

Upgrade Guide

GBOSUpgrade201109-02



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Upgrading to GB-OS 6.0

In order to determine what upgrade path is required for upgrading to GB-OS 6.0, you must first establish the version from which you will be upgrading. To do so, login to your GTA firewall using the Web interface. Upon logging in, you will be prompted with an opening screen. Located in the center of the screen is the version number.

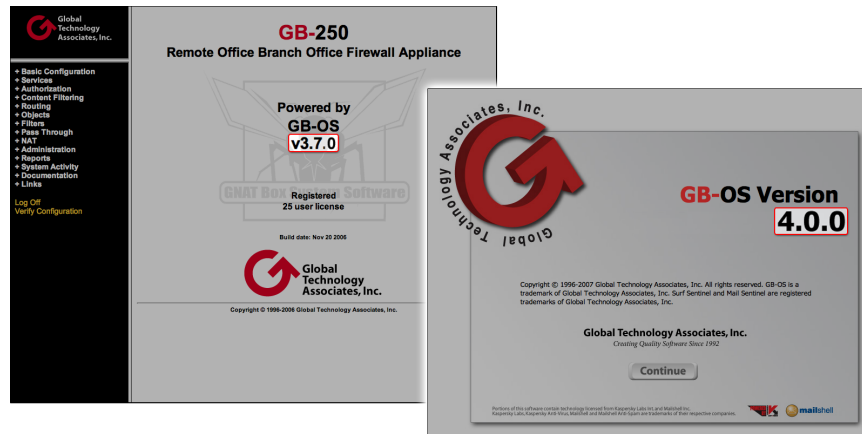


Figure D.1: Locating the GB-OS Version Number in GB-OS 3.x (left) and GB-OS 4.0 (right)

Based on the version of GB-OS your GTA firewall is currently running:

- If the version number is 5.2.0 - 5.4.x follow the instructions in [Upgrading from GB-OS 5.2.0 - 6.0.x](#).
- If the version number is 3.7.3, 4.0.3 - 5.1.5, follow the instructions in [Upgrading from GB-OS 3.7.3, and GB-OS 4.0.6 - 5.1.5](#).
- If the version number is 4.0.0 - 4.0.2, follow the instructions in [Upgrading from GB-OS 4.0.0 - 4.0.5](#).
- If the version number is 3.40 - 3.7.2, follow the instructions in [Upgrading from GB-OS 3.4.0 - 3.7.2](#).

Upgrading from versions prior to GB-OS 3.4 is not supported.



Note

GTA recommends to read and review the [Upgrade Notes](#) section of this reference before upgrading a GTA Firewall UTM Appliance to avoid complications during the upgrade process



Note

Test mode configuration data is reset to default when upgrading runtimes.

Upgrading from GB-OS 5.2.0 - 5.4.x

GTA routinely publishes updates to GB-OS. These updates provide new features and enhanced security options. When GTA publishes an update to GB-OS, availability will be announced at **Configure>Configuration>Runtime>Update** in the AVAILABLE UPDATE(S) section.

In order to check for available updates, GB-OS requires that the firewall is registered in the GTA Online Support Center, that the firewall has access to the Internet and that SSL connections are allowed. Version updates may be available only to firewalls covered by a valid support contract.



Note

Updating the GB-OS runtime always takes place as a Live Mode change.



CAUTION

Some **GB-250 Rev B** firewalls require a BIOS Update before updating to GB-OS 5.3.0 or higher. If the BIOS version is not v0.99h or higher, the BIOS may need to be updated. Please read the [BIOS Update Information page](#) if you are updating a GB-250 Rev B system. Additionally, GB-250 Rev B systems should be on slice 2 when updating.

To check for and install updates to GB-OS:

- Navigate to **Configure>Configuration>Runtime>Update**.
- In the AVAILABLE UPDATE(S) section, click the **CHECK NOW** button.
- If an update is available, installation notes and an **INSTALL** button will appear for the update.

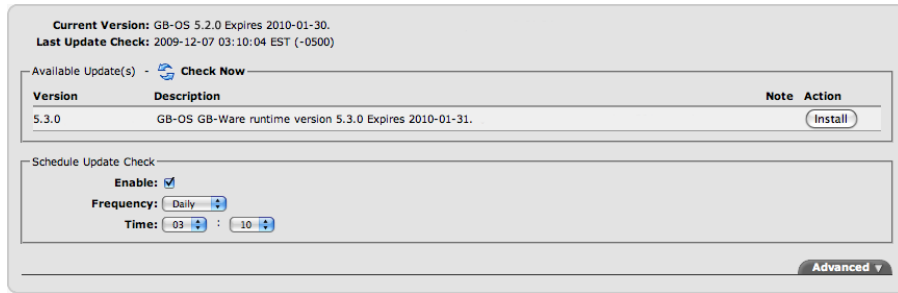


Figure D.2: Updating GB-OS

Updating Runtimes

GB-250, GB-800, GB-2000 and GB-3000 firewall appliance families running GB-OS 5.2.0 and above will have a two step process for updating runtimes.

1. Download the available runtime by clicking **DOWNLOAD**. The runtime will be stored on the firewall until installed. Rebooting the firewall or selecting **CHECK NOW** will remove the stored runtime.
2. Install the runtime by clicking **INSTALL**.

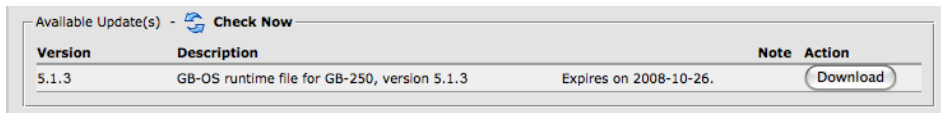


Figure D.3: Download Runtime

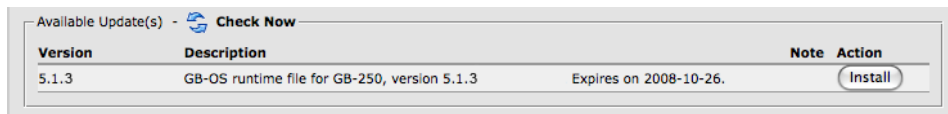


Figure D.4: Install Runtime



Scheduling Checks for Automatic Updates

GB-OS can automatically check for eligible software updates. By enabling automatic updates, administrators can rest assured knowing their GTA Firewall UTM Appliance is operating the most current available version of GB-OS.

To schedule automatic runtime updates, navigate to **Configure>Configuration>Runtime>Update**.

Screenshot of the 'Schedule Update Check' configuration form. The form includes the following fields:

- Enable:**
- Frequency:** Weekly
- Day:** Friday
- Time:** 12 : 00

Figure D.5: Scheduling Automatic Updates

Table D.1: Scheduling Automatic Updates	
Field	Description
Schedule Update Check	
Enable	Select the <code>ENABLE</code> checkbox to schedule automatic runtime updates.
Frequency	Select the frequency that GB-OS will check for updates. Options are Daily and Weekly .
Day	Select the day that GB-OS will check for updates.
Time	Select the time that GB-OS will check for updates.

Performing a Manual Software Update

If a new version of GB-OS has been indicated at **Configure>Configuration>Runtime>Update**, administrators can log into the GTA Support Center (<https://www.gta.com/support/center/>) to download the runtime. If available updates cannot be applied to the firewall, contact the GTA Sales staff (sales@gta.com) or your local GTA Channel Partner for information on support contracts.

Step 1: Generate GB-OS 6.0 Feature Activation Codes

In order to upgrade your version of GB-OS to version 6.0, first you must generate GB-OS 6.0 feature activation codes from the GTA Online Support Center (<https://www.gta.com/support/center/>).

Login to the GTA Online Support Center and navigate to the **View Products** page. The View Products page displays all products registered with GTA. If your firewall is eligible for the upgrade, an **UPGRADE TO 6.0.0** link will be available in the ACTION row. Click the link to generate the GB-OS 6.0 feature activation code(s).

Now that the GB-OS 6.0 feature activation codes have been generated, they must be loaded into the firewall's configuration.

Step 2: Load GB-OS 6.0 Feature Activation Codes Into the Configuration

Login to your firewall using an administrative account and copy the feature activation code(s) and paste them into the Features screen (**Basic Configuration>Features**). Do not paste the feature activation code(s) over any previously entered codes, they should be entered into a blank line. Once entered, click the **SAVE** button.

If entered correctly, the row's description should say `???? GB-X 6.0 - Registered`, where X is your GTA firewall's model number.

Now that the GB-OS 6.0 feature activation codes have been loaded into the firewall's configuration, the GB-OS 6.0 runtime file must be uploaded.

Step 3: Upgrade to GB-OS 6.0

After the GB-OS 6.0 feature activation codes have been successfully inserted into the firewall's configuration, you may upgrade the firewall to GB-OS 6.0.

To obtain the GB-OS 6.0 runtime, login to the GTA Online Support Center (<https://www.gta.com/support/center/>) and navigate to **Downloads>System Software**. Select the appropriate GB-OS 6.0 runtime for your firewall (e.g., if you are upgrading a GB-2000e, select the **GB-2000 FIREWALL FAMILY** runtime file saved for your operating system under the 6.0 section). Download and extract the runtime file to an easy to remember location on your workstation, such as the desktop (if you are running Microsoft Windows, the runtime will extract to `C:\Program Files\GTA\GB-X-6.0\GB-X-60.rtm`, where X is the GTA firewall's model number).

Next, login to your GTA firewall using an administrative account and navigate to **Configure>Configuration>Runtime>Update** and click the **ADVANCED** tab. In the **RUNTIME** section, click the **BROWSE** button and select the runtime. The file will have an extension of `.rtm`. Select **UPLOAD** to upload the runtime file. GB-OS will then validate the file. If it is valid, the system will install it.

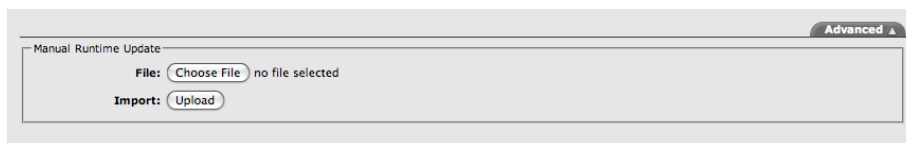


Figure D.6: Manually Updating Your Firewall's Software



Upgrading from GB-OS 3.7.3, and GB-OS 4.0.6 - 5.1.5

Upgrading from GB-OS 3.7.3, or GB-OS 4.0.6 - 5.1.5 is a two step process. To upgrade to GB-OS 6.0 you must:

1. Upgrade to GB-OS 5.2
2. Upgrade to GB-OS 6.0

Step 1: Upgrade to GB-OS 5.2

1.1: Generate GB-OS 5.2 Feature Activation Codes

Login to the GTA Online Support Center and navigate to the **View Products** page. The View Products page displays all products registered with GTA. If your firewall is eligible for the upgrade, an **UPGRADE TO 5.2.x** OR **6.0.x** link will be available in the ACTION row. Click the link to generate the GB-OS 5.2 feature activation code(s).

Now that the GB-OS 5.2 feature activation codes have been generated, they must be loaded into the firewall's configuration.

1.2: Load GB-OS 5.2 Feature Activation Codes Into the Configuration

Login to your firewall using an administrative account and copy the feature activation code(s) and paste them into the Features screen (**Basic Configuration>Features**). Do not paste the feature activation code(s) over any previously entered codes, they should be entered into a blank line. Once entered, click the **SAVE** button.

If entered correctly, the row's description should say `???? GB-X 5.2 - Registered`, where X is your GTA firewall's model number.

Now that the GB-OS 5.2 feature activation codes have been loaded into the firewall's configuration, the GB-OS 5.2 runtime file must be uploaded.

1.3: Upgrade to GB-OS 5.2

After the GB-OS 5.2 feature activation codes have been successfully inserted into the firewall's configuration, you may upgrade the firewall to GB-OS 5.2.

To obtain the GB-OS 5.2 runtime, login to the GTA Online Support Center (<https://www.gta.com/support/center/>) and navigate to **Downloads>System Software**. Select the appropriate GB-OS 5.2 runtime for your firewall (e.g., if you are upgrading a GB-2000e, select the **GB-2000 FIREWALL FAMILY** runtime file saved for your operating system under the 5.2 section). Download and extract the runtime file to an easy to remember location on your workstation, such as the desktop (if you are running Microsoft Windows, the runtime will extract to `C:\Program Files\GTA\GB-X-5.2\GB-X-52.rtm`, where X is the GTA firewall's model number).

Next, login to your GTA firewall using an administrative account and navigate to **Administration>Upload Runtime**. Browse to the downloaded runtime file and select the **SUBMIT** button. The GTA firewall will then validate the runtime file. If the file is valid, the system will install it and reboot. Your firewall is now running GB-OS 5.2 and can now be upgraded to GB-OS 5.3.

Step 2: Upgrade to GB-OS 6.0

Go to [Upgrading from GB-OS 5.2.0 Through 5.4.x](#) to finish the upgrade process.

Upgrading from GB-OS 4.0.0 - GB-OS 4.0.5

Upgrading from GB-OS 4.0.0 - 4.0.5 to GB-OS 6.0 is a three step process. To upgrade to GB-OS 6.0 you must:

1. Upgrade to GB-OS 4.0.6.
2. Upgrade to GB-OS 5.2.
3. Upgrade to GB-OS 6.0.

Step 1: Upgrade to GB-OS 4.0.6

To obtain the GB-OS 4.0.6 or above runtime, login to the GTA Online Support Center (<https://www.gta.com/support/center/>) and navigate to **Downloads>System Software**. Select the appropriate GB-OS runtime for your firewall (e.g., if you are upgrading a GB-2000e, select the **GB-2000 FIREWALL FAMILY** runtime file saved for your operating system under the 4.0 section). Download and extract the runtime file to an easy to remember location on your workstation, such as the desktop (if you are running Microsoft Windows, the runtime will extract to `C:\Program Files\GTA\GB-X-4.0.6\GB-X-406.rtm`, where X is the firewall’s model number).

Now that the GB-OS 5.3 feature activation codes have been generated, they must be loaded into the firewall’s configuration.

Next, login to your GTA firewall using an administrative account and navigate to **Configure>Import/Export**. Under the **RUNTIME** section, click the **BROWSE** button and select the runtime. Select **Upload** to upload the runtime file. If the file is valid, the system will install it and reboot. Your GTA Firewall Appliance has now been upgraded to GB-OS version 4.0.6. Next, GB-OS 5.2 feature activation codes must be entered.

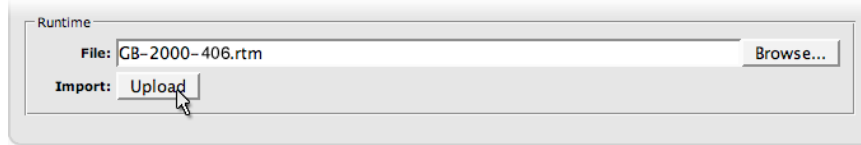


Figure D.7: Upgrading to GB-OS 4.0.3

Step 2: Upgrade to GB-O 5.2

Go to [Upgrading from GB-OS 3.7.3, and GB-OS 4.0.3 - 5.1.7](#) to finish the upgrade process.



Upgrading from GB-OS 3.4.0 - 3.7.2

Upgrading from GB-OS 3.4.0 - 3.7.2 to GB-OS 6.0 is a three step process. To upgrade to GB-OS 6.0 you must:

1. Upgrade to GB-OS 3.7.3
2. Upgrade to GB-OS 5.2
3. Upgrade to GB-OS 6.0

Step 1: Upgrade to GB-OS 3.7.3

1.1: Generate GB-OS 3.7 Feature Activation Codes



Note

If the GTA firewall is running GB-OS 3.7.0, 3.7.1, or 3.7.2, skip to step 1.3.

Login to the GTA Online Support Center and navigate to the **View Products** page. The View Products page displays all products registered with GTA. If your firewall is eligible for the upgrade, an **UPGRADE TO 3.7.3** link will be available in the ACTION row. Click the link to generate the GB-OS 3.7 feature activation code(s).

Now that the GB-OS 3.7 feature activation codes have been generated, they must be loaded into the firewall's configuration.

1.2: Load GB-OS 3.7 Feature Activation Codes Into the Configuration

Login to your firewall using an administrative account and copy the feature activation code(s) and paste them into the Features screen (**Basic Configuration>Features**). Do not paste the feature activation code(s) over any previously entered codes, they should be entered into a blank line. Once entered, click the **SAVE** button.

If entered correctly, the row's description should say ??? GB-X 3.7 - Registered, where X is your GTA firewall's model number.

Now that the GB-OS 3.7 feature activation codes have been loaded into the firewall's configuration, the GB-OS 3.7.3 runtime file must be uploaded.

GNAT Box Features		
Serial number:	82081286	
Index	Activation code	Description
1	0C035DA0-6988A323-18A14AC9-289F3D88	???? GB-2000 3.7 - Registered (25 users)
2	8042A847-4862A323-8ED681CC-8864A88D	???? GB-2000 3.7 - VPN (10 clients)
3	81FC4808-1FC7A323-86912F86-13888888	???? GB-2000 3.7 - Surf Sentinel (10 users)
4	85C98D85-2882A323-8A5C118A-3D84888C	GB-2000 3.4 - Surf Sentinel (10 users)
5	188C2885-888A323-888A118A-888A118C	GB-2000 3.4 - Registered (25 users), VPN

Figure D.8: Successful Feature Activation

1.3: Upgrade to GB-OS 3.7.3

After the GB-OS 3.7 feature activation codes have been successfully inserted into the firewall's configuration, you may upgrade the firewall to GB-OS 3.7.3.

To obtain the GB-OS 3.7.3 runtime, login to the GTA Online Support Center (<https://www.gta.com/support/center/>) and navigate to **Downloads>System Software**. Select the appropriate GB-OS 3.7.3 runtime for your firewall (e.g., if you are upgrading a GB-2000e, select the **GB-2000 FIREWALL FAMILY** runtime file saved for your operating system under the 3.7.3 section). Download and extract the runtime file to an easy to remember location on your workstation, such as the desktop (if you are running Microsoft Windows, the runtime will extract to **C:\Program Files\GTA\GB-X-3.7.3\GB-X-37.rtm**, where X is the GTA firewall's model number).



Next, login to your GTA firewall using an administrative account and navigate to **Administration>Upload Runtime**. Browse to the downloaded runtime file and select the **SUBMIT** button. The GTA firewall will then validate the runtime file. If the file is valid, the system will install it and reboot. Your firewall is now running GB-OS 3.7.3 and can now be upgraded to GB-OS 5.2.

GNAT Box Upload Runtime	
Runtime file name:	GB-2000-373.rtm <input type="button" value="Browse..."/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure D.9: Upgrading to GB-OS 3.7.3

Step 2: Upgrade to GB-OS 5.2

Go to [Upgrading from GB-OS 3.7.3, and GB-OS 4.0.3 - 5.1.5](#) to finish the upgrade process.



Upgrade Notes

The following are noted issues that may occur when upgrading to GB-OS 6.0.

Re-sizing Slices and Runtime Upgrades

In order to support the new features in GB-OS 6.0, some firewalls may require partition re-sizing during the upgrade process. Upon re-sizing, both runtime slices will have GB-OS 6.0, and firewall administrators **WILL NOT** be able to revert to previous runtimes via the Console or Web interface.



CAUTION

GTA strongly recommends backing up current firewall configurations **PRIOR** to upgrading.

Firewalls requiring re-sized partitions will take approximately 5-8 minutes to reboot and fully update once the runtime has been applied. **DO NOT** switch off or reboot the firewall during this process.

Error Messages Upon Initial Reboot

Upon rebooting after successful installation, the GTA Firewall UTM Appliance may display errors when accessed using the Web interface. This is expected, these errors are generated because the browser's cache is trying to access files and locations that no longer apply. Click **OK** to any displayed errors and refresh the browser window to access GB-OS 6.0.

If the error messages persist, clear your browser's cache.

Default Login and Password Changes

Firewall administrators who have *never* changed their default login and password in the **Admin Accounts** section of GB-OS 3.x will find that their default account's login information will no longer work with GB-OS 6.0. After the firewall administrator has upgraded to GB-OS 6.0, their login and password will both default to **fwadmin**.



CAUTION

GTA recommends changing the default user ID and password to prevent unauthorized access. Passwords can be changed after logging in.

GB-250 Upgrade Notice

GB-250 Firewall UTM Appliances may reboot multiple times, and may install GB-OS 6.0 on both memory slices during the upgrade process. It is important that administrators **do not** shut down their firewall when upgrading to GB-OS 6.0. If GB-OS 6.0 is installed on both memory slices, it will not be possible to revert back to the previously installed version of GB-OS.

IPSec Object Upgrade Notice GB-OS 5.4.2 and Above

When upgrading to GB-OS 5.4.2 and above, all firewalls using SHA-2, with keys larger than 128, will need to be upgraded. If unable to upgrade, firewalls must be switched to a compatible algorithm.

Corrupt Object Names and Descriptions

GB-OS 6.0 uses the UTF-8 character set, wherein the past previous versions of GB-OS allowed administrators to select the character set according to their locale.

When upgrading to GB-OS 6.0, it is necessary to match your Web browser's character set with the character set used by GB-OS. In GB-OS 3.x, the default character set is set at **Basic Configuration>Preferences**. In GB-OS 4.0, the default character set is set at **Configure>Accounts>Preferences**.



Note

Consult your Web browser's documentation for information on how to match the character set with the character set used by GB-OS 3.x or GB-OS 4.0.



Firewall Controll Center (FWCC) No Longer Supported

With the release of GB-OS 6.0, GTA's Firewall Control Center (FWCC) will no longer be supported and will be removed from the firewall interface for all products.

Static Gateway to Static Gateway VPN Failure

Firewall administrators that have a configured VPN between two static gateways may find that their VPN no longer functions after they have upgraded to GB-OS 6.0 from GB-OS 3.x. This is caused when the firewall administrator had a local identity configured in the **Authorization>VPN** section of GB-OS 3.x on their GTA firewall before it was upgraded to GB-OS 6.0. GB-OS versions prior to GB-OS 4.0 ignored this field when a static gateway to static gateway VPN was configured; in GB-OS 4.0 and above, the local identity is recognized and can result in a failure when a VPN connection previously worked.

To correct this issue, navigate to **Configure>VPN>IPSec Tunnels** and edit the IPSec tunnel in question by setting the local identity to **<IP Address>**.

Restrictive VPN Configurations

When upgrading to GB-OS 6.0 from GB-OS 3.x, firewall administrators may need to rebuild their VPN policies. In versions of GB-OS 3.x, VPN access was controlled using pass through filters. In GB-OS 4.0 and above, VPN access is controlled using VPN policies which allow all VPN traffic by default.

Firewall administrators who have upgraded to GB-OS 6.0 from GB-OS 3.x will need to manually recreate any restrictive VPN policies.

Naming Conventions

When upgrading to GB-OS 6.0 from GB-OS 3.7 or earlier, previously defined objects will have their names changed and may affect automatically generated user group names.

User Group Names and Assignments

When upgrading to GB-OS 6.0 from GB-OS 3.x, users will automatically be organized into groups based on the name of the their VPN object. For example, a user that made use of a VPN object with a name of Marketing Department will be assigned to a group named Group Marketing Department, while a user that made use of a VPN object with the name of MOBILE will be assigned to a group named Group MOBILE.

Users that have no VPN object assigned to them will be organized into groups based on the GB-OS version that the administrator is upgrading from, such as Users_370.

VPN Object Names

Previously defined VPN objects will have the GB-OS version number appended to their name after the GTA firewall has been upgraded to version 6.0 from GB-OS 3.x. For example, a VPN object with a name of IKE in GB-OS 3.7.0 will be named IKE_370 after the upgrade.

Address Object Identification

Previously defined address objects that were of type IP ADDRESSES will be re-categorized as being of type ALL after the GTA Firewall UTM Appliance has been upgraded to GB-OS 6.0 from GB-OS 3.x.



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GTA includes 30 days “up and running” installation support from the date of purchase. See GTA's Web site for more information. GTA's direct customers in the USA should call or email GTA using the telephone and email address below. International customers should contact a local Authorized GTA Channel Partner.

Tel: +1.407.380.0220 **Email:** support@gta.com

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