

## Registry Settings

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### TCP/IP

#### *ConnectDampingInterval*

Amount of delay time before responding to a connect event.

<b>Key</b>	ConnectDampingInterval
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\ConnectDampingInterval <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\ConnectDampingInterval <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\ConnectDampingInterval
<b>Value</b>	Time in seconds
<b>Default</b>	1
<b>Type</b>	DWORD

#### *DhcpMaxRetry*

Number of times the client tries to obtain an IP address from DHCP server.

<b>Key</b>	DhcpMaxRetry
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\DhcpMaxRetry <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\DhcpMaxRetry <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\DhcpMaxRetry
<b>Value</b>	An integer from 0-60000
<b>Default</b>	60000
<b>Type</b>	DWORD

#### *DhcpRetryDialogue*

Number of times the client tries to obtain a DHCP address before displaying a message dialogue.

<b>Key</b>	DhcpRetryDialogue
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\DhcpRetryDialogue <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\DhcpRetryDialogue <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\DhcpRetryDialogue

<b>Value</b>	An integer from 0-60000
<b>Default</b>	60000
<b>Type</b>	DWORD

### ***DisconnectDampInterval***

Amount of delay time before responding to a disconnect event.

<b>Key</b>	DisconnectDampInterval
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\DisconnectDampInterval <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\DisconnectDampInterval <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\DisconnectDampInterval
<b>Value</b>	Time in seconds
<b>Default</b>	1 for 10 series radios 0 for 30 series radios
<b>Type</b>	DWORD

### ***TcpInitialRTT***

Length of wait time prior to retransmitting a connect request.

<b>Key</b>	TcpInitialRTT
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\TcpInitialRTT <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\TcpInitialRTT <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\TcpInitialRTT
<b>Value</b>	Time in ms
<b>Default</b>	1000
<b>Type</b>	DWORD

### ***TcpMaxConnectResponseRetransmissions***

Number of times a connection request acknowledgement is retransmitted.

<b>Key</b>	TcpMaxConnectResponseRetransmissions
<b>Path</b>	<b>CF10 series:</b> HKLM\Comm\SDCCF10G1\Parms\TcpIp\TcpMaxConnectResponseRetransmissions <b>30 series:</b> HKLM\Comm\SDCSD30AG1\Parms\TcpIp\TcpMaxConnectResponseRetransmissions <b>40 series:</b> HKLM\Comm\SDCSD40N1\Parms\TcpIp\TcpMaxConnectResponseRetransmissions
<b>Value</b>	An integer from 0-255
<b>Default</b>	3
<b>Type</b>	DWORD

## Roaming

### *Aggressive Scan*

When Aggressive Scan is turned on and the current connection to an AP becomes tenuous, the radio scans more aggressively for available APs.

Aggressive scanning complements and works in conjunction with the standard scanning that is configured through the Roam Trigger, Roam Delta, and Roam Period settings.

Summit recommends that the Aggressive Scan SCU global setting be *On* unless there is significant co-channel interference because of overlapping coverage from APs that are on the same channel.

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**Note:** The **HKLM\Comm\SDCCF10G1\Parms\Configs\...** paths are the same for all radios.

<b>Key</b>	Aggressive Scan
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\aggScanTimer <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	0 – Off 1 – On
<b>Default</b>	1
<b>Type</b>	DWORD

### *BG Channel Set*

Defines the 2.4 GHz channels to be scanned when the radio is contemplating a roam and needs to determine what APs are available.

<b>Key</b>	BG Channel Set
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\bIRS <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	Full (65535) (all channels) 1,6,11(1057) (the most commonly used 2.4 GHz channels) 1,7,13(4161) (for ETSI and TELEC radios only) or Custom (see <a href="#">Custom BG Channel Set</a> )
<b>Default</b>	Full
<b>Type</b>	DWORD

### Custom BG Channel Set

You can set the SCU to only scan specific BG channels.

<b>Key</b>	bLRS
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\bLRS <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Type</b>	DWORD

The channels are:

bit0	bit1	bit2	bit3	bit4	bit5	bit6	bit7	bit8	bit9	bit10
Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8	Channel 9	Channel 10	Channel 11

To scan a channel, set its value to 1; to not scan, set the value to 0.

For example, to only use channels 1, 3, 7, 9, and 11 would equal *10101000101*.

Convert that number to decimal: 1349.

The number 1349 would be entered as the value for the *bLRS* key.

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**Note:** You also must set the value of BG Channel Set in the SCU Global tab to *Custom*.

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### Roam Delta

The signal strength (RSSI) level (in dBm) that the radio looks for in a different access point (after the roam trigger is met) before it attempts to roam to the new access point.

<b>Key</b>	Roam Delta
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\RoamDelta <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	5 (0x5) 10 (0xa) 15 (0xf) 20 (0x14) 25 (0x19) 30 (0x1e) 35 (0x23) or <a href="#">Custom</a>
<b>Default</b>	10
<b>Type</b>	DWORD

## Roam Period

The amount of time a radio collects RSSI scan data (after association or a roam scan) before it considers roaming to a different access point.

<b>Key</b>	Roam Period
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\RoamPeriod <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	5 (0x5) 10(0xa) 15 (0xf) 20 (0x14) 25 (0x19) 30 (0x1e) 35 (0x23) 40 (0x28) 45 (0x2d) 50 (0x32) 55 (0x37) 60 (0x3c) or <a href="#">Custom</a>
<b>Default</b>	10
<b>Type</b>	DWORD

## Roam Trigger

The signal strength (RSSI) (in dBm) at which the radio scans for an access point with a better signal strength. When scanning for a different access point, the radio looks for one with a RSSI at the indicated roam delta dBm level or stronger.

<b>Key</b>	Roam Trigger
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\RoamTrigger <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.

<b>Value</b>	-50 (0x32) -55 (0x37) -60 (0x3c) -65 (0x41) -70 (0x46) -75 (0x4b) -80 (0x50) -85 (0x55) or <a href="#">Custom</a>
<b>Default</b>	-70
<b>Type</b>	DWORD

### *Custom Setting*

If SCU displays a value of "Custom" for a SCU global setting, then the operating system registry has been edited to include a value that is not available for selection on the SCU Global window.

- If the registry is edited but the user does not select Custom, SCU ignores the registry.
- If SCU displays a value other than Custom and the user selects Custom, SCU reverts to the value that it displayed before the user selected Custom.

## DFS

### *DFS Channels*

Support for 5 GHz (802.11a) channels where support for dynamic frequency selection (DFS) is required. When turned on, the channels are included in the set of channels to be scanned.

<b>Key</b>	DFS Channels
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\DFSCchannels <b>Note:</b> The HKLM\Comm\SDCCF10G1\Parms\Configs\... path is the same for all radios.
<b>Value</b>	On (0x1) Off (0x0)
<b>Default</b>	Off
<b>Type</b>	DWORD

## DFS Scan Time

Amount of time (ms) the radio scans each DFS channel.

<b>Key</b>	DFS Scan Time
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\scanDFSTime <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	Time in ms
<b>Default</b>	120
<b>Type</b>	DWORD

## CCX

### CCX Features

Use of Cisco information element (IE) and CCX version number; support for CCX features

<b>Key</b>	CCX Features
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\CCXfeatures <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	0 (Optimized) – Use Cisco IE and CCX version; support all CCX features except AP-assisted roaming, AP-specified max transmit power, and RM. 1 (Full) – Use Cisco IE and CCX version number; support all CCX features. 2 (Off) – Do not use Cisco IE and CCX version number.
<b>Default</b>	0
<b>Type</b>	DWORD

**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, this parameter is disabled. The default is 0.

### WMM

Use of Wi-Fi Multimedia Extensions, also known as WMM.

<b>Key</b>	WMM
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\WME <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) On (1) Off

<b>Default</b>	0
<b>Type</b>	DWORD

**Note:** For ABGN radio modules, this parameter is disabled.

## Authentication

### *Auth Server*

Type of authentication server being used for EAP authentication.

<b>Key</b>	Auth Server
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\AuthServerType <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Type 1 – Cisco Secure ACS or another server that uses PEAPv1 for PEAP with EAP-MSCHAPV2 (PEAP-MSCHAP). (1) Type 2 – A different authentication server (such as Juniper Networks Steel Belted RADIUS) that uses PEAPv0 for PEAP-MSCHAP.
<b>Default</b>	0
<b>Type</b>	DWORD

### *Auth Timeout*

Specifies the number of seconds that Summit software waits for an EAP authentication request to succeed or fail.

If authentication credentials are specified in the active profile and the authentication times out, then association will fail.

If authentication credentials are not specified in the active profile and the authentication times out, then the user will be re-prompted to enter authentication credentials.

<b>Key</b>	Auth Timeout
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\authTimeout <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	An integer from 3 to 60
<b>Default</b>	8
<b>Type</b>	DWORD



## ***PMK Caching***

When WPA2 is in use, indicates the type of Pairwise Master Key (PMK) caching to use.

<b>Key</b>	PMK Caching
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\OPMK <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) STANDARD (1) OPMK
<b>Default</b>	0
<b>Type</b>	DWORD

**Note:** When switching from Standard to OPMK, you must initiate a suspend resume of the device.

## ***TTLS Inner Method***

The authentication method used within the secure tunnel created by EAP-TTLS.

<b>Key</b>	TTLS Inner Method
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\TTLSInnerMethod <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Auto-EAP – Any available EAP method (1) MSCHAPV2 (2) MSCHAP (3) PAP (4) CHAP (5) EAP-MSCHAPV2
<b>Default</b>	0
<b>Type</b>	DWORD

## Radio Settings

### *Ad Hoc Channel*

The channel to be used for an ad hoc connection if the active profile has a Radio Mode value of "Ad Hoc".

<b>Key</b>	Ad Hoc Channel
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\defAdhocChannel <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	One of the 2.4 GHz channels (1-14) or UNII-1 channels (36, 40, 44, 48)
<b>Default</b>	1
<b>Type</b>	DWORD

### *Frag Thresh*

If packet size (in bytes) exceeds the indicated threshold, then the packet is fragmented.

<b>Key</b>	Frag Thresh
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\Frag <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	An integer from 256 to 2346
<b>Default</b>	2346

**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, this parameter is disabled.

### *RTS Thresh*

Packet size above which RTS/CTS is required on link.

<b>Key</b>	RTS Thresh
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\RTS <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	An integer from 0 to 2347
<b>Default</b>	2347
<b>Type</b>	DWORD

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**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, this parameter is disabled.

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### ***RX Diversity***

Indicates how to handle antenna diversity when receiving data from the AP.

<b>Key</b>	RX Diversity
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\RxDiversity <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Main only – Use main antenna only. (1) Aux only – Use auxiliary antenna only. (2) On-Start on Aux – On startup, use auxiliary antenna. (3) On-Start on Main – On startup use main antenna
<b>Default</b>	3
<b>Type</b>	DWORD

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**Note:** Summit does not support the AUX antenna as a single-antenna solution.

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**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, Rx & Tx Diversity must match (both **Main Only** or both **On**).

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### ***TX Diversity***

Indicates how to handle antenna diversity when transmitting data to the AP.

<b>Key</b>	TX Diversity
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\TxDiversity <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Main only – Use main antenna only. (1) Aux only – Use auxiliary antenna only. (3) On – Use diversity.
<b>Default</b>	3
<b>Type</b>	DWORD

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**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, this parameter is disabled.

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**Note:** For 30AG (MSD30AG and SSD30AG) radio modules, Rx & Tx Diversity must match (both **Main Only** or both **On**).

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## SCU Customization

### *Admin Password*

Password that must be specified when the Admin Login button is selected.

<b>Key</b>	Admin Password
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\adminPWD <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	A string of up to 64 characters
<b>Default</b>	SUMMIT
<b>Type</b>	Binary

### *Certs Path*

Directory where certificate(s) for EAP authentication and PAC files are stored.

<b>Key</b>	Certs Path
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\certPath <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	A valid directory path of up to 64 characters
<b>Default</b>	Device-dependent
<b>Type</b>	REG_SZ

## *Hide Passwords*

If this setting is turned on, SCU (along with EAP authentication dialog boxes) masks credentials and other sensitive information.

<b>Key</b>	Hide Passwords
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\displayPWDS <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Off (1) On
<b>Default</b>	1
<b>Type</b>	DWORD

## *LEDused*

**Note:** LEDused is available only with the SDC-MCF10G.

<b>Key</b>	
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\LEDused <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Off (1) On
<b>Default</b>	0
<b>Type</b>	DWORD

**Note:** Use of LED available only with the SDC-MCF10G.

## *Tray Icon*

Enabling of System Tray icon.

<b>Key</b>	Tray Icon
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\trayIcon <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	(0) Off (1) On
<b>Default</b>	1
<b>Type</b>	DWORD

## **Diags**

### *Ping Payload*

Amount of data in bytes to be transmitted on a ping.

<b>Key</b>	Ping Payload
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\PingPayload <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	32 (0x20) 64 (0x40) 128 (0x80) 256 (0x100) 512 (0x200) 1024 (0x400)
<b>Default</b>	32
<b>Type</b>	DWORD

## *Ping Timeout ms*

Amount of time in milliseconds that passes without a response before ping request is considered a failure.

<b>Key</b>	Ping Timeout ms
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\PingTimeout <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	An integer from 1 to 30000
<b>Default</b>	5000
<b>Type</b>	DWORD

## *Ping Delay ms*

Amount of time in milliseconds between successive ping requests.

<b>Key</b>	Ping Delay ms
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\PingDelay <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	An integer from 0 to 7200000
<b>Default</b>	1000
<b>Type</b>	DWORD

## **Auto Profile**

### *Auto Profile List*

List of profiles that are able to be used to connect to automatically.

<b>Key</b>	Auto Profile List
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig\autoProfile <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Value</b>	0 (off) See <a href="#">Auto Profile Registry Setting</a> for information on how to enable.
<b>Default</b>	0
<b>Type</b>	DWORD

**Note:** Auto Profile is only able with 30AG radios with version 3.03.09 and later.

### ***Auto Profile Registry Setting***

You can enable Auto Profile from the registry.

<b>Key</b>	autoProfile
<b>Path</b>	HKLM\Comm\SDCCF10G1\Parms\Configs\GlobalConfig  <b>Note:</b> The <b>HKLM\Comm\SDCCF10G1\Parms\Configs\...</b> path is the same for all radios.
<b>Type</b>	DWORD

The settings are:

bit16	bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8	bit7	bit6	bit5	bit4	bit3	bit2	bit1
Config 15	Config 14	Config 13	Config 12	Config 11	Config 10	Config 09	Config 08	Config 07	Config 06	Config 05	Config 04	Config 03	Config 02	Config 01	Auto Scan On/Off

Config01 is (by default) the default profile and cannot be used for auto profile. It must be set to 0.

For example, if you want to automatically connect to Config02, Config05, and Config10, that would equal 10000100101

Convert that number to decimal which is 1061.

The number 1061 would be entered as the value for the autoProfile key.

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**Note:** Auto Profile is not available on the 4322 or the 30 series radios.

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