



Upgrade Guide

SpeechMiner 8.5.5

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SpeechMiner Upgrade Guide

The **SpeechMiner Upgrade Guide** provides the instructions required to upgrade **Genesys Interaction Analytics (GIA)**. These pages are valid for all **Genesys Interaction Analytics (GIA)** releases.

Important

The availability of **Genesys Interaction Analytics (GIA)** features are dependent on the deployment you are working in and your permissions.

Upgrade Paths

- Upgrade SpeechMiner from 8.0 to 8.1
- Upgrade SpeechMiner from 8.1 to 8.5
- Upgrade SpeechMiner from 8.5.0 to 8.5.0.1
- Upgrade SpeechMiner from 8.5.0.3 to 8.5.0.4
- Upgrade SpeechMiner from 8.5.0.4 to 8.5.0.5
- Upgrade SpeechMiner from 8.5.0.5 to 8.5.0.6
- Upgrade SpeechMiner from 8.5.0.1 to 8.5.2
- Upgrade SpeechMiner from 8.0 or 8.1 to 8.5.2
- Upgrade SpeechMiner from 8.5.2 to 8.5.201
- Upgrade SpeechMiner from 8.5.201.07 to 8.5.201.08
- Upgrade SpeechMiner from 8.5.2 to 8.5.3
- Upgrade SpeechMiner from 8.5.3 to 8.5.4
- Upgrade SpeechMiner from 8.5.4 to 8.5.5
- Upgrade SpeechMiner from any Version to 8.5.501
- Upgrade SpeechMiner from any Version to 8.5.502
- Upgrade SpeechMiner from any Version to 8.5.503
- Upgrade SpeechMiner from any Version to 8.5.504
- Upgrade SpeechMiner from any Version to 8.5.505
- Upgrade SpeechMiner from any Version to 8.5.506
- Upgrade SpeechMiner from any Version to 8.5.507
- Upgrade SpeechMiner from any Version to 8.5.508
- Upgrade SpeechMiner from any Version to 8.5.509

- [Upgrade SpeechMiner from any Version to 8.5.510](#)
- [Upgrade SpeechMiner from any Version to 8.5.511](#)

SpeechMiner 8.0 to 8.1 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.0 to version 8.1.

Pre-upgrade Requirements

- Request the most recent release of the 8.5 software from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Perform Pre-upgrade Tests	<p>Since upgrading SpeechMiner can take several hours it is important to avoid delays. For this reason, it is recommended to test SMUpgrade before you begin the upgrade procedure.</p> <p>To test SMUpgrade, perform one of the following:</p> <ul style="list-style-type: none">• Create a copy of the database and send it to your Genesys counterpart. Genesys will test the SMUpgrade process in a lab environment.• Create a copy of the database on a separate SQL server. Provide your Genesys counterpart with the details of the SQL server and Genesys will test the SMUpgrade process on this temporary server.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, and so on) that is

Item to Check	Details
	older than the specified period of time is automatically deleted. In these cases, it is recommended to purge the old data before performing the upgrade. Deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.

Rollback Plan

To ensure that you can revert back to SpeechMiner 8.0, keep the 8.0 DB active on the server, rather than just keeping a backup file.

Do not delete the 8.0 data folders (`index`, `grammars`, etc.). Instead, configure the 8.1 system with new data folders. Creating new folders ensures that you will not lose 8.0 data.

Since the 8.0 DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall 8.0. The 8.0 system should still be configured and functional.

After you uninstall SpeechMiner 8.0 and install SpeechMiner 8.1, the only way to revert back to 8.0 is to install 8.0 again and update the config files using SMConfig. However, since the DB and data folders would not have been deleted, they should be available and ready to use without changing the system configuration.

Upgrade Procedure

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	15 minutes
Back up the database (step 2)	120 minutes
Create target database (step 3)	30 minutes
Run SMUpgrade (steps 6 to 13)	10 to 20 hours
Configure and start the system (steps 14 to end)	60 minutes

1. Using SMConfig->Services->Stop Services, stop the 8.0 system.
2. Create a copy of the source DB and upgrade it to the latest build:
The source DB must be version 8.0. Refer to the `versionTbl` table to determine the correct version.
If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.0 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.1 upgrade.

- a. Back up the 8.0 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).
 - b. Create a copy of the source DB (back up the DB and then restore it in another location).
 - c. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
 - d. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.0 build version. For this step you will need assistance from Genesys Customer Care. Contact [Customer Care](#) for assistance.
3. Create the 8.1 target DB as follows:
- Manually—Refer to [Installing the SpeechMiner Database > Manual](#) tab.
- Or
- Setup Wizard— Refer to [Installing the SpeechMiner Database > Setup Wizard](#) tab.
4. If the MS-SQL server is an Enterprise Edition, run `EXEC sp_create_DB_storage_partitions` on the target database.
5. If your source and target databases are on different servers, make sure the servers are linked in both directions, using the stored procedures `sp_addlinkedserver` and `sp_addlinkedsrvlogin`, as needed.
6. Install and run SMUpgrade (to migrate the data from the 8.0 DB to the 8.1 DB), as follows:

Prerequisites:

- When migrating a large database, make sure that the hard drive that hosts the target database has enough storage space.

Usage

- a. Query the `versionTbl` table to ensure that your 8.0 source database is updated to the latest 8.0 schema.
- b. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db > properties > options > recovery model`.
- c. Use the [SpeechMiner Installer](#) to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.

- d. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:

- file locations
- tables to skip (comma separated list)
- number of threads running concurrently on a large table
- bulk copy usage

It is recommended that the `bulk-load` folder be located on the SQL server. The `bulk-load` folder must be shared and the user running the SQL server service must have full control over it.

If you do not set the bulk copy usage, the `callAudioTbl` upgrade will take up to two times longer on a large DB.

Only use the `skip-tables` configuration if specifically requested by Genesys Customer Care

```
<appSettings>
<add key="ErrorLogFile" value=".\\SMUpgradeLog.txt" />
<add key="LogFile" value=".\\tableLog.txt" />
<add key="TimingsFile" value=".\\tableTimings.txt" />
<add key="SkipTables" value="callTasksTbl" />
<add key="NumThreads" value="10" />
<!-- <add key="bulkpath" value="[PATH]" /> -->
</appSettings>
```

- e. Run `SMUpgrade.exe`.

Log in and select the appropriate 8.0 source and 8.1 destination databases.

Important

It is highly recommended to use the `sa` credentials or a user account with bulk insert permissions. The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` does not include the `db_owner` role.

- f. The GUI shades the tables as follows:

- **Green**—The table is finished. Both the source and the target DBs contain the same number of records. This conclusively shows that either the data has been copied or there is no data to copy.
- **Yellow**—The number of records in the source and target DBs is not indicative of whether the data in both DBs is identical or not. It is therefore not known whether the table is finished or not.
- **Red**—The table is not finished. The number of records in the source and target databases are not the same, and indicating that the data has not been copied in full.

- g. Click `Full Upgrade` to run the upgrade, or `Resume Last` if your previous upgrade was interrupted.

Resuming the last upgrade will shorten the time to run, but might cause problems. To avoid such problems, restore the database again and run the full upgrade. You can also define tables to skip in the configuration file. Every step in the upgrade process is shown in the GUI.
You can stop the upgrade by clicking the `Close` button. You will be prompted to confirm your action. Note that the window closes immediately, but the process still runs for a while, as it needs to re-enable the indexes it disables when it starts running.
The time each step took is written to the `TimingsFile`. The location of this file is defined in the configuration file.

IN CASE OF FAILURE: Review all status, error and exception notifications in the `ErrorLogFile`.

- h. Continue with the upgrade instructions below.

7. If the SpeechMiner Maintenance Job exists, and the `Update time table` step is included, delete the `Update time table` step. Make sure the last step in the job is set to quit the job upon both success and failure.
8. Optional: Uninstall 8.0 from all servers. The two versions (8.0 and 8.1) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
9. Install the 8.1 **platform** on all servers.
10. Install 8.1 **Web** on the Web server.
11. Install 8.1 **SMART** on users' desktops, as required.
12. Deploy **SQLCLR** on the DB server.
13. Update the package folders with the 8.1 `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.
Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to `<Installation folder>/Support/Grammars`.
14. Run SMConfig.
 - a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
 - b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. Update the SpeechMiner **license** with the new 8.1 licenses provided by **Genesys Licensing**.
 - e. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
 - f. Deploy the reports to the report server.
15. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:
`update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0`
 - c. Click the `Apply` button.

- d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
16. Using `SMConfig`, start the `UPlatform` services on all the servers.
 17. Update the Stored Procedures by coping any existing custom Stored Procedures from the 8.0 DB to the 8.1 DB. It is not necessary to copy Stored Procedures that are used by gauges, and are in the `GaugeWidgetProcedures` table, because they are copied automatically.
 18. Open the SpeechMiner web-based interface and test the functionality.
 19. Update the Database Jobs:
 - All database jobs that point to the 8.0 DB should be changed to point to the new 8.1 DB. Examples of DB jobs that might need to be changed:
 - DB maintenance job
 - `sp_agentFilterCleanByDays`
 - `sp_updateUntilYesterdayMaxChannels`
- To change a DB job, it is recommended that you edit the Job Step property using the SQL Management studio.
20. In the SpeechMiner web-based interface, manually reschedule and 8.0 reports that should continue to run on a scheduled basis.

Deprecated Reports

The following reports were deprecated in 8.1:

- Audit Analysis v4
- Call List v4
- First Topic Distribution v2
- MINI_System Load
- Monitor System
- Predictive Elements v4
- Program Distribution v4
- Topic Call List v2
- User Management

SpeechMiner 8.1 to 8.5 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.1 to version 8.5.

Pre-upgrade Requirements

- Request the most recent release of the 8.5 software from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Perform Pre-upgrade Tests	<p>Since upgrading SpeechMiner can take several hours it is important to avoid delays. For this reason, it is recommended to test SMUpgrade before you begin the upgrade procedure.</p> <p>To test SMUpgrade, perform one of the following:</p> <ul style="list-style-type: none">• Create a copy of the database and send it to your Genesys counterpart. Genesys will test the SMUpgrade process in a lab environment.• Create a copy of the database on a separate SQL server. Provide Genesys with the details of the SQL server and Genesys will test the SMUpgrade process on this temporary server.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, etc.) that is older

Item to Check	Details
	than the specified period of time is automatically deleted. If you do not have a data retention policy in place, it is recommended to determine what data should be saved and what can be discarded, since deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.

Rollback Plan

To ensure that you can revert back to SpeechMiner 8.1, keep the 8.1 DB active on the server, rather than just keeping a backup file.

Do not delete the 8.1 data folders (`index`, `grammars`, etc.). Instead, configure the 8.1 system with new data folders. Create the following new folders to ensure that you will not lose 8.1 data:

- Create the following empty folders:
 - Input
 - Interaction Receiver Input
 - Filtered
 - Index (this folder will be populated during the upgrade procedure).
- Copy the content of the following existing folders to new folders with the same name:
 - Store
 - Grammar
 - Backup

For detailed information about the folders you should create, refer to [Required Folders](#)

Since the 8.1 DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall 8.1. The 8.1 system should still be configured and functional.

After you uninstall SpeechMiner 8.1 and install SpeechMiner 8.5, the only way to revert back to 8.1 is to install 8.1 again and update the config files using SMConfig. However, since the DB and data folders would not have been deleted, they should be available and ready to use without changing the system configuration.

Upgrade Procedure

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	15 minutes

Step	Time
Back up the database (step 2)	120 minutes
Create target database (step 3)	30 minutes
Run SMUpgrade (steps 6 to 13)	10 to 20 hours
Configure and start the system (steps 14 to end)	60 minutes

1. Using SMConfig->Services->Stop Services, stop the 8.1 system.
2. Create a copy of the source DB and upgrade it to the latest build:
The source DB must be version 8.1. Refer to the `versionTbl` table to determine the correct version.
If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.1 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.5 upgrade.

- a. Back up the 8.1 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).
 - b. Create a copy of the source DB (back up the DB and then restore it in another location).
 - c. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
 - d. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.1 build version.
For this step you will need assistance from [Customer Care](#).
3. Create the 8.5 target DB as follows:
 - Manually—Refer to [Installing the SpeechMiner Database > Manual](#) tab.Or
 - Setup Wizard— Refer to [Installing the SpeechMiner Database > Setup Wizard](#) tab.
 4. If the MS-SQL server is an Enterprise Edition, run `EXEC sp_create_DB_storage_partitions` on the target database.
 5. If your source and target databases are on different servers, make sure the servers are linked in both directions, using the stored procedures `sp_addlinkedserver` and `sp_addlinkedsrvlogin`, as needed.
 6. Install and run SMUpgrade (to migrate the data from the 8.1 DB to the 8.5 DB), as follows:

Prerequisites:

- When migrating a large database, make sure that the hard drive that hosts the target database has enough storage space.

Usage

- a. Query the `versionTbl` table to ensure that your 8.1 source database is updated to the latest 8.1 schema.
- b. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db` > `properties` > `options` > `recovery model`.
- c. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- d. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
 - file locations
 - tables to skip (comma separated list)
 - number of threads running concurrently on a large table
 - bulk copy usage

It is recommended that the `bulk-load` folder be located on the SQL server. The `bulk-load` folder must be shared and the user running the SQL server service must have full control over it.

If you do not set the bulk copy usage, the `callAudioTbl` upgrade will take up to two times longer on a large DB.

Only use the `skip-tables` configuration if specifically requested by Genesys Customer Care.

```
<appSettings>
<add key="ErrorLogFile" value=".\SMUpgradeLog.txt" />
<add key="LogFile" value=".\tableLog.txt" />
<add key="TimingsFile" value=".\tableTimings.txt" />
<add key="SkipTables" value="callTasksTbl" />
<add key="NumThreads" value="10" />
<!-- <add key="bulkpath" value="[PATH]" /> -->
</appSettings>
```

- e. Run `SMUpgrade.exe`.
Log in and select the appropriate 8.1 source and 8.5 destination databases.

Important

It is highly recommended to use the `sa` credentials or a user account with bulk insert permissions. The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` does not include the `db_owner` role.

f. The GUI shades the tables as follows:

- **Green**—The table is finished. Both the source and the target DBs contain the same number of records. This conclusively shows that either the data has been copied or there is no data to copy.
- **Yellow**—The number of records in the source and target DBs is not indicative of whether the data in both DBs is identical or not. It is therefore not known whether the table is finished or not.
- **Red**—The table is not finished. The number of records in the source and target databases are not the same, and indicating that the data has not been copied in full.

g. Click `Full Upgrade` to run the upgrade, or `Resume Last` if your previous upgrade was interrupted.

Resuming the last upgrade will shorten the time to run, but might cause problems. To avoid such problems, restore the database again and run the full upgrade. You can also define tables to skip in the configuration file. Every step in the upgrade process is shown in the GUI. You can stop the upgrade by clicking the `Close` button. You will be prompted to confirm your action. Note that the window closes immediately, but the process still runs for a while, as it needs to re-enable the indexes it disables when it starts running.

The time each step took is written to the `TimingsFile`. The location of this file is defined in the configuration file.

IN CASE OF FAILURE: Review all status, error and exception notifications in the `ErrorLogFile`.

h. Continue with the upgrade instructions below.

7. If the SpeechMiner Maintenance Job exists, and the `Update time table` step is included, delete the `Update time table` step. Make sure the last step in the job is set to quit the job upon both success and failure.
8. Optional: Uninstall 8.1 from all servers. The two versions (8.1 and 8.5) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
9. Install the 8.5 **platform** on all servers.
10. Install 8.5 **Web** on the Web server.
11. Install 8.5 **SMART** on users' desktops, as required.
12. Deploy **SQLCLR** on the DB server.
13. Update the package folders with the 8.5 `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.

Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to <Installation folder>/Support/Grammars.

14. Run SMConfig.
 - a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
 - b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. Update the SpeechMiner **license** with the new 8.5 licenses provided by **Genesys Licensing**.
 - e. In the **Reports** panel, update the MRSLibrary.dll on the report server.
 - f. Deploy the reports to the report server.
15. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
16. Using SMConfig, start the UPlatform services on all the servers.
17. Update the Stored Procedures by copying any existing custom Stored Procedures from the 8.1 DB to the 8.5 DB. It is not necessary to copy Stored Procedures that are used by gauges, and are in the GaugeWidgetProcedures table, because they are copied automatically.
18. Open the SpeechMiner web-based interface and test the functionality.
19. Update the Database Jobs:
 - All database jobs that point to the 8.1 DB should be changed to point to the new 8.5 DB. Examples of DB jobs that might need to be changed:
 - DB maintenance job
 - `sp_agentFilterCleanByDays`
 - `sp_updateUntilYesterdayMaxChannels`

To change a DB job, we recommend that you edit the Job Step property using the SQL Management studio.
20. In the SpeechMiner web-based interface, manually reschedule 8.1 reports that should continue to run on a scheduled basis.

Deprecated Reports

The following reports were deprecated in 8.5:

- Audit Analysis v4
- Call List v4

- First Topic Distribution v2
- MINI_System Load
- Monitor System
- Predictive Elements v4
- Program Distribution v4
- Topic Call List v2
- User Management.

SpeechMiner 8.5.0 to 8.5.001 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.0 to version 8.5.001

Pre-upgrade Requirements

- Request the newest 8.5.001 software from Genesys.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your database, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Time Requirements

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	10 minutes
Back up the database (step 3)	15 minutes (the larger the database the more time this step will take)
Configure and start the system (steps 13 to end)	40 minutes

Upgrade Procedure

1. Close all browsers and SpeechMiner applications.
2. Stop the **Uplatform** service.
3. Back up the SpeechMiner 8.5.0 database in the SQL server.
4. Uninstall SpeechMiner 8.5.0 (build 7055).
5. Copy the entire **FullInstaller** folder to your local server.
6. Install the new SpeechMiner 8.5.001 (build 7104).
7. Reboot your machine.
8. Perform SpeechMiner 8.5.0 database changes on the SQL Manager by running all the SpeechMiner 8.5.0 database commands in the SQL query window. To receive the relevant commands, see [Database Changes Commands](#) or from the [SpeechMiner](#) page under the **Helpful Links** title.
9. Run the 8.5.001 database update script (not required for recording only installations). To receive the script click [Database Script](#) or from the [SpeechMiner](#) page under the **Helpful Links** title.
10. Deploy SQLCLR: Using SQL management, run the commands that are in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.0 database.
11. Run SMConfig and connect to the database that was upgraded.
12. Click **Save** in [Sites & Machines](#).
13. Deploy the reports (not required for recording only installations).
14. In the **SpeechMiner Configuration Tool 8.5.0 > Services** select the following:
 - Under **Services** select:
 - **Create Performance Counters**
 - **Register services**
 - **Update config files**
 - **Encrypt config files**
 - Under **Select/Deselect All** select the relevant machine.
 - Select **Restart Services** and select **change status to run** from the drop down list.
15. Open the SpeechMiner Web and check its functionality.

SpeechMiner 8.5.0.3 to 8.5.0.4 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.0.3 to version 8.5.0.4.

Pre-upgrade Requirements

- Request the most recent release of the 8.5 software from your Genesys representative.
- Request the **Migration Console** tool from your Genesys representative.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, and so on) that is older than the specified period of time is automatically deleted. If you do not have a data retention policy in place, it is recommended to determine what data should be saved and what can be discarded, since deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.

Upgrade Procedure

1. Back up the SpeechMiner 8.5.0.3 database in the SQL server.
2. Run the **Migration Console** tool in the background, open the command line and run the following command (where `<authType>` equals `-sql` (server authentication) or `-win` (Windows authentication)):

```
TextMigration <authType> <dbserver> <dbName> [<dbuser> <password>]
```

Important

The Migration Console tool will move the text data from your database to the **Store** folders. All migrated text will belong to the systems site with ID=0.

3. Verify that the Exit code is 0 (zero). 0 indicates that your 8.5.0.3 files were successfully transferred from the database to the file system.

Important

If the Migration Console tool was not successful you will receive an error message. Once the source of the error is solved, run the Migration Console tool again until it is successful and you receive 0.

4. Once the **Migration Console** tool is run successfully, stop the **Uplatform** service.
5. Run the **Migration Console** tool again using the following command line (where <authType> equals -sql (server authentication) or -win (Windows authentication):

```
TextMigration <authType> <dbserver> <dbName> [<dbuser> <password>]
```

Important

Do not continue with this procedure until the command that runs the Migration Console tool is successful and you receive 0. If the tool is not successful contact [Genesys Customer Care](#) for assistance.

6. Uninstall SpeechMiner 8.5.0.3.
7. Copy the entire **FullInstaller** folder from the 8.5.0.4 build 7169 kit to your local server to your local server.
8. Install the new SpeechMiner 8.5.0.4 (build 7169).
9. Reboot your machine.
10. Run the 8.5.0.4 database update script. To receive the script click [Database Script](#) or from the [SpeechMiner](#) page under the **Helpful Links** title.
11. Deploy SQLCLR: Using SQL management, run the commands that are in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.0.3 database.
12. Run SMConfig and connect to the database that was upgraded.
13. Click **Save** in [Sites & Machines](#).
14. Deploy the reports (not required for recording-only installations).

15. In the **SpeechMiner Configuration Tool 8.5.0.4 > Services** select the following:

- Under **Services** select:
 - **Create Performance Counters**
 - **Register services**
 - **Update config files**
 - **Encrypt config files**
- Under **Select/Deselect All** select the relevant machine.
- Select **Restart Services** and select **change status to run** from the drop-down list.

16. Open the SpeechMiner Web and check its functionality.

SpeechMiner 8.5.0.4 to 8.5.0.5 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.004.00 to version 8.5.005.01

Pre-upgrade Requirements

- Request the newest 8.5.005.01 software from Genesys.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your database, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Time Requirements

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	10 minutes
Back up the database (step 3)	15 minutes (the larger the database the more time this step will take)
Configure and start the system (steps 13 to end)	40 minutes

Upgrade Procedure

1. Close all browsers and SpeechMiner applications.
2. Stop the **Uplatform** service.
3. Back up the SpeechMiner 8.5.0.4 database in the SQL server.
4. Uninstall SpeechMiner 8.5.0.4 (build 7169).
5. Copy the entire **FullInstaller** folder to your local server.
6. Install the new SpeechMiner 8.5.005.01 (build 7188).
7. Reboot your machine.
8. Run the following database query:

```
GRANT EXECUTE ON sp_get_old_texts TO Platform AS dbo
GRANT EXECUTE ON sp_deleteTextsAndMoveToPurge TO Web AS dbo
GO

IF NOT EXISTS (
    SELECT *
    FROM sys.columns
    WHERE object_id = OBJECT_ID(N'[dbo].[webServiceParams]')
    AND name = 'EmailHeaderInformation'
)
BEGIN
    ALTER TABLE [dbo].[webServiceParams] ADD EmailHeaderInformation bit NOT NULL Default(1)
END

GO

BEGIN TRANSACTION
SET QUOTED_IDENTIFIER ON
SET ARITHABORT ON
SET NUMERIC_ROUNDABORT OFF
SET CONCAT_NULL_YIELDS_NULL ON
SET ANSI_NULLS ON
SET ANSI_PADDING ON
SET ANSI_WARNINGS ON
COMMIT
BEGIN TRANSACTION
GO
ALTER TABLE dbo.CallRecognizer ADD
    WRITE_UNFOUND_EVENTS bit NOT NULL CONSTRAINT DF_CallRecognizer_WRITE_UNFOUND_EVENTS DEFAULT 1
GO
ALTER TABLE dbo.CallRecognizer SET (LOCK_ESCALATION = TABLE)
GO
COMMIT

GO

IF NOT EXISTS (
    SELECT *
    FROM sys.columns
    WHERE object_id = OBJECT_ID(N'[dbo].[webServiceParams]')
    AND name = 'CallListSelectionOrder'
```

```
)
BEGIN
ALTER TABLE [dbo].[webServiceParams] ADD CallListSelectionOrder INT NOT NULL Default(0)
END

GO

IF NOT EXISTS (
    SELECT *
    FROM sys.columns
    WHERE object_id = OBJECT_ID(N'[dbo].[webServiceParams]')
    AND name = 'LimitExportSize'
)
BEGIN
ALTER TABLE [dbo].[webServiceParams] ADD LimitExportSize BigInt Default(NULL)
END
GO
UPDATE [dbo].[webServiceParams] SET LimitExportSize= 250
GO

update dbo.versionTbl set version= '8.5.7184' where resource in ('SM', 'SMART')
go
```

9. Run the following query to re-index the text data in the database:

```
exec dbo.sp_reindexTextDataByParams 1,0,0, ''
```

10. Deploy **SQLCLR**: Using SQL management, run the commands that are in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.0.4 database.
11. Run **SMConfig** and connect to the database that was upgraded.
12. Click **Save** in **Sites & Machines**.
13. Deploy the reports (not required for recording only installations).
14. Update MRSLibrary.dll on the Report server.
15. In the **SpeechMiner Configuration Tool 8.5.0 > Services** select the following:
 - Under **Services** select:
 - **Create Performance Counters**
 - **Register services**
 - **Update config files**
 - **Encrypt config files**
 - Under **Select/Deselect All** select the relevant machine.
 - Select **Restart Services** and select **change status to run** from the drop down list.
16. Open the SpeechMiner Web and check its functionality.

SpeechMiner 8.5.0.1 to 8.5.2 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.0.1 to version 8.5.2.

Pre-upgrade Requirements

- Request the most recent release of the 8.5 software from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Perform Pre-upgrade Tests	<p>Since upgrading SpeechMiner can take several hours it is important to avoid delays. For this reason, it is recommended to test SMUpgrade before you begin the upgrade procedure.</p> <p>To test SMUpgrade, perform one of the following:</p> <ul style="list-style-type: none">• Create a copy of the database and send it to your Genesys counterpart. Genesys will test the SMUpgrade process in a lab environment.• Create a copy of the database on a separate SQL server. Provide Genesys with the details of the SQL

Item to Check	Details
	server and Genesys will test the SMUpgrade process on this temporary server.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, etc.) that is older than the specified period of time is automatically deleted. If you do not have a data retention policy in place, it is recommended to determine what data should be saved and what can be discarded, since deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.
Compressed Audio Format	If your previous system stored a compressed format different from an MP3 format you should perform one of the following to listen to audio interactions from your previous system: <ul style="list-style-type: none">• Convert the files to MP3 using on-the-fly conversion.• Convert the audio files to MP3 audio files using an external tool and update the file names in the database accordingly (for example, field 'filename' in the 'callaudiotbl' table).

Rollback Plan

To ensure that you can revert back to SpeechMiner 8.5, keep the 8.5 DB active on the server, rather than just keeping a backup file.

Do not delete the 8.5 data folders (`index`, `grammars`, etc.). Instead, configure the 8.5 system with new data folders. Create the following new folders to ensure that you will not lose 8.5 data:

- Create the following empty folders:
 - Input
 - Interaction Receiver Input
 - Filtered
 - Index (this folder will be populated during the upgrade procedure).
- Copy the content of the following existing folders to new folders with the same name:
 - Store
 - Grammar

- Backup

For detailed information about the folders you should create, refer to [Required Folders](#)

Since the 8.5 DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall 8.5. The 8.5 system should still be configured and functional.

After you uninstall SpeechMiner 8.5 and install SpeechMiner 8.5.2, the only way to revert back to 8.5 is to install 8.5 again and update the config files using SMConfig. However, since the DB and data folders would not have been deleted, they should be available and ready to use without changing the system configuration.

Upgrade Procedure

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	15 minutes
Back up the database (step 2)	120 minutes
Create target database (step 3)	30 minutes
Run SMUpgrade (steps 6 to 13)	10 to 20 hours
Configure and start the system (steps 14 to end)	60 minutes

1. Using SMConfig->Services->Stop Services, stop the 8.5 system.
2. Create a copy of the source DB and upgrade it to the latest build:
The source DB must be in build 8.5.7104. Refer to the `versionTbl` table to determine the correct version.
If you have a build that is later than 8.5.7104, contact [Genesys Customer Care](#).
If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.5 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.5.2 upgrade.

- a. Back up the 8.5 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).
 - b. Create a copy of the source DB (back up the DB and then restore it in another location).
 - c. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
 - d. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.5 build version.
For this step you will need assistance from [Customer Care](#).
3. Create the 8.5.2 target DB as follows:

- Manually—Refer to **Installing the SpeechMiner Database > Manual** tab.

Or

- Setup Wizard— Refer to **Installing the SpeechMiner Database > Setup Wizard** tab.

4. If the MS-SQL server is an Enterprise Edition, run `EXEC sp_create_DB_storage_partitions` on the target database.
5. If your source and target databases are on different servers, make sure the servers are linked in both directions, using the stored procedures `sp_addlinkedserver` and `sp_addlinkedsrvlogin`, as needed.
6. Install and run SMUpgrade (to migrate the data from the 8.5 DB to the 8.5.2 DB), as follows:

Prerequisites:

- When migrating a large database, make sure that the hard drive that hosts the target database has enough storage space.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Usage

- a. Query the `versionTbl` table to ensure that your 8.5 source database is updated to the latest 8.5 schema.
- b. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db > properties > options > recovery model`.
- c. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- d. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
 - file locations
 - tables to skip (comma separated list)
 - number of threads running concurrently on a large table
 - bulk copy usage

It is recommended that the `bulk-load` folder be located on the SQL server. The `bulk-load` folder must be shared and the user running the SQL server service must have full control over it.

If you do not set the bulk copy usage, the `callAudioTbl` upgrade will take up to two times longer on a large DB.

Only use the `skip-tables` configuration if specifically requested by Genesys Customer Care.

```
<appSettings>
<add key="ErrorLogFile" value=".\SMUpgradeLog.txt" />
<add key="LogFile" value=".\tableLog.txt" />
<add key="TimingsFile" value=".\tableTimings.txt" />
<add key="SkipTables" value="callTasksTbl" />
<add key="NumThreads" value="10" />
<!-- <add key="bulkpath" value="[PATH]" /> -->
</appSettings>
```

e. Run `SMUpgrade.exe`.

Log in and select the appropriate 8.5 source and 8.5.2 destination databases.

The databases that appear in the old databases drop down list include `ver8_5` in their file name. The databases in the new databases drop down list, include `ver8_5_2` in their file name. You can also type relevant databases that are named differently.

Important

It is highly recommended to use the `sa` credentials or a user account with bulk insert permissions.

The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` does not include the `db_owner` role.

f. The GUI shades the tables as follows:

- **Green**—The table is finished. Both the source and the target DBs contain the same number of records. This conclusively shows that either the data has been copied or there is no data to copy.
- **Yellow**—The number of records in the source and target DBs is not indicative of whether the data in both DBs is identical or not. It is therefore not known whether the table is finished or not.
- **Red**—The table is not finished. The number of records in the source and target databases are not the same, and indicating that the data has not been copied in full.

g. Click **Full Upgrade** to run the upgrade, or **Resume Last** if your previous upgrade was interrupted.

Resuming the last upgrade will shorten the time to run, but might cause problems. To avoid such problems, restore the database again and run the full upgrade. You can also define tables to skip in the configuration file. Every step in the upgrade process is shown in the GUI.

You can stop the upgrade by clicking the **Close** button. You will be prompted to confirm your action. Note that the window closes immediately, but the process still runs for a while, as it needs to re-enable the indexes it disables when it starts running.

The time each step took is written to the `TimingsFile`. The location of this file is defined in the configuration file.

IN CASE OF FAILURE: Review all status, error and exception notifications in the `ErrorLogFile`.

h. Continue with the upgrade instructions below.

7. If the SpeechMiner Maintenance Job exists, and the `Update time table` step is included, delete the `Update time table` step. Make sure the last step in the job is set to quit the job upon both success and failure.
8. Run SQL commands on the new DB to update audio formats:

```
insert into audioFormatsTbl values(3,'MP3',1,'mp3',44100)
declare @pcm2mp3 int
declare @mp32pcm int
declare @mp32mp3 int
insert into audioConversionTypesTbl values (1,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_PCM to MP3')
select @pcm2mp3=@@IDENTITY
insert into audioConversionTypesTbl values (2,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'VOX to MP3')
insert into audioConversionTypesTbl values (3,3,4,null,null,8000,'MP3 to MP3')
set @mp32mp3=@@IDENTITY
insert into audioConversionTypesTbl values (4,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_ADPCM to MP3')
insert into audioConversionTypesTbl values (5,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_TRUESPEECH to MP3')
insert into audioConversionTypesTbl values (6,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_GSM610 to MP3')
insert into audioConversionTypesTbl values (8,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_MULAW to MP3')
insert into audioConversionTypesTbl values (9,3,1,'ffmpeg.exe','-i {0} -f mp3
{1}',8000,'WAV_ALAW to MP3')
insert into audioConversionTypesTbl values (3,1,1,'ffmpeg.exe','-i {0}
{1}',8000,'MP3 to WAV_PCM')
select @mp32pcm=@@IDENTITY
update audioConversionGroupsTbl set audioConversionTypeID=@mp32pcm
where audioConversionTypeID in (select audioConversionTypeID from
audioConversionTypesTbl where fromFormat=6 and toFormat=1)
update audioConversionGroupsTbl set audioConversionTypeID=@pcm2mp3
where audioConversionTypeID in (select audioConversionTypeID from
audioConversionTypesTbl where fromFormat=1 and toFormat=6)
update audioConversionGroupsTbl set audioConversionTypeID=@mp32mp3
where audioConversionTypeID in (select audioConversionTypeID from
audioConversionTypesTbl where fromFormat=6 and toFormat=6)
update audioConversionGroupsTbl set
description=replace(description,'WAV_GSM610','MP3')
update audioFormatsTbl set uplatformSupported=0 where audioFormatId not in
(0,1,3,7)
delete audioConversionGroupsTbl where audioConversionTypeID in (select
audioConversionTypeID from audioConversionTypesTbl where toFormat not in
(select audioFormatId from audioFormatsTbl where uplatformSupported=1))
delete audioConversionTypesTbl where toFormat not in (select audioFormatId
from audioFormatsTbl where uplatformSupported=1)
```

```
update siteAudioFormatsTbl set audioFormatId=3 where audioFormatId=6
update audioFormatsTbl set upPlatformSupported=1
```

9. Optional: Uninstall 8.5 from all servers. The two versions (8.5 and 8.5.2) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
10. Update Microsoft **.NET Framework**.
11. Update Microsoft **C++ Redistributable**.
12. Install the 8.5.2 **platform** on all servers.
13. Install 8.5.2 **Web** on the Web server.
14. Install 8.5.2 **SMART** on users' desktops, as required.
15. Deploy **SQLCLR** on the DB server.
16. Update the package folders with the 8.5.2 **.gram** files. The **.gram** files are located in the <Installation Folder>/Support/Grammars.
Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to <Installation folder>/Support/Grammars.
17. Manually copy the files in <Installation Folder>\Support\Grammars\Confidence to the Global Packages folder.
18. Copy the following commands and paste them into the **New Query** text area:

```
EXEC sp_configure 'xp_cmdshell', 1
GO
```
19. Run SMConfig.

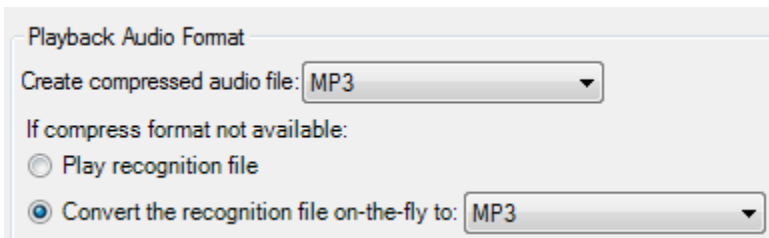
Important

If your target database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC sp_change_users_login 'Auto_Fix', 'dbuser'.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.
- d. Update the SpeechMiner **License** with the new 8.5.2 licenses provided by **Genesys Licensing**.
- e. In the **Reports** panel, update the MRSLibrary.dll on the report server.

- f. Deploy the reports to the report server.
- g. In the **Audio** panel (when using compression):
 - Change the compressed format to **MP3**.
 - Under **If compress format not available** select **Convert the recognition file on-the-fly to MP3**.

The player no longer supports compressed formats other than MP3.
For additional information refer to the **Audio** section in the Administration Guide.



- h. Run the following query to convert GSM files to MP3:
Replace WAV_GSM610 with your current audio format (see AudioFormatsTbl).

```
declare @formatName varchar(40)
set @formatName='WAV_GSM610'
declare @formatId int
select @formatId=audioFormatId from audioFormatsTbl where audioFormatName = @formatName
declare @conversionType int
declare @conversionDesc varchar(100)
select @conversionType=audioConversionTypeId,@conversionDesc=Description from
audioConversionTypesTbl where fromFormat=@formatId and toFormat=3
insert into audioConversionGroupsTbl values(6,@conversionType,3,'PLAYER - ' + @conversionDesc)
```

- 20. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:
`update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0`
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
- 21. Using `SMConfig`, start the `UPlatform` services on all the servers.
- 22. Update the Stored Procedures by copying any existing custom Stored Procedures from the 8.5 DB to the 8.5.2 DB.
It is not necessary to copy Stored Procedures that are used by gauges, and are in the `GaugeWidgetProcedures` table, because they are copied automatically.
- 23. Open the SpeechMiner web-based interface and test the functionality.
- 24. Update the Database Jobs:

- All database jobs that point to the 8.5 DB should be changed to point to the new 8.5.2 DB. Examples of DB jobs that might need to be changed:
 - DB maintenance job
 - `sp_agentFilterCleanByDays`
 - `sp_updateUntilYesterdayMaxChannels`

To change a DB job, we recommend that you edit the Job Step property using the SQL Management studio.

25. In the SpeechMiner web-based interface, manually reschedule 8.5 reports that should continue to run on a scheduled basis.
26. If one or more of your users changed their default SpeechMiner homepage in the previous version, update the url format to the selected page in the new version.

SpeechMiner 8.0 or 8.1 to 8.5.2 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.0 or 8.1 to version 8.5.2. Upgrading from a previous version to 8.5.2 enables you to retain your existing data.

Upgrade from 8.0 to 8.5.2

1. Upgrade from **8.0 to 8.1**.
2. Upgrade from **8.1 to 8.5**.
3. Upgrade from **8.5 to 8.5.2**.

Upgrade from 8.1 to 8.5.2

1. Upgrade from **8.1 to 8.5**.
2. Upgrade from **8.5 to 8.5.2**.

Important

Deploying a new SpeechMiner 8.5.2 installation does not require performing the upgrade procedures. However, a new installation will not enable you to retain existing data. For additional information about installing SpeechMiner 8.5.2, refer to the *Administration Guide*.

SpeechMiner 8.5.2 to 8.5.201.07 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.2 to version 8.5.201.07

Pre-upgrade Requirements

- Request the newest 8.5.201.07 software from Genesys.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your database, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Time Requirements

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	10 minutes
Back up the database (step 3)	15 minutes (the larger the database the more time this step will take)
Configure and start the system (steps 14 to end)	40 minutes

Upgrade Procedure

1. Close all browsers and SpeechMiner applications.
2. Stop the **Uplatform** service.
3. Back up the SpeechMiner 8.5.2 database in the SQL server.
4. Uninstall SpeechMiner 8.5.2 (build 194).
5. If SpeechMiner applications in IIS are not removed, remove the Interaction Receiver and SpeechMiner Web application manually.
6. Copy the entire **FullInstaller** folder from the 8.5.201.07 build 257 kit to your local server.
7. Install the new SpeechMiner 8.5.201.07 (build 257).
8. Provide the relevant user with IIS_IUSRS group read/write/modify (that is, Windows file Security) permissions for the new SpeechMiner Installation folder.
9. Reboot your machine.
10. Perform SpeechMiner 8.5.2 database changes on the SQL Manager by running all the SpeechMiner 8.5.2 database commands in the SQL query window.
To receive the relevant commands, see [Database Changes Commands](#) or from the [SpeechMiner](#) page under the **Helpful Links** title.
11. Deploy **SQLCLR**: Using SQL management run the commands that are in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.2 database.

For details refer to the SpeechMiner Administration Guide (Installing the SpeechMiner Components > Installing the SpeechMiner Database > SQL CLR).

12. Run SMConfig and connect to the database that was upgraded.
13. Click **Save** in **Sites & Machines**.
14. Deploy the MRSLibrary and all the Reports in the Reports tab.
15. In the **SpeechMiner Configuration Tool 8.5.2 > Services** select the following under the **Services** tab:
 - Create Performance Counters
 - Register services
 - Update config files
 - Encrypt config files
 - Select/Deselect All > select the relevant machine.
 - Restart Services > change status to run.
 - Under **Credential** enter the relevant user's information.
 - Click **Save**.
16. Open the SpeechMiner Web and check its functionality.

SpeechMiner 8.5.201.07 to 8.5.201.08 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.201.07 to version 8.5.201.08

Pre-upgrade Requirements

- Request the newest 8.5.201.08 software from Genesys.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your database, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Time Requirements

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	10 minutes
Back up the database (step 3)	15+ minutes (the larger the database; the more time this step will take)
Configure and start the system (steps 14-16)	40 minutes

Upgrade Procedure

1. Close all browsers and SpeechMiner applications.
2. Stop the **Uplatform** service.
3. Back up the SpeechMiner 8.5.201.07 database in the SQL server.
4. Uninstall SpeechMiner 8.5.201.07 (build 257).
5. If SpeechMiner applications in IIS are not removed, remove the Interaction Receiver and SpeechMiner Web application manually.
6. Copy the entire **FullInstaller** folder from the 8.5.201.08 build 260 kit to your local server.
7. Install the new SpeechMiner 8.5.201.08 (build 260).
8. Provide the relevant user with IIS_IUSRS group read/write/modify (that is, Windows file Security) permissions for the new SpeechMiner Installation folder.
9. Reboot your machine.
10. Perform SpeechMiner 8.5.2 database changes on the SQL Manager by running all the SpeechMiner 8.5.2 database commands in the SQL query window.
To obtain the relevant commands, see [8.5.201.07 to 8.5.201.08 Database Changes Commands](#) or from the [SpeechMiner](#) page under the **Helpful Links** title.
11. Deploy **SQLCLR**: Using SQL management, run the commands that are located in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.2 database.

For details, refer to the SpeechMiner Administration Guide (Installing the SpeechMiner Components > Installing the SpeechMiner Database > SQL CLR).

12. Run SMConfig and connect to the database that was upgraded.
13. Click **Save** in **Sites & Machines**.
14. Deploy the MRSLibrary and all the Reports in the Reports tab.
15. In the **SpeechMiner Configuration Tool 8.5.2 > Services**, select the following under the **Services** tab:
 - Create Performance Counters
 - Register services
 - Update config files
 - Encrypt config files
 - Select/Deselect All > select the relevant machine.
 - Restart Services > change status to run.
 - Under **Credential**, enter the relevant user's information.
 - Click **Save**.
16. Open the SpeechMiner Web and check its functionality.

SpeechMiner 8.5.2 to 8.5.3 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.2 to version 8.5.3a

Pre-upgrade Requirements

- Request the most recent release of the 8.5.3 software from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Perform Pre-upgrade Tests	<p>Since upgrading SpeechMiner can take several hours it is important to avoid delays. For this reason, it is recommended to test SMUpgrade before you begin the upgrade procedure.</p> <p>To test SMUpgrade, perform one of the following:</p>

Item to Check	Details
	<ul style="list-style-type: none">• Create a copy of the database and send it to your Genesys counterpart. Genesys will test the SMUpgrade process in a lab environment.• Create a copy of the database on a separate SQL server. Provide Genesys with the details of the SQL server and Genesys will test the SMUpgrade process on this temporary server.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, etc.) that is older than the specified period of time is automatically deleted. If you do not have a data retention policy in place, it is recommended to determine what data should be saved and what can be discarded, since deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.

Rollback Plan

To ensure that you can revert back to SpeechMiner 8.5.2, keep the 8.5.2 DB active on the server, rather than just keeping a backup file.

Do not delete the 8.5.2 data folders (`index`, `grammars`, etc.). Instead, configure the 8.5.3 system with new data folders. Create the following new folders to ensure that you will not lose 8.5.2 data:

- Create the following empty folders:
 - Input
 - Interaction Receiver Input
 - Filtered
 - Index (this folder will be populated during the upgrade procedure).
- Copy the content of the following existing folders to new folders with the same name:
 - Store
 - Grammar
 - Backup

For detailed information about the folders you should create, refer to [Required Folders](#)

Since the 8.5.2 DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall 8.5.2. The 8.5.2 system should still be configured and functional.

After you uninstall SpeechMiner 8.5.2 and install SpeechMiner 8.5.3, the only way to revert back to 8.5.2 is to install 8.5.2 again and update the config files using SMConfig. However, since the DB and data folders would not have been deleted, they should be available and ready to use without changing the system configuration.

Upgrade Procedure

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	15 minutes
Back up the database (step 2)	120 minutes
Create target database (step 3)	30 minutes
Run SMUpgrade (steps 7 to 14)	10 to 20 hours
Configure and start the system (steps 15 to end)	60 minutes

1. Using SMConfig->Services->Stop Services, stop the 8.5.2 system.
2. Create a copy of the source DB and upgrade it to the latest build:
 The source DB must be in build 8.5.201. Refer to the `versionTbl` table to determine the correct version.
 If you have a build that is later than 8.5.201.257, contact [Genesys Customer Care](#).
 If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.5.2 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.5.3 upgrade.

- a. Back up the 8.5.2 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).
 - b. Create a copy of the source DB (back up the DB and then restore it in another location).
 - c. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
 - d. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.5.2 build version. For this step you will need assistance from [Customer Care](#).
1. Using SMConfig->Services->Stop Services, stop the 8.5.2 system.
 2. Create a copy of the source DB and upgrade it to the latest build:
 The source DB must be in build 8.5.201. Refer to the `versionTbl` table to determine the correct version.
 If you have a build that is later than 8.5.201.257, contact [Genesys Customer Care](#).

If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.5.2 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.5.3 upgrade.

1. Back up the 8.5.2 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).
2. Create a copy of the source DB (back up the DB and then restore it in another location).
3. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
4. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.5.2 build version. For this step you will need assistance from [Customer Care](#).

3. Create the 8.5.3 target DB as follows:

- Manually—Refer to [Installing the SpeechMiner Database > Manual](#) tab.

Or

- Setup Wizard— Refer to [Installing the SpeechMiner Database > Setup Wizard](#) tab.

4. Run the following query on the new database, before running SMUpgrade:

```
declare @QMRole int
select @QMRole=roleId from rolesTbl where
roleName='QM Manager'
insert into rolesTbl select 20,roleName,internalRole,protectedRole,grantRoles,
createdOn,createdBy,lastUpdate from rolesTbl where roleId=@QMRole
update rolesTbl set grantRoles=REPLACE(grantRoles,CAST(@QMRole AS varchar(10)),'20')
update rolePermissionsTbl set role=20 where role=@QMRole
delete rolesTbl where roleId=@QMRole
```

5. Run the following query to create the index ix_originalTime in the TextData table:

```
ALTER TABLE [dbo].[TextStatus] DROP CONSTRAINT [FK_TextStatus_TextData]
GO
ALTER TABLE [dbo].[TextData] DROP CONSTRAINT [PK_TextDataTbl]
GO
ALTER TABLE [dbo].[TextData] ADD CONSTRAINT [PK_TextDataTbl] PRIMARY KEY NONCLUSTERED
(
[textId] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON
[PRIMARY]
GO
ALTER TABLE [dbo].[TextStatus] WITH NOCHECK ADD CONSTRAINT [FK_TextStatus_TextData]
```

```
FOREIGN KEY([textId])
REFERENCES [dbo].[TextData] ([textId])
GO
ALTER TABLE [dbo].[TextStatus] NOCHECK CONSTRAINT [FK_TextStatus_TextData]
GO
CREATE CLUSTERED INDEX [IX_originalTime] ON [dbo].[TextData]
(
[originalTime] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, DROP_EXISTING = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON,
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
GO
```

6. If the MS-SQL server is an Enterprise Edition, run `EXEC sp_create_DB_storage_partitions` on the target database.
7. If your source and target databases are on different servers, make sure the servers are linked in both directions, using the stored procedures `sp_addlinkedserver` and `sp_addlinkedsrvlogin`, as needed.
8. Install and run SMUpgrade (to migrate the data from the 8.5.2 DB to the 8.5.3 DB), as follows:

Prerequisites:

- When migrating a large database, make sure that the hard drive that hosts the target database has enough storage space.

Usage

- a. Query the `versionTbl` table to ensure that your 8.5.2 source database is updated to the latest 8.5.2 schema.
- b. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db` > `properties` > `options` > `recovery model`.
- c. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- d. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
 - file locations
 - tables to skip (comma separated list)
 - number of threads running concurrently on a large table
 - bulk copy usage

It is recommended that the `bulk-load` folder be located on the SQL server. The `bulk-load` folder must be shared and the user running the SQL server service must have full control over it.

If you do not set the bulk copy usage, the `callAudioTbl` upgrade will take up to two times longer on a large DB.

Only use the `skip-tables` configuration if specifically requested by Genesys Customer Care.

```
<appSettings>
<add key="ErrorLogFile" value=".\\SMUpgradeLog.txt" />
<add key="LogFile" value=".\\tableLog.txt" />
<add key="TimingsFile" value=".\\tableTimings.txt" />
<add key="SkipTables" value="callTasksTbl" />
<add key="NumThreads" value="10" />
<!-- <add key="bulkpath" value="[PATH]" /> -->
</appSettings>
```

e. Run `SMUpgrade.exe`.

Log in and select the appropriate 8.5.2 source and 8.5.3 destination databases. The databases that appear in the old databases drop down list include `ver8_5_2` in their file name. The databases in the new databases drop down list, include `ver8_5_3` in their file name. You can also type relevant databases that are named differently.

Important

It is highly recommended to use the `sa` credentials or a user account with bulk insert permissions.

The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` does not include the `db_owner` role.

f. The GUI shades the tables as follows:

- **Green**—The table is finished. Both the source and the target DBs contain the same number of records. This conclusively shows that either the data has been copied or there is no data to copy.
- **Yellow**—The number of records in the source and target DBs is not indicative of whether the data in both DBs is identical or not. It is therefore not known whether the table is finished or not.
- **Red**—The table is not finished. The number of records in the source and target databases are not the same, and indicating that the data has not been copied in full.
- Click **Full Upgrade** to run the upgrade, or **Resume Last** if your previous upgrade was interrupted.

Resuming the last upgrade will shorten the time to run, but might cause problems. To avoid such problems, restore the database again and run the full upgrade. You can also define tables to skip in the configuration file. Every step in the upgrade process is shown in the GUI.

You can stop the upgrade by clicking the **Close** button. You will be prompted to confirm your action. Note that the window closes immediately, but the process still runs for a while, as it needs to re-enable the indexes it disables when it starts running.

The time each step took is written to the `TimingsFile`. The location of this file is defined in the configuration file.

IN CASE OF FAILURE: Review all status, error and exception notifications in the `ErrorLogFile`.

- Continue with the upgrade instructions below.
- If the SpeechMiner Maintenance Job exists, and the `Update time table` step is included, delete the `Update time table` step. Make sure the last step in the job is set to quit the job upon both success and failure.
- Optional: Uninstall 8.5.2 from all servers. The two versions (8.5.2 and 8.5.3) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
- Update Microsoft **.NET Framework**.
- Update Microsoft **C++ Redistributable**.
- Install the 8.5.3 **platform** on all servers.
- Install 8.5.3 **Web** on the Web server.
- Install 8.5.3 **SMART** on users' desktops, as required.
- Deploy **SQLCLR** on the DB server. Using SQL management, run the commands that are in the `C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql` script in the SpeechMiner 8.5.3 database.
- Update the package folders with the 8.5.3 `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`. Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to `<Installation folder>/Support/Grammars`.
- Manually copy the files in `<Installation Folder>\Support\Grammars\Confidence` to the `Global Packages` folder.
- Run SMConfig.

Important

If your target database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.

- c. Configure the **Index** panel and save the changes.
- d. Update the SpeechMiner **License** with the new 8.5.2 licenses provided by **Genesys Licensing**.
- e. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
- f. Deploy the reports to the report server.
- g. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose **Activate program**.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate =  
dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the **Apply** button.
 - d. In the new **Apply** popup window, choose **Apply all**.
 - e. Click the **Apply** button.
- f. Using `SMConfig`, start the `UPlatform` services on all the servers.
- g. Update the Stored Procedures by copying any existing custom Stored Procedures from the 8.5.2 DB to the 8.5.3 DB.
It is not necessary to copy Stored Procedures that are used by gauges, and are in the `GaugeWidgetProcedures` table, because they are copied automatically.
- h. Open the SpeechMiner web-based interface and test the functionality.
- i. Update the Database Jobs:
 - All database jobs that point to the 8.5.2 DB should be changed to point to the new 8.5.3 DB. Examples of DB jobs that might need to be changed:
 - DB maintenance job
 - `sp_agentFilterCleanByDays`
 - `sp_updateUntilYesterdayMaxChannels`

To change a DB job, we recommend that you edit the Job Step property using the SQL Management studio.
- j. In the SpeechMiner web-based interface, manually reschedule 8.5.2 reports that should continue to run on a scheduled basis.

SpeechMiner 8.5.3 to 8.5.4 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.3 to version 8.5.4

Pre-upgrade Requirements

- Request the most recent release of the 8.5.4 software from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Perform Pre-upgrade Tests	<p>Since upgrading SpeechMiner can take several hours it is important to avoid delays. For this reason, it is recommended to test SMUpgrade before you begin the upgrade procedure.</p> <p>To test SMUpgrade, perform one of the following:</p> <ul style="list-style-type: none">• Create a copy of the database and send it to your Genesys counterpart. Genesys will test the SMUpgrade process in a lab environment.• Create a copy of the database on a separate SQL server. Provide Genesys with the details of the SQL

Item to Check	Details
	server and Genesys will test the SMUpgrade process on this temporary server.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Purging Old Data	Most systems have a data retention policy in place. Data (for example, audio, exploration data, etc.) that is older than the specified period of time is automatically deleted. If you do not have a data retention policy in place, it is recommended to determine what data should be saved and what can be discarded, since deleting the data before the upgrade will reduce both the time it takes to run the upgrade process and the storage-space requirements.

Rollback Plan

To ensure that you can revert back to SpeechMiner 8.5.3, keep the 8.5.3 DB active on the server, rather than just keeping a backup file.

Do not delete the 8.5.3 data folders (`index`, `grammars`, etc.). Instead, configure the 8.5.4 system with new data folders. Create the following new folders to ensure that you will not lose 8.5.3 data:

- Create the following empty folders:
 - Input
 - Interaction Receiver Input
 - Filtered
 - Index (this folder will be populated during the upgrade procedure).
- Copy the content of the following existing folders to new folders with the same name:
 - Store
 - Grammar
 - Backup

For detailed information about the folders you should create, refer to [Required Folders](#)

Since the 8.5.3 DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall 8.5.3. The 8.5.3 system should still be configured and functional.

After you uninstall SpeechMiner 8.5.3 and install SpeechMiner 8.5.4, the only way to revert back to 8.5.3 is to install 8.5.3 again and update the config files using SMConfig. However, since the DB and data folders would not have been deleted, they should be available and ready to use without changing the system configuration.

Important

To improve the encryption algorithm it is recommended that you change the Audio Encryption password. For details, see the Using the SMConfig to Configure SpeechMiner section in the Administration Guide.

Upgrade Procedure

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	15 minutes
Back up the database (step 2)	120 minutes
Create target database (step 3)	30 minutes
Run SMUpgrade (steps 7 to 14)	10 to 20 hours
Configure and start the system (steps 15 to end)	60 minutes

1. Using SMConfig->Services->Stop Services, stop the 8.5.3 system.
2. Create a copy of the source DB and upgrade it to the latest build:
 - The source DB must be in build 136. Refer to the `versionTbl` table to determine the correct version.
 - If you have a 145 build you must make the following change to the SMUpgrade.exe.config:
add key="TableDataFile" value=".\\TableData.xml" / should be changed to add
key="TableDataFile" value=".\\TableData_From145.xml" /.
Edit TableData_From145.xml. Change `<ToBuild>8.5.400.0</ToBuild>` to
`<ToBuild>8.5.400.xxx</ToBuild>`.
Note: xxx stands for the current 8.5.4 build. The exact number can be copied from `TableData.xml`.
 - If you have a build that is not 136 or 145, contact [Genesys Customer Care](#).
 - If the source DB is not the latest build and you do not want to update it to the latest build, create a copy of the source DB and update the copy to the latest build.

Important

These steps are necessary because the 8.5.3 DB schema needs to be updated to the latest schema in order for the rest of the upgrade process to succeed.

Use the copy of the source DB as the baseline for the 8.5.4 upgrade.

- a. Back up the 8.5.3 index folder to a backup folder (see [Configuring SpeechMiner—Index](#)).

- b. Create a copy of the source DB (back up the DB and then restore it in another location).
 - c. Configure the copy of the DB with the Index backup. This will be the baseline for the upgrade.
 - d. Implement the schema changes on the baseline DB to bring the schema into line with the latest 8.5.3 build version. For this step you will need assistance from [Customer Care](#).
3. Create the 8.5.4 target DB as follows:
- Manually—Refer to [Installing the SpeechMiner Database > Manual](#) tab.

Or

- Setup Wizard— Refer to [Installing the SpeechMiner Database > Setup Wizard](#) tab.
4. Run the following query to create the index ix_originalTime in the TextData table:

```
ALTER TABLE [dbo].[TextStatus] DROP CONSTRAINT [FK_TextStatus_TextData]
GO
ALTER TABLE [dbo].[TextData] DROP CONSTRAINT [PK_TextDataTbl]
GO
ALTER TABLE [dbo].[TextData] ADD CONSTRAINT [PK_TextDataTbl] PRIMARY KEY NONCLUSTERED
(
[textId] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON
[PRIMARY]
GO
ALTER TABLE [dbo].[TextStatus] WITH NOCHECK ADD CONSTRAINT [FK_TextStatus_TextData]
FOREIGN KEY([textId])
REFERENCES [dbo].[TextData] ([textId])
GO
ALTER TABLE [dbo].[TextStatus] NOCHECK CONSTRAINT [FK_TextStatus_TextData]
GO
CREATE CLUSTERED INDEX [IX_originalTime] ON [dbo].[TextData]
(
[originalTime] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, DROP_EXISTING = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON,
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
GO
```

5. Verify that your system does not contain duplicate interactions:

- a. Run the following query to find duplicate interactions:

```
SELECT externalID, Count (*)
FROM callMetaTbl
Group BY externalID
Having count (*) > 1
```

- b. If duplicate interactions were found, run the following query to remove the duplication. The interaction with the lowest Call ID will remain in the system.

```
DECLARE @ids VARCHAR(max)
DECLARE @deletedCallsNum int
with x as (select *, rn= ROW_NUMBER()
```

```
over (PARTITION BY externalID order by callid)
from callMetaTbl)

SELECT * into #duplications from x
WHERE callid NOT IN
(SELECT MIN(callId) FROM x)
and
rn > 1

While exists (Select * From #duplications)
begin
set @ids = ''
SELECT * into #duplicationsToDelete from (select top (1000) * from #duplications) as
Y
SELECT @ids = @ids + ', ' + CONVERT(varchar(10), callid) from #duplicationsToDelete
set @ids = Stuff(@ids, 1, 2, '')
delete from indexq where resourceId in (select callid from #duplicationsToDelete)
insert into indexq select callid,2,null,1,calltime,1 from #duplicationsToDelete

exec sp_deleteCallsAndGetTheirPath @ids, @deletedCallsNum OUTPUT
delete from #duplications where exists (select 1 from #duplicationsToDelete dtd
where #duplications.callid = dtd.callid)
drop table #duplicationsToDelete
end
drop table #duplications
```

6. If the MS-SQL server is an Enterprise Edition, run `EXEC sp_create_DB_storage_partitions` on the target database.
7. If your source and target databases are on different servers, make sure the servers are linked in both directions, using the stored procedures `sp_addlinkedserver` and `sp_addlinkedsrvlogin`, as needed.
8. Open the `TableData.xml` file and replace `Table Name="callRecognizer" DoneIfSizeIsEqual="false"` with the following:

```
<Table Name="callRecognizer" DoneIfSizeIsEqual="false" ><br>
  <AddedColumns><br>
    <Column Name="FolderWaitTimeMinutes" Value="60" /><br>
  </AddedColumns>
</Table>
```

9. Install and run `SMUpgrade` (to migrate the data from the 8.5.3 DB to the 8.5.4 DB), as follows:

Prerequisites:

- When migrating a large database, make sure that the hard drive that hosts the target database has enough storage space.

- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Usage

- a. Query the `versionTbl` table to ensure that your 8.5.3 source database is updated to the latest 8.5.3 schema.
- b. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db > properties > options > recovery model`.
- c. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- d. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
 - file locations
 - tables to skip (comma separated list)
 - number of threads running concurrently on a large table
 - bulk copy usage

It is recommended that the `bulk-load` folder be located on the SQL server. The `bulk-load` folder must be shared and the user running the SQL server service must have full control over it.

If you do not set the bulk copy usage, the `callAudioTbl` upgrade will take up to two times longer on a large DB.

Only use the `skip-tables` configuration if specifically requested by Genesys Customer Care.

```
<appSettings>
<add key="ErrorLogFile" value=".\SMUpgradeLog.txt" />
<add key="LogFile" value=".\tableLog.txt" />
<add key="TimingsFile" value=".\tableTimings.txt" />
<add key="SkipTables" value="callTasksTbl" />
<add key="NumThreads" value="10" />
<!-- <add key="bulkpath" value="[PATH]" /> -->
</appSettings>
```

- e. Run `SMUpgrade.exe`.
Log in and select the appropriate 8.5.3 source and 8.5.4 destination databases. The databases that appear in the old databases drop down list include `ver8_5_3` in their file name. The databases in the new databases drop down list, include `ver8_5_4` in their file name. You can also type relevant databases that are named differently.

Important

It is highly recommended to use the `sa` credentials or a user account with bulk insert permissions. The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` does not include the `db_owner` role.

f. The GUI shades the tables as follows:

- **Green**—The table is finished. Both the source and the target DBs contain the same number of records. This conclusively shows that either the data has been copied or there is no data to copy.
- **Yellow**—The number of records in the source and target DBs is not indicative of whether the data in both DBs is identical or not. It is therefore not known whether the table is finished or not.
- **Red**—The table is not finished. The number of records in the source and target databases are not the same, and indicating that the data has not been copied in full.

g. Click `Full Upgrade` to run the upgrade, or `Resume Last` if your previous upgrade was interrupted.

Resuming the last upgrade will shorten the time to run, but might cause problems. To avoid such problems, restore the database again and run the full upgrade. You can also define tables to skip in the configuration file. Every step in the upgrade process is shown in the GUI. You can stop the upgrade by clicking the `Close` button. You will be prompted to confirm your action. Note that the window closes immediately, but the process still runs for a while, as it needs to re-enable the indexes it disables when it starts running.

The time each step took is written to the `TimingsFile`. The location of this file is defined in the configuration file.

IN CASE OF FAILURE: Review all status, error and exception notifications in the `ErrorLogFile`.

h. Continue with the upgrade instructions below.

10. If the SpeechMiner Maintenance Job exists, and the `Update time table` step is included, delete the `Update time table` step. Make sure the last step in the job is set to quit the job upon both success and failure.
11. Optional: Uninstall 8.5.3 from all servers. The two versions (8.5.3 and 8.5.4) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
12. Install the 8.5.4 **platform** on all servers.
13. Install 8.5.4 **Web** on the Web server.
14. Install 8.5.4 **SMART** on users' desktops, as required.
15. Deploy **SQLCLR** on the DB server. Using SQL management, run the commands that are in the `C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql` script in the SpeechMiner 8.5.4 database.

16. Update the package folders with the 8.5.4 .gram files. The .gram files are located in the <Installation Folder>/Support/Grammars.
Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to <Installation folder>/Support/Grammars.
17. Manually copy the files in <Installation Folder>\Support\Grammars\Confidence to the Global Packages folder.
18. Run SMConfig.

Important

If your target database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC sp_change_users_login 'Auto_Fix', 'dbuser'.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.
- d. In the **Reports** panel, update the MRSLibrary.dll on the report server.
- e. Deploy the reports to the report server.
- f. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
- g. Using SMConfig, start the UPlatform services on all the servers.
- h. Update the Stored Procedures by copying any existing custom Stored Procedures from the 8.5.3 DB to the 8.5.4 DB.
It is not necessary to copy Stored Procedures that are used by gauges, and are in the GaugeWidgetProcedures table, because they are copied automatically.
- i. Open the SpeechMiner web-based interface and test the functionality.
- j. Update the Database Jobs:
 - All database jobs that point to the 8.5.3 DB should be changed to point to the new 8.5.4 DB. Examples of DB jobs that might need to be changed:
 - DB maintenance job
 - sp_agentFilterCleanByDays
 - sp_updateUntilYesterdayMaxChannels

To change a DB job, we recommend that you edit the Job Step property using the SQL Management studio.

- k. In the SpeechMiner web-based interface, manually reschedule 8.5.3 reports that should continue to run on a scheduled basis.

Upgrade SpeechMiner from any Version to post 8.5.401.16 up to 8.5.5

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- Before you start the upgrade process, open the **versionTbl** table and change the value in the **Version** column from 8.5.#### to 8.5.0.####. For example, change 8.5.7169 to 8.5.0.7169.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. If you do not have an IX_originalTime index in the TextData table, run the following script to create it:

```
ALTER TABLE [dbo].[TextStatus] DROP CONSTRAINT [FK_TextStatus_TextData]
```

```
GO
ALTER TABLE [dbo].[TextData] DROP CONSTRAINT [PK_TextDataTbl]
GO
ALTER TABLE [dbo].[TextData] ADD CONSTRAINT [PK_TextDataTbl] PRIMARY KEY NONCLUSTERED
(
[textId] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON
[PRIMARY]
GO
ALTER TABLE [dbo].[TextStatus] WITH NOCHECK ADD CONSTRAINT [FK_TextStatus_TextData]
FOREIGN KEY([textId])
REFERENCES [dbo].[TextData] ([textId])
GO
ALTER TABLE [dbo].[TextStatus] NOCHECK CONSTRAINT [FK_TextStatus_TextData]
GO
CREATE CLUSTERED INDEX [IX_originalTime] ON [dbo].[TextData]
(
[originalTime] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, DROP_EXISTING = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON,
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
GO
```

5. Verify that your system does not contain duplicate interactions:

a. Run the following query to find duplicate interactions:

```
SELECT externalID, Count (*)
FROM callMetaTbl
Group BY externalID
Having count (*) > 1
```

b. If duplicate interactions were found, run the following query to remove the duplication. The interaction with the lowest Call ID will remain in the system.

```
DECLARE @ids VARCHAR(max)
DECLARE @deletedCallsNum int
with x as (select *, rn= ROW_NUMBER()
over (PARTITION BY externalID order by callid)
from callMetaTbl)

SELECT * into #duplications from x
WHERE callid NOT IN
(SELECT MIN(callId) FROM x)
and
rn > 1

While exists (Select * From #duplications)
begin
set @ids = ''
SELECT * into #duplicationsToDelete from (select top (1000) * from #duplications) as
y
SELECT @ids = @ids + ', ' + CONVERT(varchar(10), callid) from #duplicationsToDelete
```

```
set @ids =Stuff(@ids, 1, 2, '')
delete from indexq where resourceId in (select callid from #duplicationsToDelete)
insert into indexq select callid,2,null,1,calltime,1 from #duplicationsToDelete

exec sp_deleteCallsAndGetTheirPath @ids, @deletedCallsNum OUTPUT
delete from #duplications where exists (select 1 from #duplicationsToDelete dtd
where #duplications.callid = dtd.callid)
drop table #duplicationsToDelete
end
drop table #duplications
```

6. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.3 GA (build 136) or 8.5.4 GA (build 85) to 8.5.5 GA (build 67), or if you are upgrading from 8.5.5 GA (build 67) to 8.5.501 GA (build 97) you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either Simple or Bulk-logged. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the \utopy\tools\bin\release\SMUpgrade.exe.config file:
You can change the LogFile location. The default LogFile location is in the same folder as the SMUpgrade.exe.config file.

```
<connectionStrings>
  <add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
```

```
<appSettings>
  <add key="ScriptsFolder" value="...\UpgradeScripts\From_8.5.3" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- When upgrading to 8.5.4 or 8.5.5 verify that the version number in the *ScriptsFolder* line is the current version number.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.
- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

At this point the Upgrade process begins. The process should complete with Return Code 0.

All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.

If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.

The Upgrade process can fail due to a Minor error (Return Code <100) or a Major error (Return Code >100).

If the process fails due to a Minor error, you can continue the Upgrade process on the same database after you solve the problem.

If the process fails due to a Major error, you must rollback to the previous database and determine the problem before beginning the process again.

g. Continue with the upgrade instructions below.

7. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
8. Install the target version **platform** on all servers.
9. Install the target version **Web** on the Web server.
10. Install the target version **SMART** on users' desktops, as required.
11. Update the package folders with the target version's `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.
Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to `<Installation folder>/Support/Grammars`.
12. Manually copy the files in `<Installation Folder>\Support\Grammars\Confidence` to the Global Packages folder.
13. Run SMConfig.

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC `sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.
- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
- e. Deploy the reports to the report server.
- f. Start SMART and perform the following:

- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
 - h. Open the SpeechMiner web-based interface and test the functionality.
14. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.501

This document explains how to upgrade SpeechMiner from any version to version 8.5.501.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.

Item to Check	Details
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- Before you start the upgrade process, open the `versionTbl` table and change the value in the **Version** column from 8.5.#### to 8.5.0.####. For example, change 8.5.7169 to 8.5.0.7169.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using `SMConfig->Services->Stop Services`, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist. The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. If you do not have an IX_originalTime index in the TextData table, run the following script to create it:

```
ALTER TABLE [dbo].[TextStatus] DROP CONSTRAINT [FK_TextStatus_TextData]
GO
ALTER TABLE [dbo].[TextData] DROP CONSTRAINT [PK_TextDataTbl]
GO
ALTER TABLE [dbo].[TextData] ADD CONSTRAINT [PK_TextDataTbl] PRIMARY KEY NONCLUSTERED
(
[textId] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON
[PRIMARY]
GO
ALTER TABLE [dbo].[TextStatus] WITH NOCHECK ADD CONSTRAINT [FK_TextStatus_TextData]
FOREIGN KEY([textId])
REFERENCES [dbo].[TextData] ([textId])
GO
ALTER TABLE [dbo].[TextStatus] NOCHECK CONSTRAINT [FK_TextStatus_TextData]
GO
CREATE CLUSTERED INDEX [IX_originalTime] ON [dbo].[TextData]
(
[originalTime] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF,
IGNORE_DUP_KEY = OFF, DROP_EXISTING = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON,
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
GO
```

5. Verify that your system does not contain duplicate interactions:

- a. Run the following query to find duplicate interactions:

```
SELECT externalID, Count (*)
FROM callMetaTbl
Group BY externalID
Having count (*) > 1
```

- b. If duplicate interactions were found, run the following query to remove the duplication. The interaction with the lowest Call ID will remain in the system.

```
DECLARE @ids VARCHAR(max)
DECLARE @deletedCallsNum int
with x as (select *, rn= ROW_NUMBER()
over (PARTITION BY externalID order by callid)
from callMetaTbl)

SELECT * into #duplications from x
WHERE callid NOT IN
```

```
(SELECT MIN(callId) FROM x)
and
rn > 1

While exists (Select * From #duplications)
begin
set @ids = ''
SELECT * into #duplicationsToDelete from (select top (1000) * from #duplications) as
y
SELECT @ids = @ids + ', ' + CONVERT(varchar(10), callid) from #duplicationsToDelete
set @ids = Stuff(@ids, 1, 2, '')
delete from indexq where resourceId in (select callid from #duplicationsToDelete)
insert into indexq select callid,2,null,1,calltime,1 from #duplicationsToDelete

exec sp_deleteCallsAndGetTheirPath @ids, @deletedCallsNum OUTPUT
delete from #duplications where exists (select 1 from #duplicationsToDelete dtd
where #duplications.callid = dtd.callid)
drop table #duplicationsToDelete
end
drop table #duplications
```

6. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Contact **Genesys Customer Care** to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.3 GA (build 136) or 8.5.4 GA (build 85) to 8.5.5 GA (build 67), or if you are upgrading from 8.5.5 GA (build 67) to 8.5.501 GA (build 97) you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either Simple or Bulk-logged. To determine which recovery model you have, right click db > properties > options > recovery model.

- b. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- When upgrading to 8.5.4 or 8.5.5 verify that the version number in the *ScriptsFolder* line is the current version number.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.
- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

At this point the Upgrade process begins. The process should complete with Return Code 0.

All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.

If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.

The Upgrade process can fail due to a Minor error (Return Code <100) or a Major error (Return Code >100).

If the process fails due to a Minor error, you can continue the Upgrade process on the same database after you solve the problem.

If the process fails due to a Major error, you must rollback to the previous database and determine the problem before beginning the process again.

g. Continue with the upgrade instructions below.

7. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
8. Install the target version **platform** on all servers.
9. Install the target version **Web** on the Web server.
10. Install the target version **SMART** on users' desktops, as required.
11. Update the package folders with the target version's `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.
Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to `<Installation folder>/Support/Grammars`.
12. Manually copy the files in `<Installation Folder>\Support\Grammars\Confidence` to the Global Packages folder.
13. Run SMConfig.

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC `sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.

- b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
 - e. Deploy the reports to the report server.
 - f. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
 - h. Open the SpeechMiner web-based interface and test the functionality.
14. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.502

This document explains how to upgrade SpeechMiner from any version to version 8.5.502.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.

Item to Check	Details
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.502.03 you may only need one license for SpeechMiner. Contact Genesys Customer Care for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- Before you start the upgrade process, open the **versionTbl** table and change the value in the **Version** column from 8.5.#### to 8.5.0.####. For example, change 8.5.7169 to 8.5.0.7169.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.502.04, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.501.05 GA (build 97) to 8.5.502.04 GA (build 92), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
  <add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
```

```
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value="..\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running `SMUpgrade.exe` has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The `SMUpgrade` process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.502.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an `.rest.sql` suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. Update the package folders with the target version's `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.

Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to <Installation folder>/Support/Grammars.

10. Manually copy the files in <Installation Folder>\Support\Grammars\Confidence to the Global Packages folder.
11. Run SMConfig.

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC sp_change_users_login 'Auto_Fix', 'dbuser'.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
 - b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. In the **Reports** panel, update the MRSLibrary.dll on the report server.
 - e. Deploy the reports to the report server.
 - f. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
 - g. Using SMConfig, start the UPlatform services on all the servers.
 - h. Open the SpeechMiner web-based interface and test the functionality.
12. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.503

This document explains how to upgrade SpeechMiner from any version to version 8.5.503.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.

Item to Check	Details
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.502.03 you may only need one license for SpeechMiner. Contact Genesys Customer Care for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- Before you start the upgrade process, open the **versionTbl** table and change the value in the **Version** column from 8.5.#### to 8.5.0.####. For example, change 8.5.7169 to 8.5.0.7169.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.503.04, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.502.04 HF1 (build 95) to 8.5.503.04 GA (build 84), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
  <add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
```

```
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value="..\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running `SMUpgrade.exe` has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The `SMUpgrade` process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.502.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an `.rest.sql` suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. Update the package folders with the target version's `.gram` files. The `.gram` files are located in the `<Installation Folder>/Support/Grammars`.

Alternatively, if you have not made changes to any file in these folders, you can delete their content completely. SMConfig will copy the grammar files to <Installation folder>/Support/Grammars.

10. Manually copy the files in <Installation Folder>\Support\Grammars\Confidence to the Global Packages folder.
11. Run SMConfig.

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC sp_change_users_login 'Auto_Fix', 'dbuser'.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
 - b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. In the **Reports** panel, update the MRSLibrary.dll on the report server.
 - e. Deploy the reports to the report server.
 - f. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
 - g. Using SMConfig, start the UPlatform services on all the servers.
 - h. Open the SpeechMiner web-based interface and test the functionality.
12. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.504

This document explains how to upgrade SpeechMiner from any version to version 8.5.504.

Pre-upgrade Requirements

Important

If you are upgrading from a system with Quality Management, you must contact **Genesys Customer Care** for a new SMUpgrade executable, before performing this procedure.

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from **Genesys Licensing**.
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Contact the Genesys Licensing Team for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.

The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.504.02, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact **Genesys Customer Care** to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.503.04 GA (build 84) to 8.5.504.02 GA (build 93), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db` > `properties` > `options` > `recovery model`.
- b. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running `SMUpgrade.exe` has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The `SMUpgrade` process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. Run `SMConfig`.

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run EXEC sp_change_users_login 'Auto_Fix', 'dbuser'.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
 - b. Configure the **Services** panel and save the changes. Do not start any of the services.
 - c. Configure the **Index** panel and save the changes.
 - d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
 - e. Deploy the reports to the report server.
 - f. Start SMART and perform the following:
 - a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
 - h. Open the SpeechMiner web-based interface and test the functionality.
10. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.505

This document explains how to upgrade SpeechMiner from any version to version 8.5.505.

Pre-upgrade Requirements

Important

If you are upgrading a 8.5.503 (or earlier) system with Quality Management, you must contact [Genesys Customer Care](#) for a new SMUpgrade executable, before performing this procedure.

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.

The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.505.02, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact **Genesys Customer Care** to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.504.02 GA (build 93) to 8.5.505.02 GA (build 69), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click `db > properties > options > recovery model`.
- b. Use the **SpeechMiner Installer** to install the `SMUpgrade` component. It is recommended to install and run the `SMUpgrade` component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running SMUpgrade has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The SMUpgrade process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:
 - a. Use Genesys Administrator Extension to create an additional new Application Template:

- a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where `<XXX>` is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for *Speechminer_Web_Node* use the name *Speechminer_Web*.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.
- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
- e. Deploy the reports to the report server.
- f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
- g. Using `SMConfig`, start the `UPlatform` services on all the servers.

8. Open the SpeechMiner web-based interface and test the functionality.
9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.506

This document explains how to upgrade SpeechMiner from any version to version 8.5.506.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that

Item to Check	Details
	they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.506.01, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.505.02 GA (build 69) or 8.5.504.02 GA (build 93) to 8.5.506.01 GA (build 58), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
  <add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
```

```
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value="..\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running `SMUpgrade.exe` has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The `SMUpgrade` process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:
 - a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where <XXX> is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for `Speechminer_Web_Node` use the name `Speechminer_Web`.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.

- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
 - e. Deploy the reports to the report server.
 - f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
- 8. Open the SpeechMiner web-based interface and test the functionality.
 - 9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

SpeechMiner 8.5.0.5 to 8.5.0.6 Upgrade Procedure

This document explains how to upgrade SpeechMiner from version 8.5.005.01 to version 8.5.006.00.

Pre-upgrade Requirements

- Request the newest 8.5.006.00 software from Genesys.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Check for Customization	If any customizations were implemented on your database, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.

Time Requirements

The following table lists the approximate times required to complete the upgrade steps:

Step	Time
Stop the system (step 1)	10 minutes
Back up the database (step 3)	15 minutes (the larger the database the more time this step will take)
Configure and start the system (steps 13 to end)	40 minutes

Upgrade Procedure

1. Close all browsers and SpeechMiner applications.
2. Stop the **Uplatform** service.
3. Back up the SpeechMiner 8.5.005.01 database in the SQL server.
4. Uninstall SpeechMiner 8.5.005.01 (build 7188).
5. Copy the entire **FullInstaller** folder to your local server.
6. Install the new SpeechMiner 8.5.006.00 (build 7214).
7. Reboot your machine.
8. Run the following database query:

```
ALTER TABLE [dbo].[callEventsAuditTbl] DROP CONSTRAINT [FK_callEventsAuditTbl_callMetaTbl]
GO
IF EXISTS (SELECT * FROM sys.procedures WHERE NAME = 'sp_get_old_audio')
BEGIN
DROP PROCEDURE sp_get_old_audio
END
GO

CREATE PROCEDURE [dbo].[sp_get_old_audio] (@audioFormat AS INT,@siteId AS INT,@fromCallId AS INT=0,@lastCallId AS INT)
AS
BEGIN
    CREATE TABLE #ret (callId int, storeMode int, folder varchar(256), filename varchar(256))

    DECLARE @retentionPeriod int

    SELECT @retentionPeriod=retentionPeriod FROM siteAudioFormatsTbl where siteId=@siteId and audioFormat=@audioFormat

    IF @retentionPeriod >= 0
    BEGIN
        DECLARE @retentionTod int

        SELECT @retentionTod=dbo.time2tod (DATEADD(hour,0-@retentionPeriod,GETUTCDATE()))

        INSERT INTO #ret
        SELECT TOP (1000) WITH TIES ca.callid,storeMode,folder,[filename]
        FROM callAudioTbl ca WITH (nolock)
        JOIN callstatustbl AS cs WITH (nolock) ON ca.callid=cs.callid
        WHERE ca.siteId = @siteId

        AND ca.format = @audioFormat

        AND ca.owner = 0

        AND cs.endRecTime <> 0
    END
END
```

```
AND cs.arrivalTime<@retentionTod

AND ca.callid NOT IN (SELECT callid FROM callcategorytbl WITH (nolock) WHERE categoryid IN (SELECT

AND ca.callId NOT IN (SELECT DISTINCT callId FROM coachingStaticCallListCalls WITH (nolock))

AND ca.callId > @fromCallId

ORDER BY callId

END

SELECT @lastCallId = MAX(callId) from #ret

SELECT * FROM #ret

DROP TABLE #ret

END

update dbo.versionTbl set version= '8.5.7204' where resource in ('SM', 'SMART')
go
```

9. Deploy **SQLCLR**: Using SQL management, run the commands that are in the C:\Program Files (x86)\Genesys\Software\Support\sqlclr.sql script in the SpeechMiner 8.5.005.01 database.
10. Run **SMConfig** and connect to the database that was upgraded.
11. Click **Save** in **Sites & Machines**.
12. Deploy the reports (not required for recording only installations).
13. Update MRSLibrary.dll on the Report server.
14. In the **SpeechMiner Configuration Tool 8.5.0 > Services** select the following:
 - Under **Services** select:
 - **Create Performance Counters**
 - **Register services**
 - **Update config files**
 - **Encrypt config files**
 - Under **Select/Deselect All** select the relevant machine.
 - Select **Restart Services** and select **change status to run** from the drop down list.
15. Open the SpeechMiner Web and check its functionality.

Upgrade SpeechMiner from any Version to 8.5.507

This document explains how to upgrade SpeechMiner from any version to version 8.5.507.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that

Item to Check	Details
	they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.507.01, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.506.01 GA (build 58) to 8.5.507.01 GA (build 122), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
  <add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
```

```
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value="..\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running `SMUpgrade.exe` has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The `SMUpgrade` process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:
 - a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where <XXX> is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for *Speechminer_Web_Node* use the name *Speechminer_Web*.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.

- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.
 - e. Deploy the reports to the report server.
 - f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
- 8. Open the SpeechMiner web-based interface and test the functionality.
 - 9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.508

This document explains how to upgrade SpeechMiner from any version to version 8.5.508.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that

Item to Check	Details
	they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Contact the Genesys Licensing Team for assistance.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to **Required Folders**

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- If you are upgrading to 8.5.508.04 or later (from any version that is 8.5.508.03 or earlier) your system's Trending Cluster data sets will be removed. You will have to wait a maximum of 24 hours for the system to collect new data sets before the **Trending** feature can produce results.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.508.03, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.507.01 GA (build 122), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
```

```
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running SMUpgrade has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The SMUpgrade process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:
 - a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where <XXX> is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for `Speechminer_Web_Node` use the name `Speechminer_Web`.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.

- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.

Important

To avoid compatibility issues, it is recommended that you delete the **Reports** folder from the **Report Server**. To delete the Reports folder open the web interface associated with the Report Server (for example, http://SERVER_NAME/reports) and delete the folder with the same name as the SpeechMiner Database name.

- e. Deploy the reports to the report server.
 - f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
- 8. Open the SpeechMiner web-based interface and test the functionality.
 - 9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.509

This document explains how to upgrade SpeechMiner from any version to version 8.5.509.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that

Item to Check	Details
	they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- If you are upgrading to 8.5.509.04 or later (from any version that is 8.5.508.03 or earlier) your system's Trending Cluster data sets will be removed. You will have to wait a maximum of 24 hours for the system to collect new data sets before the **Trending** feature can produce results.

1. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
2. Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.509.04, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.508.03 (build 83), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running SMUpgrade has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The SMUpgrade process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:
 - a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where <XXX> is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for `Speechminer_Web_Node` use the name `Speechminer_Web`.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.

- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.

Important

To avoid compatibility issues, it is recommended that you delete the **Reports** folder from the **Report Server**. To delete the Reports folder open the web interface associated with the Report Server (for example, http://SERVER_NAME/reports) and delete the folder with the same name as the SpeechMiner Database name.

- e. Deploy the reports to the report server.
 - f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
 - g. Using `SMConfig`, start the `UPlatform` services on all the servers.
- 8. Open the SpeechMiner web-based interface and test the functionality.
 - 9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.510

This document explains how to upgrade SpeechMiner from any version to version 8.5.510.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading SpeechMiner. Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that

Item to Check	Details
	they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- If you are upgrading to 8.5.510.01 or later (from any version that is 8.5.508.03 or earlier) your system's Trending Cluster data sets will be removed. You will have to wait a maximum of 24 hours for the system to collect new data sets before the **Trending** feature can produce results.

- Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
- Using SMConfig->Services->Stop Services, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist.
The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.

3. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

4. Install and run SMUpgrade to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.510.01, verify that members are not included in the Utopy and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).
- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact [Genesys Customer Care](#) to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.509.04 (build 85), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- a. Verify that your recovery model is either `Simple` or `Bulk-logged`. To determine which recovery model you have, right click db > properties > options > recovery model.
- b. Use the [SpeechMiner Installer](#) to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- c. Configure the following in the `\utopy\tools\bin\release\SMUpgrade.exe.config` file:
You can change the LogFile location. The default LogFile location is in the same folder as the `SMUpgrade.exe.config` file.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure SpeechMiner** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running SMUpgrade has permissions to edit the Scripts folder.

- d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The SMUpgrade process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.
- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

5. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
6. Install the target version **platform** on all servers.
7. Install the target version **Web** on the Web server.
8. Install the target version **SMART** on users' desktops, as required.
9. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:
 - a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where `<XXX>` is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for `Speechminer_Web_Node` use the name `Speechminer_Web`.
10. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:

```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
11. Run `SMConfig`
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.

- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.

Important

To avoid compatibility issues, it is recommended that you delete the **Reports** folder from the **Report Server**. To delete the Reports folder open the web interface associated with the Report Server (for example, http://SERVER_NAME/reports) and delete the folder with the same name as the SpeechMiner Database name.

- e. Deploy the reports to the report server.
- f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
- g. Using `SMConfig`, start the `UPlatform` services on all the servers.
8. Open the SpeechMiner web-based interface and test the functionality.
9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.

Upgrade SpeechMiner from any Version to 8.5.511

This document explains how to upgrade SpeechMiner from any version to version 8.5.511.

Pre-upgrade Requirements

- Request the most recent release of the target software version from your Genesys representative.
- Request the **Text Migration Console** tool from your Genesys representative.
- Request the SpeechMiner license from [Genesys Licensing](#).
- Verify that the following are installed:
 - Microsoft .NET Framework 3.5 SP1 must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
.net 3.5 Service Pack 1 contains many new features building incrementally upon .NET Framework 2.0, 3.0, 3.5, and includes cumulative servicing updates to the .NET Framework 2.0 and .NET Framework 3.0 subcomponents. You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=22>.
 - Microsoft .NET Framework 4.5 SP1 (4.5.1) must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40773>.
 - Microsoft Visual C++ 2013 Redistributable must be installed on all machines that will run SpeechMiner components or interact with SpeechMiner.
You can download the installation package at:
<http://www.microsoft.com/en-us/download/details.aspx?id=40784>.

Upgrade Checklist

The following checklist summarizes all the procedures required for upgrading Genesys Interaction Analytics (GIA). Make sure to complete all of the required procedures.

Item to Check	Details
Storage Requirements	To successfully complete the upgrade process, the data partition in the SQL server must have available disk space. The minimum required storage for the upgrade should be twice the size of the production database .mdf file.

Item to Check	Details
Check for Customization	If any customizations were implemented on your DB, make sure that they are part of the new version, or that they can be used in the new version without changes. Contact Genesys Customer Care for assistance.
Licensing	As of 8.5.504.02 you only need one license for SpeechMiner. Before attempting an upgrade, contact the Genesys Licensing Team for assistance and an updated license.

Rollback Plan

To ensure that you can revert back to your current SpeechMiner version, back up your current version's database and data folders (index, grammars, etc.).

For detailed information about the folders you should back up, refer to [Required Folders](#)

Since your current DB and data folders are saved and available, back-out steps are not required if problems arise with the upgrade process before you uninstall your current version. Your current system should still be configured and functional.

After you uninstall your current SpeechMiner version and install your target SpeechMiner version, the only way to revert back to your current version is to uninstall the target version, reinstall your current version, restore the database and data folders from backup, and update the config files using SMConfig.

Upgrade Procedure

Important

- You must test SMUpgrade and backup your database before you begin the upgrade procedure. Create a backup of your database, place it on a separate system and perform all the upgrade steps to verify that the process works properly.
- If you are upgrading to 8.5.511.00 or later (from any version that is 8.5.508.03 or earlier) your system's Trending Cluster data sets will be removed. You will have to wait a maximum of 24 hours for the system to collect new data sets before the **Trending** feature can produce results.

1. Verify that you have installed **Elasticsearch**. For details, refer to the [Install, Configure and Run Elasticsearch](#) page in the *SpeechMiner Administration Guide*.

2. Verify that your system includes a new index backup. If it does not include a new index backup, create a new index backup using SMConfig. For details, refer to the [Using the SMConfig to Configure Genesys Interaction Analytics \(GIA\)](#) page in the *SpeechMiner Administration Guide*.

Important

If your system has an existing daily backup process, do not use the existing backup. Instead, use a copy of the backup, since SpeechMiner may delete the backup files after a few days.

3. Disable Database Mirroring for the duration of the upgrade to enable the procedure to run faster.
4. Using `SMConfig->Services->Stop Services`, stop your current system. In addition, stop the Interaction Receiver and SpeechMiner Application Pools if they exist. The Interaction Receiver Application Pool only exists if you have recording and the SpeechMiner Application Pool only exists on web servers.
5. Create a backup copy of the source DB.

Important

These steps are necessary because the schema will be changed from your current version to the target version. It is important to back up the previous version in case of issues that may arise with the upgrade process.

6. Install **SMUpgrade tool**. The **Lucene To ES Migration** tool will be installed as well.
7. Open the `LuceneToESMigration.exe.config` migration file and modify the following parameters:
 - **ElasticSearchServers**: The new Elasticsearch servers (Data nodes).
 - **numberOfShards**: The number of **Shards** used in this cluster according to the Elasticsearch environment recommendations.
 - **numberOfReplicas**: The number of **Replicas** used for every Shard.
 - **LuceneIndexPath**: The path to the latest **Lucene** backup.
 - **connectionString**: The connection string used to connect to the current SpeechMiner database.
8. Double-click `LuceneToESMigration.exe` to run the migration tool. The migration tool will index all the interactions saved in Lucene backups in the Elasticsearch cluster. When the migration tool completes its process one of the following messages will appear.

Important

If interactions are not indexed, the specific interactions will be written to the **FailedList.txt** file. This file is only created if interactions fail to index. Save the path to the **FailedList.txt** file if it is created, since you will need this path when running **SMUpgrade**.

The Exit code can only be seen if you run the migration tool from the command line and type `echo %errorlevel%` when the tool completes the process or aborts.

- **Exit code 0:** Success.
- **Exit code 1:** Low Disc Space. The migration tool was not able to connect to the database. Solve the connection problem and run the migration tool again.
- **Exit code 2:** Indexer is Not Available. The Elasticsearch cluster does not have enough free space. Add additional storage space to your Elasticsearch servers or add additional Elasticsearch servers to the Elasticsearch cluster and run the migration tool again.
- **Exit code 3:** Failed To initialize Elasticsearch Nodes Or Indices.
- **Exit code 4:** Failed To Connect To Database.
- **Exit code 5:** Failed To initialize Lucene Reader.
- **Exit code 6:** Unknown Exception.

Important

The previous SpeechMiner deployment can continue to run safely while the migration tool is in process. If the migration tool is stopped before it completes its process, it will continue to run from where it was stopped and interactions will not be lost.

9. Once the migration tool process is complete, run the **Text Migration Console** tool (remember to request this tool from your Genesys representative) if your system includes **Text** interactions. If your system does not include **Text** interactions, skip this step and continue with **step 10**.

Important

If you are upgrading from 8.5.0.4:

- And you already ran Text Migration in the past, you must skip the Text Migration Console tool step and go directly to step 10 (install and run SMUpgrade).
- Convert your text stored file from **UTF 16** format to **UTF 18** format.

You must upgrade all of your system components (for example, Interaction Receiver on a different machine). If you do not upgrade all of your system components you run the risk of losing text interaction data.

- a. Run the **Text Migration Console** tool in the background, open the command line and run the following command (where `<authType>` equals `-sql` (server authentication) or `-win` (Windows authentication)):

```
TextMigration <authType> <dbserver> <dbName> [<dbuser> <password>]
```

Important

The Text Migration Console tool will move the text data from your database to the **Store** folders. All migrated text will belong to the systems site with ID=0.

- b. Verify that the **Exit code** is 0 (zero). 0 indicates that text data was successfully transferred from the database to the file system. To verify the **Text Migration** exit code run: `echo %errorlevel%`

Important

If the Text Migration Console tool was not successful you will receive an error message. Once the source of the error is solved, run the Text Migration Console tool again until it is successful and you receive 0.

- c. Once the **Text Migration Console** tool is run successfully, stop the **Uplatform** service.
- d. Run the **Text Migration Console** tool again using the following command line (where `<authType>` equals `-sql` (server authentication) or `-win` (Windows authentication)):

```
TextMigration <authType> <dbserver> <dbName> [<dbuser> <password>]
```

Important

Do not continue with this procedure until the command that runs the Migration Console tool is successful and you receive 0. If the tool is not successful contact [Genesys Customer Care](#) for assistance.

- e. Once the **Text Migration Console** tool is complete, run the database upgrade procedure.

Important

During the database upgrade procedure you will be required to provide the index backup folder name you used in the previous step. SMUpgrade will move all the new interactions that were indexed after the Lucene backup index was created to the IndexQ.

10. Install and run **SMUpgrade** to upgrade your database from your current version's DB to the target version's DB as follows:

Prerequisites:

- Before upgrading to 8.5.511.00, verify that members are not included in the SpeechMiner and Reports roles. If members are included in these two roles, remove them from the roles.
- Verify that you are working with **English US** localization settings. You can not upgrade using localization settings that are not English US.
- Install .NET 4.6.2. For additional information refer to [Installing the .NET Framework](#).

- When upgrading a large database, make sure that the hard drive that hosts the target database has enough storage space. The minimum required storage for the Upgrade procedure should be twice the size of the production database .mdf file.
- Contact **Genesys Customer Care** to receive the scripts required to perform the upgrade procedure. Allow for one week to receive the scripts along with instructions about how to use them.

If you are upgrading from 8.5.510.01 (build 85), you do not have to contact Customer Care since the scripts are included in the installation.

Usage

- Verify that your recovery model is either Simple or Bulk-logged. To determine which recovery model you have, right click db > properties > options > recovery model.
- Use the **SpeechMiner Installer** to install the SMUpgrade component. It is recommended to install and run the SMUpgrade component on the SQL server.
- Configure the following in the \utopy\tools\bin\release\SMUpgrade.exe.config file:
 - Configure the LogFile location. The default LogFile location is in the same folder as the SMUpgrade.exe.config file.
 - Configure the **LuceneBackupFolder** value. Use the same value configured for **LuceneIndexPath** in step #7 above.
 - Configure the **FailedLuceneMigrationFile** value. Use the full path to the **Failedlist.txt** file created by the migration tool in step #8 above (if exists). If the **Failedlist.txt** file does not exist leave this value empty.

```
<connectionStrings>
<add name="SQLServer" connectionString="server=[SERVER];uid=[USER];pwd=[PASSWORD];database=[DB N
</connectionStrings>
<appSettings>
  <add key="ScriptsFolder" value="..\..\UpgradeScripts" />
  <add key="LogFile" value=".\SMUpgradeLog" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="MasterPassword" value="" />
  <add key="LuceneBackupFolder" value="" />
  <add key="FailedLuceneMigrationFile" value="" />
</appSettings>
```

Important

- It is highly recommended to use the `sa` credentials.
The user account must belong to the `db_owner` role in the target database. By default, the `DBUser` includes the `db_owner` role.
- If you are encrypting audio when upgrading to 8.5.5 or later, you must set and remember the Master password. For details, see the **Using the SMConfig to Configure Genesys Interaction Analytics (GIA)** section in the *SpeechMiner Administration Guide*.
- Verify that the Script folder points to the folder you received from Genesys Customer Care. By default the Script folder is as it appears in the *ScriptFolder* line above.
- Verify that the user who is running SMUpgrade has permissions to edit the **Scripts** folder.

d. Run `SMUpgrade.exe` from a Command Line as an Administrator.

Important

The SMUpgrade process will trigger a reindex of all of the interactions stored in your system, if your SpeechMiner source version is before version 8.5.503.

- e. When you are asked if you are sure you want to continue, answer **yes**.
- f. Verify that the database and versions specified in this step are correct.
When you are asked if you are sure you want to upgrade the database from your current version to the target version, answer **yes**.

Important

- At this point the Upgrade process begins. The process should complete with Return Code 0.
- All messages are written to the file that starts with the name specified in 4c, followed by a time stamp.

- If for some reason, the Upgrade process could not open in the Log file the messages will only be written in the Console.
- The Upgrade process can fail before or after the database was changed. If the process failed before the database was changed, solve the cause and run the Upgrade procedure again. If the process failed after the database was changed, the database was only partly changed and SMUpgrade will attempt to create a recovery point (that is, the point from which the Upgrade process can continue). If a recovery point is created, verify at what point the procedure failed, determine the cause and run SMUpgrade again (note: at this point you will be asked whether you want to run the SMUpgrade from the recovery point or from the beginning). If a recovery point is not created, rollback to the previous database and determine the problem before beginning the process again.
- If the Upgrade process failed during the Schema upgrade or during the data upgrade, SMUpgrade will create the remaining SQL script and save it in a file in the Script folder under the Data or Schema folders. The name of the script file will be identical to the name of the script SMUpgrade ran with an .rest.sql suffix. If you decide to run SMUpgrade from the recovery point, SMUpgrade will use this file to upgrade.

g. Continue with the upgrade instructions below.

11. Optional: Uninstall your current version from all servers. The two versions (your current version and the target version) cannot be running side by side at the same time. Only one version can be registered as the active SpeechMiner service on each server. The installation binaries can be left on the server.
12. Install the target version **platform** on all servers.
13. Install the target version **Web** on the Web server.
14. Install the target version **SMART** on users' desktops, as required.
15. If you are working with Genesys Interaction Recording (GIR), create new configuration objects:

Important

If you are upgrading from 8.5.505 you do not have to perform this step. Go directly to step 10.

- a. Use Genesys Administrator Extension to create an additional new Application Template:

- a. Import the following template from the SpeechMiner CD:
 - `Speechminer_node.apd`
 - b. Verify that the template has `Genesys Generic Client` in the **Type** field.
 - b. Create three new Application objects using the **Speechminer_node Application** template.
 - a. In the **Name** field, enter the name of each application object. The three new Application objects should be named as follows (where `<XXX>` is the same as the name set in the SMConfig's Recording panel):
 - `<XXX>_Platform_Node`
 - `<XXX>_InteractionReceiver_Node`
 - `<XXX>_Web_Node`
 - b. Create a connection for each Application object to the Server application with the similar name. For example, for *Speechminer_Web_Node* use the name *Speechminer_Web*.
16. Start SMART and perform the following:
- a. Right-click on each active Program icon and choose `Activate program`.
 - b. Run the following SQL code in order to force apply of all the topics:


```
update smartTopicTbl set saveDate = dbo.time2tod(GETUTCDATE()) where version = 0
```
 - c. Click the `Apply` button.
 - d. In the new `Apply` popup window, choose `Apply all`.
 - e. Click the `Apply` button.
17. Run SMConfig
- .

Important

If your database was restored from a backup file, you may need to "fix" an orphan dbuser. To do this, simply run `EXEC sp_change_users_login 'Auto_Fix', 'dbuser'`.

- a. Configure the **Sites & Machines** panel as necessary, and save the changes. Make sure you save this panel even if you have not made any changes.
- b. Configure the **Services** panel and save the changes. Do not start any of the services.
- c. Configure the **Index** panel and save the changes.
- d. In the **Reports** panel, update the `MRSLibrary.dll` on the report server.

Important

To avoid compatibility issues, it is recommended that you delete the **Reports** folder from the **Report Server**. To delete the Reports folder open the web interface associated with the Report Server (for example, http://SERVER_NAME/reports) and delete the folder with the same name as the SpeechMiner Database name.

- e. Deploy the reports to the report server.
 - f. In the **Recording** panel (relevant only if you are working with GIR), set the Configuration Server username and password if you are not using the Genesys supplied "default" user.
 - g. Using **SMConfig**, start the **UPlatform** services on all the servers.
- 8. Open the SpeechMiner web-based interface and test the functionality.
 - 9. If Database Mirroring was enabled and you disabled it at the beginning of this procedure, enable Database Mirroring.