

ModusOne



ModusOne Web Client Setup

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ModusOne Web Client Setup

ModusOne

General Information

This document is designed for system administrators or users with basic system knowledge and experience of Windows server and client platforms used here and of the IIS platform used to host web applications.

To install and set up the ModusOne Web Client you will require knowledge of a ModusOne installation and the concept behind ModusOne configuration.

Silverlight Application

The ModusOne Web Client has been built as a Microsoft Silverlight application.

Silverlight applications are downloaded from a web server and can be run on a client computer either in **in-browser** or **out-of-browser** mode.

To ensure full client functionality in the current Silverlight 4 platform, the ModusOne Web Client must be run in **out-of-browser** mode. The necessary interaction with Microsoft Office is currently only possible with this operating mode.

Two-Step Installation

Installation is done in two steps.

Step 1

Set up via the web server. This requires server-side preparation.

Step 2

Opening the loading page in a web browser and subsequently using the option of a permanent local installation.

This ensures functional communication with Microsoft Word.

Deploying ModusOne Web Client

2.1 Server-side Requirements for Deployment and Operation

2.1.1 ModusOne Requirements

A minimum release base of version **5.1.0** is required for a server-side installation. Earlier releases do not support ModusOne Web Client.

In addition to this, you will also need the ModusOne Web Client installation package (**ModusOneWebClient.zip**) and optionally the ModusWebClientLauncher (**ModusWebClientLauncher.exe**).

2.1.2 System Requirements for Windows Server / IIS and MIME Types

IIS

In addition to the requirements of the server operating system for running a ModusOne Server, hosting the ModusOne Web Client on a ModusOne Server also requires the installation or activation of the WWW service of the Internet Information Services (**IIS**).

Activation of TCP Ports

When running separate web and ModusOne servers with a firewall between them, you must ensure that the TCP ports (normally 8000, 8010, 8011 and 8012) are activated for the Web Client to function correctly.

Deploying the Web Client

Deploying the Web Client does not normally entail having to make any extra modifications.

However, depending on the Windows Server version used and thus the IIS version in operation, you may have to add certain MIME types to support the deployment of Silverlight applications.

This step is only necessary if your **IIS version is lower than 7.0** and the operating system used is **Windows XP, Windows 2003 or Windows Vista RTM**.

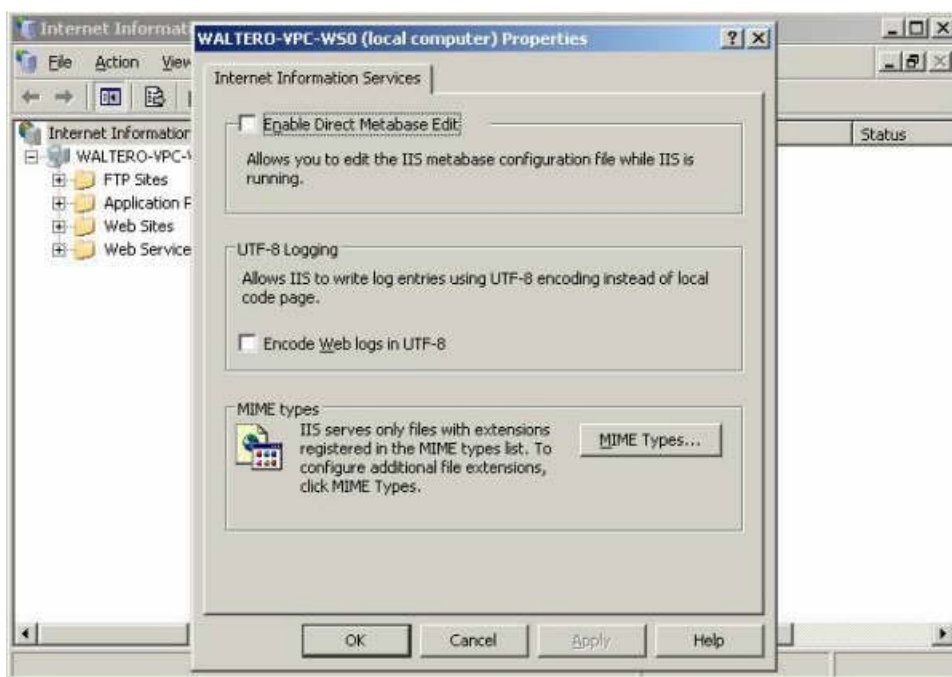
All MIME types needed to support Silverlight are implemented by default in **Windows 2008** or **Windows Vista SP1**.

With regard to the recommended platforms for ModusOne Server installations, this only applies to **Windows Server 2003 IIS 6.0**.

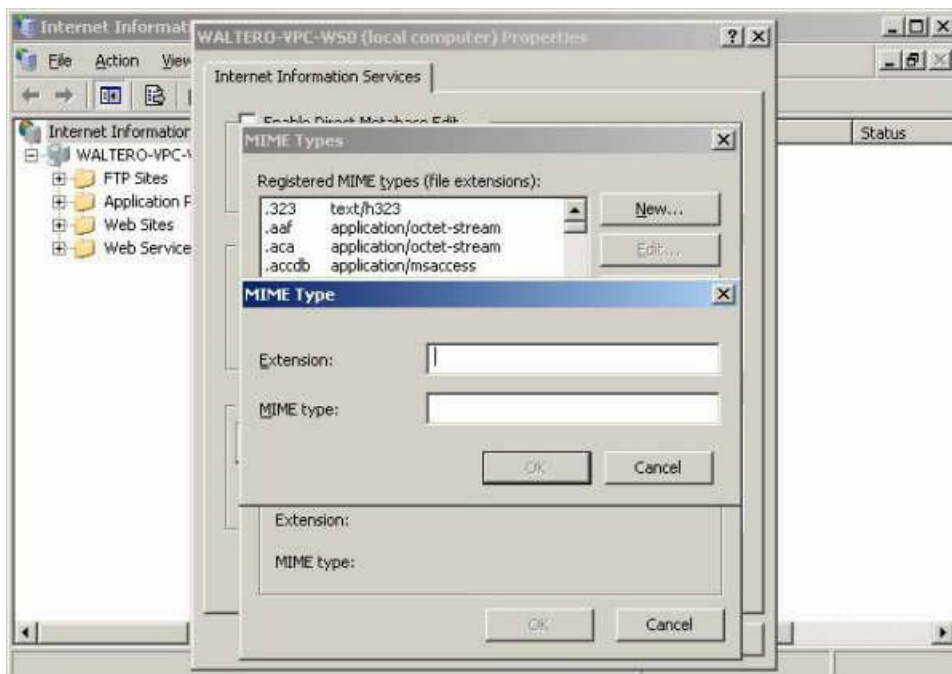
Please check for the following MIME types and add any that may be missing:

- .xap application/x-silverlight-app
- .xaml application/xaml+xml
- .xbap application/x-ms-xbap

If you are using **Windows Server 2003 IIS 6.0** alter the settings by running the **IIS Manager** which can be accessed from the property dialog for the **local Computer**.



Click on the button **MIME Types** to open the properties dialog where you can add the required MIME types.



For a more detailed description of this (and also for other Windows platforms), please refer to the article '**Configuring IIS for Silverlight Applications**' (KBA-01067-8QOZNL) on the website

www.interactivewebs.com

direct link:

<http://www.interactivewebs.com/DesktopModules/iCRMKnowledgeBase/ViewArticle.aspx?id=66>

2.2 Unpacking and Preparing ModusOne Web Client Files

2.2.1 Required Files

The ModusOne Web Client is made available in the zip file (**ModusOneWebClient.zip**). The zip file contains all the necessary set up and configuration files.

2.2.2 Content of ModusOneWebClient.zip

The zip file ModusOneWebClient.zip contains two directories, ModusOne and ModusOneWebClient.

Directory ModusOne

Contains ModusOne configuration files.

These must be copied to the ModusOne installation directory (environment variable %modusdir%) or compared to existing files as the case may be.

File	Function
modus_Core.exe.config	Configuration file for modus_core services. Needs to be compared to the existing file from the original ModusOne installation.
modus_MWS.exe.config	Configuration file for modus_mws services. Needs to be compared to the existing file from the original ModusOne installation.
ClientAccessPolicy.xml	Configuration file for the new cross domain services. Must be copied to the ModusOne installation directory if not already available.

Directory ModusWebClient

Web folder for web server deployment.

File	Function
ModusWebClient.xml	Configuration file containing destination addresses for the ModusOne Web Client. The values for the following configuration keys need to be adapted to customer requirements <ul style="list-style-type: none"> • mwsProcessServiceBasic • mwsRepositoryServiceBasic • MURServiceBasic and if required • mwsProcessServiceRest
ModusWebClient.xap	The ModusOne Web Client's Silverlight application package. This contains the compressed assemblies and resources of the Silverlight application.
ModusWebClient.html	HTML code to download the ModusOne Web Client from a web browser.
\Help\de\	HTML help files – German version
\Help\en	HTML help files – English version
\Help\fr	HTML help files – French version
\Help\nl	HTML help files – Dutch version

2.2.3 Preparatory Steps

Please carry out the following steps to prepare your system for ModusOne Web Client deployment.

1. Deploying the Microsoft Silverlight Application

To deploy the Microsoft Silverlight application, copy the file **ModusWebClient.xap** and the configuration file **ModusWebClient.xml** to an existing web folder and call the XAP file from a web page in a way demonstrated in the enclosed test page (**ModusWebClient.html**).

If you do not yet have a web folder or web page at your disposal in which you can copy the code for the XAP call, you can also use the above-mentioned test page for a test deployment. Just follow the steps described below.

2. Create a Folder and Copy Files

Create a folder in the ModusOne or web server file system, e.g. **'%modusdir%\ModusWebClient'** and copy the following files in the folder:

- ModusWebClient.xap
- ModusWebClient.xml
- ModusWebClient.html
- Help* (complete directory structure)

Please make sure when copying the folder **'Help'** that you include all the subfolders for the ModusOne Web Client help system.

As described above, the target folder is the the same folder the .XAP file was copied to. In this case
'%modusdir%\ModusWebClient'.

Only when the help files are located in a subfolder relative to the .XAP file in the form of **'Help/{LANGUAGE-ISOCODE}'** is it guaranteed that the ModusOne Web Client will find the files.

3. Set Language Version

The ModusOne Web Client usually selects the language version according to the language of the operating system it is launched from.

The installation package contains the complete folder structures for the German, English, French and Dutch language versions.

The language version can also be set in the HTML loading page document.

Add the following parameters for the **'culture'** settings of the Client UI to the other parameters in the HTML document.

```
<param name="culture" value="{LANGUAGE-ISOCODE}" />
<param name="uiculture" value="{LANGUAGE-ISOCODE}" />
```

You will need to replace the placeholder **{LANGUAGE-ISOCODE}** with the desired language code, i.e.

- de-DE for German
- en-GB for English
- nl-NL for Dutch

Depending on the language code set here, the corresponding language version is loaded when the Client is started.

Running in in-browser mode

If you wish to run the ModusOne Web Client in a browser (not recommended at present as Silverlight 4 does not offer sufficient support of Microsoft Word) these settings need to be made in the document **ModusWebClient.html** in the corresponding web folder.

Running in out-of-browser mode

If - as recommended - the ModusOne Web Client is to be used in out-of-browser mode, the locally installed start document **'index.html'** needs to be modified.

Where to find this file is described in the chapter on **Additional Information on Out-of-Browser Mode** .

4. Modify the Configuration File ModusWebClient.xml

Open the configuration file **ModusWebClient.xml** with a **UTF-8** compatible editor. Change the values for server addresses in the configuration keys

- **mwsProcessServiceBasic**
- **mwsRepositoryServiceBasic** and
- **MURServiceBasic**

to those of the ModusOne Server (the standard setting is **'localhost'**) i.e. to the

IP address or the DNS name of the ModusOne Server.

Depending on the configuration of the new component **mws-process REST services** included in ModusOne release version 5.1.0 and above (See **Adaptation of the ModusOne Installation**) you must also parameterize the configuration key **mwsProcessServiceRest** as follows if the new service is to run on another server/port as the normal **mws-process BASIC** service.

```
<appSettings>
  ...
  <add key="mwsProcessServiceRest" value=
    "http://[ModusOneServerName]:
      [mws-process_REST_Port]/mwsrest/mwsprocess/" /
  >
  ...
</appSettings>
```

If this key does not exist or the key is empty, the parameter of the **mws Basic Service** is used by default.

5. UTF-8 Encoding

Take particular care to observe UTF-8 encoding requirements when saving all XML configuration files!

2.3 Create a Virtual Directory in IIS

If the directory designated in the previous section has been newly created and has not yet been defined as a component of a web application, you will need to define it as a virtual directory in IIS before being able to access it as a web application.

URL

Choosing the name **ModusWebClient** for the virtual directory will result in it becoming part of the application's URL, which is later used to access the ModusOne Web Client

`http://[MoDusOneServerName]\ModusWebClient`

You will need to replace the placeholder **[MoDusOneServerName]** with the respective host name of your server.

Standard Documents in the Web Folder

To ensure successful access and prevent an error such as **'HTTP 403 - the website declined to show this webpage'** the HTML page from which the Silverlight client will be downloaded from must be located in the list of web folder default documents.

If you are going to use the test document **'ModusWebClient.html'** provided in the set up, then you must add the name **'ModusWebClient.html'** to the list of standard documents or rename the file to **'Default.htm'** or **'index.html'** as these names are usually already defined and added by default.

Access

It is not necessary to assign any other access rights than **'Read'** for the document you have defined.

You can set the authentication procedure to **'Anonymous authentication'** as authentication and login to the ModusOne Server are performed via the Web Client itself.

Configuration

Using the external configuration file **'ModusWebClient.xml'** the Web Client always loads its configuration settings before the login dialog is displayed.

This enables you to alter the configuration even while the Web Client is still running. Simply logging on again is enough for any alterations made to take effect.

Please note, however, that the IIS and the browser both cache the configuration and the XAP.

If you wish to make sure that any changes you make to the application - as described above - take immediate effect, you must configure the settings for the expiration date for web content accordingly.

This can be done in IIS using the property dialog and setting the **'http Headers'** property for the corresponding files.

After activating the switch **'Enable content expiration'** or **'Expire Web content'** you can define the expiration date of the selected content to force the browser to

reload updated content.

Defining the setting '**Expire immediately**' will ensure any changes take immediate effect.

2.4 Modifying the ModusOne Installation

If you have not already done so, update the ModusOne installation to **Version: 5.1.0** or higher.

As of version 5.1.0 ModusOne now contains new components to support the ModusOne Web Client: **CrossDomainService**, **REST-Services** and **CORS-Support** (Cross Originate Resource Sharing).

These new components need to be configured before the ModusOne Web Client can function correctly.

Please complete the following steps:

1. Copy Files

First of all, copy the file '**ClientAccessPolicy.xml**' to the ModusOne installation directory (%modusdir%).

2. Modify Configuration Files

Modify the configuration files '**modus_Core.exe.config**' and '**modus_mws.exe.config**' of your existing ModusOne installation.

The template versions of these files included in the ModusOne Web Client installation package ('**ModusOneWebClient.zip**') can be used as references for the changes you need to make to your ModusOne configuration files.

Merge these templates with your existing ModusOne configuration files into one file. You can use tools like **WinMerge** or **BeyondCompare** to do this.

3. Check the File modus_Core.exe.config

If you have updated an existing ModusOne installation to the version 5.1.0 or higher, check the file **modus_Core.exe.config** for the existence and correctness of the following content (please note, content may be missing or have been commented out).

Take particular care that the '**crossdomain**' Service in the sections **configSections** and **runtimeservices** is activated in the event that the code has been commented out.

The code line should look like this:

```
<configSections>
...
    <section name="crossDomainServices" type=
        "ModusSuite.Runtime.CrossDomainServiceConfiguration,
        ModusSuite.Runtime.CrossDomainService" />
...
</configSections>

<runtimeservices>
...
```

```

<service name="crossdomain" assembly=
  "ModusSuite.Runtime.CrossDomainService"
  type="ModusSuite.Runtime.CrossDomainRuntimeService"/>
...
</runtimeservices>

```

4. Check the File modus_Mws.exe.config

To configure the **MWS REST-Service** and **CORS Support** please check the file **modus_Mws.exe.config** for the existence and correctness of the following content (please note, content may be missing or have been commented out).

modus_Mws.exe.config

```

<modusruntime>
  <runtimeservices>
    ...
    <service name="mwsrest" assembly="ModusSuite.
Runtime.MWSRuntimeService"
      type="ModusSuite.Runtime.MWSRuntimeServiceRest"/>
    ...
  </runtimeservices>
</modusruntime>
...
<system.serviceModel>
  <services>
    ...
    <service name="ModusSuite.MWS.
MWSProcessServiceRest" behaviorConfiguration
      ="RestBehaviour" >
      <host>
        <!-- configure base address provided by host
-->
        <baseAddresses>
          <add baseAddress ="http://localhost:8011/
mwsrest" />
        </baseAddresses>
      </host>
      <endpoint address ="mwsprocess"
        binding ="webHttpBinding"
        contract ="ModusSuite.MWS.Types.
IMWSProcessServiceBasic"
        bindingConfiguration=""
        behaviorConfiguration = "WebBehavior"
      />
    </service>
    ...
  </services>
  ...
  <behaviors>

```



```

    <serviceBehaviors>
...
    <behavior name ="RestBehaviour" >
        <!--
            The serviceMetadata behavior allows one to
enable metadata (e.g. WSDL,
            Policy) publishing.
            This configuration enables publishing of such
data over HTTP GET.
        -->
        <serviceMetadata httpGetEnabled="true"/>
    </behavior>
</serviceBehaviors>
<endpointBehaviors>
    <behavior name="WebBehavior">
        <webHttp/>
        <CorsSupport/>
    </behavior>
</endpointBehaviors>
</behaviors>

<extensions>
    <behaviorExtensions>
        <!-- Note: type must be entered exactly as here,
otherwise the
            ConfigurationLoader will not recognize the
extension! -> Microsoft Bug!! -->
        <add name="CorsSupport" type="ModusSuite.Runtime.
CorsSupportBehaviorElement,
            ModusSuite.Runtime.Cors, Version=5.1.0.0,
Culture=neutral,
            PublicKeyToken=null"/>
    </behaviorExtensions>
</extensions>
</system.serviceModel>

```

5. Replace Server Addresses

Replace the server addresses with the host names of the ModusOne Servers in the settings in the sections **appsettings**, **services** and **crossDomainServices** of both files.

Here again, the template versions of these files included in the ModusOne Web Client installation package can be used as references for the changes you need to make.

The respective sections are marked with the placeholder **[ModusOneServerName]**.

Stop and restart the ModusOne services for the new configuration to take effect.

The ModusOne Server is now ready to accept requests from the ModusOne Silverlight Client.

Setting Up ModusOne Web Client on a Client Computer

3.1 Client Computer Requirements

Microsoft Silverlight 4 Runtime Environment

As the ModusOne Web Client is a Microsoft Silverlight application, it requires a **Microsoft Silverlight 4 runtime** environment to operate.

If the Silverlight plugin is missing when the ModusOne Web Client is first launched, the system will prompt a download link for the plugin. Alternatively, the Silverlight 4 runtime environment can be installed and rolled out to the client computer in preparation of first use.

Microsoft provides all the necessary resources. Go to

<http://www.silverlight.net/downloads>

to download the required installation package.

Select the download option **Microsoft Silverlight 4 Runtime**.

.net Framework 3.5SP1

If you wish to use optional **ModusWebClientLauncher**, you will need to have **.net Framework 3.5.5SP1** installed.

For more information, see chapter

Additional Information on Out-of-Browser Mode

Word

To use the full functionality of the ModusOne Web Client **Microsoft Word 2007** or **Microsoft Word 2010** must be installed on the client computer.

Note on using Firefox/Chrome

When using Firefox/Chrome please ensure the settings '**private browsing mode**' or '**no browser history**' **are not** activated.

3.2 First Launch on a Client Computer

Start a web browser and go to the ModusOne Web Client website configured above

http://[MoDusOneServerName]\ModusWebClient

If a Silverlight 4 runtime is already installed, the ModusOne Web Client log in dialog is displayed.

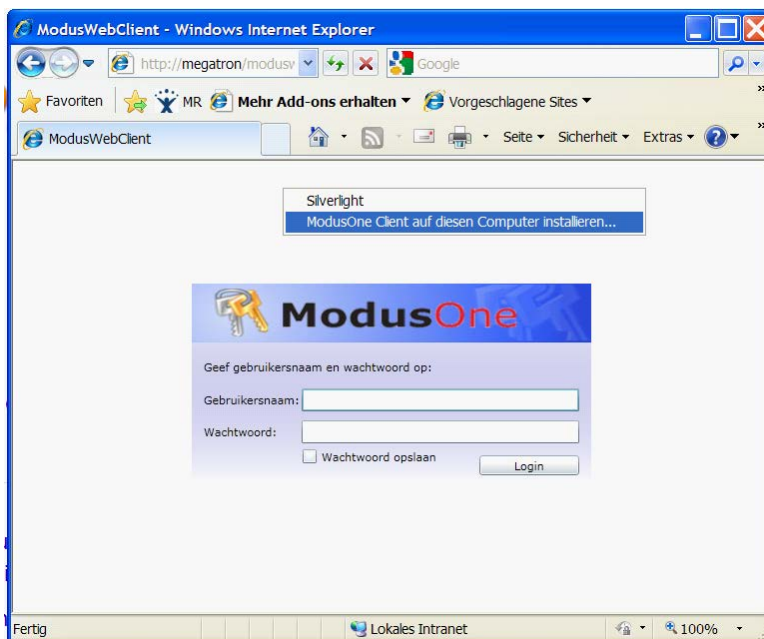
If the Silverlight runtime is not yet installed, a prompt to install and a link is displayed. After successfully installing the Silverlight 4 runtime the ModusOne Web Client can now be opened in your browser and the ModusOne log in is displayed.

To be able to use Microsoft Word, the ModusOne Web Client must at present be started in **out-of-browser** mode.

For this, the Silverlight client has to be installed locally on the client computer.

Please complete the following steps:

1. Move the mouse cursor over the Silverlight client user interface.
2. Open the context menu with a right mouse button



3. Select the option '**Install ModusOne Web Client on this Computer**' and confirm the pop up that follows with **OK**.
The ModusOne Web Client is now installed locally on this computer. A shortcut with the name '**ModusOne Web Client**' has been created in the Start menu.
4. Use this shortcut in the Start menu in future to start the ModusOne Web Client in **out-of-browser** mode.
In doing so, when double-clicking on documents generated in the ModusOne Web Client with the status '**created**' they can be opened in Microsoft Word.

ModusOne Web Client in out-of-browser mode



3.3 Additional Information on Out-of-Browser Mode

The **ModusWebClientLauncher** can be used to optionally launch the Web Client in **out-of-browser** mode. The Launcher allows you to pass specific start parameters to the ModusOne Web Client.

The **ModusWebClientLauncher** is available as an executable .exe file (**ModusWebClientLauncher.exe**) alongside the ModusOne Web Client installation package (**ModusOneWebClient.zip**)

Installation

To install, simply copy the files to a local folder on a client computer that can be accessed by the user in question.

Launch

In order to start the ModusOne Web Client via the ModusWebClientLauncher, you require either the URL or the APPID.

Syntax

```
ModusWebClientLauncher.exe -URL:"URL" | -APPID:"AppId" [-  
INFO] {Client-Parameter}
```

User Documentation

You can find more information on starting the **ModusWebClientLauncher** in the ModusOne Web Client user documentation.

Customizing

When customizing the launch and the client parameters, it is helpful to first use the command line switch

```
ModusWebClientLauncher.exe -INFO
```

This shows information about all Silverlight applications currently installed.

```
ModusWebClientLauncher Version 1.0.0.0  
ModusOne Client - Copyright, 2010 Pallas Athena GmbH
```

```
Information on installed Silverlight applications:
```

```
Name : ModusOne Web Client  
AppID: 467687297.megatron  
Title: ModusOne Web Client  
Description: A ModusOne Web Client on your desktop; at  
home, in the office, or on the road.  
OriginalSourceUri: http://megatron/moduswebclient/  
ModusWebClient.xap  
LaunchPath: C:\Documents and Settings\tester\Local  
Settings\AppData\Microsoft\Silverlight\OutOfBrowser\4676872  
97.megatron\index.html
```

This information can be used to start the Client, e.g. with the relevant '**AppID**' parameter.

Set Language Version

If required, it is now possible to set a specific language version for a Client even in **out-of-browser** mode and thus override the default operating system language setting.

The procedure is the same as that described in the chapter on **Preparatory Steps** (3. Set Language Version) for the server document '**ModusWebClient.html**' .

Instead of the HTML document '**ModusWebClient.html**' just modify the local start document '**index.html**'. The location of the file can be taken from the entry for **LaunchPath** In the example above, this would mean editing the document

C:\Documents and Settings\...\467687297.megatron\index.html.

This document, unlike the the server document '**ModusWebClient.html**' is not **UTF-8** but **UTF-16** encoded!

Please make sure when making changes to this document that you use an editor that supports both UTF-8 and UTF-16 (e.g. Notepad++).

3.4 Updating ModusOne Web Client

If a new version of the Web Client is released, the new file **ModusWebClient.xap** must be copied to the virtual directory of the **IIS** (see **Create a Virtual Directory in IIS**)

When the Web Client is launched on a client computer, it automatically checks whether a newer version is available in the virtual directory of the IIS.

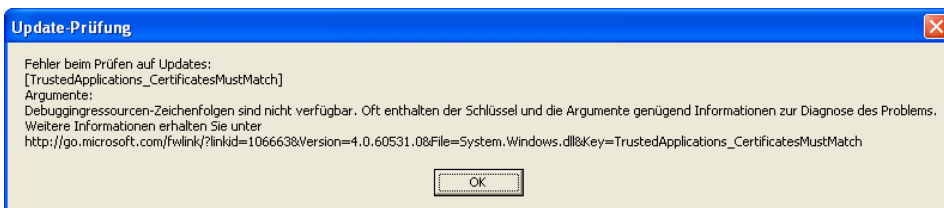
If this is the case, the newer version is transferred to the client computer and relevant information displayed.

The newer version is then installed locally the next time the ModusOne Web Client is started.

This mechanism only works for signed **.XAP** files.

Earlier release versions of the **ModusWebClient.xap** were not signed.

When attempting to install an unsigned application the message shown below is displayed and the update will fail!



In this case, the already existing older out-of-browser version must first be completely uninstalled before repeating the installation procedure again.

You can uninstall the application either by way of the control panel or via the context menu of the old application after confirming the above message box.



In the future we aim to to run the ModusOne Web Client in a browser thereby making client updates after changes on the web server obsolete.

The only requirement then will be that the expiration date of the corresponding web content be so configured in the **'http-headers'** settings in the **IIS** that no caching is allowed.

It will then no longer be necessary to take any further steps to keep the application on the client computer up to date.

The **'in-browser'** use of the ModusOne Web Client together with Microsoft Office is currently not possible.

This will only be possible with Silverlight 5 and the release of the corresponding ModusOne Web Client Silverlight 5 version with on board support for COM automation in a browser.



ModusOne