

OVERVIEW

The IPedge program update process is controlled through Enterprise Manager. The software update can be performed using three different methods.

- **Online Update** — IPedge systems running R1.5.1 and later can use the online update to download the needed file from a FTP server maintained by Toshiba. Connection to the Internet and permission to access and use an FTP server is required.
- **Remote Update** — The update files are downloaded to the Administrator's PC or saved onto the Primary IPedge server in a multi-node system.
- **Local Update** — The update files are loaded onto a USB flash drive. This process requires the administrator to plug the flash drive into the IPedge server.

Program Update

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Local Program Update

A **Local Program Update** is performed while on site, with physical access to the IPedge server. Local means that the update files are on a USB drive connected to the IPedge server. Program Update can update the IPedge core software, the Linux operating system and the Media Library. The program update file can be accessed from a USB drive connected to the IPedge server.

Note: The IPedge system must be running for at least 20 consecutive minutes before starting a program update process.

Remote Program Update

A **Remote Program Update** means the administrator may not be on site. The update files are loaded on an IPedge server in the network or loaded on the administration PC.

Important! Perform a manual database backup using the **Webmin > IPedge > Backup and Restore** tool before the software update. This backup file will be used in the event you choose to roll back the update. Store the backup file off of the IPedge server.

Online Update

IPedge systems running R1.5.1 and later software have a program update mechanism called Online Program Update. New software updates will be available on an FTP server. The IPedge server checks the FTP server each night for new software files. When a later version software file is found the system administrator will see a notice the next time Enterprise Manager is logged into.

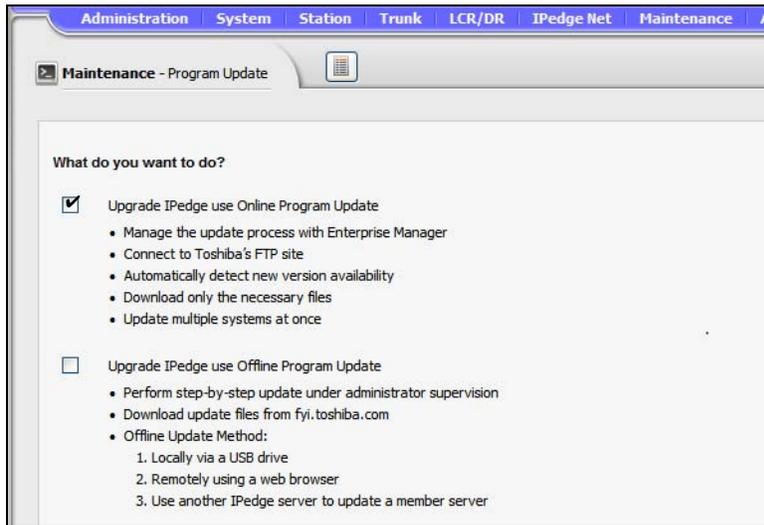
 [New version of software is available for upgrade.](#)

Note: The IPedge system must have access to the internet and be allowed FTP server access for the Online Update feature to function.

The administrator can view the update files and decide whether to run the update.

The IPedge software in the form of an RPM file can be uploaded to a predefined directory on the IPedge server. In addition to RPMs, a manifest file is provided that describes the IPedge software release. This manifest file is in xml format and contains information about the software release, release version, RPM files and release date. In Enterprise

Manager select **Maintenance > System Maintenance > Program Update.**

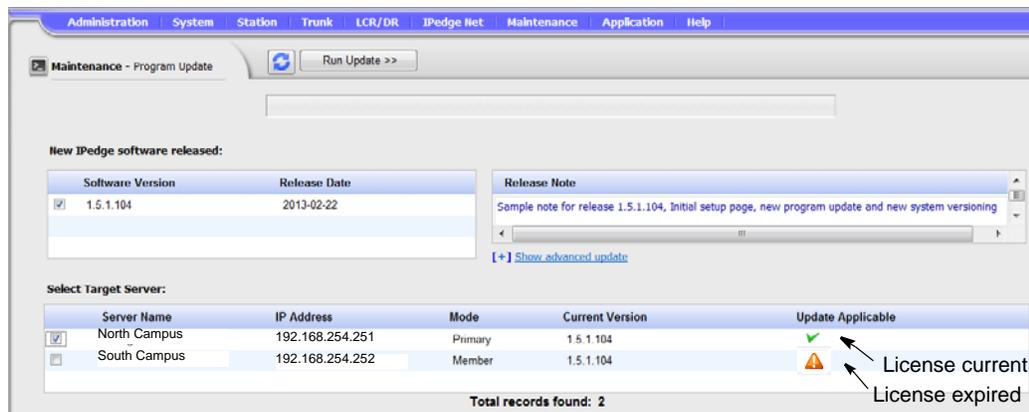


Version check

Enterprise Manager verifies the version when the administrator selects software upgrade. The system will allow an upgrade to be applied when the new version is the same or newer. A multi-node system Member server can only upgrade to a version that is the same or newer than the Primary server. A member server that does not have the 1.5.1-1 or later software will be displayed as 'unknown' until it has been upgraded.

License Checking

The Online Program Update checks for a valid license before the user can select the server. If license failed on validation such as no license or maintenance license expired, the check box will be disabled.



Language Pack

The language pack is under advanced update section. The administrator must click on the option to expand it. The default is not expanded and all languages are not checked.

The en_US (US english language pack) is checked and disabled just for display purpose. The English language pack is always the default. Enterprise Manager will compare the langPack version and always download the latest one regardless which software the user selected.

- Software list section – List available version of software that is same or newer than local version.
- Release note display – Display the text that is in the manifest xml file.
- Server list section – List of master and member servers. It indicates license status and validates version compatibility.

Systems running R1.5.1 and later software will check the maintenance license prior to starting a program update.

All results will be logged into a history file in xml format on the IPedge server. A report viewer can display detail status of each rpm.

Online Update Page Content

Online program update supports multiple nodes. Multiple servers can be upgrading in parallel with the same version of selected software.

Each server in a multi-node system will download its own rpm files and will handle its own update. The Primary server will be in a waiting state while the member servers are updating. The Primary server will start its own update when all of the selected members have finished the updates.

New IPedge software released:

Software Version	Release Date
<input type="checkbox"/> 1.5.1.206	2012-08-25
<input checked="" type="checkbox"/> 1.5.1.207	2012-10-28

Release Note

Release Note For 1

[\[+\] Show advanced update](#)

Select Target Server:

Server Name	IP Address	Mode	Current Version	Update Applicable
<input type="checkbox"/> North Campus	192.168.254.251	Primary	1.5.1.09	✓
<input type="checkbox"/> South Campus	192.168.254.253	Member	1.5.1.201	⚠

Total records found: 2

The current software version is same or newer than selected version.

Update Result: The process status will display the update process; starting, downloading, updating, and update complete.

Program update is completed. See Program Update History report for detail information.

Program Update Process Status:

Updating to version 1.3.1.99

Server Name	IP Address	Mode	Current Version	Process Status
North Campus	192.168.254.251	Primary	1.5.1.09	⚠ Update Failed
West Campus	192.168.254.252	Member	1.5.1.201	⚠ Update Failed
Warehouse	192.168.254.253	Member	1.5.1.207	✓ Successfully Completed

Total records found: 3

- The log files reside in each server.
- Each update job creates one log file. The administrator selects the server and log file to see the summary.

ENHANCED ONLINE UPGRADE

IPedge systems running R1.6 and later software have an enhanced Online Program Update process. The added enhancements are:

- Re-try while downloading files from the Toshiba FTP site
- Download files and 'Wait to upgrade'
- 'Cancel' download or check download status later

PROGRAM UPDATE

The IPedge program update process is controlled through Enterprise Manager. The software update can be performed using three different methods.

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CAUTION! The IPedge system must be running for at least 20 consecutive minutes before starting a program update process.

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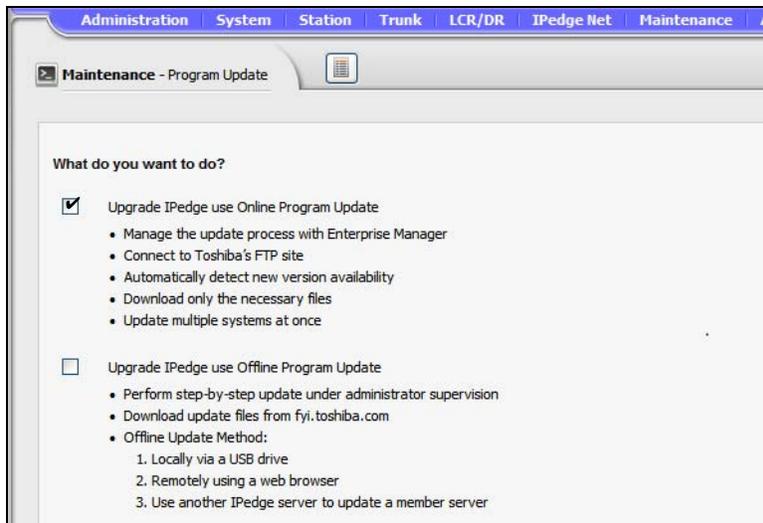
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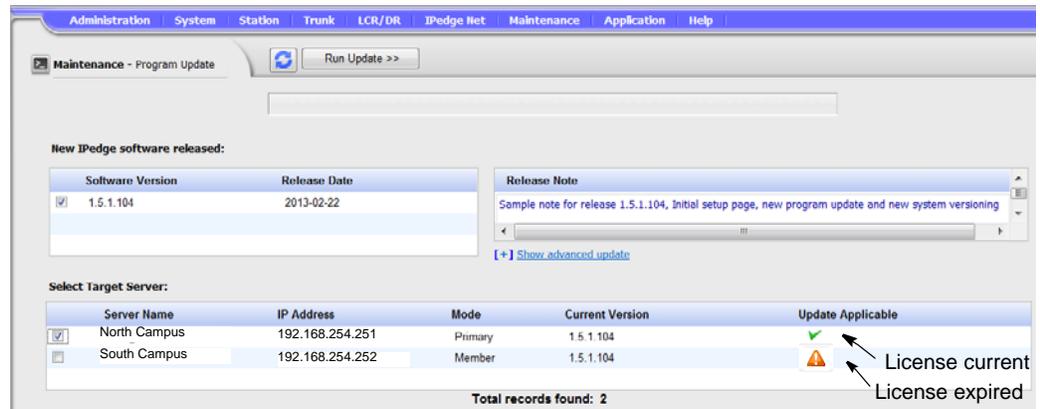
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Move cursor over the icon for additional information.

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- Re-try while downloading files from the Toshiba FTP site
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Download Retries

If an error occurs during the upgrade files download the IPedge system will wait 30 seconds after the transfer failure then try the download again. The files successfully loaded will not need to be reloaded. The retry will continue until it completes or it is canceled by the user.

If the download is taking longer than anticipated the user can cancel the download or check the progress of the update later.

The technician can select the update to begin immediately after the download is finished or wait for a manual start command. This allows the user to do a download only then, run update when user is ready.

Note: When the update process is complete the IPedge server will reboot.

Cancel Upgrade Button

When the user starts an upgrade the **Cancel Current Job** button is visible. On a multiple server update, the cancel applies to all servers.

- This cancel button stops current running tasks.
- If server is downloading upgrade files the task is stopped immediately. All files already downloaded will be cached in the IPedge server. When the download is run again only the remaining files will be processed.
- If server is processing the call processing data back-up, the task will continue until the backup cycle is finished.
- The Cancel button cannot stop an upgrade on a server that is in the upgrading state. The server that is in upgrading state will continue its update process.

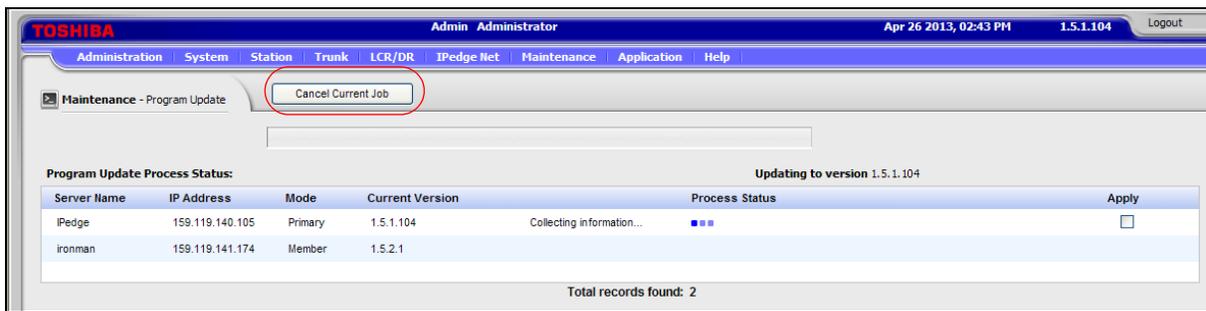


Figure 1 Program Upgrade Screen

Wait to Upgrade

The online program update provides an option to apply the update immediately after download or wait for customer action. The default action is download software and wait to upgrade. The user can download the upgrade files and be able to run upgrade at a later time. The user check marks the Apply box to have the upgrade start immediately after the file download.

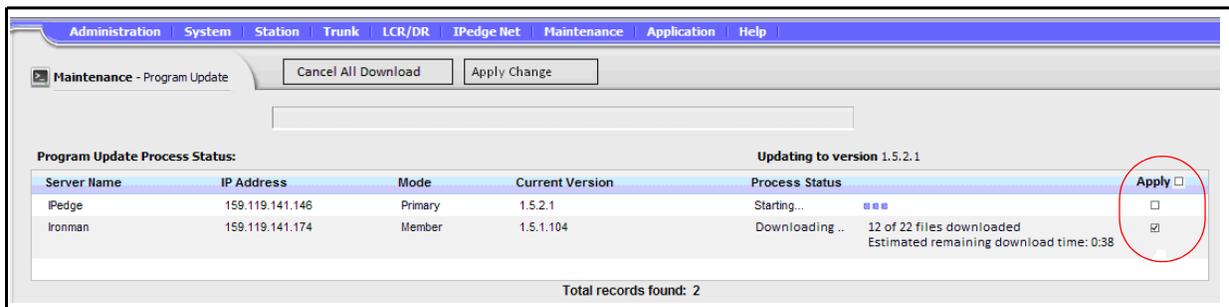


Figure 2 Download Then Upgrade

Once started, the upgrade files will continue downloading even if user is not logged into Enterprise Manager.

The option to 'Apply immediately' or 'Wait' can be changed while the file update is starting, downloading and in the waiting state.

Once a server starts upgrading the software it will continue its update process. At this point the Cancel button will be disabled.

The **Apply All** button will cause all of the servers in a multi-node system to update.

If the user choice is download and wait, there will be two reports generated for this update. One report for the download status and one for the update status.

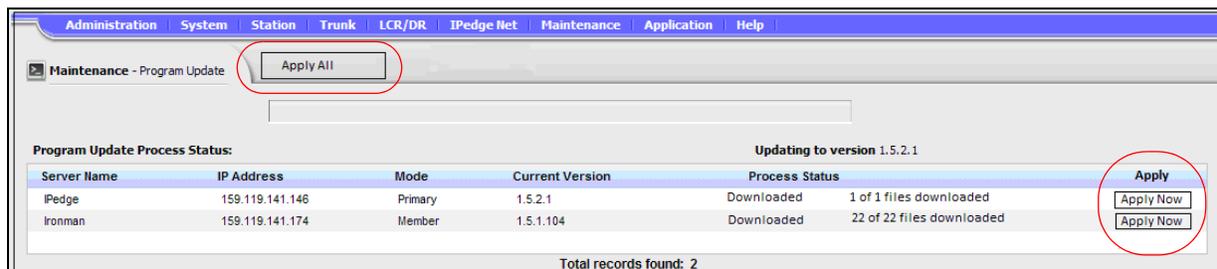


Figure 3 Apply Upgrade

ONLINE UPDATE PROCEDURE

The following procedures detail some of the upgrade files download and system upgrade processes available on IPedge systems running R1.6 and later software.

Download Then Apply Update Later

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s).
6. Click on **Run**. The server will download the upgrade files.
7. The user may log out or navigate to other page.
8. When ready to start the upgrade, Navigate to **Maintenance > System Maintenance > Program Update**.
9. The server upgrade status will be displayed. Refer to [Figure 3](#).
10. Uncheck the **Apply** check-box before the download is finished for the system to wait after loading the update files.

Notes:

- A. The online update feature will only download the required update files.
- B. If the download fails Enterprise Manager will retry the download until is successful or the administrator cancels the download.

- C. When upgrading multiple servers the data connection is shared by all of the servers.
- D. The time required to download the upgrade files and complete the upgrade process varies by server type and the size of the update file(s).
- E. In locations with low bandwidth it may be more efficient to upgrade one server at a time.

Download and Apply Immediately

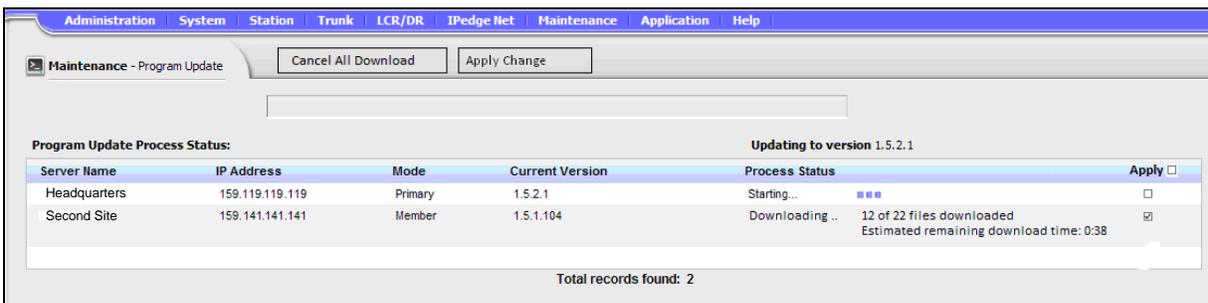
This procedure is used to download updates and apply the updates immediately.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s).
6. Click on **Run**. The server will download the upgrade files.
7. Click to check-mark the **Apply** box next to each server.
8. When the server has finished the file download the upgrade will begin.

Change To Apply Immediately

The default update condition is download files then wait for a manual upgrade start. This procedure changes the system to start the upgrade as soon as the download is complete.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s).
6. Click on **Run**. The server will download the upgrade files.
7. The **Apply** check-boxes will be displayed.



8. Click to check-mark the **Apply** box.

9. The update will begin as soon as the download is complete.

Note: If the Apply check-box is un-checked before the update starts the system will wait until you click on the Apply Now button. Once the update starts it cannot be canceled.

10. Click to check-mark the **Apply** box.

Change To Wait

This procedure changes the system from 'start the upgrade as soon as the download is complete' to download and wait.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s).
6. Click on **Run**. The server will download the upgrade files.
7. Click the **Apply** check box. This step set the system to start the upgrade as soon as the file download is complete.
8. Commit changes.
9. Uncheck the **Apply** check-box before the download is finished for the system to wait after loading the update files. Click on the **Apply Now** button or the **Apply All** button start the update.
10. Commit changes.

Cancel Update

Steps 1 through 5 start the update file download process. The download can be canceled anytime before it is complete, step 7. Any update files that were downloaded before the Cancel was clicked will be retained. When the update is attempted later these files will not need to be downloaded again.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s).
6. Click on **Run**. The server will download the upgrade files.
7. Anytime before the software upgrade starts click on **Cancel All Download**.
8. Click on **Yes** to confirm.
9. The server upgrade will abort. **Note:** If the server is in the update state, the update job will continue.

Remove One Server From Upgrade

When an upgrade on a multi-node system has been started, one, or more, of the nodes can be removed from the upgrade. When a server is removed from the update process all of the downloads are canceled then, the update is started with the appropriate servers selected.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s). For example; A, B and C.
6. Click on **Run**. The servers will download the upgrade files. For example: A=5/10, B=6/10 and C=1/10.
7. Click on **Cancel All Download**.
8. Click on **Yes** to confirm.
9. Downloads for all servers are canceled.
10. Select software version
11. Select target server(s). For example; A and B.
12. Click on **Run**. The servers will download the upgrade files. For example: A=6/10, B=7/10.

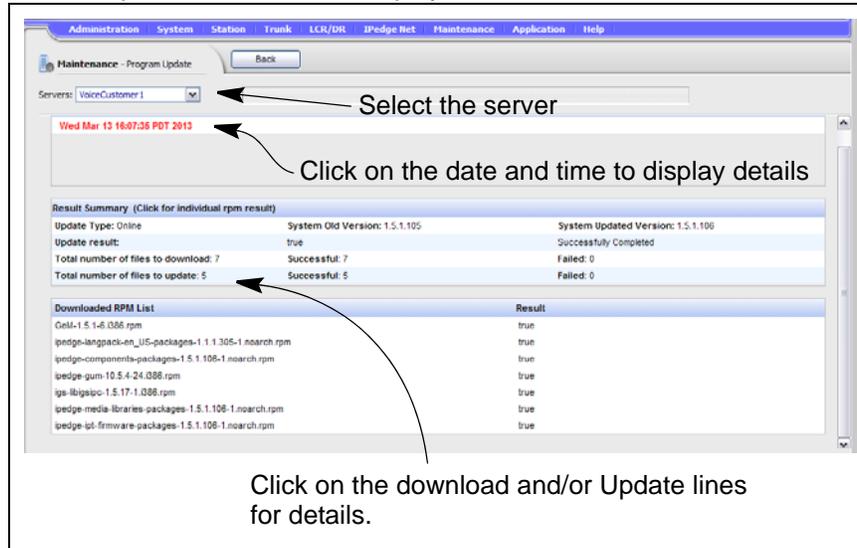
Add A Server to the Update

To add a server to the update process all of the downloads are canceled then, the update is started with the appropriate servers selected.

1. Login to Enterprise Manager.
2. Navigate to **Maintenance > System Maintenance > Program Update**.
3. Select **Online Program Update**.
4. Select software version.
5. Select target server(s). For example; A and B.
6. Click on **Run**. The servers will download the upgrade files. For example: A=5/10 and B=6/10.
7. Click on **Cancel All Download**.
8. Click on **Yes** to confirm.
9. Downloads for all servers are aborted.
10. Select software version
11. Select target server(s). For example; A, B and C.
12. Click on **Run**. The servers will download the upgrade files. For example: A=6/10, B=7/10, and C starts from 0/10.

Note: When the software upgrade starts the Cancel button will be disabled.

13. The update results will be displayed.



Notes:

- The update file download can be canceled anytime. All files that had finished loading will be retained. On the next file download those files will not download again.
- The server update process can not be stopped once it has started.

OFFLINE UPDATE PROCEDURE

The offline update uses files loaded on a USB flash drive or onto one of the IPedge servers in the same network as the server being updated.

LOCAL UPDATE

The local update process requires the system administrator to load the update files to a prepared USB flash drive and be present on site during the update process. In Enterprise Manager select **Maintenance > Program Update** then check-mark **Upgrade IPedge use Offline Program Upgrade**.

USB Drive Requirements

The following are the USB drive requirements for successful IPedge Program Update:

- The USB drive must be Linux mountable. Some USB drives on the market contain an auto_start feature or custom driver which is not Linux compatible.
- The USB drive recommended capacity is 4G Byte or more
- Supported file format FAT, FAT32 ISO9660
- The update folder must be created in the USB then, the update programs are written into this folder.

Important!

The update files must be loaded into a folder named **update** on the root directory of the USB drive.

Update File Source

Update files can be downloaded from the Toshiba FYI web site or the Toshiba TSD Technical Support web site. The update files are TGZ format.

Important! Before starting this procedure use a PC to perform a virus test on the USB flash drive.

1. Download the compressed update file from a Toshiba web site to your PC.
2. Create a folder named **update** on the root of the USB drive.
3. Copy the files to the update folder on a USB drive. Do not extract (un-compress) the files.

The update file can then be loaded onto:

- The IPedge server (update target server) or
- Another IPedge server

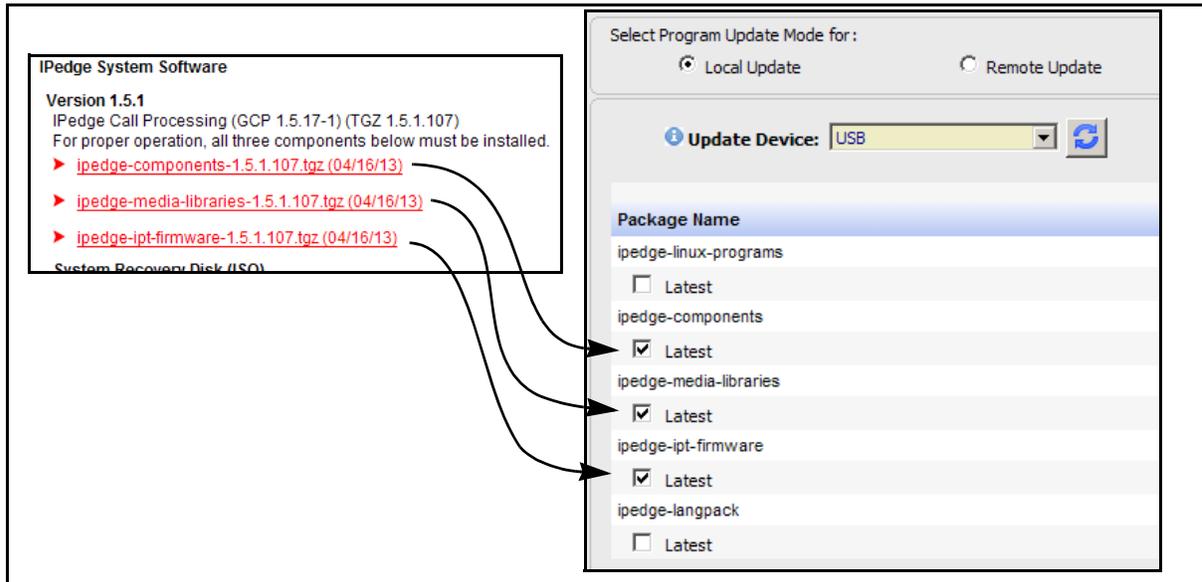
Update Procedure

1. In Enterprise Manager select **Maintenance > System Maintenance > Program Update**.
2. In the Select Target Server screen click to check-mark the server you will update then click on the **Next** button.

Select the update mode.

- **Local Update** - The update file is in the update folder on a USB drive connected to the IPedge server. Go to [Step 3](#).
 - **Remote Update** - The update file is on the PC used to connect to the IPedge server. Refer to "[REMOTE UPDATE PROCEDURE](#)" on [page -17](#).
3. When Local Update is selected, select USB in the Update Device menu.

4. Check-mark the boxes with the same names as the tgz files downloaded from the FYI web site.



5. If the update files are already extracted click on the **Skip** button to skip the extract process and start the file update process.
— OR —
Select the files to be used then, click on the **Extract** button. The extract button will extract the compressed file and copy it to the target IPedge server.

Note: The file will only extract if it is newer than file already on the server.

6. When the file extraction is complete the **Run update** button will appear. Click to run the update then, go to [Step 8](#). If the update file is not a newer file than what is already on the IPedge server the Run update button will not appear.

7. Select the IPedge server that has the extracted update files available.

Note: If the target server is already running the same software version of the download, Enterprise Manager will advise that no update is necessary and the Run update button will not appear.

8. Some updates will cause a system restart. If this occurs Enterprise Manager will logout. If the server does not restart the update complete screen will be displayed.

Important! Remove the USB device and ensure that there is no DVD in the server before the reboot.

9. Login to Enterprise Manager.

10. Synchronize the database.

REMOTE UPDATE PROCEDURE

A Remote Program Update can preformed from anywhere. Remote means that the update files are loaded on an IPedge server in the network or on the PC used to access Enterprise Manager. Program

Update can update the IPedge core software, the Linux operating system and the Media Library. The program update file can be accessed from a USB drive connected to the IPedge server.

Important! Perform a manual database backup using the **Webmin > IPedge > Backup and Restore** tool before the software update. This backup file will be used in the event you choose to roll back the update.

1. In Enterprise Manager select **Maintenance > System Maintenance > Program Update**.
2. In the Select Target Server screen click to check-mark the server you will update then click on the **Next** button then, select **Remote Update** mode.
3. Select the IPedge server that has the extracted update files available. Check-mark **From other IPedge server** then, select the server from the pull-down list. Go to [Step 5](#).
- OR -
From the Primary IPedge server only; Check-mark **From Client computer** then, **Click to upload files**. Click to **Browse** to the update file.
4. Click to **Extract** the file(s) then go to [Step 7](#).
5. Click on the **Download File** button.
6. When the file download is complete the **Run update** button will appear.
7. Click on the **Run update** button to start the update process.

Note: If the target server already has updates Enterprise Manager will advise that no update is necessary and the Run update button will not appear.

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SYSTEM REBOOT

Some program update procedures require that the System Administrator reboot the system.

Important! Remove any USB device from the server before the reboot.

1. Select **Maintenance > System Maintenance > Core System Processes**.
2. Select the target server from the pull-down list.
3. Click on the **Reboot system** icon.

PROGRAMMING

Refer to the Operation section.

CAPACITY

Not applicable

AVAILABILITY

Applies to IPedge systems only. Refer to the Restrictions section below. The VIPedge system is updated automatically and requires no user intervention.

RESTRICTIONS

IPedge systems running on R1.1.2 and earlier systems cannot update directly to R1.5 software.

Upgrading systems running R1.1.2 and earlier software involves restoring the system from the R1.5 Recovery disk.

IPedge system running R1.2 and R1.3 software are updated to R1.5 using this files downloaded from the Toshiba FYI web site.

Important! The Public Numbering Plan will be deleted during this procedure. Determine and record the numbering plan for this location before starting.

IPedge systems running R1.5.1 and later software can use the Online Update process.

IPedge systems must be running R1.5.1, TGZ 107 software to update to R1.6 software. Refer to the IPedge Install manual for detailed instructions on updating

HARDWARE

No additional hardware is necessary for this feature.

FEATURE INTERACTION

Not applicable