



# INFUZE IIS MODULE USER GUIDE

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# WURFL InFuze Module for IIS: User Guide

This document will help you install and configure WURFL IIS on Windows Server 2003, 2008, and 2012. WURFL IIS is an IIS ISAPI plugin that adds selected HTTP headers to every request received by IIS Server. Added headers will contain values for the WURFL Static/Virtual Capabilities selected in the configuration file related to the User Agent of the current request.

## Installing the WURFL InFuze Module for IIS

WURFL IIS is distributed as a Windows installer package for 64 bit Windows versions.

Once the package is installed, go to your Server Manager -> IIS Manager, select the site you want to add WURFL IIS to -> ISAPI Filter -> Add : Filter Name : WURFL IIS, Executable :

C:\Program Files\Scientiamobile\WURFL ISAPI\wurfl-isapi.dll **Warning:** *Since version 1.8.3.0: the installation of libwurfl for Windows 1.8.3.0 or greater is required and the default installation folder is C:\Program Files\Scientiamobile\WURFLIsapi\ libwurfl is provided in your Customer Vault/FileX*

## Configuration

Once the plugin is installed, navigate to your installation folder and edit the wurfl-conf.xml configuration file to inject the headers that your web application will need.

### Single site configuration example

Let's assume our IIS Server hosts a single website **www.mywebsite.com** The wurfl-conf.xml configuration file should contain a single <WurflIIS> section whose site attribute value is the regex matching the site FQN.

```
<WurflIISServer>
  <WurflIIS name="default" site="www\.mywebsite\.com">
    <WurflRoot>wurfl.zip</WurflRoot>
    <!-- WURFL Updater allows seamless update of WURFL engine with new data downloaded from Scientiamobile. -->
    <!-- Updater configuration must be done after <WurflRoot> -->
    <!-- Put your personal updater url taken from Scientiamobile customer Vault. -->
    <!-- WURFL Updater url file type and WurflRoot must match (.zip or .xml.gz) -->
    <!-- Valid values for the updater checking frequency (how often the updater checks for any new WURFL data file -->
    <!-- to be downloaded and used by the engine) are DAILY,WEEKLY (default value is DAILY) -->
    <!-- Updater log file (wurfl-updater-log.txt) may be found in WURFL Isapi installation folder. -->
    <!-- The folder and WURFL data file must be writable by IIS -->
    <!-- <WurflUpdater frequency='DAILY'>https://data.scientiamobile.com/xxxxx/wurfl.zip</WurflUpdater> -->
    <!-- <WurflPatch>patch.xml</WurflPatch> -->
    <!-- <WurflPatch>...</WurflPatch> -->
    <!-- <WurflPatch>...</WurflPatch> -->
```

```

<WurflUserAgentPriority>override_sideloaded_browser_user_agent</WurflUserAgentPriority>
<!-- default -->
<!-- <WurflUserAgentPriority>use_plain_user_agent</WurflUserAgentPriority> -->

<!-- WURFL Cache: one of the following-->
<WurflCache params="100000">single_lru</WurflCache>
<!-- <WurflCache>null</WurflCache> -->

<!-- By default wurfl static/virtual capability names are mapped to WURFLCAP_[upper(capability name)] http header
hence for example static capability ux_full_desktop will be mapped to HTTP header
WURFLCAP_UX_FULL_DESKTOP -->
<WurflRequestCapability>ux_full_desktop</WurflRequestCapability>
<WurflRequestCapability>is_tablet</WurflRequestCapability>
<WurflRequestCapability>is_wireless_device</WurflRequestCapability>

<!-- You may have a custom HTTP header name specified in the tag attribute "header" -->
<WurflRequestCapability header="DEVICE_OPERATING_SYSTEM">device_os</WurflRequestCapability>

<!--
<WurflRequestCapability>device_os_version</WurflRequestCapability>
<WurflRequestCapability>pointing_method</WurflRequestCapability>
<WurflRequestCapability>preferred_markup</WurflRequestCapability>
<WurflRequestCapability>resolution_height</WurflRequestCapability>
<WurflRequestCapability>resolution_width</WurflRequestCapability>
<WurflRequestCapability>xhtml_support_level</WurflRequestCapability>
<WurflRequestCapability>is_smarttv</WurflRequestCapability>
<WurflRequestCapability>can_assign_phone_number</WurflRequestCapability>
<WurflRequestCapability>brand_name</WurflRequestCapability>
<WurflRequestCapability>model_name</WurflRequestCapability>
<WurflRequestCapability>marketing_name</WurflRequestCapability>
<WurflRequestCapability>is_touchscreen</WurflRequestCapability>
-->

<!-- Urls blacklist: all urls matching the following regex will be excluded from wurfl headers injection -->
<!-- <WurflDoNotProcessUrl> -->

    <!-- Excludes all .ico files from processing-->
    <!-- <WurflUrl name="BlackList-Rule-1">.*\.ico</WurflUrl> -->

    <!-- Excludes all files in "img" folder from processing-->
    <!-- <WurflUrl name="BlackList-Rule-2">.*\img\.*</WurflUrl> -->

<!-- </WurflDoNotProcessUrl> -->

<!-- Urls whitelist: all urls matching the following regex will be injected with wurfl headers -->
    <!-- if no WurflProcessUrl section is present default action is to inject, no need for a catchall rule -->
<!-- <WurflProcessUrl> -->

    <!-- Includes all .jpg files in processing-->
    <!-- <WurflUrl name="WhiteList-Rule-2">.*\.jpg</WurflUrl> -->

<!-- </WurflProcessUrl> -->

<!-- <WurflLogHeaderInjection>true</WurflLogHeaderInjection> -->
<!-- default -->
<!-- <WurflLogHeaderInjection>false</WurflLogHeaderInjection> -->

</WurflIIS>

</WurflIISServer>

```

You can insert as many `<WurflRequestCapability>` tags as you need in your wurfl-conf.xml file, with each static capability (or virtual capability) resulting in a new HTTP header. A full list of capabilities can be found [here](#).

## Multiple sites configuration examples

Let's assume our IIS Server hosts two websites **www.firstwebsite.com** and **www.secondwebsite.com**. If we want to use different configurations for each website, the wurfl-conf.xml configuration file should contain two <WurflIIS> sections:

- one with site property value = www\.firstwebsite\.com
- one with site property value = www\.secondwebsite\.com

```
<WurflIISServer>
```

```
<WurflIIS name="first" site="www\.firstwebsite\.com">
  <WurflRoot>wurfl.zip</WurflRoot>
  .
  .
</WurflIIS>

<WurflIIS name="second" site="www\.secondwebsite\.com">
  <WurflRoot>wurfl.zip</WurflRoot>
  .
  .
</WurflIIS>
</WurflIISServer>
```

Let's assume our IIS Server hosts websites under com TLD and net TLD. If we want to use different configurations for each TLD, the wurfl-conf.xml configuration file should contain two <WurflIIS> sections:

- one with site property value = \*\\.com
- one with site property value = \*\\.net

```
<WurflIISServer>
```

```
<WurflIIS name="com" site="*\\.com">
  <WurflRoot>wurfl.zip</WurflRoot>
  .
  .
</WurflIIS>

<WurflIIS name="net" site="*\\.net">
  <WurflRoot>wurfl.zip</WurflRoot>
  .
  .
</WurflIIS>
</WurflIISServer>
```

If we want to use the same configurations for each TLD, the wurfl-conf.xml configuration file should contain only one <WurflIIS> section:

```
<WurflIISServer>
```

```
<WurflIIS name="allsites" site="*">
  <WurflRoot>wurfl.zip</WurflRoot>
  .
  .
</WurflIIS>
</WurflIISServer>
```

## Configuration Tags details

**Type:**not mandatory

**Context:**<WurflIIS>

**Type:**not mandatory

**Context:**<WurflIIS>

Tag	Description	Availability
<WurflIISServer>	Aggregates the WURFL engines configurations for local IIS Server <b>Context:</b> root <b>Type:</b> mandatory	1.7.0.1
<WurflIIS>	Contains the configuration for a subset (WURFL engine) of the web sites hosted by local IIS Server <b>Type:</b> mandatory <b>Context:</b> <WurflIISServer> <b>Attributes:</b> name: a symbolic name for the web sites managed by the nested configuration for logging purposes site: a regex representing web site URLs managed by the nested configuration. WURFL Isapi filter will check the HTTP Request against this regex to determine which WURFL engine will manage the incoming HTTP Request.	1.7.0.1
<WurflRoot>	Defines the location (path) of the WURFL data file. <b>Type:</b> mandatory <b>Context:</b> <WurflIIS> <b>Value:</b> the full path of the WURFL data file	1.6.4

Tag	Description	Availability
<p><b>&lt;WurflUpdater frequency="DAILY"&gt;</b></p>	<p>Allows seamless update of the WURFL Engine with new data downloaded from Scientiamobile. The tag &lt;WurflRoot&gt; must precede it.</p> <p><b>Type:</b>not mandatory  <b>Context:</b>&lt;WurflIIS&gt;  <b>Value::</b> the data url (taken from your personal Scientiamobile Vault account, choosing between two data file types: .zip or .xml.gz)  Take care that &lt;WurflRoot&gt; file type and &lt;WurflUpdater&gt; data url file type match so you may need to change the &lt;WurflRoot&gt; file type accordingly.  <b>Attributes:</b>frequency (how often the updater checks for any new WURFL data file to be downloaded and used by the engine) whose value you can choose between DAILY and WEEKLY (default value is DAILY)</p> <p>In order to let the Updater perform its activities both the &lt;WurflRoot&gt; folder and file must be writable by IIS.  The wurfl-updater-log.txt file in WURFL Isapi installation folder will contains details on Updater activity.</p>	<p>1.8.3</p>
<p><b>&lt;WurflPatch&gt;</b></p>	<p>Adds one or more custom patch files to the WURFL repository.</p> <p><b>Type:</b>not mandatory  <b>Context:</b>&lt;WurflIIS&gt;  <b>Value::</b> the full path of patch file</p>	<p>1.6.4</p>

Tag	Description	Availability
<WurflEngineTarget>	<p>You can choose between default, suitable for generic traffic, and fast_desktop_browser_match when you have significant amounts of desktop browser traffic compared to mobile device (this option will return generic_web_browser wurfl_id for the majority of web browsers). For performance and accuracy options, please read note about the <b>Decommissioning of engine target</b>. Note that performance and accuracy will trigger the new default behavior.</p>	1.6.4
<WurflCache params="100000">single_lru< WurflCache> or <WurflCache>null<WurflCache >	<p>In order to increase performance while processing real HTTP traffic, we suggest setting up an LRU cache. The LRU caching strategy will speed up lookup operations on processed User Agents by keeping them in an LRU map. By default the cache will be set to 30000 entries, which accounts for 7 to 10 MB of additional memory usage. Specific concerns regarding memory usage apart, users are advised to size their cache generously (100,000 or more) to increase performance. For more information, please see <a href="#">LRU Cache Mechanism</a>.</p>	1.6.4
<WurflRequestCapability>	<p>Defines one or more WURFL Static/Virtual Capabilities values to be injected in the Request as HTTP headers.  <b>Type:</b>not mandatory  <b>Context:</b>&lt;WurflIIS&gt;</p>	1.6.4

Tag	Description	Availability
<WurflUserAgentPriority>	Choose between these two options in order to decide the user agent priority to use. <code>override_sideloaded_browser_user_agent</code> tells WURFL to use the sideloaded browser user agent for device detection, while <code>use_plain_user_agent</code> tells WURFL to use the plain user agent instead. <b>Type:</b> not mandatory <b>Context:</b> <WurflIIS>	1.6.4
<WurflLogHeaderInjection>	Logs header injection activity <b>Type:</b> not mandatory <b>Context:</b> <WurflIIS> <b>Value:</b> true/false (default value is false)	1.6.4
<WurflDoNotProcessUrl>	URLs blacklist section: all URLs matching the contained regex will be excluded from wurfl headers injection. <b>Context:</b> <WurflIIS>	1.7.0.1
<WurflProcessUrl>	URLs whitelist section: all URLs matching the contained regex will be injected with wurfl headers. <b>Context:</b> <WurflIIS>	1.7.0.1
<WurflUrl>	An url to match <b>Context:</b> <WurflProcessUrl> <WurflDoNotProcessUrl> <b>Value:</b> the regex representing the url <b>Attributes:</b> name: a symbolic name for the URL, for logging purposes	1.7.0.1

### ***IMPORTANT - Decommissioning of <WurflEngineTarget> tag***

*Prior to version 1.9 of the API, users could choose between performance and accuracy engine optimization options. These options had been introduced years ago to manage the behavior of certain web browsers and their tendency to present "always different" User-Agent strings that would baffle strategies to cache similar WURFL queries in memory.*

*As the problem has been solved by browser vendors, the need to adopt this strategy has diminished and ultimately disappeared (i.e. there was no longer much to be gained with the performance mode in most circumstances) and ScientiaMobile elected to "remove" this option to simplify configuration and go in the direction of uniform API behavior in different contexts.*

*Customers who may find themselves in the unlikely situation of having to analyze significant amounts of legacy web traffic, may still enable the old high-performance internal behavior by enabling the `ENGINE_TARGET_FAST_DESKTOP_BROWSER_MATCH` option in their engine target configuration.*



*Please note that users with the old HIGH PERFORMANCE target engine will not receive an error. The old behavior will not > be triggered, though. The default target (corresponding to the old High Accuracy) will be used instead.*

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