

Email Configuration Network Management Card-2

AP9630, AP9631 and
2GrPDUs(AP8XXX)

Email Overview

- The NMC can be configured to send email to up to four recipients when it encounters a problem or event selected by the user. The card does not have a local email server built in, as it relies on the user's email server to send the email.
- This document will explain email configuration requirements and what problems may arise when sending email and how to resolve (where possible) the issue.
- It should be remembered that the email is dependent on the user's email server, so even if the card says it has sent the email, it may not be received at the destination address.

Requirement from the Customer End

- Valid IP Address, Subnet Mask and Default Gateway for NMC card
- Valid Primary DNS and Secondary DNS IP Addresses
- Valid Domain Name
- SMTP Server IP Address
- SMTP Port #
- From Email Address
- Recipient Email Address
- Does SMTP Require authentication to send an email? If so, please get the details from the Customer at the time of configuration.

DNS Setup-NMC 2

- Go to Configuration→Network→DNS

The screenshot displays the Schneider Electric UPS Network Management Card 2 web interface. The top navigation bar includes links for Home, Status, Control, Configuration, Tests, Logs, and About. The Configuration menu is expanded, showing options like Outlet Groups, Power Settings, Shutdown, UPS, Self-Test Schedule, Scheduling, Firmware Update, PowerChute Clients, Sync Control, Third Party Support, Universal I/O, Security, Network, Notification, General, and Logs. The Network option is highlighted, and its sub-menu is also expanded, showing TCP/IP, Port Speed, DNS, Web, Console, and SNMPv1. The DNS option is highlighted. The main content area shows the status of the Smart-UPS X 3000 (Unknown) and Environment (No Alarms Present). A table of Recent Device Events is visible, showing events related to self-tests and communication restoration. The footer includes links to Knowledge Base, Product Center, and Downloads, along with a copyright notice for 2015.

Schneider Electric UPS Network Management Card 2
Smart-UPS/Matrix Application

apc | English | Log Off | Help |

Home Status Control **Configuration** Tests Logs About

Smart-UPS X 3000: Unknown

No Alarms Present

- UPS is Online in Green Mode.

Environment

No Alarms Present

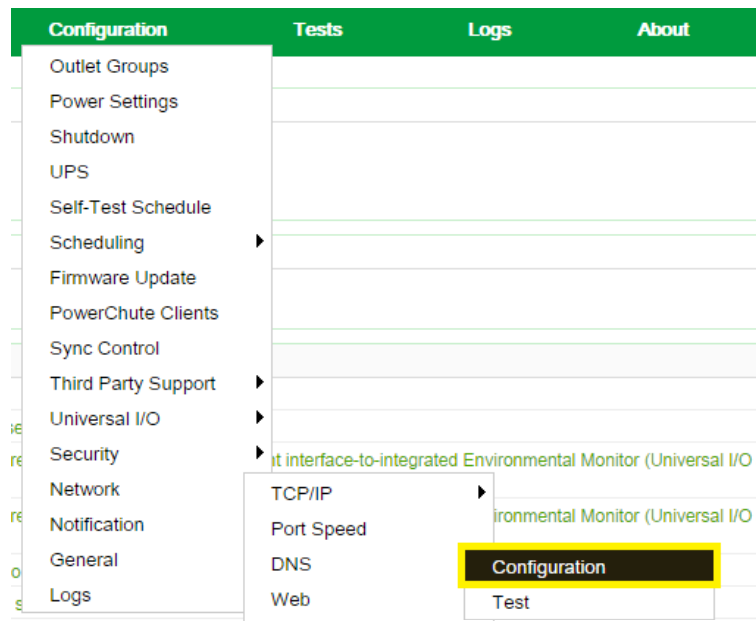
Recent Device Events

Date	Time	Event
06/15/2015	11:32:30	UPS: Self-Test passed
06/15/2015	05:06:50	Environment: Restore communication.
06/15/2015	05:06:50	Environment: Restore communication.
06/15/2015	05:06:50	UPS: Restored the lo
06/12/2015	15:15:19	UPS: The power for s

Knowledge Base | Schneider Electric Product Center | Schneider Electric Downloads

© 2015, Schneider Electric. All rights reserved.

Contd.,



Home Status Control Configuration Tests Logs About

Domain Name System Status

Active Primary DNS Server:	0.0.0.0
Active Secondary DNS Server:	0.0.0.0
Active Host Name:	apc51F044
Active Domain Name (IPv4/IPv6):	example.com
Active Domain Name (IPv6):	example.com

Manual Domain Name System Settings

Override Manual DNS Settings: ☒ Enable

Primary DNS Server: 0.0.0.0

Secondary DNS Server: 0.0.0.0

System Name Synchronization: ☐ Enable

Host Name: apc51F044

Domain Name (IPv4/IPv6): example.com

Domain Name (IPv6): example.com

Enter Valid the following details:
Primary DNS Server IP Address
Secondary DNS Server IP Address
Valid Domain Name

For Local Email Server setting

- In configuring the email for "local server," the first step is to enter the basic networking information if it is not already present (IP, subnet mask and gateway) and the DNS server information needs to be entered on the DNS configuration page.
- The user needs to know his/her email server's network name. Go to the send DNS test section and select query by FQDN. Enter the server name in the query question and press apply. If the DNS server information has not been entered, all DNS queries will fail. The user also needs to ensure both forward AND reverse DNS records are present on his DNS server for his or her email server.

Contd.,

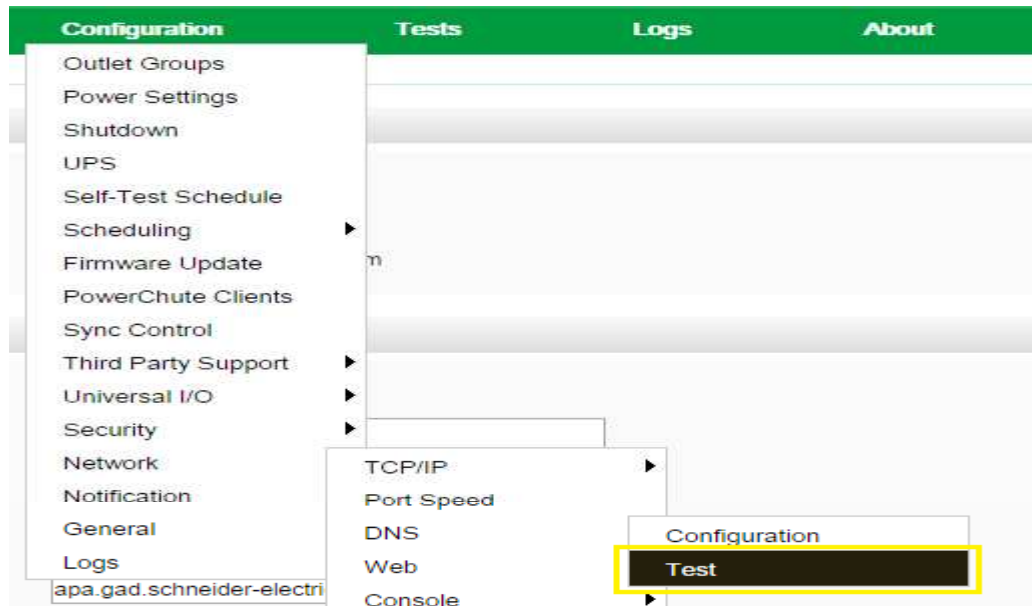
- If the DNS query fails, the user needs to check the DNS server information and ensure he/she has selected the correct query type. Also, check that the correct email server name is being used.
- NMC2 devices with NMC v6.0.6 and higher should provide detailed error messages within the email test option as to why the email is not being sent.

The screenshot displays the NMC2 web interface with a green navigation bar at the top containing links: Home, Status, Control, Configuration, Tests, Logs, and About. The main content area is divided into two sections. The first section, titled 'Domain Name System Status', shows the following information: Active Primary DNS Server: 10.216.108.8, Active Secondary DNS Server: 10.216.109.9, Active Host Name: apc51F044, Active Domain Name (IPv4/IPv6): apa.gad.schneider-electric.com, and Active Domain Name (IPv6): example.com. The second section, titled 'Manual Domain Name System Settings', contains several configuration options. 'Override Manual DNS Settings' is checked and labeled 'Enable'. Below this are input fields for 'Primary DNS Server' (10.216.108.8) and 'Secondary DNS Server' (10.216.109.9). 'System Name Synchronization' is unchecked and labeled 'Enable'. Below this are input fields for 'Host Name' (apc51F044), 'Domain Name (IPv4/IPv6)' (apa.gad.schneider-electric.com), and 'Domain Name (IPv6)' (example.com). At the bottom of this section are 'Apply' and 'Cancel' buttons.

Domain Name System Status	
Active Primary DNS Server:	10.216.108.8
Active Secondary DNS Server:	10.216.109.9
Active Host Name:	apc51F044
Active Domain Name (IPv4/IPv6):	apa.gad.schneider-electric.com
Active Domain Name (IPv6):	example.com

Manual Domain Name System Settings	
Override Manual DNS Settings:	☒ Enable
Primary DNS Server:	10.216.108.8
Secondary DNS Server:	10.216.109.9
System Name Synchronization:	☐ Enable
Host Name:	apc51F044
Domain Name (IPv4/IPv6):	apa.gad.schneider-electric.com
Domain Name (IPv6):	example.com
Apply Cancel	

DNS Query



Send DNS Query

Last Query Response: 2.19.88.250

Query Type: by Host ▼

Query Question: www.apc.com

Apply Cancel

Send DNS Query

Last Query Response: 216.58.208.197

Query Type: by Host ▼

Query Question: www.gmail.com

Apply Cancel



Send DNS Query

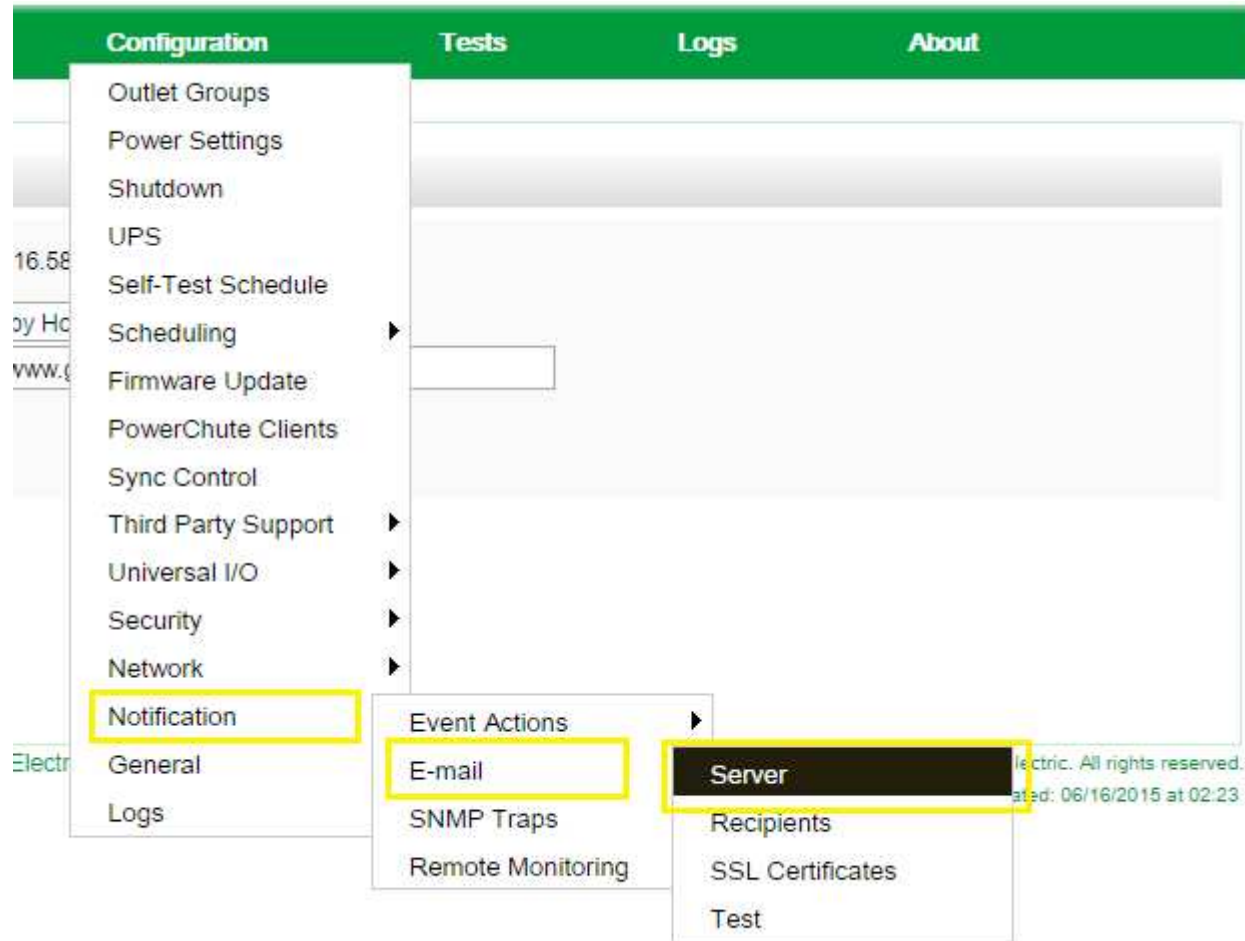
Last Query Response: 10.218.104.99

Query Type: by FQDN ▼

Query Question: apa.gad.schneider-electric.com

Apply Cancel

Enter Email Server Details



Contd.,

E-mail Server Settings

Active Primary DNS Server: 10.216.108.8
Active Secondary DNS Server: 10.216.109.9

Outgoing Mail Configuration
From Address: address@example.com
SMTP Server: mail.example.com
Port: 25 [25, 465, 587, 5000 to 32768]
Authentication: ☐ Enable
User Name: User
Password:
Confirm Password:
Advanced
Use SSL/TLS: Never ▼
Require CA Root Certificate: ☐ Enable
File Name: There are no SSL certificates loaded.
Apply Cancel

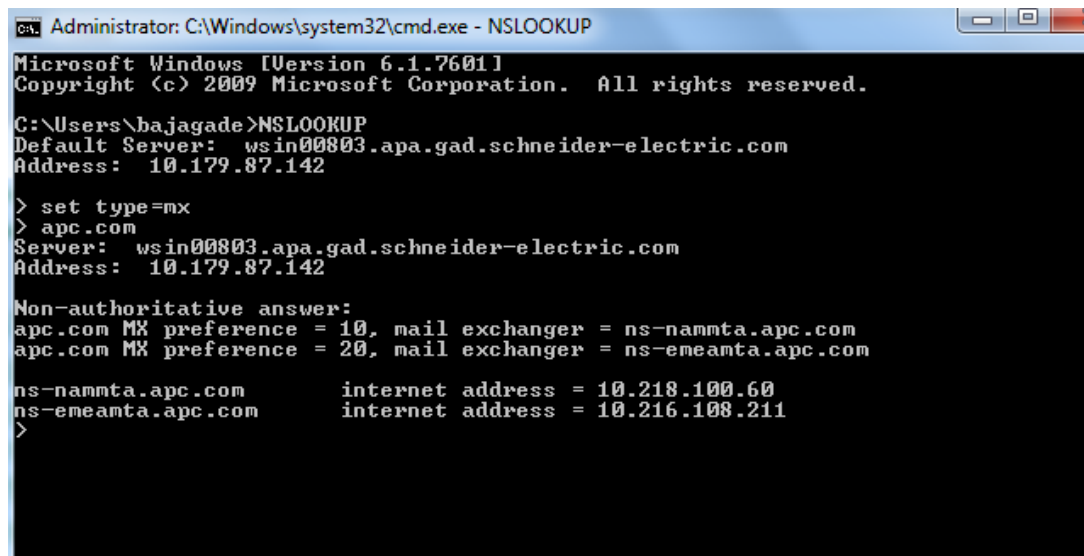
For Recipients Email Server setting

- This option allows the NMC to do a lookup on a remote domain's DNS server for an MX record. This option only tries once to relay the mail to the recipient's mail server after an MX record is found.
- You can also use NSLOOKUP to check to see if the email server registered.
- At a command prompt type NSLOOKUP. The system will respond with a default server name, the server IP and a > prompt.
- At the > prompt enter the following as shown below:

```
>set type=mx
the system will respond with
>
enter the domain name of the server you require information on and press enter (in this example we will use apc.com)
> apc.com
Server: <dns server name>
Address: <dns server ip address>
```

Contd.,

- The mail server host name and IP addresses will be listed with the MX preference. The entries we are looking for are the lines with MX preference = XX. You will generally use the lowest MX preference number for the email server. The most common reason for this method failing is the lack of a reverse DNS record in the DNS server for the mail server.
- NMC2 devices with NMC v6.0.6 and higher should provide detailed error messages within the email test option as to why the email is not being sent.



```
Administrator: C:\Windows\system32\cmd.exe - NSLOOKUP
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\bajagade>NSLOOKUP
Default Server: wsin00803.apa.gad.schneider-electric.com
Address: 10.179.87.142

> set type=mx
> apc.com
Server: wsin00803.apa.gad.schneider-electric.com
Address: 10.179.87.142

Non-authoritative answer:
apc.com MX preference = 10, mail exchanger = ns-nammta.apc.com
apc.com MX preference = 20, mail exchanger = ns-eneamta.apc.com

ns-nammta.apc.com internet address = 10.218.100.60
ns-eneamta.apc.com internet address = 10.216.108.211
>
```

Custom Server setting (NMC2 v6.0.6 and higher only)

- This option allows the user to enter custom server information (server name, port, authentication information) per recipient, if needed.
- This is a recommended alternative to the Recipients server setting as it will allow you to specify information such as port number and SMTP authentication credentials since Recipients server setting does not provide that.

- NMC2 firmware 5.1.X allows for basic (plain text) SMTP authentication only. Check with your system administrator to determine whether the SMTP server supports authentication or not and what type is required. If authentication is required, navigate to Administration Tab->Notification-> Email->recipients, and click on the desired recipient. Ensure there are no typos in the email address. Enter the user name and password for the email account required by the SMTP server. As of AOS 5.1.5 and higher, the SMTP port number can be changed as well.
- If authentication is not required, navigate to the Administration Tab-> Notification-> Email->recipients, and click on the desired recipient. Leave the "Password" and "Confirm Password" fields blank, then click "Apply." Doing this will null out the password field. If the password is null, the NMC won't try to authenticate with the SMTP server.

- Beginning with NMC2 v6.0.6 and higher, SSL/TLS email authentication is required. If authentication is enabled, there are three available modes/options. If supported is the default setting and recommended if you're not sure what your mail server requires. Each mode is explained below and is configured within the Configuration->Notification->Email options within the web or can now be configured via the command line interface if desired.
 - If supported – The NMC will begin the SMTP conversation with the EHLO command and see if SSL/TLS is a supported option on the SMTP server. If supported, the NMC will use SSL/TLS. If unsupported, the email will be sent using basic (plain text) authentication.
 - Always – The NMC will begin the SMTP conversation with the EHLO command and ensure SSL/TLS is an available option reported by the SMTP server. The email will not be sent if authentication is not configured on the server and Always is selected.
 - Implicit – The NMC skips any SSL/TLS negotiations and enters immediately into a secured connection on a user specified port.

Make the most of your energy™

