Release Notes

ST Engineering

Evolution

iDX 4.3.x

Revision 10

August 14, 2023

iDirect

ST Engineering iDirect is a global leader in satellite communications (satcom) providing technology and solutions that enable its customers to expand their business, differentiate their services and optimize their satcom networks. Through the merger with Newtec, a recognized industry pioneer, the combined business unites over 35 years of innovation focused on solving satellite's most critical economic and technology challenges, and expands a shared commitment to shaping the future of how the world connects. The product portfolio, branded under the names **iDirect** and **Newtec**, represents the highest standards in performance, efficiency and reliability, making it possible for its customers to deliver the best satcom connectivity experience anywhere in the world. ST Engineering iDirect is the world's largest TDMA enterprise VSAT manufacturer and is the leader in key industries including broadcast, mobility and military/government.

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iDirect Government created in 2007, is a wholly owned subsidiary of ST Engineering iDirect and was formed to better serve the U.S. government and defense communities. In 2019, iDirect Government acquired Glowlink Communications Technology, Inc.

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Revision History

The following table shows all revisions for this document. To determine if this is the latest revision, check the TAC Website. Refer to *Getting Help on page xiii* for TAC access information.

Revision	Date Released	Reason for Change
1	January 31, 2023	Initial Document Release for iDX Release 4.3.0.
2	February 02, 2023	Changed description of EVO-40727.
3	February 07, 2023	Added EVO-40695 as a known issue.
4	February 28, 2023	Updated New Features section.
5	March 21, 2023	Updated note about Virtual Machine Minimum Resource Configuration Requirements at *NMS Client Operating Systems*.
6	March 23, 2023	Further updated note about Virtual Machine Minimum Resource Configuration Requirements at *NMS Client Operating Systems*.
7	May 31, 2023	Updated for iDX Release 4.3.1.0; this release affects iQ Series remotes only.
8	June 30, 2023	Updated for Limited Availability iDX Release 4.3.0.1.
9	August 02,2023	Updated Security Vulnerabilities for Limited Availability iDX Release 4.3.0.1.
10	August 14,2023	Updated Security Vulnerabilities for Revision 6 for iDX Release 4.3.0.

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About

Purpose

These Release Notes support iDX Release 4.3.x. The release notes are updated with each iDX 4.3.x release.

Intended Audience

This document is intended for use by network operators and network architects that work with the iDirect network system.

Contents Of This Guide

This document contains the following sections:

- *New Features and Enhancements* - provides a summary overview of new product features and enhancements.
- *Supported Features and Hardware* - Lists supported hardware and provides upgrade paths.
- *Important Notices* - Provides important information that should be reviewed before installing the software for iDX Release 4.3.x.
- *Resolved Issues* - Describes all issues that have been resolved in iDX 4.3.x.
- *Known Issues* - Describes known issues in iDX Release 4.3.x.
- *Security Vulnerabilities* - Provides information about fixed and known security vulnerabilities in iDX 4.3.x.

Getting Help

The iDirect Technical Assistance Center (TAC) and the iDirect Government Technical Assistance Center (TAC) are available to provide assistance 24 hours a day, 365 days a year. Software user guides, installation procedures, FAQs, and other documents that support iDirect and iDirect Government products are available on the respective TAC Web site.

iDirect Contact Information

- Website: http://support.idirect.net
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iDirect Government Contact Information

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iDirect and iDirect Government produce documentation that are technically accurate, easy to use, and helpful to our customers. Please assist us in improving this document by providing feedback. Send comments to:

- iDirect: techpubs@idirect.net
- iDirect Government: techpubs@idirectgov.com

For sales or product purchasing information contact iDirect Corporate Sales at the following telephone number or e-mail address:

- Telephone: 703.648.8000
- E-mail: sales@idirect.net

Related Documents

The following additional iDirect documents are available on the TAC Website and may also contain information relevant to this release. Please refer to these documents for additional information on installing and using iDirect satellite network software and equipment.

- *Installation, Support, and Maintenance (ISM) Guide*
- *Hub Line Card Specifications Guide*
- *iBuilder User Guide*
- *iDirect Features and Chassis Licensing User Guide*
- *iDirect Hardware Matrix*
- *iDirect Software Features Matrix*
- *iMonitor User Guide*
- *Link Budget Analysis Guide*
- *Network Upgrade Procedure*
- *NMS Redundancy and Failover*
- *Satellite Router Installation and Commissioning Guide*
- *SatManage Integration and Configuration Guide*
- *Software Installation Guide for New Hubs*
- *Technical Reference Guide*
- *Web iSite User Guide*
- *Terminal WUI User Guide*
- *Technical Note on Setting Up Defense and Universal Line Cards*
- *iVantage API Technical Note*

New Features and Enhancements

4.3.x Features and Enhancements

For information about new features in iDX Release 4.3.x, see Table 1-1. For information about enhancements to existing features in iDX Release 4.3.x, see Table 1-2.

Table 1-1.Features Introduced in iDirect 4.3.x Releases

Release	Feature

4.3.0	MDM3315 – Stand-alone compact modem; SMB3315 – Board level modem for integrators
	• Dual RF receive chain (Rx1/Rx2 modes supported are: DVB-S2/None, DVB-S2X/None and DVB-S2/DVB-S2)
	• Support for DVB-S2 networks as below:
	  • 1 <= Fsym <= 45 Msps, 32APSK-8/9 Maximum MODCOD
	• Support for DVB-S2X networks as below:
	  • 5 <= Fsym <= 43 Msps, 64APSK-4/5 Allowed Maximum MODCOD
	  • 43 < Fsym <= 51 Msps, 32APSK-7/9 Allowed Maximum MODCOD
	  • 51 < Fsym <= 64 Msps, 16APSK-7/9 Allowed Maximum MODCOD
	  • Symbol rate greater than 64 Msps not allowed. 128/256APSK not supported.
	• ATDMA support up to 29 Msps
	• 4 GigE ports
	• Full feature application-level support as X7 - - No GRE tunnel support on 3315 Series
	• MDM/SMB support 170B and 438B payload only. 100B payload not supported.
	• 3315 Series remotes do not support spread carriers in iDX 4.3.0
	• MDM BUC voltage support both 24V and 44V. Users can enable it with the following Custom Key:
	`[ODU]`
	`odu_tx_dc_voltage = 44.0`

	• Introduction of Adaptive TDMA – High Efficiency Mode (ATDMA-HEM) features including low roll-off (5%) and new MODCODs with improved spectral efficiency on ULC-R line cards and iQ/3315 Series remotes
	Removal of all Remote license enforcement except: • LINK ENCRYPTION • MULTICAST FASTPATH ENCRYPTION
	On-premise deployment of PP and NMS using NGP processing servers

Table 1-1.Features Introduced in iDirect 4.3.x Releases

Release	Feature
	PP and NMS on iDirect Cloud Platform for PaaS
	Support for NGP Hub switches • Dell S4148T-ON + Pluribus switching application as a replacement for the layer 2 switches in Evolution hub network
	iQ Series remotes support in DVB-S2X networks: • 5 < Fsym <= 109 Msps, 256APSK-3/4 Allowed Maximum MODCOD • 109 < Fsym <= 119 Msps, 128APSK-3/4 Allowed Maximum MODCOD • Occupied BW should not exceed 125 MHz hardware limit of line card/iQ Series
	Enablement of low order MODCODs in DVB-S2X mode for iQ/3315 Series remotes (QPSK1/4,1/3,2/5) **NOTE:** Low order MODCODs were previously unavailable on iQ Series remotes.

Table 1-2.Enhancements Introduced in iDirect 4.3.x Releases

Release	Enhancement
4.3.0	900, 9350, 950mp, and 980 remotes now stay in network after invalid GPS received or GPS Lost.
	Users can now configure the Output Back-off (OBO) value for existing or new installations that limits the maximum power to use specifically for 16QAM and/or Low roll-off (5%) Inroute carriers using DFOE. OBO refers to the back-off in dB from configure Pmax.
	Upon detection of a mysql disconnection condition, iMonitor/iBuilder show the disconnection message on Status Bar.
	iBuilder Guest Users who do not have the privilege to change the database no longer need permission from their HNO Administrator to modify their iBuilder login password.
	When selecting a remote in the iMonitor tree, a new "Blade Info" option is available to show iCon process and Inroute Group information. For more information, see the *iMonitor User Guide*.
	DHCP option custom keys now supported with iQ Series and X9 remotes.
	ROOK OS migrated from Ubuntu to RHEL7; this ensures a single code base across products for ROOK.
	Added a new column called Software Version for each remote in iBuilder Details view.
	CPU Pinning feature enabled by default in Protocol Processor for DVB-S2/DVB-S2X.
	Remotes no longer go to lat time out after a COTM violation occurs; instead, remotes display COTM violation warning and remain in network.
	The NMS no longer pushes the configuration to the PP Controller without operator acknowledgment when the PP stack configuration generated upon restart differs from the previous one. (The PP Controller can still push a new configuration to the Protocol Processor blades without operator acknowledgment during the Protocol Processor failover process or when commanded through the "blades rebalance" command.)
	When a consolidation fails in the NMS, iMonitor displays an idsBackup failure message.

Legacy Supported Features

iDX Release 4.3.x inherits the system features and capabilities present in iDX Releases 4.1.x.x. Refer to the *Release Notes for iDX Release 4.1.x.x* for more information.

Supported Features and Hardware

This chapter provides information about supported features and hardware for iDX Release 4.3.x.

The following sections are included:

Supported Features

All major iDX feature sets are supported in this release. New features and enhancements for this release are covered in *New Features and Enhancements* on page 1.

For details on which features are supported in iDX Release 4.3.x, refer to the *iDirect Software Feature Matrix* for iDX Release 4.1. For a list of features that are not supported in iDX Release 4.3.x, see *Features Not Supported in iDX Release 4.3.x* on page 6.

Hardware Feature Licensing Requirements

For information about licensing, refer to *iDirect Features and Chassis Licensing Guide* and "Managing NMS Licenses" in the *iBuilder User Guide*.

NMS Client Operating Systems

iDX Release 4.3.x NMS clients are supported on the following platforms:

- Windows 10
- Windows Server 2019

NOTE: Windows XP is not supported in iDX Release 3.5.4.0 and forward. For remote installers with PCs using Windows XP, iSite from 3.3.x can be used to provision remotes.

NOTE: Virtual Machine Minimum Resource Configuration Requirements for Windows Clients:
For small and medium customers the requirement is as follows
• CPU 4 core
• MEM 16 GB
For large-scale customers the requirement is as follows:
• CPU 8 core
• MEM 32 GB
• Base Speed: 2.5 GHz

Supported Upgrade Paths

The following upgrade paths are supported:

- 3.3.2.x
- 3.3.6.x
- 3.5.x
- 4.1.x

Features Not Supported in iDX Release 4.3.x

The following features are not supported in iDX Release 4.3.x:

- TRANSEC is not supported.
- 9350, 900, and CX700 2nd receiver functionality (MPE or One-Way TRANSEC) is not supported.
- Upstream Persistent Multicast Traffic is not supported with 9350 remotes.
- Multicast Fastpath traffic is not supported on the X1 and e150 remotes.
- 32APSK is not supported on X1/e150 remotes.
- Layer 2 over Satellite (L2oS) is not supported on 950mp, and 900 remotes.
  - With iDX Release 4.1.0.3, 9350 remotes and iQ Series remotes support L2oS capability.

NOTE: For iQ Series remotes QinQ deployments (SP/CE tags), use of transparent inner-tagging functionality and the CE-TT feature is supported through the use of custom keys; refer to the *QinQ and CE-TT Custom Keys* section in the *Layer 2 over Satellite* chapter in the Technical Reference Guide.

NOTE: The CE-TT feature is not supported with 9350 remotes.

- Link Encryption is not implemented on 9350, 950mp, and 900 remotes.
- GRE tunnels are not supported on 9350, 950mp, 900, iQ Series, and MDM 3315 remotes (that is, there is no support for TCP acceleration and GQoS on the payload of the GRE packets).
- For iQ Series remotes, the following are not supported:

- Starting from iDX-4.1.4.0, the 2nd Ethernet port on iQ Series remotes (ETH2) is enabled for user traffic; however, iQ Series remote user traffic is not permitted on the native VLAN (VLAN1); VLAN1 is reserved for the Terminal WUI and OpenAMIP, as that traffic is untagged.
- MDM 3315 Series remotes support second receiver for DVB-S2 and not for DVB-S2X.

Supported Hardware

This section describes the iDirect hardware supported by iDX Release 4.3.x, including server support for NMS and Protocol Processor servers.

Chassis Types

The table below shows the only iDirect chassis hardware supported by iDX Release 4.3.x networks.

Table 2-1. Supported Chassis Types

Supported Chassis	Supported Line Cards
15152, 5 IF 20 Slot TDMA Hub (1500 W)	ULC-R, ULC-T

NOTE: Refer to Technical Bulletin *Introduction of the RCM-PPS* and the *Hub Installation, Support, and Maintenance Guide*.

NOTE: The 15152, 5 IF 20 Slot TDMA Hub (1500 W) is the only chassis that supports S2X.

Satellite Routers and Line Cards

The table below lists iDirect Satellite Routers and Hub Line Cards supported in iDX Release 4.3.x.

NOTE: Legacy Hardware (for example, XLC line cards and X3 remotes) that is not supported in iDX 4.3.x due to EOL is still available in iBuilder.

CAUTION: When upgrading a network with any of the unsupported components, ensure to remove or replace the unsupported components before upgrading.

Table 2-2. Supported Satellite Routers and Line Cards

Supported Satellite Routers	Supported Hub Line Cards
• 900 • 9350 • 950mp • iConnex e150 • iQ Desktop/Desktop+ • iQ 200 Board • iQ 200 Rackmount • iQ LTE • X1 • X1 Outdoor • X5 • X7 • X7-EC • X7-ER • CX700 Integrator Board • MDM3315/SMB3315	• ULC-T • ULC-R

The table below lists iDirect Satellite Routers and Hub Line Cards not supported in iDX Release 4.3.x.

Table 2-3. Unsupported Satellite Routers and Line Cards

Unsupported Satellite Routers	Unsupported Hub Line Cards
• CX780 • iNFINITI 8350 • iNFINITI 7300, 7350 • iNFINITI 5300, 5350 • iNFINITI 5100, 5150 • iNFINITI 3100, 3125, 3100-NB (Narrowband) • iConnex 700 • iConnex 300, • iConnex 100 • eP100 • 980 • X1 Indoor (65W) • X1-HSO • X3 • e8350 • e8350-48 • e8350-FIPSL2 • e8350-FIPSL2-48 • iConnex e850mp • iConnex e850mp-FIPSL2 • iConnex e850mp-IND with heat sink • iConnex e850mp-IND without heat sink • iConnex e800 • iConnex e800-FIPSL2	• XLC-11 • XLC-10 • XLC-M • eM1D1 • eM0DM • iNFINITI M1D1 • iNFINITI M0D1 • iNFINITI M0D1-NB • iNFINITI M1D1-T • iNFINITI M1D1-TSS • iNFINITI 10000 series Private Hub • iNFINITI 10000 series Mini Hub • DLC-T • DLC-R

NMS and Protocol Processor Servers

The table below lists the hardware platforms for NMS and Protocol Processor servers supported in iDX Release 4.3.x.

Table 2-4. Supported Server Platforms for NMS and Protocol Processor

Component	Supported Hardware Platform
NMS	• NGP R640 • Dell PowerEdge R630 • Dell PowerEdge R640
Protocol Processor	• NGP R640 • Dell PowerEdge R630/640 • Dell PowerEdge FX2 with Dell PowerEdge FC630/FC640 half-height compute sleds **NOTE:** Requires a server rack able to accommodate the 2RU height and mounting depth of 85.16 cm (33.52 in).

NOTE: For iDX 4.1.2.x and above, either an iGateway server (that is a Dell PowerEdge FX2 with either Dell PowerEdge FC630/FC640 compute sleds) or a Dell PowerEdge R630/R640 PP server can be used to support DVB-S2X implementations.

- The iGateway server supports 3vPPs and a BBFRAME encapsulator.
- The Dell PowerEdge R630/R640 supports one vPP and a BBFRAME encapsulator.

A specific software image is necessary to support S2 versus S2X mode. For more information, refer to the *iDX 4.1.x Software Installation Guide*.

Supported System Interfaces

This section briefly describes the various system interfaces supported by iDX Release 4.3.x.

Antenna Controllers

iDX Release 4.3.x is fully compliant with OpenAMIP v1.6 and above. The appropriate protocols are used to issue antenna controller commands and are automatically selected by the software based on the reflector configured for use with the system. The following equipment is supported:

- SeaTel (DAC-97)
- Orbit Marine (AL-7104)
- Schlumberger
- OpenAMIP Compliant Solutions

NOTE: iQ Series remotes support the following GPS input modes: Manual, Serial or NMEA. Serial or NMEA can use any configurable baud rate. The serial port does not support the RSSI, LOCK or MUTE signals. In addition, iQ Series remotes support an OpenAMIP Compliant Antenna Solution.

Web-Based User Interfaces

iDX Release 4.3.x uses the following web-based user interfaces:

- **Web iSite** - Used in the commissioning of iDirect e150 and Evolution X1, X7 Satellite Routers.
- **Terminal WUI** - Used in the commissioning of iDirect 9350, 900, 950mp, iQ Series, 3315 Series Satellite Routers.

Both interfaces provide important identifier and network information and support the loading of software packages and configuration options files on the Satellite Routers. They also support antenna alignment and cross polarization peaking as well as the setting of transmit power for the supported Satellite Routers.

Important Notices

This chapter provides important information that should be reviewed before installing the software for iDX Release 4.3.x.

iBuilder Login Fails After 3-4 Continuous Logins

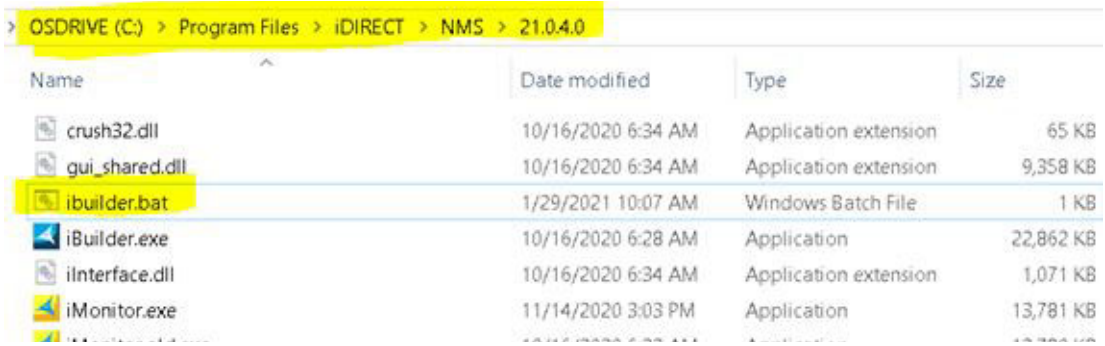
Once operator has logged into iBuilder, any attempts to re-login to the same NMS server without logging out will fail after 3-4 consecutive logins.

This is a preexisting behavior and exists in all NMS branches. This was not introduced during server-side scale enhancements.

Revision Server is Unstable When Upgrading Remotes

When running the Revision Server (REVSVR) after an upgrade, REVSVR becomes unresponsive or crashes. To avoid this, use the following work-around:

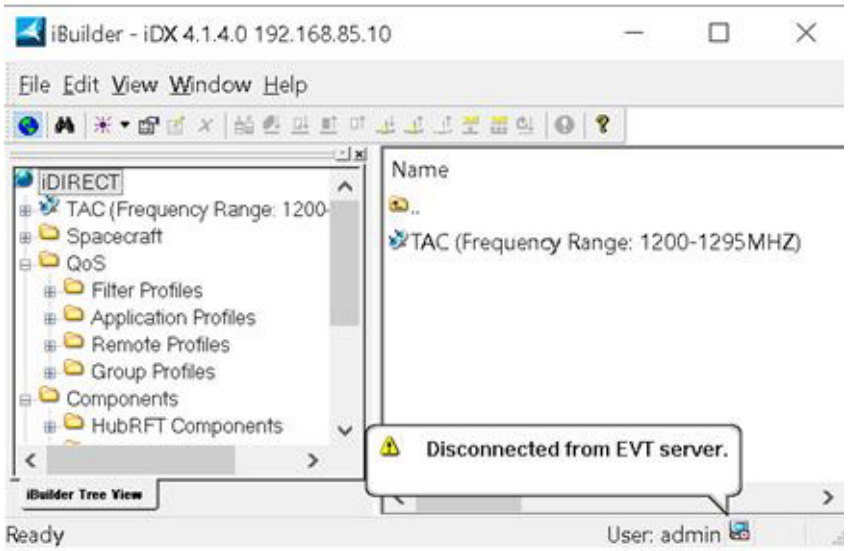
1. Make sure iBuilder cannot communicate with the Event Server (EVTSVR).
2. Create a .bat file with a variable that will make iBuilder search for the EVTSVR in a dummy IP. To do this, create a text file and rename it to ibuilder.bat.



The content of the file is:

```
@ECHO OFF
SET ENV_EVT_NMSAPI_IPADDR=X.X.X.X
ibuilder.exe
```

3. Run iBuilder by double clicking on the ibuilder.bat file (not on the iBuilder.exe file). You will see the following:



4. Perform the Revision Server operations and start the upgrade.
5. Close Revision Server dialog.

NOTE: It may not be possible to close the Revision Server dialog because iBuilder will lock up, but the important fact is that Revision Server upgrade has been started.

iQ Series Remotes Do Not Download Options Files Larger Than 24 Kilobytes

For iQ Series remotes, the maximum options file size for TCP and UDP download support has been changed from 24 KB to 64 KB.

Users can revert to the 24 KB size by entering the following command at the iQ Series remote console:

```
fw_setenv max_opt_file_size_kb 24
```

For safety, the configuration value is restricted with a lower bound of 24 (24 KB) and an upper bound of 64 (64 KB); the default value is 64 KB.

Serial Interface Restrictions with iQ Series Remotes

The default behavior for iQ Series remotes is to use 115200 as the baud rate to access its console.

Before iDX Release 4.1.5.0 a special procedure was necessary for serial GPS input that required going to the bootloader and changing the modem's environment variable. This is no longer required for releases after iDX 4.1.5.0. Customers can now change from console access to GPS serial input by using the following procedure:

1. Go to iBuilder, modify the modem by adding the following custom key to the Remote-side configuration area of the Remote **Custom** tab:

   ```
   [MOBILE]
   auto_serial_baudrate_switch=1 //default value is zero
   ```

2. At the iBuilder **Geo Location** tab, change the GPS Input from Manual to Serial and change the baud rate to 4800 or 9600.

NOTE: Customers cannot have both console access and GPS serial input for the same configuration. To switch back from GPS serial input to console access, go to the iBuilder **Geo Location** tab and change the GPS Input from Serial to Manual.

Installation Requirement

iDX-4.3.x requires the Universal Image (virtualized) setup for both NMS and PP servers. Legacy KVM and Bare Metal setup is not recommended.

TCP Window Scale Feature Enabled By Default

The TCP Window Scale feature is enabled by default from iDX 4.1.4.2 and iDX 4.1.5.0 onwards. After an upgrade, the following feature key will be shown as changes pending in the **Hub-Side** section of the remote's **Custom** tab.

```
spoof_window_scale_on=1
```

NOTE: TCP compression will be turned off when the TCP Window Scale feature is being turned on. Both features are mutually exclusive.

/etc/rc.d/rc.local is Deprecated in RHEL7.9

/etc/rc.d/rc.local is deprecated in RHEL7.9. Before performing an upgrade to iDX Release 4.3.x, check your NMS/PPs for any custom commands and prepare a plan to migrate after the upgrade using an RHEL7.9 supported method. Until then, use the following procedure for legacy support of rc.locl in RHEL7.9.

```
#chmod +x /etc/rc.d/rc.local
```

Before iDX Release 4.1.3.3, NMS Consolidator Script Does Not Consolidate NMS Activity_Log Table

From iDX 4.1.3.3 forward, whether upgrading or performing a new installation, a daily cron job is added to the NMS server that deletes activities older than six (6) months. Users can modify the duration by modifying the environment variable

ENV_EXPIRE_ACTVITY_LOG_DURATION contained in the /etc/environment file. The format of values are "1Y" for 1 Year, "2Y" for 2 years, "8M" for 8 Months.

NOTE: Be sure to add "M" for months and "Y" for years.

Backward Compatibility of Specific SNMP OIDs Disrupted Since iDX 4.1.2.0

iDX Release 4.1.2.0 introduced a new SNMP attribute (the inmesh DisplayString) that was incorrectly inserted in the middle of existing attributes (at line 1719) causing the OID values of existing attributes to increment (+1). As a result, the iDIRECT MIB for all iDX releases after iDX 4.1.2.0 is incompatible with previous versions before iDX Release 4.1.2.0. Customers are advised to make the appropriate adjustments in their existing SNMP monitoring tools to accommodate for this change. Please use the following table as a reference to adjust for the change.

Table 3-1. SNMP iDX 4.1.1.3 vs 4.1.3.2

iDX 4.1.1.3	iDX 4.1.3.2
SNR: .1.3.6.1.4.1.13732.1.4.3.1.2	.1.3.6.1.4.1.13732.1.4.3.1.2
Tx power (current): .1.3.6.1.4.1.13732.1.4.3.1.3	.1.3.6.1.4.1.13732.1.4.3.1.3
FastFadeCorr: .1.3.6.1.4.1.13732.1.4.3.1.19	.1.3.6.1.4.1.13732.1.4.3.1.18
CRC 8: .1.3.6.1.4.1.13732.1.4.3.1.20	.1.3.6.1.4.1.13732.1.4.3.1.19
CRC32: .1.3.6.1.4.1.13732.1.4.3.1.21	.1.3.6.1.4.1.13732.1.4.3.1.20
NCRLost: .1.3.6.1.4.1.13732.1.4.3.1.22	.1.3.6.1.4.1.13732.1.4.3.1.21
PLSyncLost: .1.3.6.1.4.1.13732.1.4.3.1.23	.1.3.6.1.4.1.13732.1.4.3.1.22
ClockDeltaCnt: .1.3.6.1.4.1.13732.1.4.3.1.24	.1.3.6.1.4.1.13732.1.4.3.1.23
DigitalAGCGain: .1.3.6.1.4.1.13732.1.4.3.1.25	.1.3.6.1.4.1.13732.1.4.3.1.24
TunerAGCGain: .1.3.6.1.4.1.13732.1.4.3.1.26	.1.3.6.1.4.1.13732.1.4.3.1.25
FOOffset: .1.3.6.1.4.1.13732.1.4.3.1.27	.1.3.6.1.4.1.13732.1.4.3.1.26
TDMACRCErrors: .1.3.6.1.4.1.13732.1.4.3.1.28	.1.3.6.1.4.1.13732.1.4.3.1.27
TDMASNRCAL: .1.3.6.1.4.1.13732.1.4.3.1.29	.1.3.6.1.4.1.13732.1.4.3.1.28
TDMASYMOffset: .1.3.6.1.4.1.13732.1.4.3.1.30	.1.3.6.1.4.1.13732.1.4.3.1.29
TDMAFreqOffset: .1.3.6.1.4.1.13732.1.4.3.1.31	.1.3.6.1.4.1.13732.1.4.3.1.30
RxReliable: .1.3.6.1.4.1.13732.1.4.3.1.32	.1.3.6.1.4.1.13732.1.4.3.1.31
RxRunReliable: .1.3.6.1.4.1.13732.1.4.3.1.33	.1.3.6.1.4.1.13732.1.4.3.1.32
RxOOB: .1.3.6.1.4.1.13732.1.4.3.1.34	.1.3.6.1.4.1.13732.1.4.3.1.33
TxReliable: .1.3.6.1.4.1.13732.1.4.3.1.35	.1.3.6.1.4.1.13732.1.4.3.1.34
TxUnreliable: .1.3.6.1.4.1.13732.1.4.3.1.36	.1.3.6.1.4.1.13732.1.4.3.1.35

Table 3-1. SNMP iDX 4.1.1.3 vs 4.1.3.2 (continued)

iDX 4.1.1.3	iDX 4.1.3.2
TxOOB: .1.3.6.1.4.1.13732.1.4.3.1.37	.1.3.6.1.4.1.13732.1.4.3.1.36
RemoteStatsTime: .1.3.6.1.4.1.13732.1.4.3.1.38	.1.3.6.1.4.1.13732.1.4.3.1.37
DownSNRRx2: .1.3.6.1.4.1.13732.1.4.3.1.39	.1.3.6.1.4.1.13732.1.4.3.1.38
RxPowerRx2: .1.3.6.1.4.1.13732.1.4.3.1.40	.1.3.6.1.4.1.13732.1.4.3.1.39
PLSyncLostRx2: .1.3.6.1.4.1.13732.1.4.3.1.41	.1.3.6.1.4.1.13732.1.4.3.1.40
FastFadeCorrRx2: .1.3.6.1.4.1.13732.1.4.3.1.42	.1.3.6.1.4.1.13732.1.4.3.1.41
RxCofRx2: .1.3.6.1.4.1.13732.1.4.3.1.43	.1.3.6.1.4.1.13732.1.4.3.1.42
CRC8ErrorRx2: .1.3.6.1.4.1.13732.1.4.3.1.44	.1.3.6.1.4.1.13732.1.4.3.1.43
CRC32ErrorRx2: .1.3.6.1.4.1.13732.1.4.3.1.45	.1.3.6.1.4.1.13732.1.4.3.1.44
DigitalAGCGainRx2: .1.3.6.1.4.1.13732.1.4.3.1.46	.1.3.6.1.4.1.13732.1.4.3.1.45
TunerAGCGainRx2: .1.3.6.1.4.1.13732.1.4.3.1.47	.1.3.6.1.4.1.13732.1.4.3.1.46
UsageCPU: .1.3.6.1.4.1.13732.1.4.3.1.48	.1.3.6.1.4.1.13732.1.4.3.1.47
UsageMemory: .1.3.6.1.4.1.13732.1.4.3.1.49	.1.3.6.1.4.1.13732.1.4.3.1.48
EvoMeshStatus: .1.3.6.1.4.1.13732.1.4.3.1.50	.1.3.6.1.4.1.13732.1.4.3.1.49
EvoMeshRxBps: .1.3.6.1.4.1.13732.1.4.3.1.51	.1.3.6.1.4.1.13732.1.4.3.1.50
EvoMeshTxBps: .1.3.6.1.4.1.13732.1.4.3.1.52	.1.3.6.1.4.1.13732.1.4.3.1.51
Nmstatus: .1.3.6.1.4.1.13732.1.1.2.1.15	.1.3.6.1.4.1.13732.1.1.1.1.15
Networkid: .1.3.6.1.4.1.13732.1.1.2.1.3	.1.3.6.1.4.1.13732.1.1.1.1.3
Nmstate: .1.3.6.1.4.1.13732.1.1.2.1.12	.1.3.6.1.4.1.13732.1.1.1.1.12

CK Required to Change Timeout Value for TCP Connections Tracked for iQ Series Remotes

The default value for **nf_conntrack_tcp_timeout_established** was 432000 seconds or five days. Because the connecttrack timeout starts to tick after the TCP connection becomes idle, a customer In a network with large numbers of TCP connections behind iQ Series remotes found this value too large and changed the default tcp_timeout using a standard Linux command. However, because rebooting reset the command, this was not a viable solution.

As a result a remote-side custom key for the iQ Series remotes was created. Based on RFC 5382, this value could not be less than 7440 seconds. After determining that a timeout value for **nf_conntrack_tcp_timeout_established** would be necessary in the case of all VLANs and in the case of a specific VLAN, a default value of 10800 seconds (3 hours) was selected.

To redefine the timeout value for **nf_conntrack_tcp_timeout_established** for all VLANs, use the following remote-side custom key where x is the timeout value in seconds to be redefined on the Remote-side configuration area of the Remote Custom tab:

```
[sat0_1]
```

```
ip_conntrack_tcp_timeout_established = x
```

Example

```
[sat0_1]
ip_conntrack_tcp_timeout_established = 1999
```

To redefine the timeout value for **nf_conntrack_tcp_timeout_established** for a specific VLAN, use the following remote-side custom key where x is the VLAN number and y is the timeout value to be redefined on the Remote-side configuration area of the Remote Custom tab:

```
[sat0_x]
ip_conntrack_tcp_timeout_established = y
```

Example

```
[sat0_20]
ip_conntrack_tcp_timeout_established = 1500
```

Minimum TDMA Upstream Symbol Rate for iQ Desktop / iQ 200 Series Remotes in Ka-Band Networks

The recommended minimum TDMA upstream symbol rate for iQ Desktop and iQ 200 Series remotes in Ka-band networks is 300 ksps. There is no restriction for IF, C-band, or Ku-band RF networks.

Performance Degradation with High Throughput

For N=16 channels, with 170 Bytes payload and 16QAM MODCODs with code rates > 6/11, the maximum aggregate symbol rate of all channels cannot exceed 28 Msps. Other payload and MODCOD types are not affected.

iBuilder Support for Non-iQ Series Remotes in Hybrid 16QAM / Non-16QAM Inroute Groups

iBuilder support for non-iQ Series remotes in hybrid 16QAM and Non-16QAM inroute groups is as follows:

- Non-iQ remotes go to deactivation pending when moved to the 16QAM only IG.
- Non-iQ remotes go to an incomplete state when created from the 16QAM only IG.
- Non-iQ remotes go to the complete state when at least one inroute carrier is supported by the remote; that is, the carrier is non-16QAM with a remote-supported symrate.
  - For X7 remotes, the symrate is not more than 7.5 Msps.
  - For X1 remotes, the symrate is not more than 4 Msps.

NOTE: iDirect recommends that users avoid using non-16QAM remotes in Inroute groups containing some or most carriers of 16QAM type, as demand allocation is not optimal and there is a performance penalty for non-16QAM remotes. It is recommended to split the available upstream bandwidth for the network into distinct inroute groups for 16QAM and non-16QAM remotes.

High Aggregate Receive Power, Aggregate Symrate, and Channel SNR May Cause CRC Errors and Low SNR Reporting for Superbursts in ULC-R/DLC-R Line Cards

The IF AGC has an if_agc_threshold value (default = 0x180) that is good for most cases; however, this value may not work properly if the wideband receive power reported by the line card is high (> -35 dBm) and is configured to receive a high aggregate symbol rate (> 25 Msps) with a high channel SNR (> 10dB) carriers. The following symptoms were observed in some cases:

- Channels may show trickling CRC errors even though based on the reported SNR there should be none.
- Channels may show a discrepancy between the acquisition burst SNR (Superburst or Traditional) and the traffic SNR. In particular, SNR appears lower than nominal for acquisition bursts.

The presence of the following conditions will further increase the likelihood of experiencing this issue:

- The slots in the channels are not fully allocated to remotes.
- Traffic and acquisition guard bands are high due to fast mobility and/or inclined orbit satellite.

The CRC errors and SNR discrepancies can be corrected by modifying the default `if_agc_threshold` setting. This can be set in iBuilder at the Rx line card's Custom tab using the following custom key:

```
[FPGA]
if_agc_threshold = 256
```

Decoupling of Remote Versions

Remote software versions are now decoupled from major release versions to enable them to continue to operate independently. This software best practice allows remotes to be optimally supported in 4.3.x based on the most robust and reliable iDX software version available for the given remote model leveraging iDirect's strict backwards compatibility policy.

The remotes shown in Table 3-2 use individual software versions other than iDX 4.3.x. It is recommended that you upgrade these remotes with the appropriate packages shown below that are included in iDX Release 4.3.x. iDX 4.3.x is backward-compatible with remotes running these software releases.

Table 3-2. iDX Release 4.1.6.0 Decoupled Remote Versions

Remote	Linux BSP package	Remote Package
X1 Outdoor	N/A	evo_x1_outdoor_rmt-15.0.7.5
e150	3.3.7.5 (15.0.7.5)	evo_e150_rmt-15.0.7.5

Table 3-2. iDX Release 4.1.6.0 Decoupled Remote Versions (continued)

Remote	Linux BSP package	Remote Package
Evolution X5 Remote	N/A	evo_x5_rmt-21.0.1.8
Evolution X7 Remote	N/A	evo_x7_rmt-21.0.6.x
Evolution 9 Series	N/A	9series_rootfs_rmt-23.0.x.x
Evolution iQ Series	N/A	evo_iQseries_rmt_rootfs-23.0.x.x
Evolution 3315 MDM	N/A	v3315_MDM3315_rootfs_ert_4.3.x.x
Evolution 3315 SMB	N/A	v3315_SMB3315_rootfs_ert_4.3.x.x

NOTE: iDirect no longer supports DVB-S2 32APSK MODCODs on X1/e150 remotes because introduction of this feature starting in iDX 3.5 led to instability in the X1. To improve quality and robustness, the X1 remotes use stable iDX version 3.3.7.0 which does not support 32APSK. iDirect surveyed the customer base and found few using 32APSK on X1 remotes. Like other remotes that do not support 32APSK, the X1 can still exist in a shared network with remotes than can do 32APSK. To ease upgrade and adoption, the NMS upgrade checks for this and iBuilder will no longer support configuration of 32APSK for X1/e150. See the *Network Upgrade Procedure* for more details on upgrade checks.

Admin State for iQ Series Remotes Port 1 and Port 2 Defaults to ENABLED

For iQ Series remotes, the default Admin State for Port 1 and Port 2 at the Remote Ports tab is changed to Enabled. A user can set the admin state to Disabled through the GUI for operational or security reasons. Users should not set both ports to disabled as the remote will become unreachable and require advanced recovery by TAC.

Maintaining Historical Stats Across Multiple Time Zones Requires NTP Time Synchronization

Maintaining accurate historical statistics across all NMS servers in a Distributed NMS requires synchronizing the servers using Network Time Protocol (NTP). NTP uses UTC (Coordinated Universal Time) to ensure time synchronization.

NMS server processes must be in NTP time sync. The Windows iVantage client communicates with the NMS server; if there is a difference of more than 10 seconds, the NMS provides a warning message to the operator indicating that historical stats may not report properly.

iDirect recommends that customers configure URL addresses for one or more NTP servers to ensure that configured sites and servers maintain clock synchronization. Customers may also procure URL addresses for NTP servers from external, public NTP pool sets.

Initial TX Power Offset Defaults to New Tx Initial Power Algorithm

Initial TX power offset defaults to the new Tx initial power algorithm to allow for a straightforward upgrade experience for customers who have regenerated their maps with Maptools 1.2 or higher and no customer action is required.

For customers using Maptools 1.0/1.1 generated maps and who will continue to do so, the custom key below must be applied using the legacy Tx initial power algorithm to ensure that remotes reacquire into the network upon upgrading.

```
[MOBILE]
tx_init_pwr_map_1_2 = 0
0 - Legacy algorithm for 1.0/1.1 generated maps
1 - (default) New algorithm for 1.2/1.3+ generated maps
```

iMonitor Always Reports FO Offset as Zero for X1 and 9-Series Remotes

In iMonitor, the FO (frequency oscillator) Offset stats for an X1 and 9-Series remote are always reported as zeros at the Remote Status tab. This behavior is expected as the X1 and 9-Series remotes do not report this status.

9-Series, X1 Remotes Do Not Write Option File When Two [OPTIONS_FILE] Groups Exist in Option File

In iBuilder, if a 9-Series or X1 remote is incorrectly configured with a mobile remote in one beam and a stationary instance in another beam, the remote does not write the Options File. The 9-Series and X1 remotes do not support a mix of mobile and stationary instances.

Revision Server Dialog Box Does Not Display Events Messages Correctly

In iBuilder, when using the Revision Server to download a package to a remote, the flash completed and reboot messages are not shown. However, iMonitor does display the event messages for the remote.

Remotes with NAT Enabled Can Experience ICMP Packet Loss

Latency timeouts from the NMS to the remote management interface can occur when generating ICMP traffic on the remote LAN with NAT enabled. This issue occurs only when there is a simultaneous ping session initiated from a PC behind the remote pinging NMS.

To avoid conflicts, iDirect recommends configuring a VLAN to manage each ICMP session.

With 64-Bit OS the tcpdump Command Only Captures Outgoing Packet in Default VLAN

With a 64-bit OS, the tcpdump command in a PP only captures the outgoing packets in the default VLAN.

Because the VLAN layer is filtered by the kernel, it appears untagged. Therefore, it is necessary to filter the untagged VLAN output through another tcpdump as shown in this example:

```
tcpdump -Uw - | tcpdump -en -r - vlan 200
```

QoS Allocation Fairness Relative to Operating MODCOD

Although Allocation Fairness Relative to Operating MODCOD can be seen in iBuilder on various Group QoS configuration screens, this feature is not supported in this release. This setting should not be selected.

Reference Clock Module (RCM-PPS) Requirement

To accommodate timing changes related to Adaptive-TDMA and network synchronization, iDirect networks running iDX Release 3.2 and beyond require a PPS clock signal that is only provided by the new Reference Clock Module - Pulse Per Second (RCM-PPS). With this new requirement, all chassis in iDirect networks require the new RCM-PPS component installed prior to any upgrades. The old RCM is not supported beginning in iDX Release 3.3 and future releases.

For full details refer to TAC Website Technical Bulletin *Introduction of the RCM-PPS*, and the *Hub Installation, Support, and Maintenance Guide*.

Configuring Database Replication on NMS Backup Server

You can replicate key configuration files to the Backup NMS Server by enabling replication with the `-b` option. Replication allows the Backup NMS Server to be easily brought on line as the Primary NMS Server in the event the primary server fails. However, if you use this option, the backup server cannot act independently in another role (such as a GKD server.) This is because the configuration on the backup server will be overwritten by the configuration from the Primary NMS Server. See the full command explanation and syntax in the *Technical Reference Guide,* under the section “Setting Up NMS Database Replication.”

CAUTION: Do not configure GKD and Replication using the `-b` option in the same server.

Power Requirements for Multichannel Line Card

At least 60 watts of power must be allotted for each Multichannel Line Card in a 20 slot chassis. The total power available for each 20 slot chassis model type is specified in the *Series 15100 Universal Satellite Hub (5IF/20-Slot) Installation and Safety Manual*.

Line Card Power Usage Details

Table 3-3 shows power consumption requirements for line cards in all supported modes of operation. This information may be used to calculate the cumulative power consumption of all line cards installed in a chassis.

Table 3-3. Line Card Power Usage

Line Card	Power Dissipation	Mode of Operation
ULC-R	40 W	All supported modes of operation
ULC-T	30 W	All supported modes of operation
DLC-T	35 W	All supported modes of operation
DLC-R	45 W	All supported modes of operation

NMS Fast Fade Stats Report Higher Than Actual Count

In iMonitor, the Fast Fade Counts reported by the X1 remote is much higher than expected. In addition to the fast fade event itself, the X1 remote is incrementing the count on a secondary parameter. The result is that for every fast fade event, 6-8 counts are actually registered. However, the SNR and other information required in the ACM process are not adversely affected.

Resolved Issues

Issues resolved in a release may include specific maintenance issues, or specific issues that were previously reported as “Known Issues” or as specific limitations.

NOTE: iDX Release 4.3.0 supports all resolved issues made in previous iDX 4.1.x releases.

This chapter lists all resolved issues for the following releases:

iDX Release 4.3.0

This section describes the issues resolved in iDX Release 4.3.0.

Table 4-1. Issues Resolved in iDX Release 4.3.0

Issue ID	Title and Description	Issue Reported In
EVO-39253	**opt-gen Only Spawning One Session Instead of Two** After an upgrade opt_gen_instances value are properly read from the `para_cfg.opt` file spawning the correct number of sessions; as a result, network remotes no longer incorrectly show as incomplete.	4.1.6.1
EVO-38379	**TCP Package Downloads/Configurations Fail for ULC Line Cards After Initial Upgrade to iDX 4.1.6.0** For iDX 4.1.6.0 ULC line cards, if TCP package download is failing, choose the UDP/Multicast option to upgrade to the new package.	4.1.6.0
EVO-38258	**Unable to Patch Multi-Channel Hub Line Cards Using API When Removing Carriers with Lower ID** In the cxpd server, adding carriers to line cards with existing carriers was not handled properly causing a validityCheck. This has been corrected so that users are able to patch Multi Channel HLCs using the API when removing carriers with lower IDs.	4.1.6.1

Table 4-1. Issues Resolved in iDX Release 4.3.0 (continued)

Issue ID	Title and Description	Issue Reported In
EVO-37198	**iBuilder Unable to Clone IGC1** iBuilder can now clone one or more IGCs.	4.1.6.0 4.1.3.x
EVO-37195	**iBuilder Allows Users to Configure Incorrect Maximum TDMA Power for iQ Desktop** iBuilder now throws an error message when a user tries to configure the TDMA Max Power with any value greater than 0 dBm.	4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-24616	**Unable to SSH as Root User for Newly Added 9-Series/iQ Series Remotes Because Previously Configured Password Remains in Effect** In iBuilder, after deleting an existing 9-Series/iQ Series remote and then adding it to the network with a different password and applying the changes or when adding a new 9-Series/iQ Series remote for the first time and applying the changes, a user is now able to login to the remote in either case using SSH.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-19972	**iBuilder Does Not Allow Adding Carrier with 8PSK MODCOD, 170B Payload Size, and 15M Symrate to DLC-R Line Card** iBuilder now allows a carrier to be assigned to a DLC-R/ULC-R line card after a user creates a carrier with an 8PSK MODCOD, a 170 byte payload size, and a 15 M symbol rate.	4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues

This chapter describes known issues in iDX Release 4.3.x and contains the following sections:

Known Issues in iDX Release 4.3.x for iVantage

The table below lists known issues in iDX Release 4.3.x for iVantage.

Table 5-1. Known Issues in iDX Release 4.3.x for iVantage

Issue ID	Title and Description	Reported In
EVO-40727	**Full MESH Remote Will Not Be Able to Join MESH** Full Mesh Remote Terminal will not be able to join in MESH with the Mesh Receiver Demod running on the 4.3 package. **Work-around**: Downgrade the Mesh Receiver's demod package to 4.1.6.1.	4.3.0
EVO-40506	**iBuilder Shows Versions Differ When Package Upgrade Done with Terminal WUI or iBuilder for 3315/IQ Series Remotes** IBuilder shows "Versions differ" when a package upgrade is performed with the Terminal WUI or with iBuilder for 3315 Series and IQ Series remotes. This does not affect the package upgrade operation as the remote will be upgraded. **Work-around**: None.	4.3.0
EVO-40027	**New MODCODs Incorrectly Listed with Static BPSK Spreading Factor in iBuilder** iBuilder lists new MODCODs as available for with static BPSK Spreading Factor. This is incorrect; iDX Release 4.3.0 does not support Adaptive spread on 5% roll-off and ATDMA-HEM. **Work-around**: None.	4.3.0
EVO-39779	**Initial Small TCP Window for iBuilder TCP Window Scale Feature Causes Customer Application to Fail** Using the TCP Window Scale Feature with an initial window set to 512 caused TCP throughput degradation and caused a customer application to fail. **Work-around**: Disable the feature by removing the Custom Keys.	4.3.0 4.1.4.3
EVO-37847	**iMonitor Crashes for Multiple Workspaces** iMonitor is crashing excessively when opening up multiple remotes using workspaces. **Work-around**: Limit the number of windows open simultaneously in workspace to 8.	4.3.0 4.1.4.0 4.1.3.3
EVO-33956	**"Maximum MODCOD (LNB Limit)" for Remotes Not Changing Properly When DVB-S2X Carrier's "Maximum MODCOD" Increased** When a DVB-S2X carrier's "Maximum MODCOD" is increased, remotes should have their "Maximum MODCOD (LNB Limit)" increased automatically to the carrier setting (for remotes that were not limited before). However, this change is not saved on the MySQL database but only on the NMSSVR cache; as a result, following an NMSSVR restart, all remotes go back to their previous "Maximum MODCOD (LNB Limit)." **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.3.4

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-33022	**VNO User Cannot See All Carriers on Inroute Group for Multi-Channel Demodulator Line Card** In a network with multiple Rx Multi-Channel Demodulator (MCD) line cards with multiple inroute carriers per line card, a system user can see all the carriers on the MCD line card and the IRGs but a VNO user can see only one carrier assigned to the line card and the IRG. **Work-around**: Restart NMS services.	4.3.0 4.1.6.1 4.1.4.0
EVO-32462	**iBuilder View Activity Log Report Does Not Run** After selecting Show Log at the iBuilder Activity Log window to view the Activity Log report, the report does not run. **Work-around**: At the Activity Name area of the Activity Log window, select the "Mesh Debug" option.	4.3.0 4.1.6.1 4.1.6.0 4.1.4.0 4.1.3.3
EVO-30154	**iMonitor Historical SAT Traffic Graph Shows 0.000 Even When Stats are Available in Database** After pulling 12 hours worth of network-level or inroute group-level stats and then changing the interval to minutes, the iMonitor SAT Traffic Graph shows 0.000 even when the stats are available in the database. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.4.0

EVO-29534	**iBuilder Does Not Display Multiple SVNs with Identical SP Outer Tags When SVNs Assigned to Same iQ Port**
	After using iBuilder to assign multiple SVNs with the same SP outer tag to an iQ Series remote, iBuilder only displays one SVN (the last one assigned) when using the "Ports > Assign VLANs..." option.
	Work-around: Use the CE-TT feature for configuring iQ Series ports or use a Custom Key at the Remote Custom tab Remote-side Configuration area similar to the following example:
	`[SVN_400_220]`
	`ce_tag_transparency=0`
	`enabled=1`
	`forward_8023=0`
	`interface_id=1`
	`local_id=220`
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.4.0
		4.1.3.x

EVO-29531	**Ethertype Options for CE-TT Mode at iBuilder Ports Tab for iQ Series Remotes Not Grayed Out** When configuring CE-TT for iQ Series remotes at the iBuilder Ports tab, the Ethertype options (88a8 and 8100) are shown in the drop down list; however, they are not required. Selecting either has no effect on the configuration. **Work-around**: Ignore the selection of the Ethernet type in the drop down list and proceed with completing the configuration.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-29150	**Filter Profiles "Default Action" Should Be Editable Only as a Global Parameter** Currently for Upstream or Downstream Filter Profiles, modifying a Rule "Action" changes "Default Action." This is confusing especially when multiple rules are present. The default action for Upstream or Downstream Filter Profiles should be that they are editable only as a global parameter. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.3.3 3.3.2.8
EVO-28546	**"IP Long Term Bandwidth Usage" Report Shows Multiple Entries for Same Date/Time When Querying Unconsolidated Raw Data** "IP Long Term Bandwidth Usage" report shows multiple entries for the same Date/Time when querying raw data that has not been consolidated. Once the raw data has been consolidated, the issue disappears. When the report includes less than 12 remotes, the issue is not observed. **Work-around**: Wait until the data is consolidated to run the report.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-26032	**iBuilder Does Not Allow Enabling/Disabling Multicast Encryption in Network with Active Rx2 Overlay** iBuilder does not allow a user to enable/disable Multicast Encryption at the network level when a remote's second receiver is configured (Rx2 in at the VSAT-2 tab) for Multicast Fast Path Encryption (MCFPE) traffic. However, iBuilder now provides an enhanced warning message that lists any remotes with MCFPE enabled to allow a user to manually disable them.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.1.4
EVO-24772	**HNO Unable to Assign SCPC Carrier to Remote When VNO Group has Network Visibility** After an HNO enables VNO TDMA remote visibility, SCPC upstream carriers are no longer visible for the HNO at the Carrier Name pull-down menu at the Remote Information tab; as a result, the HNO is unable to assign SCPC carriers to a remote. **Work-around**: To populate the carriers on the Carrier Name pull-down menu for the SCPC remote, temporarily disable network visibility for the VNO Group, verify SCPC carriers are visible, and then enable network visibility for the VNO Group.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-24706	**Remote Does Not Go to Incomplete State After Removing SCPC Carrier from Line Card** After removing an SCPC carrier from a Rx line card, the line card goes into the Incomplete state; however, the remote using the carrier still retains the configuration and does not go into the Incomplete state as it should. **Work-around**: Manually remove the carrier from the remote.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-24626	**Tag Packets Check Box Not Checked or Grayed Out for 9350 Remotes** In iBuilder at the IP Config tab for a 9350 remote, the Tag Packets check box is not checked and grayed out. As a result, a user may think that untagged mode is supported for 9350 remotes when it is not. **Work-around**: Enable the Tag Packets check box after adding the VLAN to the remote.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-23701	**Inconsistency in Deleting IP Address from Multiple Processing Nodes Simultaneously at iBuilder Encapsulator Dialog Box** When deleting the IP address for more than two processing nodes at the iBuilder Encapsulator dialog box, sometimes a processing node that was intended to remain is deleted. **Work-around**: Remove one processing node at a time: 1. Right click on the Encapsulator and select Modify to open the Encapsulator dialog box. 2. In the Processing Node area, select a processing node and click on Delete. 3. Click on OK to save the configuration. 4. Right click on the Encapsulator and select Modify to open the Encapsulator dialog box. 5. In the Processing Node area, select a second processing node and click on Delete. 6. Click on OK to save the configuration.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-23180	**iBuilder Forces L2 Local ID Rewrite for QinQ SDT Mode with X1/9350 Remotes** After configuring an L2 SVN in QinQ SDT mode at the L2oS tab for an X1 or a 9350 remote, iBuilder throws an error stating that both the outer and inner local ids need to be defined. After configuring the same SVN ID for both Local ID(CE) and Local ID(SP), iBuilder throws another error stating that the used local ID is invalid because it has been used by the global SVN. **Work-around**: Use the same VLAN IDs in the local re-write fields.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-22925	**iBuilder Automated Configuration Downloader Does Not Apply Changes to Encapsulator and Processing Node** When applying configuration changes to multiple elements at the network level using the Automated Configuration Downloader, changes are not applied to the Encapsulator or to the Processing Node. **Work-around**: Right-click on the Encapsulator and Processing Nodes that show Changes Pending and select Apply Configuration.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22918	**Unable to Create User Group with Owned Permission at Teleport Level in iBuilder** In iBuilder, a user is unable to create a user group after creating a VNO user group owned at the teleport level. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

EVO-22689	**iBuilder Shows Incorrect Incompatibility Warning When Assigning 50 MHz BUC to X7 Remote**
	When assigning a BUC with a 50 Mhz reference to an X7 remote, iBuilder incorrectly reports an X7 incompatibility error message. X7 remotes support the 50 MHz reference for a BUC.
	Work-around: Enter the following custom key at the Remote Custom tab Remote-side Configuration area:
	`[ODU]`
	`odu_tx_clk_ref = 50`
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.5.0
		4.1.4.1
		4.1.4.0
		4.1.3.3
		4.1.3.0
		4.1.2.2
		4.1.2.1
		4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In

EVO-22563	**TCP Traffic Limited to 80% of MIR without Custom Key for X1 Remotes**
	After configuring the maximum MIR for an X1 remote in iBuilder, TCP traffic is only 80% of the configured rate. This happens because the Link Layer (LL) window fills before reaching its configured MIR.
	Work-around: To determine a new LL window size that allows TCP traffic to attain the configured rate, use following the formula:
	*Upstream LL window size = ((US MIR/8 bit-to-bytes) * OTA RTT) / IP payload size*
	The example below uses the formula to determine the LL window size for a MIR of 5 Mbps and a payload size of 438B.
	*US LL window = ((5000000/8)*0.7/426 = 1026*
	Then enter the new LL window size at the remote's Custom tab in the Hub-side Configuration area:
	`[REMOTE_DEFINITION]`
	`ll_rx_window = 1026`
	`[RMT_LL]`
	`ll_tx_window = 1026`
	NOTE: This is the design limit for X1 remotes.
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.5.0
		4.1.4.1
		4.1.4.0
		4.1.3.3
		4.1.3.0
		4.1.2.2
		4.1.2.1
		4.1.2.0

EVO-22454	**iMonitor SAT Traffic Graph Shows Incorrect Symbol Rate for DVB-S2X Networks** In DVB-S2X networks, the iMonitor SAT traffic graph shows an incorrect symbol rate. As a result, it is difficult to determine downstream capacity. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-21988	**Modify All Instances Does Not Change iQ Series VLAN/SVN/Port Configurations in iQ Series Remotes** In iBuilder, Modify All Instances does not allow adding, editing, or deleting L2 or L3 SVNs/VLANs, or changing port configurations for iQ Series remotes. **Work-around**: Modify each remote instance separately.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-20779	**Automated Configuration Downloader Dialog Box Shows Incorrect Component Status on Occasion** On occasion, after making changes to a downstream carrier and selecting Apply Configuration → Multiple to apply the options file changes at the Automated Configuration Downloader dialog box, the status area of the dialog box shows incorrect status. **Work-around**: Apply configuration to each remote individually.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-20495	**iMonitor Not Reporting Rx2 Stats for X7-ER Remotes in Network Data Snapshot View** In iMonitor, the Network Data Snapshot is not reporting Rx2 stats for some X7-ER remotes using the second demodulator. **Work-around**: Use the Control Panel Remote Status tab to view the data.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-19888	**Saving the DVB-S2 Configuration without Changing Any Parameters Shows Changes Pending on Fast Fade Margin and Steady State Margin** Modifying the DVB-S2 setting and clicking OK triggers changes pending on Steady State Margin and Fast Fade Margin. **Work-around**: Apply the changes pending. **NOTE:** This is not service affecting; the hub-side has the correct DVB-S2 configuration parameters.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-18880	**Incorrect Time Slot Reporting for Get Past and Historical Time at iMonitor Network Timeplan Display** In iMonitor, the network Timeplan reporting (ATDMA Stats→Time Plan) for Get Past or Historical time reporting is incorrect. The total of the Allocated Slots and Free Slots do not equal Capacity (Capacity is lower). The Date display is inconsistent, sometimes displaying in 30 second, 1 minute, 1.5 minutes and 2 minute increments. It also reports 0 for Allocated Slots and Free Slots when the network is busy. Real Time reporting, however, is correct. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-18616	**Cannot Disable AcqHubModemCRC and TrafficHubModemCRC Warnings at iBuilder Modify Global Warning Dialog Box** In iBuilder, after disabling the AcqHubModemCRC and TrafficHubModemCRC warnings (Edit menu→Global Warning for Linecards→Modify Global Warning dialog box→Edit), iMonitor still reports both warnings. **Work-around**: At the Modify Global Warning dialog box, use the Edit button to increase the Limit Value for the AcqHubModemCRC and TrafficHubModemCRC warnings based on average CRCs reported.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-17721	**Graph Tab at DVBS2X MODCOD Distribution Display Shows Incorrect Historical Data** In iMonitor, the Graph tab at the DVB-S2X MODCOD Distribution display shows historical values for MODCODs that are no longer configured in the network for real-time or Historical data. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-17442	**Modifying a Remote Locked to Inroute Generates Error Message** In iBuilder, after enabling the Carrier Grooming (Debug Mode) check box at the iBuilder Inroute Group Information tab and the Show Lock to Inroute check box under the Reference Carrier section of the Remote Information tab, the following error message appears when modifying the remote: `Carrier: is not valid and cannot be selected; it may be removed from your configuration.` **Work-around:** Click OK at the error message and the remote details are displayed.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-17438	**iMonitor Reports Historical Stats Inconsistently** iMonitor reports Historical Stats Inconsistently. For example, when viewing Historical stats at the Condition tab, multiple duplicate entries are displayed for a single stat. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-17430	**Changing Cross-Strapped Downstream Carrier Causes iBuilder Error** When an operator changes the frequency of the downstream carrier on a cross-strapped configuration, iBuilder generates an error message and does not save the change. **Work-around**: Proceed as follows: 1. Clone the downstream carrier. 2. Assign the cloned downstream carrier to the Tx card. 3. Make the appropriate changes to the non-active original downstream carrier. 4. Assign the original downstream carrier back to the Tx card as the active carrier.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-17365	**IP Long Term Bandwidth Report Includes Data Out of Time Range** In iMonitor, after selecting an IP Long Term Bandwidth Usage query with Interval of 1 Month and Sort by Timestamp selected, the resulting report incorrectly includes data from an additional month. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-17222	**Decimal Values Cause Issue When Modifying Frequency For X7 Rx2 Demodulator** When changing the frequency for an X7 Rx2 demodulator in iBuilder at the Remote VSAT-2 tab, modifying only the value after the decimal point when that value was previously set at zero (for example, 1200.00) does not work. In that case, successfully modifying the frequency requires changing the values both before and after the decimal point (for example, 1201.85). **Work-around**: Do not configure values after the decimal point with zero.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-15700	**Latsvr Pings New IP Address When Remote in Changes Pending State** If the remote's Management IP address is modified, the Latency server pings the new Management IP address before applying the changes to the hub side; as a result, iMonitor issues a LAT Timeout alarm. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-15304	**iMonitor: Incorrect Time Slot Reporting for Get Past/Historical Time ATDMA Stats** In a network with a mix of ULC-R and other Evolution line cards, the Get Past and Historical Time reporting for ATDMA stats at the iMonitor Timeline window is incorrect. Allocated and free slots do not equal total capacity (that is, capacity is lower); the date display is inconsistent; it also incorrectly reports 0 in allocated and free slots when the network is busy. However, Real Time reporting is correct. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 3.5.3.0 3.5.2.2
EVO-14939	**Event Server Incorrectly Reports UCP_OUT_OF_NET Alarm for Remotes in Never Applied State** The Event server incorrectly reports a UCP out of Network alarm for remotes in the Never Applied configuration state. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-12647	**iMonitor Event/Conditions Tab Reports Incorrect Conditions Data** In iMonitor, when looking at the past 10 or 15 minutes of data in the Events/Conditions tab, the Events panel shows the correct stats but the Conditions panel shows stats for different dates. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-7004	**Configuring Unlimited Queue Size for Upstream Unreliable Service Level Limits Queue Size to 3084 Bytes** In iBuilder at the Add Service Level dialog box, configuring a queue size of Unlimited for an upstream Unreliable Service Level causes the max_depth_bytes parameter to go to 3084 bytes. As a result of the smaller queue size, packets frequently drop. **Work-around**: Manually configure queue size.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-6707	**Modifying All Instances of Roaming Remotes Configured for SCPC and TDMA Produces Unexpected Changes Pending** For roaming remotes where the upstream is a combination of SCPC and TDMA carriers, selecting Modify All Instances in the Roaming section of the menu deselects the SCPC remote instance and produces an unexpected remote side changes pending. **Work-around**: None.	4.3.0]4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-6701	**Upper Limit of Download Credentials for TCP Package Download Not Enforced Properly** In iBuilder, after entering large download credentials (the upper limit is 2147483647) at the Protocol Processor dialog box, upgrading line cards using either Multicast or TCP Package Download does not work. **Work-around**: Do not use numbers greater than 2147483647.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-1. Known Issues in iDX Release 4.3.x (continued) for iVantage

Issue ID	Title and Description	Reported In
EVO-5920	**iMonitor Fails to Generate Historical Statistics for Upstream C/N_0 and Thresholds** iMonitor fails to generate historical statistics for Upstream C/N_0 and Thresholds at both the remote level or inbound group level. **Work-around**: Use the **Remote UCP Graph** or **Remote Status and UCP Info** to view this information.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-5500	**Certificate Revocation in CA Does Not Generate iMonitor Warning** iMonitor does not generate a warning when a certificate is revoked for a line card or remote. The component continues to work normally until two ACC keyrolls have been completed. This could lead to the scenario where if an operator incorrectly revokes a certificate for the wrong component and does not issue a new certificate, then in two+ months the component could stop working without warning. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-5155	**iMonitor Does Not Display Rx Only Icon for 950mp, 9350, 950mp Remotes in Receive Only Region** iMonitor does not display the Rx Only icon indicating receive-only mode when 950mp, 9350, or 950mp remotes move into a receive only region based on OpenAMIP input. Instead, it incorrectly indicates an alarm state. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues in iDX Release 4.3.x for Remotes

The table below lists the known issues in iDX Release 4.3.x for remotes.

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes

Issue ID	Title and Description	Reported In
EVO-40589	**3315 Series Remotes Sometimes Randomly Reboot and log "Last reboot was due to tuner access problem"** After a beam switch, a 3315 Series remote demodulator occasionally fails to lock due to internal error. The remote will reboot itself to recover and re-acquire, **Work-around**: Power cycle the modem.	4.3.0
EVO-39351	**RF Frequency Range Defaults to L-Band at Terminal WUI Cross Polarization Test Page for 3315 Series Remotes** At the Cross Polarization Test Page for 3315 Series remotes, the page allows entering RF values but defaults to the maximum L-band value. The Terminal WUI sends the CW at the correct frequency; however, trying to determine what RF value was used can be confusing because the page does not display the correct input RF value. **Work-around**: None.	4.3.0
EVO-39315	**Remote Fails If Time Sync Msg Sets Time Backward** Remotes stop sending Remote Status to NMS for the duration its clock is adjusted if time sync message set timer back in time. **Work-around:** Configure NTP in all blades.	4.3.0

EVO-39310	**Rx Only iQ Series Remote with Disaster Recovery Beam Switches Occasionally**
	iQ Series remotes operating in Rx only mode switch beams from time to time making the link unstable when the Disaster Recovery (DR) beam is not active.
	Work-around: Enter a remote-side custom key of the form:
	`[BEAMS_LOCAL]`
	`rxonly_enabled = <feature state>`
	where a value of 0 for <feature state> disables the receive-only mode feature and a value of 1 for <feature state> enables the receive-only mode feature. Remotes configured with rxonly_enabled = 0 will not enter receive-only mode, regardless of the EIRP value received from the map or the state of the hardware mute signal.
		4.3.0
		4.1.3.0

EVO-39141	**MN-NMS Roaming Remote: Mobility Initial TX Power Changes Revert to Previous Values on All Remote Instances** After setting mobility initial Tx power value (-15) on a roaming remote with numerous instances and applying the changes, the remote becomes nominal. After some time, however, the Tx power value reverts to its previous setting and the remote shows changes pending. **Work-around: None.**	4.3.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-37867	**X1 Remote Running iDX 3.3.7.x Cannot Consistently Load Netlock Page** Customer running iDX 3.3.7.x is unable to consistently load the netlock page from the hub side to an X1 remote using Web iSite. **Work-around**: Login as a developer and use the Web API to open the netlock page.	4.3.0.0 4.1.6.1 3.3.7.3 (4.1.3.3) 3.3.7.1
EVO-36154	**Spectrum Mask for 5% Roll off Factor** When iQ Desktop/Desktop+/iQ-200/iQ LTE remotes are operated at a 5% roll-off factor and at transmit power levels exceeding -5 dBm, there is about 5 dB violation seen in the spectrum mask at IF port in comparison to the DVBS2X 5% mask. This is not an issue for network operation under various conditions. For 20% Roll off factor, the modems comply to the DVBS2X 20% mask.	4.3.0
EVO-35568	**Incorrect Calculation of Downstream Center Frequency in iQ Web Services When Spectral Inversion is Used** Downlink Center Frequency in Web Services for iQ Series remotes is displaying/reporting wrong calculations whenever Spectral inversion in used. **Work-around**: None.	4.3.0 4.1.5.0 4.1.3.3
EVO-35115	**Regression in X7 CW Function with Probe Tab in iDX 4.1.4.1 Compared with iDX 4.1.4.0** After upgrading X7 remotes to iDX 4.1.4.1, the Continuous Wave (CW) no longer functions as expected when initiated from the iMonitor Probe Tab. • When the Tx power level in the probe tab is increased or decreased, the power measured at the output does not always linearly correspond to the Tx power change input. • When the CW is stopped, the Tx power level changed, and the CW restarted, the output power appears as if the modem is using the Tx power from before the CW was stopped. To see the expected output, it is necessary to stop and re-start the CW once again. If the CW is initiated from Web iSite or from the console, these both work correctly. Only the probe tab is affected. **Work-around**: Initiate the CW using Web iSite or from the console.	4.3.0 4.1.5.0 4.1.4.1
EVO-34720	**NMS QoS Rules Prioritization Issue in Application Scaled Mode** When using Application Scaled QoS mode in congested networks, any applications with higher priority than the Default Application take all the bandwidth and leave nothing for NMS traffic with P1 priority located in a default Virtual Remote with cost-based priority. As a result, the Application Scaled QoS mode is unusable. **Work-around**: None.	4.3.0 4.1.6.1 4.1.5.0 4.1.3.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-34508	**iMonitor Displays Incorrect Port Speed of 1000 Half-Duplex for iQ-DT Remotes** After a HUB upgrade, iMonitor incorrectly displays an incorrect port speed of 1000 half-duplex for all iQ-DT remotes; the real port speed is 100 Full Duplex. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0

EVO-32306	**BTP Ring Full in iQ 200 Rackmount Remote**
	Starting iDx 4.1.3, the default TDMA Frame is divided into eight subframe (16 ms each).In certain configurations, the controller needs more time to process the subframe; this results in BTP discontinuities and remotes dropping out of network.
	Work-Around: Reduce the number of subframes by entering the following custom key at the Remote Custom tab Remote-side Configuration area:
	`[TDMA]`
	`num_subframes =4`
	NOTE: This work-around does not fix BTP discontinuities related to RF issues.
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.3.x

EVO-32117	**Periodic False Temperature Alarms on Mesh Receivers** False Mesh Receiver Temperature alarms are observed on Mesh Receivers. **Work-around**: Contact TAC for script to change sensor heat value.	4.3.0 4.1.6.1 4.1.3.x
EVO-29878	**9350 Remote Does Not Mute Tx for a Long Period When Beam Quality is Zero and Inhibit Tx is Enabled** When a 9350 remote receives a latlong that moves the remote from the coverage area to an area not covered by the map (beam quality = 0) and Inhibit Tx is enabled, the remote does not mute Tx for a long period. **Work-around**: None.	4.3.0 4.1.6.1 4.1.5.0 4.1.3.x

EVO-29826	**Remotes Burst Into Invalid Low Power Carriers Using Tx Power Lower Than -35 dBm**
	Remotes that are not allowed to transmit below -35 dBm are bursting into invalid low power carriers using Tx power lower than -35 dBm while remaining in network. This exceeds the network required SNR (Signal-to-Noise Ratio).
	Work-around: Enter the following custom key at the Remote Custom tab Remote-side Configuration area:
	`[UCP]`
	`min_power_level_in_db = -40`
	NOTE: The custom key does not work for iQ Series remotes.
		4.3.0
		4.1.6.1

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-27373	**iQ Series Remotes Unable to Assign L2 VLAN without Local ID as Native VLAN** When the Protocol Processor SDT mode is QinQ, iBuilder does not allow assigning an L2 SVN without a Local ID as a Native VLAN at the Ports tab. **Work-around:** 1. At the Port tab, select Access port mode. 2. Add the L2 VLAN without a Local ID at the Layer 2 tab. 3. Change to VLAN mode. 4. Assign the Layer 2 VLAN as native.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3

EVO-26940	**Beam Switching Issues When Remote Configured in Mapless Mode on Multiple Teleports on Same Satellite**
	When a remote is configured in mapless mode on multiple teleports on the same satellite, beams are not switching as per the default behavior. The remote shows only one visible beam. When the beams are not visible, the quality value is adjusted by -60.
	Work-around: Enter the following custom key at the Remote Custom tab Remote-side Configuration area:
	`[MODEM_PARAMETERS]`
	`rx_only = 0`
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.5.0
		4.1.4.1
		4.1.4.0
		4.1.3.3
		4.1.3.0
		4.1.2.2
		4.1.2.1
		4.1.2.0
		4.1.1.x
		4.1.0.x
		4.1.0.3

EVO-26657	**Terminal WUI for iQ Series Remotes Does Not Display Transmit State - Nominal Carrier Information in S2 Network** The Terminal WUI does not show Transmit State - Nominal Carrier information in an S2 network configured with iQ Series remotes. If the network is changed to an S2X network, the information displays correctly. **Work-around:** None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-25150	**Rx SNR / Error Performance Degraded Under Maximum Power for 9-Series Remotes** Rx SNR / Error Performance is degraded under maximum power for 9-Series remotes, possibly because of an incorrect agc_ctrl_loop_gain default value. **Work-around**: None. Under investigation.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-24892	**Terminal WUI Rx LED Does Not Change to Green after Rx Lock is Secured for iQ Series Remote in Commissioning Mode** Terminal WUI Rx LED does not change to solid Green after a solid Rx lock is achieved during commissioning for an iQ Series remote, instead it incorrectly remains amber. **Work-around**: Do not use the wizard but go to the action that you want to execute.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-24686	**Line Cards Show Changes Pending After Switchover to Backup Teleport** After a switchover to the backup teleport in a Geographic Redundant hub, all line cards show changes pending related to tunnel_control_credentials. This occurs even though the line cards have the new/correct NMS IP address because the tunnel credentials are calculated based on the currently active NMS; as a result, changes pending always appears on the line cards. **Work-around**: For a custom key to determine the tunnel credentials, contact the TAC. See *Getting Help* on page xiii.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1
EVO-24669	**Web iSite Cannot Download Current Downstream Config File for X7 Remote** At the Web iSite Downstream Configuration page, clicking "Download an example configuration file with current values" does not work and returns a "Site cannot be reached" message. **Work-around**: Use the Manual Configuration section of the Downstream Configuration page to download the config file.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-24616	**Unable to SSH as Root User for Newly Added 9-Series/iQ Series Remotes Because Previously Configured Password Remains in Effect** In iBuilder, after deleting an existing 9-Series/iQ Series remote and then adding it to the network with a different password and applying the changes or when adding a new 9-Series/iQ Series remote for the first time and applying the changes, a user is unable to login to the remote in either case using SSH because the previously configured password is in effect. **Work-around**: Modify the admin and user password for the remote after it comes in network and apply the changes again.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-24540	**Enabling RoHC Compression for iQ Series Remotes Compresses L2 and L3 SVN Traffic** In iBuilder, after adding L2/L3 SVNs to an iQ Series remote and enabling RoHC compression at the Compression dialog box, L3 SVN traffic is incorrectly compressed addition to the L2 SVN traffic. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0
EVO-24369	**iMonitor Displays Incorrect Altitude Values for 9350 Remotes When ACU Does Not Provide Altitude Information with Latlong via OpenAMIP** iMonitor displays incorrect altitude values (too large) for 9350 remotes when the remotes do not receive altitude information from the ACU along with Latlong via OpenAMIP. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.3.x 4.1.20
EVO-24359	**iQ Series: Sleep Mode Does Not Work in a Multi-Beam Environment** In a multi-beam environment, an iQ Series remote fails to go into Sleep Mode when Sleep Mode is enabled; instead it immediately triggers a beamswitch. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-24263	**iQ Series Remotes Experience Upstream Packet Drops/Higher Latency When Discrete Port 1 Configured with L2/L3 Native VLAN Compared to Non-Native VLAN** iQ Series remotes demand more slots for upstream traffic sent on Native L2 or L3 SVNs when configured at Port 1 at the Ports tab in the Port column under Discrete. This results in more upstream traffic sent OTA as compared to upstream traffic sent on non-native VLANs. As consequence, upstream packet drops and higher latency are experienced. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-23013	**iQ 200 Rackmount / iQ LTE Remote Does Not Send "Remote goes into RxOnly mode" Message to evtsvr port 2860** An iQ 200 Rackmount / iQ LTE remote does not send the "Remote goes into RxOnly mode" message to the evtsvr port 2860; as a result, the remote appears as an ALARM in iMonitor. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22999	**Occasionally Switching Partitions in IQ Desktop Remote Using the Terminal WUI Does Not Work** When trying to switch between partitions in an iQ Desktop remote using the Terminal WUI, the following warning message appears on occasion: `This release couldn't be activated. Please try again.` **Work-around**: Reboot remote and try again.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-22979	**9350 Remote Goes Into Waiting for ACQ When Switched Back to Rx Only Beam** When a 9350 remote configured as an Rx Only remote at the iBuilder Remote Information tab is switched to a normal beam and then back to an Rx Only beam, it goes into a Waiting for Acquisition state until the netstate_timeout value expires. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22876	**iQ Series Remotes Report Incorrect Beam ID and Beam Type When Alternate Carrier is Configured** With a primary and alternate beam configured on a Tx line card, iQ Series remotes correctly report the beam id and beam type when switching from the primary to an alternate beam. When switching back to the primary beam, however, the remotes incorrectly report the beam id and beam type even though the remotes are functioning properly. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22617	**X7 Remotes Configured as DHCP Servers Do Not Provide IP Address for First DHCP Discover Message** X7 remotes configured as DHCP servers do not provide an IP address for the first DHCP Discover message from the client even if a free IP address is available. The X7 remotes offer an IP address for the second DHCP Discover message. **Work-around**: Send request from the device twice.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-22593	**Beam_State.Opt File Displays Timeout Value as Seconds for 9350 Remote and Milliseconds for X7 Remote** After setting a timeout value of 180 in the beam_state.opt file for both a 9350 remote and a X7 remote, the timeout value for the 9350 shows as 180 and the timeout value for the X7 shows as 180000. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22481	**Reassigning IP Address for Multiple DHCP Clients Does Not Work for e150 and X1 Remotes** Reassigning of IP address for multiple DHCP clients does not work for e150 and X1 remotes. As a result, a user is not able to reassign the IP address to multiple DHCP clients although the IP is released. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-21443	**iQ Series Remote Does Not Perform Beam Switching as Expected After Package Download** An iQ Series remote does not perform beam switching as expected when Flash complete displays at the iBuilder Download dialog box. Instead, the remote waits for the next GPS update before beam switching. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In

EVO-20701	**iQ Desktop Remote Stops Forwarding VLAN1 Multicast Traffic for SatMotion to ETH2 When Running "CW" Test**
	Starting a "CW" test for an iQ Desktop remote using iBuilder causes the forwarding of VLAN1 multicast traffic to Port-2 of the remote to stop. As a result, it is not possible to auto-commission iQ Desktop remotes using SatMotion.
	Work-around: Use the following remote-side custom key so that the iQ Desktop remote forwards VLAN1 239.250.250.1 multicast traffic to Port-2:
	`[ETH0_1]`
	`group1 = 239.250.250.1`
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.0.5

EVO-20477	**Terminal WUI Manual_Downstream Option Page Fails to Load for 9350 Remote** The Terminal WUI manual_downstream option is not supported for 9350 remotes and returns an HTTP 404 ERROR page. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.4 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-18398	**9350 Remote Does Not Switch Beams During Package Download** A 9350 remote does not switch beams during a package download even after the download_timeout value expires. Instead, it remains locked to the same beam until the download package completes. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-18173	**Download Dialog Box Events Pane Displays "startup_manifest.xml" Not Found Message During iQ Desktop Upgrade** During an iQ Desktop remote upgrade, the remote gets upgraded without any issue; however, the events pane of the download dialog box displays a `"startup_manifest.xml" is not` found message that can be ignored.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-13690	**Delay in DHCP Server Response** When X7 remotes are configured as DHCP servers, there may be a delay when responding to device requests for IP addresses. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-12227	**X1 Remote Demands Excessive Bandwidth in Layer 2/Layer 3 Hybrid Mode** After selecting L2oS Enabled in iBuilder to configure the Layer 2/Layer 3 Hybrid mode on an X1 remote, the bandwidth demand is excessive (~200 slots). When configuring Layer 2 or Layer 3 separately, bandwidth demand is as expected (~44 slots and ~38 slots, respectively). **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-6207	**Terminal WUI LAN Interface Does Not Populate LAN Ports Properly for 9350 Remote** The Terminal WUI LAN Interface does not populate the LAN Ports properly for a 9350 remote; this happens with Internet Explorer, Chrome, and Firefox browsers. **Work-around**: Refresh the browser several times until the LAN Ports display properly.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-5056	**X1 and 9-Series Remotes Do Not Display Sleep Mode Remotestate Output** When Sleep mode is enabled on the remote and the remotestate output is checked to see Sleep mode status, the Sleep mode status is not displayed. **Work-around**: Check the Tx command output to check whether the remote is in Sleep mode.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-4047	**X1/iQ Desktop/9-Series Remotes Network Latency Issue** It was observed that the latency on X1, iQ Desktop, and all 9-Series remotes is 30 ms to 50 ms higher than e8x remotes in the same network/inroute group. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-2. Known Issues in iDX Release 4.3.x for Remotes (continued)

Issue ID	Title and Description	Reported In
EVO-4025	**Remote Web User Interface Reports IF Power and Not RF Power for 9350, 950mp, and 900 Remotes** The receive power for 9350, 950mp, and 900 remotes reported from the Remote Web User Interface and available at iMonitor or by console commands is the estimated IF power and not the estimated RF power. **Work-around**: Use the rx_if_power console command to see both IF power and RF power.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-2075	**Reverse Lookup Entries Are Not Updated in DNS Cache List for 900, 950mp, and 9350 Remotes** 900, 950mp, and 9350 remotes do not currently support reverse DNS caching. As a result, reverse lookup entries are not being updated in the remote's DNS cache list. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues in iDX Release 4.3.x for Hub Chassis and Line Cards

The table below lists the known issues in iDX Release 4.3.x for the Hub Chassis and line cards.

Table 5-3. Known Issues in iDX Release 4.3.x for Hub Chassis and Line Card

Issue ID	Title and Description	Reported In
EVO-33297	**Version Check for DLC in iBuilder Shows "version differ" After Upgrade** iBuilder DLC version check shows "version differ" even after the line card correctly upgrades to latest version. **Work-around**: None.	4.1.6.0 4.1.4.0 4.1.2.0 4.1.0.3 3.5.4.0 3.5.3.0 3.3.4.0
EVO-20173	**ULC-R HLC Appears Incomplete When Assigned as Warm Standby** A ULC-R HLC appears incomplete after it is assigned as a warm standby. **Work-around**: Refresh the HLC configuration by modifying the HLC and then clicking OK.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues in iDX Release 4.3.x for the NMS

The table below lists the known issues in iDX Release 4.3.x for the NMS.

Table 5-4. Known Issues in iDX Release 4.3.x for the NMS

Issue ID	Title and Description	Reported In
EVO-35222	**idsRestore Overwrites Server MAC Address** When trying to restore a full backup from server A (including the network configuration) to server B, idsRestore incorrectly overwrites the MAC address of server A onto server B. **Work-around**: Manually edit the if`cfg_eth0` file with the correct MAC address.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0
EVO-34628	**Hub Line Cards/Remotes Go to Incomplete on iBuilder** A network goes into deactivation pending and the associated HLCs and remotes go to incomplete status. **Work-around**: Modify the HLC in the chassis or modify the line card and press 'OK'. Perform a recalculation for the remotes to go to Nominal state.	4.3.0 4.1.6.0 4.1.4.0

EVO-33947	**Wrong Frequency Translation on Rx Line Cards if Transponder Translation Frequencies Different for Downstream and Upstream**
	When Transponder translation frequencies are different for downstream and upstream, some Rx line cards are using the downstream transponder translation frequency instead of the upstream transponder translation frequency.
	Work-around: Apply the following Custom Key on the affected line cards with the correct transponder frequency translation:
	`[FREQ_TRANS]`
	`sat_translation = XXXX.000000`
		4.3.0
		4.1.6.1
		4.1.6.0

EVO-32278	**NMS-domain-commands.pl Script Fails** The DNMS Services command script (NMS-domain-commands.pl) fails when nms_config is running on all three servers. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 3.3.6.4
EVO-30786	**Revision Server Consuming 100% Disk Space Under /dev/sda5 Directory for Large Networks** In a GNMS with multiple teleports and networks, the Revision server (REVSVR) is consuming 100% of the disk space under the /dev/sda5 directory for large networks. **Work-around**: None. Currently, stopping the REVSVR and manually upgrading the remotes.	4.3.0 4.1.6.1 4.1.6.0 4.1.4.0

Table 5-4. Known Issues in iDX Release 4.3.x for the NMS (continued)

Issue ID	Title and Description	Reported In

EVO-30766	**Missing Stats During idsBackup and "Queue Overflow" Messages Observed in NRDSVR Logs**
	Missing stats are observed during the period of idsBackup.
	Work-around: Add the following to the `nrdsvr para_cfg.opt` file.
	`[OPTIONS]`
	`msg_queue_size = 163840`
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.4.0
		4.1.2.2
		4.1.2.1

EVO-30096	**NMS Server Points to Wrong IP Address When Retrieving Remote Configuration** If remote instances have the same active IP Address in the MySQL database `nms.addressHistory` table, the NMS Server (NMSSVR) still points to the wrong Sat IP address when retrieving the remote config file even if the Sat IP address has already been changed and retrieved from another remote to which the NMSSVR previously pointed. **Work-around**: This example provides work-arounds for the two cases below. The example is set up as follows: 1. Re-IP the Sat IP address to a new Sat IP address on the out of network remote 1. 2. Apply HUB side changes pending. 3. Change the Sat IP address on another remote 2 to the original Sat IP address from remote 1 and apply changes. Now there are two active Sat IP addresses for two remotes IDs. • Case 1: Not Retrieving the opt file If you do not retrieve the opt file on remote 1, changes pending will show only the Sat IP differences. After applying these changes via UDP, the Sat IP address on remote 1 will be changed and sync with the DB properly without any future issues. • Case 2: Retrieving the opt file If you retrieve the opt file, the NMS will sync with the active IP on remote 2, and changes pending will show many changes because of the active IP. After applying these changes via UDP, it will be necessary to restart the NMSSVR service and then retrieve opt file on the affected remote. The remote should then sync with the DB correctly without any future issues.	4.3.0 4.1.6.1 4.1.6.0 4.1.3.x 4.1.2.2
EVO-29270	**Remote Options File Not Reflecting Correct BUC/LNB Local Oscillator Value in Fan In/Fan Out Configuration** When configuring a remote with Fan In Fan Out using iBuilder, the OPT will have the calculated BUC/LNB Local Oscillator (LO) value instead of the real LO value used. When this OPT is loaded in the modem, the remote is able to acquire in the network and iMonitor can send a CW as expected. However, because the Terminal WUI is using the calculated values from the OPT, it will be unable to send a CW carrier at the desired frequency. As a result, users will be unable to commission locally using the Terminal WUI. **Work-around**: Use iMonitor to send a CW carrier.	4.3.0 4.1.6.1 4.1.6.0 4.1.3.3

Table 5-4. Known Issues in iDX Release 4.3.x for the NMS (continued)

Issue ID	Title and Description	Reported In
EVO-28572	**snmpwalk Does Not Provide Values for All Active HLCs** User unable to get Tx / Rx traffic of all active line cards using the snmpwalk command-line utility. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.3.0
EVO-24701	**NMS IP Address Not Recalculated for Processing Nodes After Switchover to Backup Teleport** After a switchover to the backup teleport in a Geographic Redundant hub, the correct NMS IP address is enabled in the options files for all components except the Processing Nodes. As a result, the Processing Nodes appear down because they are still sending heartbeat signals to the primary teleport NMS address. **Work-around**: Manually change the NMS heartbeat address in the options files for the Processing Nodes.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1

EVO-24681	**Remotes Show Changes Pending After Switchover to Backup Teleport**
	After a switchover to the backup teleport in a Geographic Redundant hub, all remotes show changes pending because the map server changes the NMS IP address for the remotes.
	Work-around: Add the primary teleport's NMS IP address in the ServerConfiguration table as a mapserver as follows.
	1. Log in to the NMS database using the following command:
	`# mysql nms`
	2. Execute the following MySQL command to force the NMS to calculate the options file (map server IP address) using the IP address provided.
	`# mysql> INSERT INTO ServerConfiguration SET Type = 'MAPSERVER', Field = 'x.x.x.x', Value ='5003';`
	NOTE: Replace x.x.x.x with the NMS IP address.
	3. Recalculate the options files for the remotes.
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.5.0
		4.1.4.1
		4.1.4.0
		4.1.3.3
		4.1.3.0
		4.1.2.2
		4.1.2.1

EVO-24552	**SNMP Coordinate Value Does Not Match Options File Value When Coordinate Set to South in iBuilder** When Latitude is set to South at the iBuilder Remote Geo Location tab and changes are applied, the coordinate value shown in SNMP polling does not match the coordinate value in the options file. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-4. Known Issues in iDX Release 4.3.x for the NMS (continued)

Issue ID	Title and Description	Reported In
EVO-20168	**NMS Does Not Recalculate GKD Options File Automatically When GKD Cluster is Modified** GKD nodes do not get recalculated automatically when a GKD Cluster configuration is modified in iBuilder. As a result, a GKD.opt file has incorrect parameters when it is retrieved. **Work-around**: In iBuilder at the GKD Node Information tab, individually modify each GKD node.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-19055	**S2X Hub Latency Server Disconnects Intermittently** The latsvr for an S2X hub disconnects intermittently. **Work-around**: Add the hostname IP address of the latsvr to the local hosts file at /etc/hosts.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

EVO-18355	**Processing Node Goes Into Alarm When NMS is Converted to DNMS**
	In iBuilder, a processing node goes into alarm when an NMS is converted to DNMS.
	Work-around: In iBuilder, perform the following:
	1. Right-click on the processing node and open Modify dialog box.
	2. Select processing node 1, go to the Custom tab and add the following custom key pointing to new Events server machine:
	`[NMS]`
	`heartbeat_addr = INET;x.x.x.x;2860`
	3. Go back to Information tab, select processing node 2 and apply the custom key again as stated above.
	4. Apply changes to processing node.
		4.3.0
		4.1.6.1
		4.1.6.0
		4.1.5.0
		4.1.4.1
		4.1.4.0
		4.1.3.3
		4.1.3.0
		4.1.2.2
		4.1.2.1
		4.1.2.0

Table 5-4. Known Issues in iDX Release 4.3.x for the NMS (continued)

Issue ID	Title and Description	Reported In
EVO-12014	**Deactivated Networks Go To Activated State After Upgrade** After an upgrade, the NMS activates all deactivated networks; in the DB the networks remain deactivated. **Work-around**: Apply the network configuration to any affected network. The NMS changes the network status to deactivated and deactivates all remotes under the network.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues in iDX Release 4.3.x for the Protocol Processor

The table below lists the known issues in iDX Release 4.3.x for the Protocol Processor.

Table 5-5. Protocol Processor Known Issues in iDX Release 4.3.x

Issue ID	Title and Description	Reported In
EVO-40695	**Packet Loss on Tunnel interface in a System Where FC and NGP Servers Co-Exist with 10G Switch.** In a system where FC and NGP servers co-exist with a 10G switch, there will be some packet loss on NGP server tunnel interface. **Work-around**: Hard code the NGP interfaces speed/Duplex on the switch to 1G/Full.	4.3.0
EVO-40415	**Remotes Have Latency Issues and Drop Packet on Some Blades But Not Others** Remotes have latency issues and cannot ping on one blade; however, the remotes work properly with another PP blade. **Work-around**: Change the remote allocation from core based allocation to network based allocation.	4.3.0 4.1.6.1

EVO-39678	**Remotes Cannot Join Network on One PP Blade But Can Join on Another Blade**
	Remotes cannot join a network on one PP blade but can join the network on another blade if using custom key lock the modem to do it. This is because in the PP stack there are multiple NGP PP servers which have more CPUs.
	Work-around: Add custom key below to the PP controller to change the PP workload allocation from CPU core based allocation to network based allocation. Then do a PP blades rebalance.
	`[CONTROLLER]`
	`samnc_network_allocation=1`
		4.3.0
		4.1.6.1

EVO-31738	**PP SAMNC - Cannot Allocate Memory Messages** PP blades sometimes go to a low memory state and messages like "Cannot allocate memory" are observed within the SAMNC console. **Work-around**: Restart idirect_hpb service.	4.3.0 4.1.6.1 4.1.3.x
EVO-31722	**After Blade Failover, Remotes Do Not Re-Acquire Due to Rx HLC Bursts Mismatch with PP eth1 MAC Address** After a blade failover, remotes are not re-acquiring because the destination MAC address for the incoming TDMA data bursts from the Rx line card does not match the updated PP eth1 MAC address. **Work-around**: Reboot XLC-M or eM0DM line cards.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0

Table 5-5. Protocol Processor Known Issues in iDX Release 4.3.x (continued)

Issue ID	Title and Description	Reported In
EVO-19850	**IAC Fails After Upstream Carriers Are Unassigned/Reassigned** After removing carriers from an inroute group and applying changes pending, then reassigning the carriers back to the inroute group and applying changes pending, the Inroute Adaptive Controller (IAC) fails. **Work-around:** Use the "killall iac" console command to restart the iac process.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Known Issues in iDX Release 4.3.x for the iVantage API

The table below lists the known issues in iDX Release 4.3.x for the iVantage API.

Table 5-6. iVantage API Known Issues in iDX Release 4.3.x

Issue ID	Title and Description	Reported In
EVO-38834	**Adding Roaming Instance Using API Creates Remotes with Wrong Reflector ID** When adding a roaming instance of an existing remote using API, the new instance created has the wrong reflector ID. **Work-around**: Use iBuilder to manually correct the configuration.	4.3.0 4.1.6.1
EVO-35750	**API CW Call Does Not Work and Generates Error When Remote BUC LO Inverted** API CW call does not work and generates an error when the remote BUC is inverted. **Work-around**: Use the iMonitor Probe tab for Spectral inversion in the BUC.	4.3.0 4.1.4.0
EVO-29370	**L2oS Header Compression Affects API** If L2oS Header Compression is disabled or set to Simple in iBuilder, using the API to retrieve a remote does not work. The API does not return true for a Profile even if it is checked (true) for the Profile. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0
EVO-27902	**NMS API Not Showing Correct LAT/LON Values After Patch** Remotes that have their LAT set to South or LON set to West are displaying the value as 360 degree value after the remote is patched using the API. The iBuilder Remote Geo Location tab then displays the LAT or LON as the normalized 360 degree value but with North or East. **Work-Round**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.3.3 4.1.3.0
EVO-26833	**iVantage API Allows PATCHing Remote's Maximum MODCOD Above DVB-S2 Carrier Maximum MODCOD** The iVantage API "PATCH" command allows setting a remote's Maximum MODCOD above the DVB-S2 carrier's Maximum MODCOD. This changes the content of nms.NetModem "MaxEIR" value and the content of the hub-side options file "eir_bitmap" value that causes an inconsistency between iBuilder, the MySQL, and the options file that is not service impacting. **Work-around**: To make iBuilder, the MySQL, and the options file consistent, open the remote instance with iBuilder and click on "OK" without doing anything else.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0

Table 5-6. iVantage API Known Issues in iDX Release 4.3.x (continued)

Issue ID	Title and Description	Reported In
EVO-24518	**API Created Remotes Do Not Display Non-Default VLAN Static Route in iBuilder** After using the API to create a remote with at least one non-default VLAN included in the post, iBuilder does not display the static route for the non-default VLAN. **Work-around**: Logoff and then log back on to iBuilder.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1
EVO-22576	**Using NMS API to Patch VLAN with VLAN Local ID Does Not Work Properly on iQ Series Remotes** For iQ Series remotes in S2/S2X networks, when using the NMS API to patch the remote VLAN with the VLAN Local ID, the VLAN fails to get assigned in the iBuilder Remote Ports tab. Patching the remote VLAN without the VLAN Local ID works properly. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-22165	**Unable to Add L3 VLAN to PP Using API** After obtaining PP details using the curl command, modifying the PP details with the values of the new SVN, and then patching the changes with the curl command, a changes pending is triggered on the PP side; however, not all L3 SVN information is successfully added. **Work-around**: None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.1.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Table 5-6. iVantage API Known Issues in iDX Release 4.3.x (continued)

Issue ID	Title and Description	Reported In
EVO-19101	**During Beam Switch Remote API "POST" Accepts "tx_init_power" in Tenths and Writes Same Value in beam_state.opt File** During a beam switch, the remote API accepts "tx_init_power" in tenths of a dBm and then writes the same value in the beam_state.opt file; as a result, the remote's initial Tx power is very low and the remote never joins the network. **Work-around:** To avoid an out of range power error, set the remote's Tx maximum power to 0 to be in the range for the API to POST the configuration.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
EVO-15808	**rx/<id> Returns Incorrect Values for 9350 API** The 9350 API rx/<id> returns incorrect values because it does not conform to the latest Interface Control Document (ICD). **Work-around:** None.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0
AR-7400	**Unable to Change Tx Power for iQ Desktop Remote Using Remote API in CW Mode** After changing the Tx power for an iQ Desktop remote using the Remote API commands in CW mode, there is no change to the Tx power value. **Work-around:** Use the tx.crosspol command to change the Tx power.	4.3.0 4.1.6.1 4.1.6.0 4.1.5.0 4.1.4.1 4.1.4.0 4.1.3.3 4.1.3.0 4.1.2.2 4.1.2.1 4.1.2.0

Security Vulnerabilities

This chapter provides information about fixed vulnerabilities in iDX 4.3.x. It contains the following sections:

NOTE: For more information about security vulnerabilities, contact your Account Representative or TAC (see *Getting Help* on page xiii).

Security Vulnerabilities for Remotes

This section provides information about severe security vulnerabilities for iDirect X7, 9350, and iQ Series remotes.

Severe Vulnerabilities for Remotes - Fixed

Table 1 provides information about severe vulnerabilities for remotes that have been fixed. An X in the appropriate column which remotes are affected.

Table 1. Severe Vulnerabilities for Remotes - Fixed

Type / Severe Vulnerability	CERT	CVE	RedHat	ULC	MDM3315	9350	iQ	Remark
OpenSSH		CVE-2021-41617			Upgrade OpenSSH to v9.0p1	Upgrade OpenSSH to v9.0p1	Upgrade OpenSSH to v9.0p1	EVO-38458
						Fixed by update Cipher & MACs in remote	Fixed by update Cipher & MACs in remote	EVO-38459

Table 1. Severe Vulnerabilities for Remotes - Fixed (continued)

Type / Severe Vulnerability	CERT	CVE	RedHat ULC	MDM3315	9350	iQ	Remark
expat / A vulnerability was found in expat is possible to create a situation in which parsing is suspended while substituting in an internal entity so that XML_ResumeParser directly uses the internalEntityProcessor as its processor. If the subsequent parse includes some unclosed tags, this will return without calling storeRawNames to ensure that the raw versions of the tag names are stored in memory other than the parse buffer itself. Issues occur if the parse buffer is changed or reallocated (for example, if processing a file line by line), problems occur. Using this vulnerability in the doContent function allows an attacker to triage a denial of service or potentially arbitrary code execution.		CVE-2022-40674		Upgrade Expat module (libexpat) to v2.4.8	Upgrade Expat module (libexpat) to v2.4.8	Upgrade Expat module (libexpat) to v2.4.8	EVO-39880 EVO-37065

Security Vulnerabilities for the NMS and Protocol Processor

This section provides information about critical security vulnerabilities for the NMS and the Protocol Processor (PP).

Critical Vulnerabilities for NMS/Protocol Processor (PP) - Fixed

Table 2 provides information about critical vulnerabilities for remotes that are fixed. An X in the appropriate column indicates which element is affected.

Table 2. Critical Vulnerabilities for NMS/Protocol Processor (PP) - Fixed

Type / Critical Vulnerability	CERT	CVE	RedHat	NMS	PP	Remark
expat / A vulnerability was found in expat is possible to create a situation in which parsing is suspended while substituting in an internal entity so that XML_ResumeParser directly uses the internalEntityProcess or as its processor. If the subsequent parse includes some unclosed tags, this will return without calling storeRawNames to ensure that the raw versions of the tag names are stored in memory other than the parse buffer itself. Issues occur if the parse buffer is changed or reallocated (for example, if processing a file line by line), problems occur. Using this vulnerability in the doContent function allows an attacker to triage a denial of service or potentially arbitrary code execution.		CVE-2022-40674		Upgraded to expat-2.1.0-15.el7_9.x86_64	Upgraded to expat-2.1.0-15.el7_9.x86_64	EVO-39880 EVO-37065

Table 2. Critical Vulnerabilities for NMS/Protocol Processor (PP) (continued)- Fixed

Type / Critical Vulnerability	CERT	CVE	RedHat	NMS	PP	Remark
flaw was found in grub2 when handling IPv4 packets. This flaw allows an attacker to craft a malicious packet, triggering an integer underflow in grub code. Consequently, the memory allocation for handling the packet data may be smaller than the size needed. This issue causes an out-of-bands write during packet handling, compromising data integrity, confidentiality issues, a denial of service, and remote code execution.		CVE-2022-28733		Upgraded to grub2-2.02-0.87.el7_9.11.x86_64	Upgraded to grub2-2.02-0.87.el7_9.11.x86_64	EVO-39878
A vulnerability was found in sudo. Exposure in how sudoedit handles user-provided environment variables leads to arbitrary file writing with privileges of the RunAs user (usually root). The prerequisite for exploitation is that the current user must be authorized by the sudoers policy to edit a file using sudoedit.		CVE-2023-22809		upgraded to sudo-1.8.23-10.el7_9.3	upgraded to sudo-1.8.23-10.el7_9.3	EVO-44211

Security Vulnerabilities for the Universal Image Hosts

This section provides information about critical security vulnerabilities for the Universal Image Hosts.

Critical Vulnerabilities for Universal Image Hosts - Fixed

Table 3 provides information about critical vulnerabilities for Universal Image Hosts that are fixed.

Table 3. Critical Vulnerabilities for Universal Image Hosts - Fixed

Type / Critical Vulnerability	CERT	CVE	RedHat	Universal Image Host	Remark
expat / A vulnerability was found in expat is possible to create a situation in which parsing is suspended while substituting in an internal entity so that XML_ResumeParser directly uses the internalEntityProcessor as its processor. If the subsequent parse includes some unclosed tags, this will return without calling storeRawNames to ensure that the raw versions of the tag names are stored in memory other than the parse buffer itself. Issues occur if the parse buffer is changed or reallocated (for example, if processing a file line by line), problems occur. Using this vulnerability in the doContent function allows an attacker to triage a denial of service or potentially arbitrary code execution.		CVE-2022-40674		Upgraded to expat-2.1.0-15.el7_9.x86_64	EVO-39880 EVO-37065

Table 3. Critical Vulnerabilities for Universal Image Hosts - Fixed (continued)

Type / Critical Vulnerability	CERT	CVE	RedHat	Universal Image Host	Remark
flaw was found in grub2 when handling IPv4 packets. This flaw allows an attacker to craft a malicious packet, triggering an integer underflow in grub code. Consequently, the memory allocation for handling the packet data may be smaller than the size needed. This issue causes an out-of-bands write during packet handling, compromising data integrity, confidentiality issues, a denial of service, and remote code execution.		CVE-2022-28733		Upgraded to grub2-2.02-0.87.el7_9.11.x86_64	EVO-39878
A vulnerability was found in X.Org. This issue occurs because the handler for the XIPassiveUngrab request accesses out-of-bounds memory when invoked with a high keycode or button code. This flaw can lead to local privilege elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions		CVE-2022-46341		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40628

Table 3. Critical Vulnerabilities for Universal Image Hosts - Fixed (continued)

Type / Critical Vulnerability	CERT	CVE	RedHat	Universal Image Host	Remark
A vulnerability was found in X.Org. The issue occurs due to the swap handler for the XTestFakeInput request of the XTest extension, possibly corrupting the stack if GenericEvents with lengths larger than 32 bytes are sent through the XTestFakeInput request. This flaw can lead to local privilege elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions. This issue does not affect systems where the client and server use the same byte order		CVE-2022-46340		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40626
A vulnerability was found in X.Org. The issue occurs because the handler for the XIChangeProperty request has a length-validation issue, resulting in out-of-bounds memory reads and potential information disclosure. This flaw can lead to local privilege elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions.		CVE-2022-46344		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40631

Table 3. Critical Vulnerabilities for Universal Image Hosts - Fixed (continued)

Type / Critical Vulnerability	CERT	CVE	RedHat	Universal Image Host	Remark
A vulnerability was found in X.Org. This issue occurs because the XkbCopyNames function leaves a dangling pointer to freed memory, resulting in out-of-bounds memory access on subsequent XkbGetKbdByName requests. This flaw can lead to local privilege elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions.		CVE-2022-4283		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40627
A vulnerability was found in X.Org. This flaw occurs because the handler for the XvdiSelectVideoNotify request may write to memory after it has been freed. This flaw can lead to local privilege elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions.		CVE-2022-46342		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40629

Table 3. Critical Vulnerabilities for Universal Image Hosts - Fixed (continued)

Type / Critical Vulnerability	CERT	CVE	RedHat	Universal Image Host	Remark
A vulnerability was found in X.Org. This issue occurs because the handler for the ScreenSaverSetAttributes request may write to memory after it has been freed. This flaw can lead to local privileges elevation on systems where the X server runs privileged and remote code execution for ssh X forwarding sessions.		cve-2022-46343		Upgraded to xorg-x11-server-utils-7.7-20.el7.x86_64. Upgraded to tigervnc-server-minimal-1.8.0-23.el7_9.x86_64	EVO-40630
A vulnerability was found in sudo. Exposure in how sudoedit handles user-provided environment variables leads to arbitrary file writing with privileges of the RunAs user (usually root). The prerequisite for exploitation is that the current user must be authorized by the sudoers policy to edit a file using sudoedit.		CVE-2023-22809		upgraded to sudo-1.8.23-10.el7_9.3	EVO-44211

Security Vulnerabilities for the ULC Line Cards

This section provides information about critical security vulnerabilities for the ULC Line Cards.

Critical Vulnerabilities for ULC Line Cards - Fixed

Table 3 provides information about critical vulnerabilities for iGateway Hosts that are fixed.

Table 4. Critical Vulnerabilities for ULC Line Cards - Fixed

Type / Critical Vulnerability	CERT	CVE	RedHat	ULC	Remark
TLS/SSL - TLS Server allows outdated TLS 1.0/1.1				Update ULC TLS Manager to only allow TLS 1.2	EVO-26693

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