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SpeechMiner Administration Guide

Genesys Interaction Analytics (GIA) 8.5.4

1/23/2022

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SpeechMiner Administration Guide

The SpeechMiner 8.5.4 Administration Guide provides the instructions required to install and configure the SpeechMiner components. These pages are valid for all 8.5.4 releases of SpeechMiner. See the summary of the highlighted topics below:

About SpeechMiner	Installation and Configuration
Find out about SpeechMiner:	Find out about how to deploy the components:
Introduction New in this Release	SpeechMiner Components Installing SpeechMiner Configuring SpeechMiner

Introduction

SpeechMiner®, Genesys Telecommunications Laboratories's speech-analytics platform analyzes call content as well as text-based interactions such as e-mails and chats. Speech-analytics leverages recorded customer interactions (from any recording system) and analyzes each interaction for critical business topics and events. With unmatched accuracy, the system "listens" to conversations between customers and contact-center agents, precisely identifies the topics that were discussed, and categorizes what took place within each interaction.

SpeechMiner supports three modes of operation:

- Analytics and Recording UI: SpeechMiner plays back and analyzes interactions recorded with Genesys Interaction Recording.
- **Recording UI Only**: SpeechMiner plays back the call audio for each interaction in the search results. The contents of the interactions are not processed by the speech-analytics system.
- **Analytics Only**: SpeechMiner imports interactions and their recorded call audio from any recording system. Once the interactions and their audio is imported SpeechMiner processes the contents of each interaction.

Important

If you have purchased both Recording and Analytics licenses, it is recommended that you review the specific SpeechMiner setup instructions in the Genesys Interaction Recording documentation prior to commencing with the installation procedure. There may be some changes required to the generic analytics procedures in this SpeechMiner Administration Guide.

The SpeechMiner user interface is made up of two software components:

- **SpeechMiner browser-based interface**, Offers a variety of ways to access the audio of calls and the results of the interaction analysis performed by the system (when Analytics mode is in use). Users of the speech-analytics system can employ this interface to:
 - · find interactions that have specific characteristics or that deal with particular topics
 - identify and listen to the parts of calls that interest them
 - audit and fine-tune SpeechMiner's call processing
 - keep track of a range of system-metrics.
- **SpeechMiner Administration Tool (SMART)**, enables users of the speech-analytics system to configure it to search interactions for specific topics and other characteristics.

This manual explains how to install and configure SpeechMiner. It is intended for system administrators. Most of the steps described are only performed once, usually with the help of Genesys Customer Care.

New in this Release

This section describes the new features that were released in the 8.5.x version of SpeechMiner.

8.5.4 Release

- **QM Evaluations Manager Media Player:** When you playback an interaction in the QM Evaluations Manager, the Media Player can be opened in a separate window.
- Localization of new languages: User Interaface localization was added for the following languages:
 - German
 - Brazilian Portuguese
 - Japanese
 - Italian
 - Catalan
 - Mandarin
 - French
- **Related Words:** When you view the transcript of an interaction, you can use the Related Words option to graphically show which terms are commonly found within the same or similar term clusters as a selected term and how frequently the terms are found together in the cluster.
- Search by ID: You can filter an interaction search query according to the interaction's ID.
- Show/Hide Search Filter: You can now select to show or hide the SpeechMiner Search filter.
- **SpeechMiner Command Line Configuration:** SpeechMiner can now be configured using the command line.
- **Transcript Comments and Events display:** With a new Comments and Events panel, you can now view and edit a list of all the comments and events associated with the transcript you selected to view.
- **Playback speed:** When you playback an interaction you can now select the playback speed. 1.0 is the default normal speed and every number above is faster. For example, 2.0 is twice as fast as the normal speed.
- **Column selections:** Column selections are now saved per user profile. The columns you select to view in a SpeechMiner grid are displayed until you select the "Reset to defaults" option. "Reset to defaults", resets the grid to display the default column layout.

8.5.3 Release

• New Quality Monitoring: 8.5.3 features an all new Quality Monitoring module, rebuilt from the ground-up. The new module features enhanced forms as well as improved workflows for scoring

interactions and agents. Four new Quality Monitoring report templates are included in 8.5.3.

- **Exploration of text channels:** Text channels are now included in Exploration tasks. Term clusters can be generated for chats and emails, and displayed in the Trending page.
- Language enablement: Recognition of Italian and Mandarin audio is enabled.
- **Functionality changes:** Three Dashboard widgets (Gauge, My Queues and Recently QAed) and the QM Agent Summary report were removed from SpeechMiner 8.5.3.

8.5.2 Release

- **New Responsive Style User Interface:** In this release, the Main page, Menus, Media Player, Search pages and grids have been updated with the new design.
- New Media Player with Video Playback Capability: The updated media player, now supports screen recordings. When working with GIR, audio and screen recordings can now be synchronized.
- **Multiple QM Forms per Interaction:** Multiple QM form evaluations can now be attached to a single interaction.
- **Categorization Based on Spatial Relationships:** Text interactions can now be categorized based on rules such as: "found abc within X words of xyz.".
- Wildcard Support for Text Interaction Topic Definitions: Like Voice interaction topic definitions, Text interaction topic definitions can now utilize wildcards.
- **Recognition Improvements:** Continuous recognition improvements were made in this release based on new customer and vertical training material.

8.5.001 Release

- Ability to add text interactions to saved lists: Similar to voice interactions, text interactions can now be added to saved lists.
- Ability to add comments to text interactions: Similar to voice interactions, comments can now be added to text interactions.
- Ability to search for numbers in text interactions: Numbers and special characters can now be used in search term definitions for text interactions.
- Events are displayed in text interactions: Similar to voice interactions, topic events are highlighted when they occur in text interactions.
- **Topic filters in reports supports text interactions:** The topic parameter in the Data Set Filters on the reports now works for text interactions.
- **Support for wildcards in Spanish:** Similar to English, wildcards are now supported for Spanish voice interactions.

• **High Availability improvement for indexing:** In the event of an index failure, the system will automatically switch to a backup index.

8.5.0 Release

- Interaction Recording Integration: SpeechMiner 8.5.x provides the UI for Genesys Interaction Recording Voice Edition. This enables out of the box integration with Genesys' new recording product.
- **Chrome Support:** Support for Chrome on Windows for the Interaction Recording features.
- Chat Support: Support for chat interactions with multiple speakers.
- Genesys Branding: The web UI has been re-branded with the Genesys name, logos and colors.
- **Configuration Server Integration:** SpeechMiner now integrates with Genesys Configuration Server for centralized user management.
- Language Recognition Support: Support for Brazilian Portuguese and German language calls.

Deploying SpeechMiner

This section describes the SpeechMiner system and how to configure each component for your enterprise.

Components

SpeechMiner Components

The SpeechMiner system makes use of the following components:

- **UPlatform service**—Manages all the processing tasks of SpeechMiner—fetching (in the case of Analytics mode), recognition and exploration (in the case of Analytics and Analytics & Recording UI modes), categorization compression, and indexing (in all modes).
- Recognition engine—Nuance speech-recognition engine that transcribes call audio into text.
- **Nuance License Server** This server manages the Nuance engine. During installation, you need to either install a new instance of the Nuance License server, or provide the details of an existing server.
- **UConnector service**—Retrieves interaction data (audio or text) and metadata from the recording systems that is placed in the SpeechMiner input folder.
- Interaction Receiver—A web service which receives calls (audio and metadata) from the Genesys Interaction Recording system.
- MS-SQL database—The SpeechMiner database stores the interaction data and the results of interaction processing.
- Web service—Runs the SpeechMiner web-based interface that enables users to view and work with the interaction data after it has been processed.
- **ULogger**—The log viewer for the SpeechMiner logs.

System Software

Users employ the following software to work with SpeechMiner:

- **SpeechMiner browser-based interface**—Offers a variety of ways to access the audio of calls and the results of the interaction analysis performed by the system (when Analytics mode is in use). Users of the speech-analytics system can employ this interface to:
 - find interactions that have specific characteristics or that deal with particular topics
 - · identify and listen to the parts of calls that interest them
 - audit and fine-tune SpeechMiner's call processing
 - keep track of a range of system-metrics.

- **SpeechMiner administration tool (SMART)**—An application that enables users to configure the speech-analytics system to search calls for specific topics and other characteristics.
- **SMConfig**—An application that is used by system administrators to configure SpeechMiner.
- **SMUpgrade**—An application used to upgrade the SpeechMiner database from the previous version to current version.

Install

Installing SpeechMiner

This section explains how to install SpeechMiner at your enterprise. This section includes preinstallation steps; setting up the system components, database, and the software steps that users employ to interact with the system. The components can be installed on a single machine, or on separate machines, as required by the particular configuration of your system.

Configure

Configuring SpeechMiner

This section explains how to configure SpeechMiner after it is installed. Most of the configuration is performed in the SMConfig application. This is a Windows application that can be installed on any machine on your network. Once it is installed, it can be used, from any machine on which it is installed, to configure the entire SpeechMiner system.

Installing SpeechMiner

This section describes how to prepare your environment before you install SpeechMiner, and how to install the SpeechMiner software. The SpeechMiner components can be installed on one or more servers, as required by the particular configuration of your system.

Important

Since the SpeechMiner supported environment may be different for each SpeechMiner version, the current SpeechMiner Administration Guide may contain information that does not apply to your version of SpeechMiner. For detailed information about supported operating environments, see the Supported Operating Environment Reference Guide.

Getting Started

Before you install SpeechMiner, make sure of the following:

- The system requirements are met.
- The required third-party software has been installed on the machines in your system.
- The required permissions are set.

Then, review the Pre-installation Checklist before you begin the installation process.

System Requirements

Disk Space

Each server in the system should have at least the following amounts of available disk space before installing SpeechMiner:

- All servers: Approximately 1 GB of disk space for the recognition engine
- **Recognition server(s):** For the UPlatform service, 20 MB of disk space for the runtime folder plus approximately 10 GB for caching recognition packages. (The exact amount required for caching depends on the size of the implementation.)
- Database server: At least 20 GB for the SpeechMiner database. In addition, on some types of

recording-system integrations that have a very high volume, a larger (10 GB-200 GB) storage area is needed for temporary files.

Important

- The initial size of the database is about 20 GB; it may grow larger, depending on the call volume and the call-purging policy.
- On relatively high-volume installations, UConnector may need its own dedicated server.
- Web server: About 20 MB for the SpeechMiner virtual folder, plus additional space for call audio. (The exact amount required for caching depends on user activity.)
- Interaction Receiver: About 15 MB for the Interaction Receiver virtual folder.
- Machines running SMART: About 1 GB of disk space for the recognition engine

Database

The database must run on a machine on which one of the following SQL servers is installed:

- Microsoft SQL Server 2008 with Reporting Services, SP1 or above (Enterprise edition is recommended for large installations.)
- Microsoft SQL Server 2012 with Reporting Services

Operating Systems

All machines must have Windows operating systems. For detailed information about the Windows operating systems that are compatible with each SpeechMiner component refer to Supported Operating Environment Reference Guide.

Browser

The SpeechMiner web interface is compatible with Google Chrome and Internet Explorer (IE) versions 10 and 11.

Users of the SpeechMiner web application must have a functioning audio device on their desktop. Users browsing using Internet Explorer should have Windows Media Player version 10 or 11 installed.

Memory (RAM)

Machines running SpeechMiner servers and applications should have at least the following amounts of memory:

- Database server: 4 GB 128 GB (dependent on call volume)
- Web server: 4 GB
- SMART application: 2 GB
- Platform server: 8 GB (allow 1 GB per recognizer task, as a rule of thumb)

What Is Installed?

The following software will be installed on the machines in your system:

Machine	Components
On the Recognition Server(s)	 UPlatform service Nuance recognition engine
On the DB Server	SpeechMiner database
On the Web Server	SpeechMiner virtual folder
On the Interaction Receiver Server	Interaction Receiver virtual folder
On Every Machine Running SMART	 Recognition engine SMART executable and runtime files (dlls)

Ports Used by the System Components

The following ports are used by SpeechMiner:

Important

The ports listed are the default ports. Most of them can be changed upon request.

Source	Destination	Protocol and Port Pair (ex. TCP 3389)
Web servers, Platform servers, SpeechMiner Administrator Workstations (SMConfig/SMART)	Database server	tcp 1433
Database server, Web server, Platform servers, SpeechMiner Administrator Workstations (SMConfig/SMART)	MS-SQL report server	http 80 / https 443
SpeechMiner Administrator Workstations (SMConfig/SMART)	Web servers	http 80 / https 443
Genesys Interaction Recording server	Interaction Receiver Server	http 80 / https 443
Web Servers	Web servers	http 80 / https 443
SpeechMiner Administrator Workstations (SMConfig)	Platform servers, Web servers	tcp 135
Platform servers (recognition), SpeechMiner Administrator Workstations (SMART)	SpeechMiner Nuance License server	tcp 27000 + another port (can be configured in license file)
Web servers, Platform servers, SpeechMiner Administrator Workstations (SMConfig/SMART)	File System	smtp over tcp 445
Web servers, SpeechMiner Administrator Workstations (SMConfig/SMART)	Active Directory	tcp 88
Web servers, Platform servers	Email server	smtp over tcp 25

Ports and Protocols Required for SpeechMiner UConnector

SpeechMiner UConnector requires access to the recording-system database and file-storage system. Access to the database is implemented using the TCP protocol with port 1433. (The port number can be configured on the database server.) Access to the file-storage system is implemented using SMB over TCP protocol with port 445. Other protocols can be used as well, if they are available in the underlying file-storage system.

Required Third-Party Software

This section explains how to install the required third-party software on the machines in your system.

Tip

You must install the required software before you install SpeechMiner.

.NET Framework

Installing the .NET Framework

Microsoft .NET Framework 4.5 SP1 (4.5.1) and .NET 2.0 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner

If you are installing the .NET Framework on machines that are running Windows Server 2008 R2 or Windows Server 2012:

- Enable .NET framework using the Add Features option in the Server Manager (Start > Administrative Tools > Server Manager).
- Verify that Windows Update is enabled.

If Windows Update is not enabled or you are using an operating system other than Windows Server 2008 R2 or Windows Server 2012, manually download and install .NET 4.5.1 from the following location: http://www.microsoft.com/en-us/download/details.aspx?id=40779

Microsoft Visual C++ Redistributable

Installing Microsoft Visual C++ Redistributable

The following Microsoft Visual C++ Redistributable's must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.

• Microsoft Visual C++ 2013 Redistributable: 2013 installation

• Microsoft Visual C++ 2010 Redistributable: 2010 installation

Important

When installing Microsoft Visual C++ 2013 Redistributable you must install both x86 and x64 versions. When installing Microsoft Visual C++ 2010 Redistributable you only need to install the x86 version.

SQL Server

Setting Up the SQL Server

Before you begin installing SpeechMiner, you must install the SQL server on the database server. You can use either Microsoft SQL Server 2008 with Reporting Services or Microsoft SQL Server 2012 with Reporting Services.

For information about installing and configuring the SQL Server for SpeechMiner, see Setting Up the SQL Server for SpeechMiner.

Internet Information Server

Installing IIS on the Web Server or Interaction Receiver Server

The Internet Information Server (IIS) must be installed and operational on the servers that will be used to run the SpeechMiner Web and the Interaction Receiver. You can install and configure:

- Windows Server 2008
- Windows Server 2012

Notes:

- The SpeechMiner and Interaction Receiver Application Pool must use .NET framework version 4.0. After you install the SpeechMiner web server, you should check that this is the version in use.
- It is recommended to enable HTTP Compression on the IIS server. For additional information, see http://technet.microsoft.com/en-us/library/cc771003(v=ws.10).aspx.

Report Viewer

Installing Report Viewer

SpeechMiner can be configured to use Microsoft's Report Viewer to run saved reports at night and cache their results. Using Microsoft's Report Viewer can significantly reduce the time required to load the SpeechMiner **Views** page, if it contains a large number of reports. If you want to use this feature, you have to install it and then configure it to run the jobs you want it to run. You can download the installation file at http://www.microsoft.com/en-us/download/details.aspx?id=21916.

For additional information about Report Caching, see: Defining Caching Reports.

Setting Up the SQL Server for SpeechMiner

Installing SQL Server 2008 R2

In order to install SQL Server 2008 R2 for use with SpeechMiner, run the normal setup wizard and follow the instructions. To install SQL Server 2008 R2:

- 1. Run the installation program. The **SQL Server Installation Center** window opens, with the **Planning** screen open.
- 2. From the menu on the left, select **Installation**. The **Installation** screen opens.

🚼 SQL Server Installation Center	
Planning Installation	New installation or add features to an existing installation. Launch a wizard to install SQL Server 2008 R2 in a non-dustered environment or to add features to an existing SQL Server 2008 R2 instance.
Maintenance Tools Resources	New SQL Server failover duster installation Launch a wizard to install a single-node SQL Server 2008 R2 failover duster.
Advanced Options	Add node to a SQL Server failover duster Launch a wizard to add a node to an existing SQL Server 2008 R2 failover duster.
opons	Upgrade from SQL Server 2000, SQL Server 2005 or SQL Server 2008 Launch a wizard to upgrade SQL Server 2000, SQL Server 2005 or SQL Server 2008 to SQL Server 2008 R2.
	Search for product updates Search Microsoft Update for SQL Server 2008 R2 product updates.
SQL Server 2008 R2	

- 3. Select New installation or add features to an existing installation. The installation wizard opens.
- 4. Follow the on-screen instructions. When the screens mentioned below open, follow the instructions below to select the required settings and options for SpeechMiner.
- 5. From the Setup Role screen, select SQL Server Feature Installation.

Setup Role	
Secup Role	
Click the SQL Server Feature Install install a specific configuration.	lation option to individually select which feature components to install, or click a feature role to
Setup Support Rules Product Key License Terms Setup Role Feature Selection Installation Rules Disk Space Requirements Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	 <u>SQL Server Feature Installation</u> Install SQL Server Database Engine Services, Analysis Services, Reporting Services, Integration Services, and other features. <u>SQL Server PowerPivot for SharePoint</u> Install PowerPivot for SharePoint on a new or existing SharePoint 2010 server to support PowerPivot data access in the farm. To use the New Server option, SharePoint must be installed but not configured. Add PowerPivot for SharePoint to: New Server Add PowerPivot for SharePoint to: New Server Mathematical PowerPivot for SharePoint to: New Server Natall Features With Defaults Install all features using default values for the service accounts.

6. From the **Feature Selection** screen, select the following options:

- Database Engine Services
- Reporting Services
- Client Tools Connectivity
- SQL Server Books Online
- Management Tools Basic
- Management Tools Complete

SQL Server 2008 R2 Setup Feature Selection Select the Enterprise features to	install.
Setup Support Rules Product Key License Terms Setup Role Feature Selection Installation Rules Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Reporting Services Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Eeatures: Description: Instance Features Server features are instance-aware and have their own registry hives. They support multiple instances on a computer. SQL Server Replication Full-Text Search Analysis Services Reporting Services Shared Features Oldent Tools Connectivity Integration Services Server Books Compatibility Client Tools Connectivity Server Books Online Management Tools - Basic Management Tools - Complete SQL Client Connectivity SDK Microsoft Sync Framework Redistributable Features Wicrosoft Sync Framework
	Select All Unselect All Shared feature directory: C:\Program Files\Microsoft SQL Server\ Shared feature directory (x86): C:\Program Files (x86)\Microsoft SQL Server\ <

- 7. From the Server Configuration screen, in the Service Accounts tab, for the SQL Server Agent, SQL Server Database Engine, and SQL Server Reporting Services, do the following:
 - Enter the user account and password of the service account.
 - Under Startup Type, select Automatic.

d collation configuration.				
Service Accounts Collation				
Microsoft recommends that you u	ise a separate account for each S	QL Server service	e.	
Service	Account Name	Password	Startup Type	
SQL Server Agent	libbysql	•••••	Automatic	
SQL Server Database Engine	libbysql	•••••	Automatic	-
SQL Server Reporting Services	libbysql	•••••	Automatic	•
SQL Server Browser	NT AUTHORITY/LOCAL S		Disabled	Ŧ
	Service SQL Server Agent SQL Server Database Engine SQL Server Reporting Services	Microsoft recommends that you use a separate account for each S Service Account Name SQL Server Agent libbysql SQL Server Database Engine libbysql SQL Server Reporting Services libbysql SQL Server Browser NT AUTHORITY/LOCAL S	Microsoft recommends that you use a separate account for each SQL Server service Service Account Name Password SQL Server Agent libbysql •••••••• SQL Server Database Engine libbysql •••••••• SQL Server Reporting Services libbysql •••••••• SQL Server Browser NT AUTHORITY/LOCAL S •••••••	Microsoft recommends that you use a separate account for each SQL Server service. Service Account Name Password Startup Type SQL Server Agent libbysql ••••••• Automatic SQL Server Database Engine libbysql ••••••• Automatic SQL Server Reporting Services libbysql ••••••• Automatic

8. From the **Server Configuration** screen, in the **Collation** tab, under **Database Engine**, select SQL_Latin1_General_CP1_CI_AS (the default value).

SQL Server 2008 R2 Setup		
Server Configuration		
Specify the service accounts and col	llation configuration.	
Setup Support Rules Installation Type Product Key License Terms Setup Role Feature Selection Installation Rules Installation Rules Installation Rules Server Configuration Database Engine Configuration Reporting Services Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Service Accounts Collation Database Engine: SQL_Latin1_General_CP1_CI_AS Latin1-General, case-insensitive, accent-sensitive, kanatype-insensitive, width-insensitive for Unicode Data, SQL Server Sort Order 52 on Code Page 1252 for non-Unicode Data	<u>C</u> ustomize
	< <u>B</u> ack <u>N</u> ext > Cancel	Help

9. From the **Database Engine Configuration** screen, in the **Data Directories** tab, select the locations for the database folders. If possible, put the User database directory, the Temp DB directory, and the Backup directory on a separate drive from the other folders.

😵 SQL Server 2008 R2 Setup Database Engine Config	uration		_ _ ×
	ation security mode, administrators	and data directories.	
Setup Support Rules Installation Type Product Key License Terms Setup Role Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Reporting Services Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Account Provisioning Data Directory: System database directory: User database directory: User databaselog directory: Temp DB log directory: Backup directory:	C:\Program Files\Microsoft SQL Server\ C:\Program Files\Microsoft SQL Server\MSSQL 10_50.LIBBYINSTANCE\MSSQL\Data	
		< <u>B</u> ack <u>N</u> ext > Cancel	Help

10. From the **Reporting Services Configuration** screen, select **Install the native mode default configuration**.

11. When you finish installing SQL Server, restart the machine on which you installed it.

Installing SQL Server 2012

In order to install SQL Server 2012 for use with SpeechMiner, run the normal setup wizard and follow the instructions. To install SQL Server 2012:

- 1. Run the installation program. The **SQL Server Installation Center** window opens, with the **Planning** screen open.
- 2. From the menu on the left, select **Installation**. The **Installation** screen opens. Select **New installation or add features to an existing installation**. The installation wizard opens.
- 3. Follow the on-screen instructions. When the screens mentioned below open, follow the instructions below to select the required settings and options for SpeechMiner.

- 4. From the Setup Role screen, select SQL Server Feature Installation.
- 5. From the **Feature Selection** screen, select the following options:
 - Database Engine Services
 - Reporting Services
 - Client Tools Connectivity
 - SQL Server Books Online
 - Management Tools Basic
 - Management Tools Complete

- 6. From the Server Configuration screen, in the Service Accounts tab, for the SQL Server Agent, SQL Server Database Engine, and SQL Server Reporting Services, do the following:
 - Enter the user account and password of the service account.
 - Under Startup Type, select Automatic.

1	SQL Server	2012 Setup		_ □	x
Server Configuration Specify the service accounts and	collation configuration.				
Setup Support Rules Setup Role Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Reporting Services Configuration Error Reporting	Service Accounts Collation Microsoft recommends that you u Service SQL Server Agent SQL Server Database Engine SQL Server Reporting Services SQL Server Browser	Ise a separate account for each SQL Serv Account Name NT Service\SQLSERVERAGENT NT Service\MSSQLSERVER NT Service\ReportServer NT AUTHORITY\LOCAL SERVICE	er service. Password	Startup Type Automatic Automatic Automatic Disabled	× × ×
Installation Configuration Rules Ready to Install Installation Progress Complete					
		< <u>B</u> ack <u>N</u> ext >	Cancel	He	lp

7. From the **Server Configuration** screen, in the **Collation** tab, under **Database Engine**, select SQL_Latin1_General_CP1_CI_AS (the default value).

1	SQL Server 2012 Setup	x
Server Configuration Specify the service accounts and	d collation configuration.	
Setup Support Rules Setup Role Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Reporting Services Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Service Accounts Collation Database Engine: SQL_Latin1_General_CP1_CLAS Latin1-General, case-insensitive, accent-sensitive, kanatype-insensitive, width-insensitive for Unicode Data, SQL Server Sort Order 52 on Code Page 1252 for non-Unicode Data Qustomi	
	< <u>B</u> ack <u>N</u> ext > Cancel He	elp

8. From the **Database Engine Configuration** screen, in the **Data Directories** tab, select the locations for the database folders. If possible, put the User database directory, the Temp DB directory, and the Backup directory on a separate drive from the other folders.

1	SC	2L Server 2012 Setup
Database Engine Config Specify Database Engine authen	guration tication security mode, administra	ators and data directories.
Setup Support Rules Setup Role Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Reporting Services Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Server Configuration Data Dir Data root directory: System database directory: User database directory: User database log directory: Temp DB directory: Temp DB log directory: Backup directory: Backup directory:	ectories FILESTREAM C:\Program Files\Microsoft SQL Server\ C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Data C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Data C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Log C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Backup
		< Back Next > Cancel Help

- 9. From the **Reporting Services Configuration** screen, select **Install the native mode default configuration**.
- 10. When you finish installing SQL Server, restart the machine on which you installed it.

Configuring the SQL Server Setting

After the SQL server is installed, do the following:

- Ensure that the SQL server is running
- Configure the SQL server to start automatically
- Enable both the TCP/IP and the Named Pipes protocols

Important

After you install SpeechMiner, you also have to deploy the CLR assembly and set its permissions. See Installing the SpeechMiner Components > Installing the SpeechMiner Database > SQL CLR.

To configure the SQL server and enable the required protocols:

- 1. From the Start menu, navigate to Microsoft SQL Server 2008 > Configuration Tools > SQL Server Configuration Manager. The SQL Server Configuration Manager opens.
- 2. On the left side of the window, select **SQL Server Services**.

Sql Server Configuration Manager					_ 0	١×
File Action View Help						
🐤 🔿 🙇 🔛 🕞 🚹 🕭 🕕 📀 😍						
SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration (32bit) SQL Server Network Configuration SQL Server Network Configuration SQL Server Network Configuration SQL Server Network Configuration SQL Native Client 10.0 Configuration	Name SQL Server (MSSQLSERVER) SQL Server Reporting Services (MSSQLSERVER) SQL Server Browser SQL Server Agent (MSSQLSERVER)	State Running Running Stopped Running	Start Mode Automatic Automatic Other (Boot, System, Disabl Automatic	Process ID 1260 1336 0 1772	Service Type SQL Server Report Server SQL Agent	

- 3. On the right side of the window, for **SQL Server Agent**, check that the **Status** is **Running**, and the **Start Mode** is **Automatic**.
- 4. If one or both of these values are not as they should be, do the following:
 - Double-click the row. The **Properties** window opens.
 - In the **Service** tab, set the **Start Mode** to **Automatic**.
 - If the service is not running, in the **Log On** tab, select **Start**.
 - Click **OK** to implement the changes.

5. On the left side of the SQL Server Configuration Manager window, select SQL Server Network Configuration > Protocols for MSSQLSERVER.

- 6. On the right side of the window, for **TCP/IP** and for **Named Pipes**, check that the **Status** is **Enabled**.
- 7. For each of these protocols, if it is not enabled, do the following:
 - Double-click the row. The **Properties** window opens.
 - In the **Protocol** tab, under **Enabled**, select **Yes**.
 - Click **OK** to implement the changes.

Configuring the Reporting Services

The SQL reporting services should be configured as explained below.

Tip

The default configuration for mhtml rendering is html3.2. This configuration does not support padding. In order to render web archive open the Report Server config file (for example C:\Program

Files\Microsoft SQL Server\MSRS10_50.MSSQLSERVER\Reporting Services\ReportServer\rsreportserver.config) and change RenderingExtension (under EmbeddedRenderFormats) to HTML4.0. Once you are done, restart the report server.

To configure the SQL reporting services:

- 1. In the Start menu, under All Programs, select SQL Server 2008 R2 > Configuration Tools > Reporting Services Configuration Manager. The Reporting Services Configuration Connections window opens.
- Enter the report server name and the instance name (if they are not already there), and click Connect. The Reporting Services Configuration Manager opens, with the Report Server Status screen displayed.

Reporting Services Configuration M	anager: \MSSQLSERVER		
Reporting Services Conf	iguration Manager		
Connect	Report Server Status	iguration Manager tool to define or modify settings for the Repor	t Server and Report
3 Service Account	Manager. If you installed Report database, and the Report Manag	ing Services in files-only mode, you must configure the Web serv per URL.	ice URL, the
🔊 Web Service URL	Current Report Server		
1 Database	SQL Server Instance: Instance ID:	MSSQLSERVER MSRS10_50.MSSQLSERVER	
Report Manager URL	Edition: Product Version:	ENTERPRISE EDITION 10.50.1600.1	
🚖 E-mail Settings	Report Server Database Name: Report Server Mode:	ReportServer Native	
Execution Account	Report Service Status:	Started	
Recryption Keys		Sart Stop	
4 Scale-out Deployment			
	Results		
			Copy
0			Apply Exit

- 3. Check whether the report server is running. If it is not, click **Start**.
- 4. On the left side of the window, select **Service Account**.

Reporting Services Configuration	Manager: Manag		_10
Reporting Services Cor	2 Manager		
Connect			
TLVQAVM9(MSSQLSERVER	Service Account		
Service Account	Specify a built-in acc	count or Windows domain user account to run the report server service.	
A Web Service URL	Report Server Service Account	vice account and then click Apply.	
U Database	C Use built-in account:	Network Service	Y
Report Manager URL	C Use another account: Account (Domain/user):	6. 17 M 18 M	
E-mail Settings	Password:	•••••	
Execution Account			
R Encryption Keys			
2 Scale-out Deployment			
	Results		
	- COURSE		
			Copy
•			Apply Exit

5. Configure the account name and password of the service account that will be used to run the reportserver service, as required. Use either a local administrator account or an account that can log in as a service and run services on the local machine.

The user must be a **Domain user**.

6. On the left side of the window, select **Web Service URL**; make sure the settings in the screen match the settings as follows:

Reporting Services Cor	niguration manager		
Connect	Web Service URL		
LVQAVM9\MSSQLSERVER			
Service Account	Configure a URL to instance, or to spi	used to access the Report Server. Click Advanced to define multiple URLs for a ecify additional parameters on the URL.	single Report Server
Web Service URL	Report Server Web Service V Virtual Directory:	Wrtual Directory ReportServer	
Database	Report Server Web Service 5		
Report Manager URL	IP Address:	All Assigned (Recommended)	
E-mail Settings	ICP Port: SSL Cettificate:	80 (Not Selected)	
Execution Account	SSL Port:		A <u>d</u> vanced
Recryption Keys	Report Server Web Service I		
Scale-out Deployment	URLs:	http://12_12_12_00/ReportServer	
	Results		

On the left side of the window, select **Database**. If you created a report-server database when you
installed SQL Server, it appears under **Current Report Server Database**. If you did not, create it
now.

LIBBYINST WSSQLSERVER			
3 Service Account		res all report server content and application data in a database. Use this er database or update database connection credentials.	page to create or
🐊 Web Service URL	Current Report Server Database		
Database	Click Change database to select a	a different database or create a new database in native or SharePoint inte	grated mode.
() COMOUNT	COL COLUMN		
Report Manager URL	SQL Server Name: Database Name:	LIBBYINST ReportServer	
	Report Server Mode:	Native	
🚖 E-mail Settings			Change <u>D</u> atab
Execution Account	Current Report Server Database Cre	edential	
Keys	The following credentials are used different account or update a pass	d by the report server to connect to the report server database. Use the o sword.	options below to choo
	Credential:	Service Account	
Scale-out Deployment	Login:	CARE-UTLASING a	
	Password:	*****	
			Change <u>C</u> redent
	Results		

8. On the left side of the window, select **Report Manager URL**; make sure the settings in the screen match the settings as follows:

SQL Server 2008 R	22		
Reporting Services Cor	12 nfiguration Manager		
Connect	Report Manager URL		
Service Account	Configure a parameters	URL to access Report Manager. Click Advanced to define multiple on the URL.	URLs, or to specify additional
A Web Service URL	Report Manager Site Ide	Reports	
🔰 Database	URLs:	http://	Advanced
Report Manager URL			
🚖 E-mail Settings			
Execution Account			
Recryption Keys			
2 Scale-out Deployment			
	Results		
			<u><u></u>οργ</u>

- 9. On the left side of the window, select **E-mail Settings**.
- 10. Enter the settings for the e-mail account you want the report server to use to send reports to SpeechMiner users.

Reporting Services Configuration M	lanager: TLV3\MSSQLSERVER	
SQL Server 2008 R2 Reporting Services Conf	g figuration Manager	
Cognect Cogne	E-mail Settings To use report server e-mail, specify an exis server. SMTP Settings To edit, change the fields and click the Apply button. Sender Address: Current SMTP Delivery Method: SMTP Server:	it can send e-mail from that
ncryption Keys	Results	Сору
0		Apply Exit

- 11. Click Exit to close the Reporting Services Configuration Manager.
- 12. In the **Report Server config** file (rsreportserver.config) change the **MaxActiveReqForOneUser** parameter value from 20 to 250.

For more details see: http://msdn.microsoft.com/en-us/library/ms157273.aspx

Creating the Report-Server Database

If the report-server database was not created automatically when you installed SQL Server, you can create it in the **Report Server Database Configuration Wizard**. To create the report-server database:

- 1. Open the **Reporting Services Configuration Manager**.
- 2. From the **Database** screen, under **Current Report Server Database**, click **Change Database**. The **Report Server Database Configuration Wizard** opens.

3. In the wizard, fill in the fields as they are filled in in the examples shown (except, of course, for the server name and the credentials, which you must specify as appropriate for your system). Click **Next** to progress from screen to screen until you have finished creating the database.

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Action

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to the local data	Sector constants	A log production of an in-
Tala and		
Contraction	Carry in Informations	
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Database Server

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Database

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inena Ineny Algeneiren	Same	

Credentials

•

Click on the image to enlarge.

Setting the Maximum Memory Usage

If the SQL-server's memory usage is not limited, it will consume all of the available memory. Therefore, it is recommended to limit the memory usage of the SQL Server by setting the max server memory value.

Important

In addition to the "server memory" that is limited by this value, the SQL server uses 2-4 GB of other memory. For this reason, it is recommended to set the max server memory to a value that is 2-4 GB lower than the maximum memory you want to allow the server to use. For additional details, see http://msdn.microsoft.com/en-us/ library/ms178067.aspx.

You can see the current max server memory value, and modify it as required, in the **SQL Server Management Studio**.

To view or modify the max server memory value:

- 1. From the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)
- 2. On the left side of the window, right-click the SQL server and then select **Properties**. The **Server Properties** window opens.

Server Properties - LIBBYIN	IST 📃 🗌	×
Select a page	Script - 📑 Help	
General Memory Processors Security Connections Database Settings Advanced Permissions	Server memory options Use AWE to allocate memory Minimum server memory (in MB): 0 4096 4096 1 1 1 1 1 1 1 1 1 1 1 1 1	
Connection Server: (local) Connection: CAMELOT\Lschwartz	Other memory options Index creation memory (in KB, 0 = dynamic memory): 0 ** Minimum memory per guery (in KB): 1024 *	
View connection properties Progress Ready		
	OK Cancel	//

- 3. On the left side of the window, select **Memory**. The memory settings are displayed.
- 4. Under Maximum server memory (in MB), enter the value you want to use.
- 5. Click **OK**. The setting is implemented, and the window closes.

If you prefer, you can also set the max server memory property by executing a query:

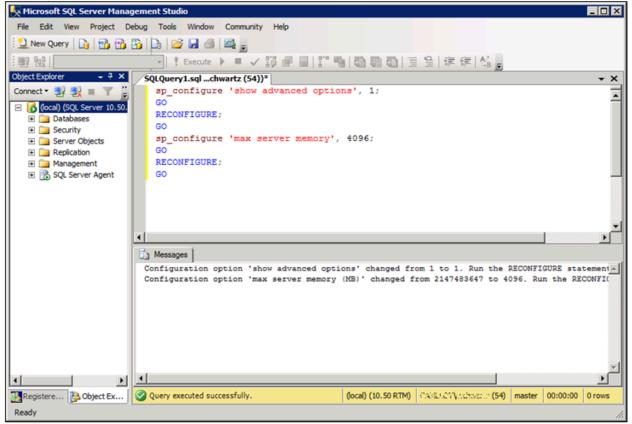
To set the max server memory by executing a query:

- 1. On the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)
- 2. On the left side of the window, right-click the SQL server and then select **New Query**. A blank text area opens on the right side of the window.

3. Copy the following commands and paste them into the text area:

```
sp_configure 'show advanced options', 1;
G0
RECONFIGURE;
G0
sp_configure 'max server memory', 4096;
G0
RECONFIGURE;
G0
```

- 4. The code sets the max server memory to 4GB (4096MB). If you want to set it to a different value, in the text area, change 4096 to the required value.
- 5. Above the text area, select **Execute**. The commands are executed. When the process is completed successfully, **Query executed successfully** appears at the bottom of the window.



Installing IIS on the Web Server or Interaction Receiver Server

Windows Server 2008

On Windows Server 2008, you can install and configure the Internet Information Services (IIS) in the Server Manager.

To install and configure the IIS component:

- 1. From the Start menu, select All Programs > Administrative Tools > Server Manager. The Server Manager opens.
- 2. On the left side of the window, select **Roles**.

Server Manager		_ O ×
File Action View Help		
🗇 🔿 🗾 🖬 📓		
Server Manager (VM2008)	Roles	
Roles Gil Festures Gil Festures Gil Gild Configuration Configuration Configuration Configuration	Vew the health of the roles installed on your server and add or remove roles and features.	
P Windows Firewall with Adva Services	Roles Summary	Roles Summary Help
WMI Control Model Users and Groups Sers Groups	Roles: 0 of 17 initialed	Add Roles
🗄 🚰 Storage		
	Q Last Refresh: Today at 11:10 AM Configure refresh	

3. On the right side of the screen, select **Add Roles**. The **Add Roles Wizard** opens.

Add Roles Wizard		X
Select Server Ro	es	
Before You Begin Server Roles Web Server (IIS) Role Services Confirmation	Select one or more roles to install on this server. Roles:	Description: Web Server (115) provides a reliable, manageable, and scalable Web application infrastructure.

- 4. From the list of roles, select **Web Server (IIS)**, and then select **Next**. An **Introduction to the Web Server** is displayed.
- 5. Select **Next**. The **Role Services** screen opens.

Add Roles Wizard		×
Select Role	Services	
Before You Begin Server Roles Web Server (IIS) Role Services Confirmation Progress Results	Select the role services to install for Web Server (IIS): Bole services: Web Server Web Server Static Content Directory Browsing HTTP Errors HTTP Redirection WebDAV Publishing Application Development ASP.NET SAPI Extensibility ASP.NET Server Side Includes Server Side Includes Health and Diagnostics Health and Diagnostics HTTP Logging Logging Tools Request Monitor Tracina	Description: Windows authentication is a low cost authentication solution for internal Web sites. This authentication scheme allows administrators in a Windows domain infrastructure for authenticating users. Do not use Windows authenticated access your Web site from behind firewalls and proxy servers.
	< Previous	Next > Install Cancel

- 6. Under **Role Services**, make sure the following services are selected:
 - a. Under Common HTTP Features:
 - Static Content
 - Default Document
 - HTTP Errors
 - HTTP Redirection
 - b. Under Application Development:
 - ASP.NET
 - ISAPI Extensions
 - ISAPI Filters

Important

When you select ASP.NET, a window pops up, asking you to confirm that you want to "Add role services required for ASP.NET." Select **Add required role services**.

- c. Under Security:
 - Windows Authentication
- d. Under IIS 6 Management Compatibility:
 - IIS 6 WMI Compatibility
 - IIS 6 Metabase Compatibility
- 7. Click Next. A Confirm Installation Selections screen opens.

Add Roles Wizard	on Selections
Before You Begin Server Roles Web Server (IIS) Role Services	To install the following roles, role services, or features, click Install.
Confirmation Progress Results	Web Server (IIS) The out more about Windows System Resource Manager (WSRM) and how it can help optimize CPU usage Web Server Common HTTP Features Static Content Default Document HTTP Redirection Application Development ASP.NET .NET Extensibility ISAPI Extensions ISAPI Filters Health and Diagnostics HTTP Logging Request Monitor Serverity Print, e-mail, or save this information

8. Select **Install**. The installation process begins, and the **Installation Progress** screen is displayed. When the installation is completed, an **Installation Results** screen is displayed.

Add Features Wizard			×
Installation Resu	lts		
Features	The following roles, role services, or features w	vere installed successfully:	
Confirmation Progress	○ .NET Framework 3.5.1 Features	Installation succeeded	
Results	The following features were installed: .NET Framework 3.5.1		
	Print, e-mail, or save the installation report		
	< 1	Previous Next > Close	Cancel

9. Click **Close**. The **Add Roles Wizard** closes, and the **Server Manager** lists the **Web Server (IIS)** role as installed.

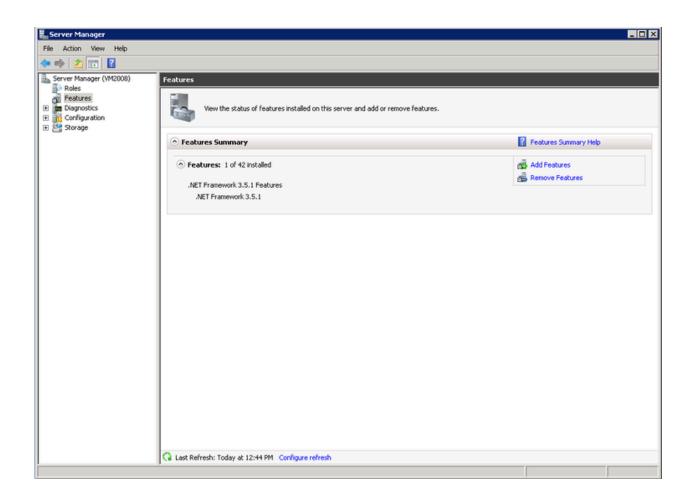
🏭 Server Manager		
File Action View Help		
🗢 🔿 🔁 🔂		
	Roles	
Roles Web Server (IIS) Greatures Diagnostics Configuration	View the health of the roles installed on your server and add or remove roles and features.	
Task Scheduler	Roles Summary	Roles Summary Help
Windows Firewall with Adve Services WMI Control Services and Groups Users Users Groups	Roles: 1 of 17 installed Web Server (IIS)	Add Roles
🕀 🤮 Storage	• Web Server (IIS)	Web Server (IIS) Help
	Provides a reliable, manageable, and scalable Web application infrastructure.	
		Go to Web Server (IIS)
	Messages: None	
	System Services: 4 Running, 1 Stopped	
	Events: None in the last 24 hours	
	Best Practices Analyzer: To start a Best Practices Analyzer scan, go to the Best Practices Analyzer tile on this role's homepage and click Scan this Role	
	Role Services: 24 installed	Add Role Services
۲	C Last Refresh: Today at 12:01 PM Configure refresh	

- 10. From the **Server Manager**, in the left pane, select **Features**, and then, in the right pane, select **Add Features**. The **Add Features Wizard** opens.
- 11. Select **Add required role services**. The window closes.

Click **Next** three times, and then click **Install**. The installation process begins, and the **Installation Progress** screen is displayed. When the installation is completed, the **Installation Results** screen is displayed.

Add Features Wizard			×
Installation Resu	lts		
Features	The following roles, role services, or features	were installed successfully:	
Confirmation Progress	.NET Framework 3.5.1 Features	🥑 Installation succeeded	1
Results	The following features were installed: .NET Framework 3.5.1		
	Print, e-mail, or save the installation report		
	<	Previous Next > Close Cancel	

12. Click **Close**. The **Add Features Wizard** closes, and the **Server Manager** lists the features you selected as installed.



Windows Server 2012

On Windows Server 2012, you can install and configure the Internet Information Services (IIS), version 8, in the **Server Manager**.

To install and configure the Internet Information Services (IIS) component:

1. Open the Server Manager.

2	Server Manager	= 0 X
Server M	anager • Dashboard • 💿 I 🏲	Manage Tools View Help Add Roles and Features
Dashboard Local Server	WELCOME TO SERVER MANAGER	Remove Roles and Features Add Servers
All Servers File and Storage Services	1 Configure this local server	Create Server Group Server Manager Properties
io IIS	2 Add roles and features	
	Add other servers to manage Add other servers to manage A Create a server group	
		•
	LEARN MORE	Hide

- 2. From the upper-right side of the window, in the **Manage** menu, select **Add Roles and Features**. The **Add Roles and Features Wizard** opens.
- 3. Click Next. The Installation Type screen opens.

la la	Add Roles and Feat	ures Wizard	_ D X
Select installation	on type	TLVQAVM	DESTINATION SERVER 28.us.int.genesyslab.com
Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	 machine, or on an offline virtual hard of Role-based or feature-based inst Configure a single server by adding Remote Desktop Services installa 	allation roles, role services, and features. stion ual Desktop Infrastructure (VDI) to create a	
		< Previous Next > Inst	all Cancel

4. Select **Role-based or feature-based installation**, and click **Next**. The **Server Selection** screen opens.

elect destinati	on server		TLVQAVM28.0	s.int.genesyslab.com
Before You Begin	Select a server or a	Select a server or a virtual hard disk on which to install roles and features.		
Installation Type	Select a server	from the server pool		
Server Selection	O Select a virtual	hard disk		
Server Roles	Server Pool			
Features				
	Filter:			
	Name	IP Address	Operating System	
	The second second		Microsoft Windows Server 2012 Stand	dard
	1 Computer(s) four	rd		
	This page shows se	ervers that are running Wir	dows Server 2012, and that have been a fline servers and newly-added servers fro	

5. Verify that the **Select a server from the server pool** is selected and select the server on which you will be installing the SpeechMiner web server. Click **Next**. The **Server Roles** screen opens.

2	Add Roles and Features Wizard	_ _ ×
Select server ro Before You Begin Installation Type	Select one or more roles to install on the selected server. Roles	DESTINATION SERVER tivqa4.us.int.genesyslab.com Description
Server Selection Server Roles Features Confirmation Results	 Active Directory Rights Management Services Application Server DHCP Server DNS Server Fax Server ✓ File And Storage Services (Installed) Hyper-V Network Policy and Access Services Print and Document Services Remote Access Remote Desktop Services Volume Activation Services Web Server (IIS) Windows Deployment Services Windows Server Update Services 	 Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.
	< Previous	Next > Install Cancel

6. From the list of roles, select **Web Server (IIS)**. The following window pops up.

Add Roles and Features Wizard				
Add features that are required for Web Server (IIS)? The following tools are required to manage this feature, but do not have to be installed on the same server.				
⊿ Web Server (IIS)				
▲ Management Tools				
[Tools] IIS Management Console				
Include management tools (if applicable) Add Features Cancel Cancel Cancel				

- 7. Select the **Include management tools (if applicable)** checkbox and click **Add Features**. The window closes.
- 8. Select **Next**. The **Role Services** screen opens.

elect role servic	ces	DESTINATION SERVE tivqa4.us.int.genesyslab.com
Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results	Select the role services to install for Web Server (IIS) Role services	Windows Management Instrumentation (WMI) scripting
	Request Monitor Control Contro Control Control Control Control Control Contro	

- 9. From the list of **Role services**, make sure the following services are selected:
 - a. Under Common HTTP Features:
 - Static Content
 - Default Document
 - HTTP Errors
 - HTTP Redirection
 - b. Under Application Development:
 - Application Initialization
 - ASP.NET
 - ASP.NET Extensibility
 - ISAPI Extensions
 - ISAPI Filters
 - c. Under **Security**:
 - Windows Authentication

- d. Under IIS Management tools:
 - IIS 6 Management Compatibility
 - IIS Management Console

10. Select **Next** and then select **Install**. The IIS server is installed with the roles and features you selected.

Pre-installation Checklist

Before you begin installing SpeechMiner, ensure the following:

- You have the required hardware (see System Requirements).
- You have received the following from Genesys:
 - SpeechMiner installation package
 - Licenses
- Space check: The hard drives of the machines on which you are planning to install the system components have sufficient space available for those components (see System Requirements).
- OS check: All machines have supported operating systems (see System Requirements).
- Machine connectivity: All machines are functional and connected to the network.
- Admin user: The user account that will be used to install the components has Administrator permissions on all machines on which components will be installed.
- Verify that all of the following Required Third-Party Software is installed and configured:
 - .NET Framework
 - SQL Server
 - IIS installation
 - Report Viewer
- Audio capabilities: Machines on which the SpeechMiner web application will run have functioning audio devices, and Windows Media Player version 10 or 11 installed (see System Requirements).

Installing the SpeechMiner Components

The setup wizard is used to install all SpeechMiner components. You can run it separately on each machine on which you are installing SpeechMiner components. If you are installing multiple SpeechMiner components on the same machine, you can install them at the same time. For example, if you are installing the database server and the web server on the same machine, you can select both of them in the setup wizard. In most systems, SMConfig is installed on all server machines.

Installing Using the Wizard

Installing Using the Wizard

To install components using the setup wizard:

- 1. Open the installation package.
- 2. From the **FullInstaller** folder, run SpeechMinerInstall.exe. The setup wizard opens, with the **Welcome** screen displayed.
- 3. Click Next. The License Agreement screen opens.
- 4. Select I accept the terms of the license agreement, and then click Next. The Installation Type screen opens.

Installation type Please choose the installation type			9
Analytics and Recording UI			
C Recording UI Only			
C Analytics Only			
Nullsoft Install System v2.44	< Back	Next >	Cancel

- 5. Select the installation mode:
 - Analytics and Recording UI: SpeechMiner plays back and analyzes interactions recorded with Genesys Interaction Recording.
 - **Recording UI Only**: SpeechMiner plays back the call audio for each interaction in the search results. The contents of the interactions are not processed by the speech-analytics system.
 - · Analytics Only: SpeechMiner imports interactions and their recorded call audio from any recording

system. Once the interactions and their audio is imported SpeechMiner processes the contents of each interaction.

6. Click Next. The Choose Components screen opens.

Choose Components Choose which features of SpeechMiner 8.5 you want to install.				
Check the components you wa install. Click Next to continue.	int to install and uncheck the com	ponents you don't want to		
Select components to install: Space required: 606.4MB	 ✓ Uplatform ✓ Smart ✓ Web ✓ SMConfig ✓ ULogger ✓ SMUpgrade ✓ Interaction Receiver Nuance License Database 	Description Position your mouse over a component to see its description.		
Nullsoft Install System v2.44				
	< Back	Next > Cancel		

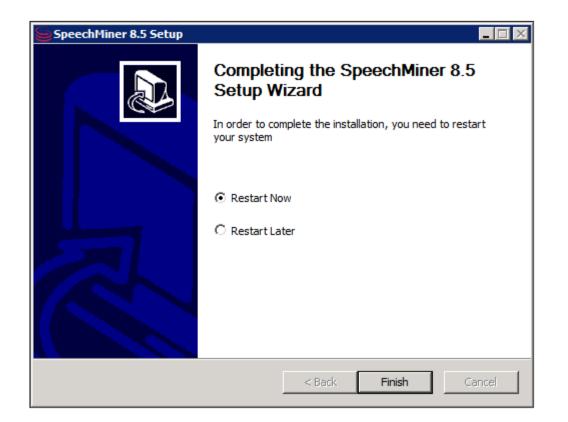
- 7. In the list of components, select the components you want to install on the machine.
- 8. Click **Next**. Which screen you see next depends on the components you selected in the previous screen.
 - If you are installing the Uplatform, see Installing the UPlatform Server.
 - If you are installing SMART, see Installing SMART.
 - If you are installing the database, see Installing the SpeechMiner Database.
 - Otherwise, the **Choose Install Location** screen opens.

Important

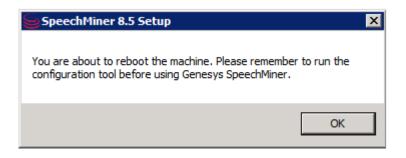
By default, 64-bit SpeechMiner is installed in the following location: C:\Program Files (x86)\Genesys\Software.

SpeechMiner 8.5 Setup
Choose Install Location Choose the folder in which to install SpeechMiner 8.5.
Setup will install SpeechMiner 8.5 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
Destination Folder C:\Program Files (x86)\Genesys\Software Browse
Space required: 358.9MB Space available: 9.9GB
Nullsoft Install System v2.44

9. Modify the default installation location if necessary, and then click **Install**. The installation process begins. When the process is completed, the following screen appears:



10. Select **Restart Now**, and then click **Finish**. A warning message appears, and reminds you to configure SpeechMiner before you open it.



11. Click ${\bf OK}.$ The server restarts.

Installing the SpeechMiner Database

Installing the SpeechMiner Database

The SpeechMiner database stores the interaction data and the results of interaction processing. It is usually installed on a dedicated machine. The following sections explain how to install the SpeechMiner database.

Setup Wizard

Running the Setup Wizard

To begin the installation of the database server, run the setup wizard as described under Installing the Components.

To install the database server:

- 1. On the database server machine, run the **Setup Wizard**, as described under Install Using the wizard.
- 2. Follow the instructions there, until the **Database Credentials** screen opens.

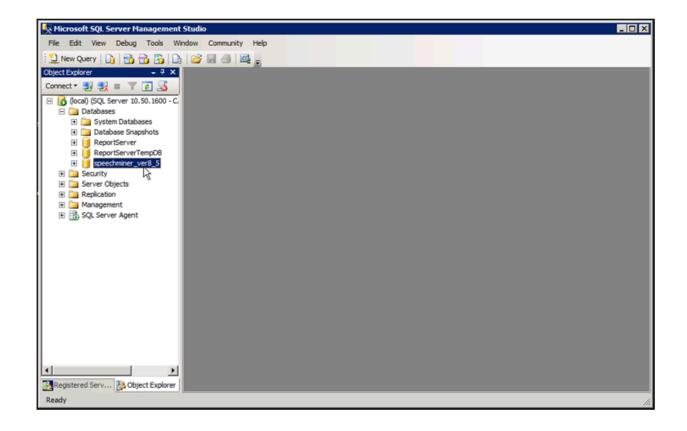
SpeechMiner 8	.5 Setup	
Database crede Please enter the	ntials credentials of the Database administrator	9
Windows Aut	henticated user	
DB Server		
DB Name	speechminer_ver8_5	
DB User		
DB Password		
Nullsoft Install Syste	m v2,44	Cancel

3. In the **Database Credentials** screen, fill in the fields as follows:

Field	Description
Windows Authenticated User	Select this option to use the Windows username and password you used to log into the machine as the DB User and DB Password. When you select this option, the DB User and DB Password become unavailable.
DB Server	Enter the name of the server on which you want to install the SpeechMiner database. If you want to install the database on an SQL Named Instance, the server name should be entered as server_name\instance_name.
DB Name	Enter the name of the database in the format speechminer_verX_Y (for example, speechminer_ver8_5).
DB User	Enter SA. (The credentials of the user name entered here will be used for the process of creating the SpeechMiner database.) Note: This field is not available

Field	Description
	when Windows Authenticated User is selected.
	Enter the DB password. Only a user with Administrator permissions can enter password credentials.
DB Password	Note: This field is not available when Windows Authenticated User is selected.

- 4. Click Next. The Choose Install Location screen opens.
- Modify the default installation location if necessary, and then click Install. The installation process begins. When the process is completed select Restart Now, and then click Finish. A warning message appears.
- 6. From the warning message, click **OK**. The server restarts.
- 7. After the database-server installation is completed, check that the speechminer_verX_Y database is present. This can be done by opening SQL Server Management Studio on the SQL server (for example, in the Start menu, under All Programs, select Microsoft SQL Server 2008 R2 > SQL Server Management Studio) and reviewing the list of databases on the server.



Manual Installation

Manually Installing the SpeechMiner Database

An alternative way to perform the database installation is to use data_ver8_5_501_sql2008.bak (an SQL backup file) deployed in **C:\Program Files (x86)\Genesys\Software\Support** during any regular install. Restore this backup on the SQL server and choose settings based on the settings in the steps above. After restoration is complete, update the database properties as follows:

- For both the Data and Log files, change Options\Recovery Mode to Simple and change the Files\ Autogrowth\File Growth parameter to 1024 MB for Data files and 256 MB for Log files.
- In addition, run the following commands to create the dbuser user:
 - On the master database: create login [dbuser] with password='dbuser', check_policy=0FF
 - On the new database: EXEC sp_change_users_login 'Auto_Fix', 'dbuser'

Important

When you manually install the SpeechMiner Database, you must enable the SQL Server Service Broker to allow purging interactions from the database.

To enable the SQL Server Service Broker:

1. Run the SP command: EXEC sp_enableServiceBroker

The SP will try to enable the service broker with ENABLE_BROKER. If it does not succeed, it will run the command with NEW_BROKER. This SP will also use the current DB name correctly.

2. If sp_enableServiceBroker does not enable the Service Broker, run the following query:

ALTER DATABASE [DB_NAME] SET ENABLE_BROKER WITH ROLLBACK IMMEDIATE

3. Run the following query to verify that SQL Server Service Broker is enabled:

SELECT is_broker_enabled FROM sys.databases WHERE database_id=DB_ID()

A value of 1 indicates that the Service Broker is enabled.

If the enable SQL Server Service Broker query fails:

- 1. Close all connections to the database.
- 2. Run the following query:

ALTER DATABASE [DB_NAME] SET ENABLE_BROKER WITH ROLLBACK IMMEDIATE

3. Run the following query to verify that SQL Server Service Broker is enabled:

SELECT is_broker_enabled FROM sys.databases WHERE
database_id=DB_ID()

To disable the SQL Server Service Broker:

1. Run the following query:

ALTER DATABASE [DB_NAME] SET DISABLE_BROKER WITH ROLLBACK IMMEDIATE

Storage Partitions

Creating the Storage Partitions

If the database server is an Enterprise Edition, you must create the storage partitions on the database. To do this, after you install the database server, run the following SQL query on the SpeechMiner database:

EXEC sp_create_DB_storage_partitions

Important

For information about how to open SQL Server Management Studio and run a query, see Setting the Maximum Memory Usage.

Maintenance Jobs

Configuring the Database Maintenance Jobs

When the database is installed, a database maintenance job (SpeechMiner_Maintenance_job - <database>) is automatically created. You should schedule it to run daily or weekly at a time when call volume is expected to be low. In addition to scheduling the job to run, you can also modify it to suit your requirements.

By default, the maintenance job does the following:

- · Shuts down the SpeechMiner UPlatform service
- · Rebuilds fragmented database table indexes
- Restarts the system
- Purges logs of messages that are older than one month
- Purges logs of user events that are older than one year
- Purges the report agent filter by removing entries that are older than 30 days and creating a new list of agents

To open the maintenance-job script:

 From SQL Server Management Studio, under Databases > SQL Server Agent > Jobs, doubleclick the job.

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File Edit View Project Debug Tools Window Community Help	
🗄 🌺 New Query 📭 📸 📸 📴 📑 🔛 🥔 ன 🖉 🥫	
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🕑 📄 System Databases	
🖲 🗀 Database Snapshots	
ReportServer	
ReportServerTempDB	
E 🚞 Security	
Server Objects	
Replication	
Management	
E 🚯 SQL Server Agent	
E 🔁 Jobs	
SpeechMiner_Maintenance_job - speechminer_ver8_5	
syspolicy_purge_history	
updateUntilYesterdayMaxChannels - speechminer_ver8_5	
C Job Activity Monitor	
Alerts	
Operators	
Proxies	
Registered Servers 🐉 Object Explorer	
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📧 Job Properties - SpeechMin	er_Maintenance_job - speech	miner_ver8_5	
Select a page	🔄 Script 👻 📑 Help		
General Steps Schedules	<u>N</u> ame:	SpeechMiner_Maintenance_job - speechminer_ver8_5	
Alerts	<u>O</u> wner:	dbuser	
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Connection: CattleBC PL schwatz	Source:		
Wew connection properties	Created:	1/30/2014 5:03:18 PM	
Progress	Last modified:	1/30/2014 5:03:18 PM	
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To an a	View Job History		
		ОК	Cancel

The job may optionally include the updateUntilYesterdayMaxChannels and sp_agentFilterCleanByDays jobs. In addition, any procedure that rebuilds indexes and purges old calls should be added as a step in the maintenance job.

Important

If information about the agents and their hierarchy is not available through the UConnector, you can include the sp_createAgentsFromPartitions job in this job.

Changing the Job Owner

To enter change the job owner:

- 1. Open the SQL Management Tool.
- 2. Alter the Store procedure called sp_createMaintenanceJob.
- 3. In the following procedure text replace dbuser with an existing database user.

@owner_login_name=N'dbuser'

4. Execute the updated Store procedure to create the correct job.

SQL CLR

Deploying the SQL CLR

After you install the database, you should deploy the SQL Common Language Runtime (CLR) assembly on the SQL server. To do this, on the Master, you must set the permissions of the XmlSerializers.dll and enable xp_cmdshell and CLR integration, as explained below.

Important

In order to set the permissions, the user running the SQL services must have modify permissions on sqlclr.XmlSerializers.dll.

To deploy the SQL CLR:

- 1. On the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2** > **SQL Server Management Studio**.)
- 2. On the left side of the window, right-click the SQL server and then select **New Query**. A blank text area opens on the right side of the window.
- 3. Copy the following commands and paste them into the text area:

```
use [master]
CREATE ASYMMETRIC KEY SQLCLRTestKey FROM EXECUTABLE FILE =
 '\\<Machine_Name>\c$\Program Files (x86)\Genesys\Software\Support\
sqlclr.XmlSerializers.dll'
G0
use [master]
CREATE LOGIN SQLCLRTestLogin FROM ASYMMETRIC KEY SQLCLRTestKey
G0
use [master]
```

GRANT EXTERNAL ACCESS ASSEMBLY TO SQLCLRTestLogin

4. In the text area, change <Machine_Name> to the name of the machine on which the SpeechMiner database was installed.

Microsoft SQL Server Managemen	t Studio
😫 New Query 🛐 📸 📸 🕻	Debug Tools Window Community Help Debug Tools Window Community Help Execute 》 =
Registered Ser	▼
Ready	Ln 3 Col 13 Ch 13 INS

5. Above the text area, select **Execute**. The commands are executed. When the process is completed successfully, **Query executed successfully** appears at the bottom of the window.

Important

If you get an error message that says, "The certificate, asymmetric key, or private key file does not exist or has invalid format," try changing the path to point at the local drive—for example, C:\Program Files (x86)\Genesys\Software\ Support\sqlclr.XmlSerializers.dll.

6. Open another **New Query**.

7. Copy the following commands and paste them into the **New Query** text area:

```
EXEC sp_configure 'show advanced options', 1
GO
RECONFIGURE
GO
EXEC sp_configure 'clr_enabled', 1
GO
RECONFIGURE
GO
```

8. Above the text area, select **Execute**. The commands are executed. When the process is completed

successfully, xp_cmdshell and CLR integration are enabled, and **Query executed successfully** appears at the bottom of the window.

- 9. Open another New Query.
- 10. Browse to C:\Program Files (x86)\Genesys\Software\Support.
- 11. Run the SQLCLR.sql script.

The clr assembly is created with EXTERNAL_ACCESS. To create an EXTERNAL_ACCESS or UNSAFE assembly in SQL Server refer to: http://msdn.microsoft.com/en-us/library/ms345106.aspx

Recovery Model

Configuring the Recovery Model

In order to save disk space, it is recommended to set the recovery model of the SpeechMiner database to Simple.

Important

If you use Log Shipping, set the recovery model to a full or bulklogged recovery model. Ensure that logs are not written to the same hard drive as the database files.

To set the recovery model to Simple:

- 1. On the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)
- 2. On the left side of the window, right-click the database and then select **Properties**. The **Database Properties** window opens.
- 3. On the left side of the window, select **Options**.
- 4. On the right side of the screen, under **Recovery model**, select **Simple**.

Database Properties - spee Select a page	Script - Market			
A General	T Scribt • 11 Help			
General Files Filegroups	<u>Collation:</u>	SQL_Latin	1_General_CP1_CI_AS	•
Propertions 200	Recovery model:	Simple		-
Change Tracking			- 2005 (00)	
Permissions	Compatibility level:	SQL Serve	r 2005 (90)	
Extended Properties	Other options:			
Airroring Transaction Log Shipping				
	Automatic			<u>م</u>
	Auto Close		False	
	Auto Create Statistics		True	
	Auto Shrink		False	
	Auto Update Statistics		True	
	Auto Update Statistics Asynchronously		False	
	Cursor			
	Close Cursor on Commit Enable	d	False	
	Default Cursor		GLOBAL	
	Miscellaneous			
	ANSI NULL Default		False	
onnection	ANSI NULLS Enabled		False	
onnection	ANSI Padding Enabled		False	
Server:	ANSI Warnings Enabled		False	
ocal)	Arithmetic Abort Enabled		False	
Connection:	Concatenate Null Yields Null		False	
AMELOT\Lschwartz	Cross-database Ownership Cha	aining Enabled	False	
B. Manual and the second in a	Date Correlation Optimization Enabled		False	
View connection properties	Numeric Round-Abort		False	
	Parameterization		Simple	-
Ready	ANSI NULL Default		<u>.</u>	
			ОК	Cancel

5. Click **OK**. The setting is implemented, and the window closes.

Autogrowth

Configuring the Autogrowth

Important

It is recommended that you enable instant file initialization. For details refer to: http://msdn.microsoft.com/en-us/library/ ms175935.aspxshould

To modify the Autogrowth settings:

- 1. On the SQL server, open the **SQL Server Management Studio**. (For example, in the **Start** menu, under **All Programs**, select **Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.)
- 2. On the left side of the window, right-click the database and then select **Properties**. The **Database Properties** window opens.
- 3. On the left side of the window, select **Files**.

ielect a page	🔄 Script 👻 📑 He	elp				
🚰 General 🚰 Files						
P Filegroups	Database <u>n</u> ame:		speechmine			
P Options Change Tracking	<u>O</u> wner:		CARELOT	Vischwaria		
Permissions	Use full-text in	dexing				
Extended Properties						
Mirroring	Database files:					
Transaction Log Shipping	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	Path
	data_ver8_5	Rows	PRIMARY	276	By 1 MB, unrestricted growth	C:\Program Files\
	data_ver8_5	Log	Not Applicable	320	By 1 MB, restricted growth to 209	hS C:\Program Files\
erver: ocal)						
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- 4. On the right side of the screen select **Autogrowth** in the **Data File** row. The **Change Autogrowth** dialog box opens.

E Change Autogrowth for data_v	er8_5 🗙
Enable Autogrowth	
File Growth	
O In <u>P</u> ercent	10 🚊
In Megabytes	1
Maximum File Size	
O Restricted File Growth (MB)	100 🔶
Inrestricted File Growth	
	OK Cancel

- 5. Verify that **Enable Autogrowth** is selected.
- 6. Under **File Growth**, select **Megabytes**, and then, in the text box on the right enter **1024**.
- 7. Click **OK**. The setting is changed in the **Properties** window.
- 8. On the right side of the screen select **Autogrowth** in the **Log File** row. The **Change Autogrowth** dialog box opens.
- 9. Verify that **Enable Autogrowth** is selected.
- 10. Under File Growth, select Megabytes, and then, in the text box on the right enter 256.
- 11. Click **OK**. The setting is changed in the **Properties** window.
- 12. In the **Properties** window, click **OK**. The setting is implemented, and the window closes.

Installing the SpeechMiner Web

Installing the SpeechMiner Web

The SpeechMiner Web runs the interface to view and work with the interaction data after it has been processed. You can install the web server on one or more machines in your system, as required. To install the web server, run the Setup Wizard, as described under Install Using the wizard.

Important

Once SpeechMiner is installed and configured, users can open the web-based interfaces from their browsers at **http://<webserver_name>/speechminer** (where <web server> is the name of a machine on which the SpeechMiner is installed.

The SpeechMiner application pool uses v4.0 of the .Net framework. After you install the SpeechMiner web server on a machine verify that the SpeechMiner Application Pool is configured with:

- .Net Framework V4.0
- SMUSER account

Configure the SpeechMiner Application Pool with .Net Framework V4.0

- 1. In the Start menu, select Administrative Tools > Internet Information Server (IIS) Manager. The Internet Information Server (IIS) Manager opens.
- 2. In the left pane, expand the server name, and select **Application Pools**. The currently defined application pools are listed in the middle pane.



Application Pools

This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications.

Filter:	• 👬 🔄 •	Show <u>A</u> ll	Group by: No Groupin	ig 🔹	
Name 🔺	Stat	us .NET	Frame Managed Pip	eli Identity	Application
🕼 ASP.NET v4.0	Star	ted v4.0	Integrated	ApplicationPoolIden.	0
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Classic .NET AppPool	Star	ted v2.0	Classic	ApplicationPoolIden.	0
DefaultAppPool	Star	ted v2.0	Integrated	ApplicationPoolIden.	3
interactionreceiver	Star	ted v4.0	Integrated	ApplicationPoolIden.	
speechminer	Star	ted v4.0	Integrated	ApplicationPoolIden.	2
•					•

- 3. Under **.NET Framework Version**, check the version number listed for the SpeechMiner application pool. If the number is 4.0, you do not have to make any changes. If it is not, double-click the version number. The **Edit Application Pool** dialog box opens.
- 4. Under .NET Framework version, select v4.0.

Edit Application Pool
Name:
DefaultAppPool
.NET Framework version:
NET Framework v4.0.30319
Managed pipeline mode: Integrated
Start application pool immediately
OK Cancel

5. Click **OK**.

Installing the Interaction Receiver

Installing the Interaction Receiver

The SpeechMiner Interaction Receiver runs the service that receives the calls (audio and metadata) from the Genesys Interaction Recording system. To install the Interaction Receiver, run the Setup Wizard, as described under Installing Using the Wizard.

To allow Genesys Interaction Recording (GIR) to send a long audio file to SpeechMiner, configure the Request Filtering Feature in the IIS server, as explained in http://www.iis.net/configreference/system.webserver/security/requestfiltering/requestlimits, and set the Maximum allowed content length to 345600000.

The Interaction Receiver application pool uses v4.0 of the .Net framework, and not a later version. After you install the SpeechMiner web server on a machine verify that the Interaction Receiver Application Pool is configured with:

- .Net Framework V4.0
- SMUSER account

Configure the SpeechMiner Application Pool with .Net Framework V4.0

- 1. In the Start menu, select Administrative Tools > Internet Information Server (IIS) Manager. The Internet Information Server (IIS) Manager opens.
- 2. In the left pane, expand the server name, and select **Application Pools**. The currently defined application pools are listed in the middle pane.



Application Pools

This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications.

	🝷 👬 💷 👻 🔂 S	uow En Laroab	by: No Grouping	•	
Name 🔺	Status	.NET Frame	. Managed Pipeli	Identity	Application
ASP.NET v4.0	Started	v4.0	Integrated	ApplicationPoolIden	0
ASP.NET v4.0 Classic	Started	v4.0	Classic	ApplicationPoolIden	0
Classic .NET AppPool	Started	v2.0	Classic	ApplicationPoolIden	0
DefaultAppPool	Started	v2.0	Integrated	ApplicationPoolIden	3
interactionreceiver	Started	v4.0	Integrated	ApplicationPoolIden	1
speechminer	Started	v4.0	Integrated	ApplicationPoolIden	2
4					►

- 3. Under **.NET Framework Version**, check the version number listed for the Interaction Receiver application pool. If the number is 4.0, you do not have to make any changes. If it is not, double-click the version number. The **Edit Application Pool** dialog box opens.
- 4. Under .NET Framework version, select v4.0.

Edit Application Pool	? ×
Name:	
DefaultAppPool	
.NET Framework version:	
.NET Framework v4.0.30319	•
Managed pipeline mode: Integrated	
Start application pool immediately	
OK Cancel	

5. Click **OK**.

Installing the UPlatform Server

Installing the UPlatform Server

The UPlatform Server manages all the processing tasks of SpeechMiner—fetching, recognition, categorization, exploration, compression, and indexing. This section explains how to install the SpeechMiner UPlatform Server. It should be installed on all machines on which SpeechMiner processing tasks take place. You can install the UPlatform server on one or more machines in your system, as required.

Important

- After you have installed the UPlatform server and created the required folders, it is recommended to turn off error reporting on the server. For additional information, see http://technet.microsoft.com/en-us/library/cc754364.aspx.
- Regional settings in the Recognition server should be English US or the decimal point separator must be "." and the group separator must be ",", otherwise the recognition will not work well.

Procedure

- 1. To begin the installation of the Uplatform server, run the setup wizard as described under Installing Using the Wizard on the Uplatform server machine.
- 2. Follow the instructions, until the **Choose Components** screen opens.
- 3. Select the following components:
 - Uplatform
 - ULogger
 - Interaction Receiver
 - Nuance License
 - SMConfig
- 4. Click **Next**.

Important

- If you included **Nuance License** in the components, the **Language Selection** screen opens. Skip the next step.
- If you did not include **Nuance License**, the **Nuance License** screen opens.

- 5. In the **Nuance License** screen, enter the names of one or more Nuance license servers you want to use, as explained in the screen, and then click **Next**.
- 6. In the Language Selection screen, select the languages you want to install.
- 7. Click Next. The Choose Install Location screen opens.
- 8. Modify the default installation location if necessary, and then click **Install**. The installation process begins. When the process is completed select **Restart Now**, and then click **Finish**. A warning message appears.
- 9. In the warning message, click **OK**. The server restarts.

Installing SMART

Installing SMART

The SpeechMiner Administration Tool (SMART) enables users to configure the Speech Analytics system to search interactions for specific topics and other characteristics. SMART should be installed on the work station of each user.

To install SMART on a user's computer:

- 1. On the Uplatform server machine, run the Setup Wizard, as described under Installing Using the Wizard.
- 2. Follow the instructions until the **Choose Components** screen opens.
- 3. Select the following components:
 - Smart
 - ULogger
 - Nuance Licence
 - SMConfig
- 4. Click Next.
 - If you included **Nuance License** in the components you selected, the **Language Selection** screen opens. Skip the next step.
 - If you did not include Nuance License, the Nuance License screen opens.
- 5. In the **Nuance License** screen, enter the names of one or more Nuance license servers you want to us, then click **Next**.

SpeechMiner 8.5 Setup	
Nuance License Please enter nuance license servers as a list of port@server combinations separated by semi-colon	9
Nullsoft Install System v2.44	
< Back Next > C	Cancel

6. In the **Language Selection** screen, select the languages you want to install.

SpeechMiner 8.5 Setup	
Languages Selection Please select the languages you would like to install	9
American English	
Brazilian Portuguese	
Canadian French	
Catalan	
Australian English	
🔲 UK English	
🗖 European French	
German	
🗖 Italian	
European Spanish	
🗖 Latin American Spanish	
Nullsoft Install System v2.44	
< Back Next >	Cancel

- 7. Click Next. The Choose Install Location screen opens.
- 8. Modify the default installation location if necessary, then click **Install**. The installation process begins. When the process is completed select **Restart Now**, then click **Finish**. A warning message appears.
- 9. In the warning message, click **OK**. The server restarts.

Required Folders

Creating the Required Folders

After you install the SpeechMiner components, manually create the shared folders as listed in the table. These folders will be used by SpeechMiner to store the audio, index, and backup files used by the system.

Important

Ensure that enough storage space is available to manually create the folders. By default, the minimum space required for each folder is 15GB. This minimum value is set in the minimumFolderSpaceMB field in the SpeechMiner database monitorTbl table. The recommended default value for free space is 25GB. This value is configured in the desiredFolderspaceMB field. If the free space is less than 25GB, the system will show a warning to let you know that you are reaching the recommended minimum value for the minimumFolderSpaceMB field.

All SpeechMiner machines should have access to these shared folders, and they should be shared with all groups and users that require access to them. It is recommended to create the folders on the same LAN as the SpeechMiner system components.

The folder names listed below are recommended, for convenience, but you can actually use any names you choose. In addition, you can create multiple folders for most of the folder types, as explained below. For information about configuring SpeechMiner to use these folders, see Sites & Machines.

Important

When you configure the shares, make sure to specifically give write permissions to the user installing SpeechMiner and to the system user (SMUSER), both under *Sharing* and under *Security*.

Folder Name	Description	Quantity
Input	Folder in which interactions data and metadata will be placed by Uconnector when it retrieves them from the recording system; fetchers collect the data from input folders, prepare it for processing by SpeechMiner, and then place it into store folders.	One folder for each fetcher task; if there are multiple recording systems, or multiple storage media used for storing the unprocessed data, a fetcher task must be created for each data source and for each input folder. For information about deciding how many fetchers to create, see Configuring Machines and Tasks .
Interaction Receiver Input	Folder in which the audio files that are received from the Genesys Interaction Recording solution will be placed, and later processed by the Interaction Receiver.	One for the entire system.

Folder Name	Description	Quantity
	Note: This is a different folder than the Input folder which is used by fetchers.	
Store	Folder in which interactions will be placed by fetchers to await processing by SpeechMiner.	The system can have multiple store folders—for example, if there are multiple storage media used for storing the processed data, you can create a folder on each of them.
Filtered	Folder in which interactions with non-existant or inactive Programs will be placed.	One for each site in the system.
Grammar	The "package" folder, in which the rules for processing voice interactions, including those defined in SMART, are stored.	One for the entire system. Note: If you want to have more than one copy of the folder, you can create additional folders and configure SpeechMiner to use them. If you do this, SpeechMiner will save the same content in each of the folders, so that you will have backups.
Index	Folder in which the system will store an index of calls, metadata, and events, so that they can be found quickly during searches.	One for the entire system.
Backup	Folder in which SpeechMiner will store backups of SMART definition sets (Program, Topic, and Category definitions).	One for the entire system. Note: If you want to have more than one copy of the folder, you can create additional folders and configure SpeechMiner to use them. If you do this,

Folder Name	Description	Quantity
		SpeechMiner will save the same content in each of the folders, so that you will have backups.

Uninstalling SpeechMiner

SpeechMiner components can be installed on one machine or numerous machines. If SpeechMiner components are installed on more than one machine, you must perform the following procedure on each machine.

Procedure

1. Double click **uninst.exe** in the C:\Program Files (x86)\Genesys\software.

The SpeechMiner component is uninstalled.

Important

Uninstall does not remove **Nuance** data files from the Recognition computers. Delete the **Nuance Recognizer** folder from C:\Program Files (x86)\Nuance if you do not plan on using this machine for recognition. Nuance data files are only located in machines on which UPlatform and SMART were installed

SpeechMiner Silent Installation

A SpeechMiner Silent installation is a method of installing SpeechMiner without user interaction. That is, it is not necessary for the user to direct the installation process.

The SpeechMiner Silent installation bypasses all levels of user interaction by reading instructions that are coded within a answers.ini response file.

The answers.ini file contains repolies to the prompts that the installer would get from the users input in a Wizard installation.

Before you begin a Silent installation, consider the following:

- The Silent installer ignores window errors (for example, "could not open file"). All errors will appear in the installation log located in the installation path.
- All of the options available in the Wizard installation can be configured in the answers.ini file. If the installer cannot find this file an error will appear in the log file and SpeechMiner will not be installed.
- The answers.ini file is divided into sections. These sections represent the Wizard installation pages.
- The Silent uninstall creates a log file in a directory that is configured by the user. This log contains errors and information about the unistall.

To perform a SpeechMiner silent installation:

- 1. Prepare the **answers.ini** file.
 - a. Open a text file and save it with the name **answers.ini**.
 - b. Enter the following code to determine the SpeechMiner deployment you want to install (for example, an Analytics & Recording deployment):

[Installation Mode]

Mode=Analytics and Recording UI You can also install a **Recording UI** Only or a **Analytics Only** deployment.

c. Enter the following list and select the components that should be installed. Only components that have the value **on** will be installed.

```
[SMComponents]
Uplatform=on
Smart=on
Web=on
SMConfig=on
ULogger=on
SMUpgrade=on
Nuance License=off
Database=off
```

d. Enter the following language list to select the language you would like to install.

Only languages with the value **on** will be displayed.

- [Languages]
- Arabic World wide=off Catalan - Spain=off English - Australia=off English - South Africa=off English - UK=off English - USA=on French - Canada=off French - France=off German - Germany=off Italian - Italy=off Japanese - Japan=off Korean - Korea=off Mandarin - China=off Portuguese - Brazil=off Spanish - Spain=off Spanish - USA=off
- e. Enter the following code to determine the Nuance License Server. If the Nuance License component is on, the value of the server should be empty (that is, only enter server=)

[Nuance License Server] server=27000@ServerName

f. Enter the following database credentials list. If the database component Windows Authenticated User is set to off, the value of each row (that is, field) under the component should be empty. If the database component Windows Authenticated User is set to on, only the values in the last two rows should be empty.

[Database]

Windows Authenticated User=off DB Server=<server> DB Name=<Name> DB User=<User> DB Password=<Password>

g. Enter the following general information.

If the **reboot value** is true, the computer will be automatically restarted after the installation. The **uninstall log path** must exist. The path for the uninstall log is the value of uninstall log path.

If this value is empty, the path will be C:\Temp, and the user should verify that C:\temp exists. The uninstall log name is the value of uninstall log name. If this value is empty, the name will be SMuninstLog.txt.

[General] reboot=false uninstall log path=C:\Temp uninstall log name=SMuninstLog.txt

h. Save the **answers.ini** file.

9. Open the **Command Line**.

a. Run the following command in the folder that contains **SpeechMinerInstall.exe**:

start "SpeechMinerInstall" /wait "SpeechMinerInstall.exe" /S

b. If the **answers.ini** file is not in the same folder as SpeechMinerInstall.exe, add the following to the end of the command:

/ANSWERS_PATH=<answers file path>

c. If the installation path is not C:\Program Files(x86)\Genesys\Software for a 64 bit machine or in C:\Program Files\Genesys\Software for a 32 bit machine, add the following to the end of the command.

The installation path must be the last parameter used in the command line and it should not contain quotes (even if the path contains spaces).

/D=<installation path>

SpeechMiner is installed successfully.

Important

To uninstall SpeechMiner in Silent mode, run the following command in the C folder: start "uninst" /wait "<uninst.exe path>\uninst.exe" /S.

Configuring SpeechMiner

This topic explains how to configure SpeechMiner after it is installed. SMConfig is used to perform the majority of the SpeechMiner configuration. For information about installing SMConfig, see Installing the Components.

SMConfig is a Windows application that can be installed on any machine on your network. Once installed it can be used to configure the entire SpeechMiner system.

The following sections describe the steps that you must perform before you can begin working with SMConfig:

Permissions

Required Permissions

- The user account from which SMConfig is opened must have read, write, and modify permissions on the local installation folder and files.
- For most of the configuration changes you can perform using SMConfig, you will need Administrator
 privileges on the current machine or on other machines. For each configuration task described below,
 the required permissions are listed. If you are running SMConfig as a non-administrator user, and errors
 are generated during the configuration process, make sure that you have the right permissions for the
 task.
- The web application user used to connect to the database must have db_datareader and db_datawriter roles.
- In Windows Vista and later versions of Windows, if User Access Control is enabled, SMConfig will automatically require you to run it with administrator privileges. If User Access Control is disabled, it is recommended to manually run SMConfig with administrator privileges. To do this, right-click the SMConfig icon, and then select Run as administrator.

For more information on the permissions required for the other SpeechMiner components, see Configuring Permissions.

Database Connection

Encrypting the Connection to the Database

The connection between SMConfig and the database can be encrypted to ensure that confidential data cannot be intercepted and viewed by unauthorized people. This option is configured by the system administrator on the SQL database server. Three encryption settings are defined there:

- Always use encryption
- Never use encryption
- · Use encryption when the user requests it

If the latter setting is implemented in your system, you can choose to use an encrypted connection when you log into SMConfig. If the database server is configured to always encrypt or not to encrypt at all, you cannot change this option when you log into SMConfig, and selecting one of the options has no affect.

Starting SMConfig

Starting SMConfig

SMConfig can be run on any machine in your system in which it is installed. During installation, an SMConfig icon is placed on the desktop of the machine.

You can log into SMConfig in one of the following ways:

- Using a SpeechMiner user account
- Using the Windows account you used to log onto the PC
- Using a Genesys user account and connecting to a Genesys configuration server for confirmation

Important

Genesys Authentication is only implemented if SpeechMiner is deployed with GIR.

To open SMConfig:



1. On the desktop of the computer, double-click the **SMConfig - Login** dialog box appears.

/ ^V SMConfig - Login 🛛 🗙
 SpeechMiner Authentication Windows Authentication Genesys Authentication
Build: 7055
Username: administrator
DB Settings:
OK Cancel

- 2. Select the type of user account you want to use to log into SpeechMiner:
 - **SpeechMiner Authentication:** Use a username and password that are managed by SpeechMiner.
 - Windows Authentication: Use the username and password you used to log into Windows.
 - Genesys Authentication: Use a Genesys username and password.

Important

Genesys authentication users can only be set in Genesys Administration Extension (GAX).

3. In the **Username** and **Password** fields, type your username and password.

Important

If you are logging in using Windows Authentication, your username and password are inserted automatically, and the username is in the form domain\username.

4. If this is the first time you are opening SMConfig on this computer, or if you want to change the existing database settings, click the **DB Settings** arrow. The **Login** dialog box expands and displays the

database settings.

Important

If you do not need to set or modify the database settings, skip this and the next step.

/ ¹ SMConfig - Login 🗙			
 SpeechMiner Authentication Windows Authentication Genesys Authentication Build: 7055 Username: administrator Password: DB Settings: 	DB Properties SQL Server Authentication Windows Authentication Server: demo Port: 51606 Username: sa Password: Database: ibby_instal Encrypt connection		
OK Cancel			

5. Fill in the fields as follows:

Field	Description
SQL Server Authentication / Windows Authentication	Select SQL Server Authentication if the username and password for accessing the database are managed on the SQL server. SelectWindows Authentication if you log into the database using the same username and password you used to log into Windows. Note: If you are not sure which option to choose, consult your system administrator.
Server	The name of the database server

Field	Description
	Note: If the database is a named instance on the server, enter both the server name and the instance name, in the format server_name\ instance_name.
Port	The port to use to connect to the database server Note: This should normally be left as <default>, even if the database is a named instance.</default>
	The username to use to connect to the database
Username	Note: This field is not available when Windows Authentication is selected. In this case, the username is automatically taken from the username used to log into Windows.
Password	The password to use to connect to the database Note: This field is not available when Windows Authentication is selected. In this case, the password is automatically taken from the username used to log into Windows.
Database	The name of the database
Encrypt connection	If encrypting the connection to the database is optional in your system, select this option to activate encryption. Note: If encryption is always turned on in your system, selecting or clearing this option will have no effect. If encryption is always turned off in your system, selecting this option will prevent SMConfig from connecting to the database server

Field	Description
	and you will not be able to log in. In this case, an error message stating, Could not connect to database. Please check database settings, will appear when you click OK .

6. If you have chosen to log in using Genesys authentication, an additional option, Configuration Server Settings, appears below DB Settings. If this is either the first time you are opening SMConfig on this computer, or you want to change the existing Genesys configuration server settings, click the Configuration Server Settings arrow. The Login dialog box expands and displays the configuration server settings.

Important

If you do not need to set or modify the Genesys authentication settings, skip this and the next step.

/ ⁹ SMConfig - Login 🛛			
 SpeechMiner Authentication Windows Authentication Genesys Authentication 	Configuration Server Properties		
Build: 7055			
Username:			
Password:			
DB Settings:			
Configuration Server Settings:			
OK Cancel	,		

- 7. Enter the name of the server and the port to use to verify the user information, as follows:
 - Server—Enter the name of the configuration server.

• Port—The port to use to connect to the configuration server in order to verify the user information.

After setting or updating the configuration server host and port in SMConfig (either in the Login window, or in the Sites and Machines panel), the IIS should be restarted.

8. Click **OK**. You are logged into the system, and the **SpeechMiner Configuration Tool** (SMConfig) window opens with the first screen, **Sites and Machines**, displayed.

SpeechMiner Confi	iguration Tool - 8.5	. 🗆 🗡
Sites & Machines	Sites & Machines	
	Validate input, filtered, store and installation folders	
License	Machines & Tasks	
Ser <u>v</u> ices	Name Tasks	
Audio	Package Folders	
	Validate Report Server	_
Index	Report Server	
Tinex	Server Name: protocol: http: mail.example.com Protocol: http: Alaste Email dummy@nonlace.com	
	Protocol: http: Alerts Email: dummy@noplace.com	
	Virtual Folder: ReportServer	
	Configuration Server Select Languages	
	Port: 2020	ave

The SMConfig interface contains panels (**Sites and Machines**, **Reports**, etc.) in which various categories of configuration settings can be accessed.

To open a panel:

• On the left side of the window, select the icon of the panel. The panel opens on the right side of the window.

Saving Changes

Saving the Changes in SMConfig

Changes you make in one panel of SMConfig are saved temporarily if you open a different panel. Nonetheless, you must click **Save** in each panel to save the settings in that panel.

After you click **Save**, before the settings are actually saved, some settings go through a validation process. Validation ensures that the locations specified for folders and files exist and can be accessed, and checks that certain important parameters are configured properly. Certain key settings are always validated when Save is selected; you can choose to have the system validate certain others if you wish.

During the validation process, a Progress window is displayed. The window lists the stages of the validation process as they are completed, with an icon indicating the status of each stage.

Icon	Description
\checkmark	Success: Validation of the stage was successful.
<u>^</u>	Warning: Validation of the stage was successful, but some problematic issues were detected.
8	Failure: Validation of the stage failed, because of the problems indicated. No changes to the configuration were saved.

When the process is complete, the **Close** button at the bottom of the window becomes active. If validation was successful, the last line of the log says **Done**. If the **Progress** window contains any

stages that failed (indicated by ¹), the entire save process is cancelled. The following screenshots depict examples of each status:

Progress	
Messages	
√ validating site 1 (Detroit)	
✓ Done.	
	<u> </u>
	<u> </u>
Close	li.

Pr	ogress		
		-	
	Messages		
	√ validating site 1 (Detroit)		
	A Failed to access the report server Invalid URI: The hostname could not be parsed.		
	The new package folder "\\libbyinst\c\$\data\grammars\' could not be found. It was added to the system		
	🔥 Notify web on machine \\LIBBYINST failed. If this is the first time the system is being configured please ig		
	√ Done.		
	A	1	
		1	
		1	
	Close		
		//	

Progress
Messages
√ validating site 1 (Detroit)
✓ validating site 2 (Vancouver)
S Filtered folder is missing for site Vancouver
There should be at least one store folder for site Vancouver
Computer list is empty for site Vancouver
A Failed to access the report server Invalid URI: The hostname could not be parsed.
Qose

To see details about a warning or failure:

• In the Progress window, select the item. Details are displayed at the bottom of the window.

Progress	
Messages	
√ validating site 1 (New York)	
Notify web on machine \\LIBBYINST failed. If this is the first time the system is being configured pleas	e ia
✓ Done.	
Notify web on machine \\LIBBYINST failed. If this is the first time the system is being configured please	
ignore this warning.	Ê
Web service URL: http:////LIBBYINST:80/speechminer/webServices/notification.asmx	
	~
Close	

After the configuration changes are successfully saved, a **Restart Services** message appears.



Select **Yes** to restart all of the services, or **No** if you prefer to restart them later (either after you make additional configuration changes, or manually from the **Services** panel.)

Using SMConfig

This section describes how to use SMConfig to configure the Enterprise.

Using the SMConfig to Configure SpeechMiner

The section describes the SMConfig panels.

Important

When you first configure your system:

- 1. Update the SMConfig Licenses Panel.
- 2. Save your changes and exit.
- 3. Open SMConfig to configure additional panels.

Sites & Machines

The first panel of the **SMConfig** application, **Sites & Machines**, is used to configure the layout of the system as well as some other system-wide parameters.

This tool enables you to configure sites, machines and tasks, and system index searches.

Export Sites & Machines	Sites & Machines	
Reports	Site Site Name: default	Filtered Dir: \computer\filter Image: Store Folders Image: Store Folders Image: Store Folders Image: Store Folders
	Validate input, filtered, store and installation folders	Cross site processing allowed Prefer compressed remote audio
License License Services	Name Tasks TLV Web Server Interaction Receiver Index(1) Rec(1) Fetcher(1) RecManager(1) Mon
Audio	Package Folders Image: Computer Grammars	Backup Folders
Q. Index	Configuration Servers	Validate Package, Backup and Index Folders
Recording		Email Server: mail.example.com Alerts Email: dummy@noplace.com Index Folder: \\computer\index Default Workgroup: /Default Workgroup
		Default Workgroup: //Default Workgroup Default Language: English - USA Select Languages
		Save

Configuring Sites

A *site* is a single geographical location in which SpeechMiner servers are installed. One SpeechMiner system, which has one database, can have a number of sites. All the sites configured in the **Site** section of the **Sites & Machines** panel are locations that connect to the SpeechMiner database. If your SpeechMiner is set up in more than one location, configuring each location as a site helps to minimize the bandwidth needed for call processing.

Every SpeechMiner system has at least one site. The first site is created automatically, and is initially called "default." Immediately after SpeechMiner is installed, the "default" site is automatically configured to include all the servers in the local network. You can change the name of the default site, and add sites, as required. If you create new sites, you can move servers that are listed under the default site to other sites.

Permissions

Required Permissions

Validation of the input, filtered, store, and installation folders can only be performed if the user account used to log into SMConfig has administrator permissions on the machine that is being configured. This is because SMConfig must use the \$ share to check that the installation folder exists.

Default Site

Configuring the Default Site

Some of the settings in the **Sites & Machines** panel are configured per site, and others are configured for the entire system. This section explains how to configure the default site by configuring the site and system settings defined in the **Sites & Machines** panel.

After you configure the settings, and click Save to save them, SMConfig automatically validates the key folders you specified by checking that they exist and are configured with the required permissions. Validation is always performed on the items listed under Machines and Tasks. Validation of other settings is optional, as indicated below. For additional information, see Saving Changes.

To configure the default site:

1. In the **Sites & Machines** panel, fill in the fields as follows:

Field	Description	
Site Name	The name of the site. Initially, the site is called "default." Modify this field to change the name.	
Filtered Dir	Enter the location of the folder called filtered that you created (see Creating the Required Folders). For example, the required path format is \\computer\data\input.	
Input Folders	Click to add a line to the list. Then, modify the line to give the location of the input folder you created (see Creating the Required Folders). If you will be using multiple input folders for this site, repeat this procedure to add additional lines to the list, as necessary. For example, the required path format is \\computer\data\input.	
Store Folders	Click to add a line to the list. Then, modify the line to give the location of the store folder you created (see Creating the Required Folders). If you will be using multiple store folders for this site, repeat this procedure to add additional lines to the list, as necessary.	
Validate input, filtered, store, and installation folders	Select this option if you want SMConfig to validate the input, filtered, store, and installation folders after you click Save (see Saving Changes).	
Cross site processing allowed	If your system will have more than one site, select this option to enable processing of interactions from other sites at this site. When this option is selected, the Recognizers at this site will give priority to processing local files, but no local files need to be processed, they will process calls from remote locations. Selecting this option can improve the overall performance of the system, but it does mean that audio files will be transmitted over the network.	
Prefer compressed remote audio	If cross-site processing is activated, select this option to give priority to compressed audio files if they are available. If this option is selected, when call data is transmitted from a remote site to this site for processing, the system will send the compressed versions of calls if they are	

Field	Description
	available. In this case, the compressed audio will be decompressed before being processed by the Recognizer. Even so, the quality of the audio input may be diminished slightly, and this may impact the recognition quality.
	Note: This option is only available when Cross site processing allowed is selected.
Machines and Tasks	List all the SpeechMiner machines at the site, and configure the tasks that will run on each machine, as explained under Configuring Machines and Tasks.
	Click to add a line to the list. Then, modify the line to give the location of the grammars folder you created (see Creating the Required Folders).
Package Folders	If you will be using multiple grammars folders in your system, repeat this procedure to add additional lines to the list, as necessary. For example, the required path format is \\computer\data\ input.
	Click to add a line to the list. Then, modify the line to give the location of the backup folder you created (see Creating the Required Folders).
Backup Folders	If you will be using multiple backup folders in your system, repeat this procedure to add additional lines to the list, as necessary. For example, the required path format is \\computer\data\input.
	Fill in the fields in this area as follows:Email Server: The name of the email server
Email	SpeechMiner must use to send alerts, notifications, and reports
	 Alerts Email: The email address SpeechMiner must use as the sender address

Field	Description
	when it sends email notifications
Index Folder	Click to add a line to the list. Then, modify the line to give the location of the index folder you created (see Creating the Required Folders). For example, the required path format is \\computer\data\index.
Default Workgroup	Enter the default work group. If an interaction is not associated with a work group, the system will assign this work group to the specific interaction. Note: The default work group must include a slash (/) at the beginning of the work group name.
Default Language	Select the default language for new Programs that are opened in SMART. (If additional languages are installed in SpeechMiner, the languages of individual Programs can be changed in SMART when the Programs are created.) Note: Only the languages selected under Select Languages appear in the dropdown list.
Select Languages	Select all of the languages for which you will want to perform speech recognition. These languages will appear as language options in SpeechMiner and in SMART. Note: In order to create and apply Programs in these languages, their language packs must also be installed. The language packs are installed as part of the SpeechMiner installation process (see Running the Setup Program and Installing SMART). Note: The language selections here do not affect the language of the web-based

Field	Description
	interface. The interface language is selected in the settings of the Web server, under Machines & Tasks .
Configuration Server	 If users will use Genesys credentials to log into any of the SpeechMiner components from this site, Click is to add a line to the list and modify it so that it points to the location of the Genesys Configuration server (that is, <config_server>:<port>).</port></config_server> Server Name: The name of the machine on which the Genesys configuration server is installed Port: The port SpeechMiner should use to connect to the configuration server To configure backup configuration server host and port in SMConfig (either in the Login window, or in the Sites and Machines panel), the IIS should be restarted.

2. Click **Save**. The system validates the settings, and then, if the validation is successful, implements them. The **Progress** window opens and shows information about the implementation process.

Add a Site

Adding a Site

If your system will have servers at more than one site, you can add additional sites to the configuration in SMConfig. A new tab is added to the **Sites & Machines** panel for each site you create. The settings in the upper half of the panel, under **Sites** and **Machines and Tasks** are configured for each site. The settings in the lower half of the panel are configured for each system, and thus are not changed when you add an additional site.

Before you begin adding the site, create filtered, input, and store folders on a machine at the new site (see Creating the Required Folders).

To add a site:

- 1. In the upper-left of the **Sites & Machines** panel, select 1. A new tab is added to the site-setting area in the upper part of the panel.
- 2. Under **Site Name**, modify the name as required. The name of the tab is automatically updated.

Sites & Machines	
New York San Diego Site Site Site Name: San Diego Input Folders Input Folders	Filtered Dir:
Validate input, filtered, store and installation folders	Cross site processing allowed Prefer compressed remote audio
Machines & Tasks	
Name Tasks	

3. Under **Sites** and **Machines and Tasks**, fill in the fields for the new site.

Configuring Machines and Tasks

The **Sites & Machines** panel must list all the machines used by SpeechMiner at each site, and the tasks they will run. Before you begin configuring the settings in this panel, map out the machines in your system, their specifications, the sites at which they are located, and the tasks that must be performed at each site. Using this information, you can decide which tasks to run on each machine.

Important

In SMConfig, in the Sites and Machines panel, when the system tasks are saved, warning messages indicate that the system does not include Categorizer, Active Search and Exploration tasks. These messages can be ignored when working in Recording UI Mode, since these tasks are not available in this mode.

Choose the Task

Choosing Which Tasks to Run on Each Machine

Before you can configure the machines and their tasks, you must decide which tasks to assign to each machine. Each machine can have a number of different roles at one site. The entire system must include machines that fill all of the following roles:

- Web server: Runs the SpeechMiner web-based interface.
- Interaction Receiver: Used for the Recording UI and Recording+Analytics modes. It receives interaction data and metadata from the Genesys Interaction Recording system, inserts it into the SpeechMiner database, and places the data files in the Store folder to await processing.
- **Fetcher:** Takes unprocessed interaction data and metadata from the input folder (where the UConnector placed it after retrieving it from the recording system), inserts it into the SpeechMiner database, prepares the data files for processing by SpeechMiner, and places it in the store folder to await processin.
- **Call Recognizer:** Processes call audio according to the requirements of the program to which the call belongs by transcribing the text and identifying topics and other events in it.
- Indexer: Maintains an index of calls, metadata, and events, so it can be searched quickly.
- **Report caching:** Runs reports that are included in active users' Views pages overnight so that they can be displayed quickly in their widgets when the users open their Views pages; the amount of time to store cached results is configured in the Reports panel.
- Active Search Manager: Enables the Active Search feature to work in the web-based interface.
- **Exploration:** Performs the data analysis required for the Exploration feature of the web-based interface.

- **Recategorizer:** Assigns Categories to the processed interactions in accordance with the Category definitions defined in the system.
- Text Recognizer: Processes written interaction input data and identifies Topics and other events in it.

Important

The Exploration and Active Search tasks use the Index folder. Machines that perform these tasks must be physically connected to the same LAN as the Index folder and the Index task).

Normally, each site will have:

- One Web server
- One or more fetchers
- Several Recognizers, Recategorizers, Active Search Managers, and Monitors
- One or more Indexer tasks (The Indexer tasks should only be configured on machines that are located on the same local network as the index folder.)

Important

Monitors run on all computers in the system. Because of this, there is no option to assign the Monitor task to specific machines, and it does not appear in the list of roles above. It is recommended to run the Recategorizers and the Active Search Managers on the same machines as the Recognizers.

Optimizing the Number of Fetchers

To optimize the rate at which interaction data is fetched, multiple fetchers can run simultaneously. You can configure SpeechMiner to employ multiple fetchers on one or more machines. However, if too many fetchers run on a single machine simultaneously, the CPU may not be able to run all of its tasks efficiently. The optimal number of fetchers to run on a single machine is a function of how powerful the CPU of the machine is. A general starting point on a new SpeechMiner installation is to assign 0.5 fetcher tasks per core on each fetcher machine. Normally, two fetchers will maximize the CPU usage on a quad-core machine.

Optimizing the Number of Call Recognizers

To maximize the speed of interaction processing, multiple Call Recognizers can run simultaneously. You can configure SpeechMiner to employ multiple Call Recognizers on one or more machines. However, if too many Call Recognizers run on a single machine simultaneously, the CPU may not be able to run all of its tasks efficiently. The optimal number of Call Recognizers to run on a single machine is a function of how powerful the CPU of the machine is and how many Topics must be recognized concurrently. A general starting point on a new SpeechMiner installation is to assign 1.5 Recognizer tasks per core on each Recognition machine. Normally, six Call Recognizers will maximize the CPU usage on a quad-core machine.

Important

The total number of recognition tasks cannot exceed the number in the SpeechMiner license under <maxCallProcessing>xx</maxCallProcessing>.

The Call Recognizers in your system are run by a special Recognition process (uRecognizer.exe) that is distinct from the Platform process (uPlatform.exe). Each Recognition process can manage multiple Call Recognizers. You can configure the maximum number of Call Recognizers that should be managed by each Recognition process. If the number is too low, performance may be impacted; if it is too high, the process may run out of memory. Running more than six Call Recognizers per process is not recommended. Unless you are running the processes on a virtual machine(VM), it is recommended to configure the system to run at most six Call Recognizers per process. Then, if you encounter memory problems, reduce this number as necessary to eliminate the problems. On a virtual machine, it is highly recommended to run only two Call Recognizers per process. If you run more than two Call Recognizers simultaneously on a VM, they slow one another down considerably. This recommendation is relevant for virtual machines running either on VMware or Hyper-V servers.

Configure the Machine

Configuring the Properties of a Machine

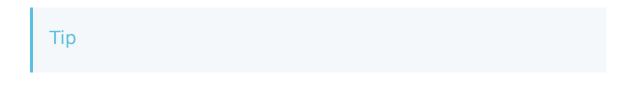
You configure the properties of a machine by selecting the tasks it should perform.

To configure the properties of a machine:

1. Under **Machines & Tasks**, double-click the machine. A **Properties** window opens and displays the properties of the machine.

Properties		X
Name:	TLV	
Installation Folder:	C:\utopy\trunk	
Web Server		
Protocol:	http: 🔻	
Port:	80 🚖	
Virtual Folder:	speechminer	
Language:	English - USA	•
Search us	ing remote web service	
Computer	:	-
 Interaction Received Fetcher Call Recognizer Indexer Report Caching Exploration Recategorizer Text Recognizer Monitor 	1 Parameters 1 Parameters	
	Cancel	

- 2. Select all of the tasks the machine should perform.
- 3. If you selected **Web Server**, select the protocol, specify the port and virtual folder, and select the language of the web-based interface.



It is recommended that in systems with Analytics the language selected here should be one of the languages selected in the Sites & Machines panel.

In addition, if the index folder used by the system is on a different network, it is recommended that you configure your web server to work with the remote web service. For additional information about this option, see Remote Index Search.

4. If you selected **Interaction Receiver**, click the **Parameters** button to its right. In the dialog box, select the protocol and specify the port. If you are working with an Analytics deployment, enter the location of the Interaction Receiver Input folder in which the audio files received from the Genesys Interaction Recording solution will be placed, and then click **OK**.
Note that the Interaction Receiver Input folder is not the come folder as the Input folder used by

Note that the Interaction Receiver Input folder is not the same folder as the Input folder used by the fetchers.

- 5. If you selected **Fetcher**, configure the **Fetcher** settings as explained below.
- 6. If you selected **Call Recognizer**, configure the **Call Recognizer** settings as explained below.
- 7. Click **OK**. The machine is added to the list of machines at the site.

Configuring the Settings of the Fetchers

To configure the settings of the fetchers:

- 1. To the right of the **Fetcher** checkbox, select the number of fetchers that should run on the machine.
- 2. Click the **Parameters** button. The **Fetcher Parameters** window opens and displays a list of all the input folders that are configured for the site.

1	⁹ Fetch	er Parameters	×
		Input Folder Nu	mber of Fetchers
	•	\\tlv1\qastore\libby8_0\input 2	
	_		
		OK Cancel	

- 3. Under **Number of Fetchers**, specify how many fetchers should retrieve interaction data from each input folder. Modify the values so that the sum of all the fetchers defined matches the number of fetchers that you specified should run on the machine.
- 4. Click **OK**.

Configuring the Settings of the Call Recognizers

To configure the settings of the Call Recognizers:

- 1. To the right of the **Fetcher** checkbox, select the number of Call Recognizers that should run on the machine.
- 2. Click the **Parameters** button. The **Recognizer Parameters** window opens and displays a list of all the input folders that are configured for the site.

/ ¹⁹ Recognizer Parameters	×
Maximum number of recognizers per process	6
Server port range start	2001 🗧
Limit number of Active Search recognizers	
OK Cancel	

3. Fill in the fields as follows:

Field	Description
Maximum number of recognizers per process	How many Call Recognizers can be handled by each process.
Server port range start	The ports that will be used by the Call Recognizers; the system will use multiple ports, as necessary, beginning with the port entered in this field. By default, this is port 2001. You can change this number if it conflicts with other port settings in your system.
Limit number of Active Search recognizers	Active Search is a feature that users can access from the SpeechMiner web-based interface. It allows users to reprocess calls in order to search for new terms that were not sought in the original processing. Active Search uses the same Call Recognizers that are used for the original processing of calls. If Active Search is running at the same time as routine call processing, it may slow the routine processing down considerably by using its Call Recognizers.

Field	Description
	If Active Search is frequently run during the time when routine call processing is performed, you may wish to limit the number of Call Recognizers that can be used by Active Search at any given time. To do so, enter the maximum number of Call Recognizers that Active Search can use at one time.

4. Click **OK**.

Adding Machines to a Site

You can add machines to sites as required.

To add a machine to a site:

- 1. Under Machines & Tasks, click . A blank Properties window opens.
- 2. Fill in the name and properties of the machine.
- 3. Click **OK**. The machine is added to the list of machines at the site.

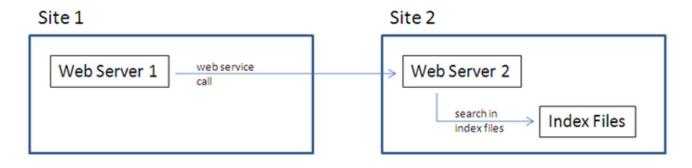
Configuring Remote Index Search

The index is a collection of system files. When SpeechMiner searches for calls in the index, it reads the index files from the hard drive on which they are stored. These index files can be on the hard drive of the machine performing the search (the Web server), on a different machine on the same LAN, or on a different machine on a remote LAN.

Whenever the index folder is on a different machine from the Web server performing the search, Windows sharing is used to enable the Web server to access the index files. If both machines are on the same LAN, this arrangement should not cause any performance issues. But when the Web machine and the index machine are on different sites that connect to one another over the internet, accessing the system files on the index machine directly, via Windows sharing, can be slow, especially if the index files are large.

To solve this issue, each Web machine can be configured to either search the index files directly or to use Web service calls.

Consider, for example, a SpeechMiner system that has two sites: Both sites have Web servers, and the second site also stores the index files. In this system, we configure the Web server at Site 2 to search the index files directly, because the index files are located on the same machine as the Web server. On the other hand, we configure the Web server at Site 1 to search the index using Web service calls to the Web server at Site 2. This arrangement is illustrated in the following diagram:



This configuration is set up in the **Properties** windows of each of the machines in the system.

Properties			X
Name:	TLV		
Installation Folder:	C:\utopy\trunk		
Veb Server			
Protocol:	http: 🔻		
Port:	80 🌲		
Virtual Folder:	speechminer		
Language:	English - USA	l	•
Search us	ing remote web	service	
Computer	:		-
			_
Interaction Rece		Parameters	-
Fetcher	1 🚔	Parameters	
Call Recognizer	1 🌲	Parameters	
Indexer			
Report Caching			
Exploration			
Recategorizer			
Text Recognizer			
Monitor			
	OK Ca	ncel	.11

To configure a Web server to search the system files directly:

• In the **Properties** window of the Web server, clear the **Search using remote web service** checkbox.

To configure a Web server to search the system files by calling the Web service on another machine:

- In the **Properties** window of the Web server, select the **Search using remote web service** checkbox. The **Computer** field becomes active.
- In the **Computer** field, select the Web server to which search requests should be sent.

Reports

Reports

If you want to use any of the SpeechMiner reports, you must deploy both the MRS Library, which is a DLL that provides support for various report features, and all the required reports, on the report server. You can do this from the **Reports** panel of SMConfig. The DLL and the reports will be deployed on the machine that is identified in the **Sites & Machines** panel, specified as the **Server Name** parameter under the **Report Server** panel.

Export	Ployment Server ttv http: 30 ReportServer_ttv33	
Set reports cachin		
Services Deploy Reports	E:\Genesys\Software\reports Browse Browse Browse Browse	
Audio	Report/Resource Agent Comparison v4.rdl Agent Trend v4.rdl Agent Summary.rdl Agent Summary.rdl	
Q. Index	Team Comparison v4.rdl	
Logging	rary To deploy MRS library you need to set a machine and a valid installation folder under the "Machines & Tasks" section in the "Sites & Machines" panel and apply. To deploy reports you need to deploy the MRS library first or deploy both at the same time.	
		Save

Required Permissions

To check if the MRS Library has been deployed on the report server, and to deploy the MRS Library, SMConfig reads the report server's Registry to locate the report server's bin folder and then accesses the folder using the \$ share. Therefore, to deploy the MRS Library and any or all of the reports, the user account used to log into SMConfig must have administrator permissions on the report server.

Deploying the Reports

To deploy reports on the report server, you must first deploy the MRS Library on the server, and then

deploy the required report templates. You can perform both actions simultaneously by selecting both options in the **Reports** panel. Once the MRS Library is deployed on the server, you can deploy additional reports without redeploying the library.

Important

When you select the Reports panel, SMConfig checks whether the MRS Library is already deployed on the machine.

To deploy reports on the report server:

1. In the **Reports** panel, fill in the fields as follows:

Field	Description
Validate Report Server	Select this option if you are configuring SpeechMiner to use a report server. SMConfig will check that the parameters are correct. Note: If you select this option, SMConfig will try to validate that the user who is running SMConfig has access to the report web service and can call methods using this web service. Therefore, the user account that was used to run SMConfig must have the Content Manager role on the report server (see Configuring Permissions for UPlatform). Folders Select this option if you want SMConfig to check whether the Package, Backup, and Index folders exist and are configured properly.
Report Server	 Fill in the fields in this area as follows: Server Name: The name of the machine on which the report server is installed Protocol: The protocol SpeechMiner must use to connect to the report server Port: The port SpeechMiner must use to connect to the report server Virtual Folder: The folder of the reports on
	the report server—usually named ReportServer. If the database is a named

Field	Description
	<pre>instance, enter both the folder name and the instance name, in the format <virtual report folder name>_<instance_name>.</instance_name></virtual </pre> Note: If you plan to use the report server, select Validate Report Server.
Set reports caching time	If you chose to use report caching in the Sites & Machines panel, specify how long report results should be cached, in minutes. The results of reports that are included in active users' Views pages will be saved for the specified period of time. Users who open their Views pages during that time period will see the cached results. The recommended time period is 24 hours (i.e., 24*60=1440 minutes), because the report caching runs once every 24 hours.
Deploy MRSLibrary	If the MRS Library has not yet been deployed on the report server, select this option. Note: If this option is not selected, but the checkboxes in the Report/ Resource list below are active, this means that the MRS Library is already deployed on the machine. In this case, it is not necessary to select this option.
Deploy reports	Enter the location of the reports folder. This folder is called reports, and is located in the SpeechMiner installation folder. For example, if SpeechMiner was installed in c:\Program Files (x86)\Genesys\Software, the path to enter would be c:\Program Files (x86)\Genesys\ Software\reports.
Select\Unselect All	Select the checkbox to select all of the reports in the Report/Resource list below for installation. Clear it to clear all of the selections in the list. Note: If this option is not available, this means that the MRS Library has not yet been deployed on the machine. In this case, select Deploy MRSLibrary, and this option will

Field	Description
	become available.
	Select the reports you want to deploy on the report server
Report/Resource	Note: If this option is not available, this means that the MRS Library has not yet been deployed on the machine. In this case, select Deploy MRSLibrary, and this option will become available.

2. Click **Save**. The system begins to deploy the reports on the report server, and the **Progress** window opens and shows information about the deployment process.

Licenses

Licenses

For the system to process calls, enter the licenses you received from Genesys must be entered in the **Licenses** panel. The licenses are not included in the SpeechMiner installation folder.

Export		
	Licenses	
Sites & Machines	SpeechMiner License:	Browse
Reports	<pre></pre> </td <td>×</td>	×
	<coachingenabled>False</coachingenabled>	-
License	Nuance License:	Browse
Services	# This is a license issued by Nuance Communications, Inc. # This license certificate authorizes you to use the Nuance # software specified below. # This license created to fulfill order OR16242, ID 84930 # Created on 2013-08-08 04:41:37.037 SERVER this, host ANY 27000	4
Audio	VENDOR swillingrd USE_SERVER INCREMENT ost_swirec swillingrd 9.0 04-feb-2014 50 ISSUED=08-Aug-2013 \ SN=0R16242:84930 SIGN="1FD0 37C9 A078 FE8F 372C 0A0F 3E44 71F8 \	*
Q Index		
Recording		
Logging		
		Save

To update the licenses:

- 1. Copy the text of the SpeechMiner license that was supplied.
- 2. In **SMConfig**, in the **Licenses** panel, paste the license text into the **SpeechMiner License** field.
- 3. Copy the text of the Nuance license that was supplied.
- 4. In **SMConfig**, in the **Licenses** panel, paste the license text into the **Nuance License** field.
- 5. Click **Save**.

Important

If the license texts are stored in separate files, as an alternative to the procedure described above, you can browse to locate the files. When you open the relevant file, its contents are automatically copied into the appropriate field.

Services

Services

The **Services** panel is used to manage the SpeechMiner services. You can use it to:

- Register all the SpeechMiner services on each machine in the system
- Update the SpeechMiner configuration files on each machine
- Start, restart, and stop services

You must perform these actions at the end of the installation process, and also whenever you add, change, or remove services or machines to or from the system. You can also use the **Services** panel to restart or stop services whenever necessary.

Export		a man an an and	
	Services	Select/Deselect All	
Sites & Machines	Create performance counters	Machine	
	Register services	DEMO_VM_8_5_5	
	Update IIS application pools		
1	Update config files		
Reports	✓ Encrypt config files		
	Use encrypted SQL connections		
	Credentials		
	Username		
License	Password		
	Domain		
Services	 Restart Services and Stop Services 		
Audio	Update Nuance license server		
Q Index			
Recording	Set master password Confirm master password		
			Save

Initial Configuration

After you install SpeechMiner and configure its components in SMConfig, you must register all of the SpeechMiner services, update the SpeechMiner configuration files on each machine, and start all Uplatform servers. In addition, whenever you make changes to the system, you should follow the same procedures, as explained below. To configure the services in your system:

1. In the **Services** panel, fill in the fields as follows:

Field	Description
Create performance counters	Select this option to configure the performance counters on each of the selected machines. Note: Performance counters should normally be configured only once for each machine. Select this option for all machines when you first install SpeechMiner. Then, if you add new machines to the system, select this option for the new machines.
Register services	Select this option to register the relevant services on each of the selected machines. When you select this option, the Credentials area becomes active. Enter the credentials of the Windows user that will run the services (typically, SMUSER). Notes: Service registration should be performed once for each machine when SpeechMiner is first installed. It should be performed again if the credentials of the Windows user account running the services are changed. Select this option for all machines when you first install SpeechMiner. Then, if you add new machines to the system, select this option for the new machines. If the credentials given are for a local user on each machine rather than a domain user, under Domain , enter a "." (dot). The Uplatform service will be registered but the user will not have the "Run as Service" role. You will have to manually go to the Windows services management tool on each machine, enter the password, and click Apply .

Field	Description
Update IIS application pools	Select this option to configure the Application Pools identity for SpeechMiner Web and Interaction Receiver with an SMUSER Account.
Update config files	Select this option to update the SpeechMiner configuration files on each of the selected machines. When you select this option, the Credentials area becomes active. Enter the Windows user that will run the services(typically, SMUSER). In addition, the encryption options become active. Select the required options. Note: Updating of configuration files should be performed once for each machine when SpeechMiner is first installed. It should be performed again if the credentials of the Windows user account running the services are changed. Select this option for all machines when you first install SpeechMiner. Then, if you add new machines to the system, select this option for the new machines.
Restart Services / Stop Services	All the Uplatform services must be restarted after the installation and configuration processes are completed. To do this, under Restart Services and, select change status to run. Then, under Machine , make sure all servers on which Uplatform is installed are selected. Note: The restart and stop options in this panel should also be used whenever you need to restart or stop any of the SpeechMiner servers (see Starting and Stopping the System).
Update Nuance license server	If your Nuance license servers are installed on central machines, enter the list of servers and ports in this box. This will update the selected machines' environment variables so that they

Field	Description
	point to these license servers. Separate entries with semi-colons (;).
	If you want SMART to access a central license server, add this environment variable to the machine on which SMART is installed: SWILicenseServerList- port@server
	Notes:
	 Select this option for all machines when you first install SpeechMiner. If you relocate the license server to a different machine, add additional servers, or remove existing ones, run this option and select all the machines in your system.
	 If you are updating the Nuance license servers on remote machines, the Remote Registry service must be running on those machines. If it is not running on one of the machines, the error "Failed to update Nuance license on [MACHINE NAME]. The network path was not found." will appear in the Progress window.
	• If you want a machine to work with a local license server, clear the text box, verify that the check box is selected and save.
Select/Deselect all	Select the checkbox to select all of the machines in the list below for updating. Clear it to clear all of the selections in the list.
Machine	Select the machines for which you want to implement the options you selected on the left side of the panel.
Set master password	 Select a machine from the list provided. Select Set master password and enter the Master password used in the Audio panel, so that the platform/web for the selected machine can decrypt audio files.

2. Click **Save**. The system begins to implement the settings you selected, and the **Progress** window opens and shows information about the implementation process.

Required Permissions

The user account used to log into SMConfig must have the required permissions in order for SMConfig to perform the actions selected in the **Services** panel. Some of the requirements are for permissions on the local machine (the machine on which SMConfig is currently running); others are for permissions on the selected remote machines. The various options in the panel have different permission requirements, as explained in the following table:

Option	Required Permissions	Additional Details
Create Performance Counters	 For remote machines: Administrator privileges on the selected machines For the local machine: Under Windows Server 2008, Power User privileges 	
Register Services	Administrator privileges on the selected machines.	Administrator privileges on the selected machines are required in order to register the Uplatform service. These privileges are required for running remote commands on the selected machines and for registering the services using the Windows Services API.
Update Config Files	Administrator privileges on the local machine and on all selected machines.	Administrator privileges on the selected machines are required in order to update the configuration files on the local machine and on the remote machines. These privileges are required for accessing the files using the \$ share and for encryption and decryption (if Encrypt config files is selected).
Restart/Stop Services	 For remote machines: Administrator privileges on the selected machines For the local machine: Power User privileges 	 To change the Uplatform service status on remote machines, Administrator permissions are required in order to get the service information and change it's status remotely using the Windows Services API. To change the Uplatform service status on the local machine Power User privileges on the local machine are sufficient.

Option	Required Permissions	Additional Details
Update Nuance license server	 For remote machines: Administrator privileges on the selected machines. For the local machine: Under Windows Server 2008, Power User privileges. 	Administrator permissions are required in order to update the registry key that controls the Nuance environment variables.

Starting and Stopping the System

You can start, restart, or stop SpeechMiner services in SMConfig in the **Services** panel. One case in which you must use this feature to start the Uplatform services is after the initial installation and configuration of the system (see Initial Configuration). You can also use these features to change the status of a service from run to idle, or vice versa, or to completely stop a service.

Important

You can also toggle between "idle" status and "run" in the SpeechMiner web interface, in the System Monitor page.

To start, restart, or stop SpeechMiner services:

- 1. In the Services panel, clear the Create Performance Counters, Register Services, and Update Config Files checkboxes.
- 2. Select one of the following options:
 - **Restart Services and leave status as is**: Restarts the selected services, and leaves them in the mode they were in previously
 - **Restart Services and change status to run**: Restarts the selected services, and puts them into "run" mode
 - **Restart Services and change status to idle**: Restarts the selected services, and puts them into "idle" mode
 - Stop Services: Stops the selected services
- 3. In the list of machines, select the servers you want to restart or stop.
- 4. Click **Save**. The system begins to implement the options you selected, and the **Progress** window opens and shows information about the implementation process.

Audio

Audio

The **Audio** panel of SMConfig is used to configure the call-audio recognition and playback formats, retention periods for each format and site, and playback rates. Below is a summary of the audio formats that are supported for each audio function.

		a har a sa		
Export				
Aud	io			
Sites & Machines Reco	ognition Audio Format	Playback Audio	Format	
	et the audio format for recognition:	Create compres	sed audio file: MP3 🔹	
	V_PCM	If compress for Play recog	rmat not available: nition file	
Reports			e recognition file on-the-fly to: MP3	~
Rete	ention Policies			
	Site Audio Fo		Period (Hours)	
	Automation WAV_PC	CM -1		
License				
<u>,</u>				
Services				
	ryption Encrypt audio files Mas	ter password:		
		firm master password:		
Audio Sur				
Sum	nmary			
Inp	out folder expects:	1. WAV_PCM 2. VOX		
Q		3. WAV_ADPCM		
Index		4. WAV_TRUESPEECH 5. WAV_GSM610		
		6. WAV_MULAW		
		7. WAV_ALAW 8. MP3		
$\overline{\mathbf{v}}$				
Recording Re (AL	ecognition priorities: udio format saved for recognition)	1. WAV_PCM 2. MP3		
Pla	ayback priorities:	1. MP3		
(Au		2. WAV_PCM		
				Save

Configuring the Audio Settings

The **Audio** panel contains the basic audio setting options for the system.

Important

This panel includes the most common audio configurations. If you require a more complex configuration, you must manually define it in the database. Bear in mind that, if you do so, the configuration you defined in the database will not appear in the **Audio** panel. In this case, be careful not to click Save in this panel. If you do, the settings in the panel will overwrite the more complex configuration you defined in the database.

To configure call-audio settings:

1. In the **Audio** panel, fill in the fields as follows:

Field	Description	
Select the audio format for recognition	Select the format of the call audio that must be used by SpeechMiner during the recognition process. If the audio received from the recording system is not in the format selected here, the fetchers will automatically convert it to this format (after they retrieve it from the input folders) before they save it in the store folders to await processing by SpeechMiner. If the system is used in the Recording UI mode or Recording and Analytics mode, the format must be set to WAV_PCM.	
Create compressed audio file	Select the format of the call audio that must be used by SpeechMiner for playback in the web- based interface. After the audio of a call is processed, an additional compressed copy is made in this format and saved in a file in the store folders. If the system is used in the Recording UI mode, or Recording and Analytics mode, this must be set to Do Not Generate .	
lf compress format not available	 Select one of the SpeechMiner actions to be performed if a user initiates playback of a call for which no compressed audio file is available. (If compressed audio is available, it is automatically used for playback.): Play recognition file: The player plays the recognition audio file directly without any format conversion. Convert the recognition file on-the-fly to: 	

Field	Description
	The player first converts the recognition audio file to the format selected here, and then play it for the user.
	For Internet Explorer users, select the Convert the recognition file on-the-fly to MP3 option.
	Specify the retention policy, per site, for each of the audio/text formats selected. Call data is deleted from the store folder automatically when it has been in the folder as long as the specified retention period. The values chosen should be based mainly on the disk space available for storing the interaction file. Bear in mind that 1 MB of disk space can contain roughly one minute of uncompressed data or 15 minutes of compressed data.
Retention Policies	Default values are automatically entered for each site in the system, with separate retention periods for each of the formats selected under Recognition Audio Format and Playback Audio Format , in hours. You can manually adjust the retention period for each item, as required. To do so, double-click the
	item, or select it and then select . The Retention Period dialog box opens. Modify the value in the text field, and then click OK .
	If the system is used in the Recording UI mode or Recording and Analytics mode, set the retention policy of WAV_PCM to 0.
	Notes:
	 Selecting these options prevents the creation of unnecessary files and the storage of files for longer than is necessary.
	• The recognition files of interactions that have

Field	Description
	 not been processed yet, and of interactions that are included in Static Call Lists, are not deleted even when the retention period is over. If you do not want data to be deleted from the store folder automatically, enter the value -1. This value should only be used in static systems where the number of interactions is limited and does not grow continuously.
Encrypt audio files	 Select this option to encrypt the audio files. Note: If you do not have a key, Generate new password is automatically selected to generate a key. In this case, you must enter a Master password and confirm it. If you want to generate a new key, select Generate new password, enter the Master password and confirm it. The Master password must be the same as the original Master password. The Master password is always the same. The new Master password is not saved in the database. For that reason, you must save the Master password in a location of your choice. The Master password is required for the machines selected in the SMConfig > Services panel. For additional information, refer to the Set master password description in the Services panel page.

2. Click **Save**. The system implements the settings, and the **Progress** window opens and shows information about the process.

Summary

The **Audio** panel summary lists the preferred formats that SpeechMiner supports:

Item	Function	Description
Input folder expects	Fetcher	Audio formats supported by fetchers; call audio that is retrieved from the external recording system by UConnector must be saved in the input folder in one of these formats.

Item	Function	Description
Recognition priorities	Recognition	Preferred audio formats for the recognition process, in order of preference; call audio that is processed by the Recognizers should ideally be in one of these formats.
Playback priorities	Playback	Preferred audio formats for the SpeechMiner media player, in order of preference; call audio that is played back should ideally be in one of these formats.

Index

Index

The **Index** panel enables you to manage index-related tasks: backup, restore, and index optimization.

		X
Export Sites & Machines	Daily Index Backup	
Reports	Keep only last 5 isolate backups Daily backup folder Browse	
E. License	Backup to folder Browse Use Different Credentials Username Password	
Services	Backup Now Restore Index Folder	
Audio	Restore Index Folder Use restore carefully, for example when the Hard drive of the index folder crashes permanently High Availability Switch over in case of index failure	
Index	Switch after Image: minutes Weekly Index Optimization Image: minutes Optimize every week at Sunday	
Recording		
Logging	Save	

Backup the Index

Backing up the Index

You can back up the index automatically on a daily basis or manually as required. Note that no incremental backup is available; every time the backup is started, all of the index files are copied to

the backup folder.

Daily Backup

You can set a time and specify a backup folder, and SpeechMiner will automatically back up the index every day at the specified time to the specified folder.

Daily Index Backup	
Backup every day at 2:16:00 PM	
Keep only last 5 💭 backups	
Daily backup folder	Browse

To set up a daily backup of the index:

1. In the **Index** panel, in the **Daily Index Backup** region, fill in the fields as follows:

Field	Description
Backup every day at	Select the checkbox to activate the automatic daily backup, and then, in the time field, select the time at which you want to the backup to begin.
	Note: The backup time will be saved in the database as UTC time.
Keep only last	Select the number of backups to keep. Older backups will be deleted automatically.
Daily backup folder	Select the folder in which to store the backup data.

2. Select **Save**. The changes are saved, and a **Progress** window shows information about the saving process.

Manual Backup

You can select a folder and back up the index to that folder manually as necessary.

Manual Index Back	up	
Backup to folder		Browse
🔄 Use Different C	redentials	
Username		
Password		
Domain		

To run a backup of the index manually:

1. In the Index panel, in the Manual Index Backup region, fill in the fields as follows:

Field	Description
Backup to folder	Select the folder in which to store the backup data.
Use different credentials	If different credentials are required to access the index folder, select the Use Different Credentials check box, and then enter the required user credentials.

2. Select **Backup Now**. The backup is performed, and a **Progress** window shows information about the backup process.

Restore the Index

Restoring the Index

Restoring the index can be done in two different ways:

- Restoring the index from a backup, using SMConfig
- Creating_a_New_Index_from_Scratch|Deleting the existing index and creating a new one from scratch

Restoring the Index from a Backup

If you have a backup of the index, it is generally preferable to restore the index from it. Restoring the index from a backup is generally a much quicker process than creating it from scratch, especially if the database is large. The index task re-indexes the database at a pace of about 3,500 calls per minute. If you restore the index from a backup, only those calls that were indexed after the backup was created must be re-indexed. Calls that are included in the backup do not have to be re-indexed.

As a result, you can start using the index almost immediately.

Two alternative methods for restoring the index from a backup are available:

- Use the backup folder as the current index folder.
- Restore the index from the backup folder to a new index folder.

In either case, you should not restore the index folder manually. Instead, use SMConfig to perform the restoration. Using SMConfig ensures that the process is performed properly, and, in addition, SMConfig also takes care of re-indexing all the calls that were indexed after the backup was created.

To restore the index from a backup:

1. In SMConfig, in the **Index** panel, select **Restore Index Folder**. The **Restore Index Folder** dialog box opens.

/ ⁹ Restore Index Fold	ler X
Destination for restore	
To index folder:	O (Minimum WEB down time) Make the backup folder the new index folder
	$lace{\mathbf{O}}$ (Recommended for the long run) Restore the backup to a new index folder location
	New index folder path: Browse
Source for restore	
From backup folder:	Restore the latest valid daily backup
	O Restore from a manual backup folder
	Manual backup folder: Browse
└──User credentials ───	
Use different crede	entials
Username	
Password	
Domain	
· ·	
	OK Cancel

2. Fill in the fields as follows:

Fie	ld	Description
To index folder		Select (Minimum WEB down time) Make the latest valid backup folder the new index

Field	Description
	folder to use the backup folder as the new index folder, or (Recommended for the long run) Restore the backup to a new index folder location to create a new folder to use as the index folder.
	If you chose the second option, under New index folder path , select the folder to use as the new index folder. Note that this folder must be empty when you begin the restoration process.
	Select Restore the latest valid daily backup to restore the index from the folder that contains the automatically generated backups of the index (specified in the Index panel under Daily Backup Folder), or Restore from a manual backup folder to use a manually generated backup.
From backup folder	If you select the second option, under Manual Backup Folder , select a SpeechMiner backup folder with the following name: SpeechMinerBackup_#year#_#month
Use Different Credentials	If different credentials are required to access the index folder, select the Use Different Credentials checkbox, and then enter the required user credentials.

 Click OK. The index is restored to the new index folder, and a Progress window shows information about the restoration process. During the process, SMConfig will also do the following:

During the process, smearing will also do the following.

- Checks the validity of the new index folder, and, if it is not valid, abort the process.
- Inserts indexing requests into the index queue for all the calls that were processed or updated after the backup was created.
- Notifies the Web servers that the index folder was changed.
- 4. When the restoration process is finished, restart the platform servers.

Creating a New Index from Scratch

If you do not have a backup of the index, you can restore it by deleting the existing index and creating a new one. In addition, if the database is quite small, you may prefer to restore the index in this way even if you do have a backup.

Restoring an index by creating it from scratch is generally a much slower process than restoring it from a backup, especially if the database is large. The index task re-indexes the database at a pace of about 3,500 calls per minute. If you re-create the index from scratch, all of the calls in the database must be indexed.

To create a new index:

- 1. Stop all the Uplatform services that run index tasks.
- 2. Run the following SQL command: truncate table indexq
- 3. Delete all of the files in the index folder.
- 4. Run the following stored procedures in the database:
 - To re-index the calls, run exec dbo.sp_reindexCallsByParams 3,0,0,''
 - To re-index the text interactions, run exec dbo.sp_reindexTextDataByParams 3,0,0,''

Important

Re-indexing the text interactions is only relevant in SpeechMiner versions from 7.3 and on, and only if your system handles text interactions as well as calls.

5. Restart the Uplatform services that you stopped before. After a minute or two, the index task will start to index the calls. Newer calls will be indexed first.

Optimize the Index

Optimizing the Index

The Index Optimization task optimizes the index files of the system, thus reducing their size. It is recommended to configure it to run at a time when the system is not in use, such as Sunday at midnight.

To configure the system to optimize the index:

- 1. In SMConfig, in the **Index** panel, in the **Weekly Index Optimization** region, select the **Optimize every week at** checkbox.
- Select the day of the week on which to perform the optimization, and specify the time to begin the process.
 Note: The selected time will be saved in the database as UTC time.
- 3. Click **Save**. The setting is saved, and the **Progress** window opens and shows information about the saving process.

High Availability

High Availability is an automatic process for restoring an index backup. When the High Availability feature is selected in the SMConfig Index panel, the system will detect when the Index folder is not accessible and perform the following:

1. Switch the roles of the Index folder and the Daily Backup folder, so that the current backup becomes the primary folder and the current index becomes a secondary backup folder.

Indexing will take place on the new primary folder.

2. Re-index all the interactions that were indexed after the latest daily backup was created.

Whenever the primary folder becomes inaccessible, the folder roles will change.

The time between when the index is detected as inaccessible and when the switch over is performed can be configured in the **High Availability** section of the **Index** Tab. (That is, Switch after # minutes)

Recording

Recording

When working with a Recording mode, the following configurations are required in the Recording panel. The Recording panel only appears when you are working in a Recording + Analytics environment or a Recording Only environment:

Configuration

The following must be configured in the systems Configuration Server:

- Tenant
- Application Name
- Users Access Group

• Interaction Receiver

In systems with Call Recording mode or Call Recording and Analytics mode licenses, the Program ID is normally assigned to calls by the recording processor.

The recording processor adds the Program ID to the call's metadata. If the call arrives in the SpeechMiner system without a Program ID, SpeechMiner assigns it the default Program ID. By default, this value is default.

If you want to change this default value to a different value, perform the following:

- For **Call Recording and Analytics Mode** licenses, in SMART, create a Program with the name you want to use for the default Program, and apply it. Finally, in the SMConfig Recording panel, set **Default Program** to the Program's external ID.
- For Call Recording Mode set Default Program to the desired value.

Set **Extension Speaker Type** and **Trunk Speaker Type** as configured in the GIR system.

Important

For additional information see Recording Modes.

• RP Authorization

Set the User and Password to the values configured for the RP.

• MCP Authorization

Set the User and Password to the values configured for the MCP. The MCP authorization option is only available when working in an environment with SpeechMiner Analytics.

Playback

- Set the **RCS URI** value using the format: http://rcs_host:port/rcs, or https://rcs_host:port/rcs (Web Server connection).
- Set the **External RCS URI** value (when working with encrypted Screen Recording), using the format: http://rcs_host:port/rcs, or https://rcs_host:port/rcs (Browser connection).
- Set the **HTCC URL** value (when working with Screen Recording), using the format: http://htcc_host:port, or https://htcc_host:port (Browser connection).

If you are not working with Screen Recording, leave the HTCC URL field empty.

Important

Use https for the RCS and HTCC connections if the connection to the SpeechMiner web server was configured with https.

	SpeechMiner Configuration Tool - 8.5.5 (8.5.507.116)	_	
rt			
	Recording		
ites & Machines	Configuration		
_	Tenant Environment		
6			
Reports	Application Name Speechminer		
_	User Application Name default		
	Update Agents Every 24 🐥 Hours		
	Interaction Receiver		
	Default Program default		
-8	Extension Speaker Type agent		
	Trunk Speaker Type customer		
4	RP Authorization User Password		
	MCP Authorization User Aladdin Password		
•	Playback		
	RCS URI		
	RWS URI		
	External RCS URI		
-8	External RWS URI		
ng 👘			
-8			
			Save

Logging

Logging

The Logging panel enables you to configure the logging output for the following components:

- **Platform**: manages all the SpeechMiner processing tasks. For example, fetching, recognition, categorization, exploration, compression and indexing.
- Web: runs the SpeechMiner web-based interface that enables users to view and work with the interaction data after it has been processed.
- Client Applications: SpeechMiner applications such as SMART and SMConfig.

Important

The logging panel is only available when you do not set Configuration Servers. When a Configuration Server is set the logging parameters are taken from the Configuration Server. For details see: Site & Machines > Configuring Sites > Default Site.

For details see the Log Options and Log Output option descriptions below.

Export Logging Sites & Machines Component: Platform	
Sites & Machines Component: Platform	
Log Option Check-point 1 compatible-output-priority false	
End expire 10 License keep-startup-file true message_format short print-attributes false	
Services segment 10000 time_convert local time_format ISO8601	
Audio Verbose debug	
All debug Index trace interaction interaction	
Recording standard	
Logging	ve

Log Options

Important

For applications configured via a configuration file, changes to log options take effect after the application is restarted.

Log Options	Description
check-point	Specifies (in hours) how often the application generates a check point log event, to divide the log into sections of equal time. By default, the application generates this log event every hour. Setting the option to 0 prevents the generation of check-point events. Default Value : 1 Valid Values : 0-24 Changes take effect : after restart
	Specifies whether the application uses 6.x output logic. Default Value : false
	Valid Values:
compatible-output-priority	• true : The log of the level specified by Log Output Options is sent to the specified output.
	 false: The log of the level specified by Log Output Options and higher levels is sent to the specified output.
	Changes take effect: after restart
	Determines whether log files expire. If they do, Expire sets the measurement for determining when they expire, along with the maximum number of files (segments) or days before the files are removed. This option is ignored if log output is not configured to be sent to a log file.
expire	Note: If an option's value is set incorrectly (out of the range of valid values) it will be automatically reset to 10.
	Default Value: false
	Valid Values:
	• false : No expiration; all generated segments

Log Options	Description
	 are stored. <number> file or <number>: Sets the maximum number of log files to store. Specify a number from 1-1000.</number></number> <number> day: Sets the maximum number of days before log files are deleted. Specify a number from 1-100.</number> Changes take effect: after restart
keep-startup-file	Specifies whether a log startup segment, containing the initial configuration options, is to be kept. If it is, this option can be set to true or to a specific size. If set to true, the size of the initial segment will be equal to the size of the regular log segment defined by the segment option. The value of this option will be ignored if segmentation is turned off (that is, if the segment option is set to false). Default Value: false Valid Values: • false: No startup segment of the log is kept. • true: A startup segment of the log is kept. The size of the segment option. • chamber> KB : Sets the maximum size, in kilobytes, for a startup segment of the log. • chamber> MB : Sets the maximum size, in megabytes, for a startup segment of the log. Changes take effect: after restart
message_format	 Specifies the log record headers format used by the application when writing logs in the log file. Using compressed log record headers improves application performance and reduces the log file's size. With the value set to short: A log file header or the log file segment contains information about the application

Log Options	Description
	(such as the application name, application type, host type, and time zone), whereas single log records within the file or segment omit this information.
	 A log message priority is abbreviated to Std, Int, Trc, or Dbg, for Standard, Interaction, Trace, or Debug messages, respectively.
	• The message ID does not contain the prefix GCTI or the application type ID.
	A log record in the full format appears as follows:
	 2002-05-07T18:11:38.196 Standard localhost cfg_dbserver GCTI-00-05060 Application started.
	A log record in the short format appears as follows:
	 2002-05-07T18:15:33.952 Std 05060 Application started
	Note: Whether the full or short format is used, time is printed in the format specified by the time_format option.
	Default Value: short
	Valid Values:
	 short: An application uses compressed headers when writing log records in its log file.
	 full: An application uses complete headers when writing log records in its log file.
	Changes take effect: after restart
print-attributes	Specifies whether the application attaches extended attributes (if any exist), to a log event that it sends to the log output. Typically, log events at the Interaction log level and Audit-related log events contain extended attributes. Setting this option to true enables audit capabilities, but negatively affects performance. Genesys recommends enabling this option for Solution

Log Options	Description
	Control Server and Configuration Server when using audit tracking. For other applications, refer to Genesys Combined Log Events Help to find out whether an application generates Interaction-level and Audit-related log events. If such log events are generated enable the option only when testing new interaction scenarios.
	Default Value: false
	Valid Values:
	 true: Attaches extended attributes (if any exist) to a log event sent to log output
	 false: Does not attach extended attributes to a log event sent to log output.
	Changes take effect: after restart
	Specifies whether there is a segmentation limit for a log file. If there is, it sets the mode of measurement along with the maximum size. If the current log segment exceeds the size set by this option the file is closed and a new one is created. This option is ignored if the log output is not configured to be sent to a log file.
	Default Value: false
	Valid Values:
segment	• false : No segmentation is allowed.
	 <number> KB or <number>: Sets the maximum segment size (in kilobytes). The minimum segment size is 100 KB.</number></number>
	 <number> MB: Sets the maximum segment size (in megabytes).</number>
	 <number> hr: Sets the number of hours for the segment to stay open. The minimum number is 1 hour.</number>
	Changes take effect: after restart
time_convert	Specifies the system in which an application calculates the log record time when generating a log file. The time is converted from the time in seconds since the Epoch (00:00:00 UTC, January 1,

Log Options	Description
	1970).
	Default Value: Local
	Valid Values:
	• local : The time of log record generation is expressed as a local time, based on the time zone and any seasonal adjustments. Time zone information about the application's host computer is used.
	• utc : The log record generation time is expressed as Coordinated Universal Time (UTC).
	Changes take effect: after restart
	Specifies how to represent (in a log file) the time when an application generates log records.
	A log record's time field in the ISO 8601 format appears as follows: 2001-07-24T04:58:10.123
	Default Value: time
	Valid Values:
time_format	 time: The time string is formatted according to the HH:MM:SS.sss (hours, minutes, seconds, and milliseconds) format.
	• locale : The time string is formatted according to the system's locale.
	• ISO8601 : The date in the time string is formatted according to the ISO 8601 format. Fractional seconds are given in milliseconds.
	Changes take effect: after restart
verbose	Determines whether a log output is created. If the log output is created, Verbose specifies the minimum level of log events generated. The log events levels, starting with the highest priority level, are Standard, Interaction, Trace, and Debug.
	Note: For definitions of the Standard,

Log Options	Description
	Interaction, Trace, and Debug log levels, refer to the Framework Management Layer User's Guide, Framework Genesys Administrator Help, or to Framework Solution
	Default Value: all
	Valid Values:
	 all: All log events (that is, log events of the Standard, Trace, Interaction, and Debug levels) are generated.
	• debug : The same as all.
	• trace : Trace level log events and higher (that is, log events of the Standard, Interaction, and Trace levels) are generated, but Debug level log events are not generated.
	 interaction: Interaction level log events and higher (that is, log events of the Standard and Interaction levels) are generated, but Trace and Debug levels log events are not generated. Interaction is associated with Information messages.
	 standard: Standard level log events are generated, but Interaction, Trace, and Debug levels log events are not generated. Standard is associated with Warn, Error and Critical messages.
	• none : No output is produced.
	Changes take effect: after restart

Log Output Options

To configure log outputs, set log level options (all, standard, interaction, trace, and/or debug) to the desired types of log output (stdout, stderr, network, memory, and/or [filename], for log file output).

You can use:

• One log level option to specify different log outputs.

- One log output type for different log levels.
- Several log output types simultaneously, to log events of the same or different log levels.

You must separate the log output types by a comma when you are configuring more than one output for the same log level.

The log output options are activated according to the setting of the verbose configuration option.

Important

- If you direct log output to a file on the network drive, an application does not create a snapshot log file (with the extension *.snapshot.log) in case it terminates abnormally.
- Directing log output to the console (by using the stdout or stderr settings) can affect application performance. Avoid using these log output settings in a production environment.

Output Options	Description
	Specifies the outputs to which an application sends all log events. The log output types must be separated by a comma when more than one output is configured. For example: all = stdout, logfile
	Note: To ease the troubleshooting process, consider using unique names for log files that different applications generate.
	Default Value: no default value
	Valid Values:
all	 stdout: Log events are sent to the Standard output (stdout).
	 stderr: Log events are sent to the Standard error output (stderr).
	 network: Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the all log level option to the network output enables an application to send Standard, Interaction, and Trace levels log events to Message Server. Debug-level log events are neither sent to the Message Server and are not stored in the Log Database.

Output Options	Description
	 memory: Log events are sent to the memory output on the local disk. This is the safest output in terms of the application performance. file name: Log events are stored in a file with a specified name. The default path used for all components is C:\Temp\SMLogs. Each component has its own path. You can save the files in a different path of your choice. Make sure the path is absolute (full). Changes take effect: after restart
	Specifies the outputs to which an application sends the Trace level and higher log events (that is, log events of the Standard, Interaction, and Trace levels). The log outputs must be separated by a comma when more than one output is configured. For example: trace = stderr, network Default Value : no default value
trace	 Valid Values (log output types): stdout: Log events are sent to the Standard output (stdout). stderr: Log events are sent to the Standard error output (stderr). network: Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. memory: Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance. file name: Log events are stored in a file with a specified name. You can save the files in a different path of your choice. Make sure the path is absolute (full). Changes take effect: after restart
debug	Specifies the outputs to which an application sends the log events of the Debug level and higher (that is, log events of the Standard, Interaction, Trace, and Debug levels). The log output types must be separated by a comma when more than one output

Output Options	Description
Output Options	is configured—for example: debug = stderr, /usr/ local/genesys/logfile
	Note: Debug-level log events are never sent to Message Server or stored in the Log Database.
	Default Value: no default value
	Valid Values (log output types):
	 stdout: Log events are sent to the Standard output (stdout).
	 stderr: Log events are sent to the Standard error output (stderr).
	 network: Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database.
	 memory: Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance.
	 file name: Log events are stored in a file with a specified name. You can save the files in a different path of your choice. Make sure the path is absolute (full).
	Changes take effect: after restart
	Specifies the outputs to which an application sends the Interaction level and higher log events (that is, log events of the Standard and Interaction levels). The log outputs must be separated by a comma when more than one output is configured. For example: interaction = stderr, network
interaction	Default Value: no default value
	Valid Values (log output types):
	 stdout: Log events are sent to the Standard output (stdout).
	 stderr: Log events are sent to the Standard error output (stderr).

Output Options	Description
	• memory : Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance.
	• file name : Log events are stored in a file with a specified name. You can save the files in a different path of your choice. Make sure the path is absolute (full).
	Changes take effect: after restart
	Specifies the outputs to which an application sends the log events of the Standard level. The log output types must be separated by a comma when more than one output is configured. For example: standard = stderr, network.
	Default Value: no default value
	Valid Values (log output types):
	 stdout: Log events are sent to the Standard output (stdout).
standard	 stderr: Log events are sent to the Standard error output (stderr).
	 network: Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database.
	 memory: Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance.
	• file name : Log events are stored in a file with a specified name. You can save the files in a different path of your choice. Make sure the path is absolute (full).
	Changes take effect: after restart

SMConfig Console

SMConfig Console

This page describes how to configure SpeechMiner using the command line.

Important

To configure SpeechMiner with the command line you must have SMConfig permissions. You must have the permissions required for logging in and configuring all SMConfig panels.

Before you begin consider the following:

- SMConfig creates an .xml file(s) that contains the details and selections you made in the SMConfig panel(s).
- Instead of configuring SMConfig from scratch every time you deploy SpeechMiner, you can simply run the same .xml file(s) on each environment.
- You can create an .xml file for each SMConfig panel or one .xml file that contains details for all the panels.
- Once the .xml file is created you can change the order in which the panels are configured by simply editing the panel order within the .xml.
- You can edit the .xml file so that it includes any combination and panel order you want. For example, the .xml file can contain the same panel more than once.
- Once the .xml file for the SMConfig panel(s) is created you can modify it for the specific system. If the deployment is the same as the previous system deployment you will only need to change the name and system credentials.
- If the command line configuration process fails, the process will stop the execution and it will not continue to the next SMConfig panel.

To configure SpeechMiner using the command line:

- 1. Export SpeechMiner configuration to an .xml file.
 - a. Open **SMConfig** and configure its panels for the environment you are currently deploying.

See pages above for details.

b. Click the **Export** button in the SMConfig panel(s) whose details you want to deploy using the command line.



- c. Select one of the following:
- All Panels: to create an .xml file with all the SMConfig details and selections.
- **Current Panel:** to create an .xml file with the SMConfig details and selections associated with the specific panel.
- Browse to the location in which you want to save the .xml file.
- Click Save.
- Configure SpeechMiner:
 - a. Open your command line.
 - b. Run the **SMConfigconsole.exe** (in the Installation folder in ...\utopy\tools\bin\release) with the path to the .xml file created in step #1.

Important

To validate the input parameters run SMConfigconsole.exe with -v and the path to the .xml file.

c. Review the command line results:

Exit Code	Name	Description
0	Success	All of the panels were configured successfully.
1	ExceptionOnConfig	An exception was thrown when configuring a panel.
2	FailedToConfig	The panel could not be configured.
3	FailedToLogin	The login failed.
4	FailedToTeadXML	The process failed to parse the XML.
5	InputMissing	Input is misssing.

A report will be written to the console. The report will include a status for each SMConfig panel. If the command line results are a success SpeechMiner was configured successfully.

Additional Configurations

The following configurations are recommended for the successful completion of the SpeechMiner configuration process:

Browser

Configuring the Browser

End users of SpeechMiner access its browser-based interface from Internet Explorer or Google Chrome, which connects to the SpeechMiner Web server through the local network. In order for the SpeechMiner interface to work properly, you must configure each user's browser as explained below. The configuration changes that must be implemented are to allow pop-ups from the SpeechMiner domain, to treat the SpeechMiner domain as part of the local intranet (or as a trusted site), and to enable automatic updating of cached web pages.

In addition, if Internet Explorer is running on a Windows Server 2008 machine or Windows Server 2012 machine, the Enhanced Security Configuration feature should be turned off. Refer to the *Turning Off the Enhanced Security Configuration Feature on Windows Server 2008 / Windows Server 2012* section below.

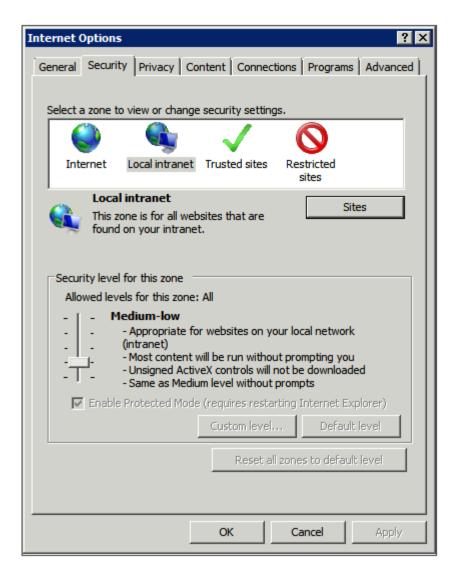
Tip

To run SpeechMiner 8.5.5 you must use a minimum resolution of 1366X768. We recommend that you work with a 1680x1050 resolution.

Internet Explorer

Configuring Internet Explorer

1. In the Internet Options dialog box, in the Security tab, select Local Intranet.



- 2. Add the SpeechMiner domain to the list of web sites in the **Local Intranet** zone.
- 3. Click **Sites > Advanced** and add ***.genesyscloud.com** to the list of safe websites.
- 4. Click **Custom Level** to customize the local intranet zone security.
- 5. Under **Miscellaneous > Access data sources across domains**, select **Enable**.

Selecting Enable makes Screen Recording playback possible because it allows access from the browser to HTCC.

Settings Settings Disable Enable Enable Miscellaneous
 Disable Enable Miscellaneous
Enable Miscellaneous
Miscellaneous
Access data sources across domains
Disable
Enable
O Prompt
Allow META REFRESH
O Disable
Enable
Allow scripting of Microsoft web browser control
Disable Total
Enable
Allow script-initiated windows without size or position constra
*Takes effect after you restart Internet Explorer
Reset custom settings
Reset to: Medium-high (default)
OK Cancel

- 6. In the **Privacy** tab, add the SpeechMiner domain to the list of web sites that are permitted to open popups.
- 7. In the **General** tab, under **Browsing history**, select **Settings**.
- 8. Under Check for newer versions of stored pages, select Automatically.

Temporary Internet Files and History Settings			×
Temporary Internet Files Internet Explorer stores copies of webpages, images, and media for faster viewing later.			
C Every time I v C Every time I s C Automatically	sions of stored pages isit the webpage tart Internet Explorer		
© Never Disk space to use (8-1024MB) (Recommended: 50-250MB) Current location: C:\Users\schwartz\AppData\Local\Microsoft\Windows\Temporary Internet Files\			
Move folder	View objects	View files	
History Specify how many days Internet Explorer should save the list of websites you have visited. Days to keep pages in history: 20			
	ОК	Cancel	

9. Click **OK** to save the changes.



Turning Off the Enhanced Security Configuration Feature on Windows Server 2008 / Windows Server 2012

 In the Server Manager, in the home page (the top level), expand the Security Information section. The current settings for the Enhanced Security Configuration feature appear under IE Enhanced Security Configuration (ESC).

Security Information		🔐 Go to Windows Firewall
Windows Firewall:	Domain: Off	 Configure Updates Check for New Roles
Windows Updates:	Install updates automatically using a managed updating service	Run Security Configuration Wizard Configure IE ESC
Last checked for updates:	Today at 2:02 PM	IN Configure IE ESC
Last installed updates:	12/11/2013 2:00 PM	
IE Enhanced Security Configuration (ESC):	Off for Administrators Off for Users	

2. If the current settings are not **Off** for **Administrators** and **Off** for **Users**, click **Configure IE ESC**. The **Internet Explorer Advanced Security Configuration** dialog box opens.

わ Interne	et Explorer Enhanced Security Configuration	
exposu Interne	et Explorer Enhanced Security Configuration (IE ESC) reduces the re of your server to potential attacks from Web-based content. et Explorer Enhanced Security Configuration is enabled by for Administrators and Users groups.	
Adminis	strators:	
۲	O n (Recommended)	
۲	• off	
Users:		
۲	O n (Recommended)	
8	● off	
More about Internet Explorer Enhanced Security Configuration		
	OK Cancel	

- 3. For both Administrators and Users, select Off.
- 4. Click **OK** to save the changes.

Chrome

Configuring Chrome

- 1. In the Chrome browser, click the **Chrome** menu , and select **Settings**.
- 2. Under **Privacy**, click **Content Settings...**.
- 3. Under Pop-ups, verify that **Allow all sites to show pop-ups** is selected. If it is not selected perform the following:

- a. Click Manage exceptions....
- b. In the field provided, type ***.genesyscloud.com** and select the **Allow** behavior.
- c. Press Enter and click Done.

Verify that Java Script is Enabled

- 1. In the Chrome Browser, navigate to Chrome Settings > Show Advanced Settings > Privacy > Content Settings.
- 2. Under Java Script, select Allow all sites to run Java Script (recommended).

For more information about enabling Java Script, see the following example https://support.google.com/adsense/answer/12654.

Date and Time

Setting the Date and Time

The webServiceParam table has two fields for configuring the date and time display:

- **globalDateFormat** which configures the date format, for example: MM/dd/yy
- globalDateTimeFormat which configures the time format, for example: hh:mm tt

For additional information about the options available, see http://www.w3.org/TR/NOTE-datetime.

When the following SpeechMiner's interface languages are used for the Web interface, the only formats supported for **globalDateTimeFormat** are the following 24-hour formats: H:mm:ss, H:mm, HH:MM or HH:mm.

- Catalan Spain
- German Germany
- Spanish Spain
- Spanish USA
- French France
- Italian Italy
- Portuguese Brazil

Forget Password Configuration

Set the Forget Password Login Option

When configuring SpeechMiner you can give users the option of recovering forgotten passwords. If you choose to enable users to recover their forgotten passwords, the SpeechMiner log in screen will contain a **Forget Password?** link.

When the user clicks the Forget Password? link, the user will be required to enter his email address. The user will then receive an email with a **Reset Password** link.

By default the Reset Password link is only available for 4 hours. This default number can be changed.

To enable a user to recover his password perform the following:

- 1. Access the webServiceParam table.
- 2. Change the PasswordRecovery field from false to true.

To change the Reset Password link default:

- 1. Access the webServiceParam table.
- 2. Change the resetPasswordTokenExpirationTime field from 4 hours to the amount you prefer.

Important

If more than one user has the same email address, the Forget Password option will not be available.

To change the email message the user receives:

- 1. Access the webServiceParam table.
- 2. Change the resetPasswordMailBody field to the content you prefer the user to receive. The email message content should contain <resetLink>. <resetLink> represents the Reset Password link.
- 3. Change the resetPasswordMailSubject field to the subject you prefer the user to receive.

Resource Type

Setting the Resource Type

The resourceTypeId table contains a list of all the possible resource types.

To enable/disable a resource type in SpeechMiner, update the isEnabled field in the resourceTypeId table with the relevant status.

VMWare

Configuring a VMWare Server

If you are installing SpeechMiner on virtual machines and using VMWare Server VSphere4, it is recommended to use the Scheduling Affinity feature, which dedicates specific logical CPUs for the virtual CPUs of particular VMs. Doing this can improve Recognition performance.

To use the VMWare Scheduling Affinity feature:

- 1. For each active Virtual Machine, check the VM Settings to see how many CPUs are configured for the machine.
- 2. In **Setting****Resources tab****Advanced CPU****Scheduling Affinity**, enter the serial numbers of the VMWare server's logical CPUs.

HTTPS for SpeechMiner

Enable HTTPS for SpeechMiner

Important

The following procedure is intended for a WIndows 2008 Server

- 1. Create a self signed server certificate to enable the https protocol:
 - a. Open the Microsoft Management Console (MMC).
 - b. Select File > Add / Remove Snap-in.
 - c. Select Certificate and click Add.
 - d. Click **OK**.

- e. Select **Computer account** and click **Next**.
- f. Selelct Local computer and click Finish and OK.
- g. Under Certificates (Local Computer), right-click Personal, All Tasks, Request New Certificates

The following **Certificate Enrollment** window appears:

- h. Click Next
- i. Under Active Directory Enrollment Policy, Select Computer.
- j. Click Enroll and Finish.
- 11. Configure the Report Server:
 - a. Open the Reporting Services Configuration Manager.
 - b. Select Web Service URL.
 - c. Select Advanced.
 - d. Under Multiple SLL Identities, click Add and select the certificate you created.
 - e. Click **OK** and select the **https URL**.
 - f. Under Multiple SSL Identities, click Add and select the certificate you created.
 - g. Click **OK** and select the **Report Manager URL**.
- 8. Create an SSL Binding:
 - a. Open IIS Manager.
 - b. Select **Default Web Site** and in the right **Action** pane click **Bindings**.
 - c. Click Add.
 - d. In the **Type** list select **https**.
 - e. In the IP address list select All Unassigned.
 - f. In the **Port** field enter the relevant port number.
 - g. In the **SSL Certificate** list select the relevant SSL Certificate.
- 8. Configure SSL settings:
 - a. In the IIS Manager, click Default Web Site.
 - b. Under IIS, select SSL Settings.
 - c. Select **Require SSL** and click **Apply**.
- 4. Restart the **IIS Server**.

Important

If the following error occurs after you restart the IIS Server, it

maybe due to the fact that your Skype process is using the same ports and should be stopped:

IIS Manager Error: The process cannot access the file because it is being used by another process. (Exception from HRESULT: 0×80070020)

Additional information abouat SSL on IIS 7 can be found here: http://learn.iis.net/page.aspx/144/how-to-set-up-ssl-on-iis-7/

Recording Modes

Additional Configuration for Recording Modes

- Create a new application for SpeechMiner with a Genesys Generic Server template in the **Genesys** Administration Extension:
 - Follow the Creating Applications Objects procedure in the **Procedures** tab of the **Applications** page in the Genesys Administration Extension document.
 - Verify that the name of the application that you create is the same as the **ApplicationName** field in the **configServer table** of the SpeechMiner database.
 - Creating a SpeechMiner application does not require configuring connections or options and is not integrated with LCA.

SpeechMiner Web Application

Configuring a SpeechMiner Web Application

Configure a new SpeechMiner Web application when your default web site is not sufficient for your systems demands.

- 1. Open the **IIS Manager**.
- 2. Under **Connections**, select **Sites > Default Web Sites** and right-click **SpeechMiner**.
- 3. Click **Remove** to remove the existing SpeechMiner Web Application.
- 4. Under **Connections** right-click the web site to which you want to add the SpeechMiner Web Application.

- 5. Select Add Application.
- 6. In the **Application Name** field enter **SpeechMiner** for the new web application.
- 7. Click Select.
- 8. Open the **Application Pool** list and select **SpeechMiner**.
- 9. Click **OK**.
- In the Physical Path click the Browse button and select the Installation > Web folder. The default folder is c:\Program Files (x86)\Genesys\Software\utopy\product\web.
- 11. Click **OK**.

The SpeechMiner Web Application appears under the web site to which you selected to add the SpeechMiner Web Application.

Enabling CMD for SMART

Configuring Command Line availability for SMART

To update the database configuration perform one of the procedures:

SMConfig

- 1. Log into SMConfig.
- 2. Select Services.
- 3. In the Services window, select **Update config files**.
- 4. Click Save.

SMART

- 1. Manually log into **SMART**.
- 2. Go to C:\Program Files (x86)\Genesys\Software\utopy\product\bin\release.
- 3. Make a copy of **smart.exe.config** and name the copy **smartc.exe.config**.
- 4. When asked to replace a file with the same name click Yes.

Define Caching Reports

Defining Caching Reports

All Caching tasks are listed in the **Report Caching Params** table.

In the default database there is one Caching task that caches all the reports in the expanded widgets for all the active partition sets during the last 30 days.

You can select different reports to cache then those defined by default. You can also delete the existing cache and create a new cache.

To define a new cache report:

- 1. Access the **Report Cache Params** table in the database and insert a new row.
- 2. Define the following parameters:

Parameter	Description
Enable	True
Report Query	The query that retrieves the report id's and the partition strings associated with the report you want to cache.

Within the Report Query you can use the following parameters:

Parameter	Description
@templatesToExclude	The templates to exclude from caching.
@usersToExclude	The users to exclude from caching.
@daysUserIsActive	The users that should be cached. For example, if this is 7, then only users that are active in the last 7 days should be cached.
numberOfProcesses	The number of parallel threads that should be cached (at the same time).
keepLogMessages	The number of days log messages associated with caching tasks be should be kept.
NotificationMail	The email address belonging to the users to whom the caching task report should be sent when the caching is complete.
webComputerName	The name of the web server to which the reports are cached.
RunAtTime	Defines when the caching task will run within 24hrs. The maximum is 1440 minutes for 24hrs. For example, if you want the cache task to run at 12 midnight and your UTC difference is +2, enter -120. It is the difference between UTC and the local time you want it to run in. The difference is in minutes.
nextTimeToRun	The next time the Caching task is set to run. Set this parameter to a low value. During the initial run the task automatically sets the correct value.

- 3. Log into SMConfig.
- 4. Under Machines & Tasks, select one or more machines on which the Caching task will run.

If you select more than one machine the Caching task will be divided equally between the machines that run simultaneously. The more machines the faster the Caching task will be completed.

5. Click Edit.

The following **Properties** window appears:

/ ⁹ Properties	×
Name: TLVQAVM29	
Installation Folder: C:\Program File	s (x86)\Genesys\!
Veb Server	
Protocol: http:	1
Port: 80	1
Virtual Folder: speechmine	r
Language: English	•
Search using remote web	service
Computer: TISRAEL	7
Interaction Receiver	Parameters
Fetcher 1	Parameters
Call Recognizer	Parameters
Indexer	
Report Caching	
Active Search Manager	
Exploration	
Recategorizer	
Text Recognizer	
ОКС	ancel //

- 6. Select Report Caching.
- 7. Click **Ok**.
- 8. Click Save.
- 9. Select the **Report** tab.

The following **Report Deployment** page is opened:

SpeechMiner Config	uration Tool - 8.5.2 (8.5.2	00.125)	_ 🗆 🗙
SpeechMiner Config	uration Tool - 8.5.2 (8.5.2 Report Deplo Set reports caching time Deploy MRSLibra Deploy Reports	Dyment (minutes) 10 My C:\Program Files (x86)\Genesys\Software\reports Select\Unselect All Report/Resource Agent Bubble Chart v4.rdl Agent Trend v4.rdl Agent Trend v4.rdl Buzz.rdl Capacity Trend.rdl	Browse
Services		Gategory Bubble Chart v4.rdl Gategory Distribution v4.rdl Gategory Trend v4.rdl Gategory Trend v4.rdl	
Audio		Image: Coaching Summary.rdl Image: Coaching Summary.rdl <th></th>	
		B Topic Analysis - Trends.rdl B Topic Correlation.rdl B Usage Tracking v2.rdl	
	- Help		
	Deploy MRS Library	To deploy MRS library you need to set a machine and a valid installation folder under the Tasks" section in the "Sites & Machines" panel and apply.	"Machines &
	Deploy Reports	To deploy reports you need to deploy the MRS library first or deploy both at the same time	8.
			Save

- 10. In the **Set reports caching time (minutes)** field enter **1440** (this number represents 24 hours).
- 11. Select all the report templates and click **Save**.
- 12. Verify that the Caching task is running:
 - a. Access the **reportCachingLog** table.
 - b. Select the table records and verify that the Caching task ran.
 - c. Access the **ulogger** and verify that it is caching the selected reports.

Important

If the Report Caching task fails, the Partition Failure error will appear in the reportCachingLog table. To resolve this error copy the Microsoft.ReportViewer*.* dlls from the web\bin folder to the platform bin folder utopy\product\bin\release or Install MS Report Viewer 2005.

Report Server Email Configuration

Report Server Email Configuration

Configure the Report Server email as follows so that the report schedule and report deliverable functions operate as expected.

- 1. Access the **Report Server** machine.
- 2. Open Reporting Services Configuration Manager.
- 3. Click **Connect** to connect to the Report Server.
- 4. Select **Service Account** and define a user account with access to the SMTP server.
- 5. Click **Apply**.
- 6. Select E-mail Setting and define the SMTP Server and default Sender Address.
- 7. Click **Apply**.

Integrated Windows Authentication

Integrated Windows Authentication

Integrated Windows Authentication enables you to ensure that your SpeechMiner users are not required to log into SpeechMiner every time they want to access the application.

Tip

To configure your application to use Integrated Windows Authentication, you must use IIS Manager to configure your application's virtual directory security settings and you must configure the <authentication> element in the Web.config file.

1. Open IIS Manager and navigate to the level you want to manage. For information about opening IIS Manager, see Open IIS Manager (IIS 7).

For information about navigating to locations in the UI, see Navigation in IIS Manager (IIS 7).

- 2. In Features View, double-click Authentication.
- 3. On the Authentication page, select Windows Authentication.
- 4. In the **Actions pane**, click **Enable** to use Windows authentication and **Disable** to use Anonymous authentication.
- 5. In your application's Web.config file or in the machine-level Web.config file, ensure that the authentication mode is set to Windows as shown here.

```
<system.web>
...
<authentication mode="Windows"/>
...
</system.web>
...
```

Multiple Language Support for the User Interface

Multiple Language Support for the User Interface

To enable your user interface to display in more than one language perform the following steps:

- 1. Create a copy of the SpeechMiner web folder (C:\Program Files (x86)\Genesys\Software\utopy\product\ WEB).
- 2. In IIS create an additional SpeechMiner application and select Speechminer as the Application Pool.
- 3. Under **Advanced Settings** change the path of the new physical folder to the new web folder.
- 4. In the ...\utopy\product\web.config file change en-US to one of the following supported languages:

Supported Languages:

- en-US
- ca-ES
- de-DE
- es-ES
- es-MX
- fr-FR
- it-IT
- ja-JP
- ko-KR
- pt-BR
- zh-CN

Configuring Permissions

This section describes the permissions that must be set for the functional SpeechMiner domain user (SMUSER) and for users of SMART.

UPlatform

Configuring Permissions for UPlatform

SpeechMiner uses a domain user account as the credentials for all the registered SpeechMiner services. Your IT department must be able to create this account for you. The domain user must have assigned permissions on all machines on which the UPlatform service will run, as described below. The user account must be created and assigned the required permissions before you begin configuring SpeechMiner.

Important

In this guide, this functional user account is called **SMUSER**.

Groups

SMUSER must be added to the following groups:

- Power Users
- Performance Monitor Users (if this group exists on the machine)

Folder Properties

In the Properties of the following folders, assign permissions to SMUSER, as follows:

Important

Tab indicates the tab in the **Properties** dialog box in which the permission can be assigned.

Folder	Tab	Permission	Comments
Genesys installation folder	Security	Modify	UsuallyC:\Program Files (x86)\Genesys\ Software
Genesys data folders	Security	Modify	For example, C:\data - where the data\input and data\filtered folders are located
Genesys data folders	Sharing	Change	For example, C:\data - where the data\input and data\filtered folders are located
C:\Program Files (x86)\Genesys\ Software\utopy\ product\WEB\App_Data	Security	Read/Write	This is for the impersonation user specified in the web.config file.

Report Server

On the report server, assign the Content Manager role to SMUSER, as follows:

1. On the database server, open a browser, and navigate to //<database server name>/reports. The SQL Server Reporting Services manager opens.

Important

If the Windows UAC (User Account Control) is active on the server, open the browser by right-clicking its icon and then selecting **Run as administrator**.

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Importance::::::::::::::::::::::::::::::::::::	SQL Server Reporting Services	1	
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2. Select the Folder Settings tab.

Important

If you cannot access this folder, because you are repeatedly asked for your credentials, and then the screen turns blank, do the following: In rsreportserver.config, remove the value RSWindowsNegotiate and ensure that RSWindowsNTLM is specified. (For more information about this problem, and some other solutions, see http://blogs.msdn.com/b/lukaszp/archive/ 2008/03/26/solving-the-reporting-services-login-issue-in-thefebruary-ctp-of-sql-server-2008.aspx)

- 3. If SMUSER is not on the list, click **New Role Assignment** and add it. If it is on the list, click **Edit** to edit the existing account settings.
- 4. Select **speechminer database > sme**.
- 5. In the Security tab, click New Role Assignment. The New Role Assignment tab opens.

- 6. In **Group or user name**, enter the user name (SMUSER).
- 7. Select the **Content Manager** checkbox.

Home		
R	SQL Server Reporting Services New Role Assignment	
Grou	this page to define role-based security for Home. up or user name:	
	Role 4	Description
	Browser Content Manager My Reports Publisher Report Builder OK Cancel	May view folders, reports and subscribe to reports. May manage content in the Report Server. This includes folders, reports and resources. May publish reports and linked reports; manage folders, reports and resources in a users My Reports folder. May publish reports and linked reports to the Report Server. May view report definitions.

8. Click **OK**. The Content Manager role is assigned to SMUSER.

Directories Used by ASP.NET

Give SMUSER access permissions to the IIS metabase and other directories used by ASP.NET. To do this, an administrator can run this command:

c:\Windows\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe -ga
"{domain}\{user}"

Uconnector

Configuring Permissions for UConnector

A functional UConnector user should be assigned the permissions listed below. Note that you can use SMUSER for this purpose; it is not necessary to create a dedicated domain user for this.

- Recording-system shared folder: Read permissions
- · SpeechMiner input folder: Read/write permissions

SMART

Configuring Permissions for SMART

Any user who will run SMART should have the following permissions:

Folder	Permission	Comments
SpeechMiner installation folder	Read/write	Usually C:\Program Files (x86)\Genesys\Software
Package Root Path	Read/write	The path configured in the Packages folders text box in the Sites and Machines section.
Nuance installation folder	Read/write	For example, C:\Program Files\Nuance

In addition, all SMART users should have permission to use .net encryption. To add this, an administrator can run the following command:

aspnet_regiis -pa "NetFrameworkConfigurationKey" "{domain}\{user}"

Web Server

Configuring Permissions for the Web Server

Once you have installed the SpeechMiner web server, you should set the following permissions:

- On the folder C:\Windows\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files, give Modify permissions to the domain user that SpeechMiner will impersonate (For the SMUSER, see Configuring Permissions for UPlatform).
- Set read/write/modify permissions to the IIS user/group (IIS_IUSRS in Windows server 2008 and above) and the operational domain user (SMUSER) on the SpeechMiner installation folder.
- Set read/write/modify permissions to the IIS user/group (IIS_IUSRS in Windows server 2008 and above) on the windows temp folder.

Working with Chat Interactions

SpeechMiner supports numerous metadata for chat interactions.

This page describes the required system specifications for the successful implementation of chat interactions.

Supported Formats

Supported Formats for SpeechMiner 8.5 and Above

- Text File
- Chat XML file (.chtx)

File Format

Chat File Format Specifications

Text File

A chat interaction in a text file format only requires a subject and the conversation. The file does not require information about the participants.

The first line in the text file should be the subject. The second line in the text files should be empty. The remaining lines should contain the chat conversation.

For example:

Billing Issue

How can I help you today? I want to change my billing address.

May I have your account number please?	
 It's been my pleasure to assist you today	Chat XML File (.chtx)
	When using an XML file (.chtx format), the chat interactions should be configured as follows: <textformat>XML</textformat>

Additional information can be added as meta data in the interaction XML file.

Important

The .chtx format and specification that is described here is not an official format or standard. This file format was specifically created for SpeechMiner purposes. The assumption is that the UConnector or any other ETL tool will create the chat conversation in this format before sending the file to SpeechMiner.

A chat conversation in .chtx format can contain one subject, multiple conversation messages and a description of the parties in the conversation. The subject and each message is not limited to one line (they can contain multiple lines).

Each message element can contain the following:

- Time stamp the time format is ISO_8601. For example: '2013-12-04T18:26:46'
- **Display name** the display name of the message sender.
- **Party ID** the string identifier of the sender/party id. The party ID can be described in two places, in both cases the ID will be used to match the party/speaker type. If the party ID cannot be found in one of these places it will be ignored and identified as a different party in the call.
 - In the 'speakers' element in the meta data xml file
 - In the 'parties' element in the chtx file (see below)

Messages without a party ID or messages with a party ID that were not found, will be treated as one party. This configuration is similar to the channels speakers configuration in dual channel calls

Each party element can contain the following:

- Party ID used to match the id from each 'message' element
- **Party type** used to identify the type of the party/speaker when you configure categories with speakers or limit the search in the web to specific speakers.

If one of these attributes are missing this party configuration will be ignored.

Important

The additional information in each message is not mandatory.

The order of the messages in the file must be in the original order. Since it's not mandatory, the system does not sort the messages according to the time stamp value.

If the sender name is not specified in the message, the system will not use the speaker name from the speakers configuration (the UI will not show any name).

File Format Examples

Example 1:

```
<?xml version="1.0" encoding="us-ascii"?>
<chat>
 <parties>
  .
<party partyId="FIRST SPEAKER ID" partyType="FIRST SPEAKER TYPE" />
  <party partyId="SECOND SPEAKER ID" partyType="SECOND SPEAKER TYPE" />
 </parties>
 <subject>SUBJECT LINE</subject>
 <message time="FIRST MESSAGE DATE AND TIME" partyId="FIRST MESSAGE
    SPEAKER ID" displayName="FIRST MESSAGE SENDER NAME">
    FIRST MESSAGE CONTENT
 </message>
 <message time="SECOND MESSAGE DATE AND TIME" partyId="SECOND MESSAGE</pre>
    SPEAKER ID" displayName="SECOND MESSAGE SENDER NAME">
    SECOND MESSAGE CONTENT
 </message>
</chat>
```

Example 2:

```
<?xml version="1.0" encoding="us-ascii"?>
<chat>
 <parties>
 <party partyId="customer" partyType="customer" />
 </parties>
 <subject>Billing issue</subject>
 <message time="2013-04-18T12:10:42" partyId="agent"
  displayName="Agent 1"> How can I help you today?
 </message>
 <message time="2013-04-18T12:10:51" partyId="customer"</pre>
  displayName="Customer 1"> I want to change my billing address
 </message>
 <message time="2013-04-18T12:10:58" partyId="agent"</pre>
  displayName="Agent 1"> May I have your account number please?
 </message>
  . . .
 <message time="2013-04-18T12:15:23" partyId="agent"
```

```
displayName="Agent 1"> It's been my pleasure to assist you today
</message>
</chat>
```

Important

Any white space around the message content or subject content will be removed (including the first and last new lines). New lines inside the content will be preserved. Since the format is XML, any reserved XML characters must be encoded if they appear in the subject content, message content or attributes. Any other XML information will be ignored.

PartyID Configuration

PartyID Configuration

PartyID can be configured in two places:

- In the chat meta xml file, in the speakers element. The speakers element in the meta xml file is used for mapping the interaction to an agent and work group. Since speakerType is defined in the meta xml file, the file is used as part of the parties configuration.
- In the parties element in the chtx file. The parties element contains parties that are not linked to the interaction as agents or work group (for example, a customer).

The chtx fetcher will search for each PartyID used in the message in the speakers configuration. If the PartyID does not exist in the speakers element, the chtx fetcher will check the parties element. If the PartyID is not defined in both places the PartyID will be ignored.

Example 1: 2 Parties (Agent + Customer)

In this example, the agent is defined as the speaker and the customer is defined in the parties element.

Meta XML File:

```
<?xml version="1.0" encoding="us-ascii" ?>
<callInformation>
<mediaType>Chat</mediaType>
<textFormat>XML</textFormat>
<textTime>2014-01-07T10:54:04</textTime>
<programID>english</programID>
<speakers>
<speaker id="ag1" speakerType="agent">
<workgroup>/W1/W2</workgroup>
```

</speaker> </speakers> </callInformation>

CHTX File:

```
<?xml version="1.0" encoding="us-ascii"?>
<chat>
 <parties>
 <party partyId="customer1" partyType="customer" />
 </parties>
 <subject>Billing issue</subject>
 <message time="2013-04-18T12:10:42" partyId="ag1"
 displayName="Agent 1"> How can I help you today?
 </message>
 <message time="2013-04-18T12:10:51" partyId="customer1"</pre>
 displayName="Customer 1"> I want to change my billing address
 </message>
 <message time="2013-04-18T12:10:58" partyId="ag1"
 displayName="Agent 1"> May I have your account number please?
 </message>
</chat>
```

As shown in the above example the agent with ag1 ID is configured in the speakers element, in the meta xml file and the customer with the customer1 ID is configured under parties in the chtx file.

Example 2: 3 parties - agent, supervisor and customer

In this scenario there are two options. You can configure the supervisor as a speaker (the common scenario) or as the party in the chat. When configured as the party a link to an agent or work group is not possible.

Option 1: Supervisor as a speaker - Meta XML File

Option 1: Supervisor as a speaker - CHTX File

```
<?xml version="1.0" encoding="us-ascii"?>
<chat>
<parties>
<party partyId="customerl" partyType="customer" />
</parties>
<subject>Billing issue</subject>
<message time="2013-04-18T12:10:42" partyId="agl"
displayName="Agent 1"> How can I help you today?
```

</message>
<message time="2013-04-18T12:10:51" partyId="customer1"
displayName="Customer 1"> I want to change my billing address
</message>
<message time="2013-04-18T12:10:58" partyId="ag1"
displayName="Agent 1"> May I have your account number please?
</message>
<message time="2013-04-18T12:11:02" partyId="customer1"
displayName="Customer 1"> I want to talk to supervisor!
</message>
<message time="2013-04-18T12:11:03" partyId="sup1"
displayName="Supervisor A"> I'm the supervisor, how can I help you?
</message>
</chat>

Option 2: Supervisor is not a speaker - Meta XML File

```
<?xml version="1.0" encoding="us-ascii" ?>
<callInformation>
  <mediaType>Chat</mediaType>
  <textFormat>XML</textFormat>
  <textTime>2014-01-07T10:54:04</textTime>
  <programID>english</programID>
  <speakers>
      <speaker id="agl" speakerType="agent">
      <workgroup>/W1/W2</workgroup>
      </speakers>
      </speakers>
```

Option 2: Supervisor is not a speaker - CHTX File

```
<?xml version="1.0" encoding="us-ascii"?>
<chat>
 <parties>
   <party partyId="customer1" partyType="customer" />
   <party partyId="sup1" partyType="supervisor" />
 </parties>
 <subject>Billing issue</subject>
 <message time="2013-04-18T12:10:42" partyId="ag1"</pre>
   displayName="Agent 1"> How can I help you today?
 </message>
 <message time="2013-04-18T12:10:51" partyId="customer1"</pre>
  displayName="Customer 1"> I want to change my billing address
 </message>
 <message time="2013-04-18T12:10:58" partyId="ag1"</pre>
   displayName="Agent 1"> May I have your account number please?
 </message>
 <message time="2013-04-18T12:11:02" partyId="customer1"</pre>
   displayName="Customer 1"> I want to talk to supervisor!
 </message>
 <message time="2013-04-18T12:11:03" partyId="sup1"
  displayName="Supervisor A"> I'm the supervisor, how can I help you?
 </message>
</chat>
```

Working with ULogger

ULogger is a SpeechMiner tool that lets you view event logs associated with your system.

Before you begin working with ULogger consider the following:

- SpeechMiner logs are written to the Event Viewer and to files saved on your database.
- The SpeechMiner logs that appear in ULogger are the same logs that appear in Event Viewer > Applications and Services Logs > SpeechMiner.
- ULogger enables you to view SpeechMiner logs in a central location.
- ULogger view options conveniently enable you to separate information logs from warning and error logs.
- In Debug mode, the debug logs will not appear in the ULogger. The debug messages will only appear in the log files.

Procedure



1. Right click the ULogger icon 🔚 and select **Run as administrator**.

ULogger is opened.

2. Use one or more of the following ULogger options:

ULogger Options	Description
Pause	Click Pause II to freeze the ULogger scroll bar so that you can read a specific log. Click Pause again to unfreeze the scroll bar.
Refresh	Click Refresh to reload logs according to the selected view (for example, View last 7 days) and source.
Machine	Indicates the machine for which the logs are created.
Find	Enables you to search for a specific log.
System	Enables you to select the system for which you want to view logs. If the system is only working with one Tenant, SpeechMiner will appear in the field.
	Enables you to view logs associated with a specific source:
Source	 All: view logs for all sources. Default: view logs for components that are
	not connected to the database (for example, SMConfig before it logs into the database).

ULogger Options	Description
	Or, view logs for one of the components in the list (for example, Interaction Receiver, Uplatform, Web, etc.).
File Menu	 Contains the following two options: Refresh: enables you to view older logs and updated logs for a specific source. Clear: enables you to either erase the logs from ULogger while keeping them in the database or you can completely delete the logs from the system.
	Click Yes to delete the log files from the Event Viewer and No to clear the ULogger screen.
	• Split View : divides the screen into two. The left side contains a list of information logs and the right side of the screen contains a list of error and warning logs.
	• Merged View : shows all the logs in one list (that is, information, error and warning logs).
	• View All: shows all the available logs.
View Menu	• View last 7 days : updates the screen with logs from the last 7 days.
	• View last 24 hours : updates the screen with logs from the last 24 hours.
	• View last 60 minutes : updates the screen with logs from the last 60 minutes.
	• Fore Color: enables you to change the log font color.
	 Back Color: enables you to change the log background color.