SPEECHExec MOBILE SERVER

VERSION 2.7
Technical Documentation
Advanced Configuration

For Certified MDC Partners and Support technicians
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1. Installation and Configuration

1.1. Introduction

Congratulations for purchasing a Philips SpeechExec Mobile Solution. By using the following components it is possible to integrate your Mobile Device with Philips Dictation Recorder, used as a dictation machine, into your SpeechExec Workflow.

1.2. Components Overview

**Dictation Recorder for Mobile Devices**
- Dictations are recorded on the mobile device and send to the webserver

**Webserver – Receives dictations**
- A PHP or ASPX script receives the dictation send by the Mobile Device, checks the successful transmission and save the dictation in a directory.

**SpeechExec Mobile Server**
- **Receive** – the MobileServer collects the dictations by using a UNC path and/or FTP
- **Processing** – it assembles dictation parts and converts them into the preferred format WAV, MP3 or DSS.
- **Delivery** – finally, it delivers dictations to the receiver by using UNC path, E-Mail or FTP

**SpeechExec Enterprise**
- Within the SpeechExec Workflow dictation will be written by the transcribers.

Philips Dictation Recorder Client Software – this software turns your mobile device into a professional dictation machine. It is possible to record dictations, rewind, insert or manage recorded dictations on the device. Dictations are sent via TCP to a receiver php or aspx script located on the webserver.

A previously on the webserver installed PHP or ASPX script receive dictations from the mobile devices, checks if the transmission was successful and save the dictations in a directory. All the incoming dictations are temporarily buffered on the webserver.

The SpeechExec Mobile Server takes care of the management of the user data since every Mobile devices corresponds to the serial number is assigned to a specific user. It picks up the dictations, which should be processed from the temporary file of the web server. It accesses the file by using an UNC path or FTP. Additionally, it converts the temporarily used AMR format into a common format like MP3, WAV, DSS and sends it to the SpeechExec workflow via UNC path, FTP or e-mail to the user.

SpeechExec Enterprise Software – Dictations are written and deployed further respectively within the SpeechExec workflow.
System chart for software components and connections.
1.3. Installation, Planning and Requirements

The installation of SpeechExec Mobile Server is easy to manage. However, certain components have to be adjusted. Especially in companies using strict safety directives the installation should be made by an experienced administrator who knows how to handle web server settings, setup firewall, setup BlackBerry Enterprise Server (only if BlackBerry is in use), FTP Server, MSSQL Database and manage Windows Server Systems.

1.3.1. Clients for Mobile Device

1.3.1.1. SpeechExec Dictation Recorder for Android

Speech Processing Solutions have tested and released version 3.2.03 on the devices with Android version 4.2 or newer

1.3.1.2. SpeechExec Dictation Recorder for BlackBerry

Supported Devices:
BlackBerry Classic
BlackBerry Leap
BlackBerry Passport
BlackBerry Q10
BlackBerry Q5
BlackBerry Z3
BlackBerry Z30

1.3.1.3. SpeechExec Dictation-Recorder for iPhone

Speech Processing Solutions have tested and released version 4.2.04 on the following devices:
iPhone, iPad, and iPod touch with iOS 10.0
1.3.2. MobileServer Requirements

Processor: Intel i3 or higher or compatible
RAM Memory: 4GB or higher
Operating System: Microsoft Windows 7 SP1 (32/64Bit)
Microsoft Windows 8.1 (32/64Bit)
Microsoft Windows 10 (64Bit)
Server Operating System: Microsoft Server 2008R2 (64Bit)
Microsoft Server 2012R2 (64Bit)
Microsoft Server 2016 (64Bit)

Microsoft .NET Framework 4.6.1
Microsoft Desktop Experience
Optional MSSQL Database – if not available, SQL Server 2014 Express installation will be provided during MobileServer installation.

Microsoft SQL Server 2014 SP2
Microsoft SQL Server 2016

Hard drive: 3GB for SQL Express Server
700MB for .NET Framework 3.5
5GB or more for Dictation Files

Microsoft Small Business Server versions are not supported due to their already heavily taxed functionality

1.3.2.1. Webserver

Microsoft Internet Information Server version 6.0 or newly with ASPX Support
Apache Webserver version 2.0.64, 2.2.23, 2.4.3 or newly with PHP Support
2. Before you install checklist

Check these conditions before beginning the installation procedure:

1. If necessary, install the .NET Environment
   for Windows Server 2012 – see Chapter 8.10.1
   for Windows Server 2008 – see Chapter 8.10.2

2. If necessary, install the Desktop Experiences Feature
   for Windows Server 2012 – see Chapter 8.11.1
   for Windows Server 2008 – see Chapter 8.11.2

3. If necessary, install the IIS Webserver
   for Windows Server 2012 – see Chapter 8.12.1
   for Windows Server 2008 – see Chapter 8.12.2

4. If you use external Web Server from Hosting Company, please check and prepare a FTP Account for the Account

5. Download and save the Mobile Server Software from the WebPage

Note:

Creation and preparation of the target Server is the responsibility of the customer’s IT department.
3. Mobile Server – Installation process

3.1. License Server

Mobile Server 2.7 need a License Server 6.0. Before you start with Mobile Server installation, make sure that you have available License Server in local network, or install new License Server.

We describe the installation process and configuration process for license server based on Microsoft Server 2016.

**Warning:** Do not rename the computer with the Enterprise License Server Service! This can make your license file invalid!

Select the executable Autorun file

Select the Installation Language and click on OK. The available language is Czech, Danish, Dutch, English, Finnish, French, German, Norwegian, Spanish and Swedish.
Select – I accept the terms in the license agreement and click Next
Click again on Next
Click Install to begin the installation.
Click Finish
3.1.1. Check the installation

Open Task Manager by right clicking the taskbar, and then clicking Start Task Manager, alternative, you can also open Task Manager by pressing CTRL+SHIFT+ESC.
Switch to Processes and look for PSP.SpeechExec.Enterprise.LicenseServer.exe (32 bit) process.
Double click on this, and click with the right mouse button on SpeechExec Enterprise License Server Service, select Open Service

Switch to Services and check if the Status is Running. Click on Services
If the service is running, you can stop or restart the service.

With doubleclick on it open the properties for more information.
3.1.2. Create license request

Click on License and select Export license request file. Accept the terms in the license and click Continue.
Save the *.seereq File and send this to yours Key Account Manager or Speech Processing Partner.

3.1.3. Import license file

Click on License and select Import license file.

Select the Folder with license file (with file extension *.seelic)
You can see all the installed and available licenses. In our example, we have 10 Mobile Server licenses and 1000 Users licenses.

Click on License, select View license information and see the full information about your license.
3.1.4. Email notification – Health scanner

You can create an email notification for low license. SpeechExec Enterprise License Server will send an email notification to each recipient if the number of used licenses reaches the specified threshold. Each license type is monitored separately.

Click on Email notifications, select Change email notifications.

Create SMTP connection to the SMTP Server. Create a recipients list and setup the threshold for notification. You can also activate notification for Workflow Manager and for Mobile Server.
3.2. **Mobile Server**

Open the folder 03_Mobile_Server and run MobileServer_2_7_0_x32.exe as administrator.

The .NET 4.6.1 Framework is required for the full installation. Click OK.

Click on Next to start the setup wizard.
Accept the terms of the License Agreement and click Next

You can choose the installation path or keep the preselected destination path and click on Next. Predefined path is C:\Program Files (x86)\MobileServer
Click on Next to create Data folder. Philips SpeechExec Mobile Server will store all the user data in this directory.

If you want install Microsoft SQL Server 2014 Express Edition – please click on Install. If not, you can setup the connection data within the Application.
Installation process is running in the background

Click Finish to proceed to the MobileServer Configuration Tool.
4. **Webserver - configuration**

Dictation receiving (webserver) and dictation processing (SpeechExec Mobile Server) are two independent modules and can therefore be installed and tested independently. For the first step – receive dictation from mobile devices – we need prepare our webserver.

4.1. **Installation of the Upload Script**

There are two script files (upload.php, upload.aspx) in the installation directory of the Mobile Server. The PHP script can be used with every current web server on which you can install and run PHP5. The ASPX file is specifically made for the Microsoft Internet Information Server (IIS).

For a new installation, you can create two folders in your web-root directory. In our example we create a folder **mobileserver_upload** and **dictations**, but you can name the folder they you would like it.

- `/mobileserver_upload/` – copy the upload.php or upload.aspx script into the directory. If you configure the web server, the data files in the directory should be visible to the user and allow the PHP script or ASPX respectively to be run.

- `/mobileserver_upload/dictations/` – this is the folder where the incoming dictations are saved. Make sure that all services of the web server components have access to the directory and have permission to save data within the directory. The access to the dictation file via web browser should generally be restricted. Thus, there is a strict separation between the active web components and the actual memory.

Edit the corresponding script file as follows:

```php
// destination, where the files get copied to
define('DESTINATION', dirname(__FILE__). '/dictations');
/*Fill in the user name and password that correspond to the data used for the mobile device client:*/
define('USERNAME', 'test');
define('PASSWORD', 'test');
/* Enter the target path you would like to use to store the dictations:*/
define('DESTINATION', '/dictations/');
/* If you expect script problems, you can allow the error to be displayed (true/false)*/
define('SHOW_SCRIPT_ERRORS', false);
```
Upload.aspx

<!-- Fill in the user name and password that correspond to the data used for the mobile device client:-->
const string USERNAME = "test";
const string PASSWORD = "test";

<!-- Enter the target path you would like to use to store the dictations:
(please use two backslashes in your path instead of one; e.g.: C:\DictationRoot\Dictations):-->
const string DESTINATION = "C:\dictations";

Check the script – open the URL of the script file by using the Internet Explorer or other Webbrowser from another computer inside the network
For Apache/PHP
http://SERVER IP ADDRESS/speechexec/upload.php
For Microsoft IIS/ASPX
http://SERVER IP ADDRESS/speechexec/upload.aspx
It should appear a web form. If this is not the case, the script lacks appropriate permissions or PHP or ASPX is not installed correctly.

Fill in user name (test) and password (test) which you have previously defined in upload.php or upload.aspx and choose a supported audio file.

The following information could occur:

Code0: 152d03c64d536a361cd6e83fa354359c282de8c7
Code0 = No Error
Code1 = Invalid username or password
Code2 = Filetype not allowed. Allowed file type is define in upload.php or upload.aspx
Code3 = Unexpected error, check given message

You now have the upload script successfully installed and can now setup the mobile device components.
5. Dictation App Configuration

Please install Philips Dictation Recorder on your Mobile Device and configure a connection with the Mobile Server.

5.1. Android Client

<table>
<thead>
<tr>
<th>Tap the Settings green square and tap Forwarding</th>
<th>Tap Mobile Server Settings</th>
<th>Tap the red corner icon and select Add</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Android Settings screenshot" /></td>
<td><img src="image2" alt="Android Mobile Server Settings screenshot" /></td>
<td><img src="image3" alt="Android Mobile Server settings" /></td>
</tr>
</tbody>
</table>

- Tap the Settings green square and tap Forwarding.
- Tap Mobile Server Settings
  - Forwarding
  - E-Mail
  - SpeechLive
  - Mobile Server Settings
  - Dictation Hub
  - Workflow
- Tap the red corner icon and select Add
  - Name: MobileServer
  - Add
  - Name: MobileServer 3a

- Tap on MobileServer 3 and rename it. Tap on Username, Password and URL and set the connection parameter as already previously set.
- Tap one of the red corner and following Send DeviceID. Send the DeviceID to your MDC Dealer or system administrator.
- To configure the MobileServer send the DeviceID to administrator.

<table>
<thead>
<tr>
<th><img src="image4" alt="Android Settings screenshot" /></th>
<th><img src="image5" alt="Android Mobile Server Settings screenshot" /></th>
<th><img src="image6" alt="Android Mobile Server settings" /></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="Android Settings screenshot" /></td>
<td><img src="image8" alt="Android Mobile Server Settings screenshot" /></td>
<td><img src="image9" alt="Android Mobile Server settings" /></td>
</tr>
</tbody>
</table>

- Username: peter
- Password: @gmail.com
- DeviceID: 369544069346274

- ![Android Settings screenshot](image10)           | ![Android Mobile Server Settings screenshot](image11) | ![Android Mobile Server settings](image12) |
| ![Android Settings screenshot](image13)           | ![Android Mobile Server Settings screenshot](image14) | ![Android Mobile Server settings](image15) |

- Username: peter
- Password: @gmail.com
- DeviceID: 369544069346274

- ![Android Settings screenshot](image16)           | ![Android Mobile Server Settings screenshot](image17) | ![Android Mobile Server settings](image18) |
| ![Android Settings screenshot](image19)           | ![Android Mobile Server Settings screenshot](image20) | ![Android Mobile Server settings](image21) |

- Username: peter
- Password: @gmail.com
- DeviceID: 369544069346274
### 5.2. BlackBerry OS10 Z10 Client

<table>
<thead>
<tr>
<th>Tap red corner</th>
<th>Tap Settings</th>
<th>Tap Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Tap red corner" /></td>
<td><img src="image2.png" alt="Tap Settings" /></td>
<td><img src="image3.png" alt="Tap Delivery" /></td>
</tr>
</tbody>
</table>

- **Tap Mobile Server**
  - Setup Username, Password and URL. Tap on Mobile Server to select one from available Mobile Servers. Tap Send DeviceID.
- **Tap Send DeviceID**
  - To configure the MobileServer send the DeviceID to administrator.

![Delivery](image4.png)  
![Mobile Server Settings](image5.png)  
![Compose](image6.png)  
![Send](image7.png)
5.3. BlackBerry OS7 9860 Client

<table>
<thead>
<tr>
<th>Click red corner and select Settings</th>
<th>Select Connection Settings</th>
<th>Enter the Server URL, User name and Password</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Enter Mobile Server URL and click OK. You can use only one Mobile Server.

![Image](image4.png)

To configure the Mobile Server, send the Device PIN to administrator via E-Mail. Select Setup/Options/Device/Device and select Status Information.

![Image](image5.png)
## iPhone Client

- **Tap red corner**
- **Tap Settings**
- **Tap Forwarding**

### Tap green corner to select Mobile Server. Tap red corner and Setup User Name, Password, Email and Server-URL. Tap green corner to Send DeviceID

### To configure the MobileServer send the IDID to administrator

<table>
<thead>
<tr>
<th>Philips Dictation Hub Settings</th>
<th>Mobile Server Settings</th>
<th>HTTP Server Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dictation Hub (On)</td>
<td><strong>Server information</strong></td>
<td>HTTP Server</td>
</tr>
<tr>
<td>SpeechDrive Settings</td>
<td></td>
<td>Workflow</td>
</tr>
<tr>
<td></td>
<td><strong>Mobile Server 2</strong></td>
<td>Workflow</td>
</tr>
</tbody>
</table>

**User Name**: Philip

**Password**: ******

**Email**: john....

**URL**: 

*Send UDID*

This Philips Mobile Server will process your voice recording further. For more info please visit www.dictation.philips.com/iPhone

*Please note:*

For correct routing of audio files within your company network, Philips Dictation Recorder app will send the UDID of your device together with audio files to the SpeechExec Mobileserver software. Neither Philips nor any other third party will have access to this information at any time. In order to secure your personal data during data transmission
5.4. Check the Configuration

Connect to WebServer via FTP and open the mobileserver_upload folder – you see only the upload.aspx or upload.php scripts and folder dictations.

<table>
<thead>
<tr>
<th>Dateiname</th>
<th>Dateigröße</th>
<th>Dateityp</th>
<th>Zuletzt geändert</th>
<th>Berechtigung</th>
</tr>
</thead>
<tbody>
<tr>
<td>.. dictations</td>
<td>Dateiordner</td>
<td>30.09.2015 13:35:18</td>
<td>0777</td>
<td></td>
</tr>
<tr>
<td>upload.aspx</td>
<td>3.9 KB</td>
<td>ASPX-Datei</td>
<td>11.05.2015 15:40:28</td>
<td>0777</td>
</tr>
<tr>
<td>upload.php</td>
<td>4.7 KB</td>
<td>PHP-Datei</td>
<td>18.09.2015 16:15:15</td>
<td>0777</td>
</tr>
</tbody>
</table>

Open the dictations folder and you see the files upload via web form or send from the dictation app.

<table>
<thead>
<tr>
<th>Dateiname</th>
<th>Dateigröße</th>
<th>Dateityp</th>
<th>Zuletzt geändert</th>
<th>Berechtigung</th>
</tr>
</thead>
<tbody>
<tr>
<td>stein442.135--21-09-2015-14-55-08.wav.part1</td>
<td>1.1 MB</td>
<td>PART1-Datei</td>
<td>30.09.2015 15:39:42</td>
<td>0644</td>
</tr>
<tr>
<td>stein442.135--21-09-2015-14-55-08.wav.part2</td>
<td>1.1 MB</td>
<td>PART2-Datei</td>
<td>30.09.2015 15:39:42</td>
<td>0644</td>
</tr>
<tr>
<td>stein442.135--21-09-2015-14-55-08.wav.part3</td>
<td>1.1 MB</td>
<td>PART3-Datei</td>
<td>30.09.2015 15:39:42</td>
<td>0644</td>
</tr>
</tbody>
</table>
5.5. XML File structure

XML file structure receive from SpeechAir device

```xml
<?xml version='1.0' encoding='UTF-8' standalone='yes' ?>
<SpeechExecDictation version="v3.0.08">
  <format>AMR</format>
  <creationdate>2017-05-08T10:43:36</creationdate>
  <comment></comment>
  <category>Company</category>
  <worktype>Report</worktype>
  <author>Mike</author>
  <custom1></custom1>
  <custom2></custom2>
  <custom3></custom3>
  <custom4></custom4>
  <custom5></custom5>
  <filenumber>Peter17</filenumber>
  <priority>false</priority>
  <deviceid>PSP11000000044</deviceid>
  <encrypted>true</encrypted>
  <sha1Hash>77050c6fb88fd84e65d4ee738c6f32d5561cdd46</sha1Hash>
  <fileindex>0</fileindex>
  <uploadchunkcount>1</uploadchunkcount>
  <uploadchuncksize>1048576</uploadchuncksize>
  <uploadchuncksuccess>0</uploadchuncksuccess>
  <audioformat>MP3</audioformat>
  <country></country>
  <companyname></companyname>
  <firstname></firstname>
  <lastname></lastname>
  <providercompany></providercompany>
  <providername></providername>
  <devicename>PSP1100</devicename>
  <blackberryosversion>4.4.2</blackberryosversion>
  <blackberrylanguage>en</blackberrylanguage>
  <apn></apn>
  <besmode></besmode>
  <storagemode></storagemode>
  <attachmentfilename></attachmentfilename>
  <EOL>false</EOL>
  <ListColumn1Content>Dr. Smith</ListColumn1Content>
  <ListColumn2Content>Miller Ken</ListColumn2Content>
  <ListColumn3Content>153545859SPS</ListColumn3Content>
  <ListColumn4Content>Room2</ListColumn4Content>
  <ListColumn5Content></ListColumn5Content>
  <ListColumn6Content></ListColumn6Content>
  <ListColumn7Content></ListColumn7Content>
  <ListColumn8Content></ListColumn8Content>
  <ListColumn9Content></ListColumn9Content>
  <ListColumn10Content></ListColumn10Content>
  <ListColumn1Usage>Doctor</ListColumn1Usage>
  <ListColumn2Usage>Patient</ListColumn2Usage>
  <ListColumn3Usage>Insurance ID</ListColumn3Usage>
  <ListColumn4Usage>Room</ListColumn4Usage>
  <ListColumn5Usage></ListColumn5Usage>
</SpeechExecDictation>
```
XML file structure receive from Android mobile device

```xml
<?xml version='1.0' encoding='UTF-8' standalone='yes' ?>
<SpeechExecDictation version="v2.7.01">
   <format>AMR</format>
   <creationdate>2015-09-21T14:55:08</creationdate>
   <comment></comment>
   <category></category>
   <worktype></worktype>
   <author></author>
   <custom1></custom1>
   <custom2></custom2>
   <custom3></custom3>
   <custom4></custom4>
   <custom5></custom5>
   <filenumber>stein442.135</filenumber>
   <priority>false</priority>
   <deviceid>359544059346274</deviceid>
   <encrypted>false</encrypted>
   <sha1Hash>8e6a700b447195242d2a8e213f7c790f04f23cc1</sha1Hash>
   <fileindex>0</fileindex>
   <uploadchunkcount>18</uploadchunkcount>
   <uploadchunksize>1048576</uploadchunksize>
   <uploadchunkssuccess>0</uploadchunkssuccess>
   <audioformat>MP3</audioformat>
   <country></country>
   <companyname></companyname>
   <firstname></firstname>
   <surname></surname>
   <providercountry>at</providercountry>
   <providername>A1</providername>
   <devicename>GT-I9505</devicename>
   <blackberryosversion>4.4.4</blackberryosversion>
   <blackberrylanguage>en</blackberrylanguage>
   <apn></apn>
   <besmode></besmode>
   <storagemode></storagemode>
   <attachmentfilename></attachmentfilename>
</SpeechExecDictation>
```
XML file structure receive from iPhone mobile device

```xml
<?xml version="1.0" encoding="utf-8"?>
<SpeechExecDictation version="3.0.24.0000">
<format>AAC</format>
<creationdate>2013-11-04T10:43:54</creationdate>
<comment></comment>
<worktype>Memo</worktype>
<category></category>
<author></author>
<filenumber>Untitled4</filenumber>
<priority>false</priority>
<deviceid>73C20ED1-971B-49CE-97EF-037340FAF419</deviceid>
<encrypted>false</encrypted>
<sha1hash>ad15f134be771f7c8c6b7103b677fe7a</sha1hash>
<fileindex>0</fileindex>
<uploadchunkcount>293</uploadchunkcount>
<uploadchunksize>16384</uploadchunksize>
<uploadchunkssuccess>0</uploadchunkssuccess>
<mailtypist></mailtypist>
<mailauthor>peter.rittau@speech.com</mailauthor>
<audioformat>M4A</audioformat>
<country></country>
<companyname></companyname>
<firstname></firstname>
<surname></surname>
<authorabbreviation></authorabbreviation>
<providercountry></providercountry>
<providername></providername>
<devicename>iPhone5,2</devicename>
<blackberrysversion>7.0.2</blackberrysversion>
<blackberrylanguage>de_AT</blackberrylanguage>
<apn></apn>
<besmode>no</besmode>
<storagemode>internal</storagemode>
<attachmentfilename></attachmentfilename>
</SpeechExecDictation>
```
6. Mobile Server Configuration

Before you start with the configuration make sure that the connection between the MobileServer and MSSQL Database is established.

6.1. Check the Database connection

If there are any trouble with the database connection or if you want to use an external MS SQL database server you can click on Database Settings to view and check the current settings.

Now you can see the current Setup information. You can select between SQL Server Authentication or Windows Authentication Mode. You see the Server Name (NB101), Database Instance Name (MOBILESERVER) and Database Name (MobileServer). Click on Check Connection, and if the setup is OK then you see a confirmation window with a message: Everything seems OK!

Answer from Server:
The Data Source string and Config.xml are also available here:
7. Setup options

7.1. Service

The menu item Service is used to start and stop the MobileServer. Simply click on the Start or Stop button. Service is up and running – click Stop if you want to stop the service.

Service is stopped – click Start to run this again.

Additionally, you can install and uninstall the MobileServer service.

The Service MobileServer.Service.exe is default installed. Click on Uninstall Service and uninstall this. You can also run the install_service.bat or uninstall_service.bat located in the installation folder (C:\Program Files (x86)\MobileServer) for activate or deactivate the services.

7.2. User

Use the option User to import or export users accounts, add a new user, modify existing user, delete user.

7.2.1. Add User Metadata

Fill in the standard information about the users:

- Personal – you can decide if the profile should be active or not. You can add a customer number, the first and last name as well as the address of the customer/user.
- Device Data – the Device Data is very important. Add the Phone Number and the Identifier. By using the Identifier the system can assign the corresponding author to the device. Enter the E-mail address of the mobile device to receive status messages sending from the mobile server to the device.
- Dictation Handling – here you can configure how the dictations should be processed. Use SpeechExec Author to fill in the author shortcut that should be shown in SpeechExec Enterprise. Format defines the file format for the dictation conversion, normally this should be the DSS format, but you can select WAV or MP3 format.
- Dispatch Type – you can sent the dictations to a specific destination or select None to deactivate this. Available transmissions ways: Folder, Mail, FTP. Depending on the selected options select the destination folder, fill in the Destination E-mail address or configure the FTP Server Account.
- Encryption Password – enter the password for the encryption.
- Send Notification – user receives a confirmation that the MobileServer has performed specified action. You can activate E-Mail messages with notification for received dictation, delivered dictation, decryption error, dispatch error, conversion error.
7.2.1.1. Important settings

Preferred language

Depend on the selected language the system send a predefined template with a language version.
7.2.2. Add User Keyword Routing

Click on Keyword Routing tab to distribute dictations according to the previously defined worktype. If, for example, a user has defined the worktypes Standard, Smith, House and Meeting this could be defined as follow:

Standard – dictation is send to the author’s folder
Smith – dictation is sent to the folder Smith
Meeting – dictation is send to the E-Mail address.
Meeting – dictation is send via FTP to external FTP Server.
7.3. Settings

7.3.1. Misc

In the section Settings / Misc you can configure the system folders and e-mail addresses of the administrator. We describe all the setup options.

7.3.1.1. Dictation Root Folder

The Dictation Root Folder is a “working folder” for the Mobile Server application.

<table>
<thead>
<tr>
<th>Dictation Root Folder</th>
</tr>
</thead>
<tbody>
<tr>
<td>C:\incoming_diction_from_WWW_server</td>
</tr>
</tbody>
</table>

The Device directory contain the following folders:

- **Action**
- **Backup** (received files are saved here again)
- **Inbox** (Inbox folder of the user)

If a dictation file should not have reached its destination folder, you can always be reconstructed from the backup folder out. This ensures that it can never come to a dictation loss.

The latest one file is the log.txt file with detailed logging for every step.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Log Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>Reading file: xml -&gt; C:\dictationRoot\335829055882890\inbox\untitled.txt</td>
</tr>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>File found: C:\dictationRoot\335829055882890\inbox\untitled.30-09-13</td>
</tr>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>Copying file to conversion temp -&gt; C:\dictationRoot\conversion\temp</td>
</tr>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>Trying to convert file to DSS</td>
</tr>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>ConvertFile()</td>
</tr>
<tr>
<td>09.09.2013</td>
<td>10:24:26</td>
<td>C:\Program Files (x86)\MobileServer\PSP.speechexec dictatepropconf</td>
</tr>
</tbody>
</table>

7.3.1.2. Conversion Temp Folder

Within this directory, the format conversions are performed. The files will be temporary stored, converted, and then distributed according to the users Dispatch-Type.

<table>
<thead>
<tr>
<th>Conversion Temp Folder</th>
</tr>
</thead>
<tbody>
<tr>
<td>C:\Users\Public\MobileServer\Temp</td>
</tr>
</tbody>
</table>

7.3.1.3. Administrator E-Mail

The administrator e-mail address identifies the address to send the error messages from the server.

<table>
<thead>
<tr>
<th>Administrator E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:peter@speech.com">peter@speech.com</a></td>
</tr>
</tbody>
</table>
7.3.1.4. Service E-Mail

The MobileServer will use the Service E-mail address to send messages to the administrator and user; hence the sender’s address the recipient will see this. In case you would like to receive replies to this address, make sure that you use, for example, the address of the help desk or other, for the MobileServer responsible user.

![Service Email Name](image)

7.3.1.5. Max Attachment Size

Here you can define the maximum size of an E-mail attachment to be sent. If the attachment is rather large the dictations will be divided and sent in parts to receiver. Adjustable maximum size is 100MB.

![Maximum E-mail Attachment Size](image)

7.3.1.6. Rewind Split Dictation

If dictations have to be divided to be sent in parts, it might be useful to keep some overlapping parts. This is to avoid that single words within a dictations are split. Here you can enter how many seconds the overlapping parts should contain. You can set between 1-100 seconds.

![Rewind Split Dictation](image)

7.3.1.7. Max Logfile Size

Here you can define the maximum size of the log file for the ActionLog.txt, and the log files for each user. Please enter a sensible value (e.g. 100 MB).

![Maximum Logfile Size](image)

7.3.1.8. Pull Intervall

Specifies the time intervals which the Mobile Server receive the dictates from the Webroot or from a FTP server. You can choose between 1-1000 seconds.

![Pull Interval](image)

7.3.1.9. Health Scanner

SpeechExec Enterprise will send a http-POST to a specific IP-address & Port. If the MobileServer Service is still alive, it should respond with the HTTP code 200 and following string in the result body: "MobileServer alive". Make sure that the firewall is opened for the port.

![Health Scanner](image)
7.3.2. Incoming Dictations

With the Incoming Dictations tab specifies where dictations to be picked up. You can select Folder or a FTP account for a Webserver from Webhosted sources.

7.3.2.1. Incoming Dictations Web Root

If the folder is for the incoming dictate within the network, then they can set the path here.

Click on the \(\text{Browse}\) Icon and browse for the preconfigured upload folder. Click OK, now, the folder is now connected.
7.3.2.2. Incoming Dictations FTP Server

If you use a web server outside the LAN or your web server is from hosting company, then you can use only limited connection to the upload folder, usually only FTP. Mobile Server can be configured so, that the dictations file will receive via integrated FTP Client. You can also create connection via SFTP, here please change the Port to 22 or any others, if this differs from the standard.

First, fill in the connections data like host name or IP address, port number (is usually port 21), username and password into red marked area and finally click on Browse in the green marked area.

Click Connect and then Refresh. Browse for the preconfigured upload folder, in our example: /mobileserver_upload/dictations/

The /web/ folder is the web server root folder.
Select the right folder and click on OK.

The web server directory is connected; you can prepare a local folder inside the PC or LAN.

Directory – this is the webserver directory
Download Directory – this is the local directory

Click on Button and select local folder

If you receive any error messages like this one – see screenshot – then check the Firewall settings. For more information please check Appendix 8.16 – Firewall settings.
7.3.3. E-mail Server

At this point, you can configure an SMTP server to the Mobile Server can send mails. For sending e-mails, it is important that the security settings for the SMTP server allow that e-mails may be sent to the registered e-mail service Address, i.e. that the SMTP server may act as a remailer!
Click Test settings to send a predefined E-mail message to the server and you receive a small confirmation window and the Administrator – created in Misc/Administrator E-mail – receive also a E-Mail message.

Confirmation from the mobile server

Confirmation E-mail in the E-Mail Client
Received from the Mobile Server.
7.3.4. Converter

Here you can configure the audio converter.

For example, you will convert dictation file receiving from iPhone to a MP3 file with 64kbit/s -b:a 64k or –b:a 256k if you want 256 kbit/s audio.

With the DSS Conversion you can select one of this value:
- LPC_BB
- STANDARDPLAY
- QUALITYPLAY
- LONGPLAYmobile
- GSM610_8kHzMono
- GSM610_11025HzMono
- IMAADPCM4Bit8kHzMono
- CELP16kHzMono
- CELP8kHzMono
- CCITTALaw8Bit8kHzMono
- CCITTuLaw8Bit8kHzMono
- PCM16Bit16kHzMono
- PCM16Bit11025HzMono
- PCM16Bit8kHzMono
- PCM16Bit22050HzMono

Note:
For the DSS conversion a DSS server license with an applicable SpeechExec Enterprise license needs to be present.
7.3.5. Error Handling

Error messages for the administrator can be defined in advance.

Maximum Transmission Waiting Time – if a user has canceled the dictation dispatch and fragments remain in the web root folder, an error message can be sent to the administrator and the dictation fragments can be automatically moved to a predefined folder when the Maximum Transmission Waiting Time was reached.

Decryption Error – this error occurs if the password of the mobile device does not match with the password of the server configuration or is missing. In this case the administrator should be informed and the dictation will be saved in the defined folder.

Conversion Error – an error occurred during the conversion. In this case the administrator should be informed and the dictation will be saved in a previously defined folder.
Unknown Device – an unknown mobile device tries to send dictations. If necessary, a new user has to be added or the device UDID or PIN of existing user needs to be changed. In this case the administrator should be informed and the dictation will be saved in a previously defined folder.

7.3.6. SpeechExec

The SpeechExec Tab enables you to configure the SpeechExec workflow with the MobileServer.
7.3.6.1. XML Generation

XML Generation – here you can determine if a SpeechExec XML-file with meta data should be created for each dictation. If you are using dictation systems from other vendors you would need to disable this option.

Please state the path (by default: C:\Program Files (x86)\MobileServer\PSP.SpeechExec.DictationPropConfiguration.xml) to your SpeechExec Dictation Property XML-File. Future dictation-XML files will be generated based on the basics on this setting. Furthermore, you will be able to assign in what fields of SpeechExec Software you want the Meta data that arrives from the Mobile Device client will be saved. For the Worktype, Filenumber, Category or Comments you can select and define on of the following item values:

- NoItem
- SpecialInstructionLength
- DictationLength
- CreationDateTime
- LastModified
- Status
- LastUserName
- Encrypted
- SendNotification
- NotificationAskForAttachments
- NotificationReplyToAddresses
- Author
- RevisionAuthor
- Title
- Keyword
- Comments
- Priority
- EOL
- DPMKeywordContent1
- DPMKeywordContent2
- DPMKeywordContent3
- DPMKeywordContent4
- DPMKeywordContent5
- DPMLabel1
- DPMLabel2
- DPMBarcode
- Department
- Workstation
- Custom1
- Custom2
- Custom3
- Custom4
- Custom5
- DictationHistory
- MainDocumentFileName
- IsSrDictation
- IsQueuedForRecognition
- QueuedForRecognitionBy
- RecognitionPosition
- CorrectionPosition
- SRInformation
- RecordedWith
- WordAnalyzingDone
- ReadOnlySimpleEditStrings
- DictationId
- Transcriptionist
- Worktype
- TranscriptionPosition
- DictationPosition
- Delivery
- ListColumn1Content
- ListColumn1Usage
- ListColumn2Content
- ListColumn2Usage
- ListColumn3Content
- ListColumn3Usage
- ListColumn4Content
- ListColumn4Usage
- ListColumn5Content
- ListColumn5Usage
- ListColumn6Content
- ListColumn6Usage
- ListColumn7Content
- ListColumn7Usage
- ListColumn8Content
- ListColumn8Usage
- ListColumn9Content
- ListColumn9Usage
- ListColumn10Content
- ListColumn10Usage
- DPMLabel1
- DPMDownloadDate
7.3.6.2. Automatic User Integration

Should you prefer to manage the Mobile Device users automatically with SpeechExec Enterprise you can set up applicable parameters here:

**Automatic User Import**

- **Activate user import from SpeechExec Enterprise**
- **Refresh User every**
  - 1 minute

**SEE Root Directory**

\192.168.1.52\second

Refresh User every: state here how often to search for user changes. If necessary, you can also use the button “SpeechExec Refresh” within the User manager to update users manually.

**SEE Root Directory** – please state here the path to the to the SEE central root configuration folder

Click on … to browse for a folder with the User-XML Rules of SpeechExec Enterprise.

Now open the User Tab and select Import / Export, click on SpeechExec User Refresh to receive user data from the SpeechExec Enterprise.
All the green fields are imported full automatically from the SpeechExec Enterprise settings.
### 7.3.6.3. Dictation Naming

Depend on the Keyword the software can rename the dictation name with the following sample:

<dictate>.<date>.<time>

#### Dictation Naming

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Separator</th>
<th>Time Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>category</td>
<td>Space</td>
<td>24h</td>
</tr>
<tr>
<td>author</td>
<td>Hyphen</td>
<td>12h</td>
</tr>
<tr>
<td>worktype</td>
<td>Underscore</td>
<td></td>
</tr>
<tr>
<td>filenumber</td>
<td>Dot</td>
<td></td>
</tr>
<tr>
<td>ListColumn1Content</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>ListColumn2Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn3Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn4Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn5Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn6Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn7Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn8Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn9Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ListColumn10Content</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available Keywords:
- author
- worktype
- ListColumn1Content
- ListColumn2Content
- ListColumn3Content
- ListColumn4Content
- ListColumn5Content
- ListColumn6Content
- ListColumn7Content
- ListColumn8Content
- ListColumn9Content
- ListColumn10Content
7.3.6.4. SpeechExec Enterprise Configuration

Open the SpeechExec Enterprise Manager Software and select one of the Authors, who will use the Mobile Server with a mobile device. To assign authors to mobile devices, click Assign authors to mobile devices on the Mobile device assignments page.

Select an author in the Assign authors to mobile devices window that you want to edit. Click Edit mobile device assignments or double-click the name of an author.
The details of authors are taken from the Active Directory, and the only detail you can change is the email address.

To add or modify a mobile device ID, click a row below Mobile device IDs and enter the identifier of the device.

You can delete device assignments by selecting a mobile device ID and clicking Delete.

Save your changes when you are done. This will update the UserToMobileDeviceAssignment.xml file that Mobile Server reads.

(Path – SEEROOT\SystemConfiguration\UserToMobileDeviceAssignment\)
7.3.7. E-mail Templates

If a dictation is sent via E-mail, a corresponding text will be generated. A draft for this text can be edited here. For details about the function of Notification Received and Notification Delivered please see chapter 7.2.1 – Notification Mail settings.

Furthermore you can define a warning message for inactive Users. For English, French, German and Spanish you can use prepared Templates.

For the E-mail templates you can use predefined placeholders:

#Customer.CustomerNo#  Customer No.
#Customer.Firstname#  Customer First Name
#Customer.Lastname#  Customer Last Name
#Customer.Company#  Customer Company
#Customer.Street1#  Customer Street 1
#Customer.Street2#  Customer Street 2
#Customer.Zip#  Customer ZIP
#Customer.City#  Customer City
#Customer.Country#  Customer Country
#Customer.DevicePhoneNumber#  Customer Phone Number
#CustomerDeviceId#  Customer Device-ID
#Customer.DeviceEmail#  Customer E-mail Address
#Customer.Author#  Customer Author
#Customer.DestFormat#  Customer Destination Format
#Customer.DestDispatch#  Customer Dispatch-Type
#Customer.DestFolder#  Customer Destination Folder
#Customer.DestEmail#  Customer Destination E-mail
#Customer.DestFTP#  Customer Destination FTP URL
#Customer.Active#  Customer Active Flag
#File.DateFound#  File Date Time on Server
#File.Filename#  Filename
#File.MD5#  File MD5 Hash
#File.SizeBytes#  Filesize in Bytes
#File.SizeReadable#  Human readable Filesize (KB, MB)
#File.Format#  File Format (WAV, AMR, WAV…)
#File.CreationDate#  File Date of creation
#File.Category#  File Category
#File.Comment#  File Comment
#File.Number#  Filename
#File.Priority#  File Priority
#File.DestEmail#  File Destination E-mail
#File.DestFolder#  File Destination Folder
#File.DestFolder#  File Destination Folder
#File.DestFolder#  File Destination Folder

7.3.7.1. Notification Received

Standard template for receiver notification, this is available in English, French, German and Spanish language.

Dear #Customer.Firstname# #Customer.Lastname#,

Your dictation has been received on our server

Below is some information about your dictation:

File name:  #File.Filename#
Dear #Customer.Firstname# #Customer.Lastname#,

Your dictation was successfully processed and sent.

Below is some information about your dictation:

File name:  #File.Filename#
Size:  #File.SizeReadable#
Creation date: #File.CreationDate#

Account information:
Identifier: #Customer.DeviceId#
E-mail: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team

7.3.7.2. Notification Delivered

Standard template for delivery notification, this is available in English, French, German and Spanish language.

Dear #Customer.Firstname# #Customer.Lastname#,

Your dictation was successfully processed and sent.

Below is some information about your dictation:

File name:  #File.Filename#
Size:  #File.SizeReadable#
Creation date: #File.CreationDate#

Account information:
Identifier: #Customer.DeviceId#
E-mail: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team

7.3.7.3. Account Inactive

Template for Account inactive.

Dear #Customer.Firstname# #Customer.Lastname#,

Your audio file could not be processed since your account has been blocked. Your audio files are still available in the Philips dictation recorder app in the “Sent files” folder.

Please contact your administrator to reactivate your account.

Below is some information about your dictation:

File name:  #File.Filename#
Size:  #File.SizeReadable#
Creation date: #File.CreationDate#

Your account information:
Device ID: #Customer.DeviceId#
Email: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team
7.3.7.4. Decryption Error

Template for Decryption.

Dear #Customer.Firstname# #Customer.Lastname#,

Unfortunately the Philips SpeechExec mobile server could not decrypt the dictation file you sent.

Please contact your administrator and share your password with him so it can be stored in the mobile server for decryption.

Below is some information about your dictation:

File name: #File.Filename#
Size: #File.SizeReadable#
Creation date: #File.CreationDate#

Account information:
Identifier: #Customer.DeviceId#
E-mail: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team

7.3.7.5. Conversion Error

Template for Conversion Error.

Dear #Customer.Firstname# #Customer.Lastname#,

Unfortunately the Philips SpeechExec mobile server could not convert the dictation file you sent.

1. Make sure that a stable data connection is available.
2. Repeat the transmission.
3. If the error occurs again, switch your smartphone off and then on again. Repeat the transmission.

Below is some information about your dictation:

File name: #File.Filename#
Size: #File.SizeReadable#
Creation date: #File.CreationDate#

Account information:
Identifier: #Customer.DeviceId#
E-mail: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team

7.3.7.6. Dispatch Error

Template for Dispatch Error
Dear #Customer.Firstname# #Customer.Lastname#,

Unfortunately the Philips SpeechExec mobile server could not deliver the dictation file you sent.
The stored path or FTP server is currently not accessible. Please contact your administrator.

Below is some information about your dictation:

File name: #File.Filename#
Size: #File.SizeReadable#
Creation date: #File.CreationDate#

Account information:
Identifier: #Customer.DeviceId#
E-mail: #Customer.DeviceEmail#

Your Philips SpeechExec mobile server Team
7.3.8. Create own Template

If you will create new template you need select the preferred language [1] and you can write a message text for the subject and message body. You can also integrate the predefined placeholders click on [3], select one of the placeholders and click on [4].
7.4. Statistics

Mobile Server brings a simply but powerful statistic module. Select a time period and click on Show Statistics for the predefined time period.

Complete data set export contains the following fields:
- customId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
- berryEmail
- author
- destFormat
- destDispatch
- destFolder
- destEmail
- activeFrom
- activeTo
- backupLifetime
- prefLanguage
- receiveEmail
- ftpHost
- ftpPort
- ftpProxyHost
- ftpDirectory
- customeId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
- customeId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
- customeId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
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- street2
- zip
- berryDeviceId
- customeId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
- customeId
- customeNo
- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
- customeId
- customeNo
- firstName
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- street2
- zip
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- firstName
- lastName
- company
- street1
- street2
- zip
- berryDeviceId
7.5. Status Page

On the status page you will find a summary of all running processes.

Usage – this is the summary of the use of the mobile server. It shows how many dictations have been sent within a period and the corresponding data volume.

Files in Folders - here are shown how many single data files are in the corresponding folders. By using the buttons you can open a folder, delete the content or try to copy into the web root directory.
**Refresh** – You can define how often status page should be updated automatically. Click on Manual Refresh to trigger the update immediately at any time.

**User Information by Pin** – Here you can open the user directory in the DictationRoot directory, you can open and see the user specific log file or delete the user’s log file.

**Incoming Dictation** – the incoming dictations directory shows which dictations have been processed last.

**Show Customer** – opens the user configuration form.
8. Appendix

8.1. Update Procedure from 2.2.0 to 2.3.0

To update your system from version 2.2.0 to version 2.3.0 proceeds as follows:

- Stop the mobile server service and close the configuration tool
- Execute the MobileServer application and follow the assistant.
- Replace the update.aspx or update.php files respectively on your web server and install the latest version. Once again you have to correctly enter the URL, user name and password into the script.
- If you use an external database you might have to manually apply the update.sql of the program folder from the Mobile Server installation path.

It is recommended to update the client APPs at the same time.
8.2. Update Procedure from 2.1.17 to 2.2.0

To update your system from version 2.1.17 to version 2.2.0 proceeds as follows:

- Stop the mobile server service and close the configuration tool
- Execute the MobileServer application and follow the assistant.
- Replace the update.aspx or update.php files respectively on your web server and install the latest version. Once again you have to correctly enter the URL, user name and password into the script.
- If you use an external database you might have to manually apply the update.sql of the program folder from the Mobile Server installation path.

It is recommended to update the client APPs at the same time.

8.3. Update Procedure from 2.1.09 to 2.1.17

To update your system from version 2.1.09 to version 2.1.17 proceeds as follows:

- Stop the mobile server service and close the configuration tool
- Execute the MobileServer application and follow the assistant.
- Replace the update.aspx or update.php files respectively on your web server and install the latest version. Once again you have to correctly enter the URL, user name and password into the script.
- If you use an external database you might have to manually apply the update.sql of the program folder from the Mobile Server installation path.

It is recommended to update the client APPs at the same time.

8.4. Log-File

If you encounter any malfunctions, please see the log file for error messages. The ActionLog.txt is available from any window in SpeechExec Mobile Server – click on Show Logfile and you see this.

The other Log file is saved user folder with log.txt name.

You see a typical log file with short comments.

*** Comments – receive new incoming file from device 24dca4c7 with a *.xml and +.wav file. ***
30.09.2013 09:38:57.055  Reading file-xml => C:\DictationRoot\24dca4c7\Inbox\John.30-09-13.09_38.xml
30.09.2013 09:38:57.055  File found: C:\DictationRoot\24dca4c7\Inbox\John.30-09-13.09_38.wav

*** Comments – MobileServer process begins ***
30.09.2013 09:38:57.055  Processing file...
30.09.2013 09:38:57.087  Copying file to Conversion Temp => C:\DictationRoot\ConversionTemp
30.09.2013 09:38:57.102  Trying to convert file to MP3
30.09.2013 09:38:57.149  C:\Program Files (x86)\MobileServer\PSP.SpeechExec.DictationPropConfiguration.xml
30.09.2013 09:38:57.149  C:\Program Files (x86)\MobileServer\PSP.SpeechExec.DictationPropConfiguration.xml

*** Comments - convert from *.wav tom *.mp3 file with CBR 64k ***
30.09.2013 09:40:22.274  C:\Program Files (x86)\MobileServer\Converter\ffmpeg.exe -i "C:\DictationRoot\ConversionTemp\John.30-09-13.09_38.wav" -y -b:a 64k
"C:\DictationRoot\ConversionTemp\John.30-09-13.09_38.mp3"
*** Comments – create coherent xml file ***

*** Comments – check dispatching ***
30.09.2013 09:40:22.478   DestDispatch = Mail

*** Comments – check keyword routing ***
30.09.2013 09:40:22.493   Checking for special Keyword Routing

*** Comments – select predefined Template for Email message ***
30.09.2013 09:40:22.603   Template Subject: subject
30.09.2013 09:40:22.603   From: "My MobileServer" <dictation@gmx.at>
30.09.2013 09:40:22.603   To: peter.speechmike@speech.com
30.09.2013 09:40:22.603   File: C:\DictationRoot\ConversionTemp\John.30-09-13.09_38.mp3

*** Comments – Email is sent, message can be deleted ***
30.09.2013 09:40:23.321   Deleting Inbox file C:\DictationRoot\24dca4c7\Inbox\John.30-09-13.09_38.wav

*** Comments – process is completed ***
30.09.2013 09:40:23.321   File successfully processed
8.5. Upload Script aspx

```csharp
<%@Page Language="C#" %>
<%
  // Since Version 2.0 we need to allow the .att extension
  // Since Version 2.1 we need to allow the .aac extension (iPhone)
  // Since Version 2.1 we need to allow the .mp3 extension (iPhone)
  // Since Version 2.1.10 we need to allow the .jpg .gif .png .bmp .webp extensions (Pictures)
  // Since Version 2.1.15 we need to allow the .wav extension

  const string USERNAME = "test";
  const string PASSWORD = "test";

  const string DESTINATION = "D:\temp";

  const string ALLOWED_FILETYPES = "xml,mp3,amr,dss,ds2,att,aac,jpg,gif,png,bmp,webp,wav";

  string frmUsername = Request.Form["username"];
  string frmPassword = Request.Form["password"];

  if (Request.Form.Count == 0)
  {
    Response.Write("No data provided, showing form: <br/>");
    Response.Write("<form method="post" action="upload.aspx" enctype="multipart/form-data">");
    Response.Write("Username: <input type="text" name="username" value="test" />
    Password: <input type="text" name="password" value="test" />
    File:<input type="file" name="bytes" /><br />
    <input type="submit" value="upload" /></form>");
    Response.End();
    return;
  }

  try
  {
    // check password
    bool passwordIsCorrect =
    {
      frmUsername.ToLower() == USERNAME.ToLower() &&
      frmPassword.ToLower() == PASSWORD.ToLower();
    }
    if(passwordIsCorrect)
    {
      Response.Write("Code1: Invalid username or password");
      Response.End();
      return;
    }

    HttpPostedFile file = Request.Files[0];

    // check extension - no regular expressions..
    bool isAllowed = false;
    string[] extensionParts = file.FileName.Split(new char[] {'.'});

    // is there an extension?
    if(extensionParts.Length > 1)
    {
      // extract last extension-part
      string extension = extensionParts[extensionParts.Length-1].ToLower();
    }
  } catch(e)
  {
    Response.Write("Error: "+e.Message);
    return;
  }
```
string[] items = ALLOWED_FILETYPES.Split(new char[] {','});
bool found = false;
foreach(string item in items)
{
    //Response.Write(item+ "<br />");
    if(item == extension)
        found = true;
}
bool isPART = false;

// no xml, no amr? check for part files
if (!found && extension.Length >= 4)
{
    int partId = Convert.ToInt32(extension.Substring(4, extension.Length-4));
    isPART = (extension == "part" + partId);
}

// set allowed flag
isAllowed = (found || isPART);

if (!isAllowed)
{
    Response.Write("Code2: Filetype not allowed: " + file.FileName);
    Response.End();
    return;
}

string destFile = System.IO.Path.Combine(DESTINATION,
    System.IO.Path.GetFileName(file.FileName));
file.SaveAs(destFile);

System.Security.Cryptography.SHA1CryptoServiceProvider SHA1 =
    new System.Security.Cryptography.SHA1CryptoServiceProvider();
byte[] hash = SHA1.Hash;
string result = string.Empty;
string tmp = string.Empty;
System.IO.FileStream fs = new System.IO.FileStream(destFile,
    System.IO FileMode.Open, System.IO FileAccess.Read,
    System.IO FileShare.Read);
SHA1.ComputeHash(fs);
fs.Close();

hash = SHA1.Hash;
for (int i = 0; i < hash.Length; i++)
{
    tmp = Convert.ToString(hash[i], 16);
    if (tmp.Length == 1)
        tmp = "0" + tmp;
    result += tmp;
}
Response.Write("Code0: " + result);
Response.End();
return;
}
catch (System.Threading.ThreadAbortException e)
{
}
catch (Exception e)
{
    Response.Write("Code3: Unknown Error: " + e.Message);
    Response.End();
    return;
}

%>
8.6. Upload Script php

```php
<?php

// The following resp-codes exists
// -----
// Code0: No Error
// Code1: Invalid username or password
// Code2: Filetype not allowed
// Code3: Unexpected error, check given message

// Since Version 2.0 we need to allow the .att extension
// Since Version 2.1 we need to allow the .aac extension (iPhone)
// Since Version 2.1 we need to allow the .mp3 extension (iPhone)
// Since Version 2.1.10 we need to allow the .jpg .gif .png .bmp .webp extensions (Pictures)
// Since Version 2.1.15 we need to allow the .wav extension

// login-data
define('USERNAME', 'test');
define('PASSWORD', 'test');

// allowed filetypes
define('ALLOWED_FILETYPES', 'xml,mp3,amr,dss,ds2,att,aac,jpg,gif,png,bmp,webp,wav');

// destination, where the files get copied to
define('DESTINATION', dirname(__FILE__) . '/');

// time-limit for the script in seconds - default 600 (10 minutes)
define('UPLOAD_TIME_LIMIT', 600);

// show php-errors? just for debugging
define('SHOW_SCRIPT_ERRORS', false);

// form template - needed inputs are "username", "password" and "bytes" (type=file) and
// the method needs to be POST with enctype="multipart/form-data"
$htmlForm = <<<HTML
<?xml version="1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<style type="text/css">
/*<![CDATA[*/
form br { clear: left; }
label { float: left; width: 100px; }
/*]]>*/
</style>
<title>Upload</title>
</head>
<body>
<form enctype="multipart/form-data" action="$_SERVER['PHP_SELF']" method="post">
<!--[CDATA[*/

'label', 'Username:', '<input type="text" name="username" />
'label', 'Password:', '<input type="text" name="password" />
'label', 'File:', '<input name="bytes" type="file" />
</form>
```
<input type="submit" value="Upload!" />
</form>

<?php

// suppress errors?
error_reporting(SHOW_SCRIPT_ERRORS ? E_ALL : 0);

// set time-limit
set_time_limit(UPLOAD_TIME_LIMIT);

// file submitted?
if(count($_FILES) == 0)
{
    // no, output the form
    echo $htmlForm;
} else {

    // destination filename
    $filename = $_FILES['bytes']['name'];

    // check password
    $passwordIsCorrect = strtolower($_POST['username']) == strtolower(USERNAME) &&
       strtolower($_POST['password']) == strtolower(PASSWORD);
    if(!$passwordIsCorrect)
    {
        echo "Code1: Invalid username or password";
        exit;
    }

    // Check if file is allowed
    if(!isAllowed($filename))
    {
        echo "Code2: Filetype not allowed: " . $filename;
        exit;
    }

    // check the given destination
    $destination = DESTINATION;
    if(substr($destination, -1) != "\" && substr($destination, -1) != ")
        $destination .= ";
    // combine filename and destination
    $uploadfile = $destination . $filename;

    // Move the uploaded file
    if (move_uploaded_file($_FILES['bytes']['tmp_name'], $uploadfile))
    {
        echo "Code0: " . sha1_file($uploadfile);
        exit;
    } else {
        $error = error_get_last();
        echo "Code3: Unknown Error: " . strip_tags($error['message']);
    }

} // end if count($_FILES) == 0

?>

HTML;

/// NO NEED TO CHANGE ANYTHING FROM HERE
####

// suppress errors?
error_reporting(SHOW_SCRIPT_ERRORS ? E_ALL : 0);

// set time-limit
set_time_limit(UPLOAD_TIME_LIMIT);

// file submitted?
if(count($_FILES) == 0)
{
    // no, output the form
    echo $htmlForm;
} else {

    // destination filename
    $filename = $_FILES['bytes']['name'];

    // check password
    $passwordIsCorrect = strtolower($_POST['username']) == strtolower(USERNAME) &&
        strtolower($_POST['password']) == strtolower(PASSWORD);
    if(!$passwordIsCorrect)
    {
        echo "Code1: Invalid username or password";
        exit;
    }

    // Check if file is allowed
    if(!isAllowed($filename))
    {
        echo "Code2: Filetype not allowed: " . $filename;
        exit;
    }

    // check the given destination
    $destination = DESTINATION;
    if(substr($destination, -1) != "\" && substr($destination, -1) != ")
        $destination .= ";
    // combine filename and destination
    $uploadfile = $destination . $filename;

    // Move the uploaded file
    if (move_uploaded_file($_FILES['bytes']['tmp_name'], $uploadfile))
    {
        echo "Code0: " . sha1_file($uploadfile);
        exit;
    } else {
        $error = error_get_last();
        echo "Code3: Unknown Error: " . strip_tags($error['message']);
    }

} // end if count($_FILES) == 0

?>

HTML;
function isAllowed($filename)
{
    // check extension - no regular expressions..
    $isAllowed = false;
    $extensionParts = explode('.', $filename);

    // is there an extension?
    if(count($extensionParts) > 1)
    {
        // extract last extension-part
        $extension = strtolower($extensionParts[count($extensionParts) - 1]);

        $tmp = explode(',', ALLOWED_FILETYPES);
        $isAllowedFileType = (array_search($extension, $tmp) !== false);
        $isPART = false;
        // no xml, no amr? check for part files
        if(!$isAllowedFileType)
        {
            $partId = intval(substr($extension, 4, strlen($extension) - 4));
            $isPART = ($extension == "part" . $partId);
        }

        // set allowed flag
        $isAllowed = ($isAllowedFileType || $isPART);
    }

    return $isAllowed;
}
8.7. Installation .NET Environment

8.7.1. Windows Server 2016 Installation .NET

You can install the .NET 3.5 Framework feature from the PowerShell or with the Server Manager GUI. We describe both installation.

8.7.1.1. Installing .NET 3.5 Framework with PowerShell

Open PowerShell as Admin and type `Get-WindowsFeature`.

Check the .NET Framework 3.5 Features.
Type `Add-WindowsFeature .NET-Framework-Features`

Installation is running

Installation is done, System restart is not needed
8.7.1.2. Installing .NET 3.5 Framework with Server Manager GUI

Open Server Manager and navigate to Manage and click on rule and features.

Click on NEXT  
Select Role-based or feature-based installation and click on Next

Select the server from the server pool and click again on Next.  
Just click next to Features section and select the .NET Framework 3.5 then click Next.
On the Confirmation page click on Install to start the process. Finally, when the .NET Framework has been installed successfully on Windows server 2016, click Close to finalizing the installation.
8.7.2. Windows Server 2008 R2 Installation .NET

The .NET Framework 3.5 SP1 (also referred to as .NET Framework 3.5.1) is a prerequisite for SQL Server 2008 installation. SQL Server 2008 is a part of the Mobile Server and saves all the data from User, devices and dispatch targets.

Click the Start button in the lower left corner of the display. Highlight Administrative Tools and select Server Manager. In the Server Manager interface select Add features to display a list of possible features.

In the Select Features interface expand the .NET Framework 3.5.1 Features. Once you expand .NET Framework 3.5.1 Features, you will see two check boxes. One for .NET Framework 3.5.1 and other for WCF Activation. Check the box next to .NET Framework 3.5.1 and click Next.
Click on Install to complete the installation.

Click Close.
Open again Server Manager and go to Customize This Server – you see new installed features .NET Framework 3.5.1.
8.8. Installation of Desktop Experience Feature on Windows Server

The Desktop Experience feature enables you to install a variety of Windows 7 features on your server running Windows Server 2008 or Server 2012. If you use Windows Server 2008 or Windows Server 2012 as your primary operating system, you might want to have some of these Windows 7 features available for your daily use.

8.8.1. Microsoft Windows Server 2012

NOTE: The Server might need to be restarted after the installation completes.

The Desktop Experience feature allows you to install a variety of components and features that are provided in the Windows 7 operating system onto a computer that is running the Windows Server 2012 operating system.

You can install the Desktop Experience feature from the PowerShell or with the Server Manager GUI. We describes booth installation.

8.8.1.1. Installing Desktop Experience using PowerShell

Open PowerShell as Admin and type `Get-WindowsFeature`

<table>
<thead>
<tr>
<th>Display Name</th>
<th>Name</th>
<th>Install State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory Certificate Services</td>
<td>AD-Certificate</td>
<td>Available</td>
</tr>
<tr>
<td>Certificate Authority</td>
<td>AD-CA-Certificate</td>
<td>Available</td>
</tr>
<tr>
<td>Certificate Enrollment Policy Web Service</td>
<td>AD-ES-Enroll-Policy</td>
<td>Available</td>
</tr>
<tr>
<td>Certificate Enrollment Web Service</td>
<td>AD-ES-Enroll-Web-Svc</td>
<td>Available</td>
</tr>
<tr>
<td>Certification Authority Web Enrollment</td>
<td>AD-CA-Enroll-Web-Enroll</td>
<td>Available</td>
</tr>
<tr>
<td>Network Device Enrollment Service</td>
<td>AD-Device-Enrollment</td>
<td>Available</td>
</tr>
<tr>
<td>Online Responder</td>
<td>AD-Online-Cert</td>
<td>Available</td>
</tr>
<tr>
<td>Active Directory Domain Services</td>
<td>AD-Domain-Services</td>
<td>Available</td>
</tr>
<tr>
<td>Active Directory Federation Services</td>
<td>AD-Federation</td>
<td>Available</td>
</tr>
<tr>
<td>Active Directory Lightweight Directory Services</td>
<td>AD-LDS</td>
<td>Available</td>
</tr>
<tr>
<td>Active Directory Rights Management Services</td>
<td>ADS-RS-Server</td>
<td>Available</td>
</tr>
<tr>
<td>Active Directory Rights Management Services</td>
<td>ADS-RS-Identity</td>
<td>Available</td>
</tr>
<tr>
<td>Application Server</td>
<td>Application-Server</td>
<td>Available</td>
</tr>
<tr>
<td>.NET Framework 4.5</td>
<td>AS-.NET-Framework</td>
<td>Available</td>
</tr>
<tr>
<td>COM+ Network Access</td>
<td>AS-.NET-Service</td>
<td>Available</td>
</tr>
<tr>
<td>Distributed Transactions</td>
<td>AS-Dist-Transaction</td>
<td>Available</td>
</tr>
<tr>
<td>HTTP-Atomic Transactions</td>
<td>AS-HTTP-Atomic</td>
<td>Available</td>
</tr>
<tr>
<td>HTTP-Incoming Transactions</td>
<td>AS-HTTP-Incoming-Trans</td>
<td>Available</td>
</tr>
<tr>
<td>HTTP-Outgoing Transactions</td>
<td>AS-HTTP-Outgoing-Trans</td>
<td>Available</td>
</tr>
<tr>
<td>HTTP-Port Sharing</td>
<td>AS-HTTP-Port-Sharing</td>
<td>Available</td>
</tr>
<tr>
<td>Web Server (IIS) Support</td>
<td>AS-IIS-Web-Support</td>
<td>Available</td>
</tr>
<tr>
<td>Windows Process Activation Service Support</td>
<td>AS-WAS-Support</td>
<td>Available</td>
</tr>
<tr>
<td>HTTP Activation</td>
<td>AS-HTTP-Activation</td>
<td>Available</td>
</tr>
<tr>
<td>Message Queuing Activation</td>
<td>AS-MQO-Activation</td>
<td>Available</td>
</tr>
<tr>
<td>Named Pipes Activation</td>
<td>AS-Named-Pipes</td>
<td>Available</td>
</tr>
<tr>
<td>TCP Activation</td>
<td>AS-TCP-Activation</td>
<td>Available</td>
</tr>
<tr>
<td>DNS Server</td>
<td>DCHP</td>
<td>Available</td>
</tr>
</tbody>
</table>
Scroll down to User Interfaces and Infrastructure and check, if the Desktop Experience is activated.

Type `Add-WindowsFeature Desktop-Experience`

Installation is running.
You must restart the server to finish the installation process, type `Restart-Computer` on the PowerShell console.

8.8.1.2. Installing Desktop Experience using Server Manager GUI

Select the 2nd option – Add roles and features
Click on Next

Select the first option [1] – Role-based or feature-based installation and click Next [2]
Click Next

On the Features Menu [1] select the – User Interfaces and Infrastructure (installed)[2] and activate Desktop Experience [3] and click finally click on Next [4]
Required components will be installed – click Add Features

Finally click on Install
Installation is ready, click Close and restart your server.

After Restart please check the Installation – go to Server Manager, open Local Server, scroll down to Roles and Features and you see the installed Desktop Experience Feature.

NOTE: The Server might need to be restarted after the installation completes.

The Desktop Experience feature allows you to install a variety of components and features that are provided in the Windows 7 operating system onto a computer that is running the Windows Server 2008 R2 operating system.

Open Server Manager: click Start, point to Administrative Tools, and click Server Manager.

In the Features Summary section, click Add Features.

Select the Desktop Experience check box, and then click Next.
Click on **Add Required Features**

Required components will be installed.

Click **Close**
Finally click on **Yes**

![Add Features Wizard](image)

**Do you want to restart now?**

This server must be restarted to finish the installation process. You cannot add or remove other roles, role services, or features until the server is restarted.

[Yes] [No]

After Restart please check the Installation

![Select features to install](image)

**Features:**
- .NET Framework 3.5.1 Features
- Background Intelligent Transfer Service (BITS)
- BitLocker Drive Encryption
- BranchCache
- Connection Manager Administration Kit
- Desktop Experience (Installed)
- DirectAccess Management Console
- Group Policy Management
- 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)

**Description:**
- **Desktop Experience** includes features of Windows 7, such as Windows Media Player, desktop themes, and photo management. Desktop Experience does not enable any of the Windows 7 features; you must manually enable them.

More about features

Now you can install SpeechExec Mobile Server.
8.9. Installation Web Server

8.9.1. Windows Server 2012 IIS Web Server Installation

Click the Start button in the lower left corner of the display. Highlight Administrative Tools and select Server Manager. In the Server Manager interface select Add roles and features to displays a list of possible roles.

Click on Next
Click on - Role-based or feature-based installation and click on Next

Select a server from the pool and click on Next
Click on Server Roles Web Server IIS and click on Next

Add the required features for the installation
Scroll down to Application Development and select ASP.NET 4.5, click on Next

Add the required features for the ASP.NET 4.5 installation and click Add Features
Click Next

All the components are prepared for installation. Click on Install
The installation is ready, new Field IIS is available (green border)

Open the Web browser, type the local IP address and check the installation.
8.9.2. Windows Server 2008 R2 IIS Web Server Installation

Click the Start button in the lower left corner of the display. Highlight Administrative Tools and select Server Manager. In the Server Manager interface select Add roles to displays a list of possible roles.

The Add Roles Wizard will start with a Before You Begin page. The wizard asks for verification of the following:

The administrator account has a strong password.
The network settings, such as IP addresses, are configured.
The latest security updates from Windows Update are installed – click on NEXT.
Select Web Server IIS and click Next

An introductory page will open with links for further information, Click Next
Click Add Required Role Service

Add the ASP.NET Module and .NET Extensibility and click Next.
IIS is now installed with a default configuration for hosting ASP.NET on Windows Server. Click Close to complete the process.
Now open your web browser and check the installation. Start the Internet Explorer. Enter the localhost IP address (127.0.0.1) or type only [http://localhost](http://localhost). You should see the default IIS Welcome page.
8.10. Connection with external MSSQL 2008 Server

The connection to an external database is explicit not a recommended installation method for the SpeechExec Mobile Server. However, the use of an external database is technically possible but complicates the maintenance process.

- Install the Microsoft SQL server with the default settings.
- Install the Microsoft SQL Server management Studio.

Open the Management Studio and connect to the engine you would like to use it.

![Microsoft SQL Server 2008 R2](image)

Click with the right mouse button on the database engine you are connected to and click on Properties.
Select Security and switch server authentication to SQL Server and Windows Authentication mode.

Click OK and confirm following message with OK

Click with the right mouse button on the Databases and select New Database...

In the menu. Click on General and create a new Database named MobileServer, click OK and the window will be close.

Open the new created MobileServer database

Click File, select New and click on Query with Current Connection (shortcut CTRL+N)
Browse to the MobileServer directory, select install.sql file and click Open

Before you execute [2] the install.sql query, make sure that you are connected [1] with proper database

And now, you can see the new database structure with all the crated tables like Customer, CustomerAction...
Browse in Object Explorer to Security, click on this and select New and click on Login...
Specify a Login name [1], activate SQL Server authentication and create password [2]. Select default database [3] and click OK.

Click on Server Roles and activate dbcreator
Click on UserMapping [1] activate your Database [2] and select right Database role membership for selected Database [3] and finally click OK.

Open the two files from the Mobile Server installation folder:
Open the file with an editor and customize the connection string to your installation.

MobileServer.Service.exe.config

```xml
<connectionStrings>
  <add name="MobileServer.SharedLib.Properties.Settings.DatabaseConnectionString" connectionString="Data Source=SERVERNAME\ENGINENAME;Initial Catalog=MobileServer;Persist Security Info=False;User ID=USER;Password=PASSWORD" providerName="System.Data.SqlClient" />
</connectionStrings>

MobileServer.Tool.exe.config

```xml
<connectionStrings>
  <add name="MobileServer.SharedLib.Properties.Settings.DatabaseConnectionString" connectionString="Data Source=SERVERNAME\ENGINENAME;Initial Catalog=MobileServer;Persist Security Info=False;User ID=USER;Password=PASSWORD" providerName="System.Data.SqlClient" />
</connectionStrings>
```
8.11. Create Database Backup with MSSQL Tools

The most important part of a SQL Server maintenance plan is backing up your databases regularly. To backup a database, you cannot simply copy the respective MDF and LDF files of the database as SQL Server has a lock on these. Instead, you need to create a true backup file through SQL Server.

While this can be done by developing a Maintenance Plan inside of SQL Management Studio, the free, delivery with MobileServer, Express editions of SQL Server do not offer this interface. To work around this, you can easily backup your databases by running the command below while logged in as a Windows Administrator.

We create a new Folder for the backup’s e.g MOBILESERVERBACKUP.

Start the command line interpreter with WIN+R and type cmd, klick OK type Enter.

Type the command:
sqlcmd –U MobileServer –P mbserv99 –S MS2012R2PRI\MOBILESERVER –Q "BACKUP DATABASE [MobileServer] TO DISK='C:\MOBILESERVERBACKUP\MSBACKUP.bak'"

Description for the command
-U MobileServer – is the user login for the Database
-P mbserv99 – is a user-specified password. Passwords are case sensitive. If the –U option is used and the –P option is not used, sqlcmd prompts the user for a password.
-S MS2012R2PRI\MOBILESERVER – specifies the server\instance of SQL Server to which to connect, in our example this is MS2012R2PRI for Server and MOBILESERVER for instance.
-Q “cmdline query” execute a query when sqlcmd starts and then immediately exits sqlcmd.

Here is our Backup:
To restore a database from a backup file, please use the command:

```
sqlcmd -U MobileServer -P mbserv99 -S MS2012R2PRI\MOBILESERVER -Q "RESTORE DATABASE [MobileServer] FROM DISK='C:\MOBILESERVERBACKUP\MSBACKUP.bak'"
```

The above command will restore a backup of MobileServer from the data stored in the backup file C:\MOBILESERVERBACKUP\MSBACKUP.bak. Any changes made to MobileServer Database since the backup file was created will be lost.

8.11.1. Create Scheduled Backup

Open Notepad and paste the two lines:

```
@echo off
sqlcmd -U MobileServer -P mbserv99 -S MS2012R2PRI\MOBILESERVER -Q "BACKUP DATABASE [MobileServer] TO DISK='C:\MOBILESERVERBACKUP\MSBACKUP_%DATE%.bak'"
```

Click on File, select Save As…

Type backup.bat as File name and - very important! – Save as type All files (*.*) and click on Save.

Open Task Scheduler (Shortcut: WIN+R – taskschd.msc)
Click on Create Basic Task

Type a name and, if needed, additional description and click on Next

Select the time period and click on Next

Select Start Date and Time and click on Next.
As the right action select Start a program and click again on Next

Click on Browse and select the backup.bat from Desktop

Click on Next and close the process with click on Finish
Task is running at 12:12:12 (red) and Backup file is also created with additional time stamp.

And after three days our MOBILESERVERBACKUP folder contains three files, with corresponding file name, and the task scheduler informs us about next execution. Column Last Run Result contains system error codes – 0x0 correspond to the operation completed successfully.
8.12. Create Database Backup with external Tools

MobileServer use a Microsoft SQL Server 2008 Express version. For Backup and management you can use one of free available database tools for system administrators. In our example we use HeidiSQL. HeidiSQL is a database query tool that supports Microsoft SQL Server databases. It allows you to browse and edit data, create and edit tables, views, procedures, triggers and scheduled events. Features include managing multiple servers from one window, exporting from one database server into another, bulk editing, an advanced SQL syntax editor, and database optimization and repair functions.

Download the HeidiSQL from [http://www.heidisql.com/download.php](http://www.heidisql.com/download.php)

Here we describe the Backup process.

8.12.1. Connect with Database

Open the License Menu and click on Database Settings and check currents settings, we will need it later, so please write the information or make screenshot for later.
Open HeidiSQL Software, click on File and select Session manager. On the left side, you see Session name, that can be rename later.

In the tab Settings, select as Network type: Microsoft SQL Server (named pipe) As Hostname / IP type the Server Name and Instance (from the MobileServer settings) e.g. MS2012R2PRI\MOBILESERVER. Type MobileServer as User, and mbserv99 as Password. Click Open, and you are connected with the Database from MobileServer.

Click with right mouse button on MobileServer and select Export database as SQL
Next, you can select all of available Tables inside the Database, or, if you preferred to transfer only on specially table with Customer Data (Table dbo.Customer), then click on this. Select as Output Single .sql file and create a related name, for regular tasks, you can configure a specific variable like %host and %date.

Click Export

Export is running, you can check and can see exactly the details, how many rows inside the tables are exported and the time duration for it.

Now the sql file is created and you can import this in to another Database or save as backup.
8.13. Web.config file

How to working with configuration files on IIS7 — learn more from Microsoft knowledgebase.

Example configuration file for 10 min. request time and 30MB file size.

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <system.web>
    <!-- httpRuntime executionTimeout is in seconds. maxRequestLength and requestLengthDiskThreshold is in Kilobytes -->
    <httpRuntime executionTimeout="600" maxRequestLength="30720"
    requestLengthDiskThreshold="30720"/>
  </system.web>
  <system.webServer>
    <security>
      <requestFiltering>
        <!-- maxAllowedContentLength is in Bytes not Kilobytes -->
        <requestLimits maxAllowedContentLength="30720000"/>
      </requestFiltering>
    </security>
  </system.webServer>
</configuration>
```
8.14. Firewall settings for FTP connections


Activate Program and click on Next

Activate the radio button - This program path and click on Browse
Select the installation path (Standard is C:\Program Files (x86)\MobileServer), select MobileServer.Service and click on Open

Click Next
Activate Allow the connection and click on Next

Depend on the Network settings and policy activate the right settings for Domain or for Private and click on Next
Create a name for the rule and click on Finish.

Inbound rule for MobileServer background service is activated, now we can create a second rule for the MobileServer Management Console.
Click again on Inbound Rules – New Rule

Select radio button Program and click on Next

Activate This program path and click on Browse
Select MobileServer.Tool and click on Open

Click on Next
Activate Allow the connection and click on Next

Depend on the Network settings and policy activate the right settings for Domain or for Private and click on Next
Create Name for the rule and click on Finish.

Now we have created two inbound rules, in the same way you can create rules for outbound rules.
8.15. Update.SQL File

With the update.sql you can add or delete, or modify columns or values in an existing tables created with the installation.

Content of update.sql

USE [MobileServer]

ALTER TABLE customer ALTER COLUMN zip varchar(10) NOT NULL;
GO

ALTER TABLE Customer ADD ftpHost varchar(255) NOT NULL DEFAULT '';
ALTER TABLE Customer ADD ftpPort INT NOT NULL DEFAULT 0;
ALTER TABLE Customer ADD ftpProxyHost varchar(255) NOT NULL DEFAULT '';
ALTER TABLE Customer ADD ftpProxyPort INT NOT NULL DEFAULT 0;
ALTER TABLE Customer ADD ftpUsername varchar(255) NOT NULL DEFAULT '';
ALTER TABLE Customer ADD ftpPassword varchar(255) NOT NULL DEFAULT '';
ALTER TABLE Customer ADD ftpDirectory varchar(255) NOT NULL DEFAULT '';
GO

ALTER TABLE CustomerRule ADD ftpHost varchar(255) NOT NULL DEFAULT '';
ALTER TABLE CustomerRule ADD ftpPort INT NOT NULL DEFAULT 0;
ALTER TABLE CustomerRule ADD ftpProxyHost varchar(255) NOT NULL DEFAULT '';
ALTER TABLE CustomerRule ADD ftpProxyPort INT NOT NULL DEFAULT 0;
ALTER TABLE CustomerRule ADD ftpUsername varchar(255) NOT NULL DEFAULT '';
ALTER TABLE CustomerRule ADD ftpPassword varchar(255) NOT NULL DEFAULT '';
ALTER TABLE CustomerRule ADD ftpDirectory varchar(255) NOT NULL DEFAULT '';
ALTER TABLE CustomerFile ADD isError BIT NULL;
GO

-- 1.5.1.0
ALTER TABLE Customer ADD useTranscription BIT NULL;
UPDATE Customer SET useTranscription = 0 WHERE useTranscription IS NULL;
GO

-- 1.5.1.6 (Manager Module)
ALTER TABLE Customer ADD customerType INT NULL DEFAULT 0;
UPDATE Customer SET customerType = 1 WHERE customerType IS NULL;
ALTER TABLE Customer ADD nextPayment DATETIME NULL;
GO

-- 1.5.1.9
ALTER TABLE Customer ADD expireWarningSent [bit] NULL;
UPDATE Customer SET expireWarningSent = 0 WHERE expireWarningSent IS NULL;
ALTER TABLE Customer ADD billingSent [bit] NULL;
UPDATE Customer SET billingSent = 0 WHERE billingSent IS NULL;
ALTER TABLE Customer ADD providerCountry [varchar](255) NULL;
UPDATE Customer SET providerCountry = '' WHERE providerCountry IS NULL;
ALTER TABLE Customer ADD providerName [varchar](255) NULL;
UPDATE Customer SET providerName = '' WHERE providerName IS NULL;
ALTER TABLE Customer ADD deviceName [varchar](255) NULL;
UPDATE Customer SET deviceName = '' WHERE deviceName IS NULL;
ALTER TABLE Customer ADD blackBerryOsVersion [varchar](255) NULL;
UPDATE Customer SET blackBerryOsVersion = '' WHERE blackBerryOsVersion IS NULL;
ALTER TABLE Customer ADD blackBerryLanguage [varchar](255) NULL;
UPDATE Customer SET blackBerryLanguage = '' WHERE blackBerryLanguage IS NULL;
ALTER TABLE Customer ADD apn [varchar](255) NULL;
UPDATE Customer SET apn = '' WHERE apn IS NULL;
ALTER TABLE Customer ADD besmode [varchar](255) NULL;
UPDATE Customer SET besmode = '' WHERE besmode IS NULL;
ALTER TABLE Customer ADD storageMode [varchar](255) NULL;
UPDATE Customer SET storageMode = '' WHERE storageMode IS NULL;
ALTER TABLE Customer ADD speechVersion [varchar](255) NULL;
UPDATE Customer SET speechVersion = '' WHERE speechVersion IS NULL;
GO

-- 2.0
ALTER TABLE Customer ADD isSpeechExecUser bit DEFAULT 0
ALTER TABLE Customer ADD speechExecUserFile VARCHAR(255) DEFAULT ''
UPDATE Customer SET isSpeechExecUser = 0 WHERE isSpeechExecUser IS NULL
UPDATE Customer Set speechExecUserFile = '' WHERE speechExecUserFile IS NULL
GO

-- 2.x Manager
CREATE TABLE [CustomerAction]
(   [customerActionId] [uniqueidentifier] NOT NULL PRIMARY KEY,
    [customerId] [uniqueidentifier] NOT NULL,
    [action] [int] NOT NULL,
    [dateAction] [datetime] NULL
);
GO

ALTER TABLE Customer ADD contractType VARCHAR(255) DEFAULT '';
UPDATE Customer SET contractType = '' WHERE contractType IS NULL;
ALTER TABLE Customer ADD activationCode VARCHAR(255) DEFAULT '';
UPDATE Customer SET activationCode = '' WHERE activationCode IS NULL;
ALTER TABLE Customer ADD currency VARCHAR(255) DEFAULT 'EUR';
UPDATE Customer SET currency = 'EUR' WHERE currency IS NULL;
ALTER TABLE Customer ADD amount DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET amount = 0 WHERE amount IS NULL;
ALTER TABLE Customer ADD tax BIT DEFAULT 0;
UPDATE Customer SET tax = 0 WHERE tax IS NULL;
ALTER TABLE Customer ADD amountWithTax DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET amountWithTax = 0 WHERE amountWithTax IS NULL;
ALTER TABLE Customer ADD lastPaymentDate DATETIME DEFAULT '2000-12-24';
UPDATE Customer SET lastPaymentDate = '2000-12-24' WHERE lastPaymentDate IS NULL;
ALTER TABLE Customer ADD lastPaymentAmount DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET lastPaymentAmount = 0 WHERE lastPaymentAmount IS NULL;
ALTER TABLE Customer ADD nextPaymentDate DATETIME DEFAULT '2000-12-24';
UPDATE Customer SET nextPaymentDate = '2000-12-24' WHERE nextPaymentDate IS NULL;
ALTER TABLE Customer ADD nextPaymentAmount DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET nextPaymentAmount = 0 WHERE nextPaymentAmount IS NULL;
ALTER TABLE Customer ADD provisionCompany VARCHAR(255) DEFAULT '';
UPDATE Customer SET provisionCompany = '' WHERE provisionCompany IS NULL;
ALTER TABLE Customer ADD provisionName VARCHAR(255) DEFAULT '';
UPDATE Customer SET provisionName = '' WHERE provisionName IS NULL;
ALTER TABLE Customer ADD provisionAmount DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET provisionAmount = 0 WHERE provisionAmount IS NULL;
ALTER TABLE Customer ADD creditFrom DATETIME DEFAULT '';
UPDATE Customer SET creditFrom = 2000-12-24 WHERE creditFrom IS NULL;
ALTER TABLE Customer ADD creditAmount DECIMAL(9,3) DEFAULT 0;
UPDATE Customer SET creditAmount = 0 WHERE creditAmount IS NULL;
ALTER TABLE Customer ADD creditReason VARCHAR(255) DEFAULT '';
UPDATE Customer SET creditReason = '' WHERE creditReason IS NULL;
ALTER TABLE Customer ADD payInvCompany VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvCompany = '' WHERE payInvCompany IS NULL;
ALTER TABLE Customer ADD payInvName VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvName = '' WHERE payInvName IS NULL;
ALTER TABLE Customer ADD payInvAddress VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvAddress = '' WHERE payInvAddress IS NULL;
ALTER TABLE Customer ADD payInvMail VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvMail = '' WHERE payInvMail IS NULL;
ALTER TABLE Customer ADD payInvCountry VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvCountry = '' WHERE payInvCountry IS NULL;
ALTER TABLE Customer ADD payInvSalesTax VARCHAR(255) DEFAULT '';
UPDATE Customer SET payInvSalesTax = '' WHERE payInvSalesTax IS NULL;
ALTER TABLE Customer ADD payCCCompany VARCHAR(255) DEFAULT '';
UPDATE Customer SET payCCCompany = '' WHERE payCCCompany IS NULL;
ALTER TABLE Customer ADD payCCOwner VARCHAR(255) DEFAULT '';
UPDATE Customer SET payCCOwner = '' WHERE payCCOwner IS NULL;
ALTER TABLE Customer ADD payCCSecCode VARCHAR(255) DEFAULT '';
UPDATE Customer SET payCCSecCode = '' WHERE payCCSecCode IS NULL;
ALTER TABLE Customer ADD payCCExpDateMonth INT DEFAULT 0;
UPDATE Customer SET payCCExpDateMonth = 12 WHERE payCCExpDateMonth IS NULL;
ALTER TABLE Customer ADD payCCExpDateYear INT DEFAULT 0;
UPDATE Customer SET payCCExpDateYear = 2000 WHERE payCCExpDateYear IS NULL;
ALTER TABLE Customer ADD payPalEmail VARCHAR(255) DEFAULT '';
UPDATE Customer SET payPalEmail = '' WHERE payPalEmail IS NULL;
ALTER TABLE Customer ADD comment TEXT DEFAULT '';
UPDATE Customer SET comment = '' WHERE comment IS NULL;
GO

-- 2.1 iphone version
ALTER TABLE customer ALTER COLUMN berryDeviceId varchar(150) NOT NULL;
GO

-- 2.1 iphone version - bugfix for 2.1.8
ALTER TABLE customer ALTER COLUMN customerNo varchar(150) NOT NULL;
GO

-- 2.1.09 possibility to switch off backup
ALTER TABLE Customer ADD keepBackup bit NOT NULL DEFAULT 1;
GO

-- 2.1.11 error email notification
ALTER TABLE Customer ADD decryptErrorEmail int NOT NULL DEFAULT 1;
ALTER TABLE Customer ADD convertErrorEmail int NOT NULL DEFAULT 1;
GO

-- 2.1.13 dispatch error email notification
ALTER TABLE Customer ADD dispatchErrorEmail int NOT NULL DEFAULT 1;
GO
-- 2.1.15 destination platform (windows = 1 or mac = 2)
ALTER TABLE Customer ADD destPlatform int NOT NULL DEFAULT 1;
GO

-- 2.1.16 Apple's UDID denial
ALTER TABLE Customer ADD oldDeviceId varchar(150) NULL;
GO

-- 2.6 SFTP
ALTER TABLE Customer ADD ftpSftp bit NOT NULL DEFAULT 0;
ALTER TABLE Customer ADD emailLock bit NOT NULL DEFAULT 0;
ALTER TABLE CustomerRule ADD ftpSftp bit NOT NULL DEFAULT 0;
GO