

The Advanced Features supports RPC-API.

The RPC-API may be configured to use two options:

- JSON over HTTP
- JSON over HTTPS

The RPC-API service is disabled by default. If enabled, the default port number is 80. If it is desired to configure the RPC-API as JSON over HTTP, then the RPC-API port number must be configured to a different port number other than 80 so as not to conflict with HTTP. If it is desired to configure the RPC-API as JSON over HTTPS, then the RPC-API default port number 80 is acceptable due to the HTTPS port number 443. However, the RPC-API port number may be modified in this case as well. The HTTP and HTTPS services may not be enabled simultaneously.

## 1. Display the Default Services

The default services configuration are displayed via the console interface. Use the following procedure to connect to the Advance Features unit and display the default services configuration.

1. Connect a Serial cable from a COM port on the laptop or PC to the Serial Interface on the unit.
2. Launch Putty and configure the Serial connection as follows:

```

Speed (baud)  115200
Data bits     8
Stop bits     1
Parity        None
Flow Control  XON/XOFF
    
```

3. Press the Return key.
4. Enter enable.
5. Enter the following command to display the default services configuration.

```

Switch# show services

Networking services configuration:

Service Name      Status      Port      Protocol  Service ACL
-----+-----+-----+-----+-----
http              enable      80        TCP       -
https             disable     443       TCP       -
rpc-api           disable     -         TCP       -
telnet            disable     23        TCP       -
ssh               enable      22        TCP       -
    
```

```
snmp          disable          161          UDP          -
```

## 2. Configure RPC-API over HTTP

The HTTP service is enabled by default and is configured to use port 80.

This procedure requires:

- Enable the RPC-API service

*In this example the RPC-API port number will be configured to use port 2000.*

1. Press the Return key.
2. Enter enable.
3. Enter the following commands to enable the RPC-API service and display the services.

```

Switch# configure terminal
Switch(config)# service rpc-api enable port 2000
Switch(config)# exit
Switch# show services

Networking services configuration:
Service Name      Status      Port      Protocol  Service ACL
-----+-----+-----+-----+-----
http              enable      80        TCP       -
https             disable     443       TCP       -
rpc-api           enable      2000      TCP       -
telnet            disable     23        TCP       -
ssh               enable      22        TCP       -
snmp              disable     161       UDP       -
    
```

### 3. Configure RPC-API over HTTPS

The HTTPS service is disabled by default and is configured to use port 443.

This procedure requires:

- Disable the HTTP service
- Enable the HTTPS service
- Enable the RPC-API service

*In this example the RPC-API port number will be configured to use port 2000.*

1. Press the Return key.
2. Enter enable.
3. Enter the following commands to disable the HTTP service, enable the HTTPS service, enable the RPC-API service and display the services.

```

Switch# configure terminal
Switch(config)# service http disable
Switch(config)# service https enable
Switch(config)# service rpc-api enable port 2000
Switch(config)# exit
Switch# show services

Networking services configuration:
Service Name      Status      Port      Protocol  Service ACL
-----+-----+-----+-----+-----
http              disable    80        TCP       -
https             enable     443       TCP       -
rpc-api           enable     2000      TCP       -
  
```

telnet	disable	23	TCP	-
ssh	enable	22	TCP	-
snmp	disable	161	UDP	-