

Author	Ilia Kebets
Reviewer	Thiébaud Modoux
Date	12.04.2019
Version	1

Pryv.io DNS

Configuration

Summary

This document describes how to add entries in your Pryv.io associated domain DNS zone.

Usage

You read this if you wish to do one of the following with the Pryv.io associated domain:

- Define hostnames or aliases in the domain such as $my_service.$ \${DOMAIN}, as it is done for the pryv.me Register: reg.pryv.me
- Send emails from some-name.\${DOMAIN}, such as noreply@pryv.me
- Perform a DNS validation for a SSL certificate

Technically, this document describes how to set DNS records of type:

- A
- CNAME
- TXT
- SPF
- MX

File location

The configuration file can be found in the provided templates in the DNS directory.

For cluster configurations, it is:

- -reg-master/dns/conf/dns.json
- -reg-slave/dns/conf/dns.json



For single-node configuration, it is:

-pryv/dns/conf/dns.json

File organization

The DNS configuration uses the JSON format with all customizable properties located under the dns property:

```
{
   "dns": {
        ...
        "staticDataInDomain": {
            "sw": {
                "ip": "123.123.123"
            },
        ...
        }
    }
}
```

As JSON is not error-resilient, make sure that you do not leave formatting errors during editing, otherwise the DNS server will not boot. In this case, you will see the error in its logs.

Key format

All DNS lookups are made in **lower case**, so make sure that the keys that you define for A, CNAME and TXT records are set in lower case.

This requires to manually lower casing keys such as the ones provided for DNS validation.

A Record

Root

You can also define TYPE A record for your root domain \${DOMAIN}, such as <u>pryv.me</u>. This entry is defined at the root of the **dns** property.

```
{
    "dns": {
        ...
    "domain_A": "123.123.123"
    }
}
```



CNAME Record

TXT Record

```
{
  "dns": {
    ...
    "staticDataInDomain": {
        ...
        "_acme-challenge": {
            "description": "GqNjduntomatYhVa2k0ejrFMxcxIHcAwwlxRMp7US3A"
        }
    }
}
```

Root

TBD

SPF Record

TBD

MX Record

MX records are located directly under the dns property. They use the following strucutre:

```
{
  "dns": {
    ...
  "mail": [
        "name": "${SMTP_SERVER_HOSTNAME}",
        "ip": "${OPTIONAL_IP_ADDRESS}",
        "ttl": ${TTL_NUMBER},
        "priority": ${PRIORITY_NUMBER}
]
```



```
}
}
```

This will create a MX entry as:

```
${DOMAIN}. ${TTL_NUMBER} IN MX ${PRIORITY_NUMBER} ${SMTP_SERVER_HOSTNAME}.
```