## **Revision History**

Date	Revision	Description	Author(s)
11/09/07	1.0	First draft	Alice/Ye
05/01/08	1.1	Added API Language/SetGUILanguage	Ye
06/02/08	1.2	<ul> <li>- Move SetGUILanguage under "DeviceConfig" instead of a new service type "Language"</li> <li>- Added new API for 5GHz: Set5GSSID and Set5GChannel</li> <li>- Defined 5GHz setting with 4 APIs: SetWLANNoSecurity/SetWLANWEPByKeys/SetWLANWEPBy Passphrase/SetWLANWPAPSKByPassphrase</li> <li>- Added a new value "270Mbps_5G" for those 4 functions for dual-band routers</li> </ul>	Ye
06/24/08	1.3	- Added country code list for SetGUILanguage; - Updated Set5GSSID() to use New5GSSID as parameter instead of NewSSID; - Updated Set5GChannel() to use New5GChannel as parameter instead of NewChannel - Added new API Get5GSSID(New5GSSID) - Added new API Get5GChannelInfo(New5GChannel) - Added new API Get5GInfo(New5GSSID, New5GChannel)	Ye Zhang

11/13/08	1.4	Added 3 SOAP APIs:	Ye Zhang
		ParentalControl::EnableParentalControl()	
		ParentalControl:SetDNSMasqDeviceID()	
		ParentalControl:GetDNSMasqDeviceID()	
11/17/08	1.41	Added 3 more SOAPAPIs: ParentalControl::GetAllMACAddresses() ParentalControl::DeleteMACAddress() ParentalControl::GetEnableStatus()	Ye Zhang
3/15/09	1.5	Add PPPoA, IPoA Add "SetDSLConfig" Add "GetPPPConnStatus" Add "GetModemInfo" Add "GetDNSLookUpStatus" Add "GetInfo" in LANConfigSecurity Add "SetConfigLANIP" in LANConfigSecurity Add "SetConfigDHCPEnabled" in LANConfigSecurity Add "SetConfigLAN" in LANConfigSecurity Add "SetSSIDBroadcast" in WLANConfiguration Add Germany as GR in Country mapping table Add Others as OT in the Country mapping table	Jim Montgomery, for DSL Gateways

11/05/09	1.51	Added ParentalControl::Authenticate() API	Ye Zhang
12/04/2009	1.6	Add DSL API:	Ye Zhang
		DeviceConfig::AddStaticRoute() \	
		DeviceConfig::DelStaticRoute() \	
		DeviceConfig::GetStaticRouteTbl() \	
		WANIPConnection:: SetConnection2Type() API	
		Add argument NewNATEnable in WANIPConnection::	
		SetConnectionType() API	
02/09/2010	1.7	Add WAN3GInterfaceConfig for 3G related project	Ye Zhang
<u>07/</u> 23/ <u>2010</u>	<u>1.8</u>	Add WLANConfiguration::PressWPSPBC() API	Ye Zhang
		Add WLANConfiguration::GetGuestAccessEnabled() API	
		Add WLANConfiguration::GetGuestAccessNetworkInfo() API	
		Add <u>WLANConfiguration</u> ::SetGuestAccessNetwork() API	
		Add DeviceConfig::EnableTrafficMeter() API	
		Add DeviceConfig::SetTrafficMeterOption() API	
		Add DeviceConfig::GetTrafficMeterStatistics() API	
		Add DeviceConfig::CheckNewFirmware() API	
		Add DeviceConfig::UpdateNewFirmware() API	

08/18/2010	<u>1.9</u>	- Add WLANConfiguration:: SetGuestAccessEnabled() API	Ye Zhang
		- Updated WLANConfiguration::GetGuestAccessEnabled() details	
		- DeviceInfo:: GetAttachDevice() adds a type ("wired" or	
		"wireless") for each client device.	
		- Router needs to add "SOAPVersion=1.9" to the	
		currentsetting.htm page for SOAPAPI version 1.9 or later, the	
		number matches the SOAP API version implemented.	

### **DeviceConfig**

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
ConfigurationStarted	NewSessionID	String, string length <= 35	ResponseCode	0 (No error)
				1 (Reboot required)
				401 (Invalid action)
				402 (Invalid arguments)
				501 (Action failed)
				605 (String argument
				too long)
				702 (Value specified is
				invalid)
				728 (Invalid channel)

ConfigurationFinished	NewStatus	ChangesApplied	ResponseCode	
		RebootRequired		
SetEnable	NewEnable	1 (enable)	ResponseCode	
		0 (disable)		
		Note: This is blank state enable/disable		
		command!		
Function Name	Input	Format/Value	Response	
SetGUILanguage	GUILanguage	String, <=64, 3-character country code,	Parameter	Format/Value
		see blow		
		CHS=Simplified Chinese	ResponseCode	0 (No error)
		CHT=Traditional Chinese		402 (Invalid
		CSY=Czech		arguments)
		DAN=Danish		501 (Action failed)
		DEU=German		
		ELL=Greek		
		ENU=English		
		ESP=Spanish		
		FIN=Finnish		
		FRA=French		
		HUN=Hungarian		
		ITA=Italian		
		JPN=Japanese		
		KOR=Korean		

1				
		NLD=Dutch		
		NOR=Norwegian		
		PLK=Polish		
		PTB=Portuguese		
		ROM=Romanian		
		RUS=Russian		
		SKY=Slovak		
		SLV=Slovenian		
		SVE=Swedish		
		This API should set both the wireless		
		region, and the String Table		
		multi-language selection if enabled.		
SetConfiguration	NewConfigFile	File length <= 4M	ResponseCode	
		This binary needs to base64 encode		
		before envelop into XML!!		
		This file would replace NVRAM raw		
		data, be careful!!		
Loaddefault	NewLoaddefault	1 (let this value as 1)	ResponseCode	
SetTimeZone	NewTimeZone	-12 ~ +12	ResponseCode	
	NewDaylightSaving	1 (enable)		
		0 (disable)		
		Note: This is daylight saving		
		enable/disable command!		

SetFirmware	NewFirmware	Firmware raw data (binary).	ResponseCode	
		This size is limited up to 4M		
		This binary needs to base64 encode		
		before envelop into XML!!		
		Note: Please remember to reboot right		
		now when this function finished!		
SetBlockSiteEnable	NewBlockSiteEnable	1 (enable)	ResponseCode	
		0 (disable)		
		Note: This is block site enable/disable		
		command!		
SetBlockSiteName	NewBlockSiteName	num@name_list1@name_list2	ResponseCode	
		num is count of names, and use "@" to		
		split each name.		
		Note: Just support 10 names, and the		
		max length of name is 100		
			1	
SetBlockServices	TBD	TBD	TBD	TBD
Need discussion!! This A	PI is complex!!			
AddStaticRoute	NewRouteName	String		

	NewRoutePrivate	bool, 1 (enable),0 (disable)		
	NewRouteActive	bool, 1 (enable),0 (disable)		
	NewRouteDestinationIP	IP		
	NewRouteIPSubnetMask	Netmask		
	NewRouteGatewayIP	IP		
	NewRouteMetric	Integer 2-15		
	NewStaticRouteAdd	1:add		
<b>DelStaticRoute</b>	NewStaticRouteIndex	Integer, from 0		
	NewStaticRouteAdd	0:del		
			I	
		Destination		
<b>GetStaticRouteTbl</b>	NewStaticRouteTbl	IP:Subnetmask:GatewayIP:Matric:Acti		
		ve:Private:RouteName		
GetTimeZoneInfo	NewTimeZone		NewTimeZone	-12 ~ +12
	NewDaylightSaving		NewDaylightSaving	1 (enable)
	, ,			0 (disable)
			ResponseCode	
			T	
GetInfo	BlankState		BlankState	1 (enable)
				0 (disable)
	NewBlockSiteEnable		NewBlockSiteEnable	1 (enable)
				0 (disable)
	NewBlockSiteName		NewBlockSiteName	Just support 10 names,

				and the max length of
				name is 100
	NewTimeZone		NewTimeZone	-12 ~ +12
	NewDaylightSaving		NewDaylightSaving	1 (enable)
				0 (disable)
			ResponseCode	
		T		
GetConfigInfo	NewConfigFile		NewConfigFile	Nvram raw data with
				encryption
				When extract the
				encryption data, this
				data needs to base64
				decode before save as a
				file in user hard disk!!
			ResponseCode	
GetBlockSiteInfo	NewBlockSiteEnable		NewBlockSiteEnable	
GetBiockSitellilo				
	NewBlockSiteName		NewBlockSiteName	
			ResponseCode	
EnableTrafficMeter	NewTrafficMeterEnable	1 (enable)	ResponseCode	0 (no error)
		0 (disable)		1 (reboot required)

SetTrafficMeterOptions	NewControlOption	String, <=24	ResponseCode	0 (no error)
		No Limit		1 (reboot required)
		Download only		
		Both directions		
	NewMonthlyLimit	Integer, <=1000000 (Mbps)		
	RestartHour	Integer, 0~24 (the router code should		
		convert to am or pm if that's it uses)		
	RestartMinute	Integer, 0~60		
	RestartDay	Integer, 1~31 (of the month)		

GetTrafficMeterStatistics	NewTodayConnectionTime	String, <=5	ResponseCode	0 (no error)
		hh:mm		1 (reboot required)
	NewTodayUpload	Integer in Mbps		
	NewTodayDownload	Integer in Mbps		
	NewYesterdayConnectionTim	String, <=5		
	e	hh:mm		
	NewYesterdayUpload	Integer in Mbps		
	NewYesterdayDownload	Integer in Mbps		
	NewWeekConnectionTime	String, <=5		
		hh:mm		
	NewWeekUpload	Integer in Mbps		
	NewWeekDownload	Integer in Mbps		
	NewMonthConnectionTime	String, <=5		

	hh:mm	
NewMonthUpload	Integer in Mbps	
NewMonthDownload	Integer in Mbps	
NewLastMonthConnectionTi	String, <=5	
me	hh:mm	
NewLastMonthUpload	Integer in Mbps	
NewLastMonthDownload	Integer in Mbps	

CheckNewFirmware	CurrentVersion	String, <=24	ResponseCode	0 (no error)
				1 (reboot required)
	NewVersion	String, <=24		
	ReleaseNote	String, <=512		
UpdateNewFirmware	YesOrNo	1- Update	ResponseCode	0 (no error)
		0 - Cancel		1 (reboot required)

### ${\it Device Info}$

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
GetInfo	ModelName		ModelName	WNR834Bv2
	Description		Description	Netgear Smart Wizard 3.0,
				specification 0.8 version
	SerialNumber		SerialNumber	1ML1747D0000B
	Firmwareversion		Firmwareversion	V2.0.1
	SmartAgentversion		SmartAgentversion	3.0
	FirewallVersion		FirewallVersion	ACOS NAT/FW v2.5.0.44
				(Linux Cone NAT Hot Patch
				09/14/2007)
	VPNVersion		VPNVersion	N/A
	OthersoftwareVersion		OthersoftwareVersion	2.0.1NA
	Hardwareversion		Hardwareversion	WNR834A
	Otherhardwareversion		Otherhardwareversion	N/A
	FirstUseDate		FirstUseDate	Sunday, 30 Sep 2007 01:10:03
			ResponseCode	
G G II III	a v m		G II W	VW > 0 4 GG
GetSysUpTime	SysUpTime		SysUpTime	HH:MM:SS
			ResponseCode	
GetAttachDevice	NewAttachDevice		NewAttachDevice	n@Index;IP;Name;MAC <u>:type</u> @

		Note:
		n: count of attach devices
		Index: index of each device
		IP: IP address of each device
		Name: Each device name
		MAC: Each device MAC
		Type: "wired" or "wireless"
		depending on the client device
		connection.
		e.g.
		2@1;192.168.1.2;Peter'sNB;11:
		22:33:44:55:66 <u>;wired</u> @2;192.16
		8.1.3; William's NB; 11:22:33:44:
		55:77 <u>:wireless</u>
	ResponseCode	

#### WANIPConnection

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
SetConnectionType	NewConnectionType	DHCP	NewConnectionType	Down
		Static		DHCP
		PPPoE		Static
		PPPoA		PPPoE
		PPTP		PPPoA
		BigPond		PPTP
				BigPond
	NewISPLoginname	String, <=64	ResponseCode	0 (No error)
				1 (Reboot required)
				401 (Invalid action)
				402 (Invalid arguments)
				501 (Action failed)
				605 (String argument too long)
				702 (Value specified is invalid)
				728 (Invalid channel)
	NewISPPassword	String, <=64		
	NewConnectionMode	AlwaysOn		
		DialOnDemand		
		ManuallyConnect		
		N/A (for DHCP,		
		static)		

	Newidletimer	Integer, <= 99
	NewConnectionID	String, <=12 (for
		PPTP)
	NewPPTPMyIP	IP, PPPoA
		xxx.xxx.xxx
	NewPPTPServerIP	IP, PPPoA
		xxx.xxx.xxx
	NewBigpondAuthServer	IP, PPPoA
		xxx.xxx.xxx
	NewPrimaryDNS	IP, PPPoA
		xxx.xxx.xxx
		(if this filed is
		0.0.0.0, it means
		"Get Automatically
		DNS From ISP")
	NewSecondaryDNS	IP, PPPoA
		xxx.xxx.xxx
	NewNATEnable	0(off),1(on),2(disa
	NewNAT Ellable	ble firewall)
SetConnection2Type	NewISP2Loginname	String, <=64
(add PPPoE session2	NICD2Daaraad	String a CA
support)	NewISP2Password	String, <=64
	NewNAT2Enable	0(off),1(on),2(disa
	INCWINAI ZEHAUIC	ble firewall)

SetDSLConfig	NewWANEncap	String,	
		"LLC-BASED"/"V	
		C-BASED"	
	NewWANVCI	INT,32-102	
	NewWANVPI	INT,0-10	
SetIPInterfaceInfo	NewAddressingType	String, "Static" ResponseCode	
		only	
	NewExternalIPAddress	IP, IPoA	
		xxx.xxx.xxx	
	NewSubnetMask	IP, IPoA	
		xxx.xxx.xxx	
	NewDefaultGateway	IP, IPoA	
		xxx.xxx.xxx	
	NewPrimaryDNS	IP, IPoA	
		xxx.xxx.xxx	
	NewSecondaryDNS	IP, IPoA	
		xxx.xxx.xxx	
SetMACAddress	NewMACAddress	AABBCCDDEEFF ResponseCode	
	NewMACAddressOverride	0 (use default	
		MAC)	
		1 (user's	
		computer's MAC)	

		2 (user specify)		
SetSmartWizardDetect	ion N/A		NewConnectionType	Down
				DHCP
				Static
				PPPoE
				PPPoA
				PPTP
				BigPond
			ResponseCode	
SetMaxMTUSize	NewMaxMTUSize	Integer <= 1500	ResponseCode	
		•	•	•
AddPortMapping	NewProtocol	TCP	ResponseCode	
		UDP		
	NewInternalPort	1~65534		
	NewExternalPort	1~65534		
	NewInternalClient	xxx.xxx.xxx		
	NewPortMappingDescription	String, <= 64		
	NewPortMappingAdd	1 : Add		
Max counts of port ma	pping is 10			
·		·	·	
DeletePortMapping	NewProtocol	TCP	ResponseCode	
		UDP		

	NewExternalPort	1~65534		
	NewPortMappingAdd	0 : Delete		
GetConnectionTypeInfo	NewConnectionType		NewConnectionType	Down
				DHCP
				Static
				PPPoE
				PPPoA
				PPTP
				BigPond
GetPPPConnStatus	NewConnectionTime	String	NewConnectStatus	0 (Connected)
				1 (Waiting for Data)
				2 (Failed)
				3 (Disconnected)
			NewNegotiationStatus	0 (Success)
				1(lcp_rprotrej: Rcvd short
				Protocol-Reject packet!)
				2 (LCP down)
				3 (LCP is allowed to come up)
				4 (Initialize LCP)
				-1 (Unknown Error)
			NewAutheticationStatus	0 (Success)
				1 (CHAP authentication failed)
				2 (PAP authentication failed)

				-1 (Unknown Error)
GetDNSLookUpStatus		String	NewDNSLookUpStatus	0 (Should be able to connect)
				1 (DSLAM not ready, back to
				ADSL Settings Page)
				2 (PPP connection fail, back to
				Basic Settings Page)
				-1 (Unknown Error)
GetModemInfo	NewModemVersion	String		
	NewModemStatus	0"Connected"		
		1"Negotiating"		
		2"Connecting"		
		-1"Unknown		
		Error"		
	NewDownStreamSpeed	String		
	NewUpStreamSpeed	String		
	NewWANVCI	INT,32-102		
	NewWANVPI	INT,0-10		
GetInfo	NewEnable		NewEnable	1 (enable)
				0 (disable)
	NewConnectionType		NewConnectionType	Down
				DHCP
				Static

NewExternalIPAddress	NewExternalIPAddress	PPPoE PPPoA PPTP BigPond IP, IPoA xxx.xxx.xxx
NewSubnetMask  NewAddressingType	NewSubnetMask NewAddressingType	IP, IPoA xxx.xxx.xxx  Down DHCP Static PPPoE PPPoA PPTP BigPond
NewDefaultGateway	NewDefaultGateway	IP, IPoA xxx.xxx.xxx
NewMACAddress	NewMACAddress	AABBCCDDEEFF
NewMACAddressOverride	NewMACAddressOverride	1 (enable) 0 (disable)
NewMaxMTUSize	NewMaxMTUSize	Integer <= 1500
NewDNSEnabled	NewDNSEnabled	1 (enable) 0 (disable)
NewDNSServers	NewDNSServers	IP, xxx.xxx.xxx
	ResponseCode	

GetPortMappingInfo	NewPortMappingNumberOfEntries	NewPortMappingNumberOfEntries	Counts of port mapping entries
			Max is 10

NewPortMappingInfo	NewPortMappingInfo	Protocol;internal_port;
		external_port;client_IP;
		discription@
		Protocol;internal_port;
		external_port;client_IP;
		discription
		protocol is "TCP" or "UDP"
		internal_port is "Internal Port"
		external_port is "External Port"
		client_IP is "Client site IP address"
		description is "Description about
		this port mapping entry"
		Note: Just support 10 port
		mapping entries
	ResponseCode	

### WAN3GInterfaceConfig

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
SetConnectionType	NewWANAccessType	DSL_Only	NewWANAccessType	Down
		Cable_Only		NO_USB_Device_Attached
		3G_Only		NO_SIM_Card_Insert
		Ethernet_Only		Up
		WiMAX_Only		
		Failover_DSL_First		
		Failover_Cable_First		
		Failover_3G_First		
		Failover_Ethernet_First		
		Failover_WiMax_First		
			ResponseCode	0 (No error)
				1 (Reboot required)
				401 (Invalid action)
				402 (Invalid arguments)
				501 (Action failed)
				605 (String argument too long)
				702 (Value specified is invalid)
				728 (Invalid channel)

Set3GConfig	NewCountry	Please reference country/ISP	ResponseCode	0 (No error)
		list		1 (Reboot required)

		401 (Invalid action)
		402 (Invalid arguments)
		501 (Action failed)
		605 (String argument too long)
		702 (Value specified is invalid)
		728 (Invalid channel)
NewISPName	Please reference country/ISP	
	list	
NewISPLoginname	String, <=64	
	(for 3G ISP)	
NewISPPassword	String, <=64	
	(for 3G ISP)	
NewPINCode	Digits, length = $4 \sim 8$	
NewPIN2Code	Digits, length = $4 \sim 8$	
NewPUKCode	Digits, length = 8	
NewPUK2Code	Digits, length = 8	
NewAPN	String, < 64	
NewAccessNumber	*99#	
	*99***1#	
	*99***2#	
	*99***3#	
	*99***4#	
	*99*#	
NewPDPType	IP	
	PDP-IP	

	PPP		
	PDP-PPP		
NewAutoConnect	Enable		
	Disable		
NewReconnectAuto	Enable		
	Disable		
NewRoamingAuto	Enable		
	Disable		
	NewAutoConnect NewReconnectAuto NewRoamingAuto	Disable  NewReconnectAuto Enable Disable	PDP-PPP  NewAutoConnect Enable Disable  NewReconnectAuto Enable Disable  NewRoamingAuto Enable

GetInfo	NewActiveWAN	]	NewActiveWAN	DSL_Only
				Cable_Only
				3G_Only
				Ethernet_Only
				WiMAX_Only
				Failover_DSL_First
				Failover_3G_First
				Failover_Ethernet_First
				Failover_Cable_First
				Failover_WiMAX_First
	NewCurrentConectionType		NewCurrentConectionType	PPP (when in 3G mode)
				DHCP
				Static

		PPPoE
		PPPoA
		IPoA
		PPTP
		BigPond
NewIPAddress	NewIPAddress (when 3G	xxx.xxx.xxx
	mode)	
NewSubnetMask	NewSubnetMask (when	xxx.xxx.xxx
	3G mode)	
NewDefaultGateway	NewDefaultGateway	xxx.xxx.xxx
	(when 3G mode)	
NewDNSServers	NewDNSServers (when	xxx.xxx.xxx
	3G mode)	
NewAntennaType	NewAntennaType	Internal
		External
		0 (No error)
		1 (Reboot required)
		401 (Invalid action)
		402 (Invalid arguments)
		501 (Action failed)
		605 (String argument too long)
		702 (Value specified is invalid)
		728 (Invalid channel)
NewWiFiButtonBehavior	NewWiFiButtonBehavior	WiFi_Only
		WiFi_And_3G

			0 (No error)
			1 (Reboot required)
			401 (Invalid action)
			402 (Invalid arguments)
			501 (Action failed)
			605 (String argument too long)
			702 (Value specified is invalid)
			728 (Invalid channel)
Get3GInfo	NewModemIdentity	NewModemIdentity	String, < 128
	NewModemSWVersion	NewModemSWversion	String, < 128
			bumg, 120
	NewModemCurrentStatus	NewModemCurrentStatus	String, <= 64
	NewModemCurrentStatus NewIMSI	NewModemCurrentStatus NewIMSI	
			String, <= 64
	NewIMSI	NewIMSI	String, <= 64 String, <= 64
	NewIMSI NewIMEI	NewIMSI NewIMEI	String, <= 64 String, <= 64 String, <= 64
	NewIMSI NewIMEI NewOperatorName	NewIMSI NewIMEI NewOperatorName	String, <= 64 String, <= 64 String, <= 64 String, <= 64

#### WANEthernetLinkConfig

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
GetEthernetLinkStatus	NewEthernetLinkStatus		NewEthernetLinkStatus	Up
				Down
			ResponseCode	
SetWANRelease	NewWANRelease	1 (let this value as 1)	ResponseCode	
SetWANRenew	NewWANRenew	1	ResponseCode	

#### LANConfigSecurity

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
SetConfigLANSubnet	NewLANSubnet	IP, xxx.xxx.xxx	ResponseCode	0 (No error)
				1 (Reboot required)
				401 (Invalid action)
				402 (Invalid arguments)
				501 (Action failed)
				605 (String argument too long)
				702 (Value specified is invalid)
				728 (Invalid channel)
	-	-		
SetConfigLANIP	NewLANIP	IP, xxx.xxx.xxx		
SetConfigDHCPEnabled	NewDHCPEnabled	Bool		
SetConfigLAN	NewLANIP	IP, xxx.xxx.xxx		
	NewLANSubne	String		
	NewDHCPEnabled	Bool		
	NewStartIP	IP, xxx.xxx.xxx		
	NewEndIP	IP, xxx.xxx.xxx		
	•		•	
SetConfigPassword	NewPassword	String, <=64	ResponseCode	

GetInfo	NewLANSubnet		NewLANSubnet	IP, xxx.xxx.xxx
	NewPassword		NewPassword	String, <= 64
	NewWANLAN_Subnet_Match		NewWANLAN_Subnet_Match	1, match
				0, doesn't match
	NewLANMACAddress		NewLANMACAddress	AABBCCDDEEFF
			ResponseCode	
	NewLANIP	IP, xxx.xxx.xxx		
	NewDHCPEnabled	Bool		

### WLANConfiguration

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
SetEnable	NewEnable	1 (enable)	ResponseCode	0 (No error)
		0 (disable)		1 (Reboot required)
				401 (Invalid action)
				402 (Invalid arguments)
				501 (Action failed)
				605 (String argument too
				long)
				702 (Value specified is
				invalid)
				728 (Invalid channel)
	<u>.</u>			·
SetConfigPassword	NewPassword	String, <=64	ResponseCode	
SetChannel	N Cl 1	N	D	<u> </u>
SetChannel	NewChannel	Normal: Auto, 1~13	ResponseCode	
		But:		
		6 only when dynamic super		
		g 1 11 (C IIC1-)		
		1~11 (for US only)		
Set5GChannel	New5GChannel	Auto, 36, 40, 44, 48, 52, 56,	ResponseCode	
		60, 64		

SetSSID	NewSSID	String, <=32	ResponseCode	
SetSSIDBroadcast	NewSSIDBroadcast	Bool, 0(disable)/1(enable)		
Set5GSSID	New5GSSID	String, <=32	ResponseCode	

The section applies if the router is a dual-band router which supports both 2.4GHz and 5GHz.

For those routers, the 4 functions listed below when called should apply the same setting (except SSID, which only applys to 2.4GHz, the 5GHz SSID is applied through separate API Set5GSSID(New5GSSID)) to both 2.4GHz and 5GHz (if the mode enables 5GHz), the channel parameter is for 2.4GHz, and the API should apply channel "Auto" or 44 (if "Auto" not supported, "44" is preferred over "36" because of higher Tx output power in mid channel than band-edge channel) for 5GHz internally.

SetWLANNoSecurity

SetWLANWEPByKeys

SetWLANWEPByPassphrase

SetWLANWPAPSKByPassphrase

Also, for those 4 APIs, a new parameter value "270Mbps\_5G" is to be added for NewWirelessMode. When the client passes this value, the router needs to configure the 270Mbps rate for 5GHz, and the max allowed 2.4GHz rate, for example, WNDR3300 will allow 54Mbps for 2.4GHz if 5GHz uses 270Mbps.

\*

SetWLANNoSecurity	NewSSID	String, <=32	ResponseCode	
	NewRegion	String, <= 64		
		Please reference Appendix		

NewChannel	Normal: Auto, 1~13
	But:
	6 only when dynamic super
	g
	1~11 (for US only)
NewWirelessMode	String, <=64
	b only
	g only
	Auto 108Mbps
	g & b
	130Mbps
	270Mbps
	270Mbps_5G (for
	dual-band)

SetWLANWEPByKeys	NewSSID	String, <=32	ResponseCode	
	NewRegion	String, <= 64		
		Please reference Appendix		
	NewChannel	Normal: Auto, 1~13		
		But:		
		6 only when dynamic super		
		g		
		1~11 (for US only)		
	NewWirelessMode	String, <=64		
		b only		

		g only		
		Auto 108Mbps		
		g & b		
		130Mbps		
		270Mbps		
		270Mbps_5G (for		
		dual-band)		
	NewWEPAuthType	Automatic		
		Open		
		Shared		
	NewWEPLength	64 or 128		
	NewKey1	String, and string length		
		just could accept 10 or 26		
	NewKey2	String, and string length		
		just could accept 10 or 26		
	NewKey3	String, and string length		
		just could accept 10 or 26		
	NewKey4	String, and string length		
		just could accept 10 or 26		
SetWLANWEPByPassphrase	NewSSID	String, <=32	ResponseCode	
	NewRegion	String, <= 64		
		Please reference Appendix		
	NewChannel	Normal: Auto, 1~13		
	l .	l I	ı	I .

But:

		6 only when dynamic super	
		g	
		1~11 (for US only)	
New	vWirelessMode	String, <=64	
		b only	
		g only	
		Auto 108Mbps	
		g & b	
		130Mbps	
		270Mbps	
		270Mbps_5G (for	
		dual-band)	
New	vWEPAuthType	Automatic	
		Open	
		Shared	
New	vWEPLength	64 or 128	
New	vWEPPassphrase	String, string length <= 32	
•		·	

SetWLANWPAPSKByPassphrase	NewSSID	String, <=32	ResponseCode	
	NewRegion	String, <= 64		
		Please reference Appendix		
	NewChannel	Normal: Auto, 1~13		
		But:		
		6 only when dynamic super		
		g		

	1~11 (for US only)
NewWirelessMode	String, <=64
	b only
	g only
	Auto 108Mbps
	g & b
	130Mbps
	270Mbps
	270Mbps_5G (for
	dual-band)
NewWPAEncryptionModes	WPA-PSK/WPA2-PSK
	WPA-PSK
	WPA2-PSK
NewWPAPassphrase	String, >= 8 and <= 64

SetWPSMode	NewWPSEnable	1 (enable)	ResponseCode	
		0 (disable)		
<u>PressWPSPBC</u>			<u>ResponseCode</u>	0 no error

PressWPSPBC() will simulate the physical WPS push-button pressing, it will enable WPS process.

GetInfo	NewEnable	NewEnable	1 (enable)
			0 (disable)
	NewSSIDBroadcast	NewSSIDBroadcast	1 (on)
			0 (off)
	NewStatus	NewStatus	Up

		Disable
		Note: This filed is
		identifying link status!!
NewSSID	NewSSID	String, <=32
NewRegion	NewRegion	String, <= 64
		Please reference Appendix
NewChannel	NewChannel	Normal: Auto, 01~13
		But:
		6 only when dynamic super g
		01~11 (for US only)
NewWirelessMode	NewWirelessMode	String, <=64
		b only
		g only
		Auto 108Mbps
		g & b
		130Mbps
		270Mbps
NewBasicEncryptionModes	NewBasicEncryptionModes	None
		WEP
		WPA-PSK
		WPA2-PSK
		WPA-PSK/WPA2-PSK
NewWEPAuthType	NewWEPAuthType	Open
		Shared
		Automatic

	NewWPAEncryptionModes	NewWPAEncryptionMode	s None
			WPA-PSK
			WPA2-PSK
			WPA-PSK/WPA2-PSK
	NewWLANMACAddress	NewWLANMACAddress	AABBCCDDEEFF
		ResponseCode	
GetWEPSecurityKeys	NewWEPKey	NewWEPKey	String, and string length just
	NewWEPPassphrase	NewWEPPassphrase	could be 10 or 26  String, string length <= 32
		ResponseCode	
GetWPASecurityKeys	NewWPAPassphrase	NewWPAPassphrase	String, >= 8 and <= 64
		ResponseCode	
GetSSID	NewSSID	NewSSID	
		ResponseCode	
Get5GSSID	New5GSSID	New5GSSID	
		ResponseCode	
GetChannelInfo	NewChannel	NewChannel	Normal: Auto, 01~13
			But:
			6 only when dynamic super g
			01~11 (for US only)

		ResponseCode	
Get5GChannelInfo	New5GChannel	New5GChannel	Normal: Auto, 36, 40, 44, 48
		ResponseCode	
Get5GInfo	New5GSSID	New5GSSID	
	New5GChannel	New5GChannel	Normal: Auto, 36, 40, 44, 48
		ResponseCode	
GetRegion	NewRegion	NewRegion	String, <= 64 Please reference Appendix
	T	T	T
			Please reference Appendix
		ResponseCode	
GetWirelessMode	NewWirelessMode	NewWirelessMode	String, <=64
Get whelessivious	New Wholessivious	New Whelesswode	b only
			g only
			Auto 108Mbps
			g & b
			130Mbps
			270Mbps
		ResponseCode	
GetSSIDBroadcast	NewSSIDBroadcast	NewSSIDBroadcast	1 (on)
			0 (off)

		ResponseCode	
GetWPSMode	NewWPSEnable	NewWPSEnable	1 (enable)
			0 (disable)
		ResponseCode	
GetWPSPINInfo	NewWPSPINEnable	NewWPSPINEnable	1 (enable)
			0 (disable)
	NewRouterWPSPIN	NewRouterWPSPIN	WPS PIN number, sting
		ResponseCode	

For simplicity, the following "Guest Access" should be implemented on 2.4GHz radio for any 2.4GHz only AP, or dual-band AP. It should be implemented on 5.0GHz radio only if the AP is 5GHz-only.

Function name	Input	Input		
	Argument	Format/Value	Parameter	Format/Value
GetGuestAccessEnabled()	NewGuestAccessEnabled	1 (enabled)	ResponseCode	0 (No error)
		0 (not enabled)		402 (Invalid arguments)
		2 (Guest Access is not		
		supported)		

If Guest Access is enabled, then return NewGuestAccessEnabled as 1, if not, return 0. If Guest Access is not supported (no multi-SSID support), then return 2.

none of the SSIDs enables Guest Access, then return NewGuestAccessEnabled as 0. If at least 1 has enabled Guest Access, then returnewGuestAccessEnabled as 1.	

SetGuestAccessEnabled()	NewGuestAccessEnabled	1 (enable) 0 (disable)	ResponseCode	0 (No error) 402 (Invalid arguments)
If NewGuestAccessEnabled=1, e If NewGuestAccessEnabled=0, o			•	
GetGuestAccessNetworkInfo	NewSSID	String, <=32	ResponseCode	
	NewSecurityMode	String, <=16 None WEP64 WEP128 WPA-PSK WPA2-PSK Mixed WPA		0 (no error) 1 (Guest access not enabled)
	NewKey	String, <=64, blank for None, WEP Key1 or WPA		

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		passphrase.		
SetGuestAccessNetwork	NewSSID	String, <=32	ResponseCode	
	NewSecurityMode	String, <=16		0 (No error)
		None		1 (Reboot required)
		WEP64		401 (Invalid action)
		WEP128		402 (Invalid arguments)
		WPA-PSK		501 (Action failed)
		WPA2-PSK		
		Mixed WPA		
	NewKey1	String, and string length	If no security, leave it	
		0~64	blank. Key1 for WEP64 or	
			WEP128, Passphrase for	
			WPA(2)/PSK	
	NewKey2	String, and string length		
		0~64		
	NewKey3	String, and string length		
		0~64		
	NewKey4	String, and string length		
		0~64		

If all SSIDs are created already and none of them enables Guest Access is not enabled or not supported, then return 501.

If existing SSIDs have not enabled Guest Access, and max SSIDs are not reached, then add the SSID as Guest Access and returns 0 (if no need to reboot) or 1 (if reboot is required).

If any of the existing SSIDs has enabled Guest Access is enabled, then update that SSID network with the new set of information.

Starting with SOAP API version V1.9 (which implements PressWPSPBC(), all Guest Access APIs, Traffic Metering APIs, FW Update APIs, as well as GetAttachDevice() update), the router firmware needs to add "SOAPVersion=1.9" for example to the currentsetting.htm page (which should not require Basic Authentication) for SOAP API version 1.9 or later, the number matches the SOAP API version implemented, i.e., when SOAP version becomes 2.0, the value should be "SOAPVersion=2.0". An example:

"Firmware=V1.0.2.14 24.0.74NA RegionTag=WNRxxxx NA Region=us Model=WNRxxxx InternetConnectionStatus=Up
ParentalControlSupported=1 SOAPVersion=1.9"

#### Time

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/V
GetInfo	NewNTPServer1		NewNTPServer1	String, the
				string len
				<= 64
	NewNTPServer2		NewNTPServer1	String, the
				string len
				<= 64
	NewNTPServer3		NewNTPServer1	String, the
				string len
				<= 64
	NewNTPServer4		NewNTPServer1	String, the
				string len

		<= 64
	ResponseCode	

#### ParentalControl

Function name	Input		Response	
	Argument	Format/Value	Parameter	Format/Value
GetDNSMasqDeviceID	NewMACAddress	String (16 characters)	NewDeviceID	String, string length <=32
			ResponseCode	0: Success
				1: Error
				401: Not authenticated
Authenticate	NewUsername	String (64 characters)	ResponseCode	0: Success
				401: Invalid username and/or
				password
				2: Error
	NewPassword	String (64 characters)		

SetDNSMasqDeviceID	NewMACAddress	String (16 characters)	ResponseCode	0: Success
				1: Maxed out (can't add more)
				2: Error
				401: Not authenticated
	NewDeviceID	String (32 characters)		

EnableParentalControl	NewEnable	1 (enable)	ResponseCode	0 (No error)
		0 (disable)		1 failure
				401: Not authenticated
GetAllMACAddresses			AllMACAddresses	String, string length <=1024
			(all MACs in a string	
			delimited with ' ')	
			ResponseCode	0: Success
				1: Error
				401: Not authenticated
DeleteMACAddress	NewMACAddress	String (16 characters)	ResponseCode	0 (No error) 1 failure
DeleteMACAddress	NewMACAddress	String (16 characters)	ResponseCode	` '
				401: Not authenticated
			la 10	T <sub>a</sub> .
GetEnableStatus			ParentalControl	0 or 1
			ResponseCode	0: Success
				1: Error
				401: Not authenticated

# Appendix

Region and country code mapping table:

Region	Country Code	Specific Country
Africa	ZA	South Africa
Asia	SG	Singapore
Australia	AU	
Canada	CA	
Europe	GB	United Kingdom
Germany	GR	
Israel	IL	
Japan	JP	
Korea	KR2	
Mexico	MX	
South America	UY	Uruguay
United States	US	
Others	OT	

#### 3G related parameters:

APN: (Access Point Name) a string parameter which is a logical name that is used to select the GGSN or the external packet data network CID: (PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition. The parameter is local to the TE-MT interface and is used in other PDP context-related commands. The range of permitted values (minimum value = 1) is returned by the test form of

the command.

Access Number: A digit string (value 99) which identifies a request to use the Packet Domain service