

WPS README

WICED WPS2 Test Application

Enrollee Testing

The WICED console application includes a 'join_wps' command which supports association to an AP using WPS for test and demonstration purposes. The command requires different parameters depending on WPS mode and IP addressing requirements:

```
Usage: join_wps <pbw|pin> [pin] [<ip> <netmask> <gateway>]
```

Some Examples :

To join an AP using PIN mode and DHCP, where the PIN is entered on the command line

```
WICED> join_wps pin 12345670
```

To join an AP using PIN mode and a fixed IP address, where the PIN is entered on the command line

```
WICED> join_wps pin 12345670 192.168.1.50 255.255.255.0 192.168.1.1
```

To join an AP using PIN mode and DHCP, where the PIN is auto-generated

```
WICED> join_wps pin
Enter this PIN in the other device: 87162981
Starting Enrollee in PIN mode
```

To join an AP using PIN mode and a fixed IP address, where the PIN is auto-generated

```
WICED> join_wps pin 192.168.1.50 255.255.255.0 192.168.1.1
Enter this PIN in the other device: 87162981
Starting Enrollee in PIN mode
```

To join an AP using PBC mode and DHCP

```
WICED> join_wps pbw
```

To join an AP using PBC mode and a fixed IP address

```
WICED> join_wps pbw 192.168.1.50 255.255.255.0 192.168.1.1
```

Notes:

Use the 'status' command to get version information:

```
WICED> status
WICED Version : 2.4.0
Platform      : BCM943362WCD4
MAC Address   : 00:90:4C:E7:71:62
STA Interface : Down
AP Interface  : Down
WICED>
```

The console application does not have a command to scan for WPS APs or to associate to a particular WPS AP. This functionality may be added later but for now the console application is consistent with the way that an appliance without a display would work.

Registrar Testing

To test the internal Registrar, first start a SoftAP and then start the internal Registrar.

Starting a SoftAP

Usage: start_ap <ssid> <open|wpa2|wpa2_aes> <key> <channel> <wps>

Notes and known issues:

Starting a Soft AP in open mode (no encryption) requires a dummy argument for <key>

The SoftAP does not support External Registrar functionality.

SoftAP may be stopped by using the stop_ap command.

Examples:

Start an AP using WPA2-AES

```
WICED> start_ap YOUR_AP_SSID wpa2_aes 12345678 6 wps
```

Start an AP using WPA2/WPA mixed mode

```
WICED> start_ap YOUR_AP_SSID wpa2 12345678 6 wps
```

Start an AP using open mode (no encryption)

```
WICED> start_ap YOUR_AP_SSID open DUMMY_KEY 6 wps
```

Starting the Internal Registrar

Usage: start_registrar <pbcc|pin> [pin]

Notes and known issues:

The internal Registrar can be started in either PIN or PBC mode. For PIN mode the Enrollee's PIN must be entered.

Examples:

Starting the internal Registrar in PBC mode:

```
WICED> start_registrar pbc
```

Starting the internal Registrar in PIN mode:

```
WICED> start_registrar pin ENROLLEE_PIN
```

Restarting the Internal Registrar

The internal registrar can be restarted once it is running in either PIN or PBC mode.

Examples:

```
WICED> wps_registrar_restart
```