

**Clearswift Information Governance Server
Installation & Getting Started Guide**
Version 1.3.3

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Contents

Copyright and trademarks	2
Disclaimer	4
Contents	5
1. About this guide	6
1.1 Who is this guide for?	6
2. Before installing	7
2.1 Types of installation and hardware prerequisites	7
2.1.1 Browser support	7
2.1.2 Online installation	8
3. Installing	9
3.1 Install Ubuntu Server	9
3.1.1 After Ubuntu installation	11
3.2 Install the Information Governance Server (IGS)	12
3.2.1 Complete IGS installation	13
3.2.2 After IGS installation	13
Appendix A: Installing IGS from behind a proxy	15
Error: Failed to retrieve the preconfiguration file	15
Error: Failed to run pre-seeded command	15
Error: License validation timed-out due to network issues or validation server being down for maintenance	17
Appendix B: Configuring IGS for use behind a proxy	18
Appendix C: Retrieving users from the directory server	19

1. About this guide

The Information Governance Server (IGS) enables your organization to identify important information, and monitor and control the flow of this information within the organizational boundary and beyond.

The IGS, along with other Clearswift products, provides the basis for the Clearswift Information Governance Platform (IGP). Collectively, the IGP allows you to register, control, and track content.

The IGP comprises the following:

- The Information Governance Server
- One or more Clearswift SECURE Gateways (Web, Email, Exchange, or ICAP)

This guide provides information on how to install your IGS onto a virtual or physical machine.

This guide does not provide instructions on installing a Clearswift SECURE Gateway. You should consult documentation provided with your Gateway product for information on Gateway installation.

1.1 Who is this guide for?

This guide is provided for the administrator who is tasked with installing an IGS. Some steps of this installation procedure are performed from a Linux command line, and it is assumed that the person who installs this software has some experience of Linux administration.

We recommend that you read through this guide before installing your IGS.

2. Before installing

This section includes considerations you need to make before installing your IGS.

2.1 Types of installation and hardware prerequisites

You can install your IGS on:

- A dedicated physical server
- A VMware system, such as vSphere or ESXi

Storage requirements depend on the number of users registering items on the IGS and general Gateway usage. In addition to storage requirements, you should ensure that a minimum of 32 GB of RAM is available and, if you are using a virtual machine, a minimum 2 vCPU. 2 vCPU is the minimum recommended, but 4 vCPU is preferable and, for larger systems, 8 vCPU with dual processors.

The table below provides guidance on some typical scenarios and the amount of disk space required.

Scenario	Approximate disk space consumed
Registration of 500,000 average-sized documents (10,000 words per document).	40 GB
Storage of 1 year's worth of tracking data from a Clearswift Secure Email or Exchange Gateway for a company of 500 users	7.5 GB
Storage of 1 year's worth of tracking data from a Clearswift Secure Email or Exchange Gateway for a company of 5000 users	68 GB
Storage of 1 year's worth of tracking data from a Clearswift Secure Web or ICAP Gateway for a company of 500 users	76 GB
Storage of 1 year's worth of tracking data from a Clearswift Secure Web or ICAP Gateway for a company of 5000 users	7.5 TB
Storage of 7 year's worth of tracking data from a Clearswift Secure Web or ICAP Gateway for a company of 5000 users	52.5 TB

Depending on your organization's requirements these numbers might differ, and you should consider data retention periods and archiving processes when determining hardware resources.

2.1.1 Browser support

The following browsers and versions are supported:

- Internet Explorer IE10 (Windows 7)
- Internet Explorer IE11 (Windows 7, Windows 8)
- Mozilla Firefox 17, 24, 30, 36+

- Google Chrome 40+
- Microsoft Edge (Windows 10)

2.1.2 Online installation

You need Internet access to install IGS.

3. Installing

Installation of your IGS is a two step process. You need to:

1. Install Ubuntu Server 14.04.5.
2. Install Clearswift IGS.

The installation process uses a Clearswift 'pre-seed' file that provides default disk partition and other configuration settings. The pre-seed file is hosted at the Clearswift repository and needs to be specified as part of the boot options when installing Ubuntu.



To complete your IGS installation, you need a valid Clearswift IGS license key.

You do not need a license key to install Ubuntu Server.

3.1 Install Ubuntu Server

Before installing Ubuntu Server you need to:

- Download Ubuntu 14.04.5 64-bit Server. If you are hosting your IGS on a physical machine you will need to burn the ISO to a CD. You can find information on the 14.04.4 release at <http://releases.ubuntu.com/14.04/>.
- Ensure your physical or virtual machine (VM) meets the disk space and memory requirements outlined in the *Types of installation and hardware prerequisites* section of this guide.
- Have access to the Internet if you are installing in online mode, and be able to resolve *repo.clearswift.net* and *repo1.clearswift.net*. If you need to allow access through a firewall, the static IP address for both of these is **46.51.174.180**.

To install Ubuntu Server:

1. If you are installing on a physical server, insert the CD into the drive and power-on the server.

If you are installing on a VM, either insert the CD into the drive or make the ISO file available to the VM, and configure the installation media option accordingly.

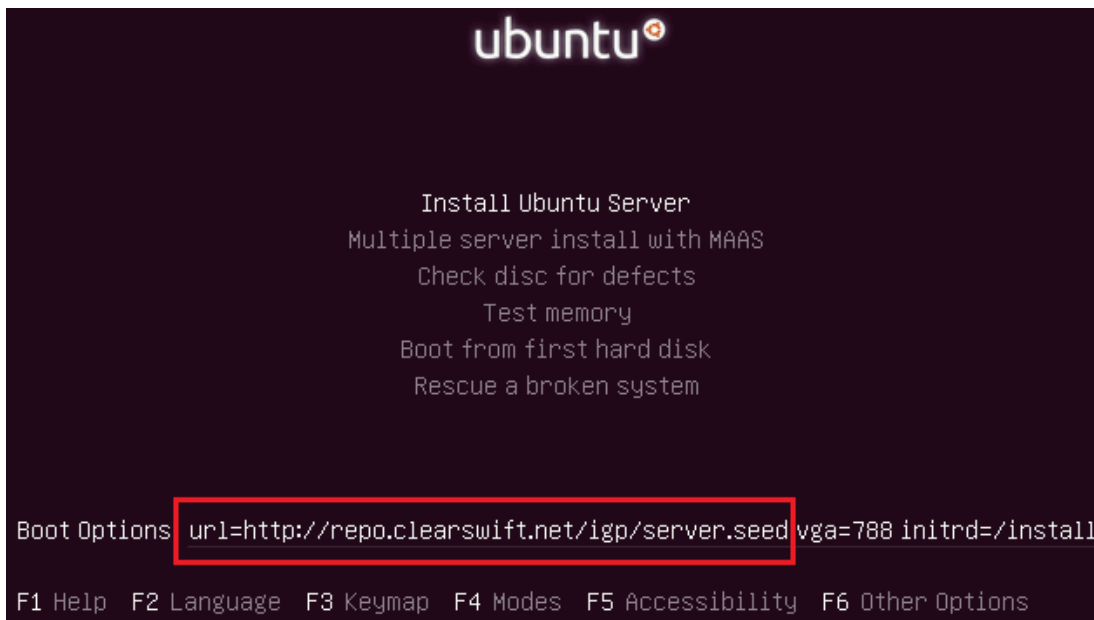
The Ubuntu splash screen is displayed.

2. Display the Boot Options. To do this, press **F6** followed by the **Esc** key.

The Boot Options are displayed. If you are installing behind a proxy, please refer to Appendix A: Installing IGS from behind a proxy.

3. Edit the **file** parameter. Replace it with the following:

```
url=http://repo.clearswift.net/igp/server.seed
```



You should only replace the **file** parameter with the new **url** parameter. Other parameters such as **vga** and **initrd** should remain the same.

4. Press **Enter**.

The installation will begin.

During installation you will be prompted to supply the following:

- Language
- Location
- Keyboard layout
- Network configuration and hostname

The installation will attempt network configuration using a DHCP IP address by default.

To ensure correct operation of your IGS policy, you must use a static IP address. To set a static IP address, take the following steps when the **Configure the network** dialog is displayed during the installation process:

1. Use the Tab key to select **Go Back**.
2. Select **Configure network manually** and complete the on-screen instructions.



You can also set the IP address from the Console Wizard after installation. Select **Configure System > Configure Network Settings > Configure Network Interface(s)**.

- Time zone
- Disk Partitioning

The installation process will allocate disk partitioning and formatting with an assumption of a single disk configuration. Details of the allocation are displayed on screen and require acceptance before the installation proceeds.



If you are using a single disk configuration, we recommend that you accept the default partitioning values.

If you are using a multiple disk configuration or are unsure about the default configuration, please contact Clearswift Support.

- Hostname proxy server (optional)



The install process takes between 10-15 minutes to complete. After the **Select and Install software** dialog completes, there is a pause of a few minutes before the **Installing GRUB boot loader** dialog appears. During this time, the install process still runs in the background and you should not interrupt it.

3.1.1 After Ubuntu installation

After the installation is complete, your server will reboot automatically and display the GRUB menu. Select the Ubuntu non-recovery mode option. A terminal window with a log on prompt will be displayed.

The installation will create a default user account of:

- user: **cs-admin**
- password: **password**



You can use these account details to perform the remaining installation steps. However, we strongly recommend that you change this password after the Ubuntu and IGS installation process has completed. Steps describing this process are included later in this guide.

3.2 Install the Information Governance Server (IGS)

The following steps describe how you install your IGS:



If you are using a VM for your installation, we recommend that you take a snapshot before installing your IGS.

1. Log on to your Ubuntu server using the **cs-admin** account. From the command line, type the following:

```
wget http://repo.clearswift.net/igp/igs-ubuntu14-install.sh
```

2. Execute the following from the command line:

```
chmod +x igs-ubuntu14-install.sh  
sudo ./igs-ubuntu14-install.sh
```

The system will reboot.

3. Log on using the **cs-admin** account.
The Clearswift Server Console is displayed.
4. Select **View System Status** and make a note of the **IP address**.
5. Change the **cs-admin** password.

Select **Configure System > Reset Administrator Password** and follow the prompts to change the password.



Do not forget the **cs-admin** password as console and command-line access require it. Consider recording it in a secure place in accordance with your organization's policy.

3.2.1 Complete IGS installation

To complete the installation, you need to provide a valid Clearswift IGS license key and configure the IGS settings from the IGS installation wizard.



Before you start the installation wizard, you need to make sure the following firewall ports are open to allow IGS to domain controller communication:

- 3268
- 3269 if using SSL

To start the installation wizard:

1. Open a web browser and go to the IP address as noted from **View System Status**:

```
https://<ip address>
```

The welcome page for the IGS wizard is displayed.

2. Start the wizard. Provide your IGS license key and apply configuration settings as appropriate for your installation. Settings can be changed after the installation process is complete from the IGS Administrator user interface.



If you are installing behind a proxy, please refer to Appendix B: Configuring IGS for use behind a proxy.



As part of your IGS configuration, you have to supply directory server account credentials. It is possible to lock all users out of the IGS Administrator user interface if the account expires or there is a password change.

What can I do?

You should create a service account for this purpose and set password expiry to disabled.

3. Click **Finish** to complete the installation wizard.

3.2.2 After IGS installation

Log in to the IGS Administrator user interface and click **Help** on the toolbar. We recommend that you read:

- [First Steps](#) in the *Get started* section.
- [Known issues](#)

Appendix A: Installing IGS from behind a proxy

The IGS install process currently assumes that you have direct access to <http://repo.clearswift.net>. If you are attempting to install IGS behind a proxy server, you might experience one or more of the following issues.



Before you begin, you must know the URL and port number of your local proxy.

Error: Failed to retrieve the preconfiguration file

This error will appear as a red screen when you are completing step four in section 3.1 of Install Ubuntu Server. It appears after you set network configuration and hostname but before you set time zone.

This error occurs if the Ubuntu installer cannot download the `server.seed` file from <http://repo.clearswift.net>. In this scenario, we recommend that you download the `server.seed` file to a web server on your local network that your Ubuntu installer can access.

Please ensure that you maintain the Linux line ending format for the installer to process the file. Clearswift recommends you follow the below steps:

1. Open a browser with access to the Internet and navigate to <http://repo.clearswift.net/igp>.
2. Right click on the `server.seed` link and select **Save link/target as....**
3. Save the file as `server.seed` and then copy it to a web server on your local network.
4. Check that you can access the file in a browser. Example:
<http://mylocal.server/path/to/server.seed>
5. Return to section 3.1 of Install Ubuntu Server and begin the install process again. Enter the new location of the `server.seed` file when you edit the `file` parameter (see step three in section 3.1 for more details).

Error: Failed to run pre-seeded command

The Ubuntu installer prompts you for proxy details during the install process. This error will appear at the end of the install process if the proxy details you provide are incorrect. The error will appear as a red screen after you complete step four in section 3.1 of Install Ubuntu Server.

If this error appears, you should:

1. Press **OK** to confirm and continue the installation process. When the installation process is complete, your server will reboot automatically.

2. After the reboot, log on to the Ubuntu terminal using the cs-admin account (username: **cs-admin** and default password: **password**) and run the following command:

```
sudo vi /etc/environment
```

3. Add or edit the following four lines:

```
http_proxy="http://<proxy server address>:<proxy server port>/"
https_proxy="http://<proxy server address>:<proxy server port>/"
HTTP_PROXY="http://<proxy server address>:<proxy server port>/"
HTTPS_PROXY="http://<proxy server address>:<proxy server port>/"
```



If you are working through an authenticating proxy, you must provide the local proxy in the following format:

```
"http://<username>:<password>@<proxy server address>:<proxy server port>/"
```

4. Save the file and then run the command:

```
sudo vi /etc/apt/apt.conf
```

5. Add or edit the following four lines:

```
Acquire::http::proxy "http://<proxy server address>:<proxy server port>/" ;
Acquire::https::proxy "https://<proxy server address>:<proxy server port>/" ;
Acquire::http::Pipeline-Depth "0" ;
Acquire::https::Pipeline-Depth "0" ;
```



If you are working through an authenticating proxy, you must provide the local proxy in the following format:

```
Acquire::http::proxy
"http://username:password@local-proxy:port/" ;
Acquire::https::proxy
"http://username:password@local-proxy:port/" ;
```


6. Save the file.
7. Once you adjust `/etc/environment` and `/etc/apt/apt.conf`, run the following command to complete the installation process:

```
wget http://repo.clearswift.net/igp/aptcfg.sh
```

```
chmod +x ./aptcfg.sh
```

```
sudo ./aptcfg.sh
```

Error: License validation timed-out due to network issues or validation server being down for maintenance

This error can occur when you are running the IGS installation wizard. It will appear when you are attempting step 2 in section 3.2.1 of Install the Information Governance Server (IGS).

If no previous errors have occurred until now, this error is likely appearing due to missing HTTPS proxy configuration or Ubuntu firewall. As a result, we recommend you follow the steps in Appendix B: Configuring IGS for use behind a proxy.

Appendix B: Configuring IGS for use behind a proxy

The following steps describe how you can configure your IGS to work behind a proxy.

1. Install IGS following the steps in this *Installation & Getting Started Guide* and *Appendix A*.
2. From the Clearswift Server Console main menu, select **Configure System > Configure Network Settings > Configure Proxy Server**.
3. Enter the details of your proxy server using the following format:

```
http://<authenticated-user>:<password>@<proxy server address>:<proxy server port>
```



If you are using HTTPS, insert **https** in place of **http** in the above example.



If the proxy server details are already populated, clear this field and apply to remove the current settings. Then re-enter the proxy server details and apply the updated details.

After completing the installation wizard, it can take a few minutes for the proxy configuration to be applied.

4. Open the IGS user interface and complete the IGS installation wizard.

Appendix C: Retrieving users from the directory server

When logging into the IGS Administrator user interface or adding a role for a user, the IG Server communicates with your Directory Server to authenticate and/or retrieve information about a user.

By default, the IG Server only searches for users within the domain you configured in the Directory Server system settings. In some domain configurations, it might be necessary to widen the scope of the search to an entire domain forest or, optionally, to restrict the scope of the search to a node containing a smaller set of users or groups.

To change the scope of the Directory Server searches, you need to do the following:

1. Log in to the Clearswift Server Console and select **Open Terminal Session**.
2. Open the folder containing the Directory Server **settings.xml** configuration file:

```
cd /var/igp/system/settings/directoryserver
```

3. Back up the current configuration file:

```
sudo cp settings.xml settings.xml.backup
```

4. Edit the configuration file:

```
sudo vi settings.xml
```

5. To search the entire domain forest, change the **<type>** value to **1**.

For example:

```
<system-properties>
  <search-context>
    <type>1</type>
    <dn></dn>
  </search-context>
</system-properties>
```

6. To search for a specific set of groups or users, change the **<type>** value to **3**.

Then change the **<dn>** value to the value of the **distinguishedName** property of the Directory Server node containing your users and groups.

In this example, we only want to permit access to users in the Sales department:

```
<system-properties>
  <search-context>
    <type>3</type>
    <dn>CN=Sales,CN=Users,DC=Clearswift,DC=com</dn>
  </search-context>
</system-properties>
```

7. Save the updates and then restart the IGS Administrator user interface:

```
sudo igp-servicecontrol restart igpadmin
```

For more information, refer to the **Installing IG Server on Ubuntu 14.04 x64** guide to upgrade your existing installation or speak to Clearswift Technical Support for more information.