

GENESYS

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SpeechMiner Administration Guide

Using the SMConfig to Configure SpeechMiner

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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.

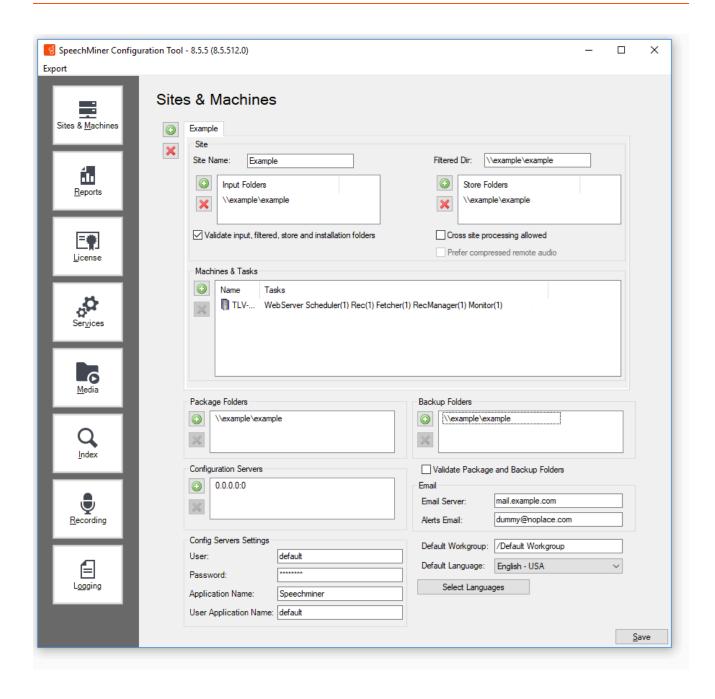
Sites & Machines

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.

For additional information, refer to the following sections:

- Configuring Sites
- Configuring Machines and Tasks



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.

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.

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,

Field	Description
	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 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.

Field	Description
	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). If you will be using multiple
Package Folders	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.
Backup Folders	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).
	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	 Email Server: The name of the email server SpeechMiner must use to send alerts, notifications, and reports
2	 Alerts Email: The email address SpeechMiner must use as the sender address when it sends email notifications
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

Field	Description
	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 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 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>). • 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 servers, add additional lines with their details. After setting or updating the configuration server host and port in SMConfig (either in</port></config_server>

Field	Description
	the Login window, or in the Sites and Machines panel), the IIS should be restarted.
Config Server Settings	The following must be configured in the systems Configuration Server:
	• Configuration Server Username and Password: The Configuration Server user and password that SpeechMiner applications should use when connecting to the Configuration Server. Verify that the specific user was given read and execute permissions for the tenant object in the configuration server and all its objects in the tenant object hierarchy.
	 Application Name: The prefix for the SpeechMiner applications. For example, if the prefix is 'Speechminer', the Web Server will use the Speechminer_Web and Speechminer_Web_node applications
	 User Application Name: The name of the Configuration Manager application object that will be used to validate user credentials. For details, see Configuring Permissions.

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.

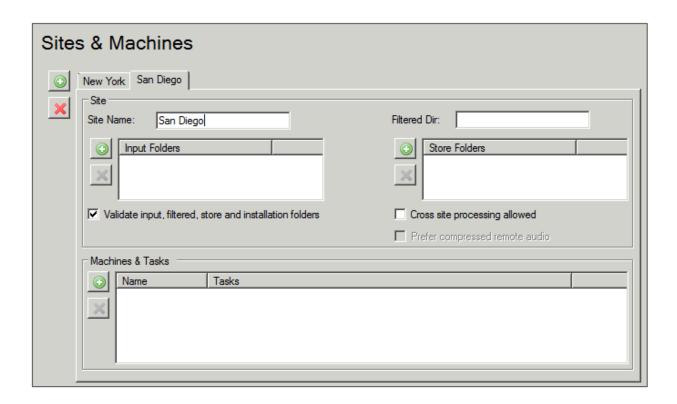
Adding a Site

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 . 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.



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 and Exploration tasks. These messages can be ignored when working in Recording UI Mode, since these tasks are

not available in this mode.

Adding Machines to a Site

You can add machines to sites as required.

To add a machine to a site:

- 1. Under Machines and Tasks click .
- 2. In the **Properties** window, enter one of the following values for <machine name>:
 - · Machine Name
 - Machine IP
 - Fully Qualified Domain Name (FQDN)
- 3. Click **OK**. The machine is added to the list of site machines.

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, 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.
- **Scheduler:** Sends data to the Indexer Service, creates Quality Management (QM) Evaluation Sessions and archives QM.
- **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.
- **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.
- Monitor: Enables the monitoring of the selected machine.

Normally, each site will have:

- One Web server
- · One or more fetchers
- Several Recognizers, Recategorizers, and Monitors
- · One or more Indexer tasks.

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 guad-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 the recognition manager. You can configure the maximum number of Call Recognizers that should be managed by each Recognition manager. If the number is too low, performance may be impacted; if it is too high, the process may run out of memory. The number of recognition machines and processes should be defined by the sizing guide.

Optimizing Exploration Tasks

Optimizing exploration tasks speeds up the data analysis required for the web-based interface Trending. The Exploration task and all its sub-tasks are run simultaneously according to a scheduler mechanism and scheduling parameters (for example, continuously, once every 24 hours, and so on). A general starting point is to define one machine with Exploration. However, when working with a very large data set, having all the sub-tasks on the same machine as the Exploration task can impact performance due to the large CPU/Memory load required. To reduce the negative impact on performance and to avoid a single point of failure and a loss of redundancy, it is recommended that you define the Exploration task on more than one machine. Since the Exploration scheduler supports load balancing the tasks between several machines, there are more hardware resources available for each task and subsequently each task runs faster.

Important

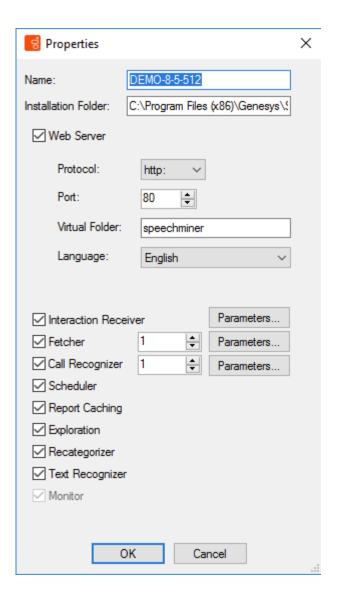
To configure a Trending Cluster Task for a fixed period longer than two weeks, you must change the default purging fragments value. For details, see the <u>Purging Fragments Configuration</u> section in the Additional Configurations page.

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.



- 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.

Important

- It is recommended that in systems with Analytics the language selected here should be one of the languages selected in the Sites & Machines panel.
- For the language change to take effect you must update the configuration files in

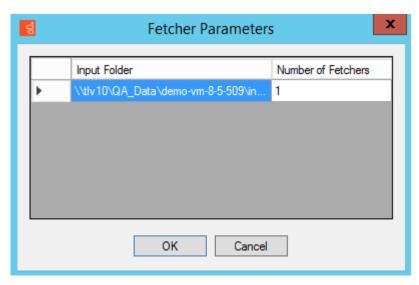
the web machines using the Service panel.

- 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 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.

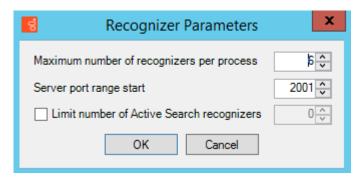


- 3. Under **Number of Fetchers**, specify how many fetchers should retrieve interaction data from each input folder. Modify the values so that the sum of all the fetchers defined matches the number of fetchers that you specified should run on the machine.
- 4. Click OK.

Configuring the Settings of the Call Recognizers

To configure the settings of the Call Recognizers:

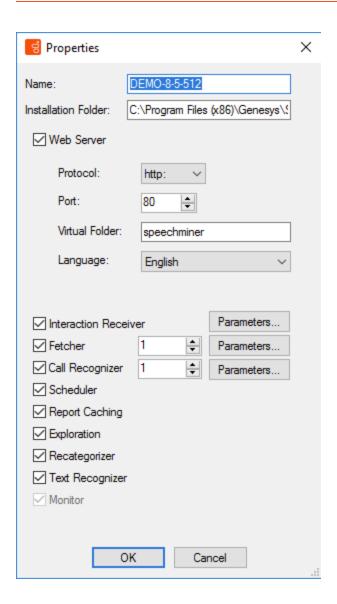
- 1. To the right of the **Fetcher** checkbox, select the number of Call Recognizers that should run on the machine.
- 2. Click the **Parameters** button. The **Recognizer Parameters** window opens and displays a list of all the input folders that are configured for the site.



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.

4. Click **OK**.

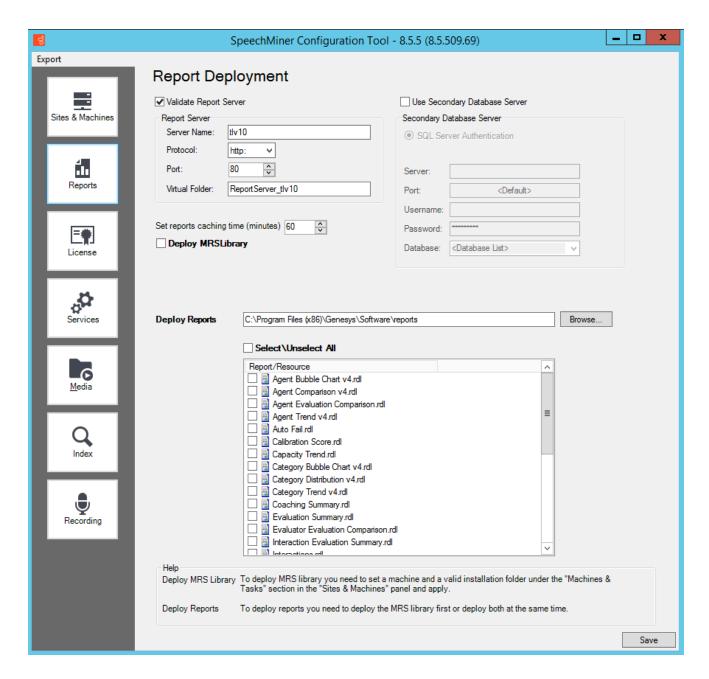


Reports

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.



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).
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 instance, enter both the folder name and the instance name, in the format <virtual< li=""> </virtual<>

Field	Description
	report folder name>_ <instance_name>.</instance_name>
	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. Note: For QM reports it is recommended that the cache setting be set to the minimum amount of 1 minute.
	If the MRS Library has not yet been deployed on the report server, select this option.
Deploy MRSLibrary	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,

Field	Description
	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.
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.

Configuring Reports on the Secondary Database

Running reports on the secondary database enables you to decrease the load on the main database.

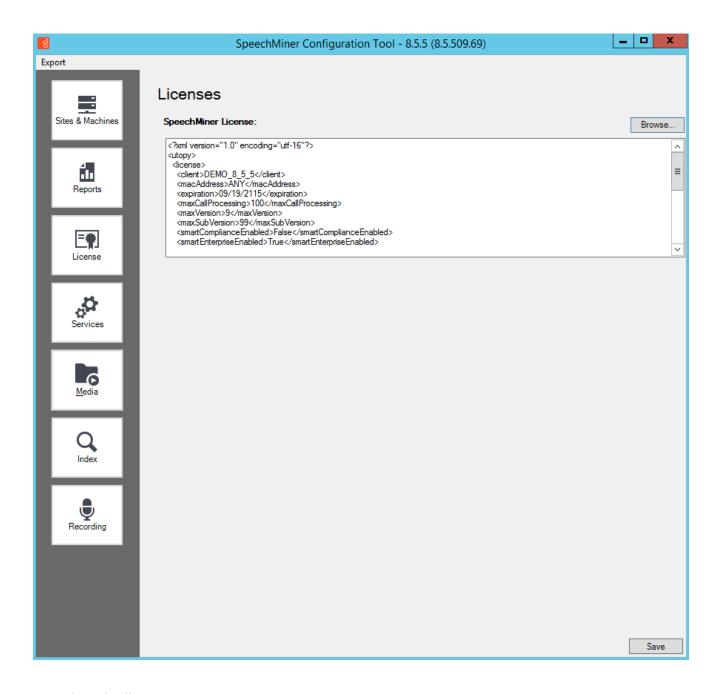
To run reports on the secondary database:

- 1. Access the http://<server name>/reports in the web browser and open the SpeechMiner database folder (that is, the folder with the relevant database name).
- 2. Open the SME data source and change/add the connection string to the following: data source=<SERVER NAME>;initial catalog=<DB NAME>;applicationIntent=ReadOnly;
- 3. Click Apply.
- 4. Restart the **Report Server**.

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.



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. 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.

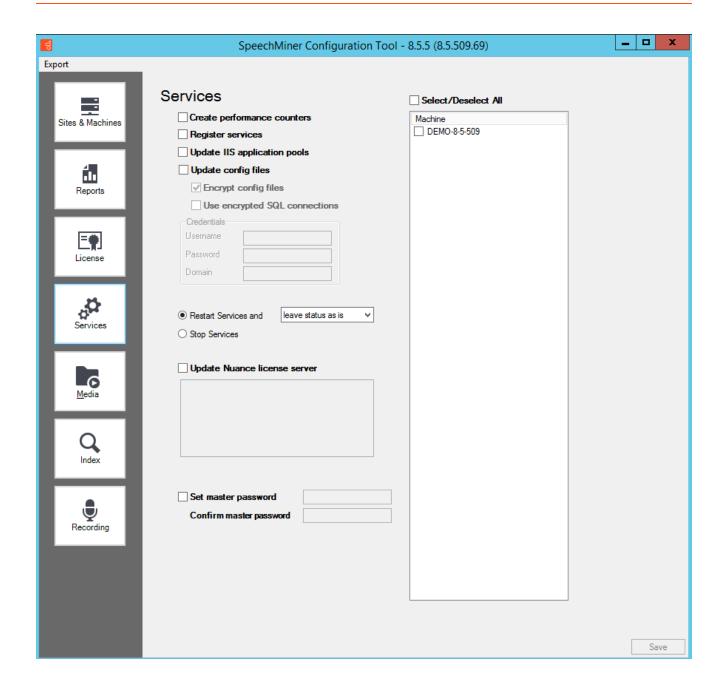
Services

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. See: Initial Configuration
- Update the SpeechMiner configuration files on each machine. See: Required Permissions
- Start, restart, and stop services. See: Starting and Stopping the System

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.



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

Field	Description
	password, and click Apply .
	Select this option to configure the Application Pools identity for SpeechMiner Web and Interaction Receiver.
Update IIS application pools	When you select this option, the Credentials area becomes active. Enter the credentials of the Windows user that will run the services.
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.
	• Encrypt config files - This option will encrypt the SpeechMiner configuration files in the local system and remote system.
	 Use encrypted SQL connections - This option will start connecting the SpeechMiner database in encrypted mode (SSL). You should use this option only when you use SQL encryption.
	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,

Field	Description
	select this option for the new machines.
	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.
Restart Services / Stop Services	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).
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 Media 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, Windows Server 2012, Windows Server 2016 and Windows Server 2019, Power User privileges 	Power User privileges should only be used when SpeechMiner services are registered on selected machines. Power User privileges should only be given by an Administrator user.
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.

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.

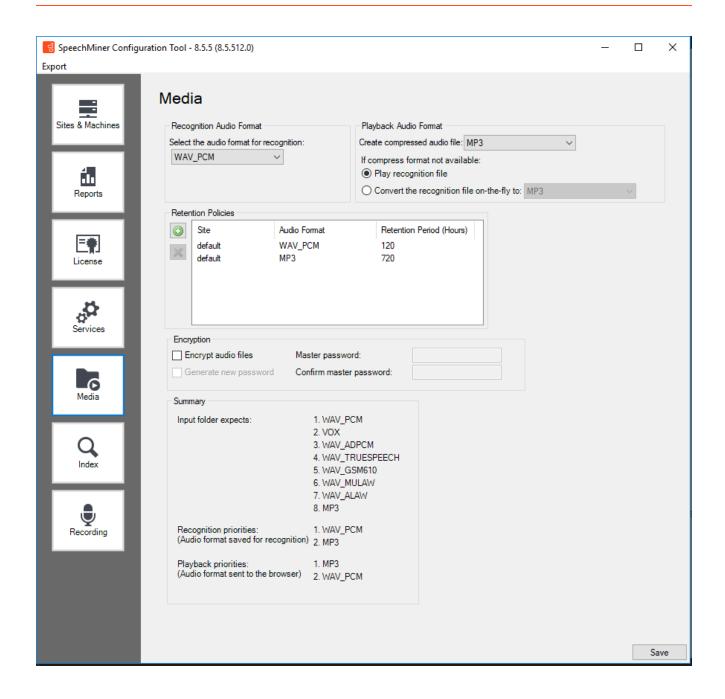
Media

Media

The **Media** 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.

Important

The Media panel is only available in an **Analytics Only** deployment.



Configuring the Media Settings

The **Media** 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 **Media** 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 webbased 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 .
If 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 plays 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 above. 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 audio data or 15 minutes of compressed audio 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 audio files and the storage of files for longer than is necessary.
	The recognition audio files of calls that have

Field	Description
	not been processed yet, and of calls that are included in Static Call Lists, are not deleted even when the retention period is over. • If you do not want audio 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 calls is limited and does not grow continuously.
Encrypt audio files	 Select this option to encrypt the audio/text 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 **Media** panel summary lists the preferred formats that SpeechMiner supports:

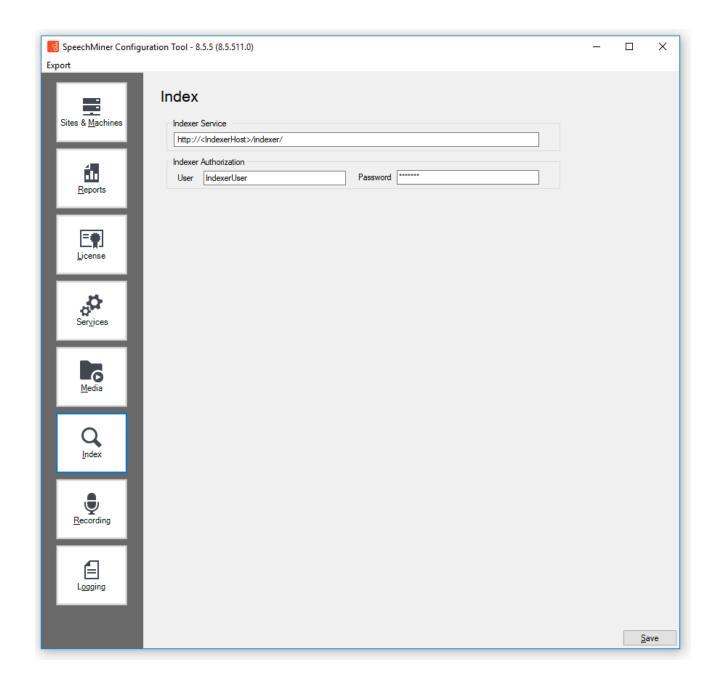
Item	Function	Description
Input folder expects	Fetcher	Audio formats supported by fetchers; call audio that is retrieved from the external recording system by UConnector must be saved in the input folder in one of these formats.
Recognition priorities	Recognition	Preferred audio formats for the

Item	Function	Description
		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 configure the Indexer authentication and service location.



Indexer Service

Enter the Indexer Service with the location at which it was installed (for example, http://<IndexerHost>/indexer/). For additional information see Installing SpeechMiner using the Wizard.

Indexer Authorization

Enter the username and password defined in the **Authentication** tab during the **Installing** SpeechMiner using the Wizard procedure.

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**: The name of the tenant in the Configuration Server that contains the system configuration.
- Update Agents Every # Hours: Indicates how often agents are updated with new recordings.

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

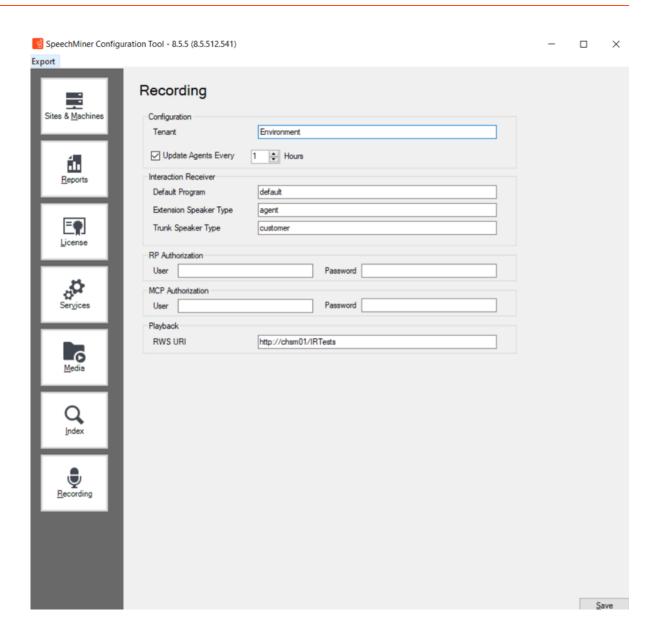
Set the User and Password to the values configured for the RP.

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 internal **RWS URI** value (when working with tagging), using the format: http://rws host:port.



Logging

Logging

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

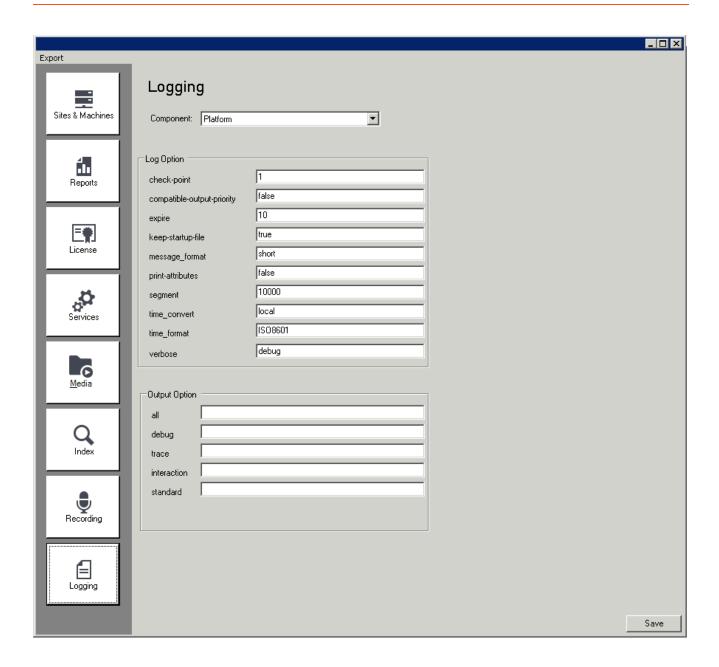
• **Platform**: manages all the SpeechMiner processing tasks. For example, fetching, recognition, categorization, exploration, compression and indexing.

- **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.



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 equals the value of the segment option. • <number> KB: Sets the maximum size, in kilobytes, for a startup segment of the log. • <number> MB: Sets the maximum size, in megabytes, for a startup segment of the log. Changes take effect: after restart</number></number>
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
verbose	minimum level of log events generated. The log events levels, starting with the highest priority level, are Standard, Interaction, Trace, and Debug.
verbose	events levels, starting with the highest priority

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
trace	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 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	
	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
standard	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). • 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.

Important

You do not have to click **Save** before you click **Export**.

- 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.