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# CheetahXD 6.1.0.26 Release Notice

## Overview

CheetahXD 6.1 is used in conjunction with Alpha software modules and controllers including CheetahXD Battery Analyst, CheetahXD Power Outage Module, CheetahXD SNMP Manager and the CheetahXD vHEC Module. CheetahXD 6.1 is able to interface with DOCSIS 2.0 and 3.0-compliant transponders and HMS-compliant transponders used in a standard HFC network. CheetahXD monitors optical transmission systems, power supplies, third-party transponders, Alpha Network Tracker / Network Tracker Plus (aka CMD-EL and CMD-EL+) and AlphaGateway Devices.

**NOTE:** There is no 6.1 release for the vHEC software. If the vHEC software needs to be installed, version 5.0.0.17 should be used.

CheetahLynx no longer exists as of Version 5.3. CheetahXD will be used to manage Network Trackers/Network Tracker Pluses. If it is desired to utilize the new CheetahXD Version 6.1.0 features for managing your Network Tracker/Network Tracker Plus devices contact Alpha Sales for more information.

NOTE: As of CheetahXD 6.0 Internet Explorer is no longer supported. The latest versions of Firefox and Chrome are supported.

CheetahXD 6.1 is supported in both English and Spanish.

## Terms and Conditions

CheetahXD 6.1 is available to any customer who has purchased a CheetahXD application software product after the release date of October 31, 2016. CheetahXD 6.1 is available to any customer who has purchased a CheetahXD application and has a current Alpha Annual Software License.

Should you not be eligible for CheetahXD 6.1, through one of the two prescribed transactions, please contact Alpha Sales for more information on how to take advantage of this release.

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# Feature Release

The following features and/or upgrades are included in the CheetahXD 6.1 release:

- New fiber node Realtime Data Display screens and enhancements
    - The previous fiber node photo has been replaced with a semi-realistic diagram. These diagrams will display the installed modules and if in alarm, will color the modules according to the alarm severity exceeded. If a module is selected, related data will be presented in tabular form to the right of the diagram, overlaying the Realtime Data Gauges.
        - **Note** – This feature is only supported in Alpha node transponders that have at least firmware version 4.11 for 3349 based transponders and 5.1 for Cisco Gainmaker transponders. If the transponder does not have this latest version of firmware then only the photo of the node will be displayed.


    - New Realtime Data Gauges display signal level and input voltage readings.

    - In the Optical Receivers and Switches section of the fiber node Realtime Data Display the A/B Switches have been changed to switch icons. These icons, when selected, allows the user to change the A/B switch setting.

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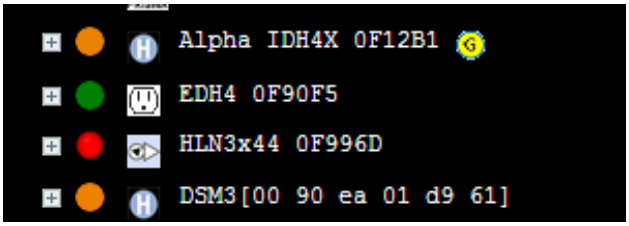
- In the RF Ports section of the fiber node Realtime Data Display the RF Port icons have been changed to three state icons that can be changed when selected.

- New optical shelf Realtime Data Display screens

  - The Arris GX2 and Cisco Prisma optical shelves are now displayed with a semi-realistic diagram. These diagrams will display the installed modules and if in alarm, will present an indication of the alarm severity. If a module is selected, related data will be presented in a table that will overlay the alarm pane.


- Portable DC Generator Monitoring has been added to identify when a portable generator is attached to a Power Supply during a commercial power outage. The new features will:

  - Flag a device in the Tree Viewer with an indicator that a generator is attached.



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- Indicate “Generator Attached” in the **Standby Remaining** column of POM when the POM senses a generator has been attached.

- Display the **Gen Status** in a new column in POM. This column will display one of the following values:
  - Running
  - Stopped at hh:mm:ss - Service?
  - Removed at hh:mm:ss
  - Power Restored

- Display the **Gen Onsite Time** in a new column in POM. This will display the time at which the generator was attached to the device.

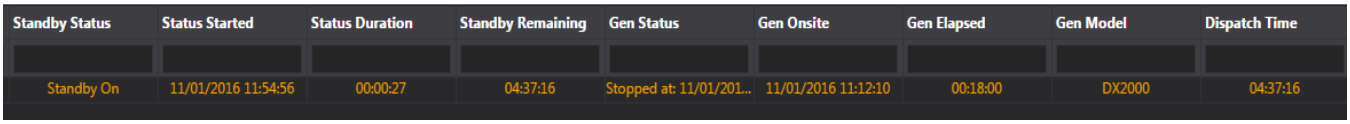
- Display the **Gen Elapsed Runtime** in a new column in POM. This will display the total elapsed runtime of the attached generator.

- Display the **Gen Model** in a new column in POM. This will display the model of the attached generator.

- Allow the user to manually reset the **Gen Elapsed Runtime.**

- Allow the user to manually set the **Gen Model** of the attached generator.

- Allow the user to manually indicate a Generator has been removed.



| Standby Status | Status Started | Status Duration | Standby Remaining | Gen Status | Gen Onsite | Gen Elapsed | Gen Model | Dispatch Time |
|---|---|---|---|---|---|---|---|---|
| Standby On | 11/01/2016 11:54:56 | 00:00:27 | 04:37:16 | Stopped at: 11/01/201... | 11/01/2016 11:12:10 | 00:18:00 | DX2000 | 04:37:16 |

- AlphaGateway Support

  - The Alpha SMG (Strand-mounted Gateway) is now supported in CheetahXD 6.1.

    - The SMG provides Power over Ethernet (PoE) by blending hybrid fiber/coaxial plant power conversion and data backhaul.

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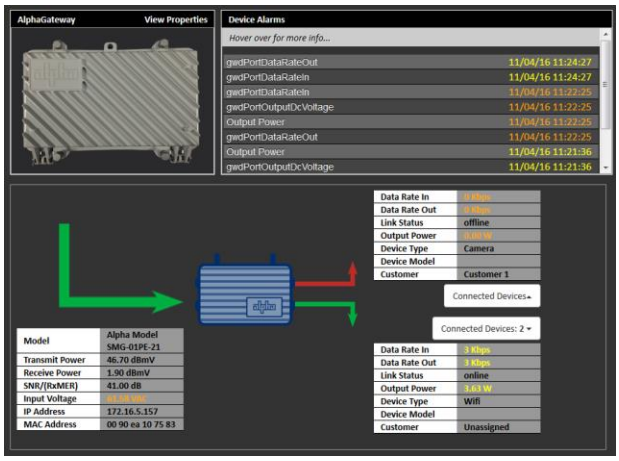
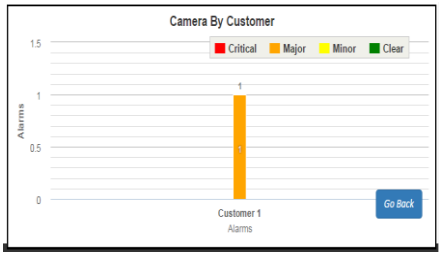
- A new Realtime Data Display screen has been created for the SMG. It displays a photo of the SMG in one pane along with the associated alarms displayed in a pane to the right of the photo. Below these panes is a graphical image of the SMG along with tables that shows important information about the SMG. Alarmable information in these tables will indicate the alarm severity by coloring the text. Also, by clicking the SMG port arrows the user can turn on, turn off, and reset the ports.




- A new Domain has been created for the AlphaGateway devices. This page will display the Alarmed Devices Counts for important parameters, the Top Ten devices with the most alarms, and a Pie Chart that displays the Ports By Type. This clickable pie chart allows the user to drill down on the devices to view the state of each port in a bar chart. This bar chart is also clickable. When one of the bars in the bar chart is clicked a page appears that allows the user to set port parameters.

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- Status Polling Timeout
    - The user now has the ability to set a timer related to the Status Polling Off feature. Status Polling can be turned off for the preset times of, 4, 8, 16, 24, and 48 hours, after which, Status Polling will automatically turn back on. The remaining time can be viewed in the device's "Device Properties" dialog box.
- The Paging components has been removed and only e-mail notification is now supported. What was previously labeled as "Page Alert" is now "Email Alert".
- The "Alpha Technologies Inc." link on the Help page now points to http://www.alpha.com/index.php/software/element-management-systems
- There is now the ability to perform a "quick-search". An object in the tree is selected and the user begins to type a display name. The display name that matches what is being typed is highlighted.
- Customized POM layouts can now be saved.
- The displayed "Network Devices" in the Network Inventory page can now be exported to a CSV report.
- POM Report Enhancements
    - Previously the Power Outage Summary and Detail Reports calculated their outage end times and outage duration based on either the return of commercial power or the time at which the transponder loses communication. The reports now always calculate the outage end time and duration based on the return of commercial power.
    - The Power Outage Summary and Detail Reports have been modified to add a column to the outage instance summary section that identifies "Loss of Service" to all outages instances where the Power Supply batteries expire and transponder communication is lost. It will be a "true/false" indicator, with "true" indicating service was lost.
- In CheetahXD 6.0, when setting the Network Inventory columns the user could only select whether to display or hide one column at a time from a drop down menu. Now, the user can change the settings in a dialog box and then save what was set.
- POM "Time to Dispatch" time is now configurable for individual power supplies. Previously the user could set the Dispatch Lead Time, but it was a global parameter. Now, the Dispatch

Lead Time can be set for each power supply separately in the Device Configuration Property tab for the Power Supply managed object.

- Device Integrations
    - As indicated previously, support has been added for the Alpha SMG.
    - Optical Ethernet Transponder Integration
        - The Alpha Optical Ethernet Transponder is now supported in CheetahXD 6.1. In general, it will appear as an HMS node transponder, but it also supports additional SFP (small form-factor pluggable) objects only associated to the Optical Ethernet Transponder.
    - Support has been added for the following Prisma II Chassis modules:
        - Prisma II P2-HD-13TxM-10-SA-F
        - Prisma II P2-HD-EDFA-GF-20L-SA
        - Prisma II P2HD1.215TXM – 13dBm ITU 44

## CheetahXD Technical and Maintenance Enhancements

| ID | Component | Summary |
|---|---|---|
| 1978 | Battery Admin | Enhancement that increases the maximum value for the Predictive Test Amp Hour Rating. It was 180 and now it is 250. |
| 2336 | CL Integration | Fixed an issue where the CheetahLight Legacy devices were not included in the alarm teardrop counts. |
| 1960 | Data Display | Device summary screen for power supplies showed Time In Standby as seconds and now it is minutes. |
| 2267 | Device Configuration | Fixed possible issue where the legacy HMS sg4000 (3510) could produce a download error. |
| 2094 | Device Inventory | Template for the legacy HMS sg4000 (3510) did not include the sg4000RFForwardPathReceiveLevel object and now it does. |
| 2088 | Device Inventory | Fixed an issue where the Power supplies and nodes for a CN legacy system do not appear in the tree after applying the tree viewer patch |
| 1976 | Device Inventory | Fixed possible issue where, If the atiMgmtSysGnrlInfoConfigsDaughter is selected to be displayed |

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| ID | Component | Summary |
|---|---|---|
| | | in device configuration or the template for the DSM3 or DM3 all "Apps" objects in data display do not display any data. |
| 2122 | Device Inventory | Fixed a bug where the Gainmaker template did not include pre and post FEC CER and EVM, now it does. |
| 1965 | Generic | Fixed an issue where the cheetah Euro transponders could not have firmware downloaded to them through CheetahXD. |
| 1980 | Installation | UniqueID script is now available on the installation disk |
| 1974 | Installation | Fixed possible issue where after installing CheetahXD with Oracle 12c the Oracle password expired. |
| 1985 | KPI Scorecard | Enhancement to KPI scorecards where it now supports the high resolution hfcnReturnLaserOpticalPower and hfcnOpticalReceiverOpticalPower objects. |
| 1305 | Notifier | Fixed bug where user was unable to retrieve event history after it has been archived from the database. |
| 1476 | Notifier | The default layout was always displayed after logging in. A saved layout is now displayed when logged in if it was the layout selected when logged out. |
| 2348 | Notifier | Layout name was limited to 10 characters the limit is now 30. |
| 2004 | Performance | Fixed an issue where the system became unstable when the transponder count is very large. |
| 2220 | Power Outage | Enhancement to POM that when there is no load on the power supply a message stating “No Load on PS” is displayed. |
| 1370 | Reports | Fixed issue where sysContact, sysLocation, and sysName are in Status report but value is none, now the correct value is displayed. |
| 1879 | Security | Fixed some labeling in the group operations tree. |
| 1878 | Summary Screens | Fixed bug where user with no permissions still had permissions to button functions. |
| 2065 | Summary Screens | Fixed bug where the Tree viewer patch introduced a bug that makes some objects in the summary screen tool bar disappear. |
| 1902 | Template | Fixed an issue where it took an extended amount of time to switch between template view options with a large database. |
| 1631 | Template | atiMgmtSysIOGenRuntime and atiMgmtSysIOGenState were not alarmable objects in CheetahXD previously and now they are. |
| 2079 | Tree Viewer | Fixed bug where XD allowed the HFC tree to be Edited /Deleted. |
| 1558 | Tree Viewer | Fixed issue where highlighted Device stays highlighted after applying a second search. Now, when a subsequent search is performed the previous search results are cleared. |

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| ID | Component | Summary |
|---|---|---|
| 2036 | Tree Viewer | Added a "Delete Reserved Device" permission to the Group Operations Tree to allow/disallow the ability to delete preconfigured containers (reserved devices). |

## Nodes and Optical Transmission Systems Supported

| CheetahXD Supports | Nodes and Optical Transmission Systems | Embedded | External |
|---|---|---|---|
| **Arris** | Opti Max OM4100, Trans Max TM4100 | X | |
| | Opti Max OM2700, Opti Max OM2741 | X | |
| | N2U-OA300 | | X |
| **Arris (Motorola)** | SG4000, SG4000 Optical Hub | X | |
| | MBN 100, MBN 200 | X | |
| | BTN 100, BTN 2000 | X | |
| | MBV3-100 Amplifiers | X | |
| | MPN100 | X | |
| | VSN200 | X | |
| | *OmniStar GX2 | | X |
| **Cisco** | GS7000 Node, GS7000 Optical Hub | X | |
| | 6940, 6942, 6944 | X | |
| | Gainmaker | X | |
| | *Prisma II | | X |
| **Harmonic** | HLN 3144 | X | |
| | HLN 3844 | X | |
| | HLN 3142, HLN 3142E | X | |
| | HLN 3842, HLN 3842E | X | |

*Contact Alpha Technical Support for a list of supported modules.

## Power Supplies Supported

| CheetahXD Supports | Power Supplies | Internal | External | # of Batteries/Strings | Generator Support |
|---|---|---|---|---|---|
| **Alpha** | XM3 | X | | 3/1, 3/2, 3/3, 3/4, 1 or 2 strings of 6-6-volt batteries (limited because XM3 only supports 3 batteries per string) | Digital |

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| CheetahXD Supports | Power Supplies | Internal | External | # of Batteries/Strings | Generator Support |
|---|---|---|---|---|---|
| | | | | | |
| | XM2, XM2 HP | X | | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4, 1 or 2 strings of 6-6-volt batteries | Digital |
| | XM with USM 2.0, XM2 with USM 2.5 | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4, 1 or 2 strings of 6-6-volt batteries | Analog |
| | XM2 with EDSM | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4, 1 or 2 strings of 6-6-volt batteries | Analog or Digital |
| | XM2 300 HP | X | | 1/1 | None |
| | GMX | X | | 3/1, 3/2 | None |
| | VMX | X | | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | None |
| **APC** | TSP, SM5, SM7 Interface | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog or Digital |
| | Smart-UPS 1500 XL | | X | No individual battery analysis | Digital |
| | Smart-UPS 2200 | | X | No individual battery analysis | Digital |
| **Generic** | HMS | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog or Digital |
| **PowerTronics** | Citation II | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog |
| **Multilink** | Blackhawk | X | | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Digital |
| | Littlehawk | X | | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Digital |
| | EB1 | X | | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Digital |
| **Myers Power Products, Inc.** | CTSP-SM5-1 | | X | 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog or Digital |
| **Lectro** | ZTT | | X | 2/1, 2/2, 2/3, 2/4, 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog |

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| CheetahXD Supports | Power Supplies | Internal | External | # of Batteries/Strings | Generator Support |
|---|---|---|---|---|---|
| | ZTT+ | | X | 2/1, 2/2, 2/3, 2/4, 3/1, 3/2, 3/3, 3/4, 4/1, 4/2, 4/3, 4/4 | Analog |
| | CPR | | X | 3/1, 3/2, 4/1, 4/2 | Analog |
| **Unitywave** | Unitywave | | X | No individual battery analysis | Analog |

## Alpha Technical Support

For questions, contact Alpha Support at:
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