

Nile Settings Guide

NILE CONFIGURATION GUIDE

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HOW TO CONFIGURE ADMINS

Overview

Once the user signs up for the Nile service, they will get root user privileges. There is only one root user per enterprise. Once the root user gets access, they can start **creating admin access** for other users in their company. Currently, there are **two types** of roles available:

Administrator and **Monitor**.

Configure admins

- Login into the Nile Portal and click on the **“Settings”** tab from the left side navigation pane. Click on **Admins**.
 - Click on the **“+”** sign on the left-hand side corner.
 - Now **input** the email address, full name, country code and phone number of the person.
 - Now, please select the appropriate **group** from the drop-down list. There are two roles available.

Administrator: This role will have complete **read and write** access to the Nile Portal. Person designated with this role can also create more admins as needed.

Monitor: This role will have **read-only** access to the Nile portal. Person designed with this role will not be able to change any configuration or create any admins.

Now click on **save**. The newly created admin should now get an **email** with the instructions to sign up.

HOW TO CONFIGURE A SERVICE AREA

Overview

Service areas are locations where you need Nile connectivity-as-a-service.

- Please make sure you have the **exact address** of the location where you want the Nile Service. Nile Service Block elements will be shipped to the address you input in the service area section.

Configure a Service Area

- Login to the Nile Portal and click on the **“Settings”** tab from the left side navigation pane. Click on **Service Areas**.
- Navigate to DHCP and click on the **‘+’** sign to start adding a site.
 - **Name:** This is where you will define the **site location** where you need the Nile service.
- **Find my address:** This is where Nile will **ship** its network elements. It is important to input the exact address here for shipping.

- Click on the newly created service area and start adding all the **buildings** under that service area. Please input information for each of the buildings where you need the Nile service and save it.
Please note: Sometimes all the buildings won't have a different address so you can simply drop the pin on the map for reference.
- Click on the newly defined building and start adding all the **floors** in that building. Please attach the **floor plans** to each of the floors.

Optional: Once the floor plan has been added, you can also define **Wi-Fi zones** on the floors if applicable. Wi-Fi zones are custom SSID zones used to service a particular set of clients. For example, you can draw a zone around the cafe if you want a specific wireless service (SSID) in that area.

HOW TO CONFIGURE DHCP

Overview

A DHCP Server is a network server that automatically provides and assigns IP addresses, default gateways and other network parameters to client devices. Currently, Nile does not provide a client DHCP server capability and uses the customer's existing DHCP server to assign the IP addresses to the endpoints. However, you can configure a DHCP relay agent on the Nile Portal.

Prerequisite

- Please make sure to have the IP address of all the DHCP servers which you want to use in your enterprise.
- Ensure that there is a bi-directional route from the DHCP server to your core router/firewall which is going to connect to the Nile Service Gateway.

Configure DHCP

- Login to the Nile Portal and click on the **"Settings"** tab from the left side navigation pane. Click on DHCP.
 - **Name:** Please specify the name you would like to use for the **DHCP server**.
 - **Host:** You can specify all the **DHCP server IP addresses** here. If you have multiple DHCP servers, please specify the other IP/FQDN in the subsequent hosts.
 - **Geo Scope:** Select the **sites** where this DHCP server will be used to assign IP address.
 - **Subnet:** These are the subnets from which the IP address will be assigned to the clients at the location selected in the Geo-scope.
 - **Router:** This IP will be consumed by the Nile relay agent when requesting an IP from the DHCP server. **Note:** Please make sure you have configured this IP address as a DHCP option on your DHCP server.

HOW TO CONFIGURE AUTHENTICATION

Overview

Nile supports RADIUS for authentication. RADIUS (Remote Authentication Dial-In User Service) is a client-server protocol and software that enables remote access servers to communicate with a central server to authenticate dial-in users and authorize their access to the requested system or service.

Prerequisite

- Before you start configuring auth, please make sure you have defined the [service areas](#).
- Please make sure to have the IP address of all the RADIUS servers which you want to use in your enterprise.
- Ensure that there is a route from the RADIUS server to your core router/firewall which is going to connect to the Nile Service Gateway.
- Please identify the shared secret which will be configured on the Nile Portal.

Please Note: Currently, we only support adding one RADIUS server per site.

Also, in your RADIUS server, please add Nile as a NAS IP. Please contact your Nile Solutions Architect for getting the NAS IP.

Configure Authentication

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Authentication.
 - **Name:** Please specify the name you would like to use for the **RADIUS server**.
 - **Port:** Please specify the **port** used by the RADIUS server.
 - **Geo Scope:** You can select all the **locations** which will use this RADIUS server to authenticate the clients.
 - **Host:** Please specify the IP address of the **primary RADIUS server** under host 1. Host1 is used as the primary RADIUS server. Host2 and later are used as secondary RADIUS servers. They failover in the event if the primary RADIUS server is unreachable.
 - **Shared secret:** Please enter the **secret key** here.
 - **Guest Portal URL (Optional):** This is the static URL you can input for a RADIUS server. If you don't input the URL here, we will use the dynamic URL which we get from the RADIUS server.

HOW TO CONFIGURE SEGMENTS

Segments are like profiles in which you can define each set of users (e.g. Corporate, guest etc.) in your enterprise. Consider one segment as one VLAN in the traditional networking terms and it includes all your wired and wireless devices. One segment can span across multiple or all of your locations.

Prerequisite

- Before you start configuring segments, please make sure you have configured the below parameters.

Please note: If you are configuring a segment for an Open, WPA2 Personal or WPA3 Personal wireless SSID, you can **skip** the **Authentication** section from the below prerequisites. You can leave the RADIUS option as blank in the next steps.

- [Service Areas](#)
- [DHCP](#)
- [Authentication](#)

Configure Segments

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Segments.
 - **General Info:** Please **name** the segment you would like to create.

Optional: Mark the “guest segment” checkbox only if you are configuring a segment for the Captive Portal and want to input the DNS allow list
 - Navigate to the Service Area and click on **select service area**.
 - Choose the sites you want to assign this segment to. You can either select all the sites or select a few **sites/zones** to assign from the options.
 - **RADIUS:** Please **select** the radius server for each of the locations selected in the subnet.
 - **DHCP:** Please **select** the DHCP server that you want to use for each of the locations.
 - **Subnets:** When you click on the drop-down menu, all the subnets configured in the DHCP server will be displayed. Select all the subnets that will be used in this segment.

HOW TO CONFIGURE WIRELESS/SSID

Overview

In this section, you will create different SSIDs for the users (e.g. Corporate, guest etc.) at all the locations.

HOW TO CONFIGURE WPA2 AND WPA3 ENTERPRISE

PREREQUISITE

- Before you configure WPA2 or WPA3 Enterprise, please make sure you have configured the following:
 - [Service Area](#)
 - [DHCP](#)
 - [Authentication](#)
 - [Segments](#)

Configuration

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Wireless
 - **Name:** Please name the **SSID name** you would like to create.
 - **Security:** Please select the **WPA2 Enterprise or WPA3 Enterprise** option from the list below.
 - **Segments:** If you had configured RADIUS Authentication for a particular segment, that segment will be displayed under the drop-down menu. Please select the appropriate segment for the above SSID and save changes. **Note:** Segments that don’t have RADIUS server configured, will not be displayed in the drop-down menu.

HOW TO CONFIGURE WPA2 AND WPA3 PERSONAL

PREREQUISITE

- Before you configure Wireless, please make sure you have configured the following:
 - [Service Area](#)
 - [DHCP](#)
 - [Segments](#)

Configuration

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Wireless.
 - **Name:** Please name the **SSID name** you would like to create.
 - **Security:** Please select the **WPA2 or WPA3 Personal** option.
 - **Passkey:** Please enter the **passkey** for the SSID.

- **Segments:** Please select the appropriate segment for the above SSID and save changes.

HOW TO CONFIGURE A CAPTIVE PORTAL

Prerequisite

- Before you configure Wireless, please make sure you have configured the following:
 - [Service Area](#)
 - [DHCP](#)
 - [Authentication](#)
 - [Segments](#)

Please make sure you have configured a splash page with your vendor and configured the re-direct URL in the authentication section.

Configuration

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Wireless.
 - **Name:** Please name the **SSID name** you would like to create.
 - **Security:** Please select the **Captive Portal** option.
 - **Segments:** Please select the appropriate segment which is configured for captive portal and save changes.

HOW TO CONFIGURE MAB (MAC AUTHENTICATION BYPASS)

Overview

MAB is used for endpoints such as printers, phones, sensors, cameras etc which are wired devices connected to the Access Switch and do not require 802.1x authentication. In this case, the MAC address of the endpoint is used to authenticate.

Configure MAB

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on MAB

There are **four different ways** to configure **MAB** on the Nile Portal.

1. If you already have any **wired devices** connected to the Nile Access Switches, it will show up on the MAB page. You can then click on the checkbox to select those devices and approve/deny/delete as needed.
2. You can also input the **OUI** of the devices to approve or deny it. Click on “OUI” from the right-hand side upper corner and add the OUI->select segment->approve or deny the devices.
3. You can also approve or deny all devices in a particular segment by clicking on “All” from the right-hand side upper corner. However, Nile **does not** recommend using this method as this can pose a security risk.
4. You can also upload a CSV file if you want to specify rules for multiple devices. Click on “Upload CSV” from the left-hand side upper corner and download the sample csv file. Once you have created your own file, please click on “select csv file” and upload your file.

HOW TO CONFIGURE ALERTS

Overview

Nile Portal sends email alerts on four different incident types: SLA, Infrastructure, Applications, Security.

Configure Alerts

- Login to the Nile Portal and click on the “**Settings**” tab from the left side navigation pane. Click on Global Settings -> Subscriptions.
- You will see four options: SLA, Infrastructure, Application, and Security. Please select the checkbox under the email column to get alerts for each of the specific incident types and save changes.

Please Note: When an admin follows the above steps, it enables alerts only for that user and not for every admin. Every admin needs to login into the Nile portal to enable email alerts for themselves.