Zimbra™ Collaboration Suite
Multi-Server Installation Guide

Open Source 3.0 Beta2 Draft
November 2005

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Building Better Products within the Open Source Community

Zimbra Collaboration Suite leverages many great technologies from the open source community: MySQL, OpenLDAP, Postfix, SpamAssassin, and Apache. Zimbra believes that great products come from contributing to and leveraging open source technologies. We are thankful for the great contributions that led to the creation of MySQL, OpenLDAP, Postfix, SpamAssassin, and Apache software.

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Table of Content

Introduction

Information in this guide is intended for persons responsible for installing the Zimbra Collaboration Suite. This guide will help you plan and perform all installation procedures necessary to deploy a fully functioning email system based on Zimbra's messaging technology.

Audience

This installation guide assumes you have a thorough understanding of Red Hat® Enterprise Linux® system administration concepts and tasks and are familiar with email communication standards, security concepts, directory services, and database management.

For More Information

Zimbra documentation, including a readme text file, release notes, the administration guide, and other Zimbra guides are copied to the servers during the installation. They are also available from www.zimbra.com and from the administration console.

- **Administrator's Guide**. This guide describes product architecture, server functionality, administration tasks, configuration options, and backup and restore procedures. The guide is available in pdf format from the administrator's console.
- **Administrator Help**. The administrator Help provides instructions about how to add and maintain your servers, domains, and user accounts from the admin console.
- **Web Client Help**. The Web Client Help provides instructions about how to use the Zimbra Web Client features.
- **Migration Wizard Guide**. This guide describes how to migrate Microsoft® Exchange users to the Zimbra Collaboration Suite.

Support and Contact Information

We appreciate your feedback and suggestions. Visit **www.zimbra.com** to join the community and to be a part of building the best open source messaging solution.

- Click **Feedback** to send us an email. Let us know what at you like about the product, and what you would like to see in the product.
- Join the Zimbra Community Forum, to participate and learn more about the Zimbra Collaboration Suite.

Chapter 1 Multi-Server Installation Prerequisites

for Red Hat Enterprise Linux 4 OS and Fedora Core 3 OS

In order to successfully install and run Zimbra Collaboration Suite, ensure your system meets the requirements described in this section.

System administrators should be familiar with installing and managing the Red Hat® Enterprise, Linux® operating system.

System Requirements

	Requirements
Servers	**Testing purposes only** • Intel/AMD CPU • 512 MB RAM • 3 GB free disk space for software • Additional disk space for mail storage Zimbra live environment Minimum server requirements • Intel/AMD CPU 1.5 GHz • 1 GB RAM • 5 GB free disk space for software and logs • Additional disk space for mail storage **Recommended server requirements** • Intel/AMD CPU 2.0GHZ+ • 2 GB RAM • 10 GB free disk space for software and logs (SATA or SCSI for performance, RAID/Mirroring for redundancy) • Additional disk space for mail storage

Operating System	Either • Red Hat Enterprise Linux, Version 4, Update 2 or • Fedora Core 3 The operating system must be configured as described in this guide. See the appropriate section in this guide.
Other Applications	The servers must also have the following installed: • **libidn**. For internationalizing domain names in applications (IDNA) • **cURL**. A command line tool for transferring files with URL syntax • **fetchmail.** A remote-mail retrieval and forwarding utility used for on-demand TCIP/IP links • **GMP**. GNU Multiple-Precision Library. • **compat-libstdcc++-33**. Compatibility Standard C++ libraries.
Miscellaneous	• SSH client software. • Access to DNS server • Computer with either of these browsers to run the administration console. •Mozilla Firefox 1.0 •Internet Explorer 6.0 or later browser

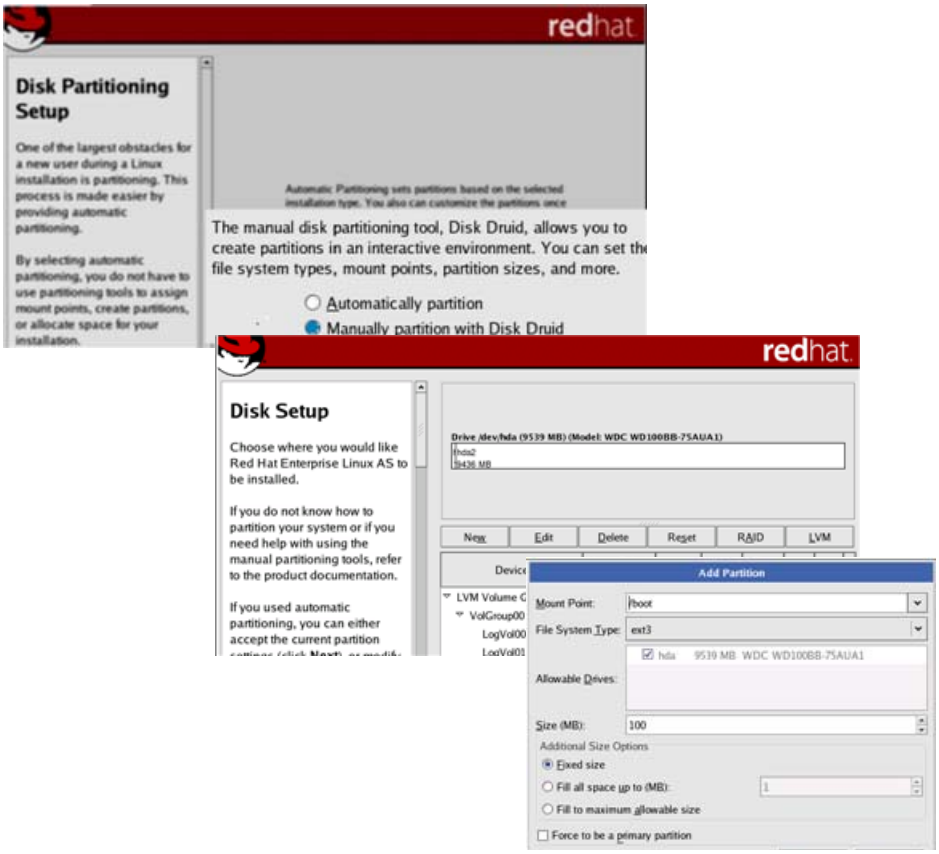
Client computer	Minimum • Intel/AMD/Power PC CPU 1.0GHz • 512MB RAM • Firefox 1.0 or Internet Explorer 6.0 or later • Operating system - Microsoft Windows 2000 or Windows XP, Linux, Mac OS, Recommended • Intel/AMD/Power PC CPU 1.5GHz • 512MB RAM • Firefox 1.0 or Internet Explorer 6.0 or later • OS - Microsoft Windows 2000 or Windows XP, Linux, Mac OS

Installation Modifications for Red Hat Enterprise Linux

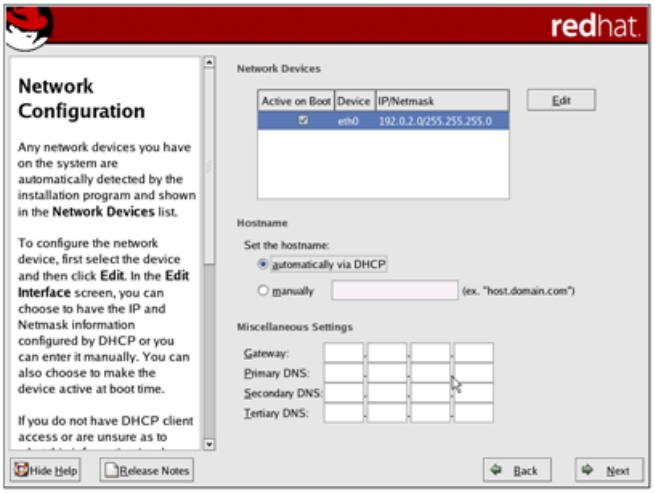
The Zimbra Collaboration Suite runs on the Red Hat Enterprise Linux, 4, Update 2 operating system. When you install the Red Hat software for the Zimbra Collaboration Suite, you should accept the default setup answers to install the minimum configuration, except the following steps must be modified.

Refer to the Red Hat Enterprise Linux installation guide for detailed documentation about installing their software.

- **Disk Partitioning Setup**. Check **Manually partition with DiskDruid**. The disk partition should be set up as follows:
  - The **Mount Point/RAID Volume** size for the /**boot** partition should be 100 MB.
  - The **Swap** partition should be set to twice the size of the RAM on your machine.
  - The **Root** partition (/) should be set with the remaining disk space size.

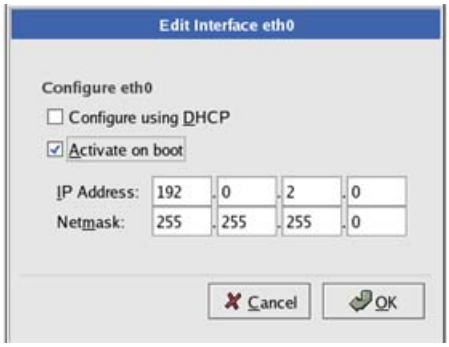


- **Network Configuration>Network Devices>Hostname** should be configured manually with the hostname [*mailhost.example.com]* of the Zimbra server.

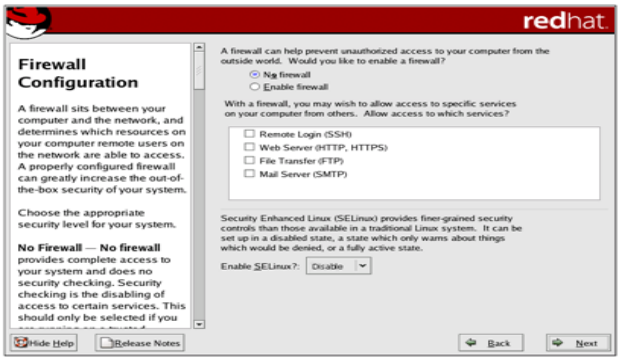


- Enter the **Gateway** and **Primary** DNS addresses.

- In the **Edit Interface** pop-up screen, check **Activate on Boot**. Enter the **IP Address** and **Netmask** of the device. This allows the interface to start when you boot.



- **Firewall Configuration** should be set to **No firewall**, and the **Security Enhanced Linux** (SELinux) should be disabled.



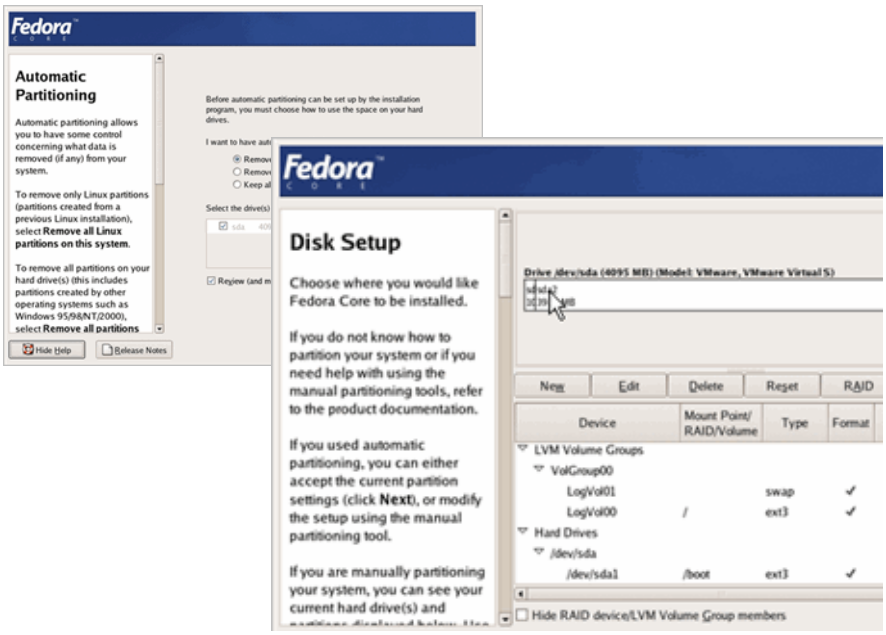
Important: You must disable Sendmail in order to run the Zimbra Collaboration Suite. Disable the Sendmail service with this command, **chkconfig sendmail off.**

Installation Modifications for Fedora

The Zimbra Collaboration Suite runs on the Fedora, Core 3 operating system. When you install the Fedora software for the Zimbra Collaboration Suite, accept the default setup answers, except for the following steps. Refer to the Fedora installation guide for detailed documentation about installing their software.

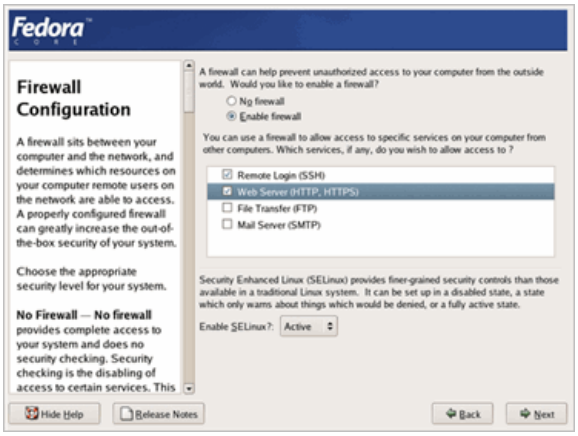
- **Disk Partitioning Setup**. Check **Manually partition with DiskDruid**. The disk partition should be set up as follows:
  - The **Mount Point/RAID Volume** size for the **/boot** partition should be 100 MB.
  - The **Swap** partition should be set to twice the size of the RAM on your machine.

- The **Root** partition (/) should be set with the remaining disk space size.



- **Network Configuration>Network Devices>Hostname** should be configured manually with the hostname name [*mailhost.example.com]* of the Zimbra server.

- Enter the **Gateway** and **Primary** DNS addresses.
- In the **Edit Interface** pop-up screen, check **Activate on Boot**. Enter the **IP Address** and **Netmask** of the device. This allows the interface to start when you boot.
- **Firewall Configuration** should be set to **No firewall**, and the **Security Enhanced Linux** (SELinux) should be disabled.



Important: You must disable Sendmail in order to run the Zimbra Collaboration Suite application. The Sendmail command to stop the service is **/etc/init.d/sendmail stop**, to disable, is **chkconfig sendmail off**. The Postfix command to stop the service is **/etc/init.d/postfix stop**, to disable, is **chkconfig postfix stop**.

Chapter 2 Zimbra Installation Overview

Zimbra architecture includes open-source integrations using industry standard protocols. The third-party software has been tested and configured to work with the Zimbra software. The following describes the Zimbra packages that are installed.

- **Zimbra Core**. This package includes the libraries, utilities, monitoring tools, and basic configuration files. Zimbra Core is automatically installed on each server.
- **Zimbra LDAP**. User authentication is provided through OpenLDAP®. Each account on the Zimbra server has a unique mailbox ID that is the primary point of reference to identify the account. The OpenLDAP schema has been customized for the Zimbra Collaboration Suite. The Zimbra LDAP server must be configured before the other servers.
- **Zimbra MTA**. Postfix is the open source mail transfer agent (MTA) that receives email via SMTP and routes each message to the appropriate Zimbra mailbox server using Local Mail Transfer Protocol (LMTP). The Zimbra MTA also includes the anti-virus and anti-spam components.
- **Zimbra Store**. The Zimbra store includes the components for the mailbox server, including Apache Tomcat, which is the servlet container the Zimbra software runs within. The Zimbra mailbox server includes the following components:
  - **Data store**. The data store is a MySQL® database.
  - **Message store**. The message store is where all email messages and file attachments reside.
  - **Index store.** Index and search technology is provided through Lucene. Index files are maintained for each mailbox.
- **Zimbra SNMP**. Installing the Zimbra SNMP package is optional. If you choose to install Zimbra-SNMP for monitoring, this package should be installed on every Zimbra server.
- **Zimbra Logger**. Installing the Zimbra Logger package is optional and is installed on one mailbox server. The Zimbra logger installs tools for syslog aggregation, reporting, and message tracing. If you do not install Logger, you cannot use the message trace feature. In addition, the server statistics are not captured, and the server statistics section of the administration console will not display.

- **Zimbra Spell**. Installing the Zimbra Spell package is optional. Aspell is the open source spell checker used on the Zimbra Web Client. When Zimbra-spell is installed, the Zimbra-apache package is also installed.

The Zimbra server configuration is menu driven. The installation menu displays the default configuration values. The menu displays the logical host name and email domain name [example.com] as configured for the computer.

Configuration Examples

Zimbra Collaboration Suite can be easily scaled for any size of email environment, from very small businesses with fewer than 25 email accounts to large businesses with thousands of email accounts. The following table shows examples of different configuration options.

Table 1 Zimbra Collaboration Suite Configuration Options

Small	Medium	Large	Very Large
All ZCS components installed on one server. See the Zimbra Installation Quick Start for installation instructions.	• Zimbra LDAP and Zimbra message store on one server • Zimbra MTA on a separate server. • Possibly include additional Zimbra MTA servers configured	• Zimbra LDAP on one server • Multiple Zimbra mailbox servers • Multiple Zimbra MTA servers	• Zimbra LDAP server as master • LDAP replicas • Multiple Zimbra mailbox servers • Multiple Zimbra MTA servers

Downloading the Zimbra Software

For the latest Zimbra software download, go to www. **Zimbra.com**. The download file is a standard compressed tar file. Save the Zimbra Collaboration Suite archive file to the computer from which you will install the software.

Basic Menu Configuration

The menu driven installation displays the components and their existing default values. During the installation process you can modify the default values. Only those menu options associated with the package being installed are displayed.

The table below describes the Main menu options

Table 2 Main Menu Options

Server Configured	Main Menu	Description
All	Hostname	The host name configured in the Red Hat operating system installation
All	LDAP host	The LDAP host name. This LDAP host name is configured on every server.
All	LDAP port	The default port is 389.
All	LDAP password	The root LDAP password for the host. This LDAP password is configured on every server.
Zimbra LDAP Server	zimbra-ldap	Configuration includes the following steps: • You can create one domain during installation. Additional domains can be created from the administration console. • Define the domain name. The default domain is the fully qualified hostname of the server. If you created a valid mail domain on your DNS server, enter it when installing the ldap server. • The administrator account is created during installation, and allows you to log on to the administration console. The default is typed as **admin@example.com**. • You must set the admin account password. The password is case sensitive and must be a minimum of six characters. The administrator name, mail address, and password are required to log on to the administration console.

Table 2 Main Menu Options

Server Configured	Main Menu	Description
Zimbra Mailbox Server	zimbra-store	Modify the zimbra-store values to include the MTA host name and the default configuration for the web server mode. The communication protocol options are HTTP, HTTPS, or mixed. Mixed mode uses HTTPS for logging in and HTTP for normal session traffic. All modes use SSL encryption for back-end administrative traffic.
Zimbra MTA Server	zimbra-mta	The following options can be modified. • Enable Spamassassin. Default is enabled. • Enable ClamAV. Default is enabled. • Identify the notification address for AV alerts. The default address that is displayed should be changed. **Use the admin address configured in the LDAP server, or create a new address. If you create a new address, remember to provision this address from the admin console.**
All servers, if installed	zimbra-snmp Installing SNMP is optional, but installed it must be on all servers.	You can modify the following options • Enable SNMP notification. The default is **No**. If you enter yes, you must type the SNMP Trap hostname. • Enable SMTP notification. The default is **No**. If you enter yes, you must type the SMTP source email address and destination email address.

Table 2 Main Menu Options

Server Configured	Main Menu	Description
Installed on one mailbox server.	zimbra-logger	If installed, it is automatically enabled. Logs from all the hosts are sent to the mailbox server where the logger package is installed. This data is used to generate the statistics graphs and is used for message tracing.
	zimbra-spell	If installed, it is automatically enabled. When composing messages in the Zimbra Web Client, spell check can be run.
	r) Start servers after configuration	When the installation and configuration is complete, if this is set to Yes, the Zimbra server is automatically started.
	s) Save config to file	At any time during the installation, you can save the configuration to file.
	q) Quit	Quit can be used at any time to quit the installation.

Chapter 3 Multiple-Server Installation

The installation is straight-forward and easy to run. You run the same install script on each server, select which component(s) to install, and then use the menu to configure the system. When the server installation is complete, the servers are started, and the status is displayed.

Important: The Zimbra-LDAP server must be installed and configured first.

Step 1 through step 4 are performed for each server to be installed.

Starting the installation process

1. Log in as **root** to the Zimbra server and **cd** to the directory where the Zimbra Collaboration Suite archive file is saved **(cd /var/<tmp>/var)**. Type the following commands.
   - **tar xzvf [zcs.tgz]**, to unpack the file
   - **cd zcs**, to change to the correct directory
   - **./install.sh**, to begin the installation

   Note: *As the installation proceeds, press* **Enter***, to accept the defaults that are shown in brackets* **[ ]** *or enter the appropriate answer for your configuration.*

The screen shots are examples of the Zimbra installation script.

```
[root@mailhost tmp]# tar xzvf zcs.tgz
zcs/
zcs/install.sh
zcs/packages/
zcs/packages/zimbra-ldap-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/packages/zimbra-logger-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/packages/zimbra-snmp-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/packages/zimbra-mta-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/packages/zimbra-core-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/packages/zimbra-store-3.0.M2_316.RHEL4-20051007080249.i386.rpm
zcs/README.txt
zcs/readme_binary.txt
zcs/docs/
zcs/docs/quick_start.pdf
zcs/docs/RNZCSN.pdf
zcs/docs/admin.pdf
.
.
.
[root@ tmp]# cd zcs
[root@ zcs]# ./install.sh

Operations logged to /tmp/install.log.9496
Checking for existing installation...
    zimbra-ldap...NOT FOUND
    zimbra-logger...NOT FOUND
    zimbra-mta...NOT FOUND
    zimbra-snmp...NOT FOUND
    zimbra-store...NOT FOUND
    zimbra-apache...NOT FOUND
    zimbra-spell...NOT FOUND
    zimbra-core...NOT FOUND
```

2. The installation process checks to see if Sendmail, Postfix, and MySQL software are running. If any application is running, you are asked to disable it. The default is **Yes**, to disable the applications. Disabling MySQL is optional, but highly recommended. Sendmail and Postfix must be disabled for the Zimbra Collaboration Suite to start correctly.

```
Checking for sendmail/postfix

Checking for mysql
Sendmail appears to be running. Shut it down [Y]
```

3. The Zimbra software agreement is displayed and includes the link to the license terms for the Zimbra Collaboration Suite. Please read the agreement and to continue, press **Enter**.

```
PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE.
ZIMBRA, INC. ("ZIMBRA") WILL ONLY LICENSE THIS SOFTWARE TO YOU IF YOU
FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY DOWNLOADING OR
INSTALLING THE SOFTWARE, OR USING THE PRODUCT, YOU ARE CONSENTING TO
BE BOUND BY THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THE TERMS
OF THIS AGREEMENT, THEN DO NOT DOWNLOAD, INSTALL OR USE THE PRODUCT.

License Terms for the Zimbra Collaboration Suite:
        http://www.zimbra.com/downloads/sourcebinary/index.php?dl=2

Press Return to continue
```

4. Next, the installer checks to see that the prerequisite software is installed. If libidn, cURL, fetchmail, GMP or compat-libstdc++-33 are not installed, the install quits. You must fix the problem and start the installation over.

Installing Zimbra LDAP Server

You must configure the Zimbra-LDAP server before you can install the other Zimbra servers.

1. Follow steps 1 through 4 in **Starting the Installation Process** section, to open a SSH session to the LDAP server, log on to the server as root, and unpack the Zimbra software.

2. Enter **y**, for the **zimbra-ldap** packages. The MTA, Store and Logger packages should be marked **n**. If you are using SNMP, SNMP package is marked **y**.

```
Select the packages to install
Install zimbra-ldap [Y]
Install zimbra-mta [Y]N
Install zimbra-snmp [Y]N
Install zimbra-store [Y]N
Install zimbra-logger [Y]N
Install zimbra-spell [Y]N

Installing:
    zimbra-core
    zimbra-ldap

This system will be modified. Continue [N} Y
Configuration section
```

3. Type Y and press **Enter** to modify the system. The selected packages are installed on the server.

The Main menu displays showing the default entries for the Zimbra component you are installing. To expand the menu to see the configuration values, type **X** and press **Enter**. The main menu expands to display configuration details for the package being installed. Values that require further configuration are marked with asterisks (*).

To navigate the Main menu, select the menu item to change. You can modify any of the defaults. See Table 2, “Main Menu Options,” on page 15 for a description of the Main menu.

```
Main menu

   1) Hostname:                            ldap.example.com
   2) Ldap host:                           ldap.example.com
   3) Ldap port:                           389
   4) Ldap password:                       set
   5) zimbra-ldap:                         Enabled
       +Create Domain:                     yes
       +Domain to create:                  ldap.example.com
       +Create Admin User:                 yes
       +Admin user to create:              admin@ldap.example.com
*******+Admin Password                     UNSET

   r) Start servers after configuration   yes
   s) Save config to file
   x) Expand menu
   q) Quit

Address unconfigured (**) items  (? - help)
```

Items with an asterisks must be configured.

4. Type **4**, to display the automatically generated LDAP password. You can change this password.

   Remember the LDAP password, the LDAP host name, and the LDAP port. You must configure this information, when you install the MTA server and the mailbox servers.

5. Type **5**, to change the zimbra-ldap settings.

   - Type **3**, to change the default domain name to the email domain name.
   - Type **6**, type a password for the administrator account. The password is case sensitive and must be a minimum of six characters. The admin account is provisioned on the Zimbra server and allows you to log on to the administration console. The administrator name, mail address, and password are required to log in to the administration console.

```
Ldap configuration

   1) Status:                                  Enabled
   2) Create Domain:                           yes
   3) Domain to create:                        ldap.example.com
   4) Create Admin User:                       yes
   5) Admin user to create:                    admin@ldap.example.com
** 6) Admin Password                          UNSET

Select, or 'r' for previous menu [r] 3

Create Domain: [ldap.example.com] example.com

Ldap configuration

   1) Status:                                  Enabled
   2) Create Domain:                           yes
   3) Domain to create:                        example.com
   4) Create Admin User:                       yes
   5) Admin user to create:                    admin@example.com
** 6) Admin Password                          UNSET

Select, or 'r' for previous menu [r] 6

Password for admin@example.com (min 6 characters): [Rv0sX7IJ] admin1
```

6. When the LDAP server is configured, type **a**, to apply the configuration changes. Press **Enter** to save the configuration data.
7. When **Save Configuration data to a file** appears, press **Enter**.
8. When **The system will be modified - continue?** appears, type **y** and press **Enter**.

   The server is modified. Installing all the components and configuring the server can take a few minutes.
9. When **Installation complete - press return to exit** displays, press **Enter**.

The installation is complete.

```
Select, or press 'a' to apply config (? - help) a
Save configuration data? [Yes]
Save config in file: [/opt/zimbra/config.2843]
Saving config in /opt/zimbra/config.2843...Done
The system will be modified - continue? [No] y
Operations logged to /tmp/zmsetup.log.2843
Setting local config zimbra_server_hostname to [ldap.example.com]
.
Operations logged to /tmp/zmsetup.log.2843

Installation complete - press return to exit
```

Installing Zimbra-MTA on a Server

When the Zimbra MTA is being installed, the root LDAP password and the Zimbra LDAP password must be known to the MTA server. If not, the MTA cannot contact the LDAP server and will not be able to complete the installation.

1. Follow steps 1 through 4 in **Starting the Installation Process** section, to open a SSH session to the MTA server, log on to the server as root, and unpack the Zimbra software.
2. Enter **y**, to install the **zimbra-mta** package. The other packages should be marked **n.** Note: If you installed the SNMP package on the LDAP server, install it here also.
3. Press **Enter** to modify the system. The selected packages are installed on the server.

   At this point, the Main menu displays the default entries for the Zimbra component you are installing. To expand the menu to see all the configuration values, type **X** and press **Enter**.

   To navigate the Main menu, select the menu item to change. You can modify any of the defaults.

```
Main menu

   1) Hostname:                                mta.example.com
** 2) Ldap host:                               UNSET
   3) Ldap port:                               389
** 4) Ldap password:                           UNSET
   5) zimbra-mta:                              Enabled
   c) Collapse menu
   r) Start servers after configuration        yes
   s) Save config to file
   q) Quit

Address unconfigured (**) items or correct ldap configuration  (? -
help) 2

Please enter the ldap server hostname ldap.company.com
Checking ldap on ldap.company.com:389...FAILED
```

4. The Main menu displays. The Hostname is displayed. You must set the LDAP host and password configured on the LDAP server.
   - Type **2** and then type the LDAP host name.
   - Type **4** and then type the LDAP password.

   The server immediately contacts the LDAP server. If it cannot contact the server, you cannot proceed.

5. Type **5 then 4**, to modify the notification address for AV alerts. You can either enter the admin address configured on the LDAP server, or create a new address.

   Note: *If you enter a new address, you will need to configure this address on the administration console.*

```
Select, or press 'a' to apply config (? - help) 5

Mta configuration

1) Status:                                  Enabled
2) Enable Spamassassin:                     yes
3) Enable Clam AV:                          yes
4) Notification address for AV alerts:      admin@mta.example.com
```

6. When the MTA server is configured, type **a**, to apply the configuration changes. Press **Enter** to save the configuration data.
7. When **Save Configuration data to a file** appears, press **Enter**.
8. When **The system will be modified - continue?** appears, type **y** and press **Enter**.

   The server is modified. Installing all the components and configuring the server can take a few minutes.
9. When **Installation complete - press return to exit** displays, press **Enter**.

The installation is complete.

```
Select, or press 'a' to apply config (? - help) a
Save configuration data? [Yes]
Save config in file: [/opt/zimbra/config.2843]
Saving config in /opt/zimbra/config.2843...Done
The system will be modified - continue? [No] y
Operations logged to /tmp/zmsetup.log.2843
Setting local config zimbra_server_hostname to [mta.example.com]
.
.
.
Initializing mta config...
*** Running as zimbra user: /opt/zimbra/libexec/zmmtainit
ldap.company.com
Done
.
.
.
*** Running as zimbra user: /opt/zimbra/bin/zmcontrol start

Operations logged to /tmp/zmsetup.log.21324

Installation complete - press return to exit
```

Installing Zimbra Mailbox Server

The Zimbra-store can be installed with the LDAP server, the MTA server and as a separate mailbox server. You can have more than one mailbox server and it is easy to add new servers at any time.

Note: *The Zimbra logger is installed on only one Zimbra mailbox server.*

1. Follow steps 1 through 4 in **Starting the Installation Process** section to log on to the server as root and unpack the Zimbra software.
2. Type **y**, to install the **zimbra-store, zimbra-logger** (optional and only on one mailbox server), and **zimbra-spell** (optional) packages. When zimbra-spell is installed, the zimbra-apache package is also installed.

```
Installing:
    zimbra-core
    zimbra-store
    zimbra-logger
    zimbra-apache
    zimbra-spell
```

3. Press **Enter,** to modify the system. The selected packages are installed on the server.

   At this point, the Main menu displays the default entries for the Zimbra component you are installing. To expand the menu to see the configuration values, type **X** and press **Enter**.

   To navigate the Main menu, select the menu item to change. You can modify any of the defaults.

```
Main menu

   1) Hostname:                              mailbox.example.com
** 2) Ldap host:                            UNSET
   3) Ldap port:                             389
** 4) Ldap password:                        UNSET
   5) zimbra-store:                          Enabled
******* +SMTP host:                         UNSET
        +Web server mode:                    http
        +Use spell check server:             yes

   6)zimbra-logger                           Enabled
   6) zimbra-spell                            Enabled
   r) Start servers after configuration      yes
   s) Save config to file
   x) Expand menu
   q) Quit

Address unconfigured (**) items or correct ldap configuration  (? -
help) x

Checking ldap on :389...FAILED
```

4. The Hostname is displayed. You must set the LDAP host and password configured on the LDAP server.

   - Type **2** and then type the LDAP host name.
   - Type **4** and then type the LDAP password.

   The server immediately contacts the LDAP server. If it cannot contact the server, you cannot proceed.

5. Type **5, to** configure the SMTP host and set the web server mode, if it is not http.

   - Type **2**, and then type the Zimbra MTA host name.
   - Type **3**, if you are changing the default. The communication protocol options are HTTP, HTTPS, or mixed. Mixed mode uses HTTPS for logging in and HTTP for normal session traffic. All modes use SSL encryption for back-end administrative traffic

```
 Address unconfigured (**) items  (? - help) 5

Store configuration

   1) Status:                                Enabled
** 2) SMTP host:                            UNSET
   3) Web server mode:                       http
   4) Use spell check server:                no

Select, or 'r' for previous menu [r] 2

Please enter the SMTP server hostname mta.example.com

Store configuration

   1) Status:                                Enabled
   2) SMTP host:                             mta.example.com
   3) Web server mode:                       http

Select, or 'r' for previous menu [r] 3

Please enter the web server mode (http,https,mixed) [http] https

Store configuration

   1) Status:                                Enabled
   2) SMTP host:                             mta.example.com
   3) Web server mode:                       https

Select, or 'r' for previous menu [r]
```

6. When the Mailbox server is configured, type **a**, to apply the configuration changes. Press **Enter** to save the configuration data.

7. When **Save Configuration data to a file** appears, press **Enter**.

8. When **The system will be modified - continue?** appears, type **y** and press **Enter**.

   The server is modified. Installing all the components and configuring the server can take a few minutes.

9. When **Installation complete - press return to exit** displays, press **Enter**.

The installation is complete.

```
Select, or press 'a' to apply config (? - help) a
Save configuration data? [Yes]
Save config in file: [/opt/zimbra/config.2843]
Saving config in /opt/zimbra/config.2843...Done
The system will be modified - continue? [No] y
Operations logged to /tmp/zmsetup.log.2843
Setting local config zimbra_server_hostname to [mailhost.example.com]
.
Operations logged to /tmp/zmsetup.log.2843

Installation complete - press return to exit
```

Installing the Zimbra-SNMP package

Installing the Zimbra-SNMP package is optional, but if you use SNMP monitoring, this package should be installed on each Zimbra server.

In the Main menu select the zimbra-snmp, to make changes to the default values.

The following questions are asked for SNMP configuration.

- Configure whether to be notified by SNMP or SMTP. The default is **No**. If you enter yes, you must enter additional information.
  - For SNMP, type the SNMP Trap host name.
  - For SMTP, type the SMTP source email address and destination email address.

```
 8) zimbra-snmp:                              Enabled
       +Enable SNMP notifications:             yes
       +SNMP Trap hostname:                   mailhost.example.com
       +Enable SMTP notifications:             yes
       +SMTP Source email address:            admin@example.com
       +SMTP Destination email address:       admin@example.com
```

Verifying Server Configuration

When **Configuration complete - press return to exit** appears, the installation is finished, and the server have been started.

You can verify that the servers are running at any time using the CLI command **zmcontrol status,** as follows:

1. For each server in the Zimbra Collaboration Suite environment, log on as a Zimbra administrator, from the root.
2. Type **su - zimbra**.
3. Type **zmcontrol status**. The services status information is displayed. The server status is displayed.

Post Installation Tasks

Once the Zimbra Collaboration Suite is installed, you can log on to the administration console and configure additional domains, create Classes of Service, and provision accounts. See the Zimbra Administrator's Guide.

Logging on to the Administration Console

To log on to the administration console, open your browser, type the administration console URL and log on to the console. The administration console URL is entered as **https://[example.com]:7071/zimbraAdmin**.

Note: *The administration console address must be typed with "https", even if you configured only "http".*

The first time you log on, a certificate authority (CA) alert may be displayed. Click **Accept this certificate permanently** to accept the certificate and be able connect to the Zimbra administration console. Then click **OK**.

Enter the admin user name and password configured during the installation process. Enter the user name as **admin@[example.com]**

Defining Classes of Service

A default Class of Service (COS) is automatically created during the installation of Zimbra software. The COS controls mailbox quotas, message lifetime, password restrictions, attachment blocking and server pools. You can modify the default COS and create new COSs to assign to accounts according to your group management policies.

In an environment with multiple mailbox servers, the COS is used to assign the new accounts to a mailbox server. The COS server pool tab lists the mailbox servers in your Zimbra environment. When you configure the COS, select which servers to add to the server pool. Within each pool of servers, a random algorithm assigns new mailboxes to any available server.

To create or modify a COS, from the Administration Console, click COS. If you have questions, refer to the Help.

Provisioning Accounts

From the administration console you can quickly create accounts using the New Account Wizard that steps you through the account information to be completed.

To provision accounts:

1. From the admin console navigation pane, click **Accounts**.
2. Click **New**, page 1 of the **New Account Wizard** opens.
3. Enter the account name to be used as the email address. The only required information is the account name and last name.
4. You can click **Finish** at this point, and the account will be configured with the default COS and global features.

   If you want to configure aliases, forwarding addresses, and specific features for this account, proceed through the dialog.

Accounts are now ready to send and receive mail.

Refer to the administration guide to learn more about provisioning accounts, including how to provision multiple accounts at once.