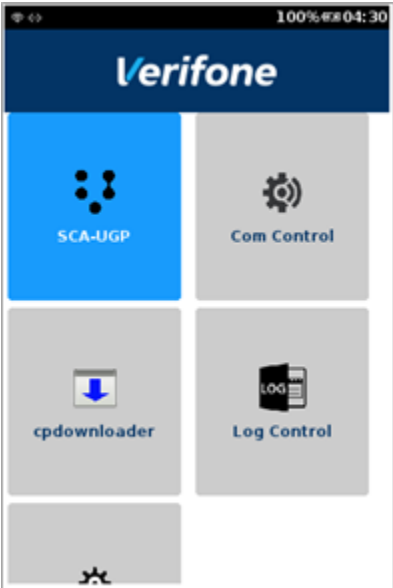
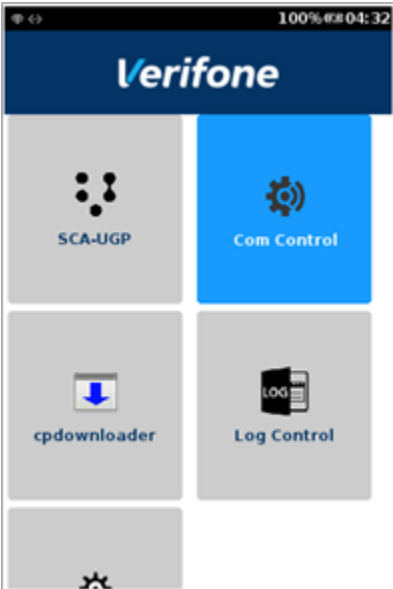


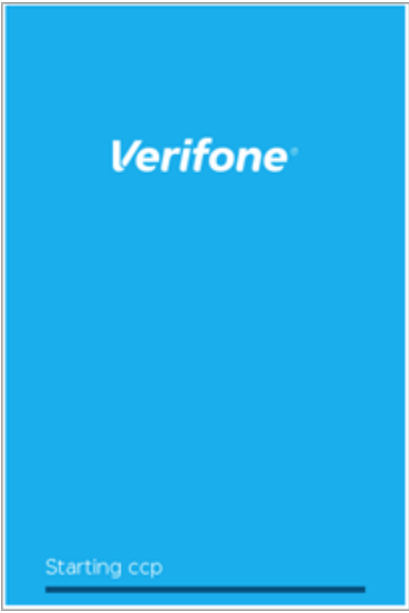
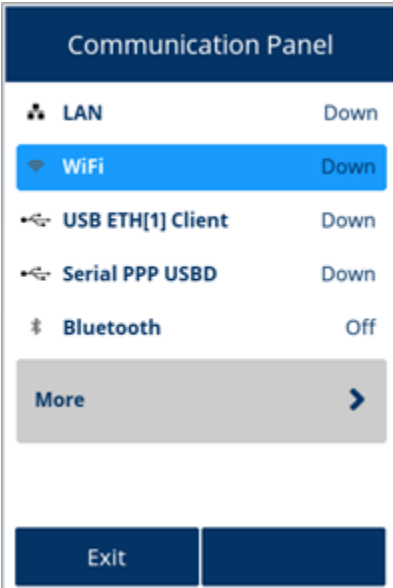
WiFi Configuration

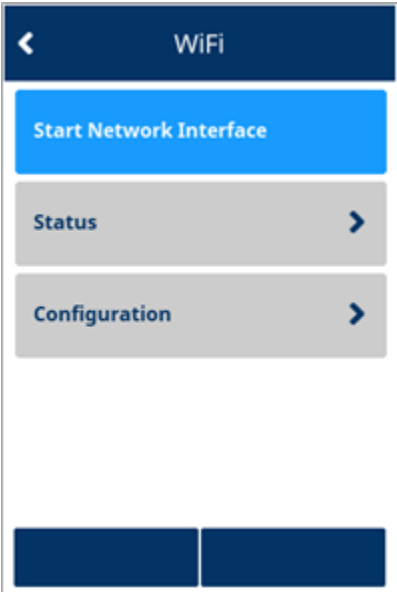
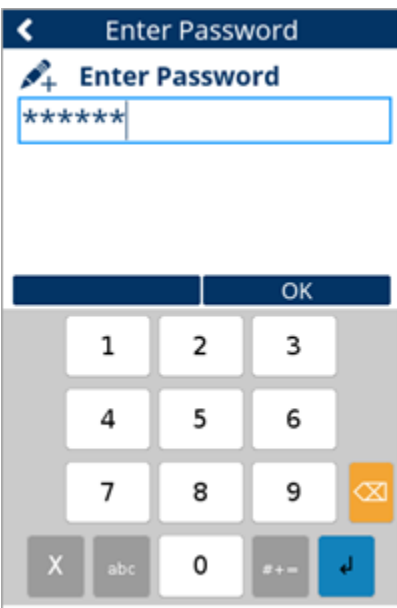
WiFi network can be configured in three ways for SCA application, like using Com Control Panel, updating SCA configuration package (ccpupdate.xml file) and downloading parameter using VHQ.

Configuration Using CCP

The user can configure the network by using Com Control Panel (CCP) and following are the steps to configure:

Display	Steps Detail
	Press 1 5 9 simultaneously on the device to start the application Mac Menu.
	Select Com Control option.

Display	Steps Detail
	CCP screen is starting.
	Communication Panel screen displaying the connection status. Select WiFi to configure the network.

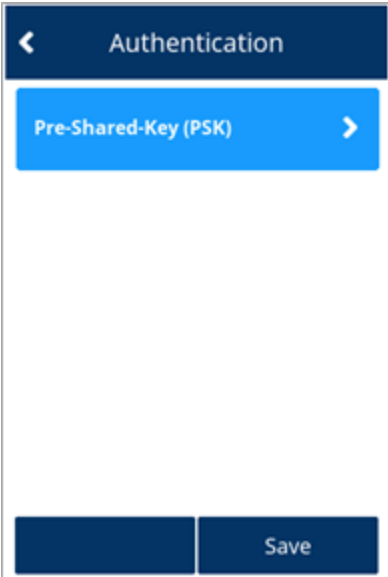
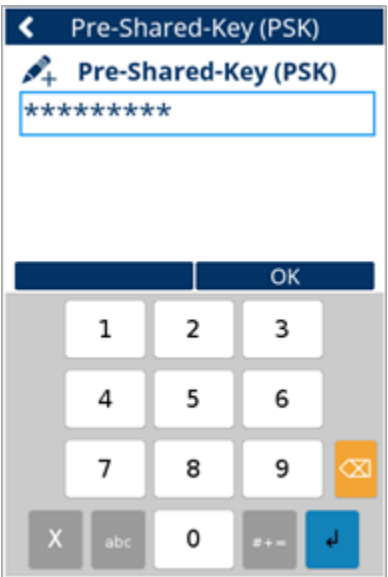
Display	Steps Detail
 The screenshot shows a 'WiFi' configuration screen. At the top is a dark blue header with a back arrow and the text 'WiFi'. Below the header is a large blue button labeled 'Start Network Interface'. Underneath are two grey buttons: 'Status' and 'Configuration', each with a right-pointing chevron. At the bottom of the screen are two dark blue rectangular buttons.	WiFi configuration page. Select Configuration to configure Network communication.
 The screenshot shows an 'Enter Password' screen. It has a dark blue header with a back arrow and the text 'Enter Password'. Below the header is a section with a pencil icon and the text 'Enter Password', followed by a text input field containing seven asterisks. At the bottom is a numeric keypad with buttons for digits 1-9, 0, and symbols like 'X', 'abc', '#+*', and a blue arrow key. There is also an 'OK' button at the top right of the keypad area.	Enter password screen is displayed. Enter the required password or reach out to <i>Verifone Contact</i> for actual password and press Ok or Enter.

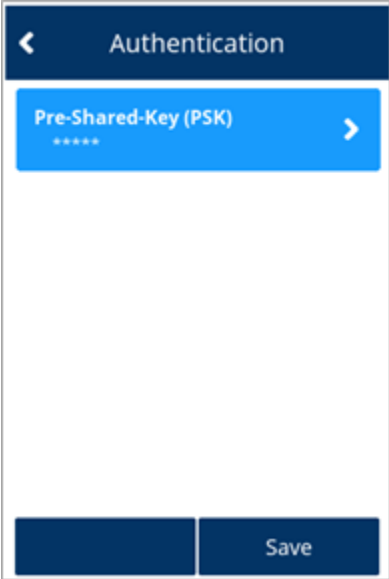
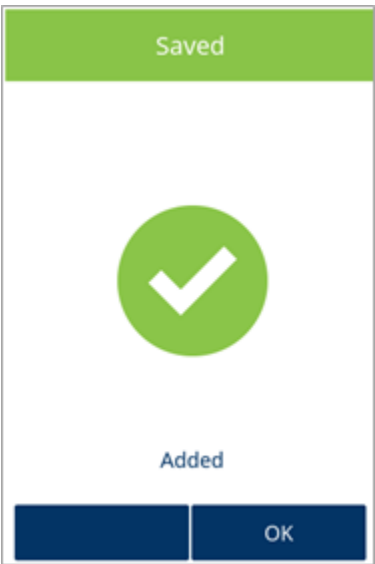
Display	Steps Detail
	Configuration page with options to select either New or WiFi Scan.

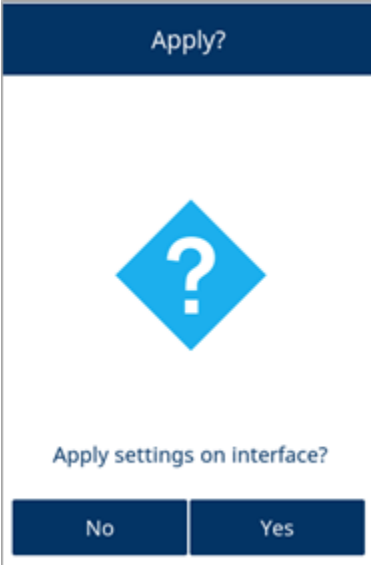
WiFi Scan

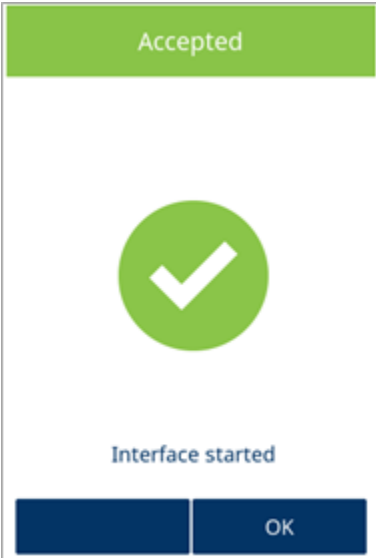
Display	Steps Detail
	Select WiFi Scan to check for existing network. Scanning in progress screen.

Display	Steps Detail
 The screenshot shows the 'WiFi Scan' screen. At the top is a back arrow and the title 'WiFi Scan'. Below are five network entries, each with a signal strength indicator '[100%]' and a name: 'dlink-CAC9' (highlighted in blue), 'VFI_ILOBBY', 'VFI_DEV', 'VFI_LAN', and 'VFI_GUEST'. At the bottom are two buttons: 'Refresh' and an empty button.	Select the Network name to configure.
 The screenshot shows the 'VFI_GUEST' configuration screen. At the top is a back arrow and the title 'VFI_GUEST'. Below are several settings, each with a label and a value: 'SSID' (VFI_GUEST), 'Protocol' (WPA 2), 'Key Management' (Pre-Shared-Key (PSK)), 'Pairwise cipher' (CCMP (AES)), 'Group cipher' (CCMP (AES)), 'Signal' (88% / -56 dBm), 'Frequency' (5300 MHz), and 'BSSID' (0C:10:00:13:00:10:00). At the bottom are two buttons: an empty button and 'Add'.	Select Key Management to enter the network password.

Display	Steps Detail
	Select the PSK.
	Enter the network password.

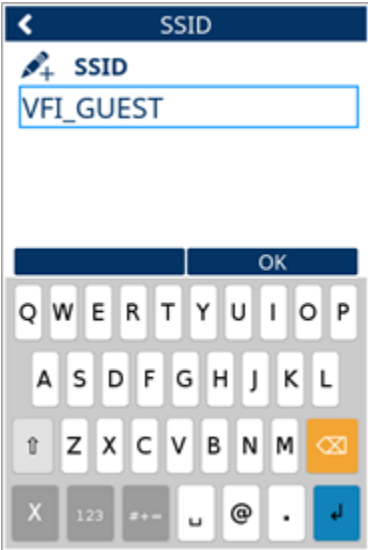
Display	Steps Detail
	Select Save.
	Notification screen as the network is Added and select OK.

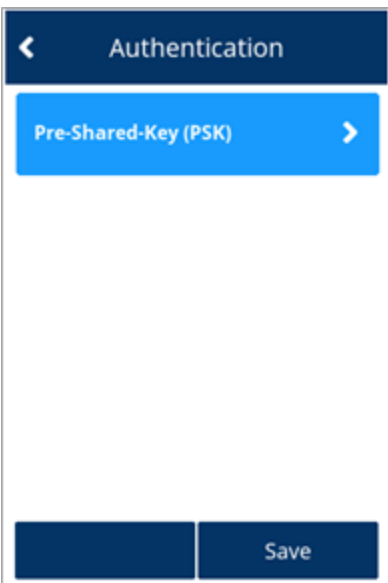
Display	Steps Detail
 The screenshot shows a dialog box titled "Apply?". In the center is a large blue diamond containing a white question mark. Below the diamond, the text "Apply settings on interface?" is displayed. At the bottom, there are two buttons: "No" on the left and "Yes" on the right.	Select Yes to apply the settings and to start the network interface.
 The screenshot shows a screen titled "WiFi". In the center is a large black circular arrow icon, indicating a loading or starting process. Below the icon, the text "Start Network Interface" is displayed. At the bottom, there are two empty rectangular buttons.	Starting the configured Network Interface.

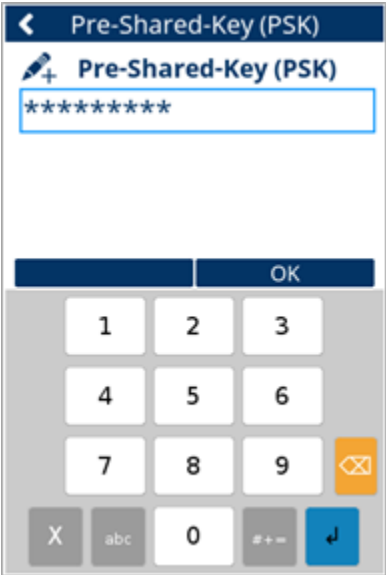
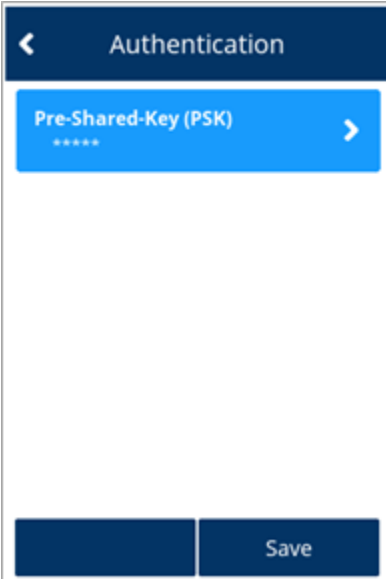
Display	Steps Detail
	The selected network is Configured. Press OK and return to WiFi configuration page.

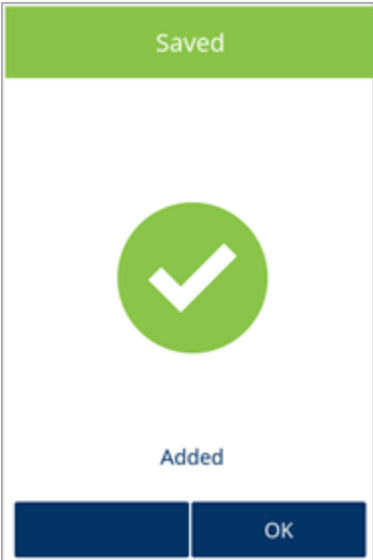
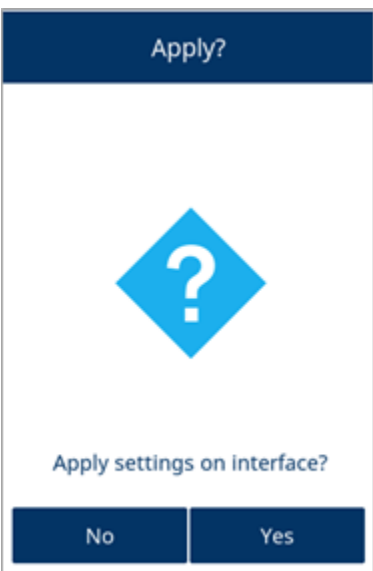
New

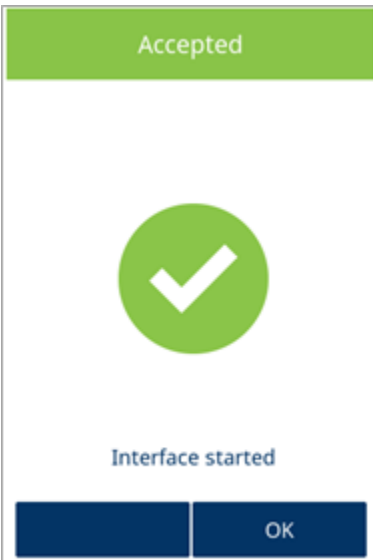
Display	Steps Detail
	Select the SSID.

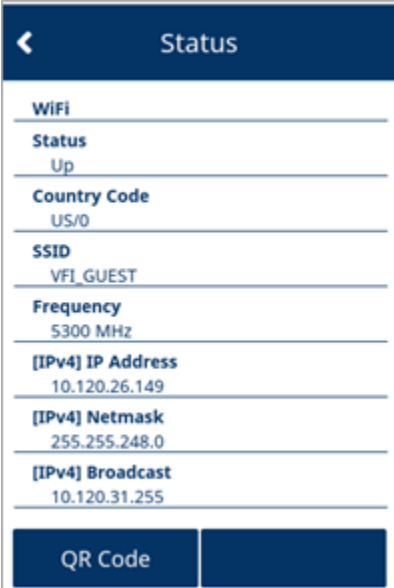
Display	Steps Detail
	Add the network name in SSID field and press OK or Enter.
	The new SSID name is displayed and select Save.

Display	Steps Detail
 The screenshot shows a configuration screen titled 'VFI_GUEST'. It lists several settings: SSID (VFI_GUEST), Protocol (WPA 2), Key Management (Pre-Shared-Key (PSK)), Pairwise cipher (CCMP (AES)), Group cipher (CCMP (AES)), Signal (88% / -56 dBm), Frequency (5300 MHz), and BSSID (0C:10:00:13:01:00). At the bottom, there is an 'Add' button.	Select Key Management to enter the network password.
 The screenshot shows an 'Authentication' screen. It has a blue button labeled 'Pre-Shared-Key (PSK)' with a right arrow. At the bottom, there is a 'Save' button.	Select the PSK.

Display	Steps Detail
	Enter the network password.
	Select Save.

Display	Steps Detail
	Notification screen as the network is Added and select OK.
	Select Yes to apply the settings and to start the network interface.

Display	Steps Detail
 The screen displays a dark blue header with the text 'WiFi'. Below the header is a large black loading spinner. At the bottom, the text 'Start Network Interface' is displayed above two dark blue rectangular buttons.	Starting the configured Network Interface.
 The screen displays a green header with the text 'Accepted'. Below the header is a large green circle containing a white checkmark. At the bottom, the text 'Interface started' is displayed above two dark blue rectangular buttons; the right button is labeled 'OK'.	The selected network is Configured. Press OK and return to WiFi configuration page.

Display	Steps Detail
	Select Status screen to view the WiFi configuration details.

SCA Configuration Package

SCA Configuration Package is another process of configuring the network., which is done as part of SCA configuration package provided to each customer. Customer needs to share minimum of the following requirements details with Verifone to create these configuration package as **ccp_update.xml**.

For Static connection type:

- Static IP
- SSID
- PSK

For DHCP connection type:

- SSID
- PSK

Following are some examples of **ccp_update.xml** with configured values:

Static type of connection for WiFi

```
<?xml version="1.0"?>
<data xmlns="http://www.verifone.com/sd/information-service/action" direction="insert_or_update">
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Type" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Service_Name" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Startup_Mode" Value="APDP"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Stop_Mode" Value="0"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Ip_Mode" Value="1"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Ip_Address" Value="192.168.10.120"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Netmask" Value="255.255.255.0"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Default_Gateway" Value="192.168.10.121"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Dns_1" Value="8.8.4.4"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/Group" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/Protocol" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/Protocol" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/SSID" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/Visibility" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/Key_Mgmt" Value="WLAN"/>
  <tag condition="*" Name="com.verifone.internal.default.wifi.WLAN/Wlan_Mode/PSK" Value="123456789"/>
</data>
```

https://verifone.cloud/docs/sca-functional-specification/html/comm_setup/wifi_config

Updated: 04-Dec-2024

DHCP type of connection for WiFi

```
<data d:action="insert_or_update" xmlns:d="http://www.verifone.com/adk/information-service/action">
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/type" Value="WLAN"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/device_name" Value="wlan0"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/startup_mode" Value="auto"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/timeout" Value="0"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/ipv4_enabled" Value="1"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/ipv6_enabled" Value="0"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/dhcp_enabled" Value="1"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/visibility" Value="HIDDEN"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/group" Value="AUTO"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/pairwise" Value="AUTO"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/bss_type" Value="INFRA"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/proto" Value="AUTO"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/key_mgmt" Value="PSK"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/auth_alg" Value="OPEN"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/ssid" Value="DB Internal"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/psk" Value="W0rkingM@ch!n3$?"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/band" Value="5"/>
  <Tag d:condition="*" Name="com/_internal/default/net/WLAN0/wlan_node/0/priority" Value="1"/>
</data>
```

SCA Parameters

This is the third process to configure the WiFi network. This can be performed by downloading SCA parameters, provided in Parameter Definition File (.vpdx) and Parameter Form File (.vpfx) using VHQ. Following are the list of parameters to be enabled to accept Network parameters and apply to ADK through VHQ Parameter Download.

- ADVCOMMSENABLED
- FORCENETWORKCFG
- REBOOTAFTERPARMDLD

Refer to [Application Parameters](#), [Parameters for WLAN Interface](#) and [Parameters for WLAN_NODE Interface](#) sections for the parameter updates on CCP.