

WANJet[®] Appliance 4.2.x to 5.0.2 Migration Guide

MAN-0272-00



Product Version

This manual applies to product version 5.0.2 of the WANJet® appliance.

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This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

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This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

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This Class A digital apparatus complies with Canadian ICES-003.

Standards Compliance

This product conforms to the IEC, European Union, ANSI/UL and Canadian CSA standards applicable to Information Technology products at the time of manufacture.

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Overview of 4.2.x to 5.0.2 migration

As of the version 5.0.2 release of the WANJet® appliance, you can upgrade a WANJet appliance running any version from 4.2.4 through 4.2.16 to version 5.0.2. You can migrate to version 5.0.2 only on WANJet 400 and 500 platforms. (WANJet 300 platforms can run only version 5.0 or later, thus migration is unnecessary.)

To successfully migrate from version 4.2.x to version 5.0.2 on the WANJet appliance, you must order an Upgrade Kit through your F5 Sales Representative.

Once you have the Upgrade Kit, you must complete the following tasks, which are described in more detail in this document. We recommend that you complete the tasks in the order in which they are listed:

- **Back up version 4.2.x configuration data.**
See *Preparing the version 4.2.x appliance*, on page 1-2, for more information.
- **Upgrade the hardware.**
You need to upgrade the CompactFlash® and BIOS (WANJet 500 only). See *Upgrading the WANJet appliance hardware*, on page 1-3, for more information.
- **Perform initial setup on the WANJet appliance.**
You need to configure the Management IP address, netmask, and gateway on the appliance; log on; then complete the Setup utility. See *Completing the initial setup*, on page 1-3, for more information.
- **Restore the 4.2.x configuration.**
Copy the backed up configuration data onto the WANJet appliance and run the **Restore42xConfig** script to migrate the version 4.2.x configuration. See *Restoring the version 4.2.x configuration*, on page 1-5, for more information.
- **Review the migrated optimization policies and configuration settings.**
Not all of the version 4.2.x settings directly correspond to settings on version 5.0.2. Review the migrated settings on the WAN Optimization screens and adjust them as necessary. See *Reviewing the optimization policies and configuration settings*, on page 1-7, for more information.
- **Configure new settings that you want to use.**
Version 5.0.2 includes new settings that you may want to configure on your WANJet appliance. See the online Help and the *WANJet® Appliance Administrator Guide*, for details on all of the settings.

You can then follow the same steps to migrate each of the other WANJet appliances in your network configuration.

If you have Enterprise Manager, you still need to complete the first four tasks described above on every WANJet appliance. On one WANJet appliance, you can complete all the tasks required to configure the appliance, then save the configuration as a template, and use Enterprise Manager to import it onto the other appliances in your configuration. For more information, refer to *Managing policies with Enterprise Manager* in the *WANJet® Appliance Administrator Guide*, and the Enterprise Manager documentation.

Preparing the version 4.2.x appliance

While the WANJet appliance is running version 4.2.x, back up the configuration and save a copy of the registration key. (You will need the registration key to license the 5.x system.)

To create a backup file of the current WANJet appliance settings

1. In the navigation pane, expand **System** and click **Backup & Restore**.
The WANJet Configuration Backup & Restore screen opens.
2. Click the word **here**.
The browser opens a File Download window where you can save the backup file to your local computer. This default backup file is **Settings-<WANJet_alias>.NTCL** where **WANJet_alias** is the name that appears in the **WANJet Alias** box on the Local WANJets screen.
Tip: You can rename the backup file so that the name identifies the specific WANJet appliance you are backing up and includes the current date.
3. Save the file to a different system, such as your local hard drive.

To save the registration key of the WANJet appliance

1. In the navigation pane, expand **System** and click **Licensing**.
2. Click **Re-activate**.
The WANJet License Details screen opens.
3. From the **Base Registration Key** setting, copy the 27-character string into a text file.
4. Save the file to a different system, such as your local hard drive.

Upgrading the WANJet appliance hardware

To upgrade existing WANJet 400 or 500 appliances running version 4.2.4 through 4.2.15 to version 5.0.2, you need to use the WANJet appliance Upgrade Kit you ordered earlier. The Upgrade Kit contains:

- 8 GB CompactFlash® with WANJet version 5.x installed
- *WANJet Appliance CompactFlash Card and BIOS Upgrade Instructions*

For the TMOS-based WANJet appliance to run properly, you need to replace the 1 GB CompactFlash® with the 8 GB CompactFlash card on which version 5.x is installed. Existing WANJet 500 appliances also require a BIOS upgrade to OBJ-0200-03 Rev A. Refer to the *WANJet Appliance CompactFlash Card and BIOS Upgrade Instructions* for information on how to upgrade the BIOS (WANJet 500 only) and replace the CompactFlash card (WANJet 400 and 500). After you complete the hardware upgrade and power on the appliance, the system will be running version 5.x.

Completing the initial setup

Once you have upgraded the appliance hardware, you need to complete the initial setup of the version 5.0.2 WANJet appliance.

To complete initial setup of the WANJet appliance

1. Use the front panel LCD to configure the Management IP address, Management netmask, and Management gateway.
*Note: You can also configure these settings from a serial console connected directly to the WANJet appliance. Log on and type **config** at the command line.*
2. Log on to the WANJet appliance. In a web browser, type:
https://<Mgmt_IP_address>
3. In the popup box, type the user name and password. The default user name is **admin**, and the default password is **admin**. The WANJet Setup Utility Welcome screen opens.
4. When you log on to the system for the first time, a message tells you that you must complete the Setup utility. Click **Next**. The Setup Utility License screen opens.
5. To begin the licensing process, click **Activate**. Follow the onscreen prompts to license the system. For the Base Registration Key, use the registration key you saved from the 4.2.x WANJet appliance. See *To save the registration key of the WANJet appliance*, on page 1-2.

Tip: If you do not have the registration key, you can extract it from the configuration backup file, which is a **gzip** file. On a Linux system, run the **tar -xvzf** command on the backup file to extract the contents. The key is located in a file called **RegKey.license** in the directory where you extracted the files. For example,

```
/var/tmp/Netcelera*/etc/license  
grep Reg /var/tmp/Netcelera*/etc/license
```

When the licensing is complete, the system opens the Setup Utility License screen.

6. Click **Next**.
The Setup Utility Platform screen opens. This is where you specify base configuration information for managing the system. Since you configured the Management IP address, netmask, and gateway from the LCD, the **Management Port** settings are already filled in with the values you specified.
7. For the **Host Name** setting, type a fully qualified domain name for the WANJet appliance. An example of a host name is **mywanjet.wanopt.net**.
8. For the **Host IP Address** setting, select **Use Management Port IP Address** to assign the Management port IP address to the host name. This is the default value.
9. In the User Administration section, for the **Root Account** and **Admin Account**, type and confirm the passwords. By default, the **root** password is **default**, and the **admin** password is **admin**. We recommend that you change them immediately.
10. Click **Next**.
The Local WANJet appliance screen opens.
11. In the **WANJet Alias** box, type a name for the WANJet appliance.
12. In the **WANJet IP** box, type the bridge IP address for the WANJet appliance.
13. In the **WANJet Netmask** box, type the netmask.
14. In the **WAN Gateway** box, type the IP address of the default WAN gateway for the WANJet appliance.
15. In the **LAN Router** box, type the IP address of the LAN router (if your network configuration includes one) that resides between the WANJet appliance and the LAN. The LAN router must be in the same subnet as the WANJet appliance. This setting is optional.
16. Click **Save**.
The WANJet appliance saves the settings, closes the Setup utility, and opens the Welcome screen. You can now continue with basic configuration.

17. After you activate the license for the first time on the upgraded system, you need to reboot the WANJet appliance.

At this point, the WANJet appliance should be running version 5.0.2. If it is running version 5.0 or 5.01, you need to update the system to 5.0.2 using the instructions provided in the *WANJet Appliance Version 5.0.2 Release Notes* available at the Ask F5 Customer Support web site, <http://support.f5.com>.

To check the WANJet appliance version

1. In the navigation pane, expand **System** and click **Configuration**. The General Configuration screen opens.
2. Refer to the **Version** property to determine the version number of the WANJet appliance software that is running on the system.
3. Proceed depending on which version your system is running:
 - If the system is running version 5.0.2, proceed to *Restoring the version 4.2.x configuration*.
 - If the system is running version 5.0 or 5.0.1, update the system as described in the *WANJet Appliance Version 5.0.2 Release Notes* before proceeding.

Restoring the version 4.2.x configuration

1. From the system on which the configuration backup file resides, copy the file onto the WANJet appliance. We recommend copying the file into `/var/tmp`, as follows.
 - If the system is running Microsoft® Windows®, use a utility such as WinSCP to copy the **Settings-<WANJet_alias>.NTCL** file to the WANJet appliance.
 - If the system is a Linux system, use the **scp** command to copy the **Settings-<WANJet_alias>.NTCL** file to the WANJet appliance.
2. Use an SSH program, such as PuTTY, AlphaCom, or SecureCRT® to get to the command line on the WANJet appliance. If you need more information on how to get to the command line, refer to the *WANJet® Appliance Administrator Guide*.
3. From the command line, log on as **root**:
 - a) At the **login as** prompt, type **root**.
 - b) At the **Password** prompt, type the **root** password (the default is **default**).

4. Run the `/usr/local/wj/scripts/Restore42xConfig` script to migrate the 4.2.x configuration:

```
Restore42xConfig Settings-WJ.NTCL -b -r IP_add...
```

Where:

Settings-WJ.NTCL is the file containing the backed up configuration settings from 4.2.x. If the file is located in a different directory, you must specify the full path name.

-b transfers the WANJet appliance bridge IP, netmask, WAN gateway, and (if selected) the **Include WANJet Subnet** check box to the new system. If you do not specify this option, these values are not restored on the 5.0.2 WANJet appliance, maintaining the values that you specified when you ran the Setup utility in *Completing the initial setup*, on page 1-3.

-r IP_add... translates the optimization policies for the remote WANJet appliances at the specified IP addresses as closely as possible given optimization policy enhancements included in 5.0.2. If you do not specify this option, the WANJet appliance translates all optimization policies from all remote appliances onto the updated system.

Restore42xConfig examples

Following are examples of using the **Restore42xConfig** script to convert the backed up configuration file from a 4.2.x system onto a 5.0.2 system.

```
cd /usr/local/wj/scripts/  
./Restore42xConfig /var/tmp/Settings-WANJet.NTCL
```

This example imports the configuration settings in the **Settings-WANJet.NTCL** file to the updated version 5.0.2 WANJet appliance, including all optimization policies from all remote WANJet appliances. The WANJet appliance does not import the bridge IP address, netmask, and WAN gateway.

```
cd /usr/local/wj/scripts/  
./Restore42xConfig /var/tmp/Settings-WJ4593.NTCL -b -r  
10.23.45.176 10.89.0.107
```

This example imports the configuration settings in **Settings-WJ4593.NTCL** onto the updated version 5.0.2 WANJet appliance, including optimization policies from the remote WANJet appliances at the IP addresses **10.23.45.176** and **10.89.0.107**. Also, the WANJet appliance imports the bridge IP address, netmask, and WAN gateway.

Figure 1.1 provides an example of running the **Restore42xConfig** script to convert a 4.2.x configuration to 5.0.2 including the output received from the system.

```
[root@WANJet:Active] config # cd /usr/local/wj/scripts
[root@WANJet:Active] scripts # ./Restore42xConfig
/var/tmp/Settings-WANJet10.NTCL
No remote WANJet specified. Optimization policies
in all remote WANJets will be converted.
Converting 4.2.X configurations to 5.X.X configurations ...
Restoring remote WANJets and optimization policies ...
Restoring operation mode, topology, etc. ...
Restoring QoS ...
Restoring traffic classes ...
Conversion done.

Restarting centralmanager
Max. Number of Connections for ACM5 = 20000
15:19:56 Centralmanager pre script exiting; Centralmanager is
running
[root@WANJet:Active] scripts #
```

Figure 1.1 Example conversion using *Restore42xConfig* script

◆ Note

*Due to enhancements on the WANJet appliance, not all of the configuration settings are converted to the upgraded appliance. Refer to **Chapter 2, Configuration Settings Not Converted** for details about the settings that are not converted to 5.0.2.*

Reviewing the optimization policies and configuration settings

With version 4.2.x, you could develop different optimization policies for the ports on each remote WANJet appliance. Therefore, one port could be optimized for one remote WANJet appliance, and set to passthrough for another one. On version 5.0.2, optimization policies are simpler, and you need to create only one set of policies for all remote WANJet appliances.

When you convert the optimization policies to version 5.0.2, if the optimization policies differ for multiple remote WANJet appliances, they need to be merged into a single policy. If there is a conflict, the following guidelines are used:

- If two optimization policies for a port conflict, and one is optimized and the other is passthrough, the version 5.0.2 policy for that port is set to optimized.

- If two optimization policies have overlapping port ranges in version 4.2.x, in version 5.0.2 they might be merged or divided into separate policies.

It is important that you review the converted optimization policies to be sure that the conversion results meet your needs. You may need to make some manual adjustments to the optimization policies on version 5.0.2. Also, as of version 5.0, there have been enhancements to the user interface. Refer to the *WANJet Appliance Version 5.0.2 Release Notes* for a list of the enhancements. Refer to the *WANJet® Appliance Administrator Guide* and the online help for more information about the WANJet appliance settings.

To review the migrated settings

1. On the updated appliance, review the migrated configuration settings:
 - a) In the navigation pane, expand **WAN Optimization** and review the settings on each of the screens (skip **Optimization Policy**) and adjust the settings as necessary.
 - b) Configure any new settings that you want to use.
 - c) For each screen, click **Save** to save the changes.
2. On the updated appliance, review the migrated optimization policies:
 - a) In the navigation pane, expand **WAN Optimization** and click **Optimization Policy**.
 - b) Check the Common optimization policies to be sure the policies are ones you want to apply to all remote WANJet appliances. Adjust them, if necessary.
 - c) Review the passthrough policies to see if they are set up correctly. Add passthrough policies, if necessary.
 - d) Click **Save** to save the changes.



2

Configuration Settings Not Converted

- Configuration settings not carried forward

Configuration settings not carried forward

This appendix describes version 4.2.x settings that are not easily converted to version 5.0.2. Some of the settings are no longer available, and others have changed for version 5.0.2 so that you need to reconfigure the setting manually on your updated system.

Management IP, Subnet, and Gateway settings

The following version 4.2.x configuration settings from the Local WANJet appliance screen are not carried over to version 5.0.2:

- **Management IP**
- **Management Netmask**
- **Management Gateway**

You need to configure these settings from the LCD, or using a serial console when you first start up the WANJet appliance. On the System >> Platform Configuration screen, you can view or change the Management port settings.

LAN Router setting

If you specified a **LAN Router** on the Local WANJet appliance screen in version 4.2.x, it is not transferred to version 5.0.2. You can specify the **LAN Router** setting manually on the Local WANJet appliance screen of the updated system after running the **Restore42xConfig** script.

WANJet IP, WANJet Netmask, and WAN Gateway settings

On a version 4.2.x system, you specify the **WANJet IP**, **WANJet Netmask**, and **WAN Gateway** on the Local WANJet appliance screen, or using the LCD or **config** command. During initial setup when running the Setup utility on the updated version 5.0.2 system (see *Completing the initial setup*, on page 1-3), you must specify these settings. Therefore, you normally do not need to migrate these settings because you have already specified them.

However, when running the **Restore42xConfig** script, you can choose to migrate these settings (overwriting the values specified during initial setup) by using the **-b** command line option. If you do not include the option, the system does not migrate these settings.

Redundant Peer IP setting

On version 4.2.x systems, you can enable a redundant peer and specify the **Redundant Peer IP** on the Local WANJet appliance screen. Setting up a local redundant peer in version 5.0.2 is still done on the same screen but it requires additional configuration. Therefore, you must set up redundant peers manually on the Local WANJet appliance screen of the updated system.

VLAN settings

On version 4.2.x systems, you can configure **VLAN Settings** from the Local WANJet appliance screen. You cannot connect WANJet appliances through VLAN trunks in version 5.0.2, so no VLAN settings are available on the updated system.

Optimize All Subnets check box

Version 4.2.x systems include an **Optimize All Subnets** check box on the WANJet Optimization Policy screen. This check box is not available in version 5.0.2.

Include WANJet Subnet check box

On version 4.2.x systems, you can select the **Include WANJet Subnet** check box on the WANJet Optimization Policy screen. This check box is available on version 5.0.2 on the WAN Optimization >> Local WANJet >> Local Subnets screen; however, the selected check box is maintained only if you use the **-b** command line option when running the **Restore42xConfig** script. If you do not include the option, the **Include WANJet Subnet** check box is not checked on the updated system. You can select the check box on the WAN Optimization >> Local WANJet >> Local Subnets screen.

Bandwidth, RTT, and Queue Size settings

On version 4.2.x systems, you configured link settings globally for all remote WANJet appliances. You could configure **Bandwidth**, **RTT** (round trip time), and **Queue Size** settings on the Tuning screen. With the Asymmetric Multilink feature in version 5.0.2, you can specify the WAN link settings asymmetrically for each remote WANJet appliance. You can specify the **Send Bandwidth**, **Receive Bandwidth**, and **RTT** on the Manage Remote WANJet appliance popup screen, which you display from the WAN Optimization >> Remote WANJets screen. The queue size is not configurable in version 5.0.2.

SNMP IP and Community String settings

On version 4.2.x systems, you can configure the **SNMP IP** and **Community String** settings on the WANJet Syslog and SNMP screen. SNMP access control provides additional configuration settings in version 5.0.2. You configure SNMP on the System >> SNMP screens. Refer to *Configuring SNMP* in the *WANJet® Appliance Administrator Guide*, and the online help for more information about administering SNMP on the updated system.

Syslog Server IP setting

On version 4.2.x systems, you could enable or disable sending data to a syslog server and specify the **Syslog Server IP** address. In version 5.0.2, the WANJet appliance does not provide a way to send logs to a syslog server from the browser-based interface. You can manually edit the `/etc/syslog-ng/syslog-ng.conf` file and use the HUP `syslog-ng` command to allow logging to a remote server. For example:

```
user.* @my_remote_server_IP # log all user messages to a remote
server
kern.crit @my_remote_server_IP # log only the critical kernel
messages to a remote server
*. * @my_remote_server_IP # log everything to remote server
```

The WANJet appliance now uses the same method as the BIG-IP® system to send logs to a syslog server. Refer to *SOL5527: Configuring BIG-IP to log to a remote syslog server* (available on the Ask F5SM Technical Support web site) and the `syslog-ng` and `syslog-ng.conf` man pages for additional information.

