Cisco BroadWorks

Partner Configuration Guide

Alcatel Lucent Enterprise H2_H2P Series

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Cisco® Guide

Notification

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Document Revision History

Version	Reason for Change
1.1	Introduced document for Alcatel Lucent Enterprise H2_H2P Series version 2.10 validation with Cisco BroadWorks Release 22.0.
1.2	Edited changes, rebranded and published document.

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Table of Contents

1 Overview 6

2 Interoperability Status 7

2.1 Verified Versions 7

2.2 Interface Capabilities Supported 7

2.2.1 SIP Interface Capabilities 8

2.2.2 Other Interface Capabilities 13

2.3 Known Issues 14

3 Cisco BroadWorks Configuration 15

3.1 Cisco BroadWorks Device Profile Type Configuration 15

3.2 Cisco BroadWorks Configuration Steps 16

4 H2_H2P Series Configuration 17

4.1 Configuration Method 17

4.2 System Level Configuration 17

4.2.1 Configure Network Settings 17

4.2.2 Configure SIP Interface Settings 18

4.2.3 Configure Service Settings 19

4.3 Subscriber Level Configuration 19

4.1 SIP Advanced Feature Configuration 19

4.1.1 Shared Call Appearance Configuration 19

4.1.2 Busy Lamp Field Configuration 23

4.1.3 Feature Key Synchronization Configuration 23

4.1.4 Call Center Feature Configuration 23

4.1.5 Hoteling and Flexible Seating Feature Configuration 24

4.1.6 Call Recording Feature Configuration 24

4.1.7 Security Classification Feature Configuration 25

4.1.8 Emergency Call Configuration 25

4.1.9 Advice of Charge Configuration 25

4.1.10 Conference Event Configuration 25

5 Device Management 26

5.1 Device Management Capabilities Supported 26

5.2 Device Management Configuration 28

5.2.1 Configure Cisco BroadWorks Tags 28

5.2.2 Configure Cisco BroadWorks Device Profile Type 30

5.2.3 Create Device Profile Instance 35

5.2.4 Configure Cisco BroadWorks User 36

5.2.5 Customize Tags 36

5.2.6 Configure Alcatel Lucent Enterprise H2_H2P Series 37

Appendix A: Reference H2_H2P Series Configuration Files 39

References 48

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Table of Figures

Figure 1 Device Identity/Profile Type 16
Figure 2 Shared Call Appearance Configuration 20
Figure 3 System Default Tag Settings 30
Figure 4 Device Type-specific Tag Settings 30
Figure 5 Device Access FQDN 32
Figure 6 config.%BWMACADDRESS%.xml File Settings 34
Figure 7 Cisco BroadWorks User Language Definition 35
Figure 8 Device Profile Instance 36
Figure 9 Static Mode Configuration 37
Figure 10 DHCP Mode Configuration 38

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1 Overview

This guide describes the configuration procedures required for the Alcatel Lucent Enterprise H2_H2P Series for interoperability with Cisco BroadWorks. This includes the following models:

- H2
- H2P

The H2_H2P is a series of desk phones that use the Session Initiation Protocol (SIP) to communicate with Cisco BroadWorks for call control.

This guide describes the specific configuration items that are important for use with Cisco BroadWorks. It does not describe the purpose and use of all configuration items on the H2_H2P. For those details, see the *Premium H2_H2P Series User Manual* [1] supplied by Alcatel Lucent Enterprise.

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2 Interoperability Status

This section provides the known interoperability status of the Alcatel Lucent Enterprise H2_H2P Series with Cisco BroadWorks. This includes the version(s) tested, the capabilities supported, and known issues.

Interoperability testing validates that the device interfaces properly with Cisco BroadWorks via the SIP interface. Qualitative aspects of the device or device capabilities not affecting the SIP interface such as display features, performance, and audio qualities are not covered by interoperability testing. Requests for information and/or issues regarding these aspects should be directed to Alcatel Lucent Enterprise.

2.1 Verified Versions

The following table identifies the verified Alcatel Lucent Enterprise H2_H2P Series and Cisco BroadWorks versions and the month/year the testing occurred. If the device has undergone more than one test cycle, versions for each test cycle are listed, with the most recent listed first.

Compatible Versions in the following table identify specific H2_H2P versions that the partner has identified as compatible so should interface properly with Cisco BroadWorks. Generally, maintenance releases of the validated version are considered compatible and may not be specifically listed here. For any questions concerning maintenance and compatible releases, contact Alcatel Lucent Enterprise.

NOTE: Interoperability testing is usually performed with the latest generally available (GA) device firmware/software and the latest GA Cisco BroadWorks release and service pack at the time the testing occurs. If there is a need to use a non-verified mix of Cisco BroadWorks and device software versions, customers can mitigate their risk by self-testing the combination themselves using the *Cisco BroadWorks SIP Phone Interoperability Test Plan* [5].

Verified Versions

Date (mm/yyyy)	Cisco BroadWorks Release	H2_H2P Verified Version	H2_H2P Compatible Versions
05/2020	Release 22.0	2.10	List any specific compatible versions.

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by the Alcatel Lucent Enterprise H2_H2P Series.

The *Supported* column in the tables in this section identifies the Alcatel Lucent Enterprise H2_H2P Series' support for each of the items covered in the test plan, with the following designations:

- Yes Test item is supported
- No Test item is not supported
- NA Test item is not applicable to the device type
- NT Test item was not tested

Caveats and clarifications are identified in the *Comments* column.

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2.2.1 SIP Interface Capabilities

The Alcatel Lucent Enterprise H2_H2P Series has completed interoperability testing with Cisco BroadWorks using the *Cisco BroadWorks SIP Phone Interoperability Test Plan* [5]. The results are summarized in the following table.

The Cisco BroadWorks test plan is composed of packages, each covering distinct interoperability areas, such as "Basic" call scenarios and "Redundancy" scenarios. Each package is composed of one or more test items, which in turn are composed of one or more test cases. The test plan exercises the SIP interface between the device and Cisco BroadWorks with the intent to ensure interoperability sufficient to support the Cisco BroadWorks feature set.

NOTE: DUT in the following table refers to the Device Under Test, which in this case is the Alcatel Lucent Enterprise H2_H2P Series.

Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Basic	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Session Timer	Yes	
	Ringback	Yes	
	Forked Dialog	Yes	
	181 Call Being Forwarded	Yes	
	Dial Plan	Yes	
	DTMF – Inband	Yes	
	DTMF – RFC 2833	Yes	
	DTMF – DTMF Relay	Yes	
	Codec Negotiation	Yes	
	Codec Renegotiation	Yes	
Cisco BroadWorks Services	Third-Party Call Control – Basic	Yes	
	Third-Party Call Control – Advanced	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Message Waiting Indicator – Unsolicited	Yes	
	Message Waiting Indicator – Solicited	Yes	
	Message Waiting Indicator – Detail	Yes	
	Voice Portal Outcall	Yes	
	Advanced Alerting – Ringing	Yes	
	Advanced Alerting – Call Waiting	No	

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Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Advanced Alerting – Ring Splash	Yes	
	Advanced Alerting – Silent Alerting	No	
	Calling Line ID	Yes	
	Calling Line ID with Unicode Characters	Yes	
	Connected Line ID	Yes	
	Connected Line ID with Unicode Characters	Yes	
	Connected Line ID on UPDATE	Yes	
	Connected Line ID on Re-INVITE	Yes	
	Diversion Header	Yes	
	History-Info Header	Yes	
	Advice of Charge	No	
	Meet-Me Conferencing	Yes	
	Meet-Me Conferencing – G722	Yes	
	Meet-Me Conferencing – AMR-WB	No	
	Meet-Me Conferencing – Opus	Yes	
	Collaborate – Audio	Yes	
	Collaborate – Audio – G722	Yes	
	Collaborate – Audio – Opus	Yes	
	Call Decline Policy	Yes	
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	
	Three-Way Calling	Yes	Before answer not supported.
	Network-Based Conference	Yes	
DUT Services – Registration and Authentication	Register Authentication	Yes	
	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating Cisco BroadWorks	No	
DUT Services – Emergency Call	Emergency Call	No	
	Emergency Call with Ringback	No	

Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
DUT Services – P-Access-Network-Info Header	REGISTER with P-Access-Network-Info Header	No	
	INVITE with P-Access-Network-Info Header	No	
DUT Services – Miscellaneous	Do Not Disturb	Yes	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Anonymous Call	Yes	
	Anonymous Call Block	Yes	
	Remote Restart Via Notify	Yes	
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	Yes	
	Call Park Notification	Yes	
Advanced Phone Services – Feature Key Synchronization, Private Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Call Center Agent Logon/Logoff	No	
	Call Center Agent Unavailable Code	No	
	Executive – Call Filtering	No	
	Executive-Assistant – Call Filtering	No	
	Executive-Assistant – Diversion	No	
	Call Recording	No	
	Security Classification	No	
Advanced Phone Services – Feature Key Synchronization, Shared Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Security Classification	No	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	Yes	
	Line-Seize	Yes	

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Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Advanced Phone Services – Shared Call Appearance using Call Info	Call-Info/Lamp Management	Yes	
	Public Hold	Yes	
	Private Hold	Yes	
	Hybrid Key System	No	
	Multiple Call Arrangement	Yes	
	Bridge Active Line	Yes	
	Bridge Active Line – Silent Monitor	No	
	Call Park Notification	Yes	
Advanced Phone Services – Call Park Notification	Call Park Notification	Yes	
Advanced Phone Services – Call Center	Hold Reminder	Yes	
	Call Information	Yes	
	Hoteling Event	Yes	
	Status Event	Yes	
	Disposition Code	Yes	
	Emergency Escalation	Yes	
	Customer Originated Trace	Yes	
Advanced Phone Services – Call Recording Controls	Pause/Resume	No	
	Start/Stop	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Call Recording Video	Basic Call	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Security Classification	Security Classification	No	
Advanced Phone Services – Conference Event	Network-Based Conference Creator	No	
	Network-Based Conference Participant	No	
	Meet-Me Conference Participant	No	
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
	Bye Failover	Yes	
SBC/ALG – Basic	Register	Yes	

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Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
SBC/ALG – Failover/Failback	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
Video – Basic Video Calls	Call Origination	No	
	Call Termination	No	
	Call Hold	No	
	Call Waiting	No	
	Call Transfer	No	
Video – Cisco BroadWorks Video Services	Auto Attendant	No	
	Auto Attendant – HD	No	
	Voice Messaging	No	
	Voice Messaging – HD	No	
	Custom Ringback	No	
Video – Cisco BroadWorks Video Conference	Network-based Conference	No	
	Network-based Conference – HD	No	
	Collaborate – Video	No	
	Collaborate – Video – HD	No	
Video – Cisco BroadWorks WebRTC Client	Call from WebRTC Client	No	
	Call to WebRTC Client	No	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Ringback	Yes	
	Codec Negotiation/Renegotiation	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Call Control	Yes	
	Registration with Authentication	Yes	
	Busy Lamp Field	Yes	
	Redundancy	Yes	
	SBC	Yes	

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Cisco BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Video	No	
	Dual Stack with Alternate Connectivity	No	

2.2.2 Other Interface Capabilities

This section identifies whether the Alcatel Lucent Enterprise H2_H2P Series has implemented support for the following:

- Cisco BroadWorks Xtended Services Interface (Xsi)
- Extensible Messaging and Presence Protocol (XMPP) (BroadCloud/Cisco BroadWorks Collaborate Instant Messaging and Presence [IM&P])

Support for these interfaces is demonstrated by completing the *Cisco BroadWorks SIP Phone XSI and XMPP Test Plan* [6]. Support for these interfaces is summarized in the following table.

Cisco BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table			
Interface	**Feature**	**Supported**	**Comments**
Xsi Features – Authentication	Authenticate with SIP Credentials	No	
	Authenticate with Cisco BroadWorks User Login Credentials	No	
	Authenticate with Cisco BroadWorks User Directory Number	No	
Xsi Features – User Service Configuration	Remote Office	No	
	Cisco BroadWorks Anywhere	No	
	Simultaneous Ringing	No	
	Caller ID Blocking	No	
	Call Forwarding Always	No	
	Call Forwarding Busy	No	
	Call Forwarding No Answer	No	
	Do Not Disturb	No	
Xsi Features – Directories	Enterprise Directory	No	
	Enterprise Common Phone List	No	
	Group Directory	No	
	Group Common Phone List	No	
	Personal Phone List	No	
	Search All Directories	No	
Xsi Features – Call Logs	Placed Calls	No	
	Received Calls	No	
	Missed Calls	No	

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Cisco BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table			
Interface	**Feature**	**Supported**	**Comments**
	All Calls	No	
	Sort by Name	No	
Xsi Features – Visual Voice Mail	View Messages	No	
	Listen to Audio Message	No	
	Watch Video Message	No	
	Mark Message Read/Unread	No	
	Delete Message	No	
	Mark All Messages Read/Unread	No	
XMPP Features – Contact/Buddy List	Contacts	No	
	Favorites	No	
	Groups	No	
	Non-XMPP Contacts	No	
	Conferences	No	
XMPP Features – Presence	Login Invisible	No	
	Presence State	No	
	Presence Status	No	
	Contact's Presence State	No	

2.3 Known Issues

This section lists the known interoperability issues between Cisco BroadWorks and specific partner release(s). Issues identified during interoperability testing and known issues identified in the field are listed.

The following table provides a description of each issue and, where possible, identifies a workaround. The verified partner device versions are listed with an "X" indicating that the issue occurs in the specific release. The issues identified are device deficiencies or bugs, and are typically not Cisco BroadWorks release dependent.

The *Issue Number* is a tracking number for the issue. If it is an Alcatel Lucent Enterprise issue, the issue number is from Alcatel Lucent Enterprise's tracking system. If it is a Cisco BroadWorks issue, the issue number is from BroadSoft's tracking system.

For more information on any issues related to the particular partner device release, see the partner release notes.

Issue Number	Issue Description	Partner Version			
		2.10			

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3 Cisco BroadWorks Configuration

This section identifies the required Cisco BroadWorks device profile type for the Alcatel Lucent Enterprise H2_H2P Series as well as any other unique Cisco BroadWorks configuration required for interoperability with the H2_H2P.

3.1 Cisco BroadWorks Device Profile Type Configuration

This section identifies the device profile type settings to use when deploying the Alcatel Lucent Enterprise H2_H2P Series with Cisco BroadWorks.

Create a generic device profile type for the Alcatel Lucent Enterprise H2_H2P Series with settings as shown in the following example. A separate device profile may be created for each Alcatel Lucent Enterprise H2_H2P model. The settings shown are recommended for use when deploying the Alcatel Lucent Enterprise H2_H2P Series with Cisco BroadWorks. For an explanation of the profile parameters, see the *Cisco BroadWorks Device Management Configuration Guide* [2].

The device profile type shown provides the *Number of Ports* (number of SIP lines) setting for all Alcatel Lucent Enterprise H2_H2P Series.

Model	Number of Lines
H2	2
H2P	2

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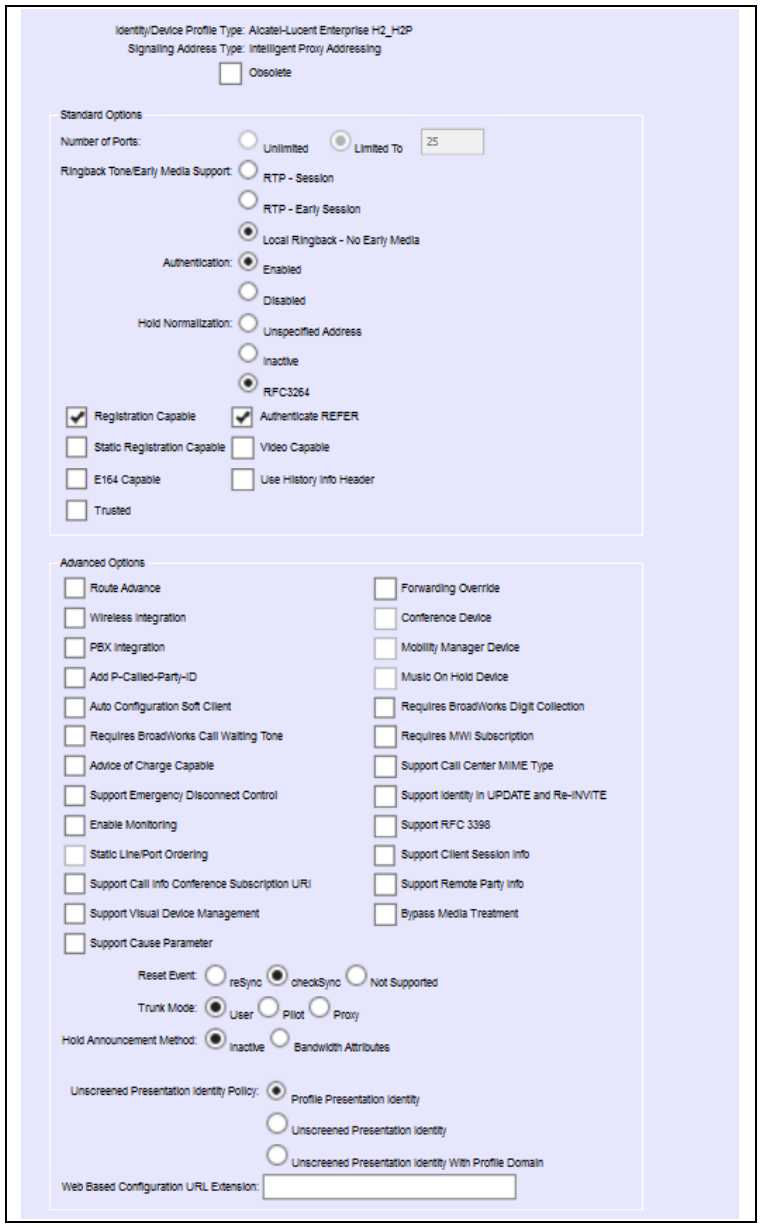

Figure 1 Device Identity/Profile Type

3.2 Cisco BroadWorks Configuration Steps

There are no additional Cisco BroadWorks configurations required.

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4 H2_H2P Series Configuration

This section describes the configuration settings required for the H2_H2P series desk phone integration with Cisco BroadWorks, primarily focusing on the SIP interface configuration. The H2_H2P series desk phone configuration settings identified in this section have been derived and verified through interoperability testing with Cisco BroadWorks. For configuration details not covered in this section, see the *Premium User Manual* [1] for H2_H2P Series.

4.1 Configuration Method

Alcatel Lucent Enterprise H2_H2P Series Premium Desk Phones can be configured thought a single SIP configuration file. All the configuration parameters of system and subscriber are described in this configuration file.

The configuration file could be retrieved by HTTP or HTTPS methods. And the HTTP or HTTPS download URL could be configured by either DHCP options or static configuration. H2_H2P series desk phone will load the configuration file during each phone initialization or synchronization. For detailed description of the phone provisioning and updating, see the *Premium User Manual* [1] for H2_H2P Series.

Configuration Files

H2_H2P Series Configuration Files	Level	Description
A0V00H200000.cfg A0V0H2P00000.cfg	System	Contains configurable parameters that apply to all devices in a given deployment.
config.%BWMACADDRESS%.xml	Subscriber	Contains configurable parameters that apply to an individual device in a deployment.

4.2 System Level Configuration

This section describes system-wide configuration items that are generally required for each H2_H2Ps series desk phone to work with Cisco BroadWorks. Subscriber-specific settings are described in the next section.

All the system level configuration is described in the single configuration file *config.<mac>.xml*.

4.2.1 Configure Network Settings

Step	Command	Description
Step 1	**Set WAN port Network type.** Example: `WAN TYPE :0`	Set the network WAN interface Type. Available types: ▪ 0 for IPv4 Only ▪ 1 for IPv6 Only ▪ 2 for IPv4 and IPv6

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Step	Command	Description

Step 2	**Set Network mode**
	Example:
	`Enable DHCP :1`
	`Enable PPPoE :0`
		Set the network WAN interface mode.
		Available modes:
		▪ Enable DHCP set to 1 and for Enable PPPoE set to 0 for DHCP mode.
		▪ Enable DHCP set to 0 and for Enable PPPoE set to 0 for static IP mode.
		▪ Enable DHCP set to 0 and for Enable PPPoE set to 1 for PPPoE mode.

Step 3	**Set Network Mask** Example: `WAN Subnet Mask: 255.255.255.0`	Set the network WAN interface mask.
Step 4	**Set Gateway** Example: `WAN Gateway: 192.168.1.1`	Set the default gateway.

Step 5	**Set NTP Server**
	Example:
	`Enable SNTP: 1`
	`SNTP Server: time.nist.gov`
	`Second SNTP Server: time.windows.com`
		Set the NTP server of phone.
		(1-enable, 0-disable).
		▪ SNTP Server- Primary SNTP Server
		▪ Second SNTP Server- Backup SNTP Server

Step 6	**Set Transport Protocol** `SIP1 Transport: 0`	Set the transport protocol. ▪ 0: UDP ▪ 1: TCP ▪ 2: TLS
Step 7	**Enable DNS SRV Lookup** `SIP1 DNS Mode :1`	Enable DNS SRV lookups. ▪ 0: A ▪ 1: SRV ▪ 2: NAPTR

4.2.2 Configure SIP Interface Settings

Step	Command	Description
Step 1	**Set SIP Proxy/Domain** Example: `SIP1 Register Addr: as.tekvizion.com`	Set the S series SIP server to the Fully Qualified Domain Name (FQDN) for the BroadWorks Application Server cluster. The domain must match the domain configured for the BroadWorks subscriber's line/port domain.
Step 2	**Set Outbound Proxy** Example: `SIP1 Proxy Addr: sbc2.tekvizion.com`	Set the outbound proxy to the session border controller (SBC) if one is deployed between the S series and BroadWorks. If there are redundant SBCs, set it to the FQDN for the SBC cluster.
Step 3	**Set Register Mode** `SIP1 Enable Reg: 1`	Enable SIP register. ▪ 1: enable ▪ 0: disable
Step 4	**Set SIP Timers** `SIP1 Register TTL: 1200`	The suggested registration period (Reg Max Expires) is one day or 86400 seconds.

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4.2.3 Configure Service Settings

Step	Command	Description
Step 1	**Set User Agent** `SIP1 User Agent:ALE H2P`	Set the user agent.
Step 2	**Enable Negotiated DTMF Type** Example: `SIP1 DTMF Mode: 1`	Set the S series to enable inband or RFC 2833 negotiated DTMF ▪ 0: relay ▪ 1: RFC2833 ▪ 2: SIP_INFO ▪ 3: auto
Step 3	**Set Ring Types** Example: `SIP1 Ring Type: Type 1`	Set the incoming call ring type.

Step 4	**Enable Supplementary Services**
	`P1 CallWaiting: 1`
	`P1 CallTransfer: 1`
	`P1 CallConference: 1`
		Set the call waiting, call transfer, and call conference.

4.3 Subscriber Level Configuration

This section identifies the device-specific parameters, including registration and authentication. These settings must be unique across devices to be matched with the settings for a Cisco BroadWorks SIP trunk or subscriber. SIP Registration requires that a unique address of record (AoR) be provisioned on Cisco BroadWorks and the device.

Step	Command	Description
Step 1	**Enable each line to be used** `SIP1 Enable Reg    :1`	Enable each S series in use.
Step 2	**Set register user ID for each Line** `SIP1 Phone Number  :1234`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication for each line**
	`SIP1 Register User : User1`
	`SIP1 Register Pswd :123456`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.

Step 4	**Configure display name for each line** `SIP1 Display Name  :Test`	For each line, configure the name to be displayed on the device.

4.1 SIP Advanced Feature Configuration

This section provides configuration instructions for advanced SIP features supported by the phone including but not limited to Shared Call Appearance, Busy Lamp Field, Feature Key Synchronization, Call Center, Emergency Call, Advice of Charge, Call Recording, and Security Classification.

4.1.1 Shared Call Appearance Configuration

The Shared Call Appearance (SCA) feature allows the administrator to add multiple locations to a given line. Any of the locations can be used to originate or receive calls.

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When a call comes into an idle line, all the provisioned locations for that line are alerted. The first location to answer the call is connected to the originator. If the line is already active in a call, only the active location is alerted.

A subscriber can originate calls from any of the configured locations. All other locations are unable to originate calls until all calls are released.

It is recommended to use the phone number plus an index (<phoneNumber>_<index>) when provisioning the unique AoR for each shared line, for example: 2405551111_2. If a phone number does not exist, use the Media Access Control (MAC) address plus an index (<macAddress>_<index>).

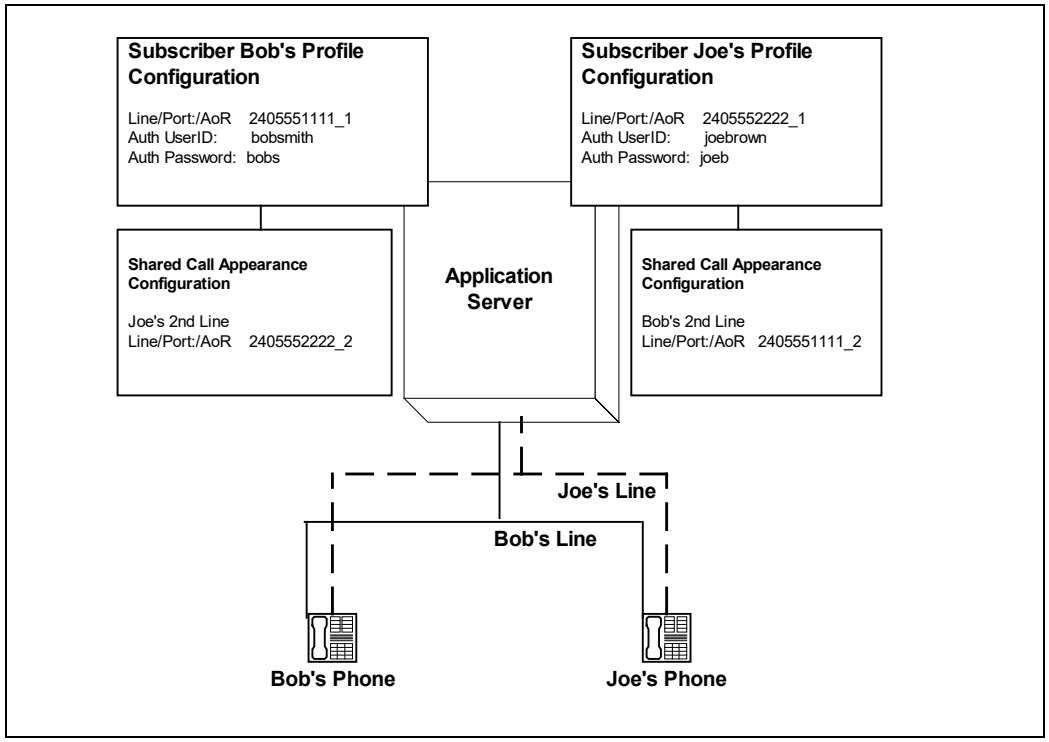

Figure 2 Shared Call Appearance Configuration

Figure 2 shows that Bob and Joe each have two lines and that Bob shares a line with Joe and Joe shares a line with Bob. The figure also shows the applicable Subscriber Profile and Shared Call Appearance configuration data for subscribers Bob and Joe.

When Bob (2405551111) is called, Bob's first line and Joe's second line ring. When Joe (2405552222) is called, Joe's first line and Bob's second line ring.

The following steps show how to configure both phones for this Shared Call Appearance configuration.

4.1.1.1 Bob's Phone Configuration – <Bob's MAC.cfg>

The following steps are used to configure line 1 for Bob's phone. This line rings when Bob is called, and it has Bob's authentication information.

Step	Command	Purpose
Step 1	**Configure the Line as Shared** `SIP1 Enable SCA :1;`	Configure the line as "shared" (as opposed to "private").

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Step	Command	Purpose
Step 2	**Set Register User ID** `SIP1 Phone Number :2405551111_1;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication**
	`SIP1 Register User :bobsmith`
	`SIP1 Register Pswd :bobs;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Bob is called, and it has Bob's authentication information.

Step 4	**Configure the Display Name** `SIP1 Display Name :Bob Smith;`	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Bob's phone. This line rings when Joe is called and it has Joe's authentication information.

Step	Command	Purpose
Step 1	**Configure the Line as Shared** `SIP2 Enable SCA :1;`	Configure the line as "shared" (as opposed to "private").
Step 2	**Set the Register User ID** `SIP2 Phone Number :2405552222_2;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication**
	`SIP2 Register User :joebrown`
	`SIP2 Register Pswd :joeb`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called and it has Joe's authentication information.

Step 4	**Configure the Display Name** `SIP2 Display Name :Joe Brown;`	Configure the name to be displayed on the device for this line.

4.1.1.2 Joe's Phone Configuration – <Joe's MAC.cfg>

The following steps are used to configure line 1 for Joe's phone. This line rings when Joe is called, and it has Joe's authentication information.

Step	Command	Purpose
Step 1	**Configure the Line as Shared** `SIP1 Enable SCA :1;`	Configure the line as "shared" (as opposed to "private").
Step 2	**Set the Register User ID** `SIP1 Phone Number :2405552222_1;`	The register user ID must correspond with the line/port setting on BroadWorks.

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Step	Command	Purpose

Step 3	**Enable SIP Authentication**
	`SIP1 Register User :joebrown;`
	`SIP1 Register Pswd :joeb;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called, and it has Joe's authentication information.

Step 4	**Configure the Display Name** `SIP1 Display Name :Joe Brown`	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Joe's phone. This line rings when Bob is called, and it has Bob's authentication information.

Step	Command	Purpose
Step 1	**Configure the Line as Shared** `SIP2 Enable SCA :1;`	Configure the line as "shared" (as opposed to "private").
Step 2	**Set the Register User ID** `SIP2 Phone Number :2405551111_2 ;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication**
	`SIP2 Register User :bobsmith`
	`SIP2 Register Pswd :bobs;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Bob is called, and it has Bob's authentication information.

Step 4	**Configure the Display Name** `SIP2 Display Name :Bob Smith;`	Configure the name to be displayed on the device for this line.

4.1.1.3 Hybrid Key System Configuration

Hybrid Key System emulation requires the phone to support assignment of multiple line keys to a single registering line on the phone. It also requires the phone to limit each line key to a single call appearance or provide the configurability to roll a new call over to the next free line key. Any of the locations can be used to originate or receive calls.

Configure of the phone to enable Hybrid Key System is described as below:

Step	Command	Purpose
Step 1	**Configure the Line as Shared** `SIP1 Enable SCA :1`	Configure the line as "shared" (as opposed to "private").

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Step	Command	Purpose
Step 2	**Configure More Line Keys** Fkey1 Type :2 Fkey1 Value :SIP1 Fkey1 Title : Fkey2 Type :2 Fkey2 Value :SIP1 Fkey2 Title : Fkey3 Type :2 Fkey3 Value :SIP1 Fkey3 Title :	Assign multiple line keys to a single registered line.

4.1.2 Busy Lamp Field Configuration

The Busy Lamp Field implementation provides an attendant console function. Configuration of the phone to enable Busy Lamp Field is described as follows.

Step	Command	Purpose
Step 1	**Configure the Line Enable Busy Lamp Field Function** SIP1 Enable BLFList:1	Configure the line enable Busy Lamp Field.
Step 2	**Set the Busy Lamp Field Number** SIP1 BLFList Uri :123456	Busy Lamp Field number configured by your service provider. "123456" is an example.
Step 3	**Configure More Dss keys Empty** Fkey1 Type :0 Fkey1 Value : Fkey1 Title : Fkey2 Type :0 Fkey2 Value : Fkey2Title :	All the empty Dss Keys will be automatically configured with Busy Lamp Field value.

4.1.3 Feature Key Synchronization Configuration

The Feature Key Synchronization provides synchronization of phone services, such as Call Forwarding and Do Not Disturb, with the settings on BroadWorks for the analogous services. Configuration of the phone to enable Feature Key Synchronization is described as follows.

Step	Command	Purpose
Step 1	**Configure the Line Enable Feature Key Synchronization** SIP1 Feature Sync :1	Enable Feature Key Synchronization.

4.1.4 Call Center Feature Configuration

This section provides configuration instructions to configure the phone to enable integration with BroadWorks Call Center features including but not limited to call information, hoteling, status, and disposition codes.

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Step	Command	Purpose
Step 1	**Configure the Line Enable Call Center Feature** `SIP1 Sub CC Status :1`	Enable Call Center feature.
Step 2	**Configure the Line Enable Hoteling Feature** `SIP1 Server Type :28`	Enable Hoteling feature.

Step 3	**Configure Dss Key Support Disposition Code**
	`Fkey10 Type :3`
	`Fkey10 Value : F_DISPOSITION:123`
	`Fkey10 Title :`
		Enable enter Disposition Code.
		F_DISPOSTION is Dss Key's subtype.
		"123" is the disposition code.

Step 4	**Configure Dss Key Support Emergency Escalate**
	`Fkey11 Type :3`
	`Fkey11 Value :F_ESCALATE:456`
	`Fkey11 Title :`
		Enable emergency escalate.
		F_ ESCALATE is Dss Key's subtype.
		"456" is the supervisor's number.

Step 5	**Configure Dss Key Support Customer Originated Trace**
	`Fkey12 Type :3`
	`Fkey12 Value :F_TRACE`
	`Fkey12 Title :`
		Enable Customer Originated Trace.
		F_ TRACE is Dss Key's subtype.

4.1.5 Hoteling and Flexible Seating Feature Configuration

This section provides configuration instructions to configure the phone to enable integration with BroadWorks Hoteling and Flexible seating feature.

Step	Command	Purpose
Step 1	Configure the Line Enable Hoteling Feature `SIP1 Server Type :28`	Enable Hoteling feature.
Step 2	Configure the Hotel Guest number `Agent Number :0910`	Configure the Hotel Guest number
Step 3	Configure the Hotel Guest password `Agent Password :123456`	Configure the Hotel Guest password
Step 4	Configure the Line for Hotel Host `Agent Sipline :1`	Configure the line.
Step 5	Configure the State for Hotel Guest `Agent Status :3`	0:Logoff 1:Logon 2:Unavailable 3:Available 4:Wrap-up

4.1.6 Call Recording Feature Configuration

ALE H2_H2P does not support this feature.

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4.1.7 Security Classification Feature Configuration

ALE H2_H2P does not support this feature.

4.1.8 Emergency Call Configuration

ALE H2_H2P does not support this feature.

4.1.9 Advice of Charge Configuration

ALE H2_H2P does not support this feature.

4.1.10 Conference Event Configuration

ALE H2_H2P does not support this feature.

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5 Device Management

The Cisco BroadWorks Device Management feature provides the capability to automate generation of device configuration files to support mass deployment of devices. This section identifies the Device Management capabilities supported by the Alcatel Lucent Enterprise H2_H2P Series and the configuration steps required. For Device Management configuration details not covered here, see the *Cisco BroadWorks Device Management Configuration Guide* [2] and the *Cisco BroadWorks CPE Kit Usage Guide* [8].

5.1 Device Management Capabilities Supported

The Alcatel Lucent Enterprise H2_H2P Series has completed Device Management interoperability testing with Cisco BroadWorks using the *Cisco BroadWorks Device Management Interoperability Test Plan* [7]. The results are summarized in the following table.

The Cisco BroadWorks test plan is composed of packages, each covering distinct interoperability areas. Each package is composed of one or more test items, which in turn, are composed of one or more test cases. The test plan exercises the Device Management interface between the device and Cisco BroadWorks with the intent to ensure interoperability.

The *Supported* column in the following table identifies the Alcatel Lucent Enterprise H2_H2P Series' support for each of the items covered in the test plan packages, with the following designations:

- Yes Test item is supported
- No Test item is not supported
- NA Test item is not applicable
- NT Test item was not tested

Caveats and clarifications are identified in the *Comments* column.

NOTE: *DUT* in the following table refers to the *Device Under Test*, which in this case is the Alcatel Lucent Enterprise H2_H2P Series.

Cisco BroadWorks Device Management Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
HTTP File Download	HTTP Download Using XSP IP Address	Yes	
	HTTP Download Using XSP FQDN	Yes	
	HTTP Download Using XSP Cluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using XSP IP Address	Yes	
	HTTPS Download Using XSP FQDN	Yes	
	HTTPS Download Using XSP Cluster FQDN	Yes	

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Cisco BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
HTTPS File Download with Client Authentication	HTTPS Download with Client Authentication Using XSP FQDN	Yes	
	HTTPS Download with Client Authentication Using XSP Cluster FQDN	Yes	
Time Zone Mapping	Inspect Time Zone Setting	Yes	
Language Mapping	Inspect Language Setting	Yes	
File Inspection	Inspect System Config File	Yes	
	Inspect Device-Specific Config File	Yes	
	Inspect Other Config Files	Yes	
	Inspect Static Files	Yes	
Device Inspection	Inspect SIP Settings	Yes	
	Inspect Line Settings	Yes	
	Inspect Service Settings	Yes	
HTTP File Upload	HTTP Upload Using XSP IP Address	No	
	HTTP Upload Using XSP FQDN	No	
	HTTP Upload Using XSP Cluster FQDN	No	
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	Yes	
	Shared Line Origination	Yes	
	Shared Line Termination	Yes	
	Shared Line Status	Yes	
	Busy Lamp Field	Yes	
	Network-Based Conference	Yes	
Flexible Seating	Association via Voice Portal	Yes	
	Association via Phone	No	
No Touch Provisioning	Provision via DHCP Options Field	Yes	
	No Touch Provision via DM redirect	No	
	No Touch Provision via Vendor redirect	Yes	

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5.2 Device Management Configuration

This section identifies the steps required to enable the Alcatel Lucent Enterprise H2_H2P Series for Device Management. For Device Management configuration details not covered here, see the *Cisco BroadWorks Device Management Configuration Guide* [2] and the *Cisco BroadWorks CPE Kit Usage Guide* [8].

5.2.1 Configure Cisco BroadWorks Tags

The template files in Device Management use tags to represent the data stored on Cisco BroadWorks. When the configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on Cisco BroadWorks. There are default tags defined in the Device Management software and there are custom tags that the service provider can create and define via the web portal for use by Device Management. There are two types of custom tags that can be defined: system-default tags that are common to all devices on the system and device type-specific tags that are common to Alcatel Lucent Enterprise device models only.

The Alcatel Lucent Enterprise H2_H2P Series make use of custom tags which can be configured by a Cisco BroadWorks administrator as either system default or device type-specific tags. This section identifies the required tags.

5.2.1.1 Create System Default Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and select the *System Default* tag set. The Alcatel Lucent Enterprise configuration templates make use of the tags in the following table. Add the tags if they do not already exist.

Tag Name	Valid Settings	Description
%SNTP_SERVER_1%	IP address/FQDN	Network Time Protocol (NTP) server address.
%SNTP_SERVER_2%	IP address/FQDN	NTP server address alternate.
%DNS_SERVER_1%	IP address	DNS server address.
%DNS_SERVER_2%	IP address	DNS server address alternate.
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address.
%SBC_PORT%	Port	SBC SIP port. The port should be set if the defined session border controller (SBC) address is an IP address. If the SBC address is an FQDN, then the SBC port should not be set.
%BWLANGUAGE-1%	Language character	Set phone Language.
%SYS_IMAGE%	Auto Image Url	URL to download image.
%BWTIMEZONE-1%	Time zone number	Time zone settings.
%BWLINEPORT-1%	Phone Number	The line port is provisioned on the device that is assigned to the user.
%BWNAME-1%	Display Name	This is the subscriber's first name and last name in the user's profile.
%BWLINEPORTHOST-1%	Sip Name	The line port and domain are provisioned on the device that is assigned to the user.

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Tag Name	Valid Settings	Description
%BWHOST-1%	Register Address	This is the domain portion of the provisioned line port for the device assigned to the user.
%BWAUTHUSER-1%	Register User	This is the authentication user name.
%BWAUTHPASSWORD-1%	Register Password	This is the user's authentication password.
%BWNETWORK-CONFERENCE-SIPURI-USERNAME-1%	Conference Uri	This is the network conferencing SIP URI for the current user.
%BWFAC-DND-ACTIVATE-1%	DND On Service Code	This evaluates to the configured feature access code with the prefix for Do Not Disturb activation for the primary line.
%BWFAC-DND-DEACTIVATE-1%	DND Off Service Code	This evaluates to the configured feature access code with the prefix for Do Not Disturb deactivation for the primary line.
%BWFAC-CFA-ACTIVATE-1%	Forward immediately On Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding Always activation.
%BWFAC-CFA-DEACTIVATE-1%	Forward immediately Off Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding Always deactivation.
%BWFAC-CFB-ACTIVATE-1%	Forward Busy On Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding Busy activation.
%BWFAC-CFB-DEACTIVATE-1%	Forward Busy Off Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding Busy deactivation.
%BWFAC-CFNA-ACTIVATE-1%	Forward No Answer On Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding No Answer activation.
%BWFAC-CFNA-DEACTIVATE-1%	Forward No Answer Off Service Code	This evaluates to the configured feature access code with the prefix for Call Forwarding No Answer deactivation.
%BWBLF-USER-1%	BLFList Uri	This is the user portion of the Busy Lamp Field URI without the "sip:" URI delimiter.

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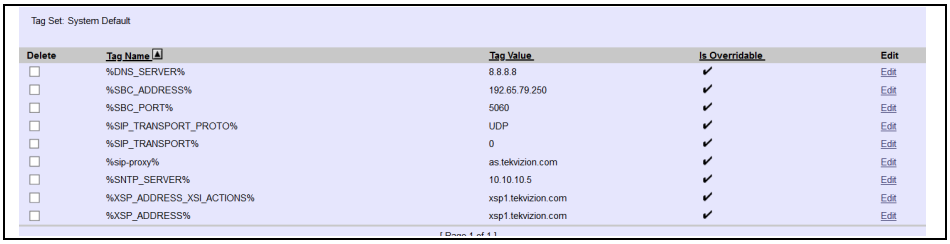
Example System Default Tag Settings


Tag Set: System Default

Delete	Tag Name	Tag Value	Is Overridable	Edit
	%DNS_SERVER%	8.8.8.8	✔	Edit
	%SBC_ADDRESS%	192.65.79.250	✔	Edit
	%SBC_PORT%	5060	✔	Edit
	%SIP_TRANSPORT_PROTO%	UDP	✔	Edit
	%SIP_TRANSPORT%	0	✔	Edit
	%sip-proxy%	as.tekvizion.com	✔	Edit
	%SNTP_SERVER%	10.10.10.5	✔	Edit
	%XSP_ADDRESS_XSI_ACTIONS%	xsp1.tekvizion.com	✔	Edit
	%XSP_ADDRESS%	xsp1.tekvizion.com	✔	Edit

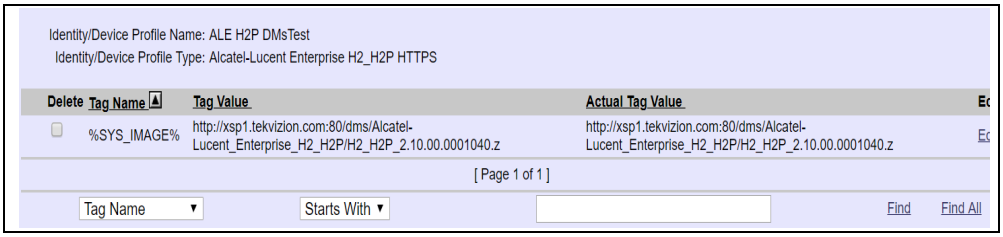
Figure 3 System Default Tag Settings

5.2.1.2 Create Device Type-specific Tags

Browse to *System → Resources → Device Management Tag Sets* and then click **Add** to add a new tag set. Configure the tag set name using the device name appended by *Tags*: *Alcatel-Lucent-H2_H2P-Tags*. Add the device type specific tags in the following table to the device tag set. If the tag set already exists, make sure the following tags are defined.

NOTE: The Alcatel Lucent Enterprise H2_H2P Series does not currently require device type-specific tags, but it is important to create the tag set as a placeholder to enable use of tags in the future.

Example Device Type-specific Tag Settings


Identity/Device Profile Name: ALE H2P DMsTest
Identity/Device Profile Type: Alcatel-Lucent Enterprise H2_H2P HTTPS

Delete	Tag Name	Tag Value	Actual Tag Value	Ec
	%SYS_IMAGE%	http://xsp1.tekvizion.com:80/dms/Alcatel-Lucent_Enterprise_H2_H2P/H2_H2P_2.10.00.0001040.z	http://xsp1.tekvizion.com:80/dms/Alcatel-Lucent_Enterprise_H2_H2P/H2_H2P_2.10.00.0001040.z	Ec

[Page 1 of 1]

Tag Name ▾ Starts With ▾ Find Find All

Figure 4 Device Type-specific Tag Settings

5.2.2 Configure Cisco BroadWorks Device Profile Type

The device profile type is a system-level structure that defines how the device interfaces with Cisco BroadWorks. It also identifies the default configuration files and other files, such as firmware, which are required for the device to operate correctly. The device profile type is created by the system administrator. Group administrators use the device profile type to create a device profile. The device profile is an instance of the device profile type that is associated with a physical device.

There are two Cisco BroadWorks device profile configuration methods described: import and manual. The import method takes a DTAF as input and builds the Cisco BroadWorks device profile type(s) automatically. The manual method takes the administrator through the steps to manually add and configure the device profile type(s).

The import method should be used if all of the following prerequisites are met:

- The Cisco BroadWorks Release is 17.0 or later.
- The device profile type(s) being imported do not already exist on the system. (If either a previous import or manual configuration was done, then the import fails.)

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- There is a DTAF file available for import with a Cisco BroadWorks release level that is the same as or prior to the release to which it is being imported. If the DTAF file is at a release level later than the release being imported to, then the import can fail.

Otherwise, use the manual method.

For more detailed instructions, see the *Cisco BroadWorks CPE Kit Usage Guide* [8] and the *Cisco BroadWorks Device Management Configuration Guide* [2].

5.2.2.1 Configuration Method 1: Import

This section identifies the steps necessary to make use of the Device Management import feature to configure Cisco BroadWorks to add the Alcatel Lucent Enterprise H2_H2P Series as a Device Management-enabled device type. Also, see the *Cisco BroadWorks CPE Kit Usage Guide* [8].

Download the Alcatel Lucent Enterprise H2_H2P Series CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you wish to import.

1) Log in to Cisco BroadWorks as an administrator.
2) Browse to *System* → *Resources* → *Identity/Device Profile Types* and then click **Import**.
3) Select *Browse* to find the extracted DTAF file for the model and then click **OK** to start the import.

   After the import finishes, complete the following post-import configuration steps:
4) Browse to *System* → *Resources* → *Identity/Device Profile Types*.
5) Perform a search to find the imported Alcatel Lucent Enterprise device profile type, Alcatel Lucent Enterprise H2_H2P Series.
6) Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform (Xsp) or Xsp cluster address.

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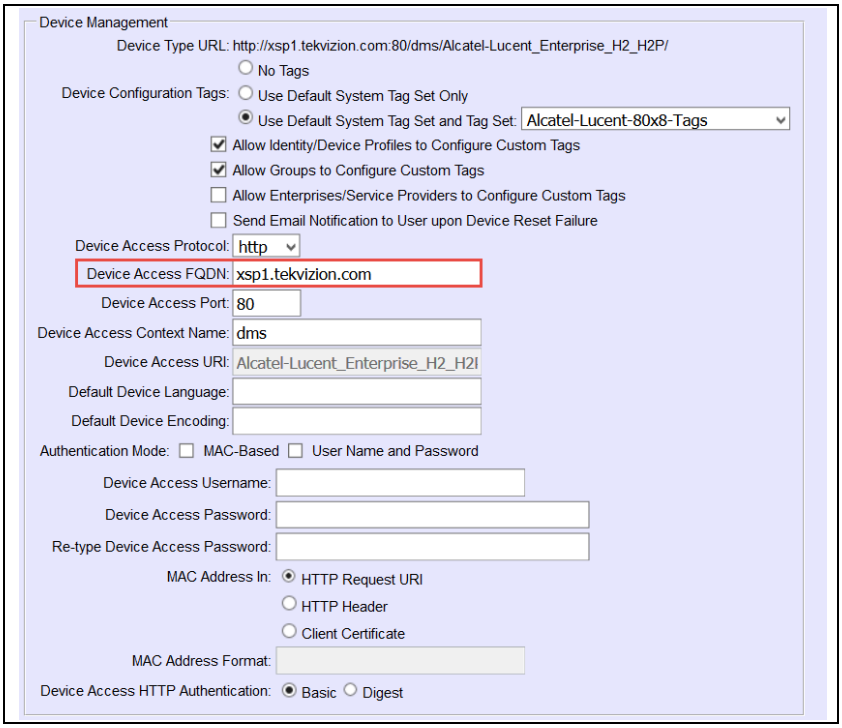

Figure 5 Device Access FQDN

7) After importing the DTAFs, restart the Application Server to load the *TimeZoneAlias* files.

5.2.2.2 Configuration Method 2: Manual

This section identifies the basic steps necessary for an administrator to manually configure Cisco BroadWorks to add the Alcatel Lucent Enterprise H2_H2P Series as a Device Management-enabled device type. This method should not be used except in special cases as described in the opening to section *5.2.2 Configure Cisco BroadWorks Device Profile Type*.

For more detailed instruction on manual configuration, see the *Cisco BroadWorks CPE Kit Usage Guide* [8] and the *Cisco BroadWorks Device Management Configuration Guide* [2].

The steps in this section can also be followed to update previously imported or configured device profile type(s) with new configuration files and firmware.

If there are DTAFs for more than one device model, these steps must be completed for each model.

5.2.2.2.1 Create or Modify Device Profile Type

This section identifies the Cisco BroadWorks device profile type settings relevant to Device Management for the Alcatel Lucent Enterprise H2_H2P Series.

Browse to *System → Resources → Identity/Device Profile Types* and perform a search to find the Alcatel Lucent Enterprise device profile type(s) created in section *3.1 Cisco BroadWorks Device Profile Type Configuration* or add the device profile type for each model using the settings from section *3.1 Cisco BroadWorks Device Profile Type Configuration* if they do not exist.

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Configure the device profile type *Signaling Address Type*, *Standard* and *Advanced* options settings to match the settings in section *3.1 Cisco BroadWorks Device Profile Type Configuration*.

Configure the device profile type *Device Management* options as shown in section *5.2.2.1 Configuration Method 1: Import*.

The following subsections identify the required settings specific to Device Management.

5.2.2.2.2 Define Device Profile Type Files

This section describes the Cisco BroadWorks Device Management configuration necessary to identify the configuration files and other files that the Alcatel Lucent Enterprise H2_H2P Series download.

Configuration template the H2_H2P uses must be uploaded to Cisco BroadWorks. Download the Alcatel Lucent Enterprise H2_H2P Series CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the configuration files from the *Configuration Files* folder of CPE kit.

The following table identifies the Alcatel Lucent Enterprise configuration files distributed with the 2.10.0001050 CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
Examples			
config.%BWMACADDRESS%.xml	*config.mac.xml*	Device-specific	This file contains all the configuration and firmware files that the phone needs to load.
A0V00H200000.cfg *A0V0H2P00000.cfg*	*A0V00H200000.cfg* *A0V0H2P00000.cfg*	System-level	This file is the default file that the phone requests when the config.%BWMACADDRESS%.xml file is not present.

5.2.2.2.2.1 config.%BWMACADDRESS%.xml

Add the config.%BWMACADDRESS%.xml file to the device profile type with the settings shown in *Figure 6*.

After creating the device profile type file, upload config.%BWMACADDRESS%.xml, which is extracted from the CPE kit obtained from Alcatel Lucent Enterprise. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

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Figure 6 config.%BWMACADDRESS%.xml File Settings

5.2.2.2.3 *Time Zone Mapping*

The CPE kit contains a time zone properties file for each device model. This file maps the Cisco BroadWorks user's time zone settings to the device's time zone settings.

This time zone mapping file must be added to the */usr/local/Cisco BroadWorks/bw_base/conf/dms* directory on the Application Server using the following file name format: *TimeZoneAliasLabels_<Device_Type_Name>.properties*.

For example, if the device type name is *MyDevice T200,* the time zone mapping file name must be *TimeZoneAliasLabels_MyDevice+T200.properties*. (A space in the device name must be converted to a "+" in the file name.) A separate *TimeZoneAlias* file must be provided for each device profile type, corresponding to each device profile type created.

You must restart the Application Server for the *TimeZoneAlias* files to be picked up by the system.

5.2.2.2.4 *Language Mapping*

To enable Device Management control of the phone language for languages other than English, the languages defined on the Cisco BroadWorks Application Server must be mapped to the Alcatel Lucent Enterprise H2_H2P Series definitions.

To perform the mapping, select the device profile type and from there select the *Languages* link. The defined Cisco BroadWorks languages will be listed in a table. If languages other than English do not appear, they have not yet been defined on the Cisco BroadWorks Application Server.

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The supported languages and required mapping are:

Cisco BroadWorks Language Identifier	ALE H2_H2P Language Mapping
English (US)	en
English (BR)	en
French	fr
German	de
Italian	it
Japanese	jp
Russian	ru
Spanish (Spain)	es

The language applied to an individual phone is determined by the language defined for the user on the *Cisco BroadWorks User's Profile* page (see *Figure 6*).

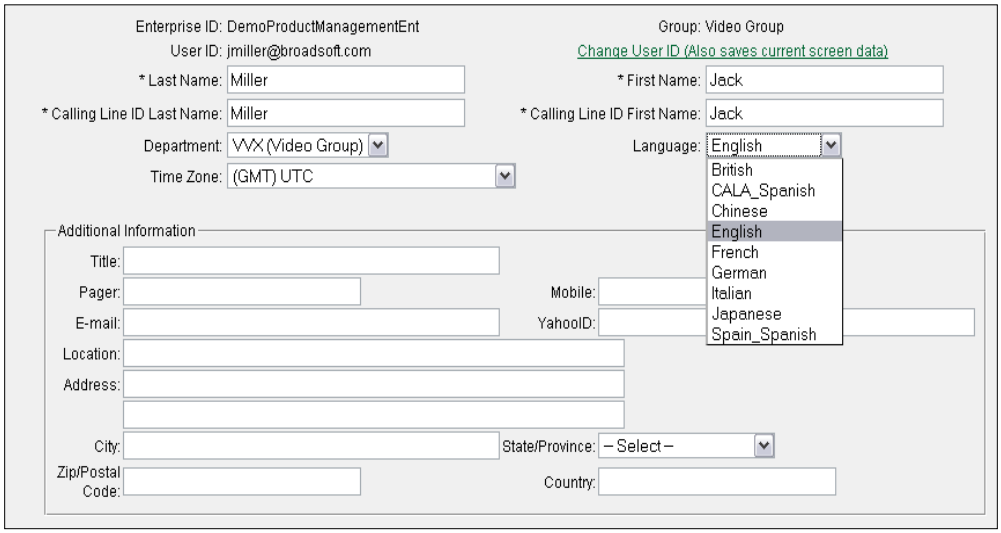

Figure 7 Cisco BroadWorks User Language Definition

5.2.3 Create Device Profile Instance

The previous sections defined the device profile type such that the system is ready to mass deploy device profiles. A device profile is an instance of the device profile type and defines the Cisco BroadWorks interface to an individual Alcatel Lucent Enterprise device.

Browse to the Cisco BroadWorks *<group>* → *Resources* → *Identity/Device Profiles* page and then select **Add** to add a new Alcatel Lucent Enterprise H2_H2P device profile. Configure the device profile as shown in the *Figure 8* example.

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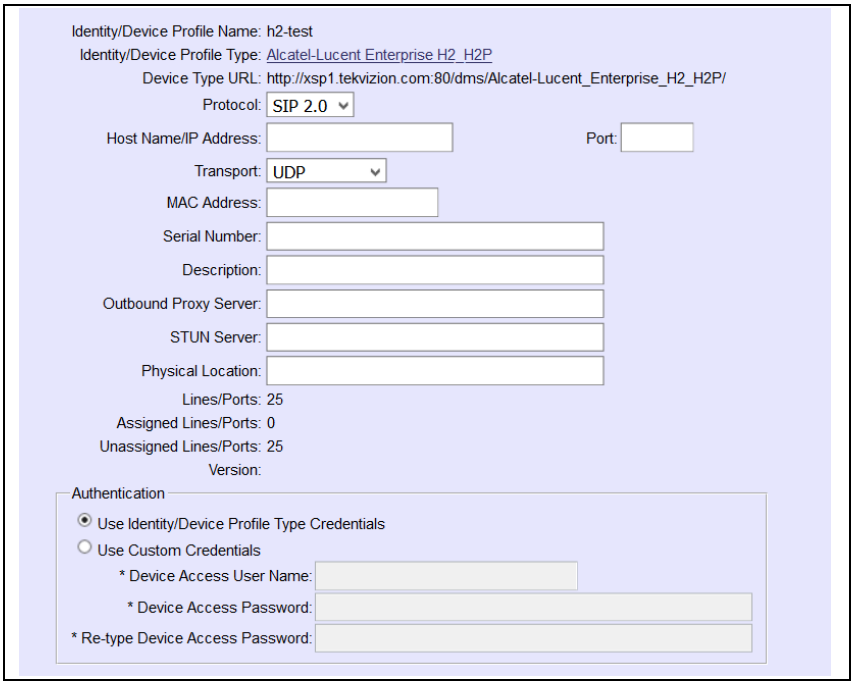

Figure 8 Device Profile Instance

5.2.4 Configure Cisco BroadWorks User

Configure the user with the desired Cisco BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and are defined in the device configuration files, if the template files are created with the correct Device Management tags.

The device profile created in the previous section must be assigned to the Cisco BroadWorks user. Assigning the device profile to the user automatically causes the Device Management feature to generate the device configuration files for this user's device.

To assign the device profile to the user, browse to the Cisco BroadWorks *<user>* → *Addresses.*

5.2.5 Customize Tags

This section identifies custom tags used by the H2_H2P that may need to be customized at the group or device profile. Customizing a tag at the group level overrides the setting on the device profile type for the device profiles created within the group. Customizing a tag at the device profile level overrides the setting at the device profile type and/or group level for the individual device profile.

5.2.5.1 SBC Address Customization for Edge Device

In many deployments, an edge device, such as an enterprise SBC or application layer gateway, is deployed on the enterprise edge. The edge device's SIP server or outbound proxy setting is configured with the service provider's SBC IP address or FQDN. If there is no edge device, the following customization does not apply.

To integrate the edge device with Device Management, the SBC address tag (%SBC_ADDRESS%) defined in section *5.2.1.1 Create System Default Tags* must be overridden at the group level with the LAN address of the edge device. To do so, perform that following steps.

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1) At the *Group* → *Utilities* → *Configure Device* page, select the Alcatel Lucent Enterprise device profile (for example, jc-ALE-H2_H2P).
2) Click on the *Custom Tags* tab.
3) Click **Add**.
4) For the tag, enter “SBC_ADDRESS”.
5) For the value, enter the edge device LAN IP address.
6) To save the tag data, click **OK**.

5.2.6 Configure Alcatel Lucent Enterprise H2_H2P Series

This section describes the steps necessary to configure the Alcatel Lucent Enterprise H2_H2P Series to integrate with Cisco BroadWorks Device Management.

5.2.6.1 Defining Device Management File Access URI

The H2_H2P series desk phone can use either static mode or DHCP mode to get the URL of the provisioning server parameters.

If using static mode, user need to configure the DM_URL in phone local setting with the provisioning server parameter.

Manually configured use static mode for H2_H2P Series through its web interface http(s)://<device IP>. The default login username and password are “admin/123456”.

After login the device, browser to Servicing → Auto Provision page, and configure the BroadWorks Device Management URL, Device Management Username and Password. Set the Update Mode to Update After Reboot.

Restart the phone to download Device Management configuration files. In case Device Management Username and Password is not configured on Auto Provision page, supply the BroadWorks device access username and password when prompted during rebooting.

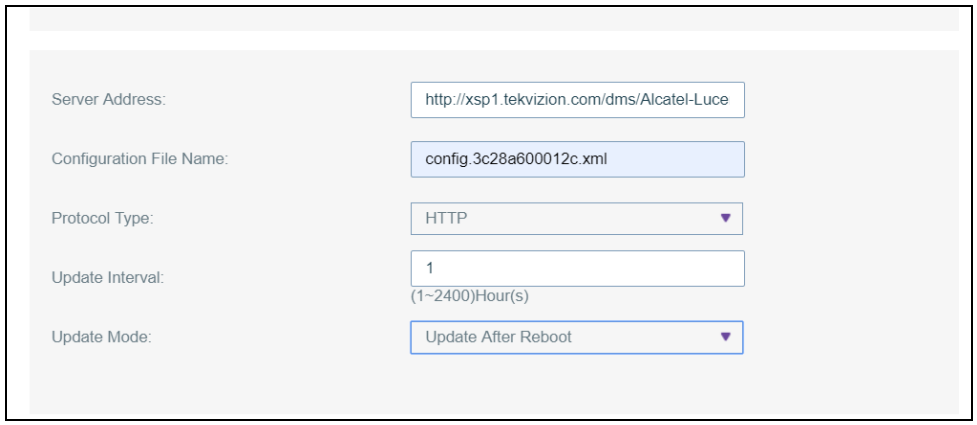

Figure 9 Static Mode Configuration

If using DHCP mode, the URL for a BroadWorks provision URL can be obtained through DHCP options 66 (default) or 43 (if previously configured). The BroadWorks provision URL from the DHCP offer message points to the location where each H2_H2P Series phone downloads the device profile.

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Configure the end customer's DHCP server with Option 66 containing the BroadWorks Device Type URL. The URL is in format of http://<Device Access FQDN>:<Device Access Port>/<Device Access Context Name>/<Device Access URI>/config.$mac.xml.

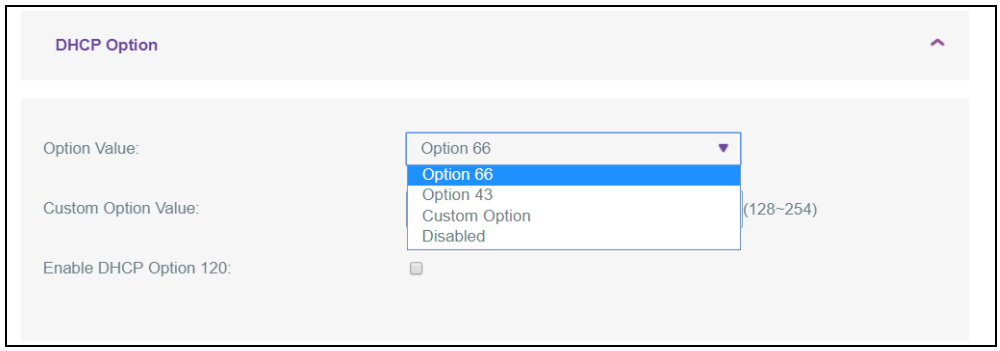

Figure 10 DHCP Mode Configuration

5.2.6.2 No Touch Provisioning

No Touch Provisioning allows H2_H2P series to be deployed with minimal user input. To put the endpoint in service, the H2_H2P series can be simply taken out of the box and plugged into the LAN. When the end user's username and password are supplied via the physical keypad, the H2_H2P series can then complete the provisioning process by retrieving its corresponding configurations.

H2_H2P series supports DHCP OPTION Redirect where the BroadWorks Alcatel Lucent Enterprise H2_H2P device type URL can be obtained through DHCP Option 66 (by default) or 43 (if previously configured). The URL from DHCP Offer message is pointing each H2_H2P series phone to download device configuration files.

Further, H2_H2P series supports Alcatel-Lucent-hosted redirect service. When the network of H2_H2P series is provisioned statically or when H2_H2P series fails to obtain the configuration URL from the DHCP server, H2_H2P series contacts the Alcatel-Lucent redirect service to obtain the Alcatel-Lucent Enterprise H2_H2P file access URL. Finally, H2_H2P series follows the normal process for requesting configuration files.

The following sections identify the necessary steps to enable No Touch Provisioning for H2_H2P series using DHCP OPTION and Alcatel-Lucent redirect service.

5.2.6.2.1 DHCP Server Configuration

Configure the end customer's DHCP server with Option *66* containing the Alcatel Lucent Enterprise H2_H2P device profile URL. The URL is in format of http*://<Device Access FQDN>:<Device Access Port>/<Device Access Context Name>/<Device Access URI>/config.%BWMACADDRESS%.xml,* for example, *http://xsp1.tekvizion.com/dms/Alcatel-Lucent_Enterprise_H2_H2P/config.%BWMACADDRESS%.xml*. The URL should match the device type URL for Alcatel Lucent Enterprise H2_H2P defined at the previous section.

5.2.6.2.2 Alcatel-Lucent Redirect Server

Alcatel-Lucent Redirect Server is a web redirect service hosted by Alcatel-Lucent. It works in conjunction with the Alcatel Lucent Enterprise H2_H2P device profile URL for phone to download device configuration files. Hence, prior to device deployment, the administrator is required to login to Alcatel-Lucent's web portal to associate each device based on the MAC address to the Alcatel-Lucent Enterprise H2_H2P device profile URL.

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Appendix A: Reference H2_H2P Series Configuration Files

The following is a reference configuration for the H2_H2P Series configured for use with Cisco BroadWorks.

System Default File: A0V00H200000.cfg/A0V0H2P00000.cfg

NOTE: This is an example file and it should be used for reference only.

```
<<VOIP CONFIG FILE>>Version:2.0000000000

<NET CONFIG MODULE>
WAN TYPE            :0
WAN IP              :192.168.1.179
WAN Subnet Mask     :255.255.255.0
WAN Gateway         :192.168.1.1
Domain Name         :
Primary DNS         :%DNS_SERVER_1%
Secondary DNS       :%DNS_SERVER_2%
Enable DHCP         :1
DHCP Auto DNS       :1
DHCP Auto Time      :0
DHCP Option 100-101:1
Use Vendor Class ID:0
Vendor Class ID     :ALE H2P
Enable PPPoE        :0
PPPoE User          :user123
PPPoE Password      :password

<MM CONFIG MODULE>
ILBC Payload Type   :97
ILBC Payload Len    :20
Dtmf Payload Type   :101
Opus Payload Type   :107
Opus Sample  Rate   :0
VAD                 :0
Resv Audio Band     :0
RTP Initial Port    :10000
RTP Port Quantity   :1000

<PHONE FEATURE MODULE>
Menu Password       :123456
KeyLock Password    :123456
Fast Keylock Code   :
Enable KeyLock      :0
KeyLock Timeout     :0
KeyLock Status      :0
Emergency Call      :110
Push XML IP         :
SIP Number Plan     :0
LDAP Search         :0
Search Path         :0
Caller Display T    :5
CallLog DisplayType:0
Enable Recv SMS     :1
Enable Call History:1
Line Display Format:$name@$protocol$instance
Enable MWI Tone     :0
All Pswd Encryption:0
SIP Notify XML      :1
Block XML When Call:1
XML Update Interval:30
Vqm Display Order   :
Enable Push XML Auth:0
--Display Input--   :
Default Language    :%BWLANGUAGE-1%
Enable Greetings    :0
--Power LED--       :
Power               :0
MWI Or SMS          :3
In Using            :0
Ring                :2
Hold                :0
```


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```
Mute              :0
Missed Call       :3
--Line LED--      :
Line Idle Color   :0
Line Idle Ctl     :1
--BLF LED--       :
BLF Idle Color    :0
BLF Idle Ctl      :1
BLF Idle Text     :terminated
BLF Ring Color    :1
BLF Ring Ctl      :2
BLF Ring Text     :early
BLF Dialing Color :1
BLF Dialing Ctl   :0
BLF Dialing Text  :
BLF Talking Color :1
BLF Talking Ctl   :1
BLF Talking Text  :confirmed
BLF Hold Color    :1
BLF Hold Ctl      :0
BLF Hold Text     :
BLF Failed Color  :0
BLF Failed Ctl    :0
BLF Failed Text   :failed
BLF Parked Color  :0
BLF Parked Ctl    :3
BLF Parked Text   :parked
--Voice Volume--  :
Handset Vol       :3
Handset Mic Vol   :3
Headset Vol       :3
Headset Mic Vol   :3
Headset Ring Vol  :5
HandFree Vol      :7
HandFree Mic Vol  :3
HandFree Ring Vol :5
Ring Type         :ring00.wav
--DateTime Config--:
Enable SNTP       :1
SNTP Server       :%SNTP_SERVER_1%
Second SNTP Server :%SNTP_SERVER_2%
SNTP Timeout      :60
DST Type          :%SYS_ENABLE_DST%
DST Rule Mode     :2
DST Min Offset    :60
DST Start Mon     :1
DST Start Week    :1
DST Start Wday    :1
DST Start Hour    :0
DST End Mon       :1
DST End Week      :1
DST End Wday      :1
DST End Hour      :0
--Softkey Config-- :
Softkey Mode      :1
SoftKey Exit Style :2
Desktop Softkey   :menu;dnd;history;dss1;headset;
Talking Softkey   :hold;xfer;conf;end;
Ringing Softkey   :accept;none;forward;reject;
Alerting Softkey  :end;none;none;none;
XAlerting Softkey :end;none;none;xfer;
Conference Softkey :hold;none;split;end;
Waiting Softkey   :xfer;accept;reject;end;
Ending Softkey    :repeat;none;none;end;
DialerPre Softkey :send;2aB;delete;exit;
DialerCall Softkey :send;2aB;delete;exit;
DialerXfer Softkey :delete;xfer;send;exit;
DialerCfwd Softkey :send;2aB;delete;exit;
Desktop Click     :history;none;none;none;status;
Dailer  Click     :pline;nline;none;none;none;
Ringing Click     :none;none;none;none;none;
Call    Click     :none;none;none;none;none;
Desktop Long Press :status;none;none;none;reset;
DialerConf Softkey :contact;clogs;redial;video;cancel;
-- Agent Config--  :
Agent Username    :
Agent Password    :
Agent Number      :
Agent Sipline     :0
Agent Status      :0
Agent Status Reason:
```


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```
Agent Clear CallLog:0
--Xml PhoneBook--  :
XML-PBook1 Name              :
XML-PBook1 Addr              :
XML-PBook1 UserName          :
XML-PBook1 PassWd            :
XML-PBook1 Sipline           :-1
XML-PBook1 BindLine          :-1
XML-PBook2 Name              :
XML-PBook2 Addr              :
XML-PBook2 UserName          :
XML-PBook2 PassWd            :
XML-PBook2 Sipline           :-1
XML-PBook2 BindLine          :-1
XML-PBook3 Name              :
XML-PBook3 Addr              :
XML-PBook3 UserName          :
XML-PBook3 PassWd            :
XML-PBook3 Sipline           :-1
XML-PBook3 BindLine          :-1
XML-PBook4 Name              :
XML-PBook4 Addr              :
XML-PBook4 UserName          :
XML-PBook4 PassWd            :
XML-PBook4 Sipline           :-1
XML-PBook4 BindLine          :-1
XML-PBook5 Name              :
XML-PBook5 Addr              :
XML-PBook5 UserName          :
XML-PBook5 PassWd            :
XML-PBook5 Sipline           :-1
XML-PBook5 BindLine          :-1

<MMI CONFIG MODULE>
Web Server Type    :1
Web Port           :80
Https Web Port     :443
Remote Control     :1
Enable MMI Filter  :0
Web Authentication :0
Logon Timeout      :15
--MMI Account--    :
Account1 Name               :admin
Account1 Password           :123456
Account1 Level              :10
Account2 Name               :guest
Account2 Password           :guest
Account2 Level              :5

<TR069 CONFIG MODULE>
TR069 Tone         :1
CPE SerialNumber   :3c28a60000b9
ACS Server Type    :1
Enable TR069       :0
ACS URL            :0.0.0.0
ACS UserName       :admin
ACS Password       :
ACS Backup URL     :0.0.0.0
ACS BackupUserName :
ACS BackupPassword :
CPE UserName       :dps
CPE Password       :dps
Periodix Interval  :3600
TLS Version        :2
Area Code          :
STUN Enable        :0
STUN Server Addr   :
STUN Server Port   :3478
STUN Local Port    :30000

<VPN CONFIG MODULE>
VPN mode           :-1
Enable VPN         :0
Enable Nat         :0
Openvpn mode       :0
L2TP Server Address:0.0.0.0
L2TP User Name     :
L2TP Password      :

<AUTOUPDATE CONFIG MODULE>
Auto Image Url     :%SYS_IMAGE%
```


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```
Auto etc  Url      :%SYS_ETC%
Auto Pbook  Url    :%SYS_PHONEBOOK%

<QOS CONFIG MODULE>
Enable VLAN        :0
VLAN ID            :256
Enable PVID        :0
PVID Value         :254
Signalling Priority:0
Voice Priority     :0
Video Priority     :0
LAN Port Priority  :0
Enable diffServ    :0
Singalling DSCP    :46
Voice DSCP         :46
Video DSCP         :46
LLDP Transmit      :1
LLDP Refresh Time  :60
LLDP Learn Policy  :1
LLDP Save Learn Data:0
CDP Enable         :0
CDP Refresh Time   :60
DHCP Option Vlan   :132

<ALE CONFIG MODULE>
Ale Enable         :1
Ale Url            :https://device.eds.al-enterprise.com

<APP CONFIG MODULE>
Watch Dog Enabled  :1

<<END OF FILE>>
```

Device-specific File: config.%MACADDRESS%.xml

NOTE: This is an example file and it should be used for reference only.

```
<?xml version="1.0" encoding="UTF-8"?>
<VOIP_CONFIG_FILE>
<version>2.0002</version>
<GLOBAL_CONFIG_MODULE>
<Time_Zone>%BWTIMEZONE-1%</Time_Zone>
</GLOBAL_CONFIG_MODULE>
<CALL_FEATURE_MODULE>
<Port_Config>
<Port_Config_Entry>
<ID>P1</ID>
<Enable_DND>1</Enable_DND>
<DND_Mode>0</DND_Mode>
<Mute_Ringing>0</Mute_Ringing>
<Ban_Dial_Out>0</Ban_Dial_Out>
<Ban_Empty_CID>0</Ban_Empty_CID>
<Enable_CLIP>1</Enable_CLIP>
<CallWaiting>1</CallWaiting>
<CallTransfer>1</CallTransfer>
<CallSemiXfer>1</CallSemiXfer>
<CallConference>1</CallConference>
<Auto_PickupNext>0</Auto_PickupNext>
<Busy_No_Line>0</Busy_No_Line>
<Auto_Onhook>1</Auto_Onhook>
<Auto_Onhook_Time>3</Auto_Onhook_Time>
<DND_Code>1</DND_Code>
<Busy_Code>2</Busy_Code>
<Reject_Code>3</Reject_Code>
<CID_Prioiry>0</CID_Prioiry>
<Enable_Intercom>1</Enable_Intercom>
<Intercom_Mute>0</Intercom_Mute>
<Intercom_Tone>1</Intercom_Tone>
<Intercom_Barge>1</Intercom_Barge>
<Use_Auto_Redial>0</Use_Auto_Redial>
<AutoRedial_Delay>10</AutoRedial_Delay>
<AutoRedial_Times>10</AutoRedial_Times>
<Call_Complete>0</Call_Complete>
<Hide_DTMF_Type>0</Hide_DTMF_Type>
<Talk_DTMF_Tone>1</Talk_DTMF_Tone>
```


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```
<Dial_DTMF_Tone>1</Dial_DTMF_Tone>
<Psw_Dial_Mode>0</Psw_Dial_Mode>
<Psw_Dial_Length>0</Psw_Dial_Length>
<Psw_Dial_Prefix></Psw_Dial_Prefix>
</Port_Config_Entry>
</Port_Config>
</CALL_FEATURE_MODULE>
<SIP_CONFIG_MODULE>
<SIP__Port>5060</SIP__Port>
<STUN_Server></STUN_Server>
<STUN_Port>3478</STUN_Port>
<STUN_Refresh_Time>50</STUN_Refresh_Time>
<SIP_Wait_Stun_Time>800</SIP_Wait_Stun_Time>
<Extern_NAT_Addrs></Extern_NAT_Addrs>
<Reg_Fail_Interval>32</Reg_Fail_Interval>
<SIP_Pswd_Encryption>0</SIP_Pswd_Encryption>
<Strict_BranchPrefix>0</Strict_BranchPrefix>
<Enable_RFC4475>1</Enable_RFC4475>
<Strict_UA_Match>1</Strict_UA_Match>
<SIP_Line_List>
<SIP_Line_List_Entry>
<ID>SIP1</ID>
<Phone_Number>%BWLINEPORT-1%</Phone_Number>
<Display_Name>%BWNAME-1%</Display_Name>
<Sip_Name>%BWLINEPORTHOST-1%</Sip_Name>
<Register_Addr>%BWHOST-1%</Register_Addr>
<Register_Port>5060</Register_Port>
<Register_User>%BWAUTHUSER-1%</Register_User>
<Register_Pswd>%BWAUTHPASSWORD-1%</Register_Pswd>
<Register_TTL>3600</Register_TTL>
<Backup_Addr>%CUS_BAKPROXY_ADDR%</Backup_Addr>
<Backup_Port>%CUS_BAKPROXY_PORT%</Backup_Port>
<Enable_Reg>%BWLINE-BINARY-1%</Enable_Reg>
<Proxy_Addr>%SBC_ADDRESS%</Proxy_Addr>
<Proxy_Port>%SBC_PORT%</Proxy_Port>
<Proxy_User></Proxy_User>
<Proxy_Pswd></Proxy_Pswd>
<BakProxy_Addr></BakProxy_Addr>
<BakProxy_Port>5060</BakProxy_Port>
<Enable_Failback>0</Enable_Failback>
<Media_Crypto>0</Media_Crypto>
<SRTP_Auth-Tag>0</SRTP_Auth-Tag>
<Local_Domain></Local_Domain>
<Always_FWD>0</Always_FWD>
<Busy_FWD>0</Busy_FWD>
<No_Answer_FWD>0</No_Answer_FWD>
<Always_FWD_Num></Always_FWD_Num>
<Busy_FWD_Num></Busy_FWD_Num>
<NoAnswer_FWD_N></NoAnswer_FWD_N>
<FWD_Timer>5</FWD_Timer>
<Ring_Type>%CUS_RING_TYPE-1%</Ring_Type>
<Hotline_Num></Hotline_Num>
<Enable_Hotline>0</Enable_Hotline>
<WarmLine_Time>0</WarmLine_Time>
<Pickup_Num></Pickup_Num>
<Join_Num></Join_Num>
<NAT_UDPUpdate>2</NAT_UDPUpdate>
<UDPUpdate_TTL>15</UDPUpdate_TTL>
<Server_Type>0</Server_Type>
<User_Agent></User_Agent>
<PRACK>1</PRACK>
<Keep_AUTH>0</Keep_AUTH>
<Session_Timer>0</Session_Timer>
<S.Timer_Expire>0</S.Timer_Expire>
<Enable_GRUU>0</Enable_GRUU>
<DTMF_Mode>3</DTMF_Mode>
<DTMF_Info_Mode>0</DTMF_Info_Mode>
<NAT_Type>0</NAT_Type>
<Enable_Rport>1</Enable_Rport>
<Subscribe>0</Subscribe>
<Sub_Expire>3600</Sub_Expire>
<Single_Codec>0</Single_Codec>
<CLIR>0</CLIR>
<Strict_Proxy>1</Strict_Proxy>
<Direct_Contact>0</Direct_Contact>
<History_Info>0</History_Info>
<DNS_SRV>0</DNS_SRV>
<DNS_Mode>0</DNS_Mode>
<XFER_Expire>0</XFER_Expire>
<Ban_Anonymous>0</Ban_Anonymous>
<Dial_Off_Line>0</Dial_Off_Line>
```

```
<Quota_Name>0</Quota_Name>
<Presence_Mode>0</Presence_Mode>
<RFC_Ver>1</RFC_Ver>
<Signal_Port>5060</Signal_Port>
<Transport>0</Transport>
<Use_SRV_Mixer>0</Use_SRV_Mixer>
<SRV_Mixer_Uri>%BWNETWORK-CONFERENCE-SIPURI-USERNAME-1%</SRV_Mixer_Uri>
<Long_Contact>0</Long_Contact>
<Auto_TCP>0</Auto_TCP>
<Uri_Escaped>1</Uri_Escaped>
<Click_to_Talk>0</Click_to_Talk>
<MWI_Num></MWI_Num>
<CallPark_Num></CallPark_Num>
<Retrieve_Num></Retrieve_Num>
<MSRPHelp_Num></MSRPHelp_Num>
<User_Is_Phone>1</User_Is_Phone>
<Auto_Answer>0</Auto_Answer>
<NoAnswerTime>5</NoAnswerTime>
<MissedCallLog>1</MissedCallLog>
<SvcCode_Mode>0</SvcCode_Mode>
<DNDOn_SvcCode>%BWFAC-DND-ACTIVATE-1%</DNDOn_SvcCode>
<DNDOff_SvcCode>%BWFAC-DND-DEACTIVATE-1%</DNDOff_SvcCode>
<CFUOn_SvcCode>%BWFAC-CFA-ACTIVATE-1%</CFUOn_SvcCode>
<CFUOff_SvcCode>%BWFAC-CFA-DEACTIVATE-1%</CFUOff_SvcCode>
<CFBOn_SvcCode>%BWFAC-CFB-ACTIVATE-1%</CFBOn_SvcCode>
<CFBOff_SvcCode>%BWFAC-CFB-DEACTIVATE-1%</CFBOff_SvcCode>
<CFNOn_SvcCode>%BWFAC-CFNA-ACTIVATE-1%</CFNOn_SvcCode>
<CFNOff_SvcCode>%BWFAC-CFNA-DEACTIVATE-1%</CFNOff_SvcCode>
<ANCOn_SvcCode></ANCOn_SvcCode>
<ANCOff_SvcCode></ANCOff_SvcCode>
<Send_ANOn_Code></Send_ANOn_Code>
<Send_ANOffCode></Send_ANOffCode>
<CW_On_Code></CW_On_Code>
<CW_Off_Code></CW_Off_Code>
<VoiceCodecMap>G722,PCMU,PCMA,G729,G726-32,iLBC</VoiceCodecMap>
<BLFList_Uri>%BWBLF-USER-1%</BLFList_Uri>
<BLF_Server></BLF_Server>
<Respond_182>0</Respond_182>
<Enable_BLFList>0</Enable_BLFList>
<Caller_Id_Type>4</Caller_Id_Type>
<Syn_Clock_Time>0</Syn_Clock_Time>
<Use_VPN>1</Use_VPN>
<Enable_DND>0</Enable_DND>
<Update_Reg_Exp>1</Update_Reg_Exp>
<Inactive_Hold>0</Inactive_Hold>
<Enable_SCA>0</Enable_SCA>
<Sub_CallPark>0</Sub_CallPark>
<Sub_CC_Status>0</Sub_CC_Status>
<Feature_Sync>0</Feature_Sync>
</SIP_Line_List_Entry>
<SIP_Line_List_Entry>
<ID>SIP2</ID>
<Phone_Number>%BWLINEPORT-2%</Phone_Number>
<Display_Name>%BWNAME-2%</Display_Name>
<Sip_Name>%BWLINEPORTHOST-2%</Sip_Name>
<Register_Addr>%BWHOST-2%</Register_Addr>
<Register_Port>5060</Register_Port>
<Register_User>%BWAUTHUSER-2%</Register_User>
<Register_Pswd>%BWAUTHPASSWORD-2%</Register_Pswd>
<Register_TTL>3600</Register_TTL>
<Backup_Addr>%CUS_BAKPROXY_ADDR%</Backup_Addr>
<Backup_Port>%CUS_BAKPROXY_PORT%</Backup_Port>
<Enable_Reg>%BWLINE-BINARY-2%</Enable_Reg>
<Proxy_Addr>%SBC_ADDRESS%</Proxy_Addr>
<Proxy_Port>%SBC_PORT%</Proxy_Port>
<Proxy_User></Proxy_User>
<Proxy_Pswd></Proxy_Pswd>
<BakProxy_Addr></BakProxy_Addr>
<BakProxy_Port>5060</BakProxy_Port>
<Enable_Failback>0</Enable_Failback>
<Media_Crypto>0</Media_Crypto>
<SRTP_Auth-Tag>0</SRTP_Auth-Tag>
<Local_Domain></Local_Domain>
<Always_FWD>0</Always_FWD>
<Busy_FWD>0</Busy_FWD>
<No_Answer_FWD>0</No_Answer_FWD>
<Always_FWD_Num></Always_FWD_Num>
<Busy_FWD_Num></Busy_FWD_Num>
<NoAnswer_FWD_N></NoAnswer_FWD_N>
<FWD_Timer>5</FWD_Timer>
<Ring_Type>%CUS_RING_TYPE-2%</Ring_Type>
```


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```
<Hotline_Num></Hotline_Num>
<Enable_Hotline>0</Enable_Hotline>
<WarmLine_Time>0</WarmLine_Time>
<Pickup_Num></Pickup_Num>
<Join_Num></Join_Num>
<NAT_UDPUpdate>2</NAT_UDPUpdate>
<UDPUpdate_TTL>15</UDPUpdate_TTL>
<Server_Type>0</Server_Type>
<User_Agent></User_Agent>
<PRACK>1</PRACK>
<Keep_AUTH>0</Keep_AUTH>
<Session_Timer>0</Session_Timer>
<S.Timer_Expire>0</S.Timer_Expire>
<Enable_GRUU>0</Enable_GRUU>
<DTMF_Mode>3</DTMF_Mode>
<DTMF_Info_Mode>0</DTMF_Info_Mode>
<NAT_Type>0</NAT_Type>
<Enable_Rport>1</Enable_Rport>
<Subscribe>0</Subscribe>
<Sub_Expire>3600</Sub_Expire>
<Single_Codec>0</Single_Codec>
<CLIR>0</CLIR>
<Strict_Proxy>1</Strict_Proxy>
<Direct_Contact>0</Direct_Contact>
<History_Info>0</History_Info>
<DNS_SRV>0</DNS_SRV>
<DNS_Mode>0</DNS_Mode>
<XFER_Expire>0</XFER_Expire>
<Ban_Anonymous>0</Ban_Anonymous>
<Dial_Off_Line>0</Dial_Off_Line>
<Quota_Name>0</Quota_Name>
<Presence_Mode>0</Presence_Mode>
<RFC_Ver>1</RFC_Ver>
<Signal_Port>5060</Signal_Port>
<Transport>0</Transport>
<Use_SRV_Mixer>0</Use_SRV_Mixer>
<SRV_Mixer_Uri>%BWNETWORK-CONFERENCE-SIPURI-USERNAME-2%</SRV_Mixer_Uri>
<Long_Contact>0</Long_Contact>
<Auto_TCP>0</Auto_TCP>
<Uri_Escaped>1</Uri_Escaped>
<Click_to_Talk>0</Click_to_Talk>
<MWI_Num></MWI_Num>
<CallPark_Num></CallPark_Num>
<Retrieve_Num></Retrieve_Num>
<MSRPHelp_Num></MSRPHelp_Num>
<User_Is_Phone>1</User_Is_Phone>
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