Release Notes for Intelligent Node Software 3.x

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CONTENTS

CHAPTER 1 **What's New in Cisco Intelligent Node Software 3.x** 1

Intelligent Node Software 3.1.2 1

Intelligent Node Software 3.1.1 1

Intelligent Node Software 3.1.0 2

Intelligent Node Software 3.0.0 2

CHAPTER 2 **Caveats** 3

Open Caveats Intelligent Node 3.1.2 3

Resolved Caveats Intelligent Node 3.1.2 3

Open Caveats Intelligent Node 3.1.1 3

Resolved Caveats Intelligent Node 3.1.1 4

Open Caveats Intelligent Node 3.1.0 4

Resolved Caveats Intelligent Node 3.1.0 4

Open Caveats Intelligent Node 3.0.0 4

Resolved Caveats Intelligent Node 3.0.0 4

CHAPTER 3 **Supported Packages and System Requirements** 5

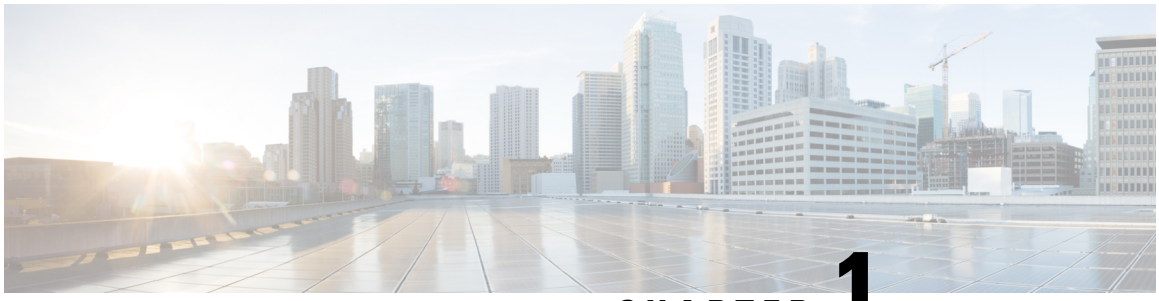
Software 5

Intelligent Node Software 3.0.0 5

CHAPTER 4 **Other Important Information** 7

Force Upgrade Option in DHCP 7

Instructions for DHCP Custom Options 8



CHAPTER 1

What's New in Cisco Intelligent Node Software 3.x

Note Explore the Content Hub, the all new portal that offers an enhanced product documentation experience.

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Do provide feedback about your experience with the Content Hub.

Cisco is continuously enhancing the product with every release and this section covers a brief description of key features and enhancements that were added. It also includes links to detailed documentation, where available.

- Intelligent Node Software 3.1.2, on page 1
- Intelligent Node Software 3.1.1, on page 1
- Intelligent Node Software 3.1.0, on page 2
- Intelligent Node Software 3.0.0, on page 2

Intelligent Node Software 3.1.2

- There are no new features for Cisco Intelligent Node Software 3.1.2 release.

Intelligent Node Software 3.1.1

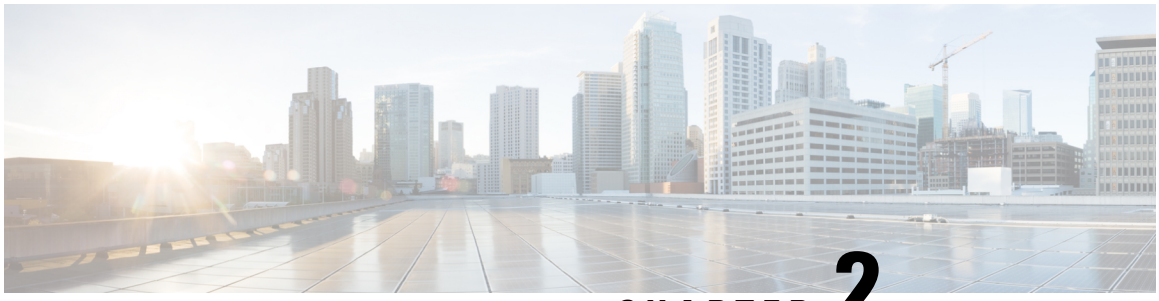
- iNode manger IP address is now available in YANG data module and is displayed in LCS mobile application.

Intelligent Node Software 3.1.0

There are no new features for Cisco Intelligent Node Software 3.1.0 release.

Intelligent Node Software 3.0.0

- Upgrades to newer kernel version (5.4.3) for enhanced security and reliability.
- Upgrades the open source/third party packages to newer versions in order to reduce vulnerabilities.
- Upgrades from Python 3.5 to Python 3.7.



CHAPTER 2

Caveats

- Open Caveats Intelligent Node 3.1.2, on page 3
- Resolved Caveats Intelligent Node 3.1.2, on page 3
- Open Caveats Intelligent Node 3.1.1, on page 3
- Resolved Caveats Intelligent Node 3.1.1, on page 4
- Open Caveats Intelligent Node 3.1.0, on page 4
- Resolved Caveats Intelligent Node 3.1.0, on page 4
- Open Caveats Intelligent Node 3.0.0, on page 4
- Resolved Caveats Intelligent Node 3.0.0, on page 4

Open Caveats Intelligent Node 3.1.2

There are no new open caveats for Cisco Intelligent Node Manager 3.1.2 release.

Resolved Caveats Intelligent Node 3.1.2

Identifier	Headline
CSCwd85359	audit.log file size keep on increasing over long run
CSCwe32142	OIB bash script unable to update the crontab for any automated activity. this leads to system unable to do any automated activity like dhcp, auto registration etc.,

Open Caveats Intelligent Node 3.1.1

There are no new open caveats for Cisco Intelligent Node Manager 3.1.1 release.

Resolved Caveats Intelligent Node 3.1.1

Identifier	Headline
CSCwc80754	LCS mobile app (ios) unable to communicate with iNode.

Open Caveats Intelligent Node 3.1.0

There are no open caveats for Cisco Intelligent Node 3.1.0 release.

Resolved Caveats Intelligent Node 3.1.0

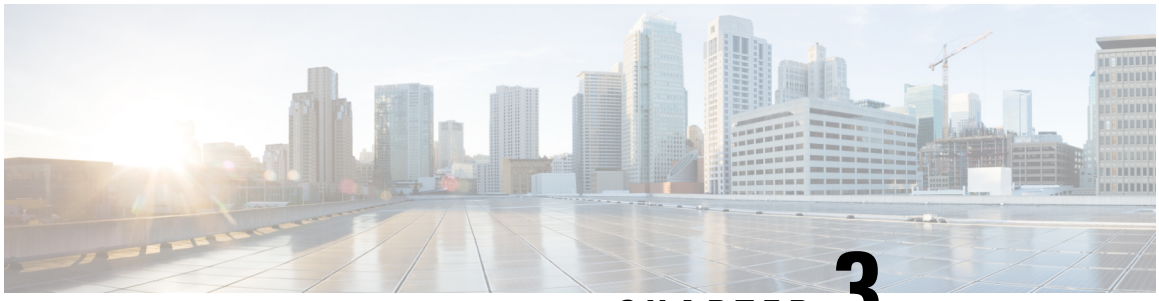
Identifier	Headline
CSCwa26243	Power savings mode is not functioning properly in iNode OIB 3.0.0

Open Caveats Intelligent Node 3.0.0

There are no open caveats for Cisco Intelligent Node 3.0.0 release.

Resolved Caveats Intelligent Node 3.0.0

There are no resolved caveats for Cisco Intelligent Node 3.0.0 release.



CHAPTER 3

Supported Packages and System Requirements

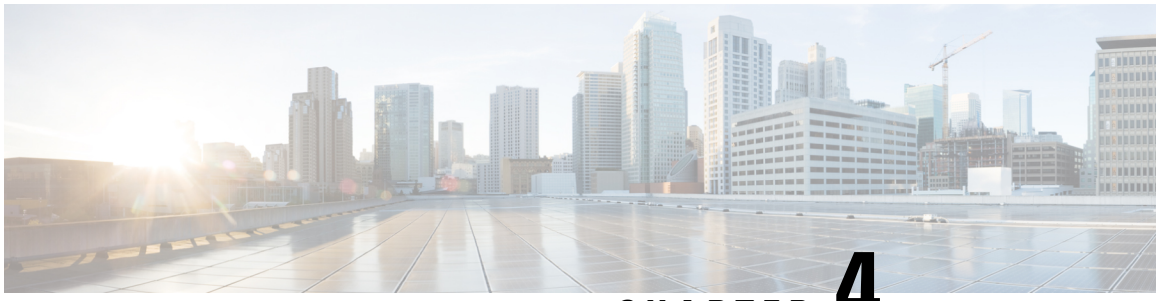
- Software, on page 5

Software

The following release images are available on Cisco.com.

Intelligent Node Software 3.0.0

- Intelligent Node
  - inode-oib.03.00.00.tar.gz
  - inode-oib.03.00.00.tar.gz.signature
- Intelligent Node App (version 1.1 or later) from a trusted source, such as App Store or Google Play



CHAPTER 4

Other Important Information

- Force Upgrade Option in DHCP, on page 7
- Instructions for DHCP Custom Options, on page 8

Force Upgrade Option in DHCP

When enabled, force upgrade option will upgrade the current image in the following scenario:

- Current image on the device is not the same as the image configured in DHCP config.
- The safe image on the device is the same as the image configured in DHCP but declared as INVALID.

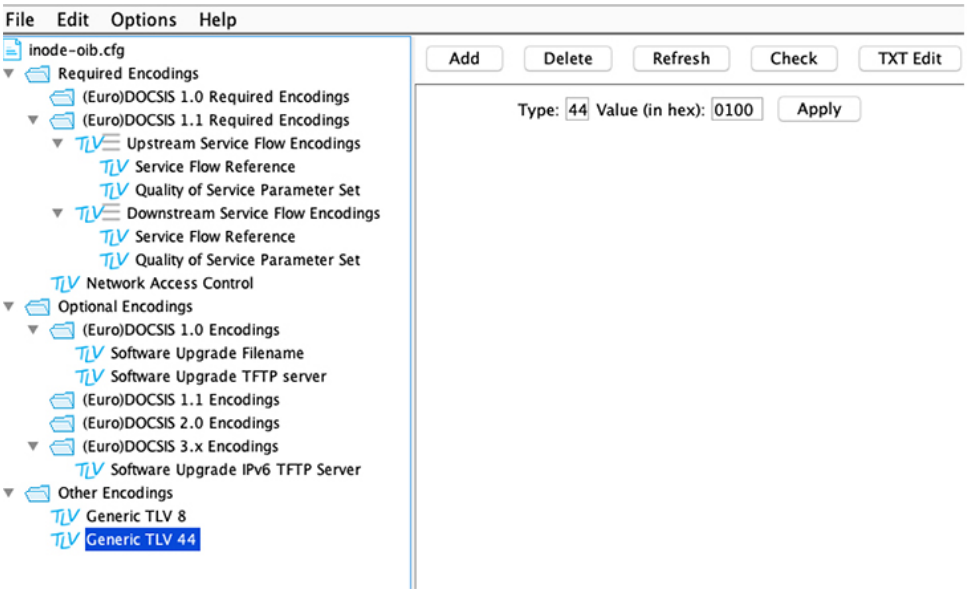
The following table describes the iNode image upgrade behaviour for both force upgrade and normal download scenarios based on iNode DHCP configuration file :

Active image (running)	Secondary/Safe image	Safe ImageValid	Normal Download	Force Download
Different from DHCP config	Same as DHCP config	Yes	Switch to Safe image	Download & Switch
Different from DHCP config	Same as DHCP config	No	Stay in Current image	Download & Switch
Different from DHCP config	Different from DHCP config	Yes	Download & Switch	Download & Switch
Different from DHCP config	Different from DHCP config	No	Download & Switch	Download & Switch
Same as DHCP config	Same as DHCP config	Yes	No Action	No Action
Same as DHCP config	Same as DHCP config	No	No Action	No Action
Same as DHCP config	Different from DHCP config	Yes	No Action	No Action

Active image (running)	Secondary/Safe image	Safe ImageValid	Normal Download	Force Download
Same as DHCP config	Different from DHCP config	No	No Action	No Action

For software upgrade, specific DHCP options are used to provide the iNode with the IP address of the TFTP server, Vendor identification, and image version information. The force download is one of these DHCP options. Force upgrade option can be enabled by configuring the following value: TLV 44: Sub type = 01 (Force Upgrade) length = 0x00.

The following figure shows how the contents of the configuration file is displayed using the Excentis DOCSIS Config File Editor. In this example, an IPv4 TFTP server address is also shown but it is not necessary for IPv6.



Instructions for DHCP Custom Options

SLAAC is not supported in this release. If the RPD is running a software version 5.2.x or earlier, to avail IPv6 support and download the iNode software successfully, apply the following DHCP custom options.

In addition to the standard DHCP options required by the OIB for software download, the customer must create 2 custom DHCPv6 options and an optional third option if an IPv6 prefix length other than /64 is required for the OIB.

```
# Define custom options to provide IPv6 Default Route, Prefix and any Static Routes:
# this is a short-term work around until you are able to receive RA messages.
option dhcp6.default-route code 214 = array of ip6-address;
option dhcp6.static-routes code 216 = array of ip6-address;
# add if OIB Prefix Length is something other than the /64 default.
option dhcp6.prefix code 215 = unsigned integer 8;
```

`dhcp6.default-route` is assigned two IPv6 address, order is important, the Gateway Router's Link-Local IPv6 address followed by it's Global IPv6 address.

`dhcp6. static-routes` is assigned a list of IPv6 addresses of any servers the OIB needs to reach that are within the same prefix as the OIB.

`option dhcp6.prefix` is the prefix length the OIB would have been assigned by the Router Advertisement message.

SLACC is not supported. The OIB's Global IP address must be assigned by the DHCPv6 server.