New Features

New Features for Cisco IOS XE 17.15.1a

New features in this release are listed below:

- Higher CPU and RAM Allocation for IOx Applications

New Features for Cisco IOS XE 17.14.1a

New features in this release are listed below:

- Direct Parenting of LFN Support in Wi-SUN Mesh Deployment

New Features for Cisco IOS XE 17.8.1

Support IKEv2 for WPAN

The IR8140H supports IKEv2 dynamic routing from Cisco IOS-XE Release 17.8.1. The router can redistribute WPAN external routes (for example, Mapping of Address and Port-Translation Mode (MAP-T) routes) into IKEv2 and supports spoke and hub distribution.

Support High Availability for WPAN

The IR8140H will now support High Availability for WPAN between two routers (each with one WPAN module). WPAN HA uses HSRP to track state between the two routers. The WPAN state (RPL routes, mesh-security sessions and keys, multicast sequence numbers) is synchronized between the two routers using a reliable UDP based protocol.

Note WPAN HA will not integrate with the rest of the IOS XE HA infrastructure. It is specific to WPAN. WPAN HA will only be supported between two IR8140 routers with a single WPAN interface each. This feature cannot be used together with the Dual WPAN interface feature.

Yang Model for WPAN

Yang operational model support has been added for the information that is currently available through WPAN show commands. This includes commands for the following:

- The WPAN interface (for example, **show wpan 0/X/0**)

- RPL commands (for example, **show wpan 0/X/0 rpl**)

- meshsec (for example, **show mesh-security**)

Cisco IOS-XE Yang Data Models are found here:

https://github.com/YangModels/yang/tree/master/vendor/cisco/xe

Each release has a directory, and the 17.8.1 release is found under 1781.

Yang Model for BBU

Yang operational model support has been added for the Battery Backup Unit (BBU) information currently available via show commands. For example, **show platform hardware battery**.

Cisco IOS-XE Yang Data Models are found here:

https://github.com/YangModels/yang/tree/master/vendor/cisco/xe

Each release has a directory, and the 17.8.1 release is found under 1781.

Yang Model for GPS

Yang operational model support will be added for GNSS information currently available via show commands.

For example, **show platform hardware gnss**

Cisco IOS-XE Yang Data Models are found here:

https://github.com/YangModels/yang/tree/master/vendor/cisco/xe

Each release has a directory, and the 17.8.1 release is found under 1781.

Itron CAM Module Support

The IR8140H supports third party modules from Cisco IOS-XE Release 17.8.1.

Before inserting the 3rd-party module, use the CLI **hw-module subslot 0/1 3rdparty-mode** to configure the slot as 3rd-party mode, to avoid delays during boot caused by the system looking for ACT2, which does not exist on a 3rd-party module.