



HOWTO - Make an XSI file accessible to RadioDNS Hybrid Radio Devices

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Summary

The XSI file is an XML file that contains meta-data describing a Service Provider and Services. This HOWTO describes how to make it publicly accessible so that RadioDNS Hybrid Radio devices can locate it and extract the meta-data from it.

If you have not yet created an XSI file, or you would like to validate an existing XSI file, look first at our HOWTO on our XSI Management Tool.

If you have not registered your radio station for RadioDNS, look first at our HOWTO on Registering Your Station for RadioDNS Hybrid Radio.

Overview

Your XSI file is a single XML file, one of the files (along with PI files) that make up the meta-data supported by Hybrid Radio Service and Programme Information.

Devices download this file over the internet, using HTTP. That means that any kind of webserver can be used to host and serve the XSI file. The file must be served from a URL constructed according to the Hybrid Radio Service and Programme Information and RadioDNS Hybrid Radio Lookup standards.

Note:

Historically, Service and Programme Information was referred to as EPG (Electronic Programme Guide), and this was the term used when the technical standards were created. References to EPG and radioepg are the historic names of what is now Service and Programme Information.

Location of the XSI File

You should identify a webserver from which you can serve the XSI.xml file. This server should be able to do the following:

- Support the HTTP 1.1 protocol
- Serve the XSI file as /radiodns/epg/XSI.xml
- Identify .xml files as MIME type text/xml or application/xml

Popular servers like Microsoft IIS, Apache HTTP Server, nginx can support these requirements.

We refer to this server as your 'EPG Server'.

Save your XSI file on the server, and make sure you can successfully load it from a browser by entering the url:

```
http://(EPG server host name)/radiodns/epg/XSI.xml
```

The server should return the XSI file, with the HTTP Status Code '200 OK' and content-type: application/xml. You can use a browser like Google Chrome in Developer Mode to check that the response code and mime type are set correctly.

Creating an DNS SRV Record for your EPG Server

So that RadioDNS Hybrid Radio compatible devices can locate your XSI file, you need to create a DNS SRV record on your FQDN (Fully Qualified Domain). Your FQDN is the domain you registered for your radio station in RadioDNS.

You need to add the DNS SRV record in this form:

		example :
srv record:	<code>_radioepg._tcp.(FQDN)</code>	<code>_radiodns.tcp.radiostation.com</code>
srv hostname:	<code>(EPG server host name)</code>	<code>epg.radiostation.com</code>
port:	<code>80</code>	<code>80</code>

Note:

You create the DNS SRV record on your FQDN, not with RadioDNS. You will need to log onto your domain management company's control panel, and either add the DNS SRV record using the tool they provide, or raise a support ticket with them to do it manually.

Verifying that the XSI can be located by devices

You can manually verify that the XSI can be successfully located by carrying out the following steps.

This example uses the 'nslookup' tool, which is provided as a command line tool in Microsoft Windows, Apple Mac OS, and Linux.

Step 1 - Do a RadioDNS lookup using your radio station's information

```
nslookup (frequency).(pi-code).(ecc).fm.radiodns.org  
-> CNAME rdns.musicradio.com
```

Step 2 - Do a DNS SRV lookup for your EPG server

```
nslookup -type=SRV _radioepg._tcp.rdns.musicradio.com  
-> host = epg.musicradio.com      80
```

Step 3 - Retrieve the XSI file

Open a browser and use the address:

```
http://epg.musicradio.com/radiodns/epg/XSI.xml
```

Your XSI file should be retrieved successfully, confirming that it is now accessible to RadioDNS Hybrid Radio compatible devices.

Troubleshooting

I am getting 404, 503 or other errors when trying to retrieve my XSI.xml file.

Check that you are using exactly the right URL. Note that the file is 'XSI.xml', not 'xsi.xml', as some webservers are case sensitive.

Check that your XSI file is saved in the same folder that your webserver is looking for documents in, and that the webserver has read access to both the folders and the XSI.xml file.

I am getting SRV RECORD NOT FOUND when trying to resolve the DNS SRV record names.

Check that you have the leading . characters in the DNS SRV record (.radioepg_tcp.radiostation.com) and that it's properly attached to your FQDN. Raise a support ticket with your domain host to check.

I'm not seeing anything on the device

Your XSI file may be corrupted or not correctly constructed. Check that your XSI file's validity by loading it into the XSI Management Tool.

I'm seeing station names and descriptions on the device, but no logos

Make sure the URLs specified in the XSI file for the logos are valid, and returning the logos as PNG or JPG images. Don't make the file sizes too large (under 50kBytes is recommended).