

# OpenMail Licensing Guide



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## A. Fax Numbers

**Glossary**

**Index**

The maximum number of OpenMail users and the functionality available to them is determined by the number and type of OpenMail licenses you purchase and install.

Additional information related to OpenMail and OpenMail licensing, including the latest documentation, is also available on our Web site at the following URL:

<http://www.hp.com/go/openmail>

Licensing is enforced through a subsystem of OpenMail. When OpenMail receives a request to add a user or use a specific service, it queries the licensing subsystem to ensure sufficient licenses of the correct type are available. If there are not, OpenMail rejects the request.

There is a free demonstration period built into every OpenMail system. During this free demonstration period you can configure an unlimited number of users and have access to all the available OpenMail functionality.

An OpenMail password needs to be installed before the end of the demonstration period, otherwise it will not be possible to start the OpenMail services or add or modify users. Please note that, as soon as a mailbox license is added to the demonstration system, the demonstration period ends.

**Note:** *Please note that during the demonstration period, when OpenMail is unlicensed, no support is available from the HP Response Centers. If you experience any difficulties you should contact your HP representative. Support is only available when an OpenMail Support Contract has been purchased.*

The remainder of this section deals with:

- “Node-Locked and Virtual Licenses”
- “How License Allocation Works”
- “OpenMail License Types”
- “How the Number and Type of Licenses is Determined”

For technical information about the licensing subsystem, refer to the *OpenMail Technical Reference Guide*.

## Node-Locked and Virtual Licenses

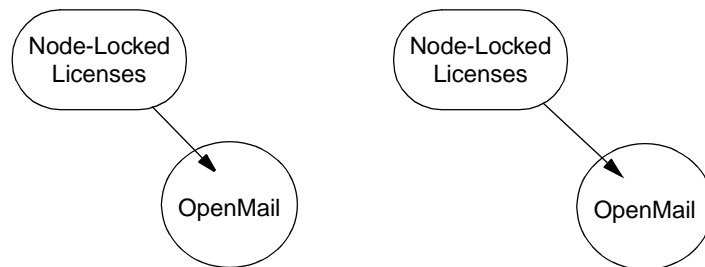
Within an OpenMail network, a system can use either **node-locked licensing** or **virtual licensing** (also known as centralized licensing). This section tells you how to decide which type of licensing you need.

**Node-locked licenses** are licenses tied to specific machines. You cannot easily move them from machine to machine.

At least one machine in an OpenMail network must have node-locked licenses; this is the primary form of licensing.

**Figure 1-1**

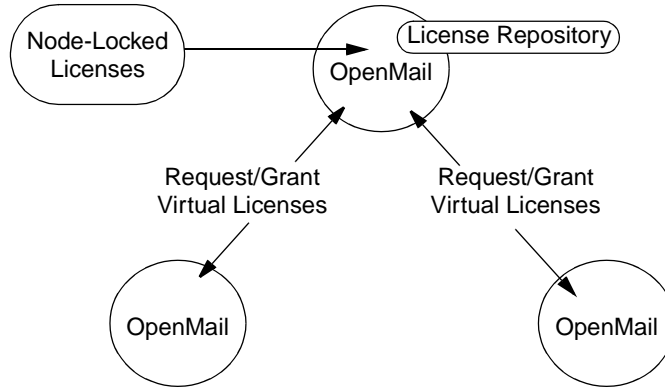
### Node-Locked Licensing



**Virtual licenses** are derived from node-locked licenses. A machine with node-locked licenses can become a **license repository** and distribute node-locked licenses as virtual licenses to other OpenMail systems in the network.

An OpenMail network usually has one system that holds all the node-locked licenses. All other systems in the network use virtual licenses distributed to them by the license repository system.

**Figure 1-2 Virtual (centralized) Licensing**



Using virtual licenses with a license repository gives flexibility in how licenses are distributed between systems and centralizes their management—only one machine in an OpenMail network need have node-locked licenses installed on it.

Use virtual licenses if...	Use node-locked licenses if...
<ul style="list-style-type: none"> <li>another OpenMail system in the network has been designated as the license repository and you are running OpenMail B.05.01 or later</li> </ul>	<ul style="list-style-type: none"> <li>you are running a version of OpenMail earlier than B.05.01 or</li> <li>your system is the only OpenMail system in the organization or</li> <li>your system has been designated as the license repository for other OpenMail systems in the network.</li> </ul>

To use virtual licenses, you must be running OpenMail version B.05.01 or later. If your systems are not all running the correct version of OpenMail, you can still use virtual licensing on those systems that are and use node-locked licensing on the other systems.

## 1 Licensing—An Overview

### Node-Locked and Virtual Licenses

The distribution of virtual licenses by the license repository is dependent on OpenMail messages being sent between the systems. If the license repository system goes down at any time, existing virtual licenses will continue to work for about four weeks.

You can have more than one license repository, but this is not recommended as it will complicate the allocation and management of the licenses.

**Note:** *If you are running multiple OpenMail systems on a single machine, only one system can be configured as a license repository; all other systems must use virtual licenses. In addition, you should not move an OpenMail system that is configured as a license repository to a machine that already contains a license repository.*

*If you are running multiple OpenMail systems on a cluster of machines, a recommended option is to configure a stand-alone machine outside the cluster as a license repository. This enables all the OpenMail systems within the cluster to use virtual licensing, and gives you the greatest flexibility in moving OpenMail systems between machines.*

## How License Allocation Works

Licenses are installed on the relevant repository server, which allocates a configurable number of licenses to satellite servers. Licenses must be allocated for the repository server as well.

**Note:** *When setting up the repository server, ensure that enough licenses have been allocated to it. Use the `omreqlic` command to request licenses on the satellite servers.*

*On the satellite servers, it is not possible to use a combination of node-locked and virtual licenses. When virtual licensing is enabled, the licenses configured in the node-lock file will no longer take effect.*

Licenses are requested by the satellite systems. They send a message to the repository, and a reply is generated soon after (use level 11 logging on the Service Router on the repository server to see the reply). This reply contains the license; for example:

```
REPORT Service Router(Service  
Router) 10.16.96 12:09:23 [OM 7808] Finished routing of  
recipient +LICENSE/op,c
```

If you want the request to take effect straight away (for example, for testing purposes), run `omreqlic`.

Approximately seven days after the request, the satellite systems perform another `omreqlic` to request a new license, because each license requested is valid for only four weeks.

## OpenMail License Types

There are five types of OpenMail licenses currently available.

<b>Product Number</b>	<b>Description</b>	<b>Blocks</b>	<b>3rd Party License Required</b>
B2016BZ	OpenMail Mailbox License	50	No
B2020BZ	OpenMail Client License	50	No
B2274BZ	OpenMail Driver License for Lotus cc:Mail R6	50	Yes
B2275BZ	OpenMail Outlook Driver License for Microsoft Outlook	50	Yes
B2029BZ	OpenMail Application Link Client License	individual	No

**Note:** *The A-series and B-series upgrade and combined mailbox+client licenses are now obsolete. However, these licenses still function on later OpenMail releases. If you upgrade to the latest version of OpenMail you should consider reconfiguring your existing licenses. Please refer to Chapter 2, “Node-Locked Licenses”.*

- **OpenMail Mailbox License (B2016BZ)**

An OpenMail Mailbox license allows the administrator to configure an OpenMail mailbox for a user. To access the OpenMail Message Store, a user must have a mailbox on the system. One mailbox license is required for each configured OpenMail user.

If you are using the application-to-application messaging functionality provided by OpenMail Application Link, you will need a mailbox license for each application that uses OpenMail.

The following clients require only an OpenMail Mailbox license:

- HP OpenMail Administration Client for Microsoft Windows
- HP OpenMail POP3 Access

- HP OpenMail IMAP4 Access
- HP AdvanceMail/TI

- **OpenMail GUI Client License (B2020BZ)**

An OpenMail Client license is required to use an OpenMail LAN or mobile client with OpenMail. You need sufficient OpenMail Client licenses for the maximum number of users that will be signed on through these clients at any one time.

To use the following clients, you require an OpenMail Mailbox license (B2016BZ) and an OpenMail Client license (B2020BZ):

- OpenMail Client for Microsoft Windows
  - OpenMail Mobile Client for Microsoft Windows
  - OpenMail Client for Apple Macintosh
  - OpenMail Mobile Client for Apple Macintosh
  - OpenMail Motif Client for HP-UX
  - OpenMail Motif Client for Sun Solaris
  - OpenMail Motif Client for IBM AIX
  - OpenMail Web Client Version 5.10
  - OpenMail Web Client Version 6.0
- **OpenMail Driver Licenses (B2274BZ and B2275BZ)**

To use the Outlook Service Providers for OpenMail, or the Lotus cc:Mail R6 for OpenMail client, you will require from Hewlett-Packard an OpenMail Mailbox license (B2016BZ); an OpenMail Driver license (either B2274BZ or B2275BZ); together with the appropriate client license(s) which may be purchased from Microsoft or Lotus:

From ...	Third-party License ...
Microsoft	Outlook Service Providers
Lotus	cc:Mail for Windows R6 cc:Mail Mobile for Windows R6

## OpenMail License Types

- **OpenMail Application Link Client License (B2029BZ)**

To use OpenMail Application Link, you will require an Application Link client license (2029BZ).

This client license is required to use OpenMail Application Link. You need sufficient Application Link client licenses for the maximum number of applications that will be signed on to OpenMail at any one time. Application Link client licenses are supplied individually for each concurrent instance of each application used.

For example, if you have a manufacturing system and a stock system which use application link, and they each link to an OpenMail server at the same time, you will need a total of 2 application link licenses and two mailbox licenses.

In addition, to use the Assured Delivery Service feature of the Application Link Server, you will require an additional Application Link client license and one mailbox license for each instance of this service. The Assured Delivery Service ensures messages are delivered in the order in which they were sent.

So, in the example above, if you require assured delivery, you will need a total of 3 application link client licenses and 3 mailbox licenses.

- **Licenses for third party products**

The third party clients in the table require an OpenMail Mailbox license from Hewlett-Packard, together with an appropriate client license which can be purchased from Microsoft or Lotus.

From ...	License ...
Microsoft	Microsoft Mail Microsoft Exchange Client
Lotus	cc:Mail Mobile for Macintosh cc:Mail Mobile for 100LX/200LX palmtop computer

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## How the Number and Type of Licenses is Determined

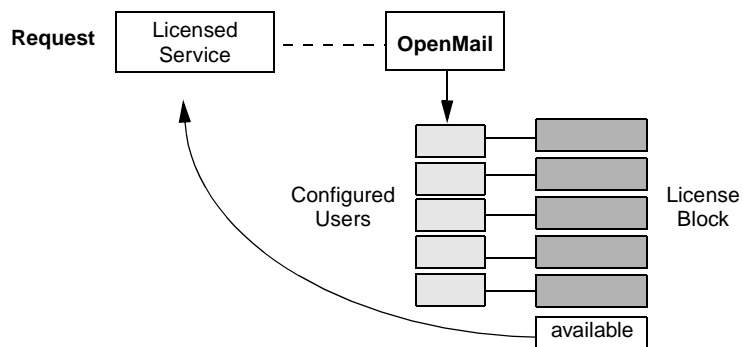
This section explains how OpenMail determines whether a license is available for a given service.

Licenses are issued in **blocks**; each block represents a number of licenses of a specific type. An OpenMail system can have one or more blocks of licenses.

When you add a user, OpenMail checks that the total number of mailbox licenses held in all the license blocks is greater than the number of currently configured OpenMail users.

When a user signs on with a Hewlett-Packard licensed client, OpenMail checks that the number of client licenses held in all the license blocks is greater than the number of users currently signed on using a Hewlett-Packard licensed client. (The number of users signed on is the relevant number, not the number of sessions each user may have.)

**Figure 1-3** Request for a licensed service



The diagram above illustrates what happens when a licensed service (for example the Bulletin Board Server) is requested, OpenMail checks the number of configured OpenMail users against each license block. If the licensed service is available in one or more license blocks and those blocks contain more licenses than there are configured users, then the service is made available.

## 1 Licensing—An Overview

### **How the Number and Type of Licenses is Determined**

For example, with the following license blocks, Directory Synchronization is available only if there are less than 500 OpenMail users configured on the system, even though up to 800 users could be configured:

```
mailbox licenses 300  
mailbox licenses 500
```

You would need to upgrade your 300 mailbox licenses to the current mailbox licenses to configure all 800 users while retaining Directory Synchronization functionality.

This chapter describes:

- “Obtaining and Installing Node-Locked Licenses”
- “Moving Node-Locked Licenses Between Systems”
- “Using Node-Locked Licensing for Standby Systems”

For information on how to consolidate node-locked licenses on a number of systems into one license repository, refer to Chapter 4, “Node-Locked License Consolidation” .

## **Obtaining and Installing Node-Locked Licenses**

Obtaining and installing new node-locked licenses or adding additional node-locked licenses involves:

1. Installing OpenMail on each system for which you need node-locked licenses.  
Refer to the *OpenMail Installation Instructions* for details.
2. “Obtaining a License Entitlement Certificate”
3. “Obtaining Password Certificates” using information in the *License Entitlement Certificate*.
4. “Adding License Passwords” as shown in each *Password Certificate* to the relevant OpenMail system.

To move existing node-locked licenses from one system to another, follow the instructions in “Moving Node-Locked Licenses Between Systems”.

To obtain duplicate node-locked licenses for a standby system, follow the instructions in “Using Node-Locked Licensing for Standby Systems”.

### **Obtaining a License Entitlement Certificate**

A *License Entitlement Certificate* is proof that you have purchased node-locked licenses.

If you do not have a *License Entitlement Certificate*, or if you have used all the licenses available to you in the *License Entitlement Certificate*, contact your sales representative and purchase the required number of licenses. Hewlett-Packard will issue you with a *License Entitlement Certificate*.

If you have lost your *License Entitlement Certificate*, contact your sales representative who will arrange for a replacement certificate to be shipped to you.

The Certificate ID Number shown on the *License Entitlement Certificate* is used to obtain one or more *Password Certificates*.

A *Password Certificate* contains a node-locked **license password**. It is the license password that is installed on the system. The password represents a block of licenses of a specific type and number for an individual system.

## Obtaining Password Certificates

There are three ways to obtain your *Password Certificates*:

- By Fax
- By e-mail
- By using the “Web-based Software License Manager” to obtain your password online

### By fax or email

To obtain your password certificates by fax or e-mail, follow these steps:

1. Obtain the **target ID** (machine identifier) of each system for which you need node-locked licenses. Log in to each system and run the command:

```
omshowlic -t
```

This command returns the target ID of the system. Make a note of it.

2. Make one copy of the *Password Request Form* for each license type you need. The *Password Request Form* is on the back of the *License Entitlement Certificate*.
3. Complete your copy of the *Password Request Form*.
  - The “Certificate ID Number” must match that shown at the top of the relevant *License Entitlement Certificate*.
  - For each system for which you need node-locked licenses of the type specified in the relevant *License Entitlement Certificate*, give the target ID of the system, the number of node-locked licenses you need for the system, and the type of system it is.

The total number of node-locked licenses must not exceed the number you have purchased (as shown on your *License Entitlement Certificate*). If you do not need to use all the node-locked licenses you are entitled to, you can obtain further *Password Certificates* at a later date using this same process.

Some valid platform (system) types are: AIX, HP-UX, and Sun.

4. Fax or e-mail the completed *Password Request Form* to the *HP License Administration Group* at one of the numbers or e-mail addresses shown in Appendix A. Hewlett-Packard will issue you with a *Password Certificate*

## 2 Node-Locked Licenses

### Obtaining and Installing Node-Locked Licenses

containing your node-locked license password. One *Password Certificate* is issued for each target ID (system) and license type for which you requested a password.

You should receive your *Password Certificate* within 24 hours of sending the fax. If you have not received it after this time, please escalate this to *HP License Administration*. The telephone numbers of the License Administration Groups are provided on the *License Entitlement Certificate*.

### Web-based Software License Manager

The *HP Software License Manager* can be found at the following sites:

- For the Americas and Asia:

`http://us-support.external.hp.com`

- For Europe:

`http://europe-support.external.hp.com`

To use *HP's Software License Manager* you need a registered *HP Electronic Support Center* User ID. If you already have a valid User ID you can logon immediately. Otherwise you need to register first.

To register, go to the site applicable to you, enter your User ID and password, your language option and click OK.

We recommend you read the section *About HP's Software License Manager* and *HP's Electronic Support Center Terms and Conditions*.

### Adding License Passwords

For each *Password Certificate*:

1. Match the target ID shown on the *Password Certificate* with the target ID of a system.

To display the target ID of a system, use the command:

```
omshowlic -t
```

2. With system administration capability, add the password shown on the *Password Certificate* to the system by entering:

```
omaddlic
```

The command prompts you for the abbreviated five-part password shown on the *Password Certificate*. It then verifies and installs the password.

**Obtaining and Installing Node-Locked Licenses**

If your *Password Certificate* contains only the “full” password rather than the five-part password, use the `-f filename` option with the command `omaddlic`.

3. Check the node-locked licenses in the password are recognized. Type:

```
omshowlic
```

The output lists all the valid licenses on the system.

`omshowlic` shows both the node-locked licenses (on the repository system) and the existing virtual licenses.

To show only virtual licenses, use the `omshowlic -v` option.

If any problems are reported, refer to Chapter 5, “Problem Solving” .

---

## Moving Node-Locked Licenses Between Systems

Node-locked license passwords are tied to a specific system (through the target ID of the system). To move node-locked licenses between systems, you must replace existing license passwords with new passwords that use the correct target IDs.

Rather than moving node-locked licenses between systems, consider using virtual licenses. Refer to Chapter 1, “Licensing—An Overview” for an overview of license types, and Chapter 4, “Node-Locked License Consolidation” for how to consolidate the node-locked licenses.

To move licenses from one server to another please complete the *OpenMail License Reconfiguration Form* which can be found on our Web site at <http://www.hp.com/go/openmail>. You can effect a search for the document by entering License Reconfiguration.

You will need to complete and submit an *OpenMail License Reconfiguration Form* for each product required.

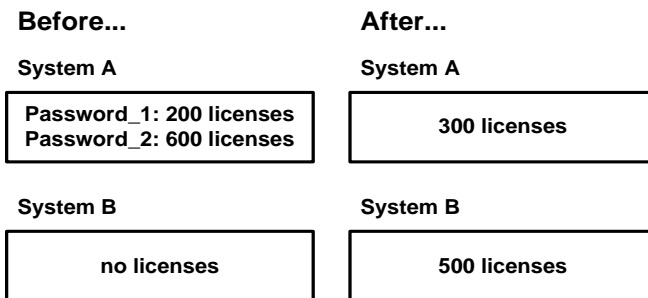
Moving node-locked licenses from one system to another involves:

1. “Obtaining Replacement Password Certificates”
2. “Adding License Passwords”
3. “Deleting License Passwords that have been Replaced”

For example, you have a system with 800 node-locked licenses held in two passwords (blocks); one holding 200 licenses, the other 600 licenses. You have purchased a new system and want to move 500 of your users to the new system, leaving 300 on the old system.

**Figure 2-1**

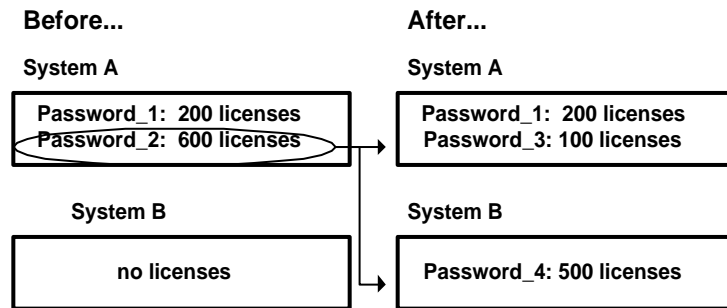
### Moving Node-Locked Licenses—Example 1



To move 500 node-locked licenses to the new system, you need to replace the existing password representing a block of 600 licenses with two new passwords; one for 500 node-locked licenses for the new system, and one for 100 node-locked licenses for the old system.

Figure 2-2

**Moving Node-Locked Licenses—Example 2**



If you are replacing upgrade license passwords, you must replace both the original password and its upgrade password. For example, if you have 300 node-locked licenses and you wish to move these to another system, you must replace the passwords for these licenses and the passwords for the upgrade.

## Obtaining Replacement Password Certificates

You can complete the *License Reconfiguration Form* online through our Web site or by copying the form and faxing it to Hewlett-Packard at one of the numbers or e-mail addresses shown. In each case, follow the steps below:

1. Determine the number and type of node-locked licenses you want on each system.
2. Identify the passwords you want to replace.
  - a. Look at the `nodelock` file on your system. The `nodelock` file contains the license passwords. The location of the `nodelock` file is platform dependent and can be obtained using the command:

```
omshowlic -n
```

Identify the passwords you want to replace and match the password string with the “full” password string in one of your existing *Password Certificates*.

If you have lost any of your *Password Certificates*, contact Hewlett-Packard at one of the following locations to obtain replacement certificates:

## 2 Node-Locked Licenses

### Moving Node-Locked Licenses Between Systems

Hewlett-Packard  
Grenoble, France  
Phone: + 33 (0)4 76 14 15 29  
Fax: +33 (0)4 76 14 25 15  
e-mail:  
codeword\_europe@hp.com

*Business hours:*  
Monday to Friday  
8am-5pm GMT+1

Hewlett-Packard  
California, USA  
Phone: +1 650-960-5111  
Fax: 650-960-5670  
e-mail:  
hplicense@mayfield.hp.com

*Business hours:*  
Monday to Friday  
6am-5pm PST

To complete the *License Reconfiguration Form* online, go to the URL <http://www.hp.com/go/openmail> and effect a search for *License Reconfiguration*. Then follow the steps below.

- b. If you are faxing your request, for each password you are replacing, make a copy of the *License Reconfiguration Form*. Complete sections A and B.

**Note:** The “*Certificate ID Number*”, “*Product Number*”, “*Target ID*”, and “*Number of Licenses*”, are shown on the *Password Certificate*.

3. Obtain the target ID (machine identifier) for each system for which you need new license passwords. Log into each system and run the command:

```
omshowlic -t
```

The command returns the target ID of the system. Make a note of it.

4. Complete section C of each *License Reconfiguration Form*.
  - a. Give the target IDs of the systems on which the new passwords will be added that replace the password specified in Section B of the *License Reconfiguration Form*.
  - b. For each target ID, give the number of node-locked licenses you want, and the platform type, i.e. HP-UX, IBM AIX, SUN OS.

The total number of node-locked licenses must not exceed the number specified in the *Password Certificate* you are replacing.

5. Complete the Declaration in section D of each *License Reconfiguration Form*.
6. Fax or e-mail each completed *License Reconfiguration Form* to Hewlett-Packard at one of the numbers or e-mail addresses shown or, if you are completing the form online, press `submit`.

Hewlett-Packard will issue you with a *Password Certificate* containing your new node-locked license password. One *Password Certificate* is issued for each target ID (system) and license type for which you requested a password.

## **Adding License Passwords**

For each *Password Certificate*:

1. Match the target ID shown on the *Password Certificate* with the target ID of a system.

To display the target ID of a system, use the command:

```
omshowlic -t
```

2. With system administration capability, add the password shown on the *Password Certificate* to the system by entering:

```
omaddlic
```

The command prompts you for the abbreviated five-part password shown on the *Password Certificate*. It then verifies and installs the password.

If your *Password Certificate* contains only the “full” password rather than the five-part password, use the `-f filename` option with the command `omaddlic`.

3. Check the node-locked licenses in the password are recognized. Type:

```
omshowlic
```

The output lists all the valid licenses on the system.

If any problems are reported, refer to Chapter 5, “Problem Solving”.

## **Deleting License Passwords that have been Replaced**

When all the new passwords have been added, delete the passwords that they replace (those specified in section B of each *License Reconfiguration Form*).

For each system containing a password that has been replaced:

1. Edit the `nodelock` file containing the password and delete the lines containing the relevant passwords. The location of the `nodelock` file is platform dependent and can be obtained using the command:

```
omshowlic -n
```

2. Stop the license monitor, `omlicmon`, using the standard Unix commands `ps` and `kill`.

## 2 Node-Locked Licenses

### **Moving Node-Locked Licenses Between Systems**

3. Restart the license monitor by entering `omlicmon`.
4. Check the correct passwords have been deleted. Type:

```
omshowlic
```

The output lists all the valid licenses on the system.

If any problems are reported, refer to Chapter 5, “Problem Solving”.

## Using Node-Locked Licensing for Standby Systems

OpenMail can be operated in a standby or switchover configuration—that is where a standby system is configured to automatically take over OpenMail processing in the event of a processor failure. In this case, an additional set of node-locked licenses are required for the standby system. The number and type of node-locked licenses for the standby system must match those on the primary system.

### Obtaining and Installing Licenses for a Standby System

To obtain and install licenses for a standby system, follow these steps:

1. Obtain a *Password Certificate* for the standby system.

Contact Hewlett-Packard's password delivery group at one of the locations indicated and explain that you want a *Password Certificate* for your standby system. There is no charge for this.

The *Password Certificate* must be for the same number and type of licenses as are installed on your primary system, but the target ID must be that of the standby system.

License Administration will request that you sign an agreement regarding the use of the new licenses for the standby system.

2. Add the license passwords contained in your *Password Certificate*.

Follow the instructions for adding license passwords given in "Problem Solving". The passwords must be installed using the standby system, even though the same files are being accessed by the primary system, because the standby system has a different target ID.



---

# 3

# Virtual Licenses

This chapter describes:

- “Prerequisites for Using Virtual Licenses”
- “Virtual License Allocation”
- “Requests for Virtual Licenses”
- “Moving Virtual Licenses Between Systems”

## Prerequisites for Using Virtual Licenses

- OpenMail version B.05.01 or later. The version number of OpenMail is given in the file:

```
/var/opt/openmail/sys/version
```

- The option `LML_USE_DIST_LIC=TRUE` set in the file:

```
/var/opt/openmail/sys/general.cfg
```

- The `license.server` process running.

Stop and then restart the Service Router. If the option `LML_USE_DIST_LIC=TRUE` has been set, the `license.server` process is started when the Service Router is restarted.

```
Use omoff -d 0 -s sr and then omon -s sr.
```

- The Local Delivery Service running.

Use the `omstat -s` command to list OpenMail services that are running. If the Local Delivery Service is not running, start it with the command `omon -s ld`.

**Note:** *After new license requests have been granted, you must stop and restart the `omlicmon` daemon; otherwise, the new requests are not recognized by the system.*

## Virtual License Allocation

The administrator of the license repository allocates virtual licenses to their own and other OpenMail systems.

The total number of virtual licenses you allocate can exceed the total number of node-locked licenses of the same type available in the repository. However, if each system requests their full allocation of licenses, some of the requests will not be fulfilled as there will not be sufficient node-locked licenses in the repository. To show the number and type of node-locked licenses in the repository, type:

```
omshowlic
```

If more node-locked licenses are required, refer to “Obtaining and Installing Node-Locked Licenses” in Chapter 2.

To show the number of virtual licenses, enter the following command:

```
omshowlic -v
```

The remainder of this section describes:

- “Allocating Virtual Licenses” using the command `omsetlic`
- “Showing the Allocation of Virtual Licenses” using the command `omaudlic`

## Allocating Virtual Licenses

1. List the license types. Type:

```
omsetlic -h
```

Make a note of the mnemonic or number representing the license type you are allocating.

2. Allocate the virtual licenses. Use the command:

```
omsetlic -n [+|-]licenses -t license_type -m mailnode
```

where:

```
-n [+|-]licenses
```

The maximum number of virtual licenses that can be requested.

The `-n licenses` option allocates an absolute number of licenses. Using `-n +licenses` increases the number of

### 3 Virtual Licenses

#### Virtual License Allocation

licenses allocated by the specified number. Using `-n licenses` decreases the number of licenses allocated by the specified number.

To completely remove the allocation of licenses for a specific system, use `-n 0`.

`-t license_type`

The mnemonic or number shown by the `-h` option representing the type of licenses being allocated.

`-m mailnode`

The primary mailnode of the system to which the virtual licenses are being allocated.

The mailnode must be routable by this (the license repository) system.

For example, to allocate up to 1,000 mailbox licenses to a system with a primary mailnode of `OU1=NY/OU2=Factory/OU3=MIS`, type:

```
omsetlic -n 1000 -t BMBX -m "OU1=NY/OU2=Factory/OU3=MIS"
```

#### Showing the Allocation of Virtual Licenses

To show the allocation of virtual licenses, type:

```
omaudlic
```

The output shows:

- the license type
- the number of licenses that have been requested
- the number of licenses that have been granted
- the number of licenses that have been allocated
- the number of mailboxes on the system requesting the licenses
- when the system last requested the licenses
- the primary mailnode of the system requesting the licenses

## Requests for Virtual Licenses

Contact the administrator of the license repository to check:

- the number and type of virtual licenses that have been allocated to your system
- the name of the primary mailnode on the license repository system

The remainder of this section describes:

- “Requesting Virtual Licenses” using the command `omreqlic`
- “Showing Details about Licenses” using the command `omshowlic`

Do not request virtual licenses until they have been allocated to you on the license repository system.

You do not have to request all the virtual licenses you have been allocated. Only request those that you need. You can increase the number at a later date using the command `omreqlic`.

Remember to request virtual licenses for the license repository system itself.

## Requesting Virtual Licenses

1. List the license types. Type:

```
omreqlic -h
```

Make a note of the mnemonic or number representing the license type you are requesting.

2. Request the virtual licenses. Use the command:

```
omreqlic -n [+|-]licenses -t license_type -m mailnode
```

where:

```
-n [+|-]licenses
```

The number of virtual licenses to be requested.

The `-n licenses` option requests an absolute number of licenses. Using `-n +licenses` increases the number of licenses requested by the specified number.

Using `-n -licenses` decreases the number of licenses requested by the specified number.

### 3 Virtual Licenses

#### Requests for Virtual Licenses

To completely remove a request, use `-n 0`.

`-t license_type`

The mnemonic or number shown by the `-h` option representing the type of licenses being requested.

`-m mailnode`

The primary mailnode of the license repository system.

The mailnode must be routable by this (the requesting) system.

For example, to request 900 mailbox licenses from a license repository whose primary mailnode is `OU1=NY/OU2=HQ/OU3=MIS`, type:

```
omreqlic -n 900 -t BMBX -m "OU1=NY/OU2=HQ/OU3=MIS"
```

If this is the first time virtual licenses have been requested, stop and then restart the license monitor `omlicmon` after requesting the licenses. Use the standard Unix commands `ps` and `kill` to kill the license monitor, and restart it by typing `omlicmon`.

If, after requesting virtual licenses, a problem is reported with the allocation of the licenses on the license repository system, reissue the request after the license allocation on the repository system has been corrected.

## Configuring Virtual Licenses

To configure virtual licenses, follow these steps:

1. Add the entry `LML_USE_DIST_LIC=TRUE` in the general `.cfg` file.
2. Use `omsetlic` on the repository to allocate licenses. The command `omreqlic -h` shows the license types. An example of its output is shown below:

Strings for specifying license types. The strings are case-insensitive, or the number can be used instead.

String	Description	Number
-----	-----	-----
AMBX	A-series mailbox	100
AMBXCL	A-series mailbox + client	101
ABUP	A to B-series upgrade	102
BMBXCL	B-series mailbox + client	103
BMBX	B-series mailbox	104
HPCL	HP client	199
HPMBCL	HP mobile client	511
HPAPPL	HP Application Link	512
CCMAIL	cc:Mail R6 driver	514

OUTLOOK	Outlook driver	515
HPJCL	HP Japanese client	516

3. Use `omreqlic` to request licenses on the satellites.

The following guidelines apply:

- a. The license types must match what is already installed in the `nodelock` file.
  - b. You can configure both the allocations and request more licenses than actually exist in the repository `nodelock` file.
  - c. The commands `omreqlic` and `omsetlic` use the primary mailnode of the satellite server; if this mailnode is changed, then virtual licensing no longer works.
4. Stop and start the Service Router which then starts the `license.server` process.
  5. Stop and start the license daemon (`omlicmon`) to enable virtual licensing.

On satellite servers it is not possible to use a combination of node-locked and virtual licenses. Once virtual licensing is enabled, then the licenses configured in the node-lock file are no longer effective.

**Note:** *If the entry `LML_USE_DIST_LIC` in the `general.cfg` file is set to `TRUE`, the node-locked licenses are available, but only the virtual licenses are actually being used.*

*If the entry is set to `FALSE`, the node-locked licenses are being used by the system.*

## Showing Details about Licenses

To show details about all the licenses on the system, type:

```
omshowlic
```

To show further details about the virtual licenses on the system, type:

```
omshowlic -v
```

The output of this command includes decaying licenses (licenses that have been removed but have not yet expired). This command also shows when decaying licenses are due to expire.

### 3 Virtual Licenses

#### Requests for Virtual Licenses

## Licensing Reports

The command `omshowlic` shows both the node-locked licenses (on the repository system), and the virtual licenses that exist on the system. Always use `omshowlic` with the `-v` option with virtual licenses (`omshowlic` on its own does not display decaying licenses). An example of the output from the `omshowlic -v` command is shown below:

There are 70 configured OpenMail users on this system.

The following node-locked license passwords are recognized:

Product	Start Date	Exp Date	No of Users
B-series mailbox + client	06.05.96	01.01.30	1000

The following are the configured OM virtual license requests:

```
-----  
Product:      B-series mailbox + client  
Repository:   op,c  
Start Date:  
Expiry Date:  
Licenses requested: 500  
Licenses granted:  500  
Last Request Sent: 12:19:23
```

The following OpenMail virtual licenses are valid:

Product	Licenses
B-series mailbox + client	500

## The omaudlic Command

The command `omaudlic` shows the allocation of virtual licenses as follows:

The following are the configured OpenMail virtual license requests:

License Type	Req	Grant	Alloc	Mbox	Last Req	Mailnode
B-series m+c	500	500	500	70	14:40:17	op,c

## Moving Virtual Licenses Between Systems

To move virtual licenses from system A to system B:

1. On system A, request a reduced number of virtual licenses. Use the command `omreqlic`.
2. On the license repository system, change the allocation of virtual licenses, reducing those for system A and increasing those for system B. Use the command `omsetlic`.
3. On system B, request the total number of virtual licenses that are required. Use the command `omreqlic`.

The virtual licenses that you remove from system A will remain active on that system for a further three to four weeks. They are marked as **decaying licenses**.

The total number of virtual licenses in use does not include decaying licenses. This allows “duplicate” virtual licenses to exist for a limited period, so that users can remain active while being moved between systems.

The time at which decaying licenses will expire is shown by the command `omshowlic -v`.



This section tells you how to consolidate your node-locked licenses on a number of OpenMail systems onto one system. This system then acts as a license repository for distributing virtual licenses to the other OpenMail systems.

Using virtual licenses with a license repository gives flexibility in how licenses are distributed between systems and centralizes their management.

## Consolidating Node-Locked Licenses

All the OpenMail systems that will be using virtual licenses, and the system designated to be the license repository, must be running OpenMail version B.05.01 or later.

1. Designate a system in the OpenMail network to act as the license repository.

This system must be able to route OpenMail messages to all the systems that will be requesting virtual licenses from it.

It should be a stable system that is unlikely to change its hardware configuration as it must hold all the node-locked licenses for the network.

2. The target ID of the license repository system is given by the command `omshowlic -t`.

Some valid platform types are: AIX, HP-UX, and SUN.

3. Identify all the node-locked licenses that you want to consolidate (including existing node-locked licenses on the license repository system). You need to know the number and type of licenses being consolidated.

Log in to each system and use the command `omshowlic` to show the node-locked licenses currently on the system.

4. You will find the *OpenMail License Consolidation Form* at our Web site at the URL `http://www.hp.com/go/openmail`. Complete all fields on the form and click `submit` to send the *OpenMail License Consolidation Form*.

Within two working days, you will receive back one or more *Password Certificates* containing new node-locked passwords for the license repository.

5. Alternatively you can make a copy of the form, fill in all fields, and fax or e-mail the completed *Consolidated License Application Form* to Hewlett-Packard at one of the numbers shown in Appendix A, "Fax Numbers".

Within two working days, you will receive back one or more *Password Certificates* containing new node-locked passwords for the license repository.

6. On the license repository system, add the new node-locked license passwords.
7. On the license repository system, allocate virtual licenses for it and the other systems in the network. Refer to "Allocating Virtual Licenses" in Chapter 3 for details.

8. On each system using virtual licenses (including the license repository system), check that a `license.server` process is running. Refer to “Prerequisites for Using Virtual Licenses” in Chapter 3 for details.
9. On each system using virtual licenses (including the license repository system), request the required number of virtual licenses. Refer to “Prerequisites for Using Virtual Licenses” in Chapter 3 for details.

Remember to stop and then restart the license monitor `omlicmon` after using the `omreqlic` command for the first time.

10. On each system using virtual licenses, use the command `omshowlic` to check the correct number and type of virtual licenses have been granted by the license repository.

If the correct virtual licenses are being used by the system, delete (or move to another file) the old node-locked license passwords that have been replaced by the new virtual licenses:

- a. Edit the `nodelock` file containing the password and delete the lines containing the relevant passwords. The location of the `nodelock` file is platform dependent and is given by the command:  

```
omshowlic -n
```
- b. Stop the license monitor `omlicmon`, using the standard Unix commands `ps` and `kill`.
- c. Restart the license monitor, using the command `omlicmon`.
- d. Check all the relevant node-locked licenses have been recognized, using the command `omshowlic`.



Errors are logged in the Event Log; for virtual licenses error messages are also sent to the Error Manager.

If a specific error message is reported, use the command:

```
omsolve -n group_code error_number
```

For general problems, use the checklists in the following sections:

- “omaddlic Reports an Invalid Password”
- “omshowlic -v Cannot be Found on the System”
- “omshowlic is Slow to Display License Details on Unix Systems”
- “Licenses are not Recognized after a Hardware Reconfiguration”
- “Node-locked Licenses are not Shown by omshowlic”
- “Requests for Virtual Licenses Fail”
- “Virtual Licenses are not Shown by omshowlic”
- “Virtual Licensing Stops Working”
- “There are not Enough Licenses to Start a Service”
- “Lost License Entitlement Certificates”

## License Errors Checklists

The following sections describe general problems you may encounter with OpenMail licensing and describe how to correct or work around them.

### omaddlic Reports an Invalid Password

- Re-add the password ensuring the correct password string is entered.
- Check the target ID of the system matches that shown in the *Password Certificate*.

To display the target ID of the system, type:

```
omshowlic -t
```

### omshowlic -v Cannot be Found on the System

The command `omshowlic -v` can be run only if you are using virtual licensing on OpenMail version B.05.01 or later.

### omshowlic is Slow to Display License Details on Unix Systems

- Check the NCS start-up file to make sure the Local Location Broker and the Global Location Broker are started.

Edit the NCS start-up file (usually `/etc/netncsrc` or `/etc/rc.config.d/ncs`) if necessary.

- Clean the Local Location Broker and Remote Location Broker databases using `/etc/ncs/lb_admin` or `/usr/sbin/ncs/lb_admin`.

### Licenses are not Recognized after a Hardware Reconfiguration

Node-locked license passwords are tied to the hardware configuration of the system. If you change a LAN card or SPU, your licenses may not be recognized.

Either replace the original LAN card, or follow the instructions in “Moving Node-Locked Licenses Between Systems” in Chapter 2 to obtain new license passwords from Hewlett-Packard.

### **Node-locked Licenses are not Shown by omshowlic**

- Check the password in the `node.lock` file is the same as the “full” password shown in the *Password Certificate*.

The location of the `node.lock` file is platform dependent and is given by the command:

```
omshowlic -n
```

- Check the target ID of the system matches that shown in the *Password Certificate*.

To display the target ID of the system, type:

```
omshowlic -t
```

### **Requests for Virtual Licenses Fail**

- Check the “Prerequisites for Using Virtual Licenses” in Chapter 3.
- Check sufficient licenses have been allocated to you by the administrator of the license repository.

On the license repository system, use the command `omaudlic`.

- Check sufficient node-locked licenses are available in the license repository to satisfy all the requests for virtual licenses.

On the license repository system, use the command `omshowlic`.

- Reissue the request.

### **Virtual Licenses are not Shown by omshowlic**

- Check the “Prerequisites for Using Virtual Licenses” in Chapter 3.
- Check the Event Log for Service Router errors relating to the License Server.
- Check the In Tray of the Error Manager for License Server error messages.

## Virtual Licensing Stops Working

If the repository system is down, the satellite server licenses installed are valid for up to four weeks. The `omshowlic -v` command shows the virtual licenses as decaying. When the repository system comes back up, a new license is issued to the satellites when a request is sent.

If virtual licensing stops working, perform the following actions:

- On B.05.01 or later, check for a patch for the problem. See the OpenMail Web site for more information.
- Check the `LML_USE_DIST_LIC` entry in the `general.cfg` file.
- The entry in
- Check whether there are enough licenses configured in the repository `node.lock` file.
- Stop and start both the Service Router and the License daemon (`omlicmon`).
- Reissue the `omreqlic` command and check the messages on the repository using `omshowlog` on the Service Router at level 11 logging.

If the above actions fail to resolve the problem, use the following workaround:

1. Issue a temporary license.
2. Comment out the `LML_USE_DIST_LIC` entry in the `general.cfg` file. This returns you to node-locked licensing.

## There are not Enough Licenses to Start a Service

- Stop and restart the license monitor `omlicmon`, using the standard Unix commands `ps` and `kill` to stop the license monitor, and then type `omlicmon` to restart it.
- Check the number of configured OpenMail users is less than or equal to the total number of licenses available.

The number of configured OpenMail users and the number of available licenses is shown by the command:

```
omshowlic
```

In versions of OpenMail before B.5.01, a licensed service is made available in a specific **license series** and later series. For example, Directory Synchronization functionality is only available in B-series and later licenses. There must be more licenses of the correct series than there are configured users before the service is made available.

## **Lost License Entitlement Certificates**

If you have lost your original License Entitlement Certificate please send an e-mail to [hplicense@mayfield.hp.com](mailto:hplicense@mayfield.hp.com) for US and Asia Pacific or [codeword\\_europe@hp.com](mailto:codeword_europe@hp.com) for Europe and Africa.

Please enter the subject of the email as `Lost License Entitlement Certificate`.

The details you should obtain (in conjunction with your HP Sales Representative) are:

- Company name
- Contact name
- HP Sales Order number
- Date when the product was ordered
- Product number and quantity ordered



---

# A

## Fax Numbers

To fax your Password Request Form:

<b>If calling from ...</b>	<b>dial ...</b>
United States and Canada	800-541 2633
Australia	0014 800 127 701
Belgium	08 00 1 9135
Denmark	80 01 0935
Finland	9800 13331
France	0800 12 27 67
Germany	0130 819813
Italy	1678 751 65
Mexico	95 800 541 2633
Netherlands	06 022 9350
Norway	800 11232
South Korea	0081 800 964 8243
Spain	900 97 3321
Sweden	020 792 141
Switzerland	0800 553608
United Kingdom	0800 897936
All other European countries	+ (0)33 4 76 25 14 15
All other countries	+1 650 960 46 70

## A Fax Numbers

If you experience problems, call Hewlett-Packard's password delivery group at one of the following locations:

Hewlett-Packard  
Grenoble, France  
Phone:  
+33 (0)4 76 14 15 29  
*Business hours:*  
Monday to Friday  
08:00 to 17:00 CMT + 1

Hewlett-Packard  
California, USA  
Phone:  
+ 1-415-960-5111  
*Business hours:*  
Monday to Friday:  
06:00 to 17:00 PST

---

## Glossary

### A

**Application Link client license** *See OpenMail Application Link client license.*

**A-series license** This license series is now obsolete. However these licenses still function on later OpenMail releases.  
*See also B-series license.*

### B

**B-series license.** This license series is now obsolete. However these licenses still function on later OpenMail releases.  
*See also A-series license.*

### D

**decaying license** Virtual licenses that are active on a system for a limited time—usually a maximum of three to four weeks. A virtual license becomes a decaying license when the number of virtual licenses being requested is reduced. For example, if 100 virtual licenses are being requested and then this is reduced to 60 virtual licenses, there will be 40 decaying licenses that will exist for up to three or four weeks.

### H

**HP client license** *See OpenMail client license.*

### L

**license block** A number of licenses of the same type and series. There are usually 50 licenses in a license block.  
*See also license type and license series.*

**License Entitlement Certificate** A certificate issued by Hewlett-Packard showing the number, type, and series of licenses purchased. Information in this certificate is used to authenticate requests for node-locked passwords.

**license password** A string of alphanumeric characters representing a block of node-locked licenses.

**license repository** An OpenMail system, holding node-locked licenses, used to allocate virtual licenses to other OpenMail systems.

**license series** In earlier releases of OpenMail, mailbox licenses belonged to a series, for example A-series or B-series. The license series determined the level of OpenMail functionality that was made available to you.

**license type** The area of functionality to which the license applies. License types include mailboxes and Hewlett-Packard clients and drivers.

## M

### **mailbox license**

*See OpenMail mailbox license.*

## N

**node-locked license** A license contained in a license password and bound to the hardware of an individual machine running OpenMail. Node-locked licenses cannot be moved from machine to machine. *See also virtual license.*

**nodelock file** A file containing license passwords. The location of the `nodelock` file is system dependent and is shown by the command `omshowlic -n`.

## O

**OpenMail Application Link client license** A license which enables an Application Link client application to connect to OpenMail. You need this license in order to be able to use OpenMail Application Link.

**OpenMail cc:Mail driver license** A license to use the cc:Mail for Windows R6 (OpenMail Edition) client or the cc:Mail Mobile for Windows R6 (OpenMail Edition) client with OpenMail.

**OpenMail client license** A license to use an OpenMail LAN or mobile client from Hewlett-Packard. Most Hewlett-Packard clients are licensed. Exceptions include the AdvanceMail terminal interface (`advmail`) and the OpenMail Administration Client for Microsoft Windows.

**OpenMail mailbox license** A license to configure an OpenMail mailbox for a user or an application. To access the OpenMail Message Store, a user or an application must have a mailbox on the system.

**OpenMail Outlook driver license** A license to use the Outlook 97 or Outlook 98 clients with OpenMail.

## P

**Password Certificate** A certificate issued by Hewlett-Packard in response to a password request. It contains a password for a block of node-locked licenses for an individual OpenMail system.

---

## Glossary

### T

**target ID** A number unique to the hardware configuration of a machine used to generate license passwords for node-locked licenses. The target ID is shown by the command `omshowlic -t`.

### V

**virtual license** A license based on a node-locked license in a license repository that can be allocated to any OpenMail system in the network. Virtual licenses are a way of distributing licenses throughout the OpenMail network while only having to have one system holding node-locked licenses.



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