Device Developer Certificate Installation Instructions

Overview

Introduction

Installing a Device Developer Certificate (DDC) onto a production-ready gateway enables a lab operator to convert the gateway into a lab-ready device that can be used for debugging and verification.

Installation of a DDC is a one-time operation, easily performed with a standard USB memory device or using an xld tool kit. This document provides information to request a DDC for a specific gateway and how to install it.

Audience

The intended audience for this document are lab operators working with client software applications.

Document Version

This is the first formal release of this document.

General Information

About Boot Modes and DDC Types

Review the information in this section to learn about the various boot modes and DDC types. You will need to request a specific type of DDC to convert the gateway to the desired mode.

- Full secure production mode (P-mode).

  In P-mode, the gateway boots only properly signed, released Production images. All standard gateways in subscriber homes boot to P-mode.

- Test laboratory mode (L-mode).

  In L-mode, the gateway loads signed, released Production images and qualified, signed Debug images. Debug images are signed with different keys from Production images and are intended only for lab use. Debug images may contain additional displays and functionality that are used for testing, troubleshooting, and other lab operations.

  A gateway will boot to L-mode if a Lab (L-type) DDC type is present.

How to Obtain a DDC

Contact your account representative for instructions to obtain a DDC.

How to Install a DDC

Loading a DDC is a one-time operation. DDCs may be installed in one of the two following ways:

- Load DDC with USB Flash Drive
- Load DDC using XLD Download Tool

Load DDC with USB Flash Drive

For this process, you will need a USB flash drive (mass storage device) that meets the requirements describe below.
Note: Not all USB flash drives are supported; some require special drivers that are not available to the bootloader.

- Flash drive must be formatted FAT32
- Flash drive must contain only one partition
- Drives that support automatic encryption are not supported

If you save the DDC to a flash drive, complete the steps below to load the DDC.

1. Save the DDC named CISCO.TOK into the root directory of your USB flash drive.
2. Plug the flash drive into one of the USB ports on the gateway.
3. Cycle power to the gateway. The bootloader will detect the DDC file and automatically store it to the flash drive.

Load DDC Using XLD Download Tool

If you saved the DDC to your xld directory, complete the steps below to load the DDC using the the xld download tool.

1. Connect a serial cable between your PC and the 3.5mm IR port on the rear panel of the gateway.
   Note: You will need a RS232 level shifter device to convert the signals to the proper levels.
2. On your PC, open a command prompt.
3. Type `xld CISCO.TOK cDDC p<PC COM Port Number>` and press **Enter**.
4. Cycle power to the gateway. The bootloader will look for the xld traffic and automatically load the DDC and store it to the flash drive.

Check DDC Status

Complete the steps below to determine if a DDC has been properly loaded onto the gateway.

Note: For this process, you will need the xld download tool. If necessary, contact your account representative for instructions to obtain the xld download tool.

1. If necessary, connect a serial cable between your PC and the 3.5 mm IR port on the rear panel of the gateway.
   Note: You will need a RS232 level shifter device to convert the signals to the proper levels.
2. On the PC, open a command prompt.
3. Type `xld noname cSTATUS p<COM port number>` and press **Enter**.
4. Cycle power to the gateway. The bootloader reports information pertaining to the DDC, DT, and Boot Mode.

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