Installation V8.0

Required SW/HW for SpeechMiner

Database

- Microsoft SQL Server 2005 with Reporting Services (Enterprise edition recommended for large installations) (SP3 or above)
- Microsoft SQL Server 2008 with Reporting Services (Enterprise edition recommended for large installations) (SP1 or above)

os

- Servers (DB, Platform and Web): Windows Server 2003, Windows Server 2008 32 and 64 bit editions, Windows Server 2008 R2.
- SMART clients: Windows Server 2003, Windows server 2008, Windows XP Professional (SP3 or above), Windows Vista Business 32 bit
 Windows 7 Professional 32 bit
- SpeechMiner Users (web access): Windows XP Professional (SP3 or above), Windows Vista Business 32 bit, Windows 7 Professional 32 bit, Windows Server 2003, Windows Server 2008, Windows Server 2008 R2.

Browser

For all browsers SpeechMiner application does not require JAVA, .NET framework or ActiveX.

- Internet Explorer (IE) 7
- Internet Explorer (IE) 8
- Internet Explorer (IE) 9

Memory (RAM)

- DB Server: 4GB 32GB
- Web Server: 4GB
- SMART client: 1 GB/2 GB Minimum/Recommended
- Platform server: 4GB-8GB (1GB per recognizer task as a rule of thumb)

General

- SMTP support: SMTP server with permissions to send emails (used for emailing reports to SpeechMiner users)
- Microsoft .NET Framework 3.5 SP1

What is installed

On all Platform servers

- UPlatform service 20MB disk space for entire runtime folder (+ ~10 GB for recognition packages caching. depends on implementation size)
- On the Recognition server(s) Recognition Engine ~1GB disk space

On the DB server

- MS-SQL 2005/2008 Server (normally installed beforehand). Must include MS Reporting Services
- SpeechMiner Database initial size is about 20 GB, It may grow depending on call volume and call purging policy.
- SpeechMiner Index Initial size is about 20 GB, It may grow depending on call volume and call purging policy
- UConnector service 20MB disk space for entire runtime folder. To integrate with recording systems with very high call volume, a larger (10-200GB) storage area is needed for temporary files, or in some cases a separate server.

On the Web server

• SpeechMiner virtual folder - 20MB (+ space for cached reports and call audio, depending on user activity)

On a user machine running SMART

- Recognition engine 1GB disk space
- SMART executable and runtime files (.dlls)

Required Credentials and Permissions

• Functional ID (domain user) with Power Users (and Performance Monitor Users, where applicable) privileges on the machines running

SpeechMiner (UPlatform.exe). This user is used as the credentials for the registered SpeechMiner service. (SMUSER)

- Add SMUSER to "Power Users" group and "Performance Monitor Users" group, if it exists (on each computer)
- Give SMUSER "modify" permissions on (Security tab of a folders properties)
 - UTOPY installation folder (c:\utopy) (where UTOPY installation exists)
- Utopy data folders (e.g. C:\data) (where data\input and data\filtered exist)
- On data folder: in the sharing tab > permissions > add SMUSER with "change" permissions
- Add SMUSER as "content manager" in the reporting server (//webhost/reports properties)
 Give access permissions to SMUSER to the IIS metabase and other directories used by ASP.NET. To do this, an administrator can run:

aspnet_regiis.exe -ga "{domain}\{user}"

- Functional ID UConnector
 - Have read permissions on the recording system shared folder (Note: it is possible to use SMUSER, no need for dedicated domain user).
 - Have read/write permissions to SpeechMiner data\input folder
- SMART Users (Any user that will run SMART)
 - Read/write access to UTOPY installation folder (c:\utopy)
 - Read/Write access to the "Package Root Path" (see SMConfig documentation)
 - Read/Write access to the Nuance installation folder, for ex: C:\Program Files\Nuance
 - Permission to use .net encryption. To add this, an administrator can run:

<pre>aspnet_regiis -pa "NetFrameworkConfigurationKey" "{domain}\{user}"</pre>	
	۳.

Installation files Check List

Provided by customer

- Windows Installation Media
- Microsoft SQL Server Installation Media

Provided by UTOPY

- SpeechMiner setup
- Licenses

Compare existing hardware to the original hardware specifications

Prerequisites

- 1. Space check
- Make sure there is more than 2 GB of free disk space on the hard drive where you are planning to install.
- 2. OS Check
- Verify that all machines have supported operating system.
- 3. Machines connectivity & admin user
- Verify all machines are functional and connected to the network and that the installing user account is an administrator on all of them. 4. Adding operational windows user to Power User group
- Add the designated windows user (operational user) that will run the SpeechMiner services to the Power Users group of all machines. 5. **.NET Framework**

Install on all machines Microsoft .NET Framework 3.5 SP1 (can be downloaded directly from MS at http://download.microsoft.com/download/2/0/e/20e90413-712f-438c-988e-fdaa79a8ac3d/dotnetfx35.exe).

Mindows Server 2008 R2

In Windows Server 2008 R2, the .NET Framework is a feature and installing it is different than on older versions of the Windows Operating System. In previous versions, one could either download the .NET Framework 3.5.1 install binaries from the link above. Starting with Windows Server 2008 R2, the method of installing .NET Framework 3.5.1 has changed. Follow this link http://support.microsoft.com/kb/2027770 for explanation how to verify that .NET Framework 3.5.1 is installed and if it is not installed how you can add it.

6. SQL Server installation

Microsoft SQL Server 2005 with Reporting Services (follow instructions at SQL2005 Server Installation and Configuration for SpeechMiner) or Microsoft SQL Server 2008 with Reporting Services (follow instructions at SQL2008 Server Installation and Configuration for SpeechMiner)

7. IIS configuration on Web app machine

Make sure Internet Information Server component is installed and operational. Make sure you complete all the following steps:

Windows Server 2003:

a. In Control Panel open Add or Remove Programs b.

Click on Add/Remove Windows Components	
Windows Components Wizard	×
Windows Components You can add or remove components of Windows.	Ć
To add or remove a component, click the checkbox. A s part of the component will be installed. To see what's inc Details.	
<u>C</u> omponents:	
🗹 📻 Accessories and Utilities	4.9 MB 🔺
Active Directory Services	16.7 MB 🚽
🗹 🖪 Application Server	34.4 MB
Certificate Services	1.8 MB
🔽 🖗 Distributed File System	01MB 🗾 🛛
Description: The POP3 service provides e-mail retrieval s Transfer Protocol (SMTP) is also installed. Total disk space required: 3.0 MB Space available on disk: 203051.3 MB	services. The Simple Mail
< <u>B</u> ack <u>N</u> ext >	Cancel Help

- c. Click Next and Finish to complete the installationd. When the installation is completed open Internet Information Services Manager (Start -> Run and type inetmgr)

e. Click on Web Service Extensions

f. Make sure that ASP.net and ASP are set to "Allowed"

🐌 Internet Information Services (IIS) Manager 📃 🔲 🗙							
🐚 Eile Action Yiew Window Help			_ 8 ×				
Internet Information Services Internet Information Pools Internet Service Extensions	Web Service Extensions Allow Prohibit Properties Tasks Add a new Web service extension	✓ Web Service Extension ✓ All Unknown CGI Extensions ✓ All Unknown ISAPI Extensions ✓ Active Server Pages ✓ Active Server Pages ✓ Active Server Pages ✓ ASP.NET v1.1.4322 ✓ ASP.NET v1.0.50727 ✓ HTIP Compression ✓ Internet Data Connector ✓ Server Side Includes ✓ WebDAV	Status Prohibited Prohibited Allowed Allowed Allowed Prohibited Prohibited Prohibited				
	Allow all Web service extensions for a specific application Prohibit all Web service extensions Open Help Extended < Standard /						

Windows Vista & Windows 7:

a. In Control Panel click on Programs and click on Turn Windows features on or off. If the User Access Control dialog appears click Continue



- b. Expand Internet Information Services, make sure that the following items are selected:
 - Web Management Tools
 - World Wide Web Services



- c. Expand World Wide Web Services, make sure that the following items are selected:
 - i. Under Common HTTP Features:
 - Static Content
 - Default Document
 - Directory Browsing
 - HTTP Errors
 - HTTP Redirection
 - ii. Under Application Development Features:
 - ASP.NET
 - ISAPI Extensions
 - ISAPI Filters
 - iii. Under Security:
 - Windows Authentication
- d. Expand Web Management Tools, expand IIS 6 Management Compatibility, make sure that the following items are selected:
 - IIS 6 WMI Compatibility
 - IIS Metabase and IIS 6 configuration compatibility
- e. Click OK to complete the installation

Windows Server 2008:

- a. Click Start Menu -> All Programs -> Administrative Tools -> Server Manager.
- b. Select Roles and click on Add Roles

E Server Manager		
File Action View Help		
🗇 🔿 🔰 💽		
Server Manager (TLVQA4) Roles		
Configuration Storage	reatures Diagnostics Configuration View the health of the roles installed on your server and add or remove roles and features.	
	💿 Roles Summary	Roles Summary Help
	Roles: 1 of 17 installed	Add Roles
	File Services	-
	File Services	File Services Help
	Provides technologies that help you manage storage, enable file replication, manage client computers	e shared folders, ensure fast file searching, and enable access for UNIX
		Go to File Services

c. In the wizard select Web Server (IIS), in the popup dialog click Add Required Role Services



- Static Content
 - Default Document

- Directory Browsing
- HTTP Errors
- HTTP Redirection
- ii. Under Application Development:

 - ASP.NET
 ISAPI Extensions
 ISAPI Filters
- iii. Under Management Tool: IIS 6 WMI Compatibility IIS 6 Metabase compatibility
- iv. Under Security:
- Windows Authentication
 f. Click Next and Install. When the installation is completed close the wizard
- g. Select Features and click on Add Features

	Server Manager	
	File Action View Help	
	♦ ≥ □ 2	
	Server Manager (TLVQA4)	
	Server Manager (TEVQA4) Server Manager (TEVQA4) Server Manager (TEVQA4)	Features
	🛨 💫 File Services	
	🖃 💐 Web Server (IIS)	View the status of features installed on this server and add or remove features.
	Internet Information Se Factures	
	Diagnostics	Features Summary Features Summary Help
	🗉 🁬 Configuration	reacures summary
	🕀 🚰 Storage	Seatures: 5 of 41 installed Add Features
		🚟 Remove Features
		Desktop Experience
		Ink and Handwriting Services
1		Ink Support
h. 5	Select SMTP Server	
1	Add Features Wizard	X
	3	
- 1	🛛 🛵 📶 🖉 Select Fea	tures
	Features	Select one or more features to install on this server.
	Confirmation	
	Commation	Eeatures: Description:
	Progress	DirectAccess Management Console
	Results	Group Policy Management
	(topale)	Ink and Handwriting Services (Installed)
		Internet Printing Client
		Internet Storage Name Server
		LPR Port Monitor
		🕀 🗌 Message Queuing
		Multipath I/O
		Network Load Balancing
		Peer Name Resolution Protocol
		Quality Windows Audio Video Experience
		Remote Assistance
		Remote Differential Compression
		Remote Server Administration Tools (Installed)
		RPC over HTTP Proxy
		Simple TCP/IP Services
		SMTP Server
		Storage Manager for SANs
		Subsystem for UNIX-based Applications
		Maya shaut fasturar
		More about features
		< <u>Previous</u> <u>M</u> ext > <u>I</u> nstall <u>Cancel</u>

i. In the popup dialog click Add Required Role Services

¢₽	Add role services and features req	
	<u>R</u> ole Services:	Description:
	 Web Server (IIS) Management Tools IIS 6 Management Compatibility Web Server Health and Diagnostics Remote Server Administration Tools Feature Administration Tools SMTP Server Tools 	Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.
		Add Required Role Services Cancel

j. Click Next, Next, Next and Install

General:

- a. Give "Modify" permissions to the domain user that SpeechMiner will impersonate on this folder: C:\<Windows>\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files
 b. Make sure the application pool uses v2.0 of the .Net framework, and not a later version.
 8. Disable "Simple File Sharing" on all machines

older Options	?
General View File Types Offline Files	
Folder views You can apply the view (such as Details or Tiles) the	hat
Advanced settings:	
 Launch folder windows in a separate process Managing pairs of Web pages and folders Show and manage the pair as a single file Show both parts and manage them individually Show both parts but manage as a single file Remember each folder's view settings Restore previous folder windows at logon Show Control Panel in My Computer Show encrypted or compressed NTFS files in color Show pop-up description for folder and desktop items Use simple file sharing (Recommended) 	
Restore Defau	ılts
OK Cancel A	pply

9. Audio capabilities - Users of the SpeechMiner web application must have a functioning audio device on their desktop and Windows Media Player version 10 or 11 installed.

DB Server Installation

	0 Setup					
hoose Compon					-	
Choose which fea	itures of Spee	chMiner 8.0 you w	vant to install.		~كرا	_
Check the compo install, Click Next		nt to install and un	icheck the comp	oonents you don	't want to	
Select componen	:s to install:	Uplatform Smart Web SMConfig ULogger SMUpgrade Nuance Licer	nse	Description – Position your over a compo see its descri	onent to	
Space required: 2	200.3MB	✓ Database				
soft Install Syste	m v2,44					
,			< Back	Next >	Cancel	
					echminer_verX_Y	′ (i.e. speechMin
e credentials will b peechMiner 8.0		process of creating	g the SpeechMi	ner DB.		1
atabase creder	ntials					-
	redentials of t	he Database admi	inistrator		<u>←</u> ,	
lease enter the o						
Nease enter the o						
Vindows Auth	enticated user					
Windows Auth	enticated user					
	enticated user					
Windows Auth B Server B Name						
Windows Auth B Server						

4. In Choose Install Location dialog, it is recommended to select <DRIVE>:\Utopy\software (default value)

< Back

Next >

Cancel

SpeechMiner 8.0 Setup			
Choose Install Location		_	
Choose the folder in which to install	SpeechMiner 8.0.		
Setup will install SpeechMiner 8.0 in Browse and select another folder. C		fferent folder, click	
Destination Folder		Browse	
Space required: 200.3MB Space available: 714.3GB ullisoft Install System v2.44			
sensor olar navan ba yaktern i yaktern i	< Back Insta	all Cancel	
 SQL Server Management Stu An alternative way to perform C:\utopy\Software\Support du choose settings based on the In addition you should run the on the master database: creating 	DB installation is to use data_ver8_(DB installation is to use data_ver8_(ring any regular server install. You sl setting in the steps above. following commands to create the dl te login [dbuser] with password='dbu sp_change_users_login 'Auto_Fix', 'd	es on the server 0_sql2005.bak (a SQL backup fil nould restore this backup on the buser user: ser',check_policy=OFF	e) deployed in
 b. If you need alternative call queue an advanced setting. If you don't c. If the DB server is an Enterprise I d. Review and modify the DB job for when a database is created. The updateUntilYesterdayMaxChan purge old calls should be added a 	know that you need this, just ignore t Edition, run "EXEC sp_create_DB_st r maintenance, and schedule it to run job's name is SpeechMiner_Mainten Inels and sp_agentFilterCleanByDa as a step to this job. This job should r iformation about the agents and their	allFromQ with sp_GetNextCallF his step). orage_partitions". on a regular basis. The job is cl ance_job - <database>. The job ys. In addition, any procedure to un daily or weekly at a predefine</database>	reated by the installer may include (optional o rebuild indexes and ed time window when o
Owner field. Click on Properties window wi	updateUntilYesterdayMaxChannels' j SQL Server Agent -> Jobs. Double o ill pop up. Under the General section Dick OK to submit the change.	lick on 'updateUntilYesterdayMa	axChannels' job. The
The database contair as a base for your job	ns a stored procedure that creates su p.	ich a maintenance job. You can	review it and use it
e. To boost the performance of the i directory. For security reasons gr	reports rendering in the web server, a ant access only from the web server(ReportServer virtual



Authentication M		×				
Use the following Windows user account for anonymous access:						
User name:	UTOPYINC\integ Browse					
Password:	•••••					
-						
-Authenticated a	ccess					
For the following are required wh	g authentication methods, user name and password	E E				
- anony	mous access is disabled, or					
_	s is restricted using NTFS access control lists					
-	Wi <u>n</u> dows authentication entication for Windows domain servers					
	itication (password is sent in clear text)					
.NET Passpo	rt au <u>t</u> hentication					
Default doma	n: Select					
_		-				
<u>R</u> ealm:	S <u>e</u> lect					
	OK Cancel Help					
· · ·						
IP Address and D	omain Name Restrictions	×				
IP address acces						
By default, all co	omputers will be: of C Granted access	1				
Except the follo						
	P address (Subnet mask)					
of Granted	192.168.5.64	A <u>d</u> d				
	2	Remove				
		Edi <u>t</u>				
1						
	OK Cancel <u>H</u> elp					

f. In order to deploy the SQLCLR please set the permissions of the XmlSerializers.dll. Under Master DB run the following commands (after copying sqlclr.XmlSerializers.dll from the InstallFolder\support files to a new folder - sqlclrDeploy and changing DB_SERVER in the first command to be the name of the dvserver)

CREATE ASYMMETRIC KEY SQLCLRTestKey FROM EXECUTABLE FILE = '\\DB_SERVER\C\$\sqlclrDeploy\sqlclr.XmlSerializers.dll' CREATE LOGIN SQLCLRTestLogin FROM ASYMMETRIC KEY SQLCLRTestKey GRANT EXTERNAL ACCESS ASSEMBLY TO SQLCLRTestLogin

Web Server Installation

SQL Requirement for Web Server - Make sure the system on which you plan to install the Web Server has either SQL Server Client or SQL Server Database Server installed (not required if DB Server and Web Server are the same machine).

1. Run SpeechMiner setup

2. In the Select Components dialog, cl	noose Web . Optionally add the Ul	Logger tool for monitoring the system lo
Choose Components		_
Choose which features of Spee	chMiner 8.0 you want to install.	
Check the components you war install. Click Next to continue.	nt to install and uncheck the com	conents you don't want to
Select components to install:	Uplatform Smart Web SMConfig ULogger SMUpgrade Nuance License	Description Position your mouse over a component to see its description.
Space required: 253.0MB	Database	
Nullsoft Install System v2.44		
	< Back	Next > Cancel
 In "Choose Destination Location" it is Select DB credentials for the configure After installation is done set the follow 	ration files.	>:\Utopy\software (default value)

- Set read/write/modify permissions to the IIS user/group (IUSR_XXX in Windows XP or Network Service group in Windows Server 2003 and above) and the operational domain user (SMUSER) on the SpeechMiner installation folder. Set read/write/modify permissions to the IIS user/group (IUSR_XXX in Windows XP or Network Service group in Windows ٠
- Server 2003 and above) on the windows temp folder.
- Recommended: Enable HTTP Compression on the IIS server

Platform Server Installation

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1. On the Choose Components dialog, choose UPlatform and ULogger.

🛱 SpeechMiner 8.0 Setup					
Choose Components Choose which features of SpeechMiner 8.0 you want to install.					
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.					
Select components to install: Space required: 219.9MB	 Uplatform Smart Web SMConfig ULogger SMUpgrade Nuance License Database 	Description Position your mouse over a component to see its description.			
Nullsoft Install System v2,44					
	< Back	Next > Cancel			

- In "Choose Destination Location" it is recommended to select <DRIVE>:\Utopy\software (default value)
 You should either install Nuance license server or enter the name of an existing server:

 Install Nuance license server

🗗 SpeechMiner 8.0 Setup		
Choose Components Choose which features of Spec	echMiner 8.0 you want to install.	CD
Check the components you wa install. Click Next to continue.	ant to install and uncheck the comp	oonents you don't want to
Select components to install:	Uplatform Smart Web SMConfig ULogger SMUpgrade Muance License	Description Position your mouse over a component to see its description.
Space required: 205.8MB	Database	
Nullsoft Install System v2,44		
	< Back	Next > Cancel
Enter the information of an existing	Nuance license server	

		😂 SpeechMiner 8.0 Setup	
		Nuance License Please enter nuance license servers as a list of port@server combinations separat by semi-colon	ed 🖵
		Nullsoft Install System v2.44	Cancel
3.	Select re	recognition languages you would like to install	Cancer
	cs: Sp	SpeechMiner 8.0 Setup	
5		anguages Selection Please select the languages you would like to install	,
		✓ Spanish English UK	
		Catalan	
		Spanish US	
		English AU	
	Nullso	soft Install System v2.44	cel

- 1. Manual steps
 - a. Create the input, store, filtered, and grammar shared folders. Note all SpeechMiner machines should have access to these shared folders.
 - b. Consult with http://support.microsoft.com/kb/895980/ if you have AMD based servers, in case you need to install some updates.
 - c. Optional: turn off error reporting (http://support.microsoft.com/kb/310414) :

To access the settings for the reporting feature:

1. Click Start.

- 2. Right-click My Computer, then click Properties.
- 3. Click the Advanced tab.
- 4. Click Error Reporting.

SMART Installation (user desktop)

- 1. Install the .NET 3.5 Framework (with SP1)
- 2. Run SpeechMiner setup. In the Select Components dialog, choose Smart. Optionally add the ULogger tool for monitoring the system

SpeechMiner 8.0 Setup		
Choose Components Choose which features of Spee	chMiner 8.0 you want to install.	с ъ
Check the components you wa install. Click Next to continue.	nt to install and uncheck the com	ponents you don't want to
Select components to install:	Uplatform Smart Web SMConfig ULogger SMUpgrade Nuance License Database	Description Position your mouse over a component to see its description,
Space required: 276.9MB		
Nullsoft Install System v2.44 ——	< Back	Next > Cancel

- 3. Select destination folder (Leave default if not sure)
- 4. Restart computer

User Desktop (IE Settings)

A On the end user's desktop, the Internet Explorer has to be set with to following for the SpeechMiner domain:

- Allow popups
- Set as "Trusted Sites" zone or as "Local Intranet" as explained below

* Set the SpeechMiner domain as a "Local Intranet" browser zone. This is done in the security panel of the IE settings dialog.

	S 🚽 🚽	\odot
ternet	Local intranet Trusted sites	Restricted sites
This :	Il intranet zone is for all websites that are d on your intranet.	Sites
	el for this zone	
	1edium-low - Appropriate for websites on yo (intranet) - Most content will be run withou	it prompting you
	 Unsigned ActiveX controls will r Same as Medium level without 	
-		prompts

The bottom toolbar of IE should say "Local Intranet" when browsing the SpeechMiner application pages.

Secol intranet

• Set the caching setting, under "check for newer versions of stored pages" to "Automatically".

Temporary Internet Files and History Settings		
Temporary Internet Files Internet Explorer stores copies of webpages, images, and media for faster viewing later.		
Check for newer versions of stored pages:		
O Every time I visit the webpage		
Automatically Never		
Disk space to use (8-1024MB) 50 💮 (Recommended: 50-250MB)		
Current location: C:\Documents and Settings\ron\Local Settings\Temporary Internet Files\		
Move folder View objects View files		
History		
Specify how many days Internet Explorer should save the list of websites you have visited.		
Days to keep pages in history: 20 💭		
OK Cancel		