



HOWTO - Register your station for RadioDNS Hybrid Radio

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Summary

To create the link between your broadcast radio station and its presence on the internet, you need to register an entry in the RadioDNS DNS server.

This HOWTO explains what information you'll need to prepare for a registration, and the registration process itself.

Registration does not enable any new functionality for your radio station, it just creates the IP connection. If you want to provide new functionality, look at our HOWTOs on providing service meta-data or visuals, direct your developers to our technical documentation, or contact a third-party service supplier.

Registering your Internet Domain with RadioDNS

Registration creates the link between your existing broadcasts (on FM, DAB, DAB+ or HD Radio) and a presence on the internet through an Authoritative [Fully Qualified Domain Name](#) (Authoritative FQDN), typically something like `yourradiostation.com` or `meinradiosender.de`.

Your FQDN doesn't have to be the same as your website address. It's often a domain name that you own and control, but if you choose to use a third-party supplier to provide your RadioDNS Hybrid Radio services, then it can be a domain name that they supply.

If you want to register a number of stations, we recommend that you link all of your stations to the same Authoritative FQDN. (If you have a more complex requirement that involves providing different combinations of services on each station, contact us for an alternative FQDN strategy).

DNS SRV Records

It's important that the FQDN that you choose to use can have DNS SRV records added to it. These are additional pieces of information that provide the location of specific servers.

Your DNS hosting company (usually the people you have registered your domain with) will tell you how you can add SRV records to your existing FQDN. It may be possible through their usual domain management tools, or they may require you to raise a support ticket for it to be done manually.

It is not required, but highly recommended, to set up the Authoritative FQDN prior to contacting us. The RadioDNS DNS server will return an NX (Domain Not Found) error if your Authoritative FQDN is not correctly set up, and this NX response is cached by all intermediate name servers, which can slow down the propagation of updates.

Broadcast Parameters

You will also need the information about the parameters in broadcast radio signals. These are different for each broadcasting system, and you can register any combination that are relevant for your radio station.

FM-RDS

You must be transmitting RDS / RBDS information in your FM signal to be able to use RadioDNS Hybrid Radio.

You must transmit a PI (Programme Identifier) code, which should have been issued to you by the relevant licensing authority. It's important that your PI code is unique to your radio station in your country. If two stations are using the same code, we may have to suspend the registration, as it's not possible to tell which station is which.

You are strongly recommended to transmit the ECC (Extended Country Code) in RDS. This code uniquely identifies your country, which improves the accuracy of locating your DNS entry, particularly if you have listeners in bordering countries. If you don't transmit this, the receiver will make assumptions of which country you are in, which may be incorrect. The codes are listed in [ETSI document TS 101 756](#), section 5.4.

Your DNS entry uses a Global Country Code (GCC). The GCC is always formed by taking the

first digit of your RDS PI code, followed by the two digits of your ECC code. For instance, for the UK, PI codes begin with a “C” and the ECC code is “E1”. There GCC is therefore “CE1”.

We also need your FM frequencies. We need to create a DNS entry for each of your frequencies. If you have many frequencies, and you can prove that you are the unique user of your PI code in your country, we can register you with a wildcard (*) entry, which means you don't need to provide every frequency for your station. The frequency is written as 5 digits, so 95.8MHz becomes 09580 and 104.95 becomes 10495.

So for each FM transmission, you will need

```
frequency.pi.gcc
```

DAB / DAB+

You must transmit an SId (Service Identifier), which has been issued to you by the relevant licensing authority. It's important that your SId code is unique to your radio station in your country. If two stations are using the same code, we may have to suspend the registration, as it's not possible to tell which station is which.

The multiplex your service is carried out must be transmitting a unique EId (Ensemble ID in FIG0/0) and ECC (Extended Country Code in FIG0/9)

Finally, if you have an unusual configuration, you may have a Service Component ID (SCIDs) which is different from the default of 0, in which case, you should let us know.

So for each DAB transmission, you will need

```
scids.sid.eid.ecc
```

HD Radio

Your HD Radio signal must be transmitting a CC (Country Identifier, usually “292” for the USA) and ID (FCC Facility Identifier in hexadecimal format, padded with leading “0”s to make a 5 digit hexadecimal number).

If you are transmitting a service as a HD multi-cast channel (e.g HD-2, HD-3 etc), you'll need this as well, as MC (Multicast)

So for each HD transmission, you will need

```
[mc.]id.cc
```

Creating Your DNS .zone file (Optional)

If you wish, you can send us your registration requests in a .zone file. You can download a sample .zone file from [here](#).

Example

:

Capital Radio in London (owned by Global Radio), which broadcasts on FM and DAB, would have two lines

```
0.c586.c181.ce1.dab IN CNAME rdns.musicradio.com.  
09580.c586.ce1.fm IN CNAME rdns.musicradio.com.
```

The first line describes the DAB details (service component id, service id, ensemble id, country code), and the following describes FM radio (frequency, RDS PI code, GCC code). They are all linked to `rdns.musicradio.com.`

Note:

The Authoritative FQDN must end with a full stop . character.

Your file should be named with your fqdn and the suffix .zone (e.g. `rdns.musicradio.com.zone`).

Registration Process

Our registration process is designed to be trustworthy and prevent errors in the DNS. We check the registration requests we are sent, and RadioDNS has a trust process which we follow.

To speed up processing:

- Please send your email from the same Authoritative FQDN you are linking to. For instance, if you want to link your station to `myradiostation.com`, please send the email `fromperson@myradiostation.com`
- If you are a third party requesting entries for a station, please copy in the technical

manager at the station by email, so we can verify with them directly

Please email your request to registrations@radiodns.org, including

- Your SI file as an attachment

OR

- Your .zone file as an attachment

AND

- Your name and telephone contact number
- The registered name of the radio station(s)
- The name of the authority that issued the broadcast licence(s)

We will acknowledge the change request via email, within 48 working hours.

New and changed entries take up to 24 hours to propagate through the Domain Name Service.