

DNS Service

The Rapid Access Cloud provides a DNS service for users to host zones (domains) of their own along with creating some automatic records.

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Automated Records

Within the Edmonton and Calgary regions, AAAA (IPv6) and PTR (reverse DNS) records are created automatically with the format [id.region.cybera.ca](#) (e.g. [abcd.yyc.cybera.ca](#)) This generated domain name is added as metadata to your instance which you can view on an instance's details page on the dashboard or by using

```
openstack server show
```

or

```
nova list --fields name,metadata
```

When a floating IP address is assigned to an instance, an A record is created with the automated name for your instance, as well as a PTR record as well.

Custom PTR Records

If you wish your PTR record for your IPv6 address OR your floating IPv4 address changed, please contact rac-admin@cybera.ca for an administrator to make the change.

Hosting Your Own Zone (Domain)

If you have registered a domain name you can use the Rapid Access Cloud to host a zone (full domain or sub-domain) To delegate the Rapid Access Cloud as authoritative for your zone you will need to tell your registrar to use our name servers. If it's a sub-domain you can set NS records on the parent domain to delegate control to our servers. Where this is done will depend on your registrar's DNS configuration page, or DNS policies.

Name Server 1: [ns-yye.cloud.cybera.ca](#)

Name Server 2: [ns-yeg.cloud.cybera.ca](#)

Sample Bind Config:

```
yeg.cybera.ca. NS ns-yeg.cloud.cybera.ca
yeg.cybera.ca. NS ns-yye.cloud.cybera.ca
```

Once the zone has been delegated to the Rapid Access Cloud, you can create the zone using the dashboard or via the command line utilities (don't forget the trailing dot when specifying a zone):

```
openstack zone create sampledomain.cybera.ca. --email rac-admin@cybera.ca
openstack zone list
```

Within a few minutes, or as long as 48 hours (depending on how fast your DNS delegation propagates) you can then test that the records are returning correctly:

```
dig -t NS sampledomain.cybera.ca
```

This should return the two name servers mentioned above. (ns-yeg.cloud.cybera.ca and ns-yye.cloud.cybera.ca)

Creation, Updating, and Deleting Records

To create a record (for example, [test.sampledomain.cybera.ca](#)) using the command line tools:

AAAA record:

```
openstack recordset create --records "2605:fd00:4:1000:abcd:ef12:3456:7890" --type AAAA --description "IPv6 AAAA Record" sampledomain.cybera.ca. test
```

A record:

```
openstack recordset create --records "127.0.0.1" --type A --description "IPv4 A Record" sampledomain.cybera.ca. test
```

MX record for your domain:

(Please note the different format than other records - priority and then name)

```
openstack recordset create --records "10 mail.sampledomain.cybera.ca." "20 mail2.sampledomain.cybera.ca." --type MX --description "IPv4 MX Record" sampledomain.cybera.ca. sampledomain.cybera.ca.
```

To update a record:

```
openstack recordset set --records "2605:fd00:4:1000:aaaa:bbbb:cccc:dddd" --description "IPv6 AAAA Record" sampledomain.cybera.ca. test.sampledomain.cybera.ca
```

If multiple records exist using the same record name, you will need to use the ID of the record instead, similar to what is required for other OpenStack services:

```
openstack recordset set --records "2605:fd00:4:1000:aaaa:bbbb:cccc:dddd" --description "IPv6 AAAA Record" sampledomain.cybera.ca. 2eee8889-ae7b-4271-8c39-abce5d2144ec
```

To delete a record:

```
openstack recordset delete sampledomain.cybera.ca. test.sampledomain.cybera.ca
```

If multiple records exist using the same record name, you will need to use the ID of the record instead, similar to what is required for other OpenStack services:

```
openstack recordset delete sampledomain.cybera.ca. 2eee8889-ae7b-4271-8c39-abce5d2144ec
```

Common Issues

The most common issue seen when using the new automated names occurs when a service is running on the instance but not listening on IPv6 when the user has IPv6 access. As IPv6 is the default path used when available it's important to ensure that your security groups and services on your instance can handle IPv6 traffic. See the Security Groups section in the Basic Guide for more information.

Limitations

At present each user is limited to 2 domains (zones), and up to 500 records within each zone. If you require more than that, please don't hesitate to reach out to rac-admin@cybera.ca to adjust your quota.