FactoryTalk Edge Manager
Edge Operating System (Edge OS)
Installation Guide

Version 1.00.00

Rockwell Automation

Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

⚠	**WARNING:** Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.

⚠	**ATTENTION:** Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence.

IMPORTANT	Identifies information that is critical for successful application and understanding of the product.

Labels may also be on or inside the equipment to provide specific precautions.

⚡	**SHOCK HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.

♨	**BURN HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.

⚠	**ARC FLASH HAZARD:** Labels may be on or inside the equipment, for example, a motor control center, to alert people to potential Arc Flash. Arc Flash will cause severe injury or death. Wear proper Personal Protective Equipment (PPE). Follow ALL Regulatory requirements for safe work practices and for Personal Protective Equipment (PPE).

Rockwell Automation recognizes that some of the terms that are currently used in our industry and in this publication are not in alignment with the movement toward inclusive language in technology. We are proactively collaborating with industry peers to find alternatives to such terms and making changes to our products and content. Please excuse the use of such terms in our content while we implement these changes.

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Chapter

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Edge Operating System (Edge OS) Installation

In this chapter:

This document provides necessary instructions on how to create an Edge Operating System (Edge OS) bootable USB and install Edge Operating System (Edge OS) image into hardware device or Edge Node.

Assumption

It is assumed that your hardware device is verified by Rockwell Automation.

For hardware device verification, contact Rockwell Automation Support.

Prerequisites

Ensure that following items are available to install Edge Operating System (Edge OS) into Edge Node:

1. Edge node
2. Monitor/TV
3. USB keyboard
4. USB stick (minimum recommended storage of 1 GB)
5. VGA/HDMI cable connected to the monitor
6. System to perform the installation transfer.
7. Etcher Tool to flash the Edge Operating System (Edge OS) image on a USB.
   • You can download the Etcher tool from https://www.balena.io/etcher/.
8. Latest Edge Operating System (Edge OS) RAW image file from PCDC (https://compatibility.rockwellautomation.com/Pages/home.aspx).

Flash Edge Operating System (Edge OS) Image into USB

IMPORTANT: **Ensure that the USB is formatted or wiped before starting this procedure.**

Perform the following steps to flash the Edge Operating System (Edge OS) image into USB using Etcher:
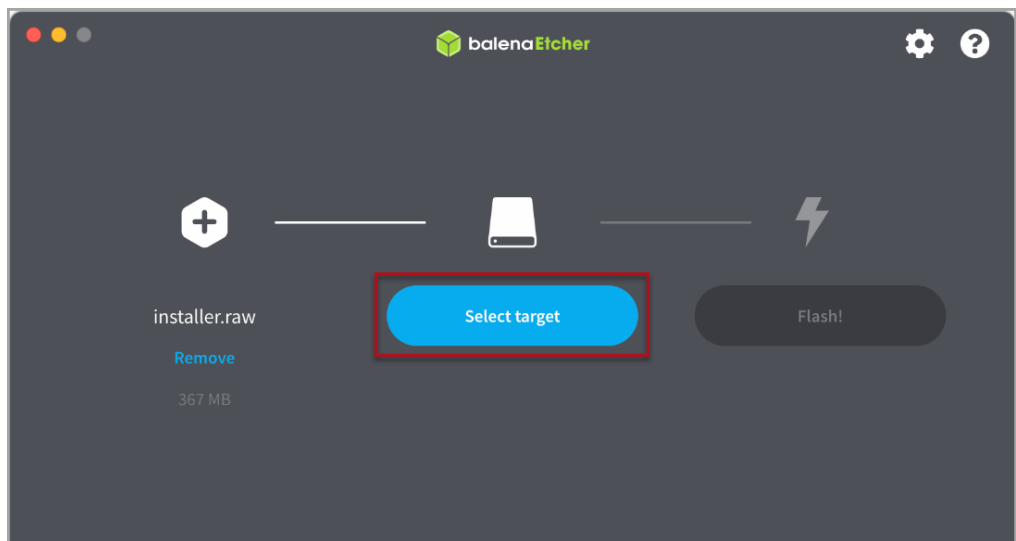
1. Open the Etcher tool.
2. Click [Flash from File], navigate to the Edge Operating System (Edge OS) image folder and select the Edge Operating System (Edge OS) RAW image.
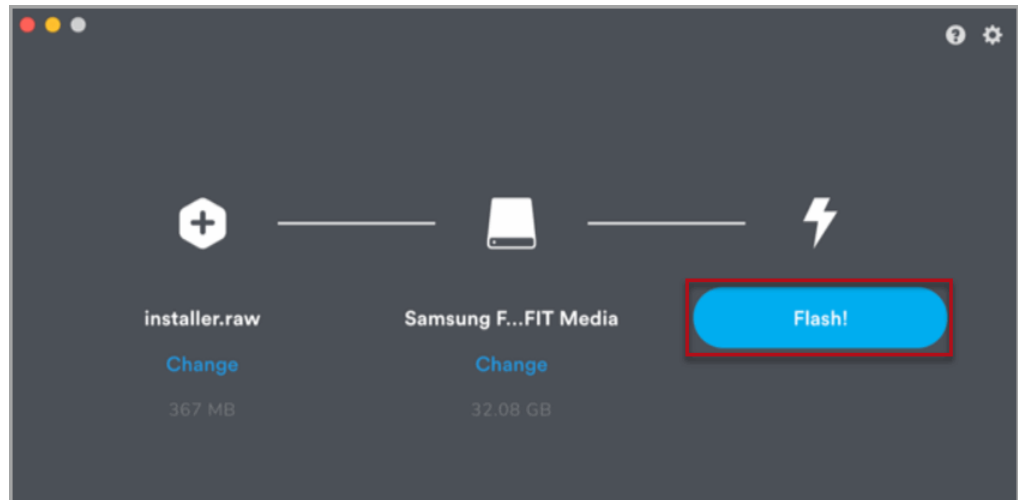
Figure 1-1:   Flash from file
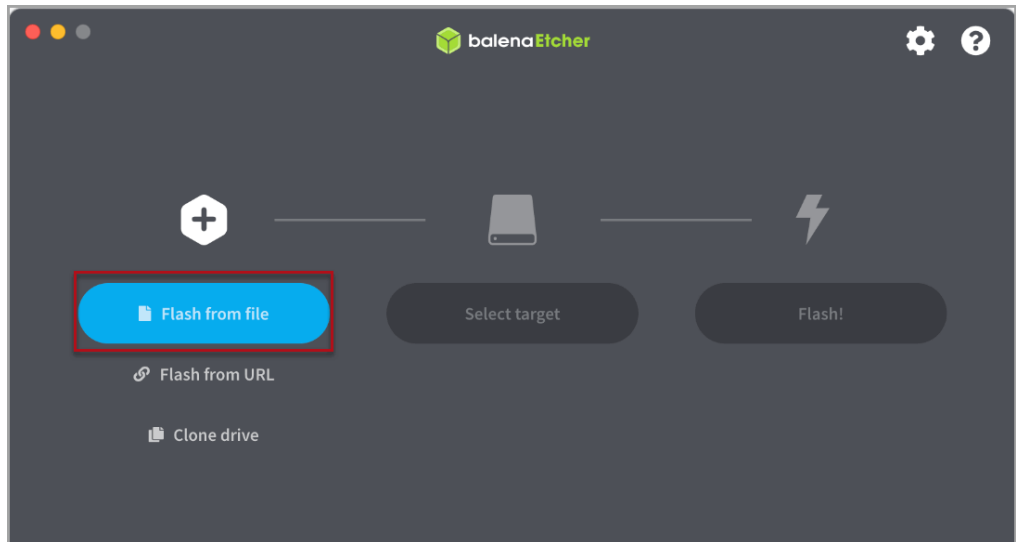
3.   Plug-in the USB to the laptop/system and click [Select target]. The connected USB details displays.

Figure 1-2:   Flash from file

4.   Click [Flash!] and provide credentials.

Figure 1-3:   Flash from file

5.   After completion, there will be 3 partitions (2 EVE, 1 INVENTORY) in the USB and now the USB cab be used to install the Edge Operating System (Edge OS) into any new hardware.

6.   Plug-out the USB from the laptop/system and close the Etcher tool.

Install Edge Operating System (Edge OS) from USB

1.   Power on the hardware device (Edge Node) manually.

2.   Plug-in the USB into Third-Party Hardware (Edge Node/Device).

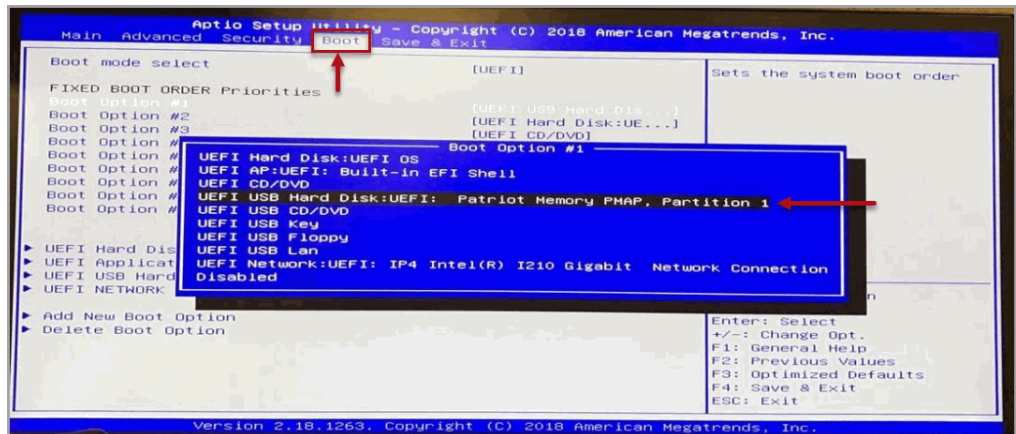3.   Invoke the BIOS settings to modify the default boot option.

NOTE: Option to go to BIOS settings can be different for machine to machine.

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4.   Go to the Boot tab and click <USB Hard Disk>. Following image is the example of DELL machine.
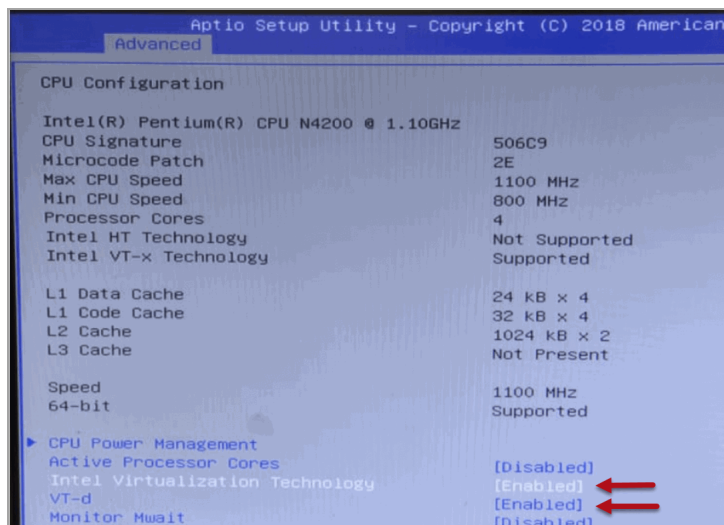
Figure 1-4:   Flash from file

5.   Go to the Advanced tab and ensure that Intel Virtualization Technology and VT-d are enabled.

NOTE: Ensure that you disable the secure boot, if enabled on the edge node.

Figure 1-5:   Flash from file

6.   Set USB as first boot priority from BIOS options.

7.   Save & exit from BIOS.

8.   The Edge Operating System (Edge OS) installation automatically begins on the Edge Node and once the installation is completed, the Edge Node automatically powers off.

9.   Remove the USB from the Edge Node once the Edge Node is powered off.

NOTE: During Edge Operating System (Edge OS) installation all the information of hardware device (Edge Node) is stored inside a repository folder in the USB. You can connect the USB to normal PC and can check the required information which includes:
- Device Manifest (Won't be needed as the device should be verified before this point and available in FT Edge Manager Marketplace).
- Folder Name = Soft Serial Number. This makes it easy to copy paste when onboarding.

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10. Power ON the Edge Node manually and invoke the BIOS settings again. Change the boot option to the default bootable disk.

11. Connect the device with the controller and follow on-boarding steps for device deployment. Refer to FactoryTalk Edge Manager Quick Start Guide for more information.

Additional Resources

These documents contain additional information related Rockwell Automation products.

Resource	Description
ASEM 6300B Box PCs and 6300T Box Thin Clients – Installation Instructions, Publication 6300B-in001	Provide details on how to install ASEM 6300B Box PC or 6300T Box Thin Client.
FactoryTalk Edge Manager Quick Start Guide	Provide guidelines for connecting the edge node to the local network along with onboarding within FactoryTalk Edge Manager user interface.

View or download publications at http://www.rockwellautomation.com/literature. To order paper copies of technical documentation, contact the local Rockwell Automation distributor or sales representative.

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Rockwell Automation Support

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