

Mantle 2.0 Quick Start Guide

Physical Network Builds

Use this guide to validate serial connectivity, baseline a device, upload the required Jinja2 template, and run a production physical network build in Mantle 2.0.

BEFORE YOU BEGIN

- Have the approved Jinja2 template available locally.
- Confirm the device is powered on, supported, and connected to the correct serial port.
- Have any known console credentials ready for the write/erase utility.

REQUIRED BUILD INPUTS

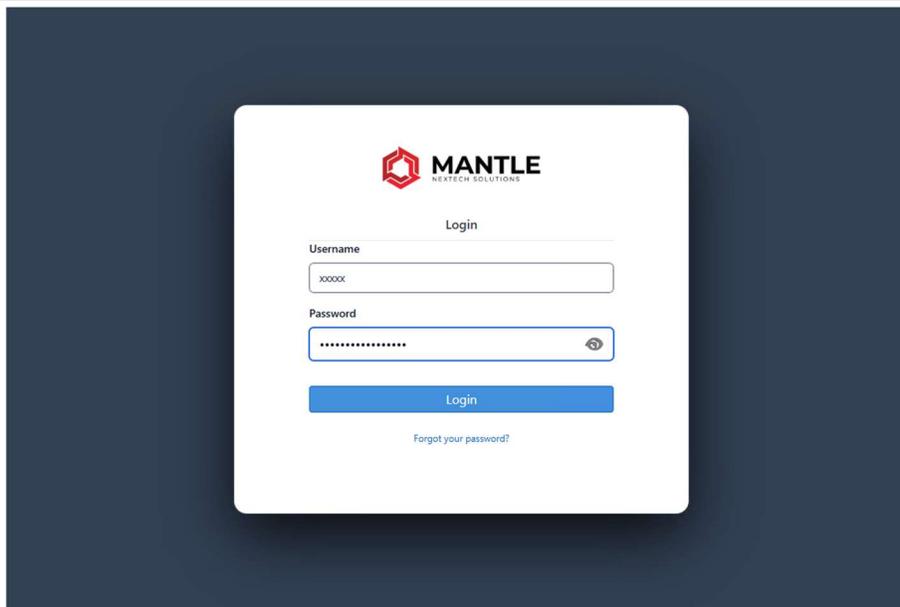
- Device name and serial port mapping
- Template selection
- Per-device template variables
- Optional Kit ID for tracked workflows

Access Mantle and confirm readiness

Start by signing in and confirming that the appliance is ready for build operations.

Step 01: Sign in to the Mantle web interface.

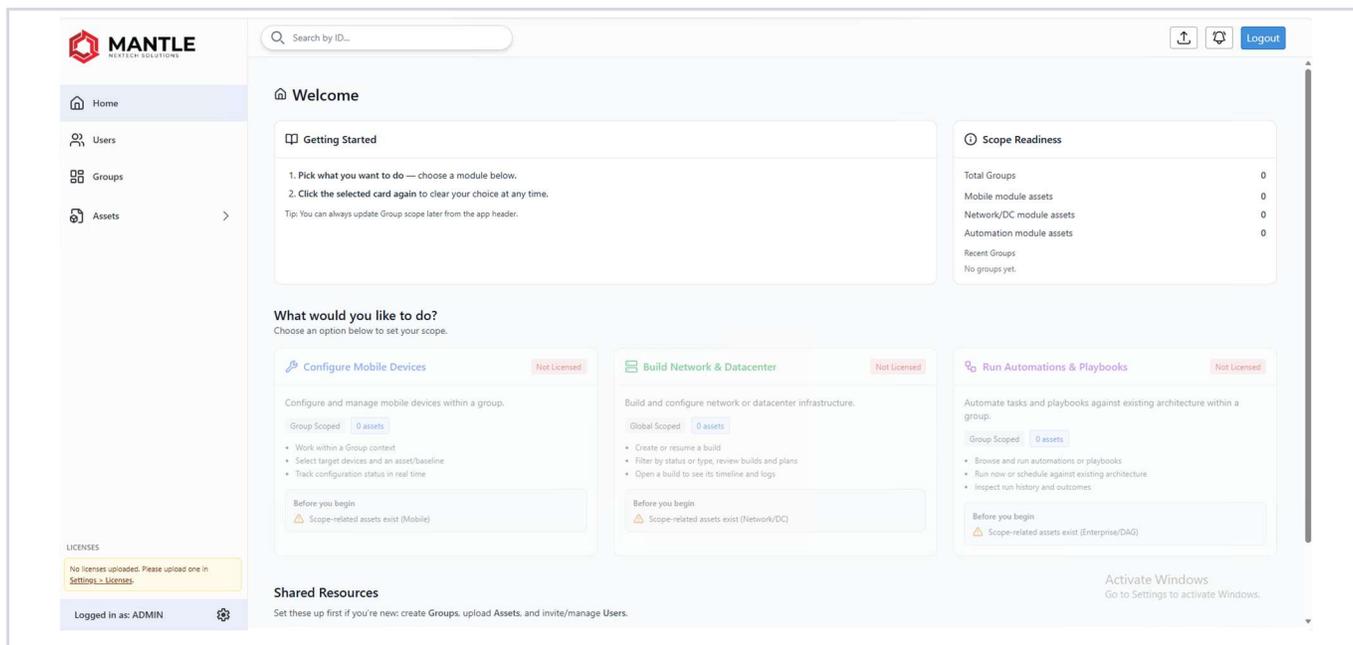
Open Mantle and enter the credentials assigned during installation.



The screenshot shows the Mantle web interface login page. At the top center is the Mantle logo, which consists of a red hexagon with a white 'M' inside, followed by the text 'MANTLE' in bold and 'NEXTTECH SOLUTIONS' in a smaller font below it. Below the logo is the word 'Login'. There are two input fields: 'Username' with a placeholder 'xxxxx' and 'Password' with a placeholder of ten asterisks and a toggle icon on the right. Below the password field is a blue 'Login' button. At the bottom center, there is a link that says 'Forgot your password?'.

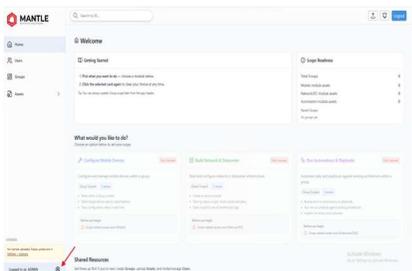
Step 02: Confirm the Dashboard loads successfully.

Verify that Mantle opens to the Dashboard before starting any network utilities or build workflows.

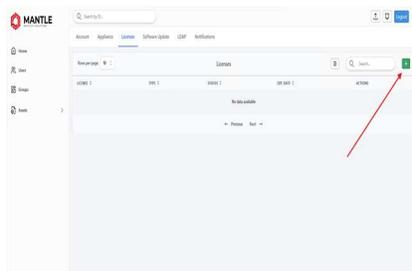


Step 03: Verify that licensing is active before starting a build.

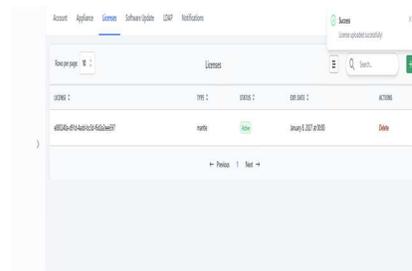
If the license has not already been uploaded, open Settings, click the add button, and upload the license file provided for the appliance.



Open Settings from the lower-right corner.



Click the green add button to upload a license file.



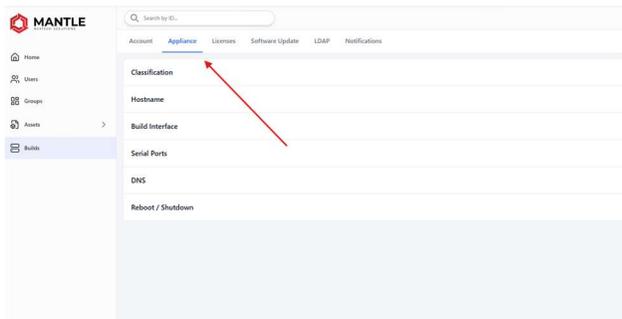
Select the file and complete the license upload.

Verify serial connectivity

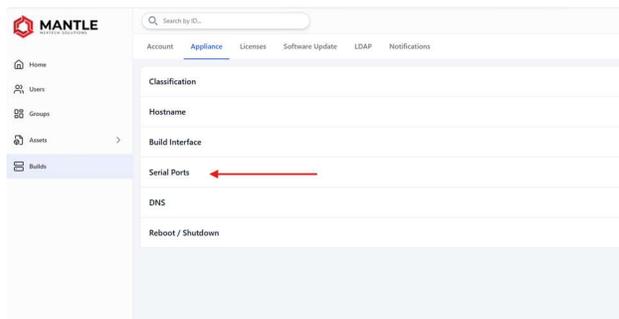
Physical Network Builds depend on a stable serial path. Confirm that the target console connection is visible before you continue.

Step 04 : Open Appliance settings.

From Settings, go to the Appliance tab to access hardware, build interface, and serial port configuration.



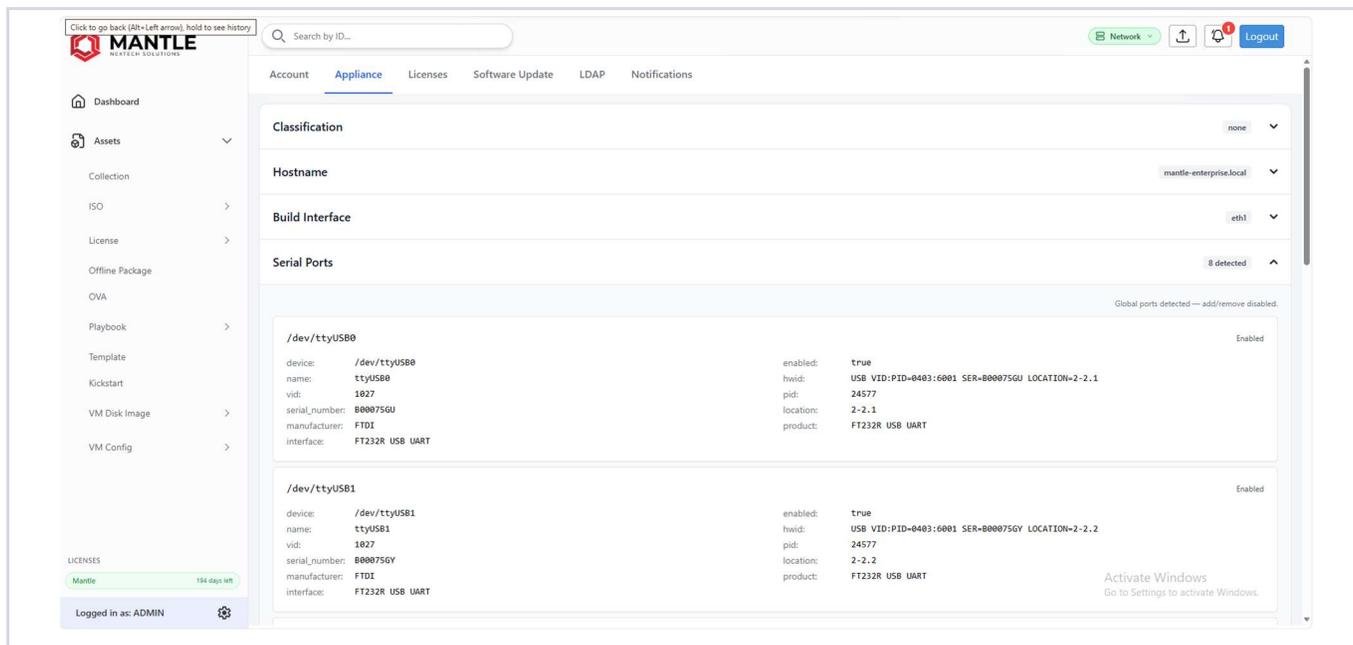
Open Settings and select the Appliance tab.



Expand Serial Ports to view available console connections.

Step 05: Confirm the correct console connection is available and enabled.

Verify that the intended serial device is present, mapped correctly, and ready to use for the target network device.

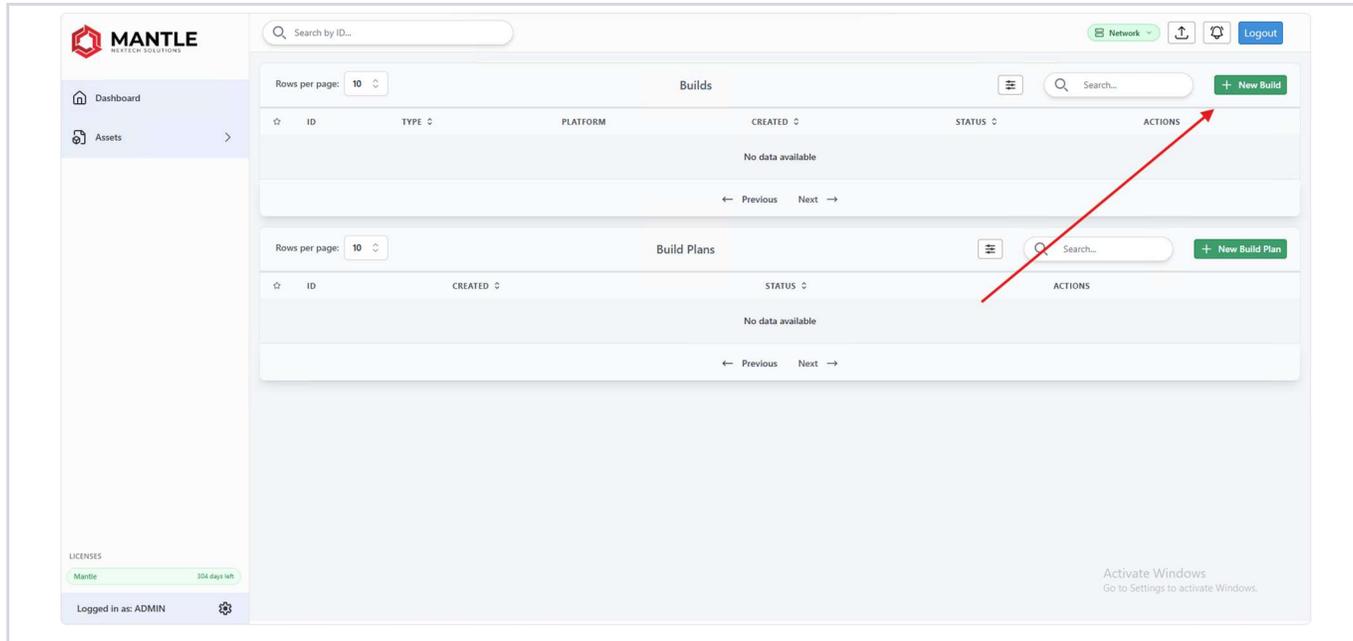


Factory baseline the device

Use the Network Utilities workflow to reset the device to a known baseline before applying a production template.

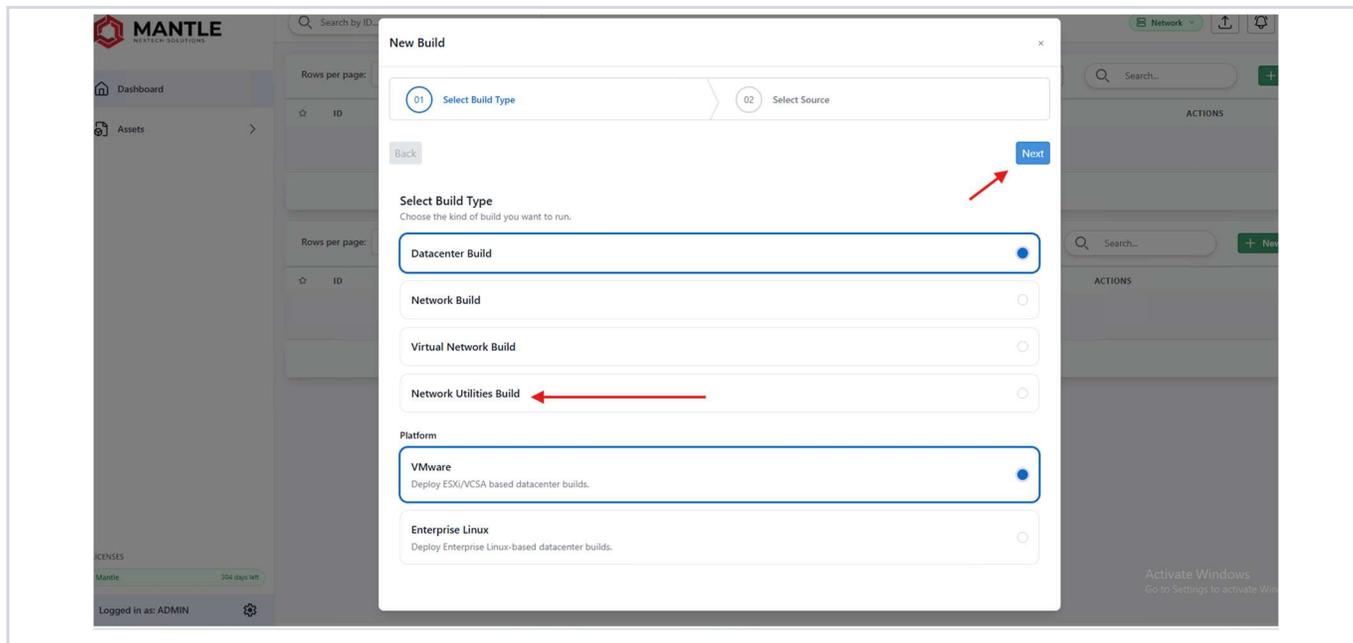
Step 06: From the Dashboard, start a new build.

Click New Build to launch the workflow selector for the utility and production build paths.



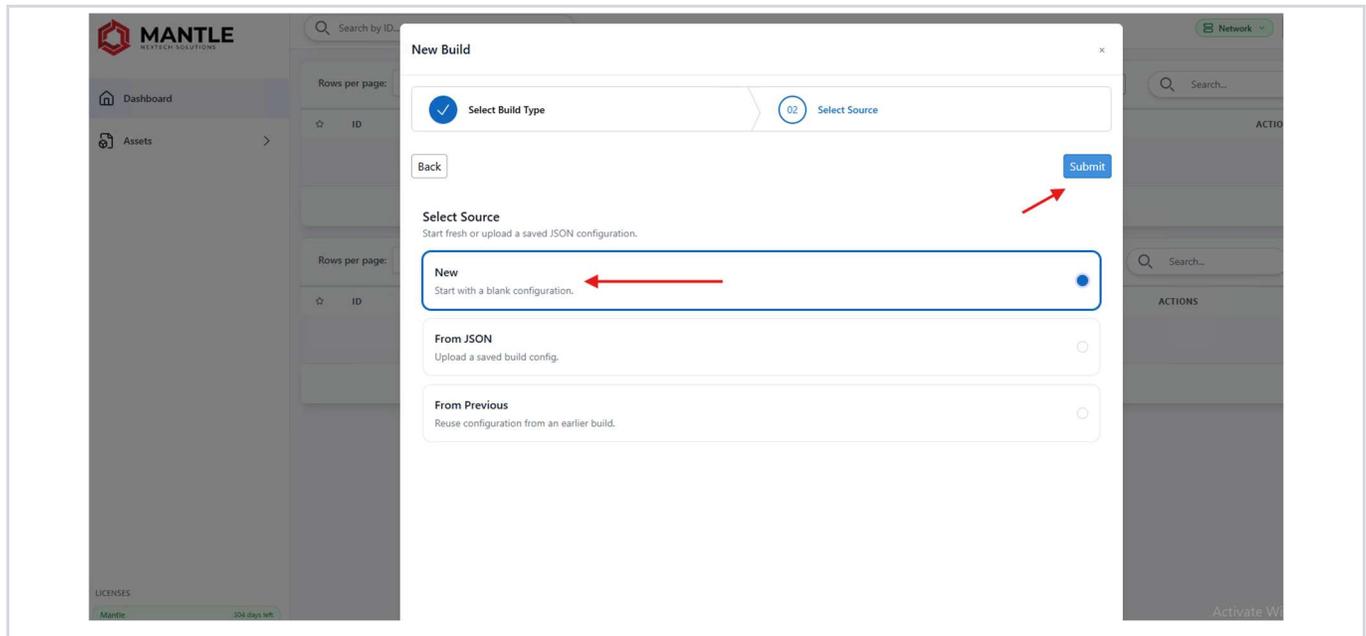
Step 07: Select Network Utilities Build, then click Next.

Choose the utility workflow used to perform the write/erase operation and continue to the source selection step.



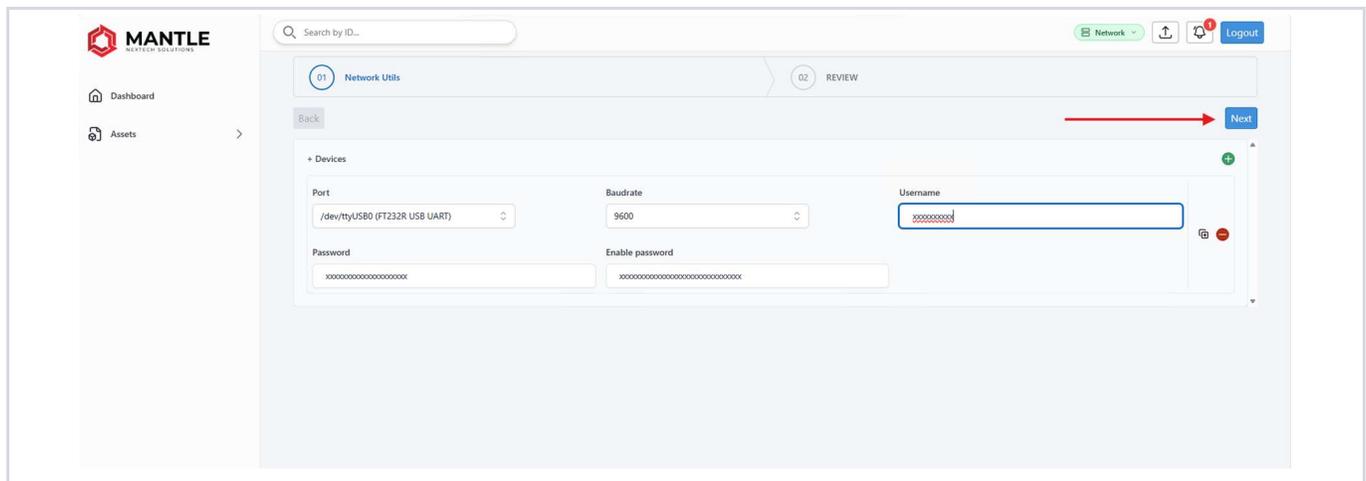
Step 08: Choose New and click Submit.

Start with a new utility configuration instead of reusing a saved or prior job.



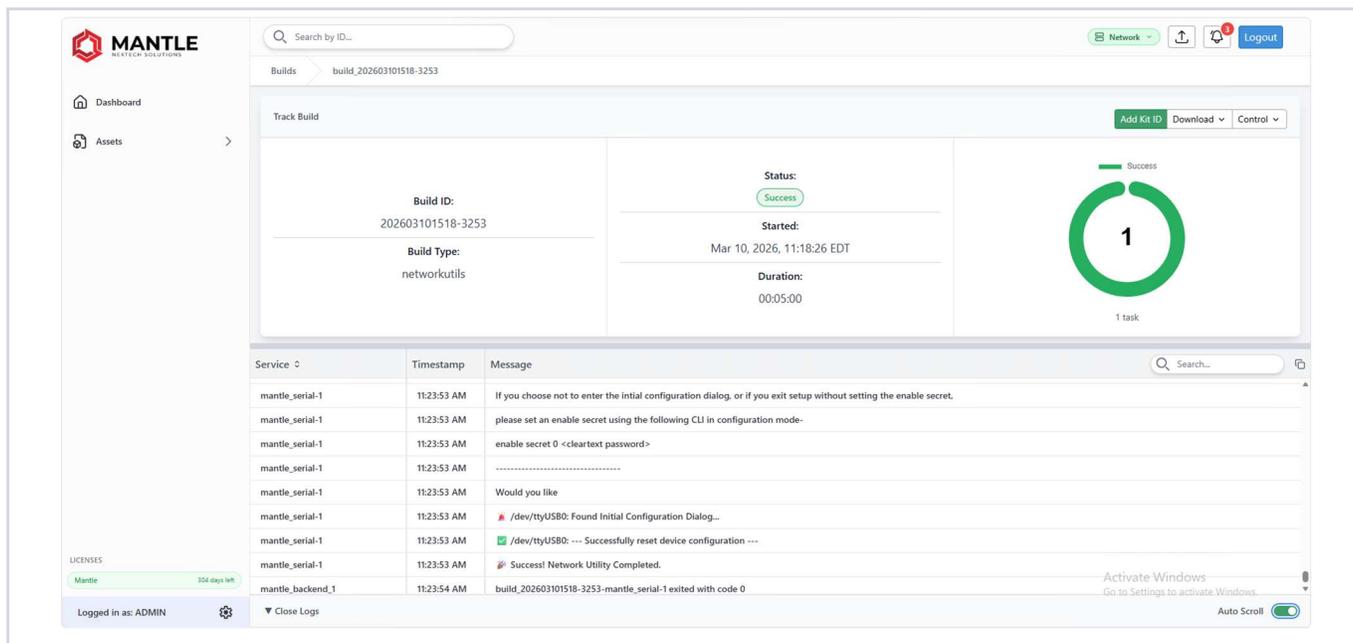
Step 09: Enter the console credentials and verify port settings.

Provide any required username, password, enable password, port, and baud rate values, then proceed to the review and deploy step.



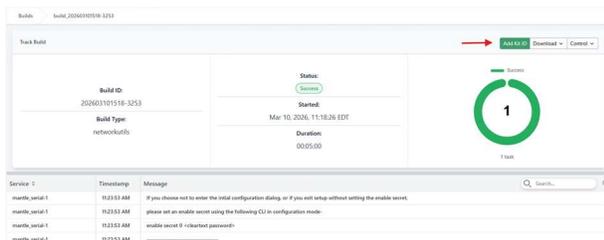
Step 10: Allow the utility build to complete.

Mantle logs in over serial and performs the baseline operation. Wait for the job to finish before moving on.

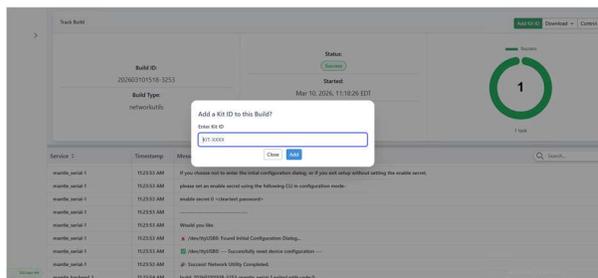


Step 11: Optionally add a Kit ID for tracking.

If your workflow uses kit tracking, add the Kit ID after the utility build completes so the job can be traced later from the Dashboard.



Select Add Kit ID from the completed utility build.



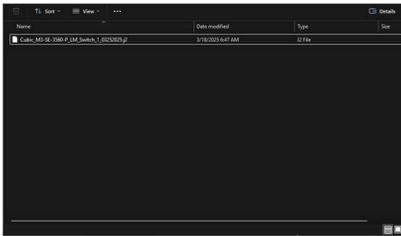
Enter the Kit ID value and click Add.

Upload the device template

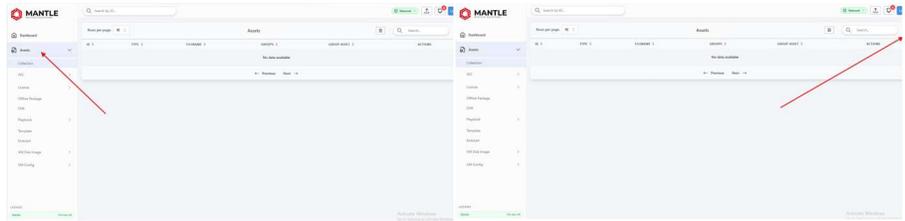
After the device is reset, upload the Jinja2 template that will be used during the production network build.

Step 12: Confirm the template file is available locally.

Have the approved Jinja2 file ready before opening the asset upload flow in Mantle.



Keep the approved Jinja2 file available locally.

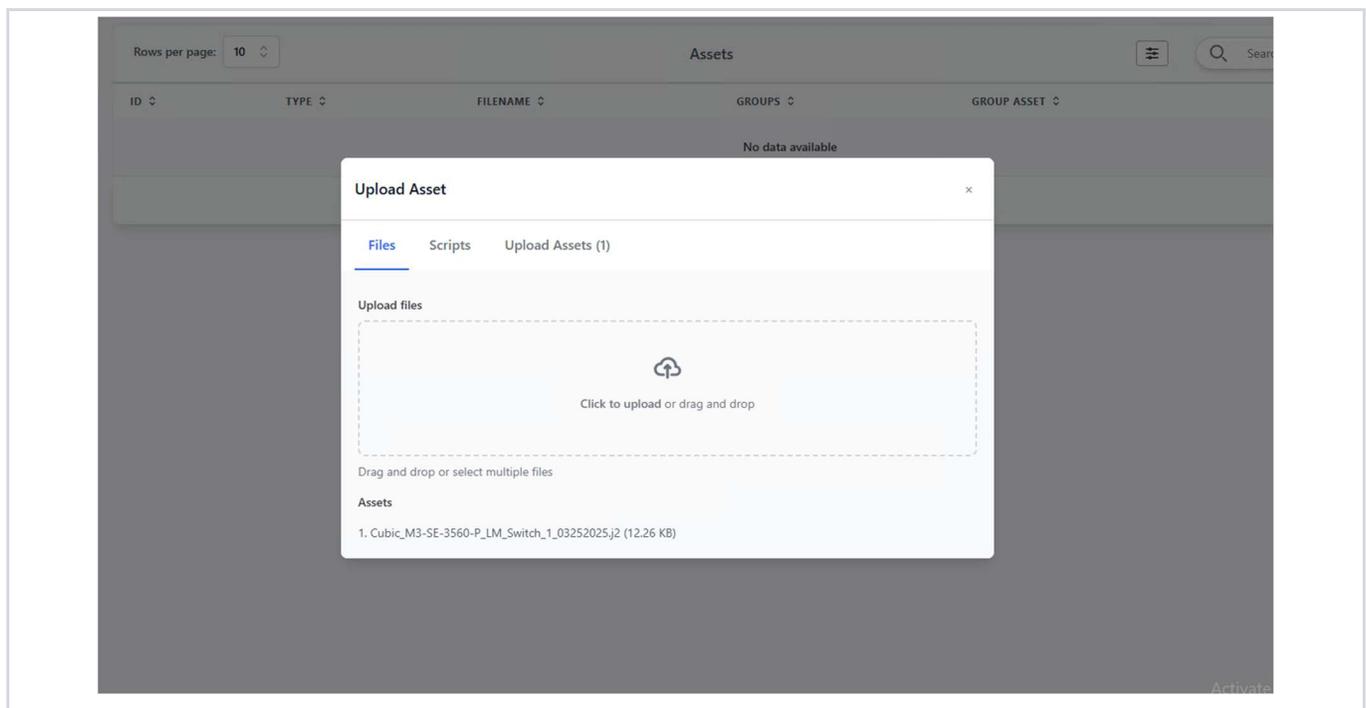


Open Assets in the left navigation.

Click the add button to begin an asset upload.

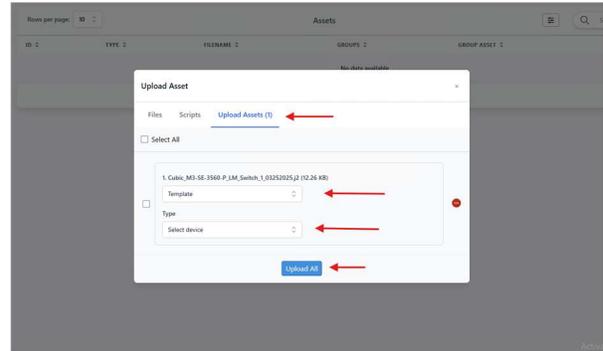
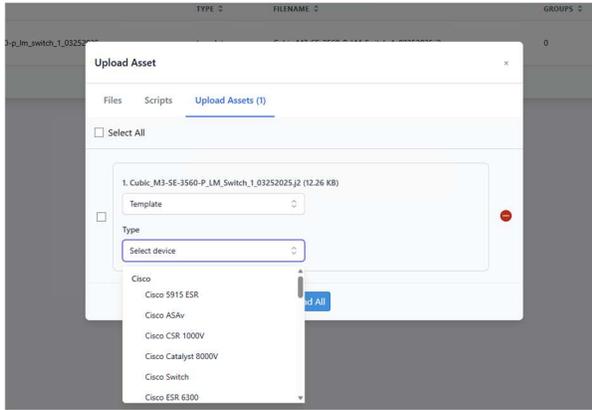
Step 13 — Upload or drag and drop the network template.

Select the Jinja2 file from disk and bring it into the upload workflow.



Step 14: Set the asset type to Template and choose the correct device type.

Finish the upload by assigning the correct template classification and supported device type, then upload all assets.

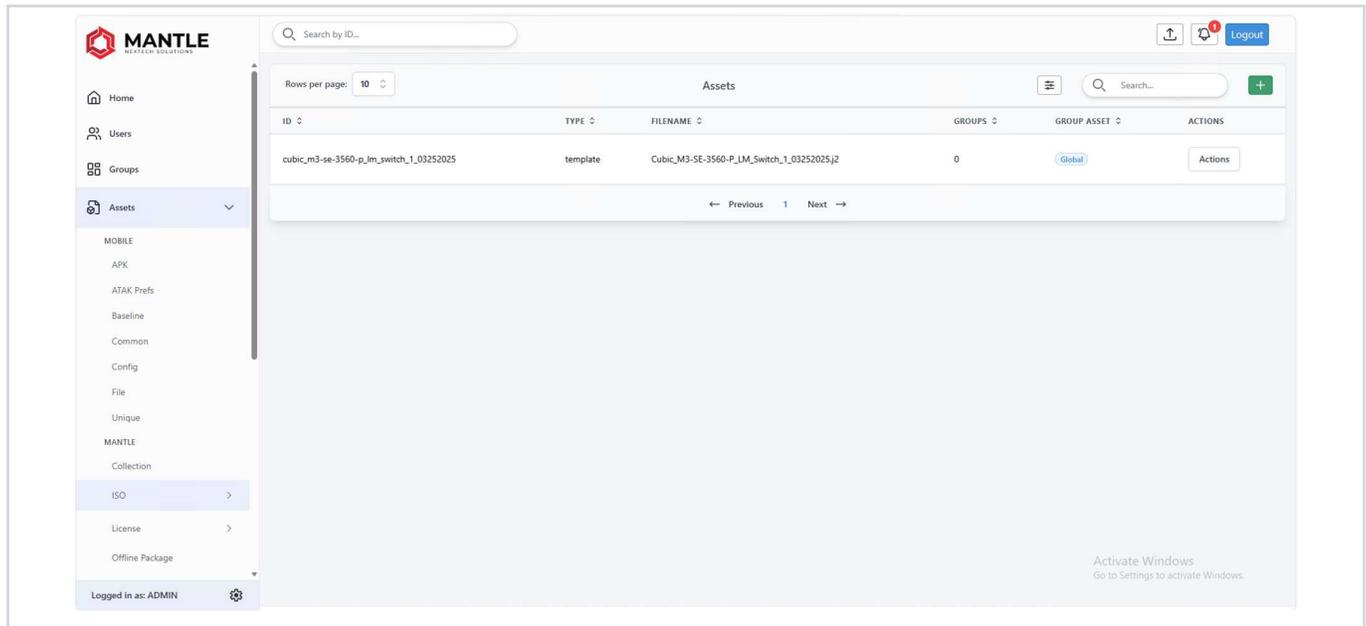


Click Upload All to finish the asset import.

Choose Template and select the supported device type.

Step 15: Verify the template appears in Assets > Templates.

Confirm that the template is visible in Mantle before launching the production build.



Run the physical network build

The build form is the source of truth. Map the correct serial port, choose the device type, select the template, and provide all required variables before deploying.

Step 16: Start a new build and select Network Build.

From the Dashboard, click New Build again, choose Network Build, and continue with a new configuration.

Tip: Use the same disciplined approach for the production build that you used for the utility build—start a new job, confirm the port mapping, and review the form before you deploy.

Step 17: Complete the build form.

Select the correct serial port, choose the device name, pick the approved template, and enter every required variable before continuing.

The screenshot displays the Mantle Network Build configuration interface. The main content area is titled '01 Network' and includes a 'REVIEW' step. The configuration is organized into several sections:

- Services:**
 - Serial Port Mapping:** Port: /dev/ttyUSB0 (FT232R USB UART)
 - Device being configured:** Device Name: Dtech M3-SE-3560-P
 - Device template selection:** Template: Cubic_M3-SE-3560-P_LM_Switch_1_0325...
- Device Template:** A dropdown menu for selecting a device template.
- Config Variables / Template variable values:** A grid of input fields for various network parameters:

Client_Default_Gateway	Client_Subnet_Mask	Client_VLAN_ID	Fully_Qualified_Domain_Name
Infrastructure_Hostname_and_IP	Network_Device_Password	Network_Device_Username	Server_Default_Gateway
Server_Subnet_Mask	Server_VLAN_ID	Switch1_Hostname	WAN_IP_SDN_Provided
WAN_Subnet_Mask_SDN_Provided	WAN_Upstream_IP_SDN_Provided		

The interface also features a sidebar with navigation options (Dashboard, Assets, VM Disk Image, VM Config), a top navigation bar with a search bar and user information (Network, Logout), and a footer with 'Activate Windows' and 'Go to Settings to activate Windows'.

Step 18: Deploy the build and monitor execution.

Click Next, review the build, and then click Deploy. Mantle applies the rendered template over the mapped serial connection and captures output for review.

Step 19: Review the completed build results.

Confirm that the build finishes successfully, then review the recorded output to validate the running configuration, system messages, and interface information.

Validation checklist. Confirm the intended device was mapped to the correct serial port, verify that all required configuration variables rendered correctly, and review the captured post-build output for any prompts, errors, or interface mismatches that require follow-up.

Setup complete. The device is now baselined, templated, and ready for follow-on validation using your organization's standard network acceptance checks.