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**Synopsis**

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Reference Documents

The documents listed below provide complementary specifications and information for the device:

- NONE

About This Document

This document describes the WiLink 6.1 *.ini file and its parameters.

The document contains the following chapters:

- **Chapter 1, Overview**, page 6, introduces the WiLink ini file.
- **Chapter 2, Ini File Parameters**, page 8, provides a summary and a detailed table describing each parameter.
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The *.ini file configures driver behavior and is loaded upon driver initialization, in order to customize its behavior to best meet customer needs.

Parameters in the *.ini file may be changed by editing the *.ini file entries using a text editor. Parameter changes take effect during the following driver load.

The *.ini file is located under the /WiLink/platforms/ps/linux directory.
1.1 Synopsis

Each *.ini line item adheres to the following convention:

Param = Value
Unless otherwise noted, parameters are referenced to the Front End Module’s (FEM’s) single-ended RFANT port (without the band-pass filter at the FEM output).

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## 2.1 Short Description

### Table 1: Ini File Parameters

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### Detailed Description

#### 2.2

#### 2.2.1 SmeConnectMode

If set to AUTO, the driver initiates a SCAN automatically, based on the configuration, and selects an appropriate BSSID. If set to MANUAL, the driver does not initiate a SCAN operation and does not select a BSSID. Instead, the application initiates the scan.

**Values:**
- 0: AUTO
- 1: Manual

**Default:** 1

#### 2.2.2 WME_Enable

This parameter defines whether or not quality of service is supported.

**Values:**
- 0: Disabled
- 1: Enabled

**Default:** 1

#### 2.2.3 dot11NetworkType

This parameter defines the 802.11 mode.

**Values:**
- 1: B mode
- 2: A mode
- 3: G mode
- 4: A/G Dual mode

**Default:** 3

#### 2.2.4 SmeScanGChannelList

This parameter provides the list of channels to be scanned when working in G band.

**Values:** List of channels in G band, from 1 to 14

**Default:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

#### 2.2.5 SmeScanAChannelList

This parameter provides the list of channels to be scanned when working in A band.

**Values:** List of channels in A band, from 36 to 64

**Default:** 36, 40, 44, 48, 52, 56, 60, 64
2.2.6  **BeaconListenInterval**
This parameter defines the number of N-beacons to wake up. It is used when working in Short Doze mode.

Values:  1 - 50  
Default:  1

2.2.7  **DtimListenInterval**
This parameter defines the number of N-DTIMs to wake up. It is used when working in Long Doze mode.

Values:  1 - 50  
Default:  1

2.2.8  **dot11PowerMode**
This parameter defines the default Power mode profile of the station.

Values:  
0: Auto. The Power mode toggles between Active mode and the defined Doze mode.  
1: Always active.  
2: Short doze.  
3: Long doze.  
Default:  0

2.2.9  **PowerMgmtHangOverPeriod**
This parameter defines the time, in milliseconds, during which the station will remain awake after sending a frame to the AP, indicating that the station is going into Power Save.

Values:  5 - 255  
Default:  10

2.2.10  **AutoPowerModeDozeMode**
This parameter defines the default Doze mode (short or long) that Auto mode uses when toggling between doze and active.

Values:  
2: Short doze  
3: Long doze  
Default:  2

2.2.11  **AutoPowerModeActiveTh**
This parameter specifies the number of frames per seconds for moving from Doze mode to Active mode, if Power mode is set to Auto.

Values:  2 - 30,000  
Default:  15
2.2.12 **AutoPowerModeDozeTh**
This parameter specifies the number of frames per seconds for moving from Active mode to Doze mode, if Power mode is set to Auto.
Values: 1 - 30,000
Default: 8

2.2.13 **defaultPowerLevel**
This parameter specifies the default power level to be used when the station is not connected.
Values:
- 0: ELP
- 1: Power down
- 2: Awake
Default: 0

2.2.14 **PowerSavePowerLevel**
This parameter specifies the default power level to be used when the station is connected.
Values:
- 0: ELP
- 1: Power down
- 2: Awake
Default: 0

2.2.15 **TxPower**
This parameter specifies the default transmission power, in dBm * 10.
Values: 0 - 250
Default: 205

2.2.16 **dot11FragmentationThreshold**
This parameter specifies the minimum frame size, in bytes, used for fragmentation.
Values: 256 - 4,096 (must be a multiple of 256)
Default: 4,096

2.2.17 **dot11RTSThreshold**
This parameter specifies the threshold of the frame size, in bytes, to send Request To Send frame.
Values: 0 - 4,096
Default: 4,096
2.2.18  **WPAMixedMode**
This parameter defines whether both the WPA and the WPA2 are supported.

Values:
- 0: Only the WPA is supported.
- 1: Both the WPA and WPA2 are supported.

Default: 1

2.2.19  **RSNPreAuthentication**
This parameter defines if Preauthentication is supported.

Values:
- 0: Not supported
- 1: Supported

Default: 1

2.2.20  **AllowedChannelsTable24**
When working in 2.4 GHz radio band, this parameter defines the following for each channel:
- Bit 7: Whether it is allowed to be scanned
- Bit 6: Whether it is allowed to be scanned in Active mode
- Bits 0-4: The maximum Tx power allowed when scanning

Each byte correlates to one channel in sequential order.

Values: 00-FF for each channel

Default: FFFFFFFFFFFFFFFFFFFFFFFFF

2.2.21  **AllowedChannelsTable5**
When working in 5.0 GHz radio band, this parameter defines the following for each channel:
- Bit 7: Whether it is allowed to be scanned
- Bit 6: Whether it is allowed to be scanned in Active mode
- Bits 0-4: The maximum Tx power allowed when scanning

Each byte correlates to one channel in sequential order.

Values: 00-FF for each channel

Default:
```
FF000000FF000000FF000000FF000000FF000000FF000000
FF000000FF000000FF000000FF000000FF000000FF000000
FF000000FF000000FF000000FF000000FF000000FF000000
FF000000FF000000FF000000FF000000FF000000FF000000
```

2.2.22  **SpectrumManagement**
This parameter defines if the 802.11h standard is supported.

Values:
- 0: Not supported
- 1: Supported

Default: 0

2.2.23  **RxBroadcastInPs**
This parameter defines whether or not the reception of broadcast frames while in PS is enabled.

Values:
- 0: Disabled
- 1: Enabled

Default: 1

2.2.24  **RatePolicyUserShortRetryLimit**
This parameter specifies the number of transmission retries for short frames (less than or equal to dot11RTSThreshold).

Values:
- 1 - 255

Default: 10

2.2.25  **RatePolicyUserLongRetryLimit**
This parameter specifies the number of transmission retries for long frames (greater than dot11RTSThreshold).

Values:
- 1 - 255

Default: 10

2.2.26  **BeaconReceiveTime**
This parameter defines how much time, in milliseconds (msecs), to wait for the beacon, before going back into power save.

Values:
- 10 - 1,000 msecs

Default: 50 msecs

2.2.27  **desiredPsMode**
This parameter defines the global power-save delivery protocol.

Values:
- 0 – **Standard PS**: The station sends a PsPoll frame in order to retrieve the data buffered at the AP. As a result, the AP sends only one frame to the station.
- 1 – **UPSD**: The station sends a data frame in order to retrieve the data buffered at the AP. As a result, the AP sends data frames according to the service period indicated by the station.

Default: 1
2.2.28 \textbf{QOS\_wmePsModeBE}

This parameter defines the power-save delivery protocol for the Best Effort access category.

Values: 0 - 1 (For exact values, refer to the desiredPsMode field.)

Default: 0

2.2.29 \textbf{QOS\_wmePsModeBK}

This parameter defines the power-save delivery protocol for the Background access category.

Values: 0 - 1 (For exact values, refer to the desiredPsMode field.)

Default: 0

2.2.30 \textbf{QOS\_wmePsModeVI}

This parameter defines the power-save delivery protocol for the Video access category.

Values: 0 - 1 (For exact values, refer to the desiredPsMode field.)

Default: 0

2.2.31 \textbf{QOS\_wmePsModeVO}

This parameter defines the power-save delivery protocol for the Voice access category.

Values: 0 - 1 (For exact values, refer to the desiredPsMode field.)

Default: 1

2.2.32 \textbf{Clsfr\_Type}

This parameter defines the packet classification type. The classified packet is mapped to one of the QoS user priorities and is transmitted over the WLAN using the corresponding access category.

Values: 0: Classification according to 802.1d tag

1: Classification according to Diffserv control service point

2: Classification according to IP port

3: Classification according to IP port and IP address

Default: 3

2.2.33 \textbf{NumOfDstIPPortClassifiers}

This parameter defines the number of classifiers when the classification type is based on the IP port and IP address.

Values: 0 - 16

Default: 0
2.2.34 **IPPortClassifier00_IPAddress**

Frames destined to this IP address and to the IP port defined in IPPortClassifier00_Port are mapped to the user priority defined in IPPortClassifier00_DTag and are transmitted over the WLAN using the corresponding access category.

**Values:** 0 0 0 0 – 0xFF 0xFF 0xFF 0xFF

**Default:** 0a 03 01 C9 (IP address 10.3.1.201)

2.2.35 **IPPortClassifier00_Port**

Refer to Section 2.2.34, IPPortClassifier00_IPAddress, for more information.

**Values:** 1 - 65,535

**Default:** 5,004

2.2.36 **IPPortClassifier00_DTag**

Refer to Section 2.2.34, IPPortClassifier00_IPAddress, for more information.

**Values:** 0 - 7

**Default:** 0

There are 16 IP address and IP port classifiers:

- IPPortClassifier00_IPAddress – IPPortClassifier15_IPAddress
- IPPortClassifier00_Port – IPPortClassifier15_Port
- IPPortClassifier00_DTag – IPPortClassifier15_DTag

2.2.37 **NumOfCodePoints**

This parameter defines the number of classifiers when the classification type is based on the Diffserv control service point.

**Values:** 0 - 16

**Default:** 0

2.2.38 **DSCPClассifier00_CodePoint**

Frames with this code point are mapped to the user priority defined in DSCPClассifier00_DTag and are transmitted over the WLAN using the corresponding access category.

**Values:** 0 - 63

**Default:** 0
2.2.39 **DSCPClassifier00_DTag**

Refer to Section 2.2.38, *DSCPClassifier00_CodePoint*, for more information.

**Values:** 0 - 7

**Default:** 0

There are 16 DSCP classifiers:

- DSCPClassifier00_CodePoint – DSCPClassifier00_CodePoint
- DSCPClassifier15_DTag – DSCPClassifier15_DTag

2.2.40 **STRdot11MaxReceiveLifetime**

This parameter specifies the maximum time to keep a fragment of a frame that was not reassembled yet, before deciding to drop it.

**Values:** 0 - 0xFFFFFFFF

**Default:** 512 msecs
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