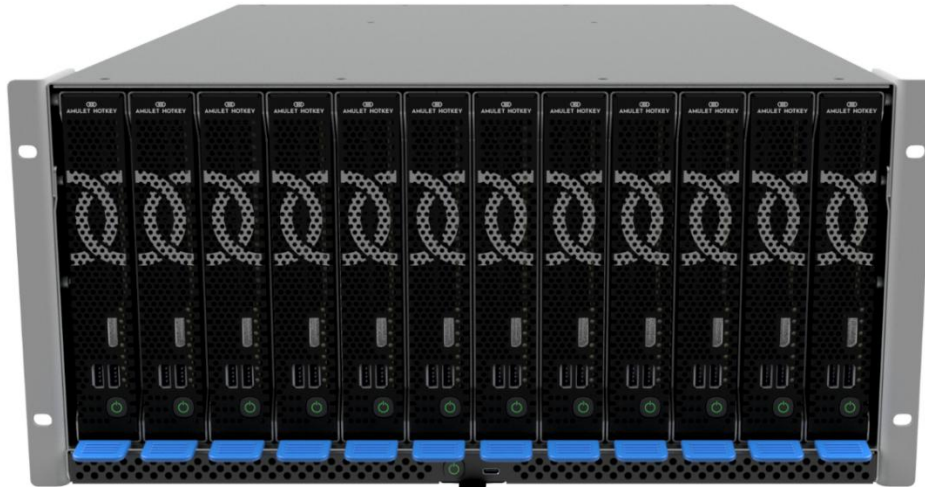


Amulet Hotkey CoreStation HX

2026.4.1 Firmware Release Notes



Release Details

Recommended best-known configuration

Component	Current Release	Previous Release
HX Management Firmware	2026.4.1	2026.1.2
NX2000 Node BIOS	2026.3.1	2026.1.1
HX2000 baseline driver pack	FEB26	SEPT25
HX2000 GPU driver	FEB26	SEPT25
HX2000 baseline firmware pack	MAR26	None
HX2000 Pre-install driver pack	MAY25	MAY25
HX Agent for Windows	2025.7.3	2025.7.3

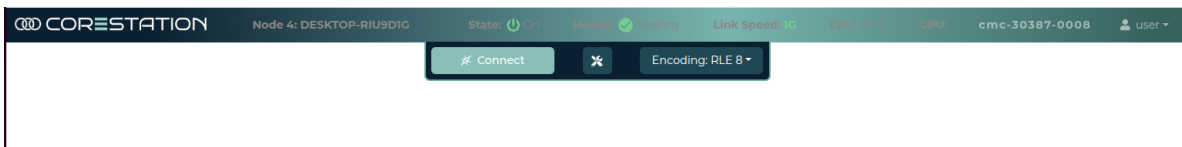
Amulet Hotkey Resources page - <https://www.amulethotkey.com/resources/library/corestation-hx2000/>

New Features in this release

Remote Console – Improved connection flow

The Node Remote Console page has been updated to provide a simpler and more intuitive flow. The single *Connect* button performs all setup and connection operations and provides feedback on the connection status.

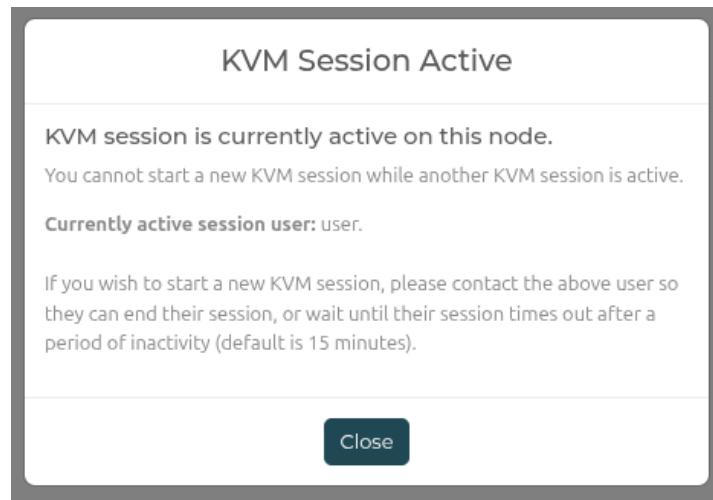
The option for Encoding is available before initiating the connection to provide for either lower bandwidth (RLE8) or higher colour precision (RLE16).



Remote Console – Active session lock


If there is an active Remote Console KVM session to a node and another user tries to start a second Remote Console KVM session to that same node, there is a lock to prevent the second session from starting as this would disconnect the first session.

The popup message shows the username of the CoreStation HX user who started the first active session. There is no option to bypass this lock or terminate the existing session, only the owner of the session can do that.



Note – this lock only applies to the case where two users are both trying to access the same node using Remote Console KVM. If a user tries to connect a KVM session to a node which is currently in use via another method – e.g. RDP, this is shown as a Windows warning after providing login details.

Remote Console – In-session hotkeys and controls

The  icon opens the Remote Console in-session tools from the left side of the window.

This includes:

Virtual Media

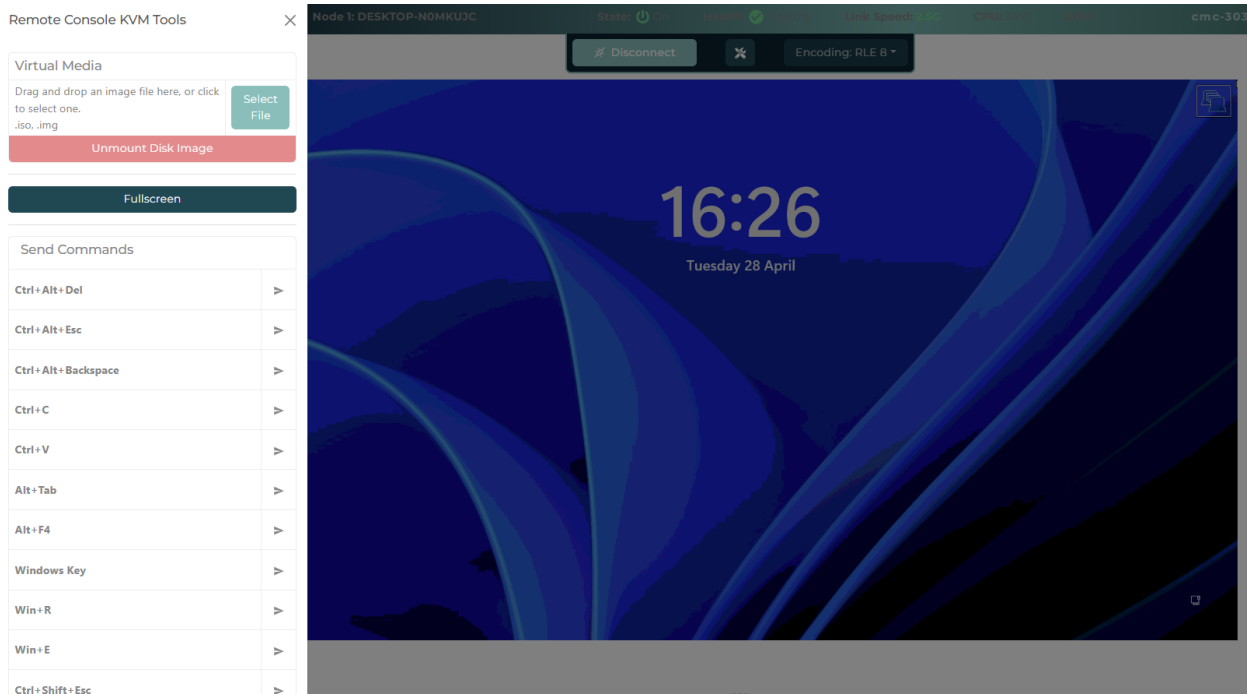
Enables the user to present a local disk image file to the node as if it were connected locally. The file must be a disk image which is recognised by the operating system or is UEFI-bootable, typically .iso (ISO 9660) format with partitions which can be read by the OS - e.g. FAT32 or NTFS. It is not possible to mount individual files or executables directly.

Fullscreen

Expands the Remote Console KVM session to use the whole display area of the current monitor and scales the image as appropriate. This does not change the resolution of the session itself as this is fixed at 1920x1080.

Send Commands

Provides a set of critical key combinations which are typically not passed directly through the KVM session. These are sent directly to the remote machine and are not seen by the Browser or OS on the user's local machine.



The screenshot displays the 'Remote Console KVM Tools' interface. On the left, there are three main sections:

- Virtual Media:** A section for managing disk images. It includes a text prompt 'Drag and drop an image file here, or click to select one.' with a 'Select File' button. Below this is a red 'Unmount Disk Image' button.
- Fullscreen:** A dark green button with the text 'Fullscreen'.
- Send Commands:** A list of key combinations, each with a dropdown arrow to its right. The commands listed are: Ctrl+Alt+Del, Ctrl+Alt+Esc, Ctrl+Alt+Backspace, Ctrl+C, Ctrl+V, Alt+Tab, Alt+F4, Windows Key, Win+R, Win+E, and Ctrl+Shift+Esc.

The main window shows a remote desktop session for 'Node 1: DESKTOP-W6MKU3C'. The desktop background is dark blue with abstract light blue patterns. The time '16:26' and date 'Tuesday 28 April' are displayed in the center. At the top of the window, there is a 'Disconnect' button, a 'Remote Console' icon, and an 'Encoding: RLE 8' dropdown menu. The bottom right corner of the window has a small icon.

Remote Console – Events

Remote Console sessions generate an event on connect and disconnect for audit and tracking purposes. These appear in the Dashboard and Node pages as well as the Events > Jobs view and are included in the support bundle and Event History exports.

The event includes the date and time of the Remote Console session start and end as well as the user and target Node. Actions performed during the session, such as mounting media or changing OS settings are not recorded in the CoreStation HX logs.

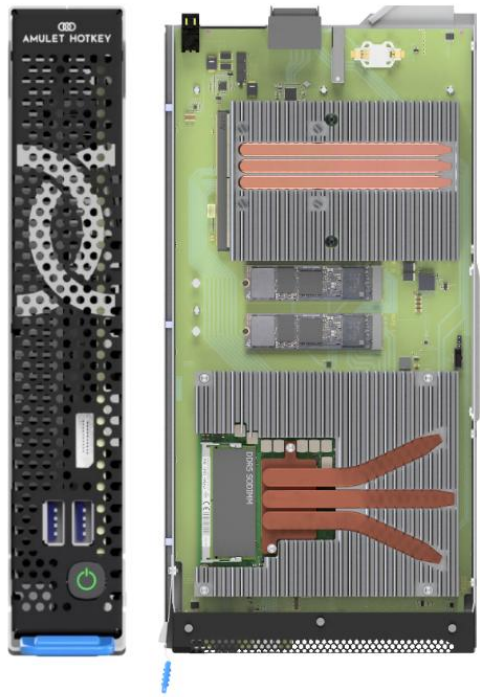
15/04/2026, 18:51:58	user	user disconnected from KVM session for Node 4	Info
15/04/2026, 18:48:05	user	user connected to KVM session for Node 4	Info

Other changes in this release

Updated Node Page info

The node page contains more details of the current firmware and configuration, including BIOS version, HX Agent version and firmware version running on the Node Management Controller. The Node Management Firmware is automatically updated as part of the HX Enclosure Management Controller firmware.

The node info card is split into sections that can collapse or expand for easier viewing on smaller screens.



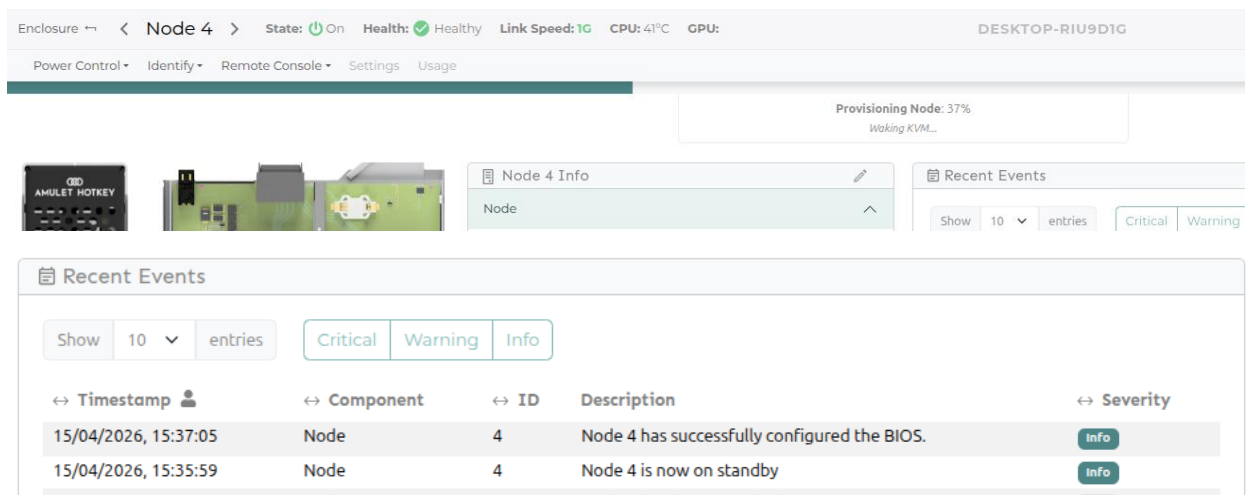
Node 4 Info	
Node	
Hostname	DESKTOP-RIU9D1G
Serial Number	30042-0056
Model	HX2000
Node Name	TestDrive node 4
Node Group	TestDrive
Node Role	
Hardware	
CPU	Intel(R) Core(TM) Ultra 9 285H
GPU	NVIDIA RTX 2000 Ada
RAM0	32 GB
RAM1	32 GB
SSD0	Micron 3500 512GB
SSD1	Micron 3500 512GB
Software	
OS	Windows 11 Pro 25H2
HX Agent Version	20.26.3.1_rc2
Node Firmware	2026.3.1_rc4
BIOS Version	20260101
VBIOS Version	95.07.43.00.2a
Networking	
Fabric 1A IP Address	169.254.88.59 (DHCP)
Fabric 1A MAC	00:13:95:68:24:3C
Fabric 1B IP Address	192.168.203.88 (DHCP)
Fabric 1B MAC	00:17:FD:60:02:F0

Live Session Info	
User	labtest
Session State	Session unlocked

Updated Node Provisioning feedback

When nodes are first inserted into the enclosure, moved between slots or a re-seat action is requested, the node provisioning process runs automatically. This ensures the node BIOS configuration is correct and that the Remote Console feature is setup and ready for use. This will typically take around 3 minutes when moving the node between enclosures or to another slot and performs a shorter check following a re-seat, that takes around 60 seconds.

The feedback makes it clear when the process is complete, and the node is ready for use. During this time, the node power actions are disabled.



The screenshot displays the CoreStation HX interface for Node 4. The top navigation bar shows the enclosure name 'DESKTOP-RIU9D1G' and node details: State: On, Health: Healthy, Link Speed: 1G, CPU: 41°C, GPU: . Below this, a 'Provisioning Node: 37%' indicator is shown with the subtext 'Waking KVM...'. The interface includes a 'Node 4 Info' panel and a 'Recent Events' section. The 'Recent Events' section shows a table of events:

Timestamp	Component	ID	Description	Severity
15/04/2026, 15:37:05	Node	4	Node 4 has successfully configured the BIOS.	Info
15/04/2026, 15:35:59	Node	4	Node 4 is now on standby	Info

API changes in this release

API documentation and example code is provided in the CoreStation HX API guide.

Additional fields in `/api/corestation/state` response

- Added object for `SwitchSystem` and `SFPState` to report status and link speed for Uplink (LAG) port and individual SFP network ports.
- Added key/value pairs to `SwitchStateSchema` to report status and link speed for Uplink (LAG) port and individual SFP network ports.
- Removed `fw_update_active` key/value pair from `NodeStateSchema`
- Added `is_configuring_bios` key/value pair to `NodeStateSchema`
- Added object for Remote Console KVM session state to report active KVM sessions
- Added new key/value pairs to `NodeStateSchema` - `fake_edid`, `update progress` and `network IP assignment`

Issues Resolved in this release

Key	Summary	Customer-facing description
CSHD-2118	GET Enclosure Time API endpoint is available without user authentication	This API endpoint exposes details of the enclosure timezone and NTP server which should not be available without authentication
CSHD-2117	Management Controller uses time1.google.com, rather than pool.ntp.org as the default NTP server	The Management Console suggests the default is pool.ntp.org, but is not.
CSHD-1905	False KVM is Disabled popup when starting Remote Console	A popup is shown when starting Remote Console suggesting that the feature is disabled when it is actually enabled. The popup disappears after a few seconds.
CSHD-1891	Enabling LAG fails and brings down Management Controller network connection	Changing LAG state causes a re-configuration of the internal switch. When the new config is applied, routing for the Management Console is blocked
CSHD-1880	Management Controller restart is delayed	An Enclosure restart can take up to 15 minutes to initiate after pressing the 'Restart' button
CSHD-1877	Generate CSR sometimes fails to complete	Occasionally the Generate CSR function fails to create a file for download. Restarting the enclosure should allow the process to complete next time.
CSHD-1860	Node Hostname on Node page is not updated when node OS Hostname changes	The node page shows a default hostname, rather than the current host name of the OS.
CSHD-1849	Node Info is sometimes blank	Node Page info occasionally appears empty. This does not generally affect the operation of the Node. The info will be restored after a node reseal
CSHD-1848	Remote Console session freezes after 3 minutes of inactivity	Remote Console sessions will occasionally disconnect after 3 minutes without any mouse movement or keypress. The session can be re-started by disconnecting and connecting again.

Remote Console

Various enhancements to Remote Console startup reliability and consistency to address issues with initial connection, lack of video and premature session disconnects.

Known issues in this release

Key	Summary	Customer-facing description
CSHD-2239	Link speed showing as down when using Fabric 1A network ports on HX2000	When using only Fabric 1A (SFP Uplinks), the node page shows network link speed as down when a network connection is available. The Node IP addresses are accurate
CSHD-2180	Remote Console disconnect generates two identical events	When disconnecting a Remote Console session, there are two events generated in the CoreStation Event Logs
CSHD-2122	Creating users via Create User API method corrupts Management Console user database	Users should be created using the GUI or LDAP integration. Adding, modifying or deleting users via the HX API may trigger this issue. The Management Controller requires a factory reset to restore the database.
CSHD-2112	GET State API endpoint shows all current Remote Console sessions	This API endpoint allows an authenticated guest user to view details of current Remote Console sessions - node, username and IP
CSHD-2110	Unauthenticated API method enclosure-management returns more info than it needs to	This API endpoint is used to populate the login page pre-authentication. The API endpoint returns information about the network configuration of the CoreStation which is not required at this point and should not be exposed without authentication
CSHD-2085	Remote Console - KVM Connect button sometimes shows Connect or Connecting whilst session is active	If the button shows Connect or Connecting, it is not possible to terminate the session cleanly. Closing the browser tab will close the session, but subsequent sessions to that node may be blocked for up to 15 minutes.
CSHD-2022	Guest user account expired errors	Guest user accounts are logged out when viewing the node page due to incorrect permissions. As a workaround, upgrade these users to Operator.
CSHD-2021	Operator user account expired errors	Operator users are logged out automatically when viewing the cooling page due to a permissions issue. As a workaround, upgrade operator users to technician role or avoid the cooling page.
CSHD-1969	Event Log reports the previous firmware version after an upgrade	Following firmware upgrade, the event log shows a successful outcome, but reports the previous version rather than the new version
CSHD-1961	2+2 LAG doesn't reliably fail over to the second Aggregator	When using LAG with two devices at the far end (using MLAG/VPC), sometimes the LAG fails to switch over to the second upstream switch after losing both links to the first.
CSHD-1954	"The Management Console is still initializing" banner on every page refresh	When moving between pages the coral banner is sometimes shown for a brief time. The system is fully operational and active.
CSHD-1951	Login failure due to false 'Max concurrent sessions' limit	Users can be prevented from authenticating or see their session terminated with a false concurrent user error. Re-attempting the login is successful.
CSHD-1914	Remote Console shows last frame when node enters standby	If a node is shutdown whilst Remote Console session is active, the last frame of video will be shown until the session is closed or the Node powers on.
CSHD-1913	HX2000 PXE boot fails if Remote Console is active	An active Remote Console session to a node will prevent that node from completing PXE boot. Close any active session before attempting to PXE boot a specific node.
CSHD-1911	Remote Console doesn't reliably connect and show video	Remote Console sometimes fails to initialise the KVM session, resulting in either no video, frozen video or a black screen.
CSHD-1847	Remote Console - Resizing or Scrolling browser window causes pointer offset on KVM	The mouse pointer on the user's machine may be offset from the mouse pointer in the Remote Console session and it may be impossible to click in certain locations.
CSHD-1845	Node Info fields cannot be deleted	Info fields on the Node page fail to update if the new value is blank. It is possible to use a single space as the new value.
CSHD-1728	HX API specification download link doesn't allow downloads	Improved in 2026.4.1. On the CoreStation API page there is a link to download the API Specification, but this link sometimes fails to make the file available.
CSHD-1715	HX5 "Restart now" banner is still present after restarting	Following a firmware update and Enclosure restart, the coral banner "Restart Now" is sometimes still shown. This can be cleared by refreshing the browser or logging out and in again. There is no need restart a second time.
CSHD-1622	Management Controller can take up to 5 minutes from power on to show login page	The Serial Console and Management Controller loading page are available within 30 seconds, but the login page can take up to 5 minutes following a power on or reboot
CSHD-1170	Loss of display output on startup with specific monitors when switching to Windows GPU drivers	For some local monitors connected to HX2000, BIOS POST messages are visible, but the Windows boot process and login screen display a blank image.



Resources

<https://amulethotkey.force.com/support/s/resources>

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