a user-defined archive folder.

Installing the DNA Import Service

Double click the `DNAImportSetup_v.X.Y.ZZZZ.msi` in the release package. Click **Next** on the **Welcome to the DNA Import Service Setup Wizard** screen.

On the **Destination Folder** screen either leave the installation location at its default value or click the **Change** button to select an alternative location. Click **Next**.

In the **Service account** screen you can specify whether to use an existing service account or a custom account.

Note: If you set the service to run under a custom user account then this account must have permissions to log on as a service.

Click **Next** once you have set the service/account under which the DNA Import Service will run.

Click **Install** on the **Ready to install DNA Import Service** screen.

Click **Finish** once the installation wizard has completed installing the service.

Configuring the DNA Import Service

Browse to the DNA Import Service installation location.

Open the `DNAImportService.exe.config` file with Notepad or similar text editor.

Locate the following element:

```
<setting name="DNAImportService_DNAWebServices_DNAWebServices"
        serializeAs="String">
```

```
<value>http://***/DNA/DNAWebServices.asmx</value>
```

```
</setting>
```

Edit the value to match the location of the `SkillsAssessor/WS/ImportKpiData.asmx` web service.

Save the file.

Login to Skills Assessor as a tenant administrator.

Click the **Import Templates** link.

Click the **New import template** button.

Set a name for the new template in the **Template Name** field.

Set the **Import Template Type** dropdown box to **DNA**.

In the **Source Description** field enter the column label for the Skills Assessor username as it appears in your import spreadsheets. Set the **Source ID** field to the number of the column in the spreadsheet. This value is zero-based so the first column in the spreadsheet has a Source ID of '0'.

In the 'Maps To' dropdown select the user field that is used to authenticate users, e.g. Login ID.

In the **Date Field Description** enter the label of the column used to store the dates of the contained KPI values.

In **Date Field ID** enter the number of the column in the spreadsheet that holds the dates of the contained KPI values. As before, this value is zero-based.

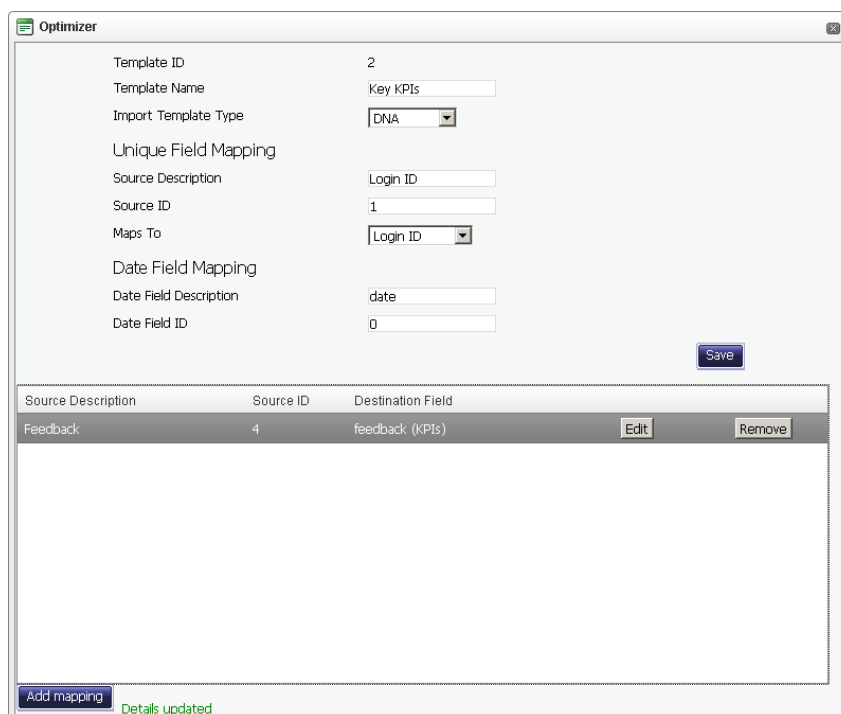
Click the **Save** button.

An additional box will appear under the form along with an **Add mapping** button.

For each column in the import spreadsheet that holds users' KPI values:

- Click the **Add mapping** button to create an association between a spreadsheet column and a KPI.
- In the **Source Description** field enter the label of the column that holds KPI value records.
- In the **Source ID** field enter the number of the column (zero-based).
- In the destination field dropdown box select the KPI which is associated with this column.
- Click **Save**.

Each mapping can be edited and removed using the associated buttons in the mappings table.



Make a note of the **Template ID**, as displayed at the top of this page, as it is required to configure the DNA Import Service.

Open the **config.xml** file with Notepad or similar text editor.

Locate the following element:

```
<IMPORTS WebServiceURL="http://***/WS/Import/DNA.asmx"
ArchiveFilePath="***/**">
```

Edit the value of the `WebServiceURL` element to match the location of the `SkillsAssessor/WS/ImportKpiData.asmx` service.

Set the value of the `ArchiveFilePath` element to the location of the archive folder, e.g. `"C:\archive\"`. The service will move files from the import folder to the archive folder once they've been processed.

Locate the following element:

```
<IMPORTDETAILS Folder="***/**" TenantID="***/**"
MappingTemplateID="***/**" UserID="***/**" AuthUserName="***/**"
AuthUserPassword="***/**" />
```

Set the `Folder` value to the folder you wish to use as the import folder, e.g. `"C:\DNAImport\"`.

Set the `TenantID` to the ID of the tenant you are configuring the service for. This can be found by opening the `dbo.Tenants` table in the Skills Assessor database.

Set the value of the `MappingTemplateID` element to the ID of the mapping template you created earlier (as displayed at the top of the edit mapping template page).

The User ID element may be left at its default value.

Set the AuthUserName to the username of the Skills Assessor user for whom the service is being configured.

Set the AuthUserPassword to the password of the Skills Assessor user for whom the service is being configured.

Click Start -> All Programs -> Administrative Tools -> Services.

Locate the DNA Import Service in the Services (Local) list.

Right click on the service and click the Restart option. Changes made to the service's DNAImportService.exe.config or config.xml file will not be applied until the service is restarted.

Ensure that the service is set to Automatic in the Startup Type column.

If the service is not set to start automatically right click on the service and click the Properties button.

Set the Startup type dropdown to Automatic.

Click the OK button.

Using Windows Explorer, browse to the folder that contains the import folder you've created.

Right click on the folder and click Properties.

Click the Security tab.

Click Add.

In the Enter the object names to select field enter the name of the service or domain user account that is used to run the DNA Import Service.

Click the Check Names button.

Click the OK button.

Tick the Full Control · Allow checkbox for the added service/domain account.

Click the Apply button.

Click the OK button.

Repeat the above process for the archive folder.

The DNA Import Service is now configured. Copying files into the import folder will cause the service to import the KPI values into the Skills Assessor database and then move the file into the archive folder. The file will be renamed prior to being moved to the archive folder to prevent naming conflicts. The service produces a log of its activities which is accessible from the service's install location.



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