



## New Features for Cisco IOS-XE 17.1.1

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The following are the new features available on the IR1101 for IOS-XE release 17.1.1:

- [Support for the X25 over TCP \(XOT\), on page 1](#)
- [Support for YANG Data Models \(Call-home\), on page 1](#)
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### Support for the X25 over TCP (XOT)

X.25 is an ITU standard for packet switching Wide Area Network (WAN). This is used in the Telecommunication industry over serial interfaces that are replaced by IP Network. An X25 connection can be established by using a PAD connection similar to Telnet/SSH. The IR1101 router has only one asynchronous serial interface where features of X25 are not supported. However, we can communicate to the X25 edge devices using by using feature TCP over X25 (XOT). With XOT, we can directly establish a PAD connection to X25 edge devices. Also, we can assign default or customized profiles to the access-groups by changing various parameters of X25 packets.

For additional information about XOT for IOS-XE, see the following:

[Wide-Area Networking Configuration Guide: X.25 and LAPB, Cisco IOS XE](#)

### Support for YANG Data Models (Call-home)

The YANG models supported for the call-home feature are similar to the earlier releases of Cisco-IOS-XE, and the same is supported on 17.1 release of IOS-XE on IR1101. The following references are available for earlier YANG models:

<https://github.com/YangModels/yang/tree/master/vendor/cisco/xe/1651>

For additional information about call-home for IOS-XE, see the following:

[Software Activation Configuration Guide, Cisco IOS XE Release 3S](#)

## Yang Data Model Support for Scada

Cisco IOS XE 17.1.1 introduces support for the Cisco IOS XE YANG model for the Scada System. Previous releases already provided Yang models in other areas.

<https://github.com/YangModels/yang/tree/master/vendor/cisco/xe/1711>

## Support for Model Driven support for GNMI Telemetry Dial-In

Similar to YANG models, there is support on IOS-XE for open source models defined by Google and is referred as Google Network Management Interface (GNMI). Configurations of GNMI can be verified either with Secure or Insecure Mode.

- Secure Mode

Secure Mode establishes secure connection using OpenSSL certificates between client and server. It sends GNMI telemetry updates using open source `gnmi_cli` tool.

- Insecure Mode

Insecure Mode sends GNMI telemetry updates between client and server using open source `pygnmi` tool.

For additional information about GNMI Telemetry see the following reference:

[Programmability Configuration Guide, Cisco IOS XE](#)

## Option to Enable or Disable USB Access

USB flash drives offer inexpensive and easy storage space for the routers to store the images, configuration files and other files. However, the USB port could be considered a potential security risk. Functionality was added to enable or disable the USB access.

## Day 0 Web User Interface

Effective with IOS-XE Release 17.1.1, the Day 0 Web User Interface (WebUI) will be supported on the IR1101. Day 0 WebUI is supported only on LAN ports. These are FastEthernet ports 0/0/1 – 0/0/4 on the IR1101. Connect either a Windows, Linux or Mac PC/Laptop to one of the LAN ports of the IR1101 and boot the router on Day 0. The PC/Laptop should be configured to obtain an IP address through DHCP.