1 | Installing v7.6.x or v7.7.0 on a V10000 G3 Appliance

Installation Instructions | V10000 G3 Appliance | Versions 7.6.1, 7.6.2, 7.6.5, 7.6.7, and 7.7.0

Applies to

- Customers wishing to run any 7.6.x version on a V10000 G3 appliance.
- Customers wishing to run version 7.7.0 on a V10000 G3 appliance.

Websense V10000 G3 appliances are delivered with v7.7.3 or later version of the Websense solution. The V10000 G3 appliance can be imaged to a v7.6.x version or v7.7.0. This enables you to match the version of the V10000 G3 to an earlier Websense version that is already running in your network.

Using the procedures in this guide, you will be able to image a V10000 G3 appliance with the v7.6.1 or v7.7.0 code. Once you have imaged the appliance with v7.6.1, you will be able to patch upgrade the appliance to the appropriate version for your deployment. The supported patch upgrade paths are as follows:

- You can upgrade an appliance one patch version at a time, if desired.
  - 7.6.1 > 7.6.2 > 7.6.5 > 7.6.7 > 7.7.0 > 7.7.3
- An appliance at version 7.6.1 can be upgraded step-by-step to any 7.6.x version.
  - 7.6.1 > 7.6.2 > 7.6.5 > 7.6.7
- An appliance at 7.6.1 or any other 7.6.x version can be upgraded in one step to version 7.7.0.
  - 7.6.x > 7.7.0 > 7.7.3

The V10000 G3 can also be imaged with v7.7.0 code directly, which can then be patched to v7.7.3 if desired.

To perform the steps in this guide, you will need access to MyWebsense.com, an approved USB flash drive of at least 8GB, and physical access to the Websense appliance on which you want to install an earlier version.

In addition to imaging the V10000 G3 appliance with version 7.6.x or 7.7.0, your network must also include a Policy Broker machine running Websense software at the correct version. During set up, the appliance will need to be able to connect to the Policy Broker and Policy Server services on that machine. For more information, please refer to the Websense Technical Library.

Obtaining and creating the installation image

The V10000 G3 appliance can be installed with either v7.6.1 or v7.7.0. Installing v7.6.1 allows you to integrate the appliance into an existing v7.6.1 Websense solution, or upgrade to another v7.6.x release. Installing v7.7.0 on the appliance allows the appliance to work with a v7.7.0 Websense solution.

◆ *Downloading the appliance installation image*

◆ *Placing the appliance image onto a USB drive (Linux machine)*

◆ *Placing the appliance image onto a USB drive (Windows machine)*

Downloading the appliance installation image

The first step in re-imaging the V10000 G3 is to obtain the proper appliance installation image from MyWebsense.com. Navigate to **Support > Support by Product > V-Series > Downloads > Get Product**. Go the Downloads tab and select Websense V10000 G3 Appliance and select either version 7.6.1 or 7.7.0, whichever is appropriate for your target deployment. Then, download the **.img** file to a local drive location on either a Windows or Linux machine. After you have downloaded the recovery image, you need to create a bootable USB flash drive. The list of previously test USB flash drives is provided here:

◆ Kingston DataTraveler R500 16GB USB Drive

◆ SanDisk Ultra CZ45 16G USB Drive

◆ Apacer AH325 16G USB Drive

◆ ADATA C008 16GB USB Drive

◆ SONY USM16GL Click 16GB USB Drive

◆ Kingston DataTraveler 8GB

◆ Kingston DataTraveler G3 16GB

◆ Netac U903 16GB

For an updated list of which USB flash drives have been tested using the Linux and Windows processes below, please see this article in the Websense Solution Center.

Placing the appliance image onto a USB drive (Linux machine)

Once you have downloaded the **.img** file, follow the directions below for creating the bootable USB flash drive on a Linux machine.

> **Important**
> During the creation of the USB installation drive, all existing data on the USB flash drive will be deleted. Do not perform any other operations on the USB drive during the image burning process. A minimum 8GB USB drive is required.

1. On the Linux server, log on as a super user and enter the following command at the terminal:
```
tail –f /var/log/messages
```

2. Insert the USB flash drive into an open USB port. Note the USB device node name that is displaed in the log on your terminal. In most cases, the USB drive will be assigned the node name of **sdb** or **sdc**. After taking note of the last letter in the node name (ether b or c), press CTRL-C to exit the log message.

3. Verify the USB device is functioning properly and has the correct partitions by typing the following command, where **x** is the letter you noted in the log messages:
```
fdisk –l /dev/sdx
```

4. You will see something similar to the following:

```
Disk /dev/sdb: 8004 MB, 8004304896 bytes
35 heads, 21 sectors/track, 21269 cylinders, total 15633408 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00000000

   Device Boot      Start         End      Blocks   Id  System
/dev/sdb1              32    15633407     7816688    7  HPFS/NTFS
```

5. Umount all partitions on the USB drive by typing the following command, where **x** is the letter you noted in the log messages:
```
umount /dev/sdx1
```

6. Navigate to the directory where you downloaded the **.img** recovery file. To copy the recovery image to the USB drive, type the following command, where **x** is the letter you noted in the log messages:
```
dd if=<recovery_image_file_name> of=/dev/sdx bs=1M
```

7. The process of copying files to the USB drive will take several minutes. When the operation is complete, you will see a confirmation similar to the following:

```
4896+0 records in
4896+0 records out
5133828096 bytes (5.1 GB) copied, 1123.32 s, 4.6 MB/s
```

8. Your USB installation drive is now complete. You can now remove the USB drive from the Linux machine and proceed to the appliance module back up or appliance installation process.

Placing the appliance image onto a USB drive (Windows machine)

Once you have downloaded the **.img** file, follow the directions below for creating the bootable USB flash drive on a Windows machine.

> **!** **Important**
>
> During the creation of the USB installation drive, all existing data on the USB flash drive will be deleted. Do not perform any other operations on the USB drive during the image burning process. A minimum 8GB USB drive is required.

1. First, download the **dd for Windows** compressed file from http://www.chrysocome.net/downloads/dd-0.5.zip. Unzip the file to the C:\ directory on the Windows machine.

2. Copy the **.img** file you downloaded to the C:\ directory on the Windows machine.

3. Insert the USB flash drive into an available USB port on the Windows machine. If you are prompted to format the drive, click **Cancel**.

4. Open a Windows command prompt window.

5. Type **cd C:** to change to the root directory.

6. Type the command **dd --list**

7. In the output of the dd --list command, you will see the USB flash drive listed as removable media, and the drive letter will match what is shown in Windows Explorer.

```
\\.\Volume{bb608259-37ee-11e2-8a96-005056c00008}\
   link to \\?\Device\HarddiskVolume3
   removeable media
   Mounted on \\.\f:
```

8. Note the name of the USB drive. In this case it is \\?\Device\HarddiskVolume3.

9. To write the **.img** file to the USB drive, the command syntax is (all on one line):
   ```
   dd if=<recovery_image_name>
   of=\\?\Device\Harddisk1Volume3 bs=1M --progess
   ```

   Where <recovery_image_name> is the file name of the **.img** file and \\?\Device\HarddiskVolume3 is replaced with the path to your USB drive as shown on your screen in step 7.

10. The USB flash drive creation process will take several minutes to complete. When the process is complete, you will see a a screen similar to the one below.

```
C:\>dd if=recovery_7_6_1_V10000_G3.img of=\\?\Device\HarddiskVolume3 bs=1M --pro
gress
rawwrite dd for windows version 0.5.
Written by John Newbigin <jn@it.swin.edu.au>
This program is covered by the GPL.  See copying.txt for details
5,264,146,432
5022+0 records in
5020+2 records out
```

11. You can now remove the USB drive from the Windows machine and proceed to the appliance module back up or appliance installation process.

Appliance module back up

If you want to import an existing appliance Web Security or Email Security module configuration to a V10000 G3, you can back up your existing appliance module configuration and restore it to your new appliance. For more information on the backup prodedure, see the article *How do I back up and restore V-Series appliances?*

> ✔ **Note**
> You cannot transfer a full appliance backup from a model other than a V10000 G3. Only module configuration backups can be transferred between different models.

If you are not transferring a module configuration, you can proceed to the installation instructions below.

Appliance installation process

You need physical access to the appliance to insert the USB drive and customize the boot process.

1. Insert the USB drive you created via the Linux or Windows process above into an available USB port on the V-Series appliance.

2. If the appliance is powered on, restart it now. If the appliance is powered down, turn it on now.

3. Press F11 to enter the Boot Manager.

4. In the BIOS Boot Manager, use the arrow keys to select Hard Drive then Front USB. Press Enter to begin the imaging process.

5. Select Yes to continue the recovery process.

6. After the recovery has completed, press any key to view the subscription agreement and complete the firstboot process.

Firstboot process

After the appliance has been re-imaged with either the 7.6.1 or 7.7.0 code, you are prompted to complete the firstboot process.

For instructions on completing the firstboot process for 7.6.x, please read the article located here.

For instructions on completing the firstboot process for 7.7.x, please read the article located here.

Patch management

Once you have completed the firstboot process, your appliance should be able to reach **download.websense.com** to check for updates and patches. If you are integrating the newly imaged V10000 G3 into an existing deployment, it must be at the same patch level as the rest of the Websense components you have deployed. For instance, if you have just imaged the appliance with version 7.6.1, but the rest of your components and appliances are on version 7.6.2, you must patch upgrade the new appliance to version 7.6.2.

From the Appliance Manager interface, go to the **Administration > Patch Management** page to check for, download, and install patches.

- Appliances automatically check for patches once a day. The time of the check is randomized, cannot be configured, and is different for every appliance.

- To manually check for patches at any time, use the **Check for Patches** button.

- When a new patch is available, the patch version number, description, and status are displayed in the **Available patches** table.

- When a new patch is available, an alert is displayed on the **Status > General** page.

- After a patch is downloaded it can be copied to another location on your network where it can be easily and efficiently uploaded to multiple appliances.

- If the appliance management interface (C) does not directly connect to the Internet, you can configure a proxy server through which the appliance checks for patches.

- The Patch History table provides an immediate history of patches that have been applied to the appliance.

Appliance module configuration recovery

If you replaced an older V-Series appliance with the newly imaged V10000 G3, and you performed a module configuration back up, you can recover the configuration following the steps provided here. This process can also be followed for importing a

module configuration to a newly imaged V10000 G3. The target recovery appliance must be at the same patch level and have the same security mode as the appliance that was used to create the backup.

Appliance configuration

If you are not recovering from a module configuration backup file, follow the instructions provided here for version 7.6.1. Follow the instructions here for configuring version 7.7.x.

Additional information

Use the links below to find more information on implementing a Websense v7.6.x or v7.7.x solution.

- ◆ Websense eSupport
- ◆ Websense Technical Library
- ◆ Deployment and Installation Center for v7.7.x
- ◆ Deployment and Installation Center for v7.6.x