



# **OpenSRS Email Service DNS Configuration Guide**

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# DNS Configuration

All domains, including any domain alias created via the Mail Administration Center (MAC) or Account Provisioning Protocol (APP), require proper DNS configuration, as per the examples below, in order to send or receive mail.

Domain Name System (DNS) is an Internet protocol and distributed database that maps domain names and hostnames to the appropriate IP addresses. When an Internet application sends a request to access your domain, DNS translates the domain name, which is usually alphabetic, into its corresponding IP address, which is numeric.

In order to transition to the OpenSRS Email Service, including filter-only mailboxes, you must first meet these requirements:

- You must register your domain name with an official registrar. For information about domain names in general, registering a domain name, or domain name availability, visit <http://www.domaindirect.com/> or the registrar of your choice.
- You must have access to a DNS server. If you do not have a DNS server, a registrar such as Domain Direct ([www.domaindirect.com](http://www.domaindirect.com)) or an Internet Service Provider (ISP) may host your domain on their DNS servers. However, not all registrars host MX or CNAME records, which are required for email services. See "Types of DNS records" below.

Once these requirements are met, you can configure your DNS records to point to the OpenSRS servers. See "Example Mail DNS configurations".

**Note:** Do not make any DNS changes until the domains and mailboxes are set up on the OpenSRS Email Service system.

## Types of DNS records

There are many types of records that the DNS system maintains. The important record types for the OpenSRS Email Service are MX and CNAME records.

### Domain Aliases

Any domain alias created for an existing domain requires you to set its MX and CNAME records to point to

### Email Exchange (MX) records

The Email Exchange (MX) record is the line within the DNS zone file that directs email for a specific domain to the appropriate email server. It tells the rest of the world where a mailbox is located.

**Zone file**—A file on a root server that contains domain name registration information. Zone files contain information that is needed to resolve domain names to IP addresses and also contain all the information related to one domain. Zone files are also called master files.

**MX**—Short for mail exchange record, an entry in a domain name database that identifies the mail server that is responsible for handling emails for that domain.

When more than one MX record is entered for any single domain name that is using more than one mail server, the MX record can be prioritized with a preference number that indicates the order in which the mail servers should be used. This enables the use of primary and backup mail servers.

## Canonical Name (CNAME) records

A Canonical Name (CNAME) record is a record in a DNS database that indicates the true or canonical host name of a computer. A computer hosting a Web site must have an IP address in order to be connected to the World Wide Web. The DNS resolves the computer' domain name to its IP address, but sometimes more than one domain name resolves to the same IP address, and this is where the CNAME is useful. A machine can have an unlimited number of CNAME aliases, but a separate CNAME record must be in the database for each alias.

OpenSRS uses CNAME records to identify the OpenSRS POP, IMAP, and SMTP server. It allows users to access email at <yourdomain>.com instead of <yourdomain>.cust.<cluster>.hostedemail.com, which is the active domain on the OpenSRS system.

**Note:** Do not use A records or IP addresses in place of CNAME hostnames. If an A record is used to identify the OpenSRS email server, email service will be disrupted if OpenSRS changes the IP address.

## Example Mail DNS configurations

OpenSRS Email Service's IP addresses include clusters represented by the variable <cluster> in the following examples.

Omission of the cluster from a DNS record will cause the default cluster, A, to be used.

Currently, OpenSRS Email employs two clusters: A and B.

**Note:** If you do not know what cluster you are on, contact your Account Manager.

Examples are provided for DNS configuration in both the Test and Live environments.

### Test

There is only one test environment.

You can use this simple example to configure the required DNS records for your domain within the Test environment.

The example domain used is example.org. Replace example.org with <your\_domain.tld>.

```
mail.example.org.    IN CNAME
    mail.example.org.cust.test.hostedemail.com.
example.org.        IN MX 0
    mx.example.org.cust.test.hostedemail.com.
```

In this example,

- Web-based email is at <http://mail.example.org/>,
- the POP/IMAP/SMTP server is [mail.example.org](mailto:mail.example.org), and
- the Email Exchange is at [example.org](mailto:example.org).

## Live

You can use this simple example to configure the required DNS records for your domain within the Live environment.

The example domain used is [example.org](mailto:example.org). Replace [example.org](mailto:example.org) with *<your\_domain.tld>*.

```
mail.example.org.      IN CNAME
    mail.example.org.cust.<cluster>.hostedemail.com.
example.org.          IN MX 0
    mx.example.org.cust.<cluster>.hostedemail.com.
```

In this example,

- Web-based email is at <http://mail.example.org/>,
- the POP/IMAP/SMTP server is [mail.example.org](mailto:mail.example.org), and
- the Email Exchange is at [example.org](mailto:example.org).

## Example Filter-only DNS configurations

Examples are provided for DNS configuration in both the Test and Live environments.

### Test

There is only one test environment.

You can use this simple example to configure the required DNS records for your domain within the Test environment.

The example domain used is [example.org](mailto:example.org). Replace [example.org](mailto:example.org) with *<your\_domain.tld>*.

```
spam.example.org.     IN CNAME
    mail.example.org.cust.test.hostedemail.com.
example.org.          IN MX 0
    mx.example.org.cust.test.hostedemail.com.
```

In this example,

- Web-based spam quarantine is at <http://spam.example.org/>,
- the IMAP server is [spam.example.org](mailto:spam.example.org), and
- the Email Exchange is at [example.org](mailto:example.org).

**Note:** [spam](mailto:spam), [portal](mailto:portal) and [spamportal](mailto:spamportal) are all acceptable prefix components to your domain name.

## Live

You can use this simple example to configure the required DNS records for your domain within the Live environment.

The example domain used is example.org. Replace example.org with <your\_domain.tld>.

```
portal.example.org.          IN CNAME
    mail.example.org.cust.<cluster>.hostedemail.com.
example.org.                 IN MX 0
    mx.example.org.cust.<cluster>.hostedemail.com.
```

In this example,

- Web-based spam quarantine is at <http://portal.example.org/>,
- the IMAP server is portal.example.org, and
- the Email Exchange is at example.org.

**Note:** spam, portal and spamportal are all acceptable prefix components to your domain name.

## Example WAP DNS configurations

Examples are provided for DNS configuration in both the Test and Live environments.

### Test

There is only one test environment.

You can use this simple example to configure the required DNS records for your domain within the Test environment.

The example domain used is example.org. Replace example.org with <your\_domain.tld>.

```
wap.example.org.           IN CNAME
    wap.example.org.cust.test.hostedemail.com.
example.org.               IN MX 0
    mx.example.org.cust.test.hostedemail.com.
```

In this example,

- Web-based email is at <http://wap.example.org/>,
- the POP/IMAP/SMTP server is wap.example.org, and
- the Email Exchange is at example.org.

## Live

You can use this simple example to configure the required DNS records for your domain within the Live environment.

The example domain used is example.org. Replace example.org with <your\_domain.tld>.

```
wap.example.org.          IN CNAME
    wap.example.org.cust.<cluster>.hostedemail.com.
example.org.              IN MX 0
    mx.example.org.cust.<cluster>.hostedemail.com.
```

In this example,

- Web-based email is at <http://wap.example.org/>,
- the POP/IMAP/SMTP server is wap.example.org, and
- the Email Exchange is at example.org.

## White Listing OpenSRS Email Service

If you want to ensure that filtered mail reaches your users, include our IPs from which we send the filtered mail in your white list.

As of September 19, 2008, the filtering IPs are:

<b>Cluster A</b>	216.40.44.0/24
	216.40.42.17/32
<b>Cluster B</b>	64.98.42.0/24
	64.98.36.17
<b>Test</b>	216.40.41.5/32
	216.40.41.17/32

Please check with OpenSRS Support if you need to trouble shoot or verify this information.

# Revisions and Updates

## September 18, 2008

- Expanded "White Listing OpenSRS Email Service" to include cluster B and Test environment.

## July 25, 2008

- Reissued under OpenSRS without change.

## May 20, 2008

- DNS examples for all test environments have been revised to remove the *<cluster>* reference.
- There is only one test environment and it does not require cluster identification.

## May 02, 2008

- Published without change.

## April 30, 2008

- 216.40.42.17/32 added to "White Listing OpenSRS Email Service"
- Cluster information added

## April 2, 2008

- WAP example added

## February 14, 2008

- Revision notes added
- Added " White Listing OpenSRS Email Service"