Graphite 6.4.0

- Release Date: June, 2024.

> ⚠️ **Important:** *Ensure that your XPression license entitles you to upgrade to 10.55, or higher, before upgrading to Graphite 6.0.0 or higher. XPression 10.55, or higher, is required for Graphite 6.0.0, or higher. If your hardware does not support XPression 10.55 you cannot upgrade to Graphite 6.0.0.*

> **Note:** *For greater security, it is recommended that you disable Remote Desktop on the Graphite server. On Windows 10, right-click on the **Start** button and click **System** > **Remote Desktop**. Switch **Enable Remote Desktop** to **Off**.*

> **Note:** *Refer to your XPression software Upgrade Notes for information on any Windows® applications what may need to be updated.*

Feature Enhancements

A number of features have been added, or updated, to this version of software. This section provides a brief introduction to these features, and how to use them.

v6.4.0 Features

Role Based Access Control

The Ross Platform Manager allows for user authentication and role based access through DashBoard. Once set up in DashBoard, Ross Platform Manager allows for control over who can control Graphite based on the roles individual users are assigned to.

> **Note:** *Ross Platform Manager does not apply to operation of the switcher from a control panel.*

> **Tip:** *For information on setting up a Ross Platform Manager server and creating user accounts, refer to the documentation that came with your Ross Platform Manager.*

SFTP Support

The TouchDrive control panel can now use SFTP to communicate with the Graphite switcher.

> **Tip:** *You can now disable the use of FTP by the control panel. From the tree view for the control panel, double-click **Configuration** > **Network** and select **Disable** for **Carbonite FTP Port**.*

> ⚠️ **Important:** *The frame software must have the disable FTP option to connect to the panel using SFTP.*

New Devices Supported

New Devices

No new devices were added or updated for this version of software.

New/Updated Commands

No new commands were added or updated for this version of software.

Bugs Addressed

The following bugs were addressed in this version of software:

- GR-2338, GR-2339— Addressed bug around sets FTP downloads through DashBoard.
- GR-2353 — Added the ability to turn off FTP on the frame (you need TouchDrive software version 1.5 or higher, else your panel will not connect).
- GR-2166 — Custom Controls - Sequencer events can now be added to a custom control.
- GR-2451 — Memory Recall / Store Attributes – Addressed a bug where **RollClip** attribute may not affect GPO and PBus devices.
- GR-2455 — Fixed some mapping issues in **User Select Assignment** DashBoard menu.

Known Issues and Limitations

Keep these notes in mind when upgrading your switcher to this version of software. Contact Ross Video Technical Support if you have any questions about performing a software upgrade.

Operational Notes

The following issues have been identified when working with the switcher:

- **Reboot After Diagnostics** — The switcher must be rebooted after performing any diagnostic test.

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- **Corrupt USB** — If you remove the USB drive while the switcher is writing to it (the USB port on the Graphite card), the USB could become corrupted and will need to be re-formatted.
- **External Re-Entry Video Errors** — A video timing error can occur when a video output of the switcher is routed back into the switcher using an input BNC. If video timing errors do occur, assigning a frame synchronizer to the input BNC will remove the timing errors.
- **GPI and Tally Diagnostics** — If you run the GPI or Tally diagnostic tests, you may have to reboot the switcher to end the test.
- **Transparency Slider** — The alpha slider on the border color section of the Live Assist node in DashBoard is not implemented at this time.
- **Stills with same Name** — You cannot have two or more Media-Store files with the same name but different file extensions in the same folder. The switcher treats capital and lowercase letters as the same.
- **Using Still for a MediaWipe** — If you use a still image for a MediaWipe, the transition may not appear as desired. The still image is flashed on screen for a frame and then the cut is performed after.
- **CancelAll CC** — If a custom control contains the CancelAll event and was created in Carbonite software version 11.1 or older, the custom control will not load. You must re-create the custom control with the new CancelAll event.
- **MediaWipe Fill/Alpha Timing** — If you are performing a MediaWipe and one of the Media-Store channels is used in a DVE key anywhere else in the switcher, the fill and alpha of the MediaWipe will not be timed the same. This applies even if the DVE key isn't on-air on the ME. Remove the Media-Store channel from the DVE key to correct the timing issue.
- **XPression Clips Video Format** — XPression clips must be in the same video format as the switcher subsystem is operating in. If there is a video format mismatch the output audio for a clip will be choppy.
- **XPression Mutes Audio** — If the performance meter in XPression exceeds 100%, and/or playout channels start dropping frames, audio playout will be muted automatically. This is normal operation.
- **Remote Control** — If you use TeamViewer or some other similar remote desktop application to control Graphite from an external computer the PC audio source and monitoring output will not be available. Remote control applications re-route Windows® audio sources to the remote PC, disconnecting it from the Graphite audio mixer.
- **XPression Studio Capture Performance in 1080p** — If you have upgraded to XPression Studio, higher numbered capture framebuffers can drop frames in 1080p when XPression is heavily stressed.
- **Transitions with Show Alpha** — If the show alpha feature is on, only cut transition are possible on the ME. The switcher will perform a cut at the end of the transition duration instead of the selected transition type.
- **Audio Fader Memories and Custom Controls (1.2 or earlier)** — Memories or custom controls created in version 1.2 or earlier and include SDI or XPression audio channels will not work with version 2.0 or higher. These memories or custom controls must be re-created. Memories or custom controls that include analog, pc audio, or Media-Store audio are not affected. Custom controls with incompatible events are flagged in the custom control editor.
- **Memories and Custom Controls (2.0)** — Audio memories or custom controls created in version 2.0 will not work with version 2.1 or higher because of the addition of the configurable audio output feature. These memories or custom controls must be re-created. Custom controls with incompatible events are flagged in the custom control editor.

- **Memories and Custom Controls (2.3)** — Memories, custom controls, and MIDI device maps created in version 2.3 or earlier and that include dedicated audio faders will not work properly in version 3.0 or higher. All audio faders are now fully configurable. Custom controls that contain the old dedicated audio faders are flagged in the custom control editor.
- **Dedicated Audio Fader Memories and CCs** — Memories or custom controls that include the dedicated audio faders will not work properly in version 3.0 or higher. The dedicated audio faders for PC audio and 1RU Audio Breakout Unit audio have been replaced with fully assignable audio faders. Custom control that contain the old dedicated audio faders are flagged in the custom control editor.
- **XPression Performance at 1080p 59.94Hz on Graphite PPC** — Due to hardware limitations of the Graphite PPC, XPression may experience audio dropouts when playing high resolution (1080p 59.94Hz) clips.
- **ViewControl over NDI® on macOS®** — ViewControl over NDI® is not supported on computers running the macOS® operating system at this time.

Graphite Upgrade

There are several components to the Graphite system. Although each of these components is upgraded individually, each component is interdependent with the others and only specific combinations of software versions are supported.

> **Important:** *Although the system may operate with a software mix-match, some feature may not be available or performance may be unpredictable.*

Software Compatibility

Before installing any software, review the following version compatibility information.

> **Important:** *You cannot downgrade past Graphite 6.0 or XPression 10.55. Graphite 6.0 is not compatible with versions of XPression before 10.55.*

Table 1: Version Compatibility

Software	Version	To Verify
Graphite	6.4.0	The current version is shown on the **Status** page in DashBoard for the Graphite node.
Graphite Windows® Driver	6.4.0	From the Windows® Control Panel, click **Programs** and **Features**. The Graphite driver is listed with the version number.
XPression	11.5.5806	Refer to the documentation what came with XPression for information on getting the current version number.
Windows®	10	From the Windows® Control Panel, click **System**.
RAVE Loader	5.0.0	The current version of the application that is used to upgrade the 1RU Audio Breakout Unit is shown on the executable.
1RU Audio Breakout Unit	4.5.1	The current version of the 1RU Audio Breakout Unit is shown on the menu display of the unit.
1RU Audio Breakout Unit-12G	5.1.2	The current version of the 1RU Audio Breakout Unit-12G is shown on the menu display of the unit.
DashBoard	9.10.0	Refer to the documentation what came with DashBoard for information on getting the current version number.
Carbonite Black Panel	1.5.530	A software mismatch message is shown on the control panel if you need to upgrade the software on the control panel.
TouchDrive Panel	3.0.1	The current version is shown on the **Status** page in DashBoard for the TouchDrive node.

> **Important:** *Depending on the components that need to be upgraded, not all of the upgrade procedures need to be completed.*

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Downgrade Compatibility

Before downgrading your switcher, review the following version compatibility information.

Current Version	Restrictions
6.0.0	You cannot downgrade past 6.0.0.
5.1	If you downgrade from 5.1 (or higher) to 5.0 (or earlier) you must downgrade the ABU to version 3.0.0. Refer to the RAVE ABU Upgrade Notes for version compatibility information and downgrade instructions.
5.0	If you downgrade from 5.0 (or higher) to 4.1 (or earlier) you must upgrade the switcher subsystem separately from the Windows® executable. Locate the `upgrade-4.1.0.#####.graphite` file from the old upgrade package. Click **Navigation Menu** > **Configuration** > **System** > **Upgrade** and upgrade the switcher subsystem. Once the switcher has upgraded you can run the executable in Windows® to upgrade the drivers.
2.3	If you downgrade from 2.3 (or higher) to 2.2 (or lower) you must ensure that you have at least one unassigned configurable audio channel (Click **Navigation Menu** > **Configuration** > **System** > **Global**). In 2.3 the dedicated PC audio fade was replaced with assignable PC audio sources. When you downgrade, the dedicated PC audio fader is added back to the list, causing the number of channels to exceed the maximum. You must set the **Conf Audio Channels** (Click **Navigation Menu** > **Configuration** > **System** > **Global**) to a supported value.

To Upgrade Graphite

The standard upgrade is accomplished with a single Windows® executable that upgrades the main Graphite switcher subsystem. The 1RU Audio Breakout Unit, XPression, and DashBoard must be upgraded separately.

The server and the switcher subsystem must both be connected to your network for the upgrade.

1. Download the `graphite-##.##_##.exe` upgrade executable file to your Graphite system.
2. Shutdown XPression and DashBoard if they are running on your system.
3. Run the upgrade executable file you downloaded.

   *Note: If a **Windows Security - Windows can't verify the publisher of this driver software** error is displayed, click **Install this driver software anyway**. The method used to digitally sign the driver has changed, triggering the warning.*

   Windows® may display a security warning, click **Run** to continue the installation.
4. Follow the onscreen instructions and click **Install** to start the upgrade. The upgrade may take between 5 to 10 minutes to complete.

   Note: If XPression is running the upgrade wizard will ask permission to close the application.
5. Click **Finish**.
6. Click **Yes** to power off the server.

   Note: The server must be completely powered off and back on again for the switcher subsystem to be upgraded.
7. Power the server back on again.

To Upgrade XPression

Upgrade the XPression part of Graphite.

Note: Check the section Graphite Upgrade on page 3 before uninstalling the current software. If the current version is compatible, then you do not need to uninstall it, or upgrade to a new version.

You must first uninstall the current version of XPression that is on your system. Once uninstalled, you can install the new XPression software.

1. Copy the new XPression installer to the hard drive of the system.
2. Uninstall the previous version of XPression.
3. Run the installer and follow the onscreen instructions.

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Note: *Refer to the documentation that came with the new version of XPression for any special installation instructions.*

To Upgrade DashBoard

Upgrade DashBoard running locally on the Graphite system.

1. Copy the new DashBoard installer to the hard drive of the system.
2. Run the installer and follow the onscreen instructions.

   Note: *Refer to the documentation that came with the new version of DashBoard for any special installation instructions.*

To Upgrade the ABU

A USB connection from a computer to the ABU or ABU-12G is required to upgrade the software.

1. Install the `raveLoader-#.#.#.#####.exe` found in the upgrade package.

   Tip: *You may be prompter by **Windows Security** asking if you want to install the software. Click **Install** to proceed.*

2. Connect a USB cable from the computer you are using to install the software to the USB-B port on the ABU. Only connect to a single ABU at a time.
3. Launch the **RAVE Loader** application.

   The application will check for any ABU or ABU-12G hardware attached to the computer. The hardware must match the software you are loading onto it.

4. Click **Browse** and navigate to and select the upgrade file for your hardware.
   - **ABU** — select the `rave-#.#.#.###.bit` file.
   - **ABU-12G** — select the `rave12g-#.#.#.###.bit` file.

5. Click **Program**.

   ⓘ *Important:* *Do not close the application or disconnect power to the 1RU Audio Breakout Unit or the computer while the upgrade is in progress.*

Note: *The upgrade will fail if you select an upgrade file that is not compatible with your hardware.*

6. Click **Verify** to confirm that the upgrade has been successful. The upgrade will fail if the software is not compatible with the hardware.
7. Click **Exit**.

To Upgrade the Carbonite Black Panel

After the frame has been upgraded and reconnected to the panel, a message may be displayed indicating that a software mismatch. You only need to upgrade the panel or CarboNET if the mismatch message is displayed.

Note: *It is important to upgrade all devices connected to a frame to the same version. This includes in a MultiPanel configuration.*

1. In DashBoard, double-click on the **CarbonitePanel** node for the Carbonite Black panel or CarboNET that you want to upgrade.
2. Click **Upload** > **Browse**.
3. Locate the `CarbonitePanel-v#_#_###.bin` upgrade file and click **Open**.

   Tip: *If you have multiple devices to upgrade, click **Next** and select all the devices that you want to upgrade.*

4. Click **Finish**.

   DashBoard uploads the upgrade file to the device and performs the upgrade.

5. Click **Reboot** > **OK**.