



FIRMWARE RELEASE NOTES

Version 7.1.65

BrightSign XTx44, XDx34, XTx43, XDx33, HDx23, HO523, LS423, 4Kx42, XDx32, HDx22

Changes Since 7.1.53

End-User Notes

Bug Fixes

- 31138: (XT1144) Players can now output to HDCP 2.2 displays from an HDMI input source that uses HDCP 1.4.

Developer Notes

New Features

- Support for PKCS8 private key parsing

Improvements

- Encrypted playback APIs now support string keys in addition to hex keys.
- Streaming media can now can be configured for HTTP proxies using the *roHtmlWidget.SetProxy()* and *roNetworkConfiguration.SetProxy()* and methods.
- The `networkconfiguration.applyConfig()` JavaScript method now accepts objects that lack a full set of parameters (in which case settings associated with undefined parameters will be reset to default). This allows scripts to pass the object returned by `getConfig()` to `applyConfig()` in all cases.

- The *networkconfiguration* JavaScript object now accepts `clientCertificate` Boolean values that are `false`.

Bug Fixes

- 31248: The *roNetworkConfiguration.AddDNSServer()* method no longer fails if `ResetInterfaceSettings()` has been called on the same instance.
- 31136: *roNetworkConfiguration* methods can once again be used to clear current wireless settings.
- 30910: Firmware updates with safe mode now work when the player storage is encrypted.
- 31210: (XT244, XT1144) The *roDeviceCustomization.EncryptStorage()* method now works with generated keys.
- 31231: The *roStorageHotplug.GetStorageStatus()* method now reports the correct status when external storage is disabled.
- 30968: The *BSTicker.AddSurface()* method no longer distorts colors with JPEG images.

Changes Since 7.0.60

End-User Notes

New Features

- (XTx43, XTx44) Support for HDCP 2.2

Improvements

- The speed at which data is unzipped to an exFAT-formatted drive has been improved.
- Players now work with very large (e.g. 4TB) USB storage devices formatted as exFAT.

Bug Fixes

- 30269: The HDMI input signal no longer becomes distorted after switching away from a presentation that displays portrait HDMI Input (at 1080x1920x60p/i) and back to it.
- 30405: Remote Snapshot now works with presentations that display both HDMI input and a second video source.
- 30437: Synchronization works between slave units running 7.x firmware and a master unit running 6.x firmware. Note that the reverse configuration (a 7.x master controlling 6.x slaves) is not supported.
- 30708: Video Timecode events no longer trigger twice during a video that has been paused/played.
- 30774: Support for BT.2020 CL output has been disabled. This fixes a purple-tint issue associated with the 3940x2160 output on certain Sony displays.
- 30271: PNG files with excessively large metadata sections no longer cause players to crash.
- 30136: (HO523) IR input via the blue 3.5mm jack now works correctly.
- 30973: Players no longer crash when reading a directory from a broken filesystem.

Developer Notes

New Features

- New *BSVideoMode.SetSyncManager()* method, which allows you to enable Genlock via JavaScript
- New *storageinfo* JavaScript object, which provides usage information for storage devices
- New `Pause()` and `Resume()` methods on the *BSTicker* JavaScript object
- New `Raise()` and `Lower()` methods for BrightScript objects that implement the *ifWidget* interface (*roTextWidget*, *roImageWidget*, etc.). This allows for detailed z-order control of the graphics plane.
- New *roNetworkConfiguration.SetForwardingPolicy()* method, which allows you to use the BrightSign player as a router for other networked devices
- New `x-bs-intrinsic-width` and `x-bs-intrinsic-height` attributes for HTML `<video>` elements: These ensure the aspect ratio of the source video is maintained when scaled to fit the element.
- New *roVideoMode.SetHdmiMetadata()* method
- Support for the 1200x1920x60p resolution
- (XTx44, XTx43, XDx34, XDx33) Support for the 3840x1080x25/30/50/60p resolutions
- Support for PKCS8 private key parsing

Improvements

- Encrypted playback APIs now support string keys in addition to hex keys.

- The *roNetworkConfiguration.ConfigureDhcpServer()* method now accepts "nameservers", "ip4_gateway", and "domain" parameters for DNS configuration.
- The *roJRE* Java runtime environment object has been updated to Java 8.
- The *roNetworkConfiguration* object can now be used to configure network interfaces that are not currently present. To do so, specify the network interface by name rather than numeric index.
- When the DHCP server is enabled on the player, you can now retrieve configuration information from the following DWS URLs: "http://<brightsign-ip>/dhcp-server.html" or "http://<brightsign-ip>/dhcp-server.txt".
- Node.js modules that are loaded with `require()` can now use BrightSign JavaScript objects.
- The Chromium Web Inspector can now perform memory heap dumps to an SD card or SSD device.
- The *roKeyStore* object can now be used to register client certificates for streaming media.
- The `SetLocalStorageDir()` and `SetLocalStorageQuota()` settings once again persist after an *roHtmlWidget* instance is destroyed.
- The *roHtmlWidget* object now generates a "download-request" event when Chromium encounters a MIME type it doesn't understand (e.g. a PDF), rather than attempting to download it. The event contains the download URL and the reported MIME type of the file.
- The Chromium engine can now create a dummy tab to initialize a PDF renderer.
- The *roHtmlWidget* storage methods and the `CreateDirectory()` global function now throw an exception if you attempt to create directories on storage drives that have not been mounted.
- The rendering speed has been improved for *roCanvasWidget* instances containing large numbers of text.

- Streaming video playback now supports AES-CBC decryption.

Bug Fixes

- 30686: The *roVirtualKeyboard* functionality has been fixed.
- 30696: The mechanisms for disabling external storage have been fixed.
- 30767: Bit errors in a DVB subtitle track no longer cause it to stop working after a certain amount of time.
- 30931: Issues with the region size or region ID of DVB subtitles no longer cause a crash.
- 29991: Node.js applications can now write files and create directories on SSDs that are formatted with the ext4 file system.
- 30942: Fixed *roHtmlWidget* download-performance issues when using a proxy that accepts HTTP connections but can get either HTTP or HTTPS URLs.
- 30352: Players no longer crash intermittently when using HTML to play streaming video containing numerous subtitles.
- 30824: HTML `<video>` elements now correctly support "file:" URIs containing "%20" encoded spaces.
- 30656: When using the pre-routed audio mode, the *roAudioPlayer.PlayFile()* method no longer returns `true` if there are no audio decoders available to play a track.
- 30477: The player log no longer generates "No mapping for key 330" messages whenever a touch event is received from certain HID touchscreens.
- 30812: Crash dumps generated by the player will now report the correct time and date (though this is not guaranteed in all instances).

- 30825: Taking frequent screen captures no longer causes a crash.
- 30231: Attempting to output USB audio from an HDMI input source no longer causes the player to crash.
- 30232: USB audio glitches no longer occur when system memory is heavily taxed.
- 30161: Players now correctly read character strings from the NephSystem N380 RFID reader/writer.
- 30666: The *roAssetFetcher* and *roSyncPool* objects once again work when assets lack the `<size>` parameter.
- 30033: The *roAssetFetcher* object now correctly resumes large file downloads after a power cycle (in-progress downloads are written to storage every 15 minutes).
- 30137: Enabling the WiFi interface no longer creates the possibility that Ethernet VLANs will be disconnected when the player reboots.
- 30107: Passing an empty associative array to the *roNetworkConfiguration.ConfigureDHCPServer()* method now correctly disables the DHCP server.