## **DNS24 Dynamic DNS**

DNS24

This document describes the dynamic DNS functionality at DNS24 and how to use it.

# Service levels

There are three dynamic DNS service levels at DNS24:

- a) none
- b) basic
- c) full

By default, when you first register with DNS24, your dynamic DNS service level is set to "none". The basic service level is free for everyone, the full service level is available for a small annual fee. The service level may be changed within the DNS24 admin interface.

## Service level "Basic"

With the basic service level, you may use your own domain or "dyndns24.ch". You get up to two hostnames on dyndns24.ch or "your.domain", for instance "delia.dyndns24.ch", "texas.dyndns24.ch" or "berlin.your.domain". The hostnames for "dyndns24.ch" are available on a first-come, first-serve basis and must be reserved via the admin interface.

## Service level "Full"

The full service level includes the above, plus you get an unlimited number of hostnames at "dyndns24.ch" and support for MX records.

## Step by step

This is an outline of how to get dynamic DNS working:

- 1. register your account with DNS24 (you have presumably already done this).
- 2. Logon on to DNS24 and click "My dynDNS" to enable service level "Basic".
- 3. Optionally configure your domain as you normally would and enable it for dynamic DNS.
- 4. Go to "My dynDNS" to add one or two hostnames.
- 5. Set up your modem or router, alternatively another device, to access the DNS24 dynamic URL when the IP-address changes.

#### Howto

As you are probably aware, when the IP-address on your internet connection changes, you need to inform us of the change. This is done by invoking the

following URL with http or https:

```
http://userid:password@dyn.dns24.ch/update?
hostname=hostname&type=type&data=data
```

Userid and password are those of your DNS24 account. Optimally, only call the update URL when your IP address changes, but if you are unable to determine that, we suggest you simply do an update every 5 minutes.

URL part	Description
hostname	The fully-qualified name you wish to change. For instance: "hostname=texas.dyndns24.ch". If you are using an IDN, e.g. "paris.dömain.ñame", you may enter it in UTF8 or in ASCII (puny-code). If you use UTF8, make sure your URL is appropriately encoded. For instance, the correct encoding for "paris.dömain.ñame" is "paris.d%C3%B6main.%C3%B1ame".
type	$\begin{array}{llllllllllllllllllllllllllllllllllll$
data	For types A and AAAA, this is the IPv4 respectively the IPv6 address of your internet connection. For types MX0 and MX1, this is a hostname or an address. Special values: "delete" = "delete this record" and "client" = "the IP address this request came from". For type TXT, data is a string of characters, maximum length 255. Valid content are all printable ASCII characters except single-quote (') and double-qoute (").

#### **Client software**

We don't currently provide any client software. Generally speaking, the dynamic DNS URL is easily invoked with either "wget" or "curl" or the equivalent tools on Windows/MacOS/Android etc. These platforms of have a wide selection of open source or freeware client tools available. Your router or modem may also have built-in support for using dynamic DNS, where you only need to fill in a template for the URL. Some devices appear to have a hardcoded service name though.

Don't forget appropriate escaping, %-encoding and/or quoting when invoking wget or curl from the command-line.

#### **HTTP or HTTPS?**

Updates over http:// use "Apache Digest authentication" where your password is never sent in cleartext. Updates over https:// use "Apache Basic authentication" and your userid and password are sent in cleartext but encrypted.

There is no functional difference between the two; which one you should chose depends on your modem or router.

#### Update timing

All dynamic DNS24 records are published with TTL/cachetime of 60 seconds. Also, dynamic updates are batched and published every 60 seconds.