

CLEARSWIFT SECURE Gateways

Installation Guide

Revision 1.1

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Contents

PREFACE

About this guide	iii
Related documentation	iv
Accessibility	iv

INSTALLATION PREPARATION

Prerequisites	. 1	-1
Types of installation	. 1	-2

CREATING A VIRTUAL MACHINE ENVIRONMENT

Creating a virtual machine environment on a VMware ESX/ESXi server	2-1
Creating a virtual machine environment on a Microsoft Hyper-V server	. 2-8

INSTALLATION

Installing the Clearswift Gateway via the ISO image	3-1
Installing the Clearswift Gateway via the VMware image	3-5

CONFIGURING THE IP ADDRESS

CLEARSWIFT SECURE Gateways Installation Guide

Preface

This guide describes the process of installing the Clearswift Email Gateway and the Clearswift Web Gateway. The available installation options for both Gateways are as follows:

- Pre-installed Dell hardware.
- Installation on VMware via VMware image.
- Installation on customer specific hardware.
- Installation of VMware via ISO image.
- Installation of Hyper-V via ISO image.

About this guide

This guide provides the prerequisite information you need to install and configure the Clearswift Gateway. On completion, the Getting Started wizard will guide you through the installation process and the Clearswift Gateway setup.

The information in this guide supplements that contained in the online help (for further information, see *Related documentation* later in this Preface).

Readership

This guide assumes that readers/server administrators have a working knowledge of VMware or Microsoft Hyper-V, if required.

Conventions

This guide uses the following conventions:

Convention	Indicates
Italics	Abbreviation or acronym; cross-reference to related information; or first use in text of a term defined in the Glossary.
Bold type	Menus, names, and options displayed on screens, or terms in a definition list.
This type	Path names, file names, and extensions; commands or text to be entered in files or dialog boxes; text displayed by the system; or extracts of program code.
<u>Underline</u>	A URL for a site on the World Wide Web.
<variable></variable>	A value you must supply, for example, in a command line.
[<variable>]</variable>	An optional value you can supply, for example, in a command line.
1	A note giving information that emphasizes or supplements important points in the text or information that may apply only in special cases.

Convention Indicates



A caution alerting you to actions that could result in the loss of data.

Related documentation

Use this guide in conjunction with:

• Getting Started Guide

The Getting Started Guide provides instructions for guiding you through the set up process. You should read this document in conjunction with the Installation Guide before you install and configure the Clearswift Gateway.

This document is available from the online help.

• Online Help

The online help provides important information on new features supported by overview and conceptual information on the key features of the Clearswift Gateway. It also explains the procedures for using them, and describes their properties and settings.

To access the online help, click the Help button on the Clearswift Gateway Taskbar.

• Knowledge Base

The Knowledge Base provides supplementary information on various features and functionality of the Clearswift Gateway.

The Knowledge Base is available from our Web site at http://kb.clearswift.com.

Accessibility

The descriptions in this guide assume the left mouse button to be the primary button and the right mouse button to be secondary. Be aware of this if you have customized your mouse buttons.

Installation Preparation

This guide provides instructions for installing the Clearswift Gateway in a virtual environment or onto customer specific hardware. It describes how you create a virtual environment, and guides you through the installation and configuration of the Clearswift Email Gateway and the Clearswift Web Gateway.

Prerequisites

Table 1.1 lists the hardware prerequisites for a deployment using our category of low, typical and high processors.

Hardware item	Evaluation disk drive	Production disk drive	Minimum RAM	vCPU
Processing speed	40 GB	160 GB	2 GB	2
(Low)				
Processing speed (Typical)	80 GB	200 GB plus	2-4 GB	3 - 4
Processing speed (High)	120 GB plus	300 GB plus	4 GB	4+ (Depending on availability)

Table 1-1: Hardware prerequisites for a deployment



Clearswift products utilize processor and disk resources quite extensively, please allocate dedicated resources appropriately to your own environment. The Clearswift Web Gateway will not function efficiently if the memory or CPU resources are overstretched. It is important to choose an ESX/ESXi Server with sufficient free resource and maintain this.

Table 1-2: Clearswift Email and Web Gateway memory allocations

Clearswift Email Gateway	2GB of memory to the virtual gateway.
Clearswift Web Gateway	4GB of memory to the virtual gateway. If available, we recommend using two CPUs each with dual-core processors. However, you may choose to vary these options.

Types of installation

Figure 1.1 shows the difference between a VMware and an ISO image CLEARSWIFT SECURE Gateway installation.



Figure 1-1: Types of installation

The types of installation available are:

- 1. Install the CLEARSWIFT SECURE Gateway on pre-installed Dell hardware
- 2. Install the CLEARSWIFT SECURE Gateway via VMware image on VMware
- 3. Install the CLEARSWIFT SECURE Gateway on customer specific hardware
- 4. Install the CLEARSWIFT SECURE Gateway on VMware via ISO image
- 5. Install the CLEARSWIFT SECURE Gateway on Hyper-V server via ISO image

Installation types

1. To install the CLEARSWIFT SECURE Gateway on pre-installed Dell hardware

On delivery, your Dell hardware is pre-installed. You may choose to:

- a. Reconfigure the IP Address, if required. For details see, *Configuring the IP address* on page 4-1, then
- b. Install the Clearswift Gateway using the Getting Started Guide.



If you are reinstalling the Clearswift Gateway, see item 3.

2. To install the CLEARSWIFT SECURE Gateway on VMware via the VMware image

- a. Install the Clearswift Gateway via the VMware image. For details see, *Installing the Clearswift Gateway via the VMware image* on page 3-5.
- b. Reconfigure the IP Address, if required. For details see, *Configuring the IP address* on page 4-1.
- c. Start the Getting Started Setup wizard using the Getting Started Guide.

3. To install the CLEARSWIFT SECURE Gateway on customer specific hardware

Clearswift has tested the installation on a number of Dell, IBM, HP, Fujitsu and Hitachi servers. To check if your server is supported, see the Clearswift Knowledge Base at http://kb.clearswift.com/

- a. Install the Clearswift Gateway via the ISO image. For details see, *Installing the Clearswift Gateway via the ISO image* on page 3-1.
- b. Reconfigure the IP Address, if required. For details see, Configuring the IP address on page 4-1.
- c. Start the Getting Started Setup wizard using the Getting Started Guide.

4. To install the CLEARSWIFT SECURE Gateway on VMware via the ISO image

- a. Create a virtual machine environment on a VMware ESX/ESXI server. For details see, *Creating a virtual machine environment* on page 2-1.
- b. Install the Clearswift Gateway via the ISO image. For details see, *Installing the Clearswift Gateway via the ISO image* on page 3-1.
- c. Reconfigure the IP Address, if required. For details see, *Configuring the IP address* on page 4-1.
- d. Start the Getting Started Setup wizard using the Getting Started Guide.

5. To install the CLEARSWIFT SECURE Gateway on a Hyper-V server via the ISO image

- a. Create a virtual machine environment on a Microsoft Hyper-V server. For details see, *Creating a virtual machine environment on a Microsoft Hyper-V server* on page 2-8.
- b. Install the Clearswift Gateway via the ISO image. For details see, *Installing the Clearswift Gateway via the ISO image* on page 3-1.
- c. Reconfigure the IP Address, if required. For details see, *Configuring the IP address* on page 4-1.
- d. Start the Getting Started Setup wizard using the Getting Started Guide.

Installation Preparation

Creating a virtual machine environment

You can create a virtual machine environment for:

- VMware ESX/ESXi server
- Microsoft Hyper-V server

Creating a virtual machine environment on a VMware ESX/ESXi server

These instructions are applicable when you are using a VMware ESX/ESXi server version 3 or later. If you experience any problems, you should contact your normal support provider.

To create a virtual machine environment:

1. Create a new virtual gateway. This can be created by connecting to the VMware Virtual Infrastructure Client then selecting the new Virtual machine option.

1/ 1X	2 MAAA	$M - M^{-1}$
🛃 10.44.2	22.26 - Virtual Infrastructure Client	
File Edit V	/iew Inventory Administration Help	
New 🕨	Virtual Machine Ctrl+N	
Export ►	Resource Pool Ctrl+O	
Report 🕨	Add Permission Ctrl+P	
Print 🕨	1 ²¹ G	
Exit	3.clearswift-info serv	er3.clearswift
	Sun	nmary Virtual
	Ge	neral
	Ma	anufacturer:

Figure 2-1: Creating a virtual machine

Creating a virtual machine environment

2. The New Virtual Machine Wizard is displayed. To proceed, you need to run and follow the New Virtual Machine Wizard instructions.

Select typical, to create a typical virtual machine.

New Virtual Machine W	'izard	
Select the Appropriate Co How would you prefer t	onfiguration o configure your virtual machine?	ESX 3.x virtual machine
Wizard Type Name and Folder Datastore Guest Operating System CPUs Memory Network Network Virtual Disk Capacity Ready to Complete	Virtual Machine Configuration Typical Create a new virtual machine with the most com Coustom Choose this option if you need to create a virtu configuration options.	mon devices and configuration options. al machine with additional devices or specific
Help		< Back Next > Cancel

Figure 2-2: Selecting the appropriate configuration

- 3. Enter a name for the virtual machine. It is recommended that you select a meaningful name, for example, Clearswift Email Gateway or Clearswift Web Gateway.
- 4. Select a Datastore. This option specifies the location of the virtual machine files.
- 5. Enter the guest operating system to be used with the virtual machine.
 - For the typical Clearswift Email Gateway installation, select Linux, with the Version set to Other Linux or Other Linux (32 bit).

🔗 New Virtual Machine Wiza	d X
Choose the Guest Operatin What Guest operating syst	g System Virtual Machine Version: 4 m do you plan to use with this virtual machine?
Wizard Type Name and location Datastore Guest Operating System CPUs Memory Network Wirtual Disk Capacity Ready to Complete	Guest Operating System: Microsoft Windows Linux Novell NetWare Solaris Other Yersion: Sterr The selection on this page allows the wizard to provide defaults for verious virtual machine parameters suitable for the guest OS you intend to install. Your selection is also recorded as part of the parameters suitable for the guest OS you intend to install. Your selection is also recorded as part of the parameters suitable for the guest OS. This wizard does not install any guest OS for you.
Help	_≤Back Next ≥ Cancel

Figure 2-3: Choosing the guest operating system (ESX/ESXi virtual machine)

6. Enter the number of virtual processors you are planning to use in the virtual machine.

On the Clearswift Web Gateway the recommended default is 2 vCPUs, provided the total number of vCPUs allocated across all VMs on the ESX/ESXi server does not exceed the available physical CPU-cores. If vCPU resource is plentiful, using a 4 vCPU VM may improve performance, but if vCPU resource is limited (or already overstretched) a 1 vCPU VM is advisable. It should be considered that on modern multi-quad-core processor hardware, access to 1, 2 or even 4 vCPUs will limit the overall performance. For example, a 2 vCPU VM on a dual quad-core hardware will only achieve a 20-25% performance, compared to a gateway running on local hardware.

🚰 New Virtual Machine W	'izard				
Virtual CPUs Configure the number of	f virtual processors in the virtual machin	ne.		ESX 3.x virtual i	machine
Wizard Type Name and Folder Datastore Guest Operating System CPUS Memory Network Virtual Disk Capacity Ready to Complete	- Number of virtual processors:	2			
Help			< Back	Next >	Cancel

Figure 2-4: Configuring the number of virtual processors in the virtual machine

- 7. Enter the amount of RAM to be available on the virtual machine. The amount of memory allocated will depend upon the number of users and the volume of email that the virtual machine needs to process and manage. Examples are specified below:
 - 2 GB is recommended for low volume environments.
 - 3 GB is recommended for typical environments.
 - 4 GB is recommended for high volume environments.

Memory Configure the virtual ma	achine's memory size.			ESX 3.x virtu	al machine
Wizard Type Name and Folder Datastore Guest Operating System CPUs Memory Network Virtual Disk Capacity Ready to Complete	Specify the amount of memory allocated machine. The memory size must be a mu Memory for this virtual machine:	to this virtual (tiple of 4MB. 2048 - MB 184 A A values, you er above or in the 32 MB 256 MB 2048 MB 16384 MB			
Help		T.	< Back	Next >	Cancel

Figure 2-5: Configuring the virtual machine's memory size

8. Enter the Network Interface Card (NIC) details.

The Clearswift Gateway requires one NIC to be configured. If required, a second card can be added.

Choose Networks Which network connection	DZATO	ESX 3.x virtual machine
Wizard Type Name and Folder Datastore Guest Operating System CPUs Memory Network Virtual Disk Capacity Ready to Complete	Create Network Connections How many NICs do you want to connect?	
Help	_ < Back	Next > Cance

Figure 2-6: Selecting network connections which will be used by the virtual machine

9. Enter the amount of disk space to be allocated on the virtual machine.

	1 0
Usage	GB
Low	160
Typical	200
High	300





The size of the virtual disk space cannot be increased after installation. To avoid performance issues, you must allow sufficient disk space for all future requirements.

10. Check the installation details, then click Finish.

Ready to Complete New Are these the options y	Virtual Machine ou want to use?			ESX 3.x virtu	al machine
Wizard Type Name and Folder Datastore		inish, a task will be started that w ne will be created with the followin	ill create the new virtung options:	ial machine.	
CPUs Memory Network Virtual Disk Capacity Ready to Complete	Host/Cluster: Host/Cluster: Datastore: Guest OS: Virtual CPUs: Memory NICS: NIC 1 Network: Virtual Disk Size:	Runsweepen unland Appliatie server3.dearswift-info Resources storage1 Other 2 2048 MB 1 1 VM Network 70 GB			
	You will involve	I not be able to use or edit the virt s creation of a virtual disk it could	ual machine until the t take several minutes	ask completes. to complete.	. If the task
Help			< Back	Finish	Can

Figure 2-7: Checking installation details

11. After creating the virtual machine, you must modify its properties to ensure that the installation CD can be used to install the Clearswift Gateway.

To modify the virtual machine properties:

- a. Select the CD/DVD drive and browse to the ISO file downloaded from the Clearswift website.
- b. Select the Connect at Power on check box.
- c. Click OK.
- 12. Install the Clearswift Gateway via the ISO. For details see Chapter 3, *Installing the Clearswift Gateway via the ISO image* on page 3-1.

Creating a virtual machine environment on a Microsoft Hyper-V server



The instructions for using Hyper-V Manager are applicable when you are using Microsoft Hyper-V on a Windows 2008 server.

If you are using Microsoft Hyper-V Server 2008, Hyper-V Manager must be run from a Windows 2008-based server; it cannot run directly on the standalone Hyper-V server.

If you experience any problems, you should contact your normal support provider.

The Clearswift Web Gateway is not supported in the Microsoft Hyper-V server environment. If you choose to install a Clearswift Web Gateway in the Microsoft Hyper-V environment, it should only be used for evaluation purposes.

To create a virtual machine environment:

1. Create a new virtual gateway. This can be created by connecting to the Virtual Infrastructure Client then selecting the new Virtual machine option.

Hyper-V Manager				
File Action View Window	Help		<u>_8</u> ×	
Hyper-V Manager	Virtual Machines	Actions T5400JW	• -	
	CONTENTsafe Server1 CONTENTsafe Server2 CONTENTsafe server integration	New		Irtual Machine Iard Disk Ioppy Disk
	DriveGul HV2007	Hyper-V Settings		
	Snapshots	Edit Disk		
	The selected virtual i	Stop Service Kemove Server		
		C Refresh View	• =	
Displays the new virtual machine wizard				

Figure 2-8: Creating a virtual machine

2. The New Virtual Machine Wizard is displayed. To proceed, you need to run and follow the New Virtual Machine Wizard instructions.



Figure 2-9: Specifying the Name and Location of the Virtual Machine

- 3. Enter a name for the virtual machine. It is recommended that you select a meaningful name, for example, Clearswift Email Gateway.
- 4. Select an existing folder or create a new folder to specify the location of the virtual machine files. If no folder is selected, the Virtual Machine will be stored in the default folder configured for this server.

te New Virtual Machine Wiz	ard	×
Assign Mem Before You Begin Specify Name and Location Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 8 MB through 4092 MB. To improve performance, specify more than the minimum amount recommended for the operating system. Memory: 2048 MB	
	< Previous Next > Einish Cancel	1

Figure 2-10: Configuring the virtual machine's memory size

- 5. Enter the amount of RAM to be available on the virtual machine. The amount of memory allocated will depend upon the number of users and the volume of email that the virtual machine needs to process and manage. Examples are specified below:
 - 2 GB is recommended for low volume environments.
 - 3 GB is recommended for typical environments.
 - 4 GB is recommended for high volume environments.

Configure N	etworking	×
Before You Begin Specify Name and Location Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual network, or it can remain disconnected. Connection: Not Connected	
	< <u>Previous</u> <u>Next</u> > <u>Einish</u> Cancel	J

Figure 2-11: Selecting network connections which will be used by the virtual machine6. It is recommended that you leave the Connection as Not Connected.

efore You Begin pecify Name and Location Issign Memory	A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.
Configure Networking Connect Virtual Hard Disk Installation Options Lummary	Name: Clearswift Email Appliance.vhd Location: I:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\ Browse Size: 80 GB (Maximum: 2040 GB)
	C Use an existing virtual hard disk Location: Ir/Users/Public/Documents/Hyper-V/Virtual Hard Disks/ Browsen
	C Attach a virtual hard disk later

Figure 2-12: Specifying the storage to install an Operating System

7. Specify the Name and Location of the virtual hard disk. Enter the amount of disk space (Size) to be allocated on the virtual machine.

Table 2-2: Disk space usage table

Usage	GB
Low	160
Typical	200
High	300



The size of the virtual disk space can be increased after installation. To avoid performance issues, it is important to allow sufficient disk space for all future requirements.

8. You can now specify the location of the Clearswift Gateway ISO image. Select to install an operating system from a Boot CD/DVD-ROM, specify the location and then click Next.

捷 New Virtual Machine Wiza	ard	×
Installation	Options	
Before You Begin Specify Name and Location Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	You can install an operating system now if you have access to the setup media, or you can install it later. C Install an operating system [ater C Install an operating system from a boot CD/DVD-ROM Media C Physical CD/DVD drive: D: Y C Image file (.iso): CV:r/25999 iso Browse	
	Install an operating system from a boot figppy disk Media Virtual floppy disk (.vfd): Browse	
	Install an operating system from a network-based installation server Your network adapter is disconnected. To perform a network-based installation, return to the Configure Networking page and connect the network adapter. <td>e</td>	e

Figure 2-13: Checking installation details

9. Check the installation details, then click Finish.

New Virtual Machine Wiza	ird	×
Completing	the New Virtual Machine Wizard	
Before You Begin Specify Name and Location	You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine. Description:	
Configure Networking Connect Virtual Hard Disk Installation Options Summary	Name: Clearswift Email Appliance Memory: 2048 MB Network: Not Connected Hard Disk: 1:/Users/Public/Documents/Hyper-V/Wirtual Hard Disks/Cle Operating System: Will be installed from 1:/(d25399.iso Image: Start the virtual machine after it is created To create the virtual machine and close the wizard, click Pinish.	
	< Buent > Einish Cano	H.

Figure 2-14: Checking installation details

10. A Legacy Network Adapter must be added to your virtual machine.

Enter the Network Interface Card (NIC) details. The Clearswift Gateway requires one NIC to be configured. If required, a second card can be added.

In the virtual machine settings you need to use a Legacy Network adapter instead of the standard adapter:

- a. Remove the Standard Network Adapter.
- b. Go to Add Hardware and add a Legacy Network Adapter.
- c. Select the new legacy adapter and connect it to a network.



Figure 2-15: Adding a Legacy Network Adapter

11. Select the Legacy Network Adapter to be added to your virtual machine.

Creating a virtual machine environment

12. After installation, you must change the settings on the Windows 2008 Server. The virtual CD/DVD drive must be removed from the virtual machine by selecting the DVD drive and clicking Remove.

nerowerc	4.5 DVD Drive		
Add Hardware	Select the controller and location on Controller:	the controller to attach the CD/D	VD drive.
Memory S12 MB Processor 1 Virtual processor 1 IDE Controller 0	IDE Controller 1 Nedia: Specify the media to use with you C None	vinuel CD/DVD drive.	2
Web Appliance_1_4_0_23231	C: Users/Desktop/250(1_4_0_	23231.40	
(+ DVD Drive 1_4_0_23231.iso			Browse
Actional Status	C Physical CD(DVD drive: Drive DC y To remove the virtual CD(DVD drive	fon this virtuel mechine, click Re	nove. Remove

Figure 2-16: Removing the virtual CD/DVD drive

13. The Clearswift Gateway will then be installed as described in point 2 of *Installing the Clearswift Gateway via the ISO image* on page 3-1.

Installation

The CLEARSWIFT SECURE Gateway installation is available in two formats, these are:

- CLEARSWIFT SECURE Gateway via the ISO image.
- CLEARSWIFT SECURE Gateway via the VMware image.

The Clearswift Gateway ISO and VMware image are available from the Clearswift website.

Installing the Clearswift Gateway via the ISO image

To install the Clearswift Gateway:

1. To start the installation, insert and run the Clearswift Gateway Gold CD. When the Gateway reboots, a GNU GRUB menu eventually appears, displaying only one option which the system selects automatically:

Clearswift Gateway Gold CD

2. During the installation, the following information is required:

a. Disk controller type

Select the controller type that the installation script has located, for example, sda. In the example below, a sda device has been located.

wd: If you don't use raid, use raid=noautodetect wd: Autodetecting RAID arrays. wd: Scanned 0 and added 0 devices. wd: autorun wd: autorun DONE. RAMDISX: gzip image found at block 0 VFS: Mounted root (ext2 filesystem) on device 1:0. *** Installation Console ** Installation phase 1 in progress ** Installation patient a disk Please select and gartition a disk Please select a disk from the following list hdRNIG: all data on the selected disk will be lost hda hda :28971520 Make selection (e.g. hda, sda or cciss):_	<pre>wd: If you don't use raid, use raid=noautodetect wd: Autodetecting NAID arrays. wd: Scanned 0 and added 0 devices. wd: autorun Md: autorun DONE. RAMDISK: gzip image found at block 0 UFS: Mounted root (ext2 filesystem) on device 1:0. /etc/init.d/rcs RUMNING *** Installation Console ** *** Installation console ** *** Installation phase 1 in progress ** *** Step 1: Select and partition a disk Please select a disk from the following list MARNIG: all data on the selected disk will be lost hda :20971520 *** Make selection (e.g. hda, sda or cciss):_</pre>
*** Installation Console *** trying Mount -t iso9660 -o ro -n /dev/hda /cdrom Found the Gold CD device on hda *** Installation phase 1 in progress *** Step 1: Select and partition a disk Please select a disk from the following list HARNING: all data on the selected disk will be lost hda :489856 sda :28971520 Make selection (e.g. hda, sda or cciss):	*** Installation Console *** trying Mount -t iso9660 -o ro -n /dev/hda /cdrom Found the Gold CD device on hda *** Installation phase 1 in progress *** Step 1: Select and partition a disk Please select a disk from the following list *** HARNING: all data on the selected disk will be lost *** *** hda :4098556 sda :20971520 Make selection (e.g. hda, sda or cciss):
trying Mount -t iso3660 -o ro -m /dev/hda /cdrom Found the Gold CD device on hda ** Installation phase 1 in progress ** Step 1: Select and partition a disk Please select a disk from the following list HARNING: all data on the selected disk will be lost hda :409856 sda :20971520 Make selection (e.g. hda, sda or cciss):_	trying Mount -t iso3660 -o ro -m /dev/hda /cdrom Found the Gold CD device on hda ** Installation phase 1 in progress ** Step 1: Select and partition a disk Please select a disk from the following list HARNING: all data on the selected disk will be lost
** Installation phase 1 in progress ** Step 1: Select and partition a disk Please select a disk from the following list MARNING: all data on the selected disk will be lost hda :409056 sda :20071520 Make selection (e.g. hda, sda or cciss):_	** Installation phase 1 in progress ** Step 1: Select and partition a disk Please select a disk from the following list MARNING: all data on the selected disk will be lost hda :409056 sda :20971520 Make selection (e.g. hda, sda or cciss):_
Step 1: Select and partition a disk Please select a disk from the following list MARNING: all data on the selected disk will be lost hda :4090556 sda :20971520 Make selection (e.g. hda, sda or cciss):_	Step 1: Select and partition a disk Please select a disk from the following list MARNING: all data on the selected disk will be lost
Please select a disk from the following list WARNING: all data on the selected disk will be lost hda :409055 sda :20071520 Make selection (e.g. hda, sda or cciss):_	Please select a disk from the following list WARNING: all data on the selected disk will be lost hda :409856 sda :20971520 Make selection (e.g. hda, sda or cciss): <u></u>
hda :409856 sda :20971520 Make selection (e.g. hda, sda or cciss):_	hda :409856 sda :20971520 Make selection (e.g. hda, sda or cciss):_
Make selection (e.g. hda, sda or cciss):_	Make selection (e.g. hda, sda or cciss): <u></u>

Figure 3-1: sda example

Installation

b. File system type

Select a root file system type. The options available are:

- EXT3
- XFS
- REISERFS (default)

It is strongly recommended that you use ReiserFS.

c. Partition tables

The Clearswift Gateway installation will stop when the partition tables have been built. Click **Return** to continue.

d. Factory partition

The factory default Clearswift Gateway system is copied to the factory partition on the Gateway machine. On completion, the installation is stopped.

Press RETURN to continue: Step 3: transfer Gold-CD image to factory partition this may take a few minutes Copy completed step 4: install & configure the bootloader (grub) grub successfully installed into MBR of /dew/sda ** Installation phase 1 complete ** ** Please remove Gold-CD ** Shutdown in 10 seconds umount: none busy - remounted read-only Couldn't umount /dew/shu on none: Invalid argument swapoff: cannot stat swapspace: No such file or director The system is going down NOM !! Sending SIGTERM to all processes. Sending SIGTERM to processes. S	/dev/sda4	14605+ 20473-	5868-	6008310	83	Linux
Step 3: transfer Gold-CD image to factory partition this may take a few Minutes copy completed Step 4: install & configure the bootloader (grub) grub successfully installed into MBR of /dev/sda ** Installation phase 1 complete ** ** Please remove Gold-CD ** Shutdown in 10 seconds umount: none busy - remounted read-only Couldn't umount /dev/shw on none: Invalid argument swapoff: cannot stat swapspace: No such file or director The system is going down NOM !! Sending SIGTERM to all processes. Sending SIGTERM to all processes. The system is halted. Press Reset or turn off power Md: stopping all Md devices. System halted.	Press RETURN	to continue:				
Step 4: install & configure the bootloader (grub) grub successfully installed into MBR of /dev/sda *** Installation phase 1 complete ** ** Please remove Gold-CD ** Shutdown in 10 seconds umount: none busy - remounted read-only Couldn't umount /dev/shw on none: Invalid argument swapoff: cannot stat swapspace: No such file or director The system is going down NOU !! Sending SLGTEMH to all processes. Sending SLGTEML to all processes. System is halted. Press Reset or turn off power md: stopping all md devices. System halted.	Step 3: tran this copy complet	sfer Gold-CD ima may take a few ed	ge to fa Minutes.	ctory part	titio	n ====
** Installation phase 1 complete ** ** Please remove Gold-CD ** Shutdown in 10 seconds umount: none busy - remounted read-only Couldn't umount /dev/shm on none: Invalid argument swapoff: cannot stat swapspace: No such file or director The system is going down NOM !! Sending SIGTERM to all processes. Sending SIGTERM to all processes. The system is halted. Press Reset or turn off power md: stopping all md devices. System halted.	Step 4: inst grub success	all & configure fully installed	the boot into MBR	loader (gr of /dev/s	rub) sda	
Shutdown in 10 seconds umount: none busy - remounted read-only Couldn't umount /dew/shw on none: Invalid argument swapoff: cannot stat swapspace: No such file or director The system is going down NOM !! Sending SIGTERM to all processes. Sending SIGTERM to all processes. The system is halted. Press Reset or turn off power md: stopping all md devices. System halted.	** I **	nstallation phas Please remove	е 1 сомр Gold-CD	lete		**
	Shutdown in umount: none Couldn't umo swapoff: can The system i Sending SIGT Sending SIGK The system is Md: stopping System halte	10 seconds busy - remounte ant /dev/shm on not stat swapspa s going down NOW ERM to all proce s halted. Press all md devices. d.	d read-o none: In ce: No s !! sses. sses. Reset or	nly valid argu uch file o turn off	имent or dir powe:	rector

Figure 3-2: System partly built example

e. Remove the CD from the Clearswift Gateway CD drive, then shutdown and restart the Clearswift Gateway system.

If you are installing the Clearswift Gateway in a virtual environment via ISO image, you need to unmount the CD-ROM image then restart the Clearswift Gateway system.



Figure 3-3: Factory start example

If you are installing the Clearswift Gateway on an VMware ESX/ESXi server, you can select Ctrl+Alt+Ins to shutdown, then restart the Clearswift Gateway virtual machine.

F

Installation

f. The Gateway machine will restart using the factory default Clearswift Gateway system. During the second phase of the installation, the Gateway will continue to self-configure, then automatically shutdown before restarting.

extracting	health package		
extracting	appjsp package		
extracting	infrastructure package		
extracting	uagent package		
extracting	MksMconf package		
extracting	postgresql_db package		
extracting	kaspav package		
extracting	sdlib package		
extracting	smbios package		
extracting	pmmtc package		
extracting	рмммарр package		
extracting	technology package		
extracting	initialupdate package		
extracting	branding package		
extracting	zoneinfo package		
extracting	locales package		
extracting	util-linux package		
Step 5: re	configure the bootloader (grub)		
grub confi	guration complete		
**	Installation phase 2 complete	**	
Debeeting	in 10 eccende		
Rebuuting	III 10 Secollus		

Figure 3-4: Installation Phase 2 complete example

On completion, an Installation phase 2 complete prompt is displayed.

When using standardized virtualized hardware you may see a warning message. The warning is prompted by the number of network cards being used, and the interface name of your wireless card, for example, eth1 not being installed on the Clearswift Gateway virtual machine. This warning can be ignored.

- g. After completion, the Clearswift Gateway system will reboot. During this process, the console screen will be blank for a couple of minutes, while the Gateway Services are started.
- If you want to change the location of the IP Address you must configure the IP Address before you start the Getting Started Setup wizard. For details see, *Configuring the IP address* on page 4-1.
- If you are using the default IP Address settings in the Getting Started Setup wizard, see the Getting Started Guide.

Installing the Clearswift Gateway via the VMware image

These instructions are applicable when you are using an VMware ESX/ESXi server version 4 or later. If you experience any problems, you should contact your normal support provider.

To install the Clearswift Gateway from the VMware image:

- a. Download the VMware image from the Clearswift website.
- b. Unzip the VMware image. The image consists of three files, these are:
 - OVF descriptor file
 - VMDK disk image
 - MD5 file
- c. Import the VM ware image into the Virtual Gateway wizard.
 - Before installation, it is recommended that you check the MD5 file.
 - After installation, you can modify the allocated Central Processing Unit (CPU) and RAM resource allowances, but you cannot change the allocated disk allowance.
 - If you do not want to use the default disk allowance, you must install the VMware using a Clearswift Gateway ISO image.

To import the VMware image into the Import Virtual Gateway wizard:

1. From the VMware Infrastructure Client or VMware Virtual Center select File then Deploy OVF Template. The Import Virtual Gateway wizard is opened.

Installation

2. On the Import Location page, select Deploy OVF Template from file.

🕜 Deploy OVF Template	
Source Select the source location.	
Source OVF Template Details Name and Location Datastore Network Mapping Ready to Complete	 Deploy from file: ice\Clearswift Email Appliance\Clearswift Email Appliance.ov] Browse Choose this option if the source OVF template (*.ovf) is on the local file system. For example, your C: drive, a network share, or a CD/DVD drive. Deploy from URL: Choose this option to download the OVF template from the Internet and enter a URL such as http://www.example.com/template.ovf
Help	< Back Next > Cancel

Figure 3-5: Specifying the import location

- 3. Click Browse, then browse to the location of the OVF descriptor file.
- 4. Select the name of the file to be imported, then click Next.
- 5. Check the file name added to Import from file is correct, then click Next.

- 6. On the Select a Name and Location for this Virtual Appliance page, enter a unique name for the virtual Clearswift Gateway.
- 7. Click Next.

🖉 Import Virtual Appliance Wizard							
Select a Name and Location for this Virtual Appliance What do you want to call this virtual appliance and where do you want it located?							
Import Location <u>Virtual Appliance Details</u> End User License Agreement Name and Location	Provide a name for the new virtual appliance and select its location in the inventory panel below. Virtual appliance names can contain up to 80 characters, but they must be unique within each inventory folder.						
Datastore	Clearswift Web Appliance						
Ready to Complete	Virtual appliance folders are unavailable when connected directly to the host.						
Help	< Back Next > Cancel						

Figure 3-6: Entering a unique name

Installation

8. On the Choose a Datastore for the Virtual Appliance page, select a datastore in which to store the files for the Clearswift Gateway.

1	🕢 Import Virtual Appliance Wiz	ard					- • •		
	Choose a Datastore for the Virtual Appliance Where do you want to store the files for the virtual appliance?								
	Import Location Virtual Appliance Details End User License Agreement Name and Location Datastore	Select a datastore in which to store the files for the virtual appliance.							
i I	Ready to Complete	Name	Capacity	Free	Туре	Access			
		[datastore1]	419.00 GB	178.45 GB	VMFS	Single host			
		[datastore2]	136.50 GB	135.95 GB	VMFS	Single host	_		
		[NAS Storage]	456.72 GB	290.83 GB	NFS	Single host			
	Help				< Ba	ck Next >	Cancel		

Figure 3-7: Choosing a datastore

9. Check the selected datastore details, and Click Next.

It is recommended that you confirm the network and resource pool configurations.

- 10. On the Ready to Complete Virtual Appliance Import page, it is recommended that you check the settings listed for the import.
- 11. Click Finish, to import the Clearswift Gateway.
 - If you want to change the location of the IP Address you must configure the IP Address before you start the Getting Started Setup wizard. For details see, *Configuring the IP address* on page 4-1.
 - If you are using the default IP Address settings in the Getting Started Setup wizard, see the Getting Started Guide.

Configuring the IP address

After the installation of the CLEARSWIFT SECURE Gateway, the IP address may need to be reconfigured to complete the installation instructions. By default, an IP address is allocated during installation. The IP address can be configured in administrator mode prior to running the Getting Started Setup wizard.

To configure the IP Address:

1. Open the virtual machine console, then press **Return** until the following Console login prompt is displayed:

Login: console

- 2. Login to the Console Interface at the Console login prompt using the name **console** and the password **console**. The Clearswift Gateway Console Interface is displayed.
- 3. From the Console Interface menu, select NIC1 Configure primary adapter (NIC1).
- 4. Enter the IP Address. The current values are, for example,

NIC 1 IP address:10.20.30.40.

A

To select options in a Console Interface dialog, use the arrow keys to highlight the required option. Use the TAB key to select the main action at the bottom of the dialog.

When you have entered the required IP address, press the TAB key to highlight **OK**, and press Enter.

- 5. On the Save NIC Settings dialog select Yes, and then exit from the Console Interface.
- 6. From the Console Interface menu, select Routes IP Route Management.
- 7. From the menu, select Set Default Gateway, and set the default gateway as, for example, 10.20.30.1.

To save settings, follow step 5 above. If you check the system status from the console or go back into the default gateway or NIC parameters the previous values will be cleared. In this instance, you will need to reset the values again.

8. Save Console Interface settings then start the Getting Started Setup wizard.

On the computer connected to the Clearswift Web Gateway, enter https://10.20.30.40 into Internet Explorer or Mozilla Firefox.

You cannot run the Getting Started Setup wizard until you have configured the host IP address on the virtual machine environment. For guidance, see the Getting Started Guide

If you experience any problems you should contact your normal support provider.

Configuring the IP address



Figure 4-1: Getting Started Guide

The Getting Started Guide is available from the Clearswift Email or Web Online Help.