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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 such as:

```
{
  "dns": {
    ...
    "staticDataInDomain": {
      "sw": {
        "ip": "123.123.123.123"
      },
      ...
    }
  }
}
```

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

```
{
  "dns": {
    ...
    "staticDataInDomain": {
      ...
      "sw": {
        "ip": "123.123.123.123"
      }
    }
  }
}
```

Root

You can also define TYPE A record for your root domain `$(DOMAIN)`, such as pryv.me. This entry is defined at the root of the `dns` property.

```
{
  "dns": {
    ...
    "domain_A": "123.123.123.123"
  }
}
```

```
}
```

CNAME Record

```
{
  "dns": {
    ...
    "staticDataInDomain": {
      ...
      "www": {
        "alias": {
          "name": "my-site.my-domain.com"
        }
      }
    }
  }
}
```

TXT Record

```
{
  "dns": {
    ...
    "staticDataInDomain": {
      ...
      "${TXT_RECORD_SUBDOMAIN}": {
        "description": [
          "${TXT_RECORD_VALUE_1}",
          "${TXT_RECORD_VALUE_2}"
        ]
      }
    }
  }
}
```

old format:

```
{
  "dns": {
    ...
    "staticDataInDomain": {
      ...
      "${TXT_RECORD_SUBDOMAIN}": {
        "description": "${TXT_RECORD_VALUE}"
      }
    }
  }
}
```

Root

In order to set a TXT record at the root of the domain, define a `rootTXT` field under `dns` as following:

```
{
  "dns": {
    ...
    "rootTXT": {
      "description": [
        "${TXT_RECORD_VALUE_1}",
        "${TXT_RECORD_VALUE_2}",
      ]
    }
  }
}
```

SPF Record

SPF records are simply TXT records located at the root of the domain. They are defined as following:

```
{
  "dns": {
    ...
    "rootTXT": {
      "description": [
        "${SPF_RECORD}"
      ]
    }
  }
}
```

MX Record

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

```
{
  "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}.
```