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GB-OS 6.2.12

GB-OS 6.2.12 is the final release of GB-OS by Global Technology Associates, Inc.
Please read this entire document and make sure you understand how a GTA firewall will operate running GB-OS 6.2.12.

Background
GB-OS is GTA's firewall operating systems which had its roots in the OS created for our first firewall, the GFX-94, in 1994. The initial version of GB-OS was released in 1996 as the GNAT Box Firewall System, a compact turn-key system with minimal hardware requirements that booted and ran off a 3.5 inch diskette. As the firewall market changed, GTA adapted the GNAT Box system for a hardware based system and began producing firewall appliances. Over the course of nearly 25 years GB-OS has evolved adding capabilities and features to address the needs of our clients. Many of the optional features added to GB-OS required external servers to provide frequent database updates, subscription and license verifications.

Global Technology Associates, Inc. will cease operations in the near future so GB-OS 6.2.12 is designed not to require access to GTA servers in order to continue to function.

Requirements
1. A GTA firewall system running any licensed version of GB-OS 6.2.x. It is best to perform the upgrade from a recent version of GB-OS such as 6.2.09, 6.2.10 or 6.2.11. It is not recommended to directly upgrade from previous versions of GB-OS to GB-OS 6.2.12, such as GB-OS 6.1.x.

2. Valid GB-OS 6.2 activation code(s). At a minimum a 6.2 registration code is required. If your system has optional features, valid 6.2 activation codes are required for those options. All activation codes currently install on a GTA firewall can be found on the Activation Codes page [Configure -> System -> Activation Codes] of the web admin interface and listed in the details section for the specific serial number in the online support center (https://support.gnatbox.com).

3. A supported GTA firewall system. GTA firewalls that are end of life can not run GB-OS 6.2.12. Supported GTA systems are: GB-2600, GB-2500, GB-2100, GB-850, GB-820, GB-300 and GB-Ware.

Download and Installation
The upgrade to GB-OS 6.2.12 uses the same process that has been in place for many years.

1. System Slices and How to Recover the Previous System
The static storage medium (Compact Flash, Hard Disk, etc) that GB-OS is installed on is divided into two "slices," Slice 1 and Slice 2. You can view information about each slice on the Runtime Options page [Configure -> Configuration -> Runtime -> Options] of the web admin interface. These are labeled "Current" and the "Alternate."

The Current slice as the label implies contains the currently running GB-OS system. The Alternate slice contains the previous version of GB-OS that was running when the last update was installed. When a GB-OS update is installed it is applied to the Alternate slice, which becomes the Current slice when the system reboots. This

scheme is designed so that if there is some problem with an update then the Alternate slice containing the previous GB-OS system can be selected and booted up, rolling back the system to its prior GB-OS version.

In the event that the firewall needs to be switch to the Alternate slice there are two methods that are available:
1. Selecting the Alternate slice from the Runtime Options screen and clicking submit. This typically only works when the system is operational but has some issues and the web admin interface is still accessible.

2. Using the console. In the case of GTA firewall appliances the supplied console cable will be needed, along with a method to attach it to a computer running a serial terminal program (such as PuTTY on Windows, iTerm using the "cu" command on a Mac, or using the 'cu" command on Unix or Linux systems). GB-2500, GB-2100 and GB-820 operate at 38400 baud, while the GB-2600, GB-850 and GB-300 operate at 115200 baud. GB-Ware systems that are installed with a serial console are accessed at 38400 baud. GB-Ware systems with a video console installed only need a keyboard and monitor connected.

    Once a console connection is setup, power cycle the system and shortly after a brief BIOS message you will see a display that shows:
    1 GB-OS slice 1
    2 GB-OS slice 2

    Default: (_the current slice number will be here)_

    Quickly press the number for the Alternate slice, (e.g. if '2' is the default then select "1") If you don't make a selection in about 15 seconds the system will boot the default slice. If you have manage to select the Alternate slice the system will boot up on the previous GB-OS system.

2. Obtaining the Runtime
The update will be available to download and install from the Update page [Configure -> Configuration -> Runtime -> Update] of the firewall web admin interface. It can also be downloaded from GTA's online support center https://support.gnatbox.com and manually installed using the Manual Runtime Update feature found in the Advanced section of the Update page of the firewall web admin interface.

It is suggested that even if you use the automated update to download and install GB-OS 6.2.12, you should also manually download the GB-OS 6.2.12 runtime from the support center and store it somewhere safe in the event that you may need to reinstall in the future.

3. Before Installation
1. Prior to actually installing GB-OS 6.2.12 insure that you have a good backup of the system configuration.
2. You have a method of accessing the console, (cable, software, etc).
3. GB-Ware systems running GB-OS 6.2 prior to 6.2.06 need to read the GB-Ware 6.2.06 Upgrade Notice (https://www.gnatbox.com/assets/pdf/announcements/GB-Ware_GB-OS_6.2.06_Upgrade_Notice.pdf)

4. What to Expect After Installing GB-OS 6.2.12
1. GB-OS 6.2.12 does not attempt to contact the GTA servers. This means:
    1. No automated checks for GB-OS runtime updates will be preformed.
    2. Preforming a manual runtime update check, will not cause the system to contact the GTA servers. The busy icon will spin indefinitely until you refresh or leave the page.
    3. No automated check will be made for AV, AS, IPS or Country Blocking updates.

4. Performing a manual contract update check, will not cause the system to contact the GTA servers. The busy icon will spin indefinitely until you refresh or leave the page.
5. Country Blocking will continue to function using the last updated database on the system. This database doesn't change drastically over the short term but will over time become out of date. The "Subscription" checkbox needs to be deselected otherwise the item will be flagged with a warning indicating a valid support contract is needed.
6. IPS will continue to function using the last updated database on the system. This database tends to add new threats on a varied basis so it is difficult to judge how effective the IPS database over time. Obviously new threats will not be added and outdated threats won't be deleted. The "Subscription" checkbox needs to be deselected otherwise the item will be flagged with a warning indicating a valid support contract is needed.
7. Mail Proxy Anti-Virus will continue to function using the last updated database on the system. This database is normally updated quite often. It will become less effective rapidly. This service should not be relied upon to identify new threats in email.
8. Mail Proxy Anti-Spam will continue to function using the last updated database on the system. The Grey Listing is not impacted as it doesn't rely on database updates from GTA servers. The actual classification of emails using the Anti-Spam database will become less effective overtime.

2. Optional licensed features High Availability, Additional Remote VPN clients, Multi-Interface all will continue to function normally.

3. Licensed Web Content Filtering option with a current subscription will continue to function normally until the subscription expires. Since Web Content Filtering accesses a third party server for URL ratings it is not impacted by not being able to contact GTA servers.

5. **What to Expect if a GTA Firewall is NOT Upgraded to GB-OS 6.2.12**
    1. GTA firewall appliances that have not upgraded to GB-OS 6.2.12 will continue to function. When the GTA servers go offline warning messages about not being able to contact GTA servers will be displayed and logged.
    2. Subscription services on GTA firewall appliances that have not upgraded to GB-OS 6.2.12 will continue to function until GTA servers go offline. When the servers go offline, deselecting the Subscription checkbox on the service should limit some warning messages. The databases will not be updated.
    3. Optional licensed features High Availability, Additional Remote VPN clients, Multi-Interface all will continue to function normally on GTA firewall appliances.
    4. Licensed Web Content Filtering option with a current subscription will continue to function normally until the GTA servers go offline. Although Web Content Filtering access a third party server for URL classification previous versions of GB-OS prior to 6.2.12 require access to a GTA server.
    5. **GTA GB-Ware firewall systems that haven't been upgraded to GB-OS 6.2.12 will eventually stop functioning after the GTA servers go offline.**