



# IOT EDGE ROUTER 2.5 RELEASE NOTES

**Release Date: April 24, 2017**

This document contains information about Silver Spring Networks IoT Edge Router version 2.5.

## About the IoT Edge Router Version 2.5

The IoT Edge Router is a hardware device that enables customers to securely connect a variety of city and utility devices—including those that require legacy-protocol support—across a common RF mesh network infrastructure using proven open standards and interfaces, and providing networking protocol support. Support includes a secure and standards-based architecture for both IPv4 and IPv6 communications with Linux-based network-edge computing capability.

The device is intended for existing Silver Spring deployments where cities wish to host additional city-focused applications on their network. In typical scenarios, cities are able to replace existing cellular modems or connect XCam smart cameras mounted on street lights to aid in switching or dimming lights in response to real-time traffic conditions.

The IoT Edge Router solution can:

- Provide wired-device connectivity to the Silver Spring network for devices that support Ethernet or HDMI connections.
- Provide IPv6- or IPv4-device connectivity to the Silver Spring network. IPv4 is currently most common, and, in these cases, the IoT Edge Router is responsible for encapsulating IPv4 packets in an IPv6 wrapper and transporting payloads across the network.
- Provide a back-end application responsible for de-capsulation of connected-device traffic allowing third-party devices to access a third-party cloud through an Address Family Transition Router (AFTR).

## What is Included With the IoT Edge Router Version 2.5

The IoT Edge Router version 2.5 includes software and firmware described in these release notes (where inclusion is indicated). The required antenna, wall wart, and power supply are not included; these must be provided by the customer.

## Differences Between Version 2.0 and Version 2.5

Following are key differences between IoT Edge Router version 2.0 and version 2.5:

- **Internal printed circuit boards:** Functionally is the same between version 2.0 and version 2.5.

- **Internal battery:** Both version 2.0 and version 2.5 use a lithium-ion battery (which is provided for graceful shutdowns), and the battery supports two hours of use for both versions.
- **External interfaces:** Available interfaces are the same for version 2.0 and 2.5 (that is, Ethernet 10/100, HDMI, and two ports for USB 3.0).
- **Silver Spring firmware:**
  - IoT Edge Router version 2.0 supports Silver Spring SilverLinkOS firmware version 3.10.1.
  - IoT Edge Router version 2.5 supports Silver Spring SilverLinkOS firmware version 3.10.1 and 3.12.0. Firmware 3.12 includes support for P2P communication (AP-Hop) and Silver Spring Milli™ mesh support.
- **Silver Spring software:**
  - Streetlight.Vision can be used as the central management software (CMS) for interfacing with the IoT Edge Router for both version 2.0 and version 2.5.
  - Network Center version 1.2.5 (device type 58 for the IoT Edge Router) is supported for both version 2.0 and version 2.5.
- **Third-party data-access software:** A10 Networks vThunder Address Family Transition Router (AFTR) virtual machine (VR) version 2.8.2 is used for both version 2.0 and version 2.5.
- **Linux OS:**
  - For IoT Edge Router version 2.0, Ubuntu version 14.04 is supported.
  - For IoT Edge Router version 2.0, Ubuntu version 16.04 is supported. Version 16.04 provides a signed snap with improved information security (InfoSec) through NIC snaps.
- **Solution applications:**

For both version 2.0 and version 2.5:

  - Modem replacement
  - Connectivity for Citilog XCam-TD+ smart cameras (for example, for traffic conditions detection)

For version 2.5:

  - Third-party applications can be supported by the IoT Edge Router if managed using Ubuntu Core Snappy tools.
- **Countries:**
  - For IoT Edge Router version 2.0, United States (USA), France (FRA), United Kingdom (GBR), Denmark (DNK), Australia (AUS), and Singapore (SGP) are supported.
  - For IoT Edge Router version 2.5, United States (USA), Canada (CAN), France (FRA), United Kingdom (GBR), Denmark (DNK), Australia (AUS), and Singapore (SGP) are supported.

## Differences Between Internal and Developer Program Builds

The initial Internal build for the IoT Edge Router will have root access enabled. With the subsequent Developer Program build, root access will be disabled.

## Related Documentation

For more information about the IoT Edge Router, see the *IoT Edge Router Installation and User Guide* and the IoT Edge Router data sheet.

## Resolved Issues

No issues to report in release notes were opened and resolved for this release of the IoT Edge Router.-

A resolved issue is no longer an open work item for Silver Spring, but might remain open in Remedy. For more information, contact your Silver Spring representative.

## Known Issues

Other than those documented in release notes for previous IoT Edge Router releases, no known issues remain open to report for the product.