

# Configuring Ensim Pro for Linux with Local Name Servers

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## Introduction

This document provides instructions for configuring Ensim Pro for Linux with local name servers.

To perform the domain name and IP address translations efficiently, DNS has a distributed architecture composed of many hierarchical DNS name servers. Each DNS name server is responsible for both nametoIPaddress translations (called forward lookups) and IPaddressstone translations (called reverse lookups). Each DNS name server manages the lookups for domain name spaces. In DNS, these domain name spaces are referred to as zones. The term zone is used to denote information, such as host records, about a domain.

To make a domain or zone accessible to the Internet, the domain name and IP address need to be registered with at least two DNS name servers: a Master DNS server and a Slave DNS server (or backup name server). You can use the Ensim Pro server or any External server as a master, slave or forward name server.

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## Definitions

This section describes the terms used in this document.

### Local-Box

Local box is the server where the user installs Ensim Pro for Linux, that is, hostname of the Ensim Pro for Linux server.

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## Local-Nameservers

Local nameservers are the name servers, which the user adds to the EPL server, in addition to the LocalBox hostname (such as ns1.domain.com, ns2.domain.com), which is to be used as Master/Slave server, while adding sites/plans/zones. Name servers can be added using the following command:

```
/usr/lib/opcenter/bind/add_local_nameserver <server name>
```

Name servers can be removed using the following command:

```
/usr/lib/opcenter/bind/delete_local_nameserver <server name>
```

The above commands updates /etc/virtualhosting/localnameservers file on the Ensim Pro server.

## External Server

External Server is the server, which is not a part of the EPL server, that is, external DNS server (such as DNS of a different physical server). When you add an external server, Ensim Pro updates the configuration file /etc/virtualhosting/masterconf on the Ensim Pro server with the following information about adds external server. This information is used by Ensim Pro to communicate with the external server as Master/Slave Server.

- FQDN of External Server. For example, ns1.isp.net
- IP address of External server. For example, 65.65.65.65
- The key name of the transaction signature that authenticates zone transfers for the external server. For example, rndc\_key
- The secret value of the transaction signature that authenticates zone transfers for the external server. For example, IC6GU6asxPceF72LjQTfUQ==

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### Note:

- a BIND name servers are configured to secure the zone updates using a transaction signature (TSIG) that uses a key/secret value pair. If your external server is running BIND, "Key Name and Secret value" are in /etc/rndc.conf
- b If your external server is running Ensim Pro, the key name you need to enter is "wp\_default\_key." (the dot is part of the key name). The secret corresponding to that key can be obtained from the SOA Settings page on the ISP UI of the Ensim control panel.
- c If your external name server is running another implementation of DNS, such as Microsoft DNS, which does not support the TSIG method of protecting zone updates. Then this external server must be configured to allow zone updates from your Ensim Pro server, otherwise, the Ensim Pro server will not be able to add records to any zone, that exists on the external name server.

## Master- Server

Master Server is an independent DNS server, which holds the master database of zones and can resolve DNS queries directly.

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## Slave - Server

Slave Server is a DNS server which is dependent on master server, on which zone database gets updated from master server, and can resolve DNS queries.

## Forward-Server

Forward Server is a DNS server, which is neither a master nor a slave server. It is completely dependent on master and slave server, and can not resolve the DNS queries directly. This type of DNS server redirects the DNS queries to Master/Slave DNS server.

# Using Local-Nameservers with Ensim Pro for Linux

## Configuring Ensim Pro for Linux as Master Server

This section describes the steps for configuring Ensim Pro for Linux as Master Server:

- 1 Add your name servers as Local-Nameservers using `'/usr/lib/opcenter/bind/add_local_nameserver <server name>'` which will create following file `'/etc/virtualhosting/localnameserver'`.
- 2 Use Local-Nameservers entry for both master and slave server fields while adding sites/plans/zones, else,
- 3 Make Local-Nameservers permanent, by making their entries as Master in DEFAULT PLAN before adding new sites.
- 4 After site addition you should see the Zone Configuration in SOA section as "Type Master".
- 5 After site addition you should see the created zone/s of newly added sites as "Master" in Zone type.

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### Note:

- Slave Servers are not mandatory, if the Local-Box is the Master Server.
- Slave will get notified, each time there is a change in the zone records of the master server.
- You can notify all the Slaves by clicking "Refresh" action of a master zone.(rndc refresh)

## Configuring Ensim Pro for Linux as Slave Server

This section describes the steps for configuring Ensim Pro for Linux as Slave Server:

- 1 Add External Server first before mentioning external DNS server as Master Server.
- 2 Make sure External Server and Local-Box time is in sync
- 3 Make sure External Server has correct entries about Slave Site Zone/s(Ensim Pro for Linux zones) in its DNS (that is in named.conf and zone records), before adding the site/s.
- 4 Use External Server entry for master server field, while adding sites/plans/zones.

- 5 Use Local-Nameservers/LocalBox entry for slave server field while adding sites/plans/zones, else,
- 6 Make Local-Nameservers/LocalBox permanent, by making their entries as Slave in DEFAULT PLAN before adding new sites.
- 7 After site addition, you should see the Zone Configuration in SOA section as "Type Slave" for newly added sites with IP address of master server.
- 8 After site addition, you should see the created zone/s of newly added sites as "Slave" in Zone type.
- 9 You can Add/Edit/Delete records of an existing Slave zone from Ensim Pro for Linux server and these changes will get transferred to a External master server (rndc transfer).
- 10 If there are changes in zone/s of the External master server, you should see the updated records in the respective zone/s of Slave Ensim Pro for Linux server.
- 11 If there are changes in zone/s of the External master server, you can update records on Slave zone of the Ensim Pro for Linux Server by doing the "Refresh" action for a particulate slave zone.

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**Note:** Service Provider/Reseller should see the notification sent by Master Server in `"/var/log/message"`, each time there is a change in zones of the master.

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## Configuring Ensim Pro for Linux as Forward Server

This section describes the steps for configuring Ensim Pro for Linux as Master Server:

- 1 Add External Server first before mentioning external DNS server as Master Server.
- 2 Make sure External Server and Local-Box time is in sync.
- 3 Make sure External Server has proper entries about Slave Site Zone/s(Ensim Pro for Linux zones) in its DNS(ie; in named.conf and zone records) before adding the site/s.
- 4 Use External Server entry for master and slave server (both the fields) while adding sites/plans/zones, else,
- 5 Make External Server permanent, by making their entries as Master and Slave in DEFAULT PLAN before adding new sites.
- 6 You should see the Zone Configuration in SOA section as "Type Forward" for newly added sites with IP address of Forwarder Servers.
- 7 After site addition, You should see the created zone/s of newly added sites as "Forward" in Zone type.
- 8 You can Add/Edit/Delete records of an existing Forward zone from Ensim Pro for Linux server, and these changes will get transferred to a External master server.(rndc transfer).
- 9 If there are changes in zone/s of the External master server, you should see the updated records in the respective zone/s of Forward Ensim Pro for Linux server.
- 10 If there are changes in zone/s of the External master server, you can update records on Forward zone of Ensim Pro for Linux Server by doing the "Refresh" action for a particulate slave zone.

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## Support and feedback

For Ensim online support or feedback, use the following links:

- <http://support.ensim.com> to create an Ensim Support account and access other documentation.
- <https://onlinesupport.ensim.com> to log in to Ensim Support using an existing account
- [http://onlinesupport.ensim.com/kb\\_search.asp?product=lwp](http://onlinesupport.ensim.com/kb_search.asp?product=lwp) to search the knowledge base
- <http://www.ensim.com/about/feedback.asp> to provide feedback to Ensim

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**Note:** All customers receive passwords that allow access to the Ensim Support site. If you do not have a password, contact your organization's liaison to Ensim.

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