Secure NMC System (SNS) Tool User Guide

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Introduction

The Secure NMC System (SNS) Tool allows you to manage firmware updates for your Network Management Card 3, including pre-installed and standalone SmartSlot cards (AP9640, AP9641, AP9643) and embedded cards. The SNS Tool was designed to enhance cybersecurity and reduce exposure to security threats by ensuring that your NMC3 is running the latest and most secure firmware. The SNS Tool supports four NMC3 applications including SU (Smart-UPS), SY (1-Phase Symmetra), SUCAN (Smart-UPS Ultra) and RDPU2G (Rack Power Distribution Units). As part of Schneider Electric's new Secure NMC System, the SNS Tool will also provide support for activating your NMC subscriptions. A 1-year Secure NMC subscription is included with all NMC3 for UPS and PDU products, including the standalone NMC3s: AP9640, AP9641, and AP9643.

⚠️ It is highly recommended you run the Secure NMC System Tool on a sufficiently hardened and secure PC. The Secure NMC System Tool should be executed only by authorized users by verifying the Tool has the correct file permissions and it's accessible on a secure location.

⚠️ If you are upgrading your NMC3 firmware from a firmware version prior to 2.3.1.1, see Knowledge Base article **FAQ000262012** before attempting the upgrade.

System Requirements

1. The NMC must have a valid IPv4 address.
2. The NMC must be available on the same internal network as the SNS Tool.
3. The system running the SNS Tool must have at least 4GB of memory.
4. The system running the SNS Tool must also have at least 2GB of storage space.

Prerequisites

1. You must have a valid Secure NMC subscription.
2. If you do not have a valid or an included subscription, you can purchase one using the part numbers below.
   Note: You must purchase the correct subscription for your application type to maximize the benefits of the SNS Tool.

Smart-UPS and 1-Phase Symmetra devices (SU, SY & SUCAN)	
Applicable Part Number	**Secure NMC Subscription**
SWNMC3SU-1Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 1 Year Secure NMC Subscription
SWNMC3SU-2Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 2 Year Secure NMC Subscription
SWNMC3SU-3Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 3 Year Secure NMC Subscription
SWNMC3SU-4Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 4 Year Secure NMC Subscription
SWNMC3SU-5Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 5 Year Secure NMC Subscription
SWNMC3SU-6Y-DIGI	NMC3 for Smart-UPS & 1-Ph Symmetra - 6 Year Secure NMC Subscription
Rack Power Distribution Units (rPDUs)	
Applicable Part Number	**Secure NMC Subscription**
SWNMC3PDU-1Y-DIGI	NMC3 for 1-Ph rPDU - 1 Year Secure NMC Subscription
SWNMC3PDU-2Y-DIGI	NMC3 for 1-Ph rPDU - 2 Year Secure NMC Subscription
SWNMC3PDU-3Y-DIGI	NMC3 for 1-Ph rPDU - 3 Year Secure NMC Subscription
SWNMC3PDU-4Y-DIGI	NMC3 for 1-Ph rPDU - 4 Year Secure NMC Subscription
SWNMC3PDU-5Y-DIGI	NMC3 for 1-Ph rPDU - 5 Year Secure NMC Subscription
SWNMC3PDU-6Y-DIGI	NMC3 for 1-Ph rPDU - 6 Year Secure NMC Subscription

Download the SNS Tool

1. Download the SNS Tool from the **APC website** by (a.) searching for one of the part numbers below, or (b.) by navigating to the NMC product page, **www.apc.com/secure-nmc** and selecting the **Secure NMC System Tool** from the **Category** list. There are four different versions available to download depending on the application you are running on your NMC3:

Applicable Part Number	**SNS Tool**
SFNMC3FMTSU	Secure NMC System Tool for Smart-UPS
SFNMC3FMTSUCAN	Secure NMC System Tool for Smart-UPS Ultra
SFNMC3FMTRPDU	Secure NMC System Tool for rPDU
SFNMC3FMTSY	Secure NMC System Tool for 1-Ph Symmetra

2. Once the SNS Tool is downloaded, run the file that is applicable to your application.
   - SU application: `snst_nmc3_su_x.x.x.x.exe`
   - SY application: `snst_nmc3_sy_x.x.x.x.exe`
   - SUCAN application: `snst_nmc3_sucan_x.x.x.x.exe`
   - RPDU2G application: `snst_nmc3_rpdu2g_x.x.x.x.exe`
3. Accept the End-User License Agreement when the SNS Tool opens.
4. Enter your email address and click **Register**. An email address is required to activate your subscription. You can change your email address in the SNS Tool via the **Options** button.

It is highly recommended that you create a **mySchneider** account with the email address provided to view and manage your subscriptions in the **Software Management** page.

Add/Remove Devices to the SNS Tool

1. You can (a.) add each device individually or (b.) add multiple devices at once.
   a. **To add each device individually:**
      (i) Click **Add Devices** and enter the following details:
         - The NMC's IP address (IPv4 only), FQDN or Hostname.
         - The communication protocol (FTP or SCP). SCP is selected by default.
           Note: Your selected protocol should also be enabled on your NMC3 device.
         - The port number for your selected protocol.
         - The NMC username and password
         - Once the device has successfully been queried, it will automatically be added to the **Device** List in the SNS Tool.
   b. **To add multiple devices at once:**
      (i) Open the `devices.csv` file from the same directory as your downloaded application file and add the device details in the same format.
         Note: Lines that start with a semi-colon **;** symbol will not be processed by the SNS Tool.
      (ii) Save and close the `devices.csv` file.
      (iii) Return to the SNS Tool and click **Add Devices**.
      (iv) Click **Import Device File**.
         Note: This button will only appear if the data is detected in the `devices.csv` file.
      (v) Select **Query Devices** to verify the NMC.
      (vi) In the Query Devices dialog, proceed with querying all devices by selecting **Query Devices** again.
      (vii) Once all devices are successfully queried, select **Add Devices** to add them to the SNS Tool.
2. To remove your NMC from the SNS Tool, select your NMC device from the **Device List** and click **Remove Devices**.

Activate NMC Subscription

1. You can activate your Secure NMC subscription (a.) online, when the NMC is on a public internet facing network or (b.) offline, when the NMC is on an air-gapped private network.
   a. **Activate Online**
      - In the SNS Tool, select the device you want to license. If you want to license more than one NMC in the **Device List**, you can Ctrl+click.
      - Select **License Devices** and click **Check License**. If you have a 1-year included subscription or a previously activated subscription, the SNS Tool will retrieve the license details.
      - Click **Okay** to exit the popup.
      - If your NMC does not have an included subscription or is not already licensed, click **Continue** and enter the Activation ID from your purchased Secure NMC subscription.
      - Click **Confirm and Activate**.

    If the SNS Tool does not retrieve an included Secure NMC subscription for your NMC, but it was purchased after April 1st, contact the **Customer Care Center**.

   b. **Activate Offline**
      - Ensure that you are running the SNS Tool on the same internal air-gapped network as the NMC.
      - Add the device you want to license. This will allow the SNS Tool to gather the NMC's information.
      - Once the NMC's details have successfully been queried, connect your computer running the SNS Tool to a network with an outgoing internet connection.
      - You can then follow the above licensing process and proceed with updating the newly licensed NMC.
2. If you have an active subscription that you want to reuse on a similar NMC, you can return a subscription to by contacting the **Customer Care Center**. Once your subscription is activated, you can update the firmware on your device(s).

Update NMC Firmware

1. For a list of all Device Statuses, see the table below.
2. In the **Device List**, the NMCs that are eligible for update will have a status displayed as "Ready for update".
   - Select the NMC you want to update.
   - Click **Update Firmware**.

   Note: If you click **Update Firmware** without selecting an NMC, the SNS Tool will automatically update the firmware of all eligible NMCs.
3. You can also update NMCs which have statuses displayed such as "Newer Firmware Found", "At Current Version", or "Mismatched Application" by manually selecting those devices in the **Device List**.

   Note: If a warning icon is displayed next to a device, it may be rebooting, offline, or unresponsive to pings. If the device is offline, firmware updates will be unsuccessful. To turn on ping responses, log into the NMC3 Web UI and navigate to **Configuration** > **Security** > **Ping Response** and enable the **IPv4 Ping Response** checkbox.

Device Status	Description
Activate License to Update	The device has to be activated with the correct license to perform upgrade.
Newer Firmware Found	The device has newer firmware than what is bundled with the SNS Tool.
At Current Version	The device already has the current firmware loaded which is bundled with the SNS Tool.
Mismatched Application	The device has a different application loaded than what is bundled with the SNS Tool.
Ready For Update	The device has passed all pre-update checks and requirements and is ready to update.
Updating Firmware	The device is currently having its firmware updated.
Update Error	The device experienced an error during the firmware update process.
Update Complete	The device has completed the firmware update process.