



BroadSoft Partner Configuration Guide

Media5 Mediatrix 3000/4000/LP/C7 Series

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BroadWorks® Guide

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1.2	Edited and published document.
1.3	Updated the document with versionDgw2.0.23.338 Device Management validation with BroadWorks Release 19.sp1.
1.4	Edited changes and published document.
1.5	Updated Cxxx model names according to a Media5 request.
1.6	Edited changes and published document.
1.7	Updated Verified Version table in section Error! Reference source not found.Error! Reference source not found..
1.8	Edited changes and published document.
1.9	Made editorial changes and published document.
2.0	Updated the document with new document template and version Dgw2.0.28.504 with BroadWorks Release 20.sp1 validation results.

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1 Overview

This guide describes the configuration procedures required for the Media5 Mediatrix 3000/4000/LP/C7series to be interoperable with BroadWorks. This includes the following Media5 Mediatrix models:

- Mediatrix 3308, 3316, 3208, 3216
- Mediatrix 3404, 3408
- Mediatrix 3631, 3632
- Mediatrix 3731, 3732, 3734, 3741, 3742
- Mediatrix 4102, 4104, 4108, 4116, 4124
- Mediatrix 4401, 4402, 4404
- Mediatrix LP16, LP24
- Mediatrix C710, C711, C731

The Mediatrix 3000/4000/LP/C7series is an integrated access device that uses the Session Initiation Protocol (SIP) to communicate with BroadWorks for call control.

This guide describes the specific configuration items that are important for use with BroadWorks. It does not describe the purpose and use of all configuration items on the Mediatrix 3000/4000/LP/C7series. For those details, see the *Dgw v2.0 Application Software Configuration Guide*[\[1\]](#) supplied by Media5.

2 Interoperability Status

This section provides the known interoperability status of the Media5 Mediatrix 3000/4000/LP/C7series with BroadWorks. This includes the version(s) tested, the capabilities supported, and known issues.

Interoperability testing validates that the device interfaces properly with 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 Media5.

2.1 Verified Versions

The following table identifies the verified Media5 Mediatrix 3000/4000/LP/C7series and 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 Mediatrix 3xxx/4xxx/LPxx/Cxxxversions that the partner has identified as compatible so should interface properly with 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 Media5.

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

Verified Versions			
Date (mm/yyyy)	BroadWorks Release	Mediatrix 3000/4000/LP/C7series Verified Version	Mediatrix 3000/4000/LP/C7series Compatible Versions
11/2014	Release 20.sp1	Dgw 2.0.28.504	List any specific compatible versions.
11/2010	Release 17.0	Dgw 2.0.9.150	Dgw 2.0.10.185 or later (required by LP16 and LP24) Dgw2.0.24.402 or later (required by C710, C711, and C73)

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Media5 Mediatrix 3000/4000/LP/C7series.

The *Supported* column in the tables in this section identifies the Media5 Mediatrix 3000/4000/LP/C7series's 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.

2.2.1 SIP Interface Capabilities

The Media5 Mediatrix 3000/4000/LP/C7series has completed interoperability testing with BroadWorks using the *BroadWorks SIP Access Device Interoperability Test Plan* [5]. The results are summarized in the following table.

The 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 BroadWorks with the intent to ensure interoperability sufficient to support the BroadWorks feature set.

NOTE: DUT in the following table refers to the *Device Under Test*, which in this case is the Media5 Mediatrix 3000/4000/LP/C7series.

BroadWorks SIP Access Device 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	
	Early UPDATE	No	Able to receive but not send early-update messages
	Early-Session	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	
BroadWorks Services	Third-Party Call Control – Basic	Yes	
	Voice Message Deposit and Retrieval	Yes	
	Message Waiting Indicator	Yes	

BroadWorks SIP Access Device Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
	Voice Portal Outcall	Yes	
	Advanced Alerting– Ringing	Yes	
	Advanced Alerting – Call Waiting	No	
	Advanced Alerting – Ring Splash	Yes	
	Calling Line ID	Yes	
	Calling Line ID with Unicode Characters	NT	Unable to source for a supporting analog phone
	Connected Line ID	No	
	Connected Line ID with Unicode Characters	No	
	Connected Line ID on UPDATE	No	
	Connected Line ID on Re-INVITE	No	
	Diversion Header	Yes	
	History-Info Header	Yes	
	Advice of Charge	No	
	Meet-Me Conferencing	Yes	
	Meet-Me Conferencing – G722	No	
	Meet-Me Conferencing – AMR-WB	No	
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	Blind transfer is not supported
	Three-Way Calling	Yes	Before answer is 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 BroadWorks	No	
DUT Services – Fax	G711 Fax Passthrough	Yes	
	G711 Fax Fallback	Yes	
	T38 Fax Messaging	Yes	
DUT Services – Emergency Call	Emergency Call	No	
	Emergency Call with Ringback	No	

BroadWorks SIP Access Device Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
DUT Services – Miscellaneous	Do Not Disturb	No	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	No	
	Anonymous Call	No	
	Anonymous Call Block	No	
	Remote Restart Via Notify	Yes	
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
	Bye Failover	Yes	
Session Border Controller (SBC)/Application Layer Gateway (ALG)	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	NT	
	Call Termination	NT	
	Session Audit	NT	
	Ringback	NT	
	Codec Negotiation/Renegotiation	NT	
	Voice Message Deposit/Retrieval	NT	
	Call Control	NT	
	Registration with Authentication	NT	
	T38 Fax Messaging	NT	
	Redundancy	NT	
	SBC	NT	
	Dual Stack with Alternate Connectivity	NT	

2.3 Known Issues

This section lists the known interoperability issues between 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 BroadWorks release dependent.

If the testing was performed by BroadSoft, then the *Issue Number* is a BroadSoft ExtraView partner issue number. If the testing was performed by the partner or a third party, then the partner may or may not supply a tracking number.

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

{Issues should be described as follows: The issue "title" in bold should be a brief statement of the symptom. The symptom is usually the issue the end user experiences, such as calls dropping or voicepath issues. The description of the issue should fully describe the problem and the signaling root cause. If there is a workaround, then it should identify a configurable method that can be used to avoid the problem.}

Issue Number	Issue Description	Partner Version			
		Dgw2.0.9.150	Dgw2.0.28.504		
-----	None				

3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Media5 Mediatrix 3000/4000/LP/C7series as well as any other unique BroadWorks configuration required for interoperability with the Mediatrix 3000/4000/LP/C7series.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type settings to use when deploying the Media5 Mediatrix 3000/4000/LP/C7series with BroadWorks.

Create a device profile type for the Media5 Mediatrix 3000/4000/LP/C7series as shown in the following example. A separate device profile type should be created for each Media5 Mediatrix 3000/4000/LP/C7series model. The settings shown are recommended for use when deploying the Media5 Mediatrix 3000/4000/LP/C7series with BroadWorks. For an explanation of the profile parameters, see the *BroadWorks Device Management Configuration Guide* [\[2\]](#).

The following device profile type shown provides the *Number of Ports* (number of SIP lines) setting for Media5 Mediatrix 3631. For other Mediatrix 3000/4000/LP/C7series models, create a new device profile type and set the *Number of Ports* to match the available number of SIP lines per model according to the following table.

Model	Number of Lines
3208	2
3216	4
3308	7
3316	14
3404	4
3408	8
3631	1
3632	2
3731	7
3732	2
3734	4
3741	11
3742	6
4102	2
4104	4
4108	8
4116	16
4124	24
4401	1

4402	2
4404	4
C710	4
C711	8
C731	8
LP16	16
LP24	24



System » MEDIATRIX-3631

[Help](#) - [Home](#)
Welcome Default Administrator [Logout](#)

Options:

- Identity/Device Profile Type

Identity/Device Profile Type Modify

Modify an existing identity/device profile type.

OK
Apply
Delete
Export
Cancel

Identity/Device Profile Type: MEDIATRIX-3631
 Signaling Address Type: Intelligent Proxy Addressing
☐ Obsolete

Standard Options

Number of Ports: ☐ Unlimited ☒ Limited To

Ringback Tone/Early Media Support: ☐ RTP - Session
☐ RTP - Early Session
☒ Local Ringback - No Early Media

Authentication: ☒ Enabled
☐ Disabled
☐ Enabled With Web Portal Credentials

Hold Normalization: ☐ Unspecified Address
☐ Inactive
☒ RFC 3264

☒ Registration Capable ☒ Authenticate REFER
☐ Static Registration Capable ☐ Video Capable
☐ E164 Capable ☐ Use History Info Header
☐ Trusted

Advanced Options

☐ Route Advance
☐ Wireless Integration
☐ PBX Integration
☐ Add P-Called-Party-ID
☐ Auto Configuration Soft Client
☐ Requires BroadWorks Call Waiting Tone
☐ Advice of Charge Capable
☐ Support Emergency Disconnect Control
☐ Enable Monitoring
☒ Static Line/Port Ordering
☐ Support Call Info Conference Subscription URI
☐ Support Visual Device Management

☐ Forwarding Override
☐ Conference Device
☐ Mobility Manager Device
☐ Music On Hold Device
☐ Requires BroadWorks Digit Collection
☐ Requires MWI Subscription
☐ Support Call Center MIME Type
☐ Support Identity in UPDATE and Re-INVITE
☐ Support RFC 3398
☐ Support Client Session Info
☐ Support Remote Party Info
☐ Bypass Media Treatment

Reset Event: ☐ reSync ☒ checkSync ☐ Not Supported
 Trunk Mode: ☒ User ☐ Pilot ☐ Proxy
 Hold Announcement Method: ☒ Inactive ☐ Bandwidth Attributes

Unscreened Presentation Identity Policy: ☒ Profile Presentation Identity
☐ Unscreened Presentation Identity
☐ Unscreened Presentation Identity With Profile Domain

Web Based Configuration URL Extension:

Device Configuration Options: ☐ Not Supported ☒ Device Management ☐ Legacy

Device Management

Device Type URL:

☐ No Tags
☐ Use Default System Tag Set Only
☒ Use Default System Tag Set and Tag Set: MEDIATRIX-Tags

☒ Allow Identity/Device Profiles to Configure Custom Tags
☒ Allow Groups to Configure Custom Tags
☐ Send Email Notification to User upon Device Reset Failure

Device Access Protocol: http

Device Access FQDN:

Device Access Port:

Device Access Context Name:

Device Access URI:

Default Device Language:

Default Device Encoding:

Authentication Mode: ☐ MAC-Based ☒ User Name and Password

Device Access Username:

Device Access Password:

Re-type Device Access Password:

MAC Address In: ☒ HTTP Request URI
☐ HTTP Header with Following Format:

Device Access HTTP Authentication: ☒ Basic ☐ Digest

OK
Apply
Delete
Export
Cancel

Figure 1 Identity/Device Profile Modify Page

3.2 BroadWorks Configuration Steps

No additional BroadWorks configurations are required.

4 Mediatrix 3000/4000/LP/C7Series Configuration

This section describes the configuration settings required for the Mediatrix 3000/4000/LP/C7seriesintegration with BroadWorks, primarily focusing on the SIP interface configuration. The Mediatrix 3000/4000/LP/C7seriesconfiguration settings identified in this section have been derived and verified through interoperability testing with BroadWorks.For configuration details not covered in this section, seethe *Dgw v2.0 Application Software Configuration Guide***Error! Reference source not found.** for Mediatrix 3000/4000/LP/C7series.

4.1 Configuration Method

The Mediatrix 3000/4000/LP/C7series can be configured with a configuration file using the Trivial File Transfer Protocol (TFTP), HTTP, HTTPS, and Command Line Interface (CLI) or through its embedded web server. The following examples describe how to set the parameters using a configuration file. This configuration description assumes the Mediatrix 3000/4000/LP/C7series uses the Dynamic Host Configuration Protocol (DHCP) to obtain an IP address and other network settings. The Mediatrix 3000/4000/LP/C7series should be configured to load the configuration file each time it resets or re-synchronizes.For detailed information on automated provisioning, see the *Dgw v2.0 Application Software Configuration Guide*[\[1\]](#).

The following is a sample of a configuration file. It can also be cut and pasted via a CLI session.

```
#####  
# Configuration Script.  
# Automatically generated on 01/11/2014 13:06:32.  
#####  
# System Name      : Mediatrix 4102S  
# Firmware         : Dgw 2.0.28.504  
# Profile          : 4102-MX-D2000-54  
# MAC Address      : 0090f804fee1  
# Serial Number    : 00065000051070026  
#####  
  
# SipEp Service  
SipEp.Gateway.DeleteAllRows  
SipEp.InsertGateway Name=default  
SipEp.DefaultStaticProxyHomeDomainHost = "as.iop1.broadworks.com"  
SipEp.DefaultStaticRegistrarServerHost = "as.iop1.broadworks.com"  
SipEp.DefaultStaticProxyOutboundHost = " 199.19.193.9:5060"  
SipEp.PenaltyBoxEnable = "Enable"  
SipEp.InteropTransmissionTimeout = "3"  
SipEp.UserAgent[EpId=Phone-Fax1].Username = "2421115501"  
SipEp.UserAgent[EpId=Phone-Fax2].Username = "2421115502"  
  
# Mipt Service  
Mipt.DefaultDtmfTransportMethod = "OutOfBandUsingRtp"  
Mipt.DefaultDtmfTransportPayloadType = "101"
```

The capabilities of the Mediatrix 3000/4000/LP/C7series have been verified for use with BroadWorks based on the settings described in the following table. For more information on the meaning, purposes, and applicability of the individual configuration items, see the *Dgw v2.0 Application Software Configuration Guide* [\[1\]](#).

Configuration Files

Files Provided by Partner	Level	Description
Mediatix41XX_Dgw2.0.28.504_41xx-MX-D2000.zip	System	Contains the device firmware load.
Generic Configuration File Name: No default name, it could be arbitrary name, for example, <i>generic.cfg</i> .	System	Contains configurable parameters that apply to all devices in a deployment.
Device-specific Configuration File Name: No default name, it could be arbitrary name, for example, <i>0004f2000fbb.cfg</i> .	Subscriber	Contains configurable parameters that apply to an individual device in a deployment.

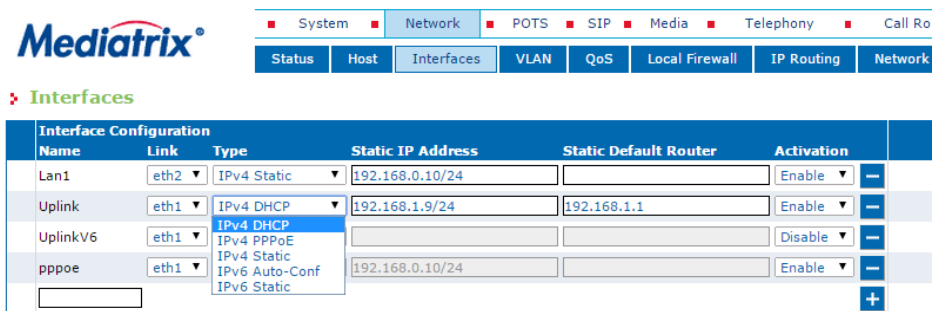
4.2 System Level Configuration

This section and the following figures describe the system-wide configuration items that are generally required for each Mediatix 3000/4000/LP/C7series to work with BroadWorks. Subscriber-specific settings are described in the next section.

4.2.1 Configure Network Settings

{Include IP, UDP/TCP/TLS, DNS, NTP, and other network settings.}

Step	Command	Description
Step 1	Log into the Mediatix Web GUI	By default, LAN (ETH2) has default IP address 192.168.0.10, Uplink (ETH1) is defaulted to DHCP; You can dial *##0 from a phone to check the Uplink IP address. Default username: "public" No Password
Step 2	Go to Network->Interfaces page	You can configure Network interface settings there
Step 3	Go to Network->Host page	You can configure DNS, NTP there



4.2.1.1 Configure IPV6 Settings

{Optional: If supported, provide IPV6 network configuration instructions.}

Step	Command	Description
------	---------	-------------

Step	Command	Description
Step 1	Same as IPv4 setup	
Step 2		
Step 3		

4.2.2 Configure SIP Interface Settings

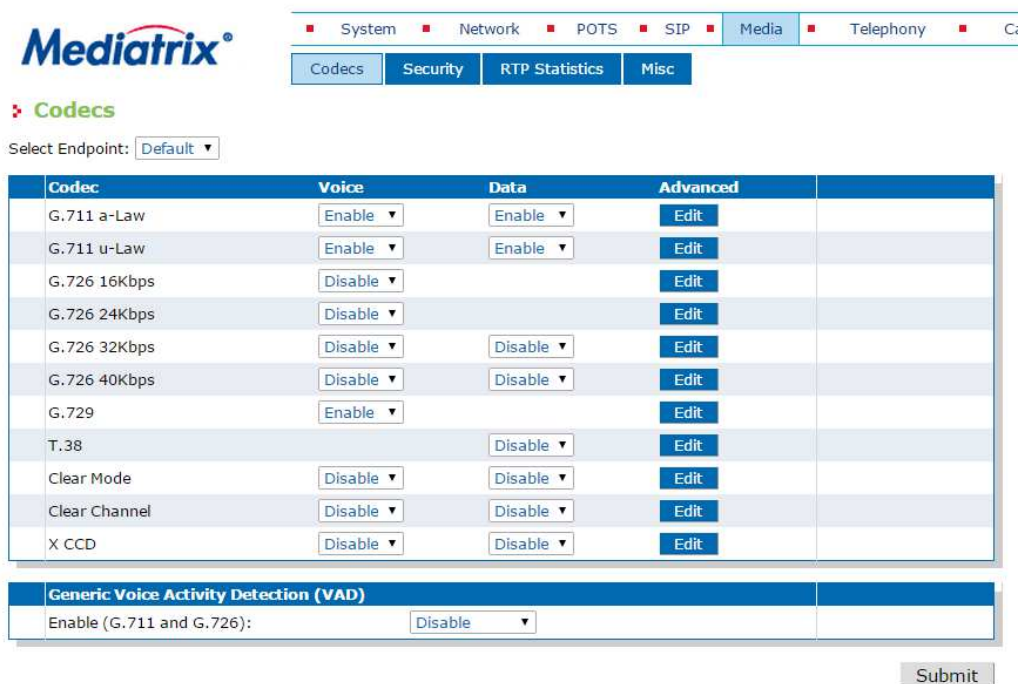
Step	Command	Purpose
System Configuration File		
Step 1	Set SIP Proxy/Domain. <code>SipEp.DefaultStaticProxyHomeDomainHost = as.broadworks.net:0</code>	Set the Mediatrix 3000/4000/LP/C7series SIP server to the Fully Qualified Domain Name (FQDN) for the BroadWorks Application Server cluster. The domain must match the domain configured for the BroadWorks subscriber's line/port domain.
Step 2	Set SIP Registrar. <code>SipEp.DefaultStaticRegistrarServerHost = as.broadworks.net:0</code>	Set the Mediatrix 3000/4000/LP/C7series SIP Registrar 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 3	Set Outbound Proxy. <code>SipEp.DefaultStaticProxyOutboundHost = sbc.broadworks.net:0</code>	Set the outbound proxy to the session border controller (SBC) if one is deployed between the Mediatrix 3000/4000/LP/C7series and BroadWorks. If there are redundant SBCs, set it to the FQDN for the SBC cluster.
Step 4	Set SIP Timers. <code>SipEp.PenaltyBoxEnable = "Enable"</code> <code>SipEp.InteropTransmissionTimeout = "3"</code>	The SIP timers should be set to levels short enough to support a timely failover when there is no server response. In this example, SIP timer is set to "3" and the SIP Penalty box is enabled, assuming FQDN with DNS-SRV is in use.
Step 5	Set DTMF mode. <code>Mipt.DefaultDtmfTransportMethod = "OutOfBandUsingRtp"</code> <code>Mipt.DefaultDtmfTransportPayloadType = "101"</code>	Set the Mediatrix 3000/4000/LP/C7series to RFC 2833 (<i>outOfBandUsingRtp</i>) with payload 101.



The screenshot shows the Mediatrix configuration interface. At the top, there are tabs for System, Network, POTS, SIP, Media, Telephony, and Configuration. Below these, there are sub-tabs for Gateways, Servers, Registrations, Authentication, Transport, Interop, and Miscellaneous. The 'Servers' sub-tab is selected. Under the 'Servers' heading, there is a section for 'Default Servers' with a table containing four rows: Registrar Host, Proxy Host, Messaging Server Host, and Outbound Proxy Host. Each row has a text input field with the value 'as.iop1.broadworks.net'.

Default Servers	
Registrar Host:	as.iop1.broadworks.net
Proxy Host:	as.iop1.broadworks.net
Messaging Server Host:	as.iop1.broadworks.net
Outbound Proxy Host:	sbcl.iop1.broadworks.net

Figure 2 Mediatrix Servers



The screenshot shows the Mediatrix configuration interface. At the top, there are tabs for System, Network, POTS, SIP, Media, Telephony, and Configuration. Below these, there are sub-tabs for Codecs, Security, RTP Statistics, and Miscellaneous. The 'Codecs' sub-tab is selected. Under the 'Codecs' heading, there is a 'Select Endpoint:' dropdown menu set to 'Default'. Below this is a table with columns: Codec, Voice, Data, and Advanced. The table lists various codecs and their status. At the bottom, there is a section for 'Generic Voice Activity Detection (VAD)' with a table containing one row: Enable (G.711 and G.726): Disable. A 'Submit' button is located at the bottom right.

Codec	Voice	Data	Advanced
G.711 a-Law	Enable	Enable	Edit
G.711 u-Law	Enable	Enable	Edit
G.726 16Kbps	Disable		Edit
G.726 24Kbps	Disable		Edit
G.726 32Kbps	Disable	Disable	Edit
G.726 40Kbps	Disable	Disable	Edit
G.729	Enable		Edit
T.38		Disable	Edit
Clear Mode	Disable	Disable	Edit
Clear Channel	Disable	Disable	Edit
X CCD	Disable	Disable	Edit

Generic Voice Activity Detection (VAD)	
Enable (G.711 and G.726):	Disable

Submit

Figure 3 Mediatrix Codecs

4.2.1 Configure Service Settings

{Include settings for Dial Plan, Ring Types, Call Waiting Tones, MWI, Call Forwarding, DND, Call Hold, Call Transfer, Conference, and other basic device services. Be sure to include the network conference URI setting if supported.}

Step	Command	Description
Step 1	Go to Digitmap web page and add *xx in the digit map	To support service activation with star-code
Step 2	And to support network conference, please include the following in the configuration script or enter it through the	By default, the Mediatrix performs conference mixing locally. With the conference mode set to ConferenceServer, one can define the ConferenceURI as such in order to use Broadsoft's conference

Step	Command	Description
	CLI: EpServ.DefaultConferenceType = "ConferenceServer" SipEp.DefaultStaticConferenceServerUri = "sip:conference@as.iop1.broadworks.net"	server for n-way conferencing

4.3 Subscriber Level Configuration

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

Provisioning a subscriber to register with BroadWorks allows calls to terminate to the subscriber's line. Registration requires that a unique address of record (AoR) be provisioned on BroadWorks and the phone; provisioning an AoR on BroadWorks consists of setting the line/port parameter to a unique value within the Application Server cluster.

Step	Command	Purpose
Subscriber parameters for the device-specific configuration file		
Step 1	Enable SIP Registration on each line to be used. SipEp.UserAgent[EpId=Port01].Register = "Enable" SipEp.UserAgent[EpId=Port02].Register = "Enable"	Enable SIP Registration on each Mediatix 3000/4000/LP/C7series line to be used.
Step 2	Set Register User ID for each line. Example: SipEp.UserAgent[EpId=Port01].Username = "2405551111" SipEp.UserAgent[EpId=Port01].Username = "2405552222"	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	Enable SIP Authentication for each line. Example: SipEp.Authentication[Index=1].ApplyTo = "Username" SipEp.Authentication[Index=1].ValidateRealm = "Disable" SipEp.Authentication[Index=1].Username = "2405551111" SipEp.Authentication[Index=1].Password = "mediatrix" SipEp.Authentication[Index=2].ApplyTo = "Username" SipEp.Authentication[Index=2].ValidateRealm = "Disable" SipEp.Authentication[Index=2].Username = "2405552222" SipEp.Authentication[Index=2].Password = "welcome"	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.	For each line, configure the name

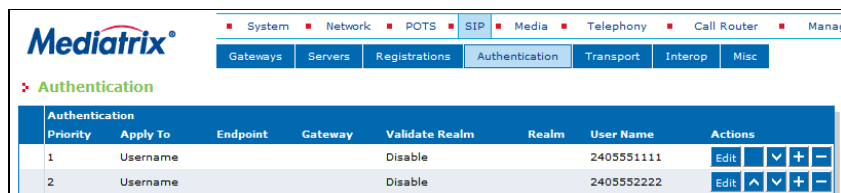
Step	Command	Purpose
Subscriber parameters for the device-specific configuration file		
	Example: <pre>SipEp.UserAgent[EpId=Port01].FriendlyName = "Claire Smith" SipEp.UserAgent[EpId=Port02].FriendlyName = "Julie Wenkel"</pre>	to be displayed on the device.



Figure 4 Mediatrix Registrations

Endpoint	User Name	Friendly Name	Register	Gateway Name
Phone-Fax1	2405551111	Thomas1	Enable	default
Phone-Fax2	2405552222	Thomas2	Enable	default

Figure 5 Endpoints Registration


 A screenshot of the Mediatrix web interface showing the 'Authentication' tab. The top navigation bar is the same as in Figure 4. The left sidebar shows Gateways, Servers, Registrations, Authentication, Transport, Interop, and Misc. The main content area shows a table with authentication settings.

Priority	Apply To	Endpoint	Gateway	Validate Realm	Realm	User Name	Actions
1	Username			Disable		2405551111	Edit [v] [+]
2	Username			Disable		2405552222	Edit [v] [+]

Figure 6 Authentication

4.4 SIP Feature Configuration

This section provides configuration instructions for advanced SIP features supported by the devices such as Advice of Charge, Emergency Call, and Fax.

4.4.1 Emergency Call Configuration

This section provides configuration instructions for configuring the device to enable emergency call headers and ringback after hang up.

Emergency Call header is not supported.

To set up ringback after hang up, just include the following in your configuration script, or enter it by CLI (here we use Digitmap #2 to define 911 as the emergency number)

```
EpServ.CallDtmfMapAllowed[Index=2].DtmfMap = "911"
EpServ.CallDtmfMapAllowed[Index=2].Emergency = "Enable"
Pots.FxsEmergencyCallOverride = "NoDisconnect"
```

4.4.2 Advice of Charge Configuration

This section provides configuration instructions to configure the device to enable Advice of Charge.

This feature is not supported.

4.4.3 Fax Configuration

This section provides configuration instructions to configure the device to enable fax.

- T.38 and clearchannel Fax is enabled by default. No configuration is needed.

5 Device Management

The BroadWorks Device Management feature provides the capability to automate generation of device configuration files to support mass deployment of devices. The Device Management is supported on the following Mediatrix models:

- Mediatrix 3631, 3632
- Mediatrix 4102, 4104, 4108, 4116, 4124
- Mediatrix 4401, 4402, 4404
- Mediatrix LP16, LP24
- Mediatrix C710, C711, C731

This section identifies the Device Management capabilities supported by the Media5 Mediatrix 3000/4000/LP/C7series and the configuration steps required. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide*[\[2\]](#).

The basic steps to integrate a device with Device Management are as follows:

- 1) Create device template files for the device with the appropriate BroadWorks Device Management tags.
- 2) Define custom and system tags and add them to the *device template* files. Note that these custom and system tags must also be defined on BroadWorks.
- 3) Create a device profile type on BroadWorks for each device model to be integrated with Device Management.
- 4) Add the device template files and other associated files to the device profile type.
- 5) Create a device profile instance of the device profile type and assign it to a user. A user name and password are assigned to this device profile.
- 6) Configure the end device with the Device Management URL for device files, as well as the user name and password access credentials.

This section describes the steps to integrate the Media5 Mediatrix 3000/4000/LP/C7series products.

As part of the Media5 Mediatrix 3000/4000/LP/C7series customer premises equipment (CPE) kit, BroadSoft has defined a standard device configuration in the device template files that service providers can use on their systems. These files can be uploaded directly to Device Management without modification. However, the service provider also has the option to modify these template files as required to fit their deployment needs.

The CPE kit contains Device Type Archive File (DTAF) files that are used to import the device type and template files.

5.1 Device Management Capabilities Supported

The Media5 Mediatrix 3000/4000/LP/C7series has completed Device Management interoperability testing with BroadWorks using the *BroadWorks Device Management Interoperability Test Plan*[\[6\]](#). The results are summarized in the following table.

The 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 BroadWorks with the intent to ensure interoperability.

The *Supported* column in the following table identifies the Media5 Mediatrix 3000/4000/LP/C7series' 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 Media5 Mediatrix 3000/4000/LP/C7series.

BroadWorks Device Management Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
HTTP File Download	HTTP Download Using Xtended Services Platform (Xsp) IP Address	Yes	
	HTTP Download Using Xtended Services PlatformFQDN	Yes	
	HTTP Download Using Xtended Services PlatformCluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using Xtended Services PlatformIP Address	Yes	
	HTTPS Download Using Xtended Services PlatformFQDN	Yes	
	HTTPS Download Using Xtended Services PlatformCluster FQDN	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 Xtended Services PlatformIP Address	No	
	HTTP Upload Using Xtended Services PlatformFQDN	No	
	HTTP Upload Using Xtended Services PlatformCluster FQDN	No	

BroadWorks Device Management Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	Yes	
	Shared Line Origination	No	
	Shared Line Termination	No	
	Shared Line Status	No	
	Busy Lamp Field	No	
	Network-Based Conference	NT	
Flexible Seating	Association via Voice Portal	NT	
	Association via Phone	NT	

5.2 Device Management Configuration

This section identifies the steps required to enable the Media5 Mediatrix 3000/4000/LP/C7series for Device Management. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2].

5.2.1 Configure BroadWorks Tags

The template files in Device Management use tags to represent the data stored on BroadWorks. When a configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on 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 devicetype-specific tags that are common to Media5device models only.

The Media5 Mediatrix 3000/4000/LP/C7series makes use of dynamic tags, which can be configured by a 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 Media5 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	NTP server address.
%SNTP_SERVER_2%	IP address/FQDN	NTP server address alternate.
%DNS_SERVER_1%	IP address	DNS server address.

Tag Name	Valid Settings	Description
%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 SBC address is an IP address. If the SBC address is an FQDN, the SBC port should not be set.
%USE_SBC_BOOLEAN%	0/1	Use SBC: 1=yes, 0=no.

Example system default tag settings:

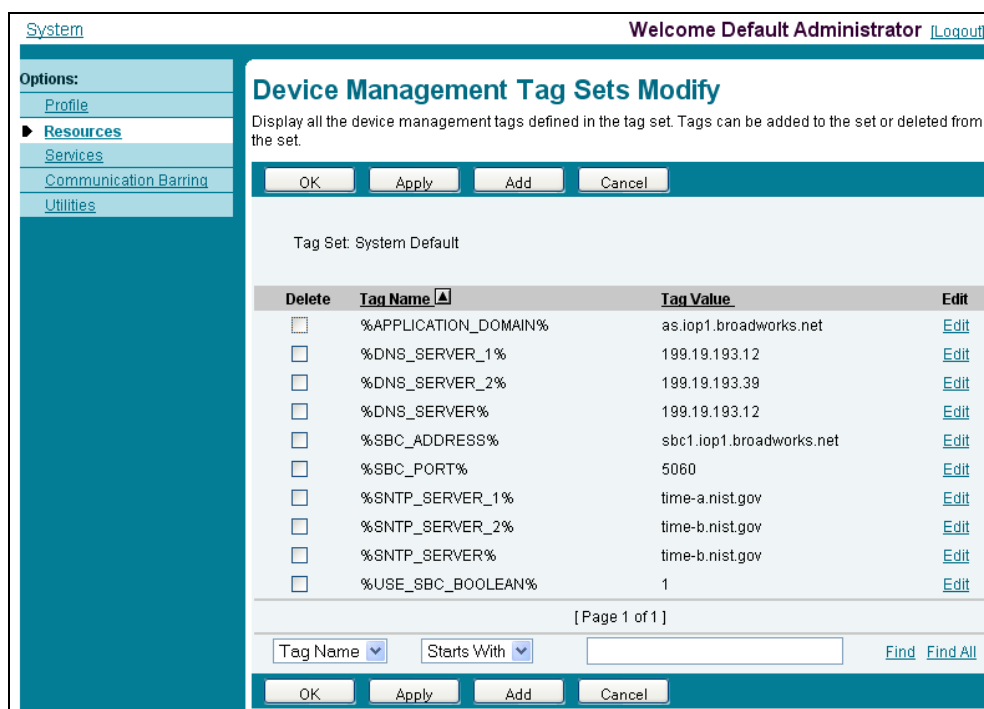


Figure 7 System Default Tag Settings

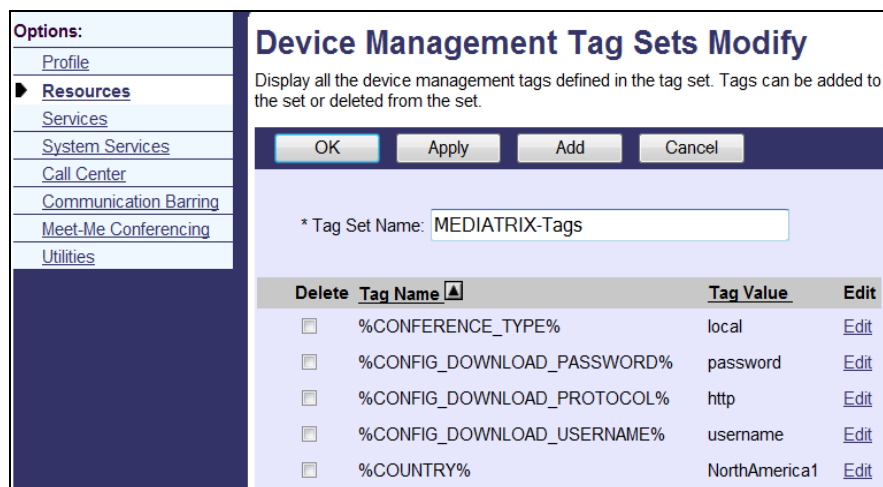
5.2.1.2 Create Device Type-specific Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and click **Add** to add a new tag set. Configure the tag set name using the device name appended by *Tags: Media5Tags*. 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.

Tag Name	Valid Settings	Description
%COUNTRY%	Austria1 Brazil1 China1 CzechRepublic1 France1	The <i>Country</i> selection is used to select predefined country settings for the tone profiles, ring patterns, and other parameters, such as input and outputting gains. The default value is "NorthAmerica1".

Tag Name	Valid Settings	Description
	Germany1 Germany2 Israel2 Italy1 Mexico1 NorthAmerica1 Spain1 Switzerland1 Uae2 Uae3 Uk1	
%CONFIG_DOWNLOAD_PROTOCOL%	http tftp https	This is the protocol used to transfer the configuration script files. The default value is "http".
%CONFIG_DOWNLOAD_USERNAME%	Username	This is the user name used to transfer the configuration script, that is, if required by the protocol.
%CONFIG_DOWNLOAD_PASSWORD%	Password	This is the password used to transfer the configuration script.
%CONFERENCE_TYPE%	Local ConferenceServer	This specifies how to manage the conference. This configuration only applies to a conference initiated by one of the unit's endpoints. <i>Local:</i> The media of the conference is locally mixed by the unit. This conference type does not require any special support of the call peer or server. <i>ConferenceServer:</i> The unit uses an external server to mix the media of the conference.

Device type specific tag settings:



Delete	Tag Name ▲	Tag Value	Edit
☐	%CONFERENCE_TYPE%	local	Edit
☐	%CONFIG_DOWNLOAD_PASSWORD%	password	Edit
☐	%CONFIG_DOWNLOAD_PROTOCOL%	http	Edit
☐	%CONFIG_DOWNLOAD_USERNAME%	username	Edit
☐	%COUNTRY%	NorthAmerica1	Edit

Figure 8 Device Type Tag Settings

5.2.2 Configure BroadWorks Device Profile Type

The device profile type is a system-level structure that defines how the device interfaces with 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 BroadWorks device profile configuration methods described: import and manual. The import method takes a DTAF as input and builds the 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 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.)
- There is a DTAF file available for import with a 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.

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 BroadWorks to add the Media5 Mediatrix 3000/4000/LP/C7 series as a Device Management-enabled device type.

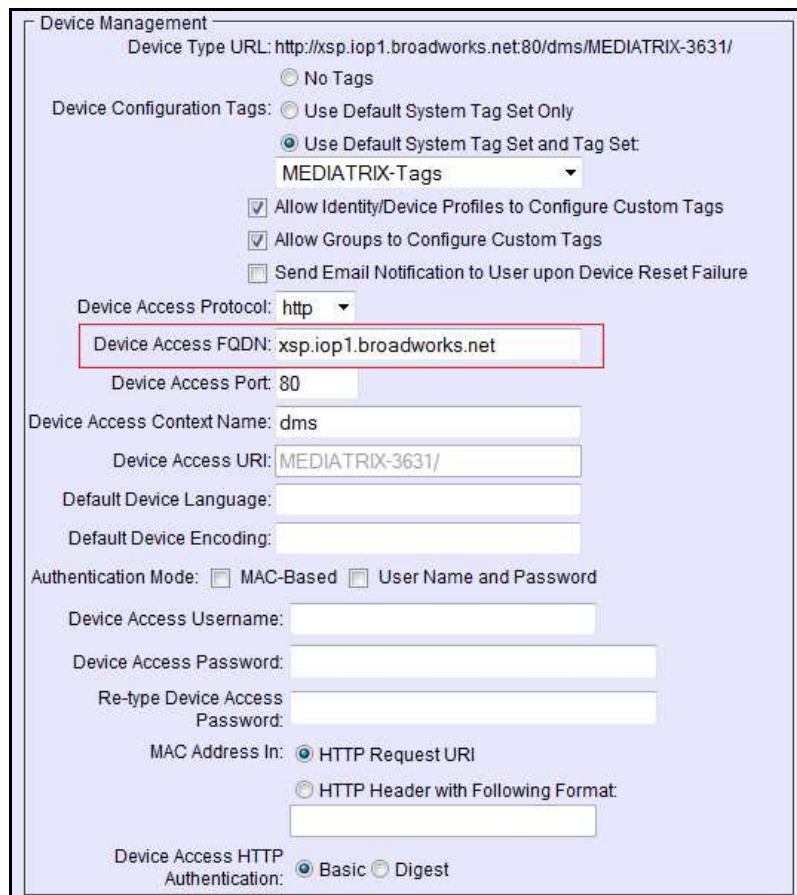
The import method is available in BroadWorks Release 17.0 and later. For previous releases, use the manual configuration method described in the next section.

Download the Media5 Mediatrrix 3000/4000/LP/C7series 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 want to import:

- 1) Login to 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 Media5 device profile type, Media5 Mediatrrix 3000/4000/LP/C7series.
- 6) Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform(Xsp) or Xtended Services Platform cluster address.



The screenshot shows the 'Device Management' configuration page. The 'Device Type URL' is set to 'http://xsp.iop1.broadworks.net:80/dms/MEDIATRIX-3631/'. Under 'Device Configuration Tags', 'Use Default System Tag Set and Tag Set' is selected, and 'MEDIATRIX-Tags' is chosen from the dropdown. Checkboxes for 'Allow Identity/Device Profiles to Configure Custom Tags' and 'Allow Groups to Configure Custom Tags' are checked. The 'Device Access Protocol' is 'http'. The 'Device Access FQDN' field is highlighted with a red box and contains 'xsp.iop1.broadworks.net'. Other fields include 'Device Access Port: 80', 'Device Access Context Name: dms', 'Device Access URI: MEDIATRIX-3631/', 'Default Device Language', 'Default Device Encoding', 'Authentication Mode' (MAC-Based and User Name and Password), 'Device Access Username', 'Device Access Password', 'Re-type Device Access Password', 'MAC Address In' (HTTP Request URI selected), and 'Device Access HTTP Authentication' (Basic selected).

Figure 9 Device Access FQDN

- 7) Click the **Files and Authentication** link and then select the option to rebuild all the system files.
- 8) 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 manual steps necessary to configure BroadWorks to add the Media5 Mediatrix 3000/4000/LP/C7series as a Device Management-enabled device type.

The manual method must be used for BroadWorks releases prior to Release 17.0. It is an optional method in Release 17.0 and later. To determine when to use the manual method, see section [5.2.2 Configure BroadWorks Device Profile Type](#). 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.

These steps must be completed for the device type for each Media5 model.

5.2.2.2.1 Modify Device Profile Type

This section identifies the BroadWorks device profile type settings relevant to Device Management for the Media5 Mediatrix 3000/4000/LP/C7series.

Browse to *System* → *Resources* → *Identity/Device Profile Types* and perform a search to find the Media5 device profile type(s) created in section [3.1 BroadWorks Device Profile Type Configuration](#) or add the device profile type for each model using the settings from section [3.1 BroadWorks Device Profile Type Configuration](#) if they do not exist.

The *Standard Options* and *Advanced Options* should already be configured as specified in section [3.1 BroadWorks Device Profile Type Configuration](#). If there are differences, perform an update to match the settings in section [3.1 BroadWorks Device Profile Type Configuration](#).

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

5.2.2.2.1.1 Configure Device Configuration Options

If Device Management has been previously enabled for the device profile type(s), goto the next section.

Device Configuration is enabled differently depending on the deployed BroadWorks release.

For BroadWorks Release 18.0 and later, configure the parameter as described in the following table.

Parameter	Value	Description
Device Configuration Options	Device Management	Use BroadWorks Device Management.

The following figure shows Device Management enabled for BroadWorks Release 18.0 and later.

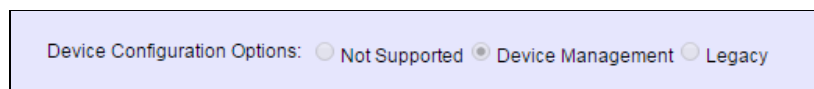


Figure 10 Enable Device Management (Release 18.0 and Later)

For BroadWorks releases prior to Release 18.0, configure as shown in the following table.

NOTE: These settings serve only to enable Device Management and are otherwise not meaningful in this context.

Parameter	Value	Description
Auto Configuration Type	2 Config File	Not meaningful other than it must be selected.
CPE System File Name	not_used	This parameter must not be blank. Set it to "not_used".
Device File Format	not_used	This parameter must not be blank. Set it to "not_used".

The following screen capture shows Device Management enabled for BroadWorks prior to Release 18.0.

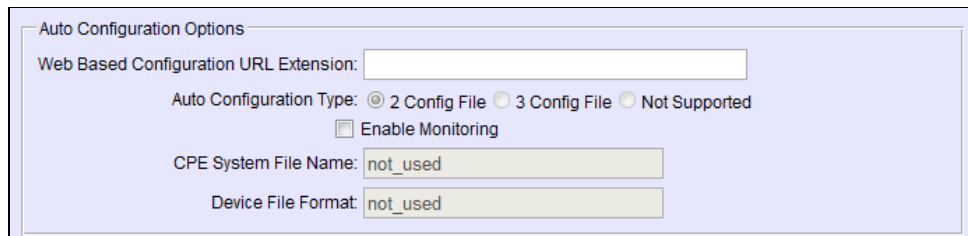


Figure 11 Enable Device Management (pre-Release 18.0)

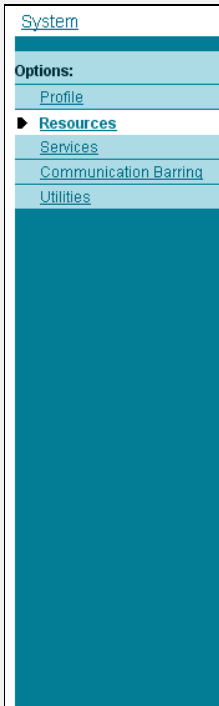
5.2.2.1.2 Configure Device Management Options

Modify the device profile type *Device Management Options* as shown in the following table. These common settings apply to all devices enabled for Device Management.

If Device Management has been enabled previously for the device profile type(s), make sure the existing settings match the settings described in this section.

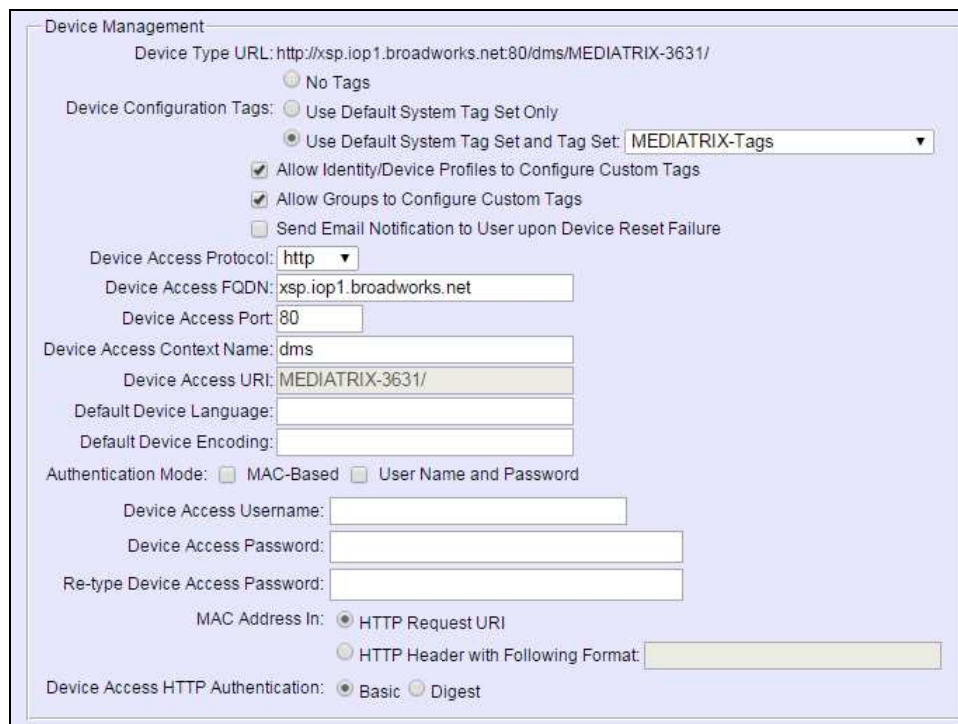
Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description
-----------	-------	-------------

Parameter	Value	Description
Device Configuration Tags	Use Default System Tag Set and Tag Set. Select the device tag set created in section 0 Tag Name %SNTP_SERVER_ %SNTP_SERVER_ %DNS_SERVER_1 %DNS_SERVER_2 %SBC_ADDRESS% %SBC_PORT% %USE_SBC_BOOL Example system default tag settings:  Figure 7 System Default Tag Settings Create Device Type-specific Tags.	

Parameter	Value	Description
Allow Identity/Device Profiles to Configure Custom Tags	Checked	Optional
Allow Groups to Configure Custom Tags	Checked	Optional
Device Access Protocol	http	
Device Access FQDN	<BroadWorks-XSP-Cluster-Address> Example: xsp.iop1.broadworks.net	Set to the Xtended Services Platform cluster FQDN if using an Xtended Services Platform farm. Otherwise, set it to the individual Xtended Services Platform FQDN or IP address.
Device Access Port	<BroadWorks-XSP-Port> Example: 80	This should be set to "80".
Device Access Context Name	dms	This does not need to be defined. BroadWorks defaults to the system-defined value.
Device Access URI	<model name> Example: <partner name>_ _<model>	This defines the directory the Xtended Services Platform uses to access the configuration files.

Example Device Management Options Settings



Device Management

Device Type URL:

☐ No Tags

Device Configuration Tags: ☐ Use Default System Tag Set Only
☒ Use Default System Tag Set and Tag Set:

☒ Allow Identity/Device Profiles to Configure Custom Tags

☒ Allow Groups to Configure Custom Tags

☐ Send Email Notification to User upon Device Reset Failure

Device Access Protocol:

Device Access FQDN:

Device Access Port:

Device Access Context Name:

Device Access URI:

Default Device Language:

Default Device Encoding:

Authentication Mode: ☒ MAC-Based ☐ User Name and Password

Device Access Username:

Device Access Password:

Re-type Device Access Password:

MAC Address In: ☒ HTTP Request URI
☐ HTTP Header with Following Format:

Device Access HTTP Authentication: ☒ Basic ☐ Digest

Figure 12 Device Management Options Settings

5.2.2.2.2 Define Device Profile Type Files

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files and other files that the Media5 Mediatix 3000/4000/LP/C7seriesdownload.

Configuration templates, firmware, and other files the Mediatix 3000/4000/LP/C7series uses must be uploaded to BroadWorks. Download the Media5 Mediatix 3000/4000/LP/C7series CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the configuration files from the *Configuration Files* folder of CPE kit. Obtain the firmware files directly from Media5.

The following table identifies the Media5 configuration files distributed with the 2.0.28.504 CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
<i>mediatrix3631-system.txt</i>	<i>mediatrix3631-system-%BWTIMESTAMP%.txt</i>	System-level	System Configuration file. This file contains common settings for all devices of the same model.
<i>mediatrix3632-system.txt</i>	<i>mediatrix3632-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4102-system.txt</i>	<i>mediatrix4102-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4104-system.txt</i>	<i>mediatrix4104-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4108-system.txt</i>	<i>mediatrix4108-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4116-system.txt</i>	<i>mediatrix4116-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4124-system.txt</i>	<i>mediatrix4124-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4401-system.txt</i>	<i>mediatrix4401-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4402-system.txt</i>	<i>mediatrix4402-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrix4404-system.txt</i>	<i>mediatrix4404-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrixLP16-system.txt</i>	<i>mediatrixLP16-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrixLP24-system.txt</i>	<i>mediatrixLP24-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrixC710-system.txt</i>	<i>mediatrixC710-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrixC711-system.txt</i>	<i>mediatrixC711-system-%BWTIMESTAMP%.txt</i>		
<i>mediatrixC731-system.txt</i>	<i>mediatrixC731-system-%BWTIMESTAMP%.txt</i>		
	<i>mediatrix3631-system-%BWTIMESTAMP%.txt</i>		
	<i>mediatrix3632-system-%BWTIMESTAMP%.txt</i>		
	<i>mediatrix4102-system-%BWTIMESTAMP%.txt</i>		
	<i>mediatrix4104-system-%BWTIMESTAMP%.txt</i>		
	<i>mediatrix4108-system-%BWTIMESTAMP%.txt</i>		

File Name	CPE Kit Template File Name	File Type	Description
<i>mediatrix3631-%BWMACADDRESS%.txt</i>	<i>mediatrix3631-%BWFQDEVICEID%.txt</i>	Device-specific	This file contains the phone or user-specific settings for the Mediatrix device.
<i>mediatrix3632-%BWMACADDRESS%.txt</i>	<i>mediatrix3632-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4102-%BWMACADDRESS%.txt</i>	<i>mediatrix4102-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4104-%BWMACADDRESS%.txt</i>	<i>mediatrix4104-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4108-%BWMACADDRESS%.txt</i>	<i>mediatrix4108-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4116-%BWMACADDRESS%.txt</i>	<i>mediatrix4116-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4124-%BWMACADDRESS%.txt</i>	<i>mediatrix4124-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4401-%BWMACADDRESS%.txt</i>	<i>mediatrix4401-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4402-%BWMACADDRESS%.txt</i>	<i>mediatrix4402-%BWFQDEVICEID%.txt</i>		
<i>mediatrix4404-%BWMACADDRESS%.txt</i>	<i>mediatrix4404-%BWFQDEVICEID%.txt</i>		
<i>mediatrixLP16-%BWMACADDRESS%.txt</i>	<i>mediatrixLP16-%BWFQDEVICEID%.txt</i>		
<i>mediatrixLP24-%BWMACADDRESS%.txt</i>	<i>mediatrixLP24-%BWFQDEVICEID%.txt</i>		
<i>mediatrixC710-%BWMACADDRESS%.txt</i>	<i>mediatrixC710-%BWFQDEVICEID%.txt</i>		
<i>mediatrixC711-%BWMACADDRESS%.txt</i>	<i>mediatrixC711-%BWFQDEVICEID%.txt</i>		
<i>mediatrixC731-%BWMACADDRESS%.txt</i>	<i>mediatrixC731-%BWFQDEVICEID%.txt</i>		
<i>TimeZoneAliasLabels_MEDIATRIX-<model>.properties</i>	<i>TimeZoneAliasLabels_MEDIATRIX-<model>.properties</i>	Time Zone Alias	The Time Zone Alias file is a BroadWorks Device Management file used to map the time zone identifiers between BroadWorks and Mediatrix device. A Time Zone Alias file is required for each model.

5.2.2.2.1 System Files

This section identifies the system-level files used by Media5 and provides instructions for defining the files and uploading for Device Management.

The Mediatrix 3000/4000/LP/C7series downloads a system file, named as follows:

- *mediatrix3631-system.txt*
- *mediatrix3632-system.txt*
- *mediatrix4102-system.txt*
- *mediatrix4104-system.txt*
- *mediatrix4108-system.txt*

- *mediatrix4116-system.txt*
- *mediatrix4124-system.txt*
- *mediatrix4401-system.txt*
- *mediatrix4402-system.txt*
- *mediatrix4404-system.txt*
- *mediatrixLP16-system.txt*
- *mediatrixLP24-system.txt*
- *mediatrixC710-system.txt*
- *mediatrixC711-system.txt*
- *mediatrixC731-system.txt*

Add a BroadWorks device profile type file to the Media5 Mediatix 3000/4000/LP/C7series device profile for the system file using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description
Device Access File Format	Mediatix<model>-system.txt Example: <i>mediatrix3631-system.txt</i>	This is the file name the phone uses to request the file.
Repository File Format	Mediatix<model>-system-%BWTIMESTAMP%.txt Example: <i>mediatrix3631-system-%BWTIMESTAMP%.txt</i>	This is the file name as stored on the Device Management repository. If group customization of the system file is required, the repository file name must contain the <i>timestamp</i> tag.
File Category	Dynamic Per-Type	The system file applies to the device type.
File Customization	Administrator	This identifies who can customize the system file template.
Enable Caching	Not Set	Caching is optional for a system file.
Assign File	Custom	
Authentication Mode	User Name and Password	
Device Access HTTP Authentication	Digest	

After defining the system file type, upload the corresponding system file template (downloaded from BroadSoft Xchange). Use the **Browse** button on the file definition screen. Be sure to select **Apply** after uploading the file.

Example System File setting:

Device Access File Format: mediatrix3631-system.txt
Repository File Format: mediatrix3631-system-%BWTIMESTAMP%.txt
Access File: <http://xsp.iop1.broadworks.net:80/dms/MEDIATRIX-3631/mediatrix3631-system.txt>
Repository File: [Download](#)
Template File: [Download](#)
File Category: ☐ Static ☒ Dynamic Per-Type ☐ Dynamic Per-Device
File Customization: Administrator
☐ Enable caching

Assign File
☐ Manual
☒ Custom
Upload File: Browse...

Currently using /var/broadworks/lpDeviceConfig/type/MEDIATRIX-3631/mediatrix3631-configuration file: **system.txt.template**

```

#####
# System Name       : Mediatrix 3631
# Description       : Broadsoft System Template Config File
#####

# DNS - Uncomment the following two lines if are using DNS server
addresses specified by Broadsoft
# Hoc.StaticDnsServers[Priority=1].IpAddress = "%DNS_SERVER_1%"
# Hoc.StaticDnsServers[Priority=2].IpAddress = "%DNS_SERVER_2%"

```

File Authentication
Authentication Mode: ☐ MAC-Based ☒ User Name and Password
MAC Address In: ☒ HTTP Request URI
☐ HTTP Header with Following Format:
Device Access HTTP Authentication: ☐ Basic ☒ Digest
Allowed Access Protocols: ☒ http ☒ https ☒ tftp

Figure 13 mediatrix3631-system.txt File

5.2.2.2.2 Device-specific Files

This section identifies the device-specific files used by Media5 and provides instructions for defining the files and uploading for Device Management.

Each Mediatrix 3000/4000/LP/C7series downloads a device-specific file based on the MAC address using the following file name format:

- mediatrix<model name>-<MAC-address>.txt

Add a BroadWorks device profile type file to the Media5 Mediatrix 3000/4000/LP/C7series device profile for the device specific file using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description
Device Access File Format	mediatrix<model>- %BWMACADDRESS%.txt Example: mediatrix3631- %BWMACADDRESS%.txt	This is the file name format the phone uses to request the file.

Repository File Format	<i>mediatrix3631-%BWFQDEVICEID%.txt</i>	This is the file name format as stored on the Device Management repository.
File Category	Dynamic Per-Device	This file is unique per device.
File Customization	Administrator and User	This identifies who can customize this file template.
Enable Caching	Not Set	Caching should not be enabled for device-specific files.
Assign File	Custom	
Authentication Mode	User Name and Password	The phone-specific file is authenticated with a user name and password.
Device Access HTTP Authentication	Digest	

After defining the device-specific file type, upload the corresponding device-specific file template downloaded from BroadSoft Xchange. Use the **Browse** button on the file definition screen. Be sure to select **Apply** after uploading the file.

Device-specific file settings:

Device Access File
Format: mediatrix3631-%BWMACADDRESS%.txt
Repository File
Format: mediatrix3631-%BWFQDEVICEID%.txt
Access File: http://xsp.iop1.broadworks.net:80/dms/MEDIATRIX-3631/mediatrix3631-{%25BWMACADDRESS%25}.txt
Note: this URL has undefined content. Validate it manually by replacing any content between {} with valid value(s).
Repository File:
Template File: [Download](#)
File Category: ☐ Static ☐ Dynamic Per-Type ☒ Dynamic Per-Device
File Customization: **Administrator and User**
☐ Allow Upload from Device

Assign File
☐ Manual
☒ Custom
Upload File: [Browse...](#)
Currently using /var/broadworks/lpDeviceConfig/type/MEDIATRIX-3631/mediatrix3631-%configuration file: BWMACADDRESS%.txt.template

```

#####
# System Name      : Mediatrix 3631
# Description      : Broadsoft Device-Specific Template Config File
#####

# SIP Registered EndPoints
# If the port is not in use, set this to Disable
SipEp.UserAgent[EpId=Slot2/E1T1].Register = "Enable"

# SIP Subscribe for MWI - Disable by default

```

File Authentication
Authentication Mode: ☐ MAC-Based ☒ User Name and Password
MAC Address In: ☒ HTTP Request URI
☐ HTTP Header with Following Format:
Device Access HTTP Authentication: ☐ Basic ☒ Digest

Figure 14 mediatrix3631-%BWMACADDRESS%.txt File

5.2.2.2.2.3 Time Zone Alias File

To properly map the BroadWorks configured user time zone to the Media5 Mediatrix 3000/4000/LP/C7series phone setting, a mapping file must be created on the BroadWorks system. This file maps the BroadWorks user time zone settings to the phone's time zone settings. Time zone mapping for the device profile type is described in the *BroadWorks Device Management Configuration Guide*. **Error! Reference source not found.** This time zone mapping file must be added to the /usr/local/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 "MEDIATRIX-3631", the time zone mapping file name must be *TimeZoneAliasLabels_MEDIATRIX-3631.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 Mediatrix model.

The file must contain the mapping of BroadWorks time zones values to Media5 Mediatrix 3000/4000/LP/C7series time zone values. Following is an example of the file contents.

```
US_ALASKA=AKST9AKDT8,M3.2.0/02:00:00,M11.1.0/02:00:00
```

```
US_HAWAII=HST10
CANADA_PACIFIC_TIME=PST8PDT7,M3.2.0/02:00:00,M11.1.0/02:00:00
US_PACIFIC_TIME=PST8PDT7,M3.2.0/02:00:00,M11.1.0/02:00:00
US_ARIZONA=MST7
CANADA_MOUNTAIN_TIME=MST7MDT6,M3.2.0/02:00:00,M11.1.0/02:00:00
US_MOUNTAIN_TIME=MST7MDT6,M3.2.0/02:00:00,M11.1.0/02:00:00
CANADA_CENTRAL_TIME=CST6CDT5,M3.2.0/02:00:00,M11.1.0/02:00:00
US_CENTRAL_TIME=CST6CDT5,M3.2.0/02:00:00,M11.1.0/02:00:00
CANADA_EASTERN_TIME=EST5EDT4,M3.2.0/02:00:00,M11.1.0/02:00:00
US_INDIANA=EST5EDT4,M3.2.0/02:00:00,M11.1.0/02:00:00
US_EASTERN_TIME=EST5EDT4,M3.2.0/02:00:00,M11.1.0/02:00:00
CANADA_ALTANTIC_TIME=AST4ADT3,M3.2.0/02:00:00,M11.1.0/02:00:00
CANADA_NEWFOUNDLAND=NST3:30NDT2:30,M3.2.0/02:00:00,M11.1.0/02:00:00
```

This file should contain all the time zones supported by the service provider's BroadWorks system. The Application Server must be restarted to load this file.

The CPE kit contains the time zone properties files defined for the continental U.S. and Canadian time zones. For other time zone settings, see the *Dgw 2.0 Application Software Configuration Guide* **Error! Reference source not found.** When using the DTAF import, the *TimeZoneAlias* files are automatically copied to the system.

The BroadWorks Application Server must be restarted for the *TimeZoneAlias* files to be retrieved by the system.

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 BroadWorks interface to a Media5 phone deployed at a user's desk.

This section describes how to create a BroadWorks device profile instance for an individual Media5 Mediatrix 3000/4000/LP/C7series phone. Device profile instances are usually created at the BroadWorks group level and assigned to users.

When the device profile is created, the authentication data must be defined. The authentication data is used by Device Management to challenge a request from a phone to download a configuration file. The device must send credentials that match the credentials stored in the device profile.

Browse to the BroadWorks <group> → *Resources* → *Identity/Device Profiles* and select *Add* to add a new Media5 Mediatrix 3000/4000/LP/C7series device profile. Define the device profile instance using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description
Identity/Device Profile Name	<device-profile-name> Example: mediatrix	The device profile name is a unique identifier for the device profile instance.
Identity/Device Profile Type	<Mediatrix-device-profile-type> Example: MEDIATRIX-3631	Select from the drop-down the Media5 device profile type created in the previous section.
Authentication	Use Custom Credentials	Use a unique login ID and password for each phone.

Parameter	Value	Description
Device Access User Name	<Mediatix-login-name> Example: media3631	User name to log in from the Mediatix. The login user naming convention must be determined by the service provider.
Device Access Password	<Mediatix-login-password> Example: 654321	Password to login from the device.

Identity/Device Profile Add settings:



Figure 15 Device Profile Instance

5.2.4 Configure BroadWorks User

The user should be configured with the desired BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and defined in the device configuration files, given that the template files are created with the correct Device Management tags.

The device profile created in the previous section should be assigned to the 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 BroadWorks <user> → *Addresses* page and set the parameters as described in the following table.

It is expected that parameters not identified in the following table are already set or are self-explanatory.

Parameter	Value	Description
Identity/Device Profile Name	<device-profile-name> Example: mediatrix	From the drop-down menu, select the device profile instance created in the previous section.
Line/Port	<SIP register address-of-record> Example: 2403646221@as.iop1.broadworks.net	Supply the desired SIP register address-of-record.

The following figure is an example of user addresses settings.

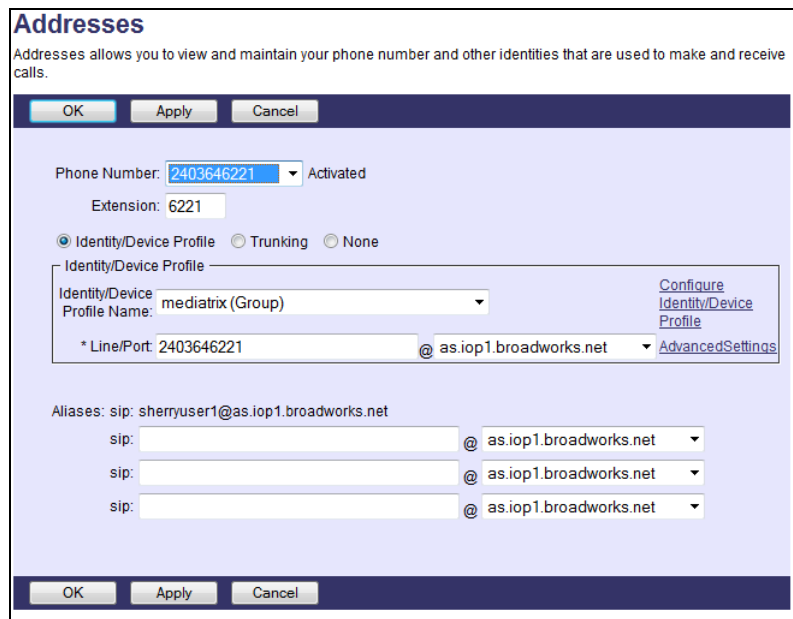


Figure 16 Assign Device Profile to User

5.2.5 Configure Edge Device

In many deployments, an edge device is deployed on the enterprise edge. Configure the edge device SIP server setting with the service provider's session border controller IP address or FQDN. If there is no edge device and the phones communicate directly with the service provider's SBC, skip this section.

To integrate the edge device with Device Management, the SBC address tag (%SBC_ADDRESS%) defined in section **Error! Reference source not found.** must be overridden at the group level with the LAN address of the edge device. At the *Group → Utilities → Configure Device* page, select the Media5 device profile (example: *MEDIATRIX-3631*). Perform the following steps.

- 9) Click on the *Custom Tags* tab.
- 10) Click the **Add** button.
- 11) Add the SBC tag.
- 12) Enter "SBC_ADDRESS" as the tag.
- 13) Enter the IP address as the value (edge device LAN IP address).
- 14) Click **OK** to save the tag data.

This Tag/Value is applied to all *MEDIATRIX-3631* phones in the group using the modified *Device Profile Type*.

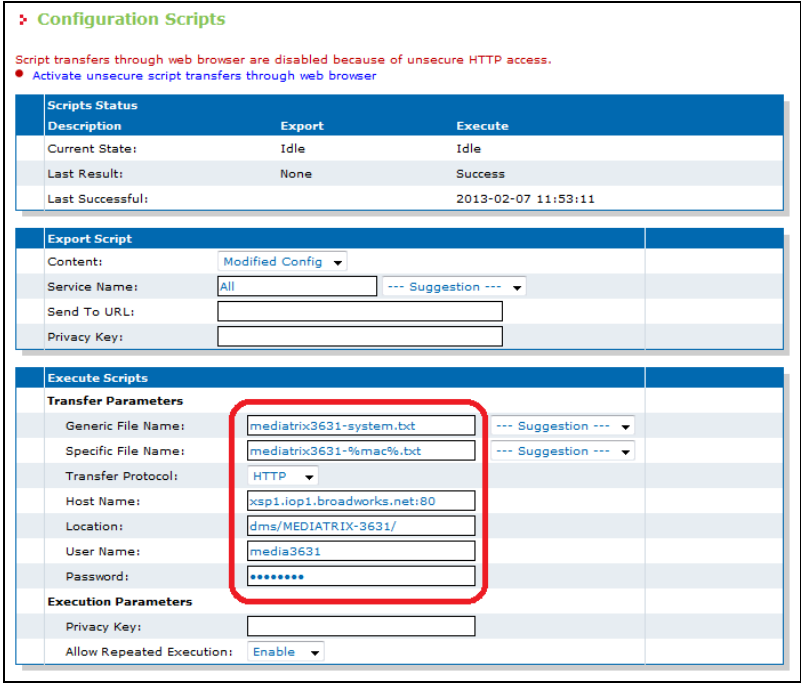
Repeat for each Mediatrix model provisioned in the group.

5.2.6 Configure Media5 Mediatrix 3000/4000/LP/C7Series

This section describes the steps necessary to configure the Media5 Mediatrix 3000/4000/LP/C7series to integrate with BroadWorks Device Management.

Log in to Mediatrix web user interface (note that the default user name is “public” and there is no password). Browse to the *Management* → *Configuration Scripts* screen to configure BroadWorks Device Management fields. After completing the configuration, click **Submit & Execute Now** to force the Mediatrix to download configuration files from BroadWorks.

The following figure is an example of a Mediatrix Configuration Script.



Configuration Scripts

Script transfers through web browser are disabled because of unsecure HTTP access.
 • Activate unsecure script transfers through web browser

Scripts Status	Export	Execute
Current State:	Idle	Idle
Last Result:	None	Success
Last Successful:		2013-02-07 11:53:11

Export Script

Content: Modified Config

Service Name: All

Send To URL:

Privacy Key:

Execute Scripts

Transfer Parameters

Generic File Name: mediatrix3631-system.txt

Specific File Name: mediatrix3631-%mac%.txt

Transfer Protocol: HTTP

Host Name: xsp1.lop1.broadworks.net:80

Location: dms/MEDIATRIX-3631/

User Name: media3631

Password: *****

Execution Parameters

Privacy Key:

Allow Repeated Execution: Enable

Figure 17 Mediatrix Management – Configuration Scripts

BroadWorks Device Management parameters are identified in the following table:

Transfer Parameter	Options	Description
Generic Filename	<i>mediatrix3631-system.txt</i> <i>mediatrix3632-system.txt</i> <i>mediatrix4102-system.txt</i> <i>mediatrix4104-system.txt</i> <i>mediatrix4108-system.txt</i> <i>mediatrix4116-system.txt</i> <i>mediatrix4124-system.txt</i> <i>mediatrix4401-system.txt</i> <i>mediatrix4402-system.txt</i> <i>mediatrix4404-system.txt</i> <i>mediatrixLP16-system.txt</i> <i>mediatrixLP24-system.txt</i> <i>mediatrixC710-system.txt</i> <i>mediatrixC711-system.txt</i> <i>mediatrixC731-system.txt</i>	The system configuration file contains common settings for all devices, (named after the model number of your Mediatrix device).
Specific File Name	<i>mediatrix3631-%mac%.txt</i> <i>mediatrix3632-%mac%.txt</i> <i>mediatrix4102-%mac%.txt</i> <i>mediatrix4104-%mac%.txt</i> <i>mediatrix4108-%mac%.txt</i> <i>mediatrix4116-%mac%.txt</i> <i>mediatrix4124-%mac%.txt</i> <i>mediatrix4401-%mac%.txt</i> <i>mediatrix4402-%mac%.txt</i> <i>mediatrix4404-%mac%.txt</i> <i>mediatrixLP16-%mac%.txt</i> <i>mediatrixLP24-%mac%.txt</i> <i>mediatrixC710-%mac%.txt</i> <i>mediatrixC711-%mac%.txt</i> <i>mediatrixC731-%mac%.txt</i>	The unit-specific configuration file contains SIP lines configuration (named after the model name and the MAC address of your Mediatrix device).
Transfer Protocol	HTTP HTTPS TFTP	The transfer protocol used to download the configuration file.
Host Name	BroadWorks Xtended Services Platform server address Example: xsp1.iop1.broadworks.net:80	The FQDN or IP address of the BroadWorks Xtended Services Platform. If port number is not standard one, the port number needs to be specified.

Transfer Parameter	Options	Description
Location	dms/MEDIATRIX-3631/ dms/MEDIATRIX-3632/ dms/MEDIATRIX-4102/ dms/MEDIATRIX-4104/ dms/MEDIATRIX-4108/ dms/MEDIATRIX-4116/ dms/MEDIATRIX-4124/ dms/MEDIATRIX-4401/ dms/MEDIATRIX-4402/ dms/MEDIATRIX-4404/ dms/MEDIATRIX-LP16/ dms/MEDIATRIX-LP24/ dms/MEDIATRIX-C710/ dms/MEDIATRIX-C711/ dms/MEDIATRIX-C731/	The folder path of the configuration files.
Username	<Mediatrx-login-name> Example: media3631	The login user name and password must match the credentials configured for BroadWorks in section 5.2.3 Create Device Profile Instance .
Password	<Mediatrx-login-password> Example: 654321	

5.3 Upgrade from Previous CPE Kits

The previous configuration sections are primarily structured around importing or manually configuring the Media device profile types for the first time. Many of the steps are unnecessary when upgrading to a new firmware release or CPE kit version.

5.3.1 General Recommendations for Upgrades

Upgrades can be resource intensive if not managed properly. Recommendations for a managed upgrade include:

- Perform the upgrade during a maintenance window.
- Keep the previous firmware on the system in case a downgrade is required. Older versions can be deleted.
- Perform the upgrade at the group level rather than the system-wide level. To do so:
 - 1) Upload firmware at the system level.
 - 2) Select the group to upgrade.
 - 3) Select *Utilities* → *Device Configuration*.
 - 4) Search for and select the Media model to upgrade.

- 5) Select *Files*. Upload the new or updated configuration files at the group level. (To identify new or modified configuration files, refer to relevant upgrade section.)
 - 6) On the *Files* page, select *Rebuild the files*. This rebuilds all the configuration files associated with the selected Media5 device profile type in this group.
 - 7) On the *Files* page, select *Reset the phones*. This causes the devices to restart and pick up the new firmware and configuration files.
 - 8) Repeat steps 2 through 7 for each Media5 model in the group to upgrade.
- After all groups have been upgraded, complete the following steps to update the system device profile types and reset the group device profile types to default values.
 - 1) Browse to the *System* → *Resources* → *Identity/Device Profile Types* page. Search for and select the Media5 model device type. Upload the new or updated configuration files at the group level. (To identify new or modified configuration files, refer to relevant upgrade section.) Repeat for each Media5 model.
 - 2) For each group, browse to the *Utilities* → *Device Configuration* page. Search for and select the upgraded Media5 model. Select *Files* and set each updated file back to *Default*. Repeat for each Media5 model.

5.3.2 Upgrade from Dgw2.0.23.338 to 2.0.28.504

The firmware files can be uploaded at any time, but the loading of configuration files should be done during a maintenance window. Perform the following steps to upgrade the Media5 device type to support version 2.0.28.504:

- 1) Obtain 2.0.28.504 firmware from Media5.
- 2) Upload the new Media5 firmware upgrade script as described in section **Error! Reference source not found.**

For example, put this firmware upgrade script in Broadworks. Let's say I name it *MediatrxUpgrade-2.0.28.504.xml*:

```
# Firmware Upgrade
# Fpu Service
Fpu.MfpVersion = "2.0.28.504"
Fpu.MfpSelection[Index=0].MfpName = "Dgw"
Fpu.MfpLocation = "MediatrxFW"
Fpu.MfpTransferProtocol = "Http"
Fpu.MfpTransferSrvHostname = "provisioning.serviceprovider.com:80"
FpuAutomaticRestartEnable = "Enable"
FpuAutomaticRestartGraceDelay = "60"
Fpu.Install
```

- 3) Import DTAF files for any new or not previously imported Media5 models in use by service provider customers.

The remaining steps are done during the maintenance window. The following configuration files have been modified in version 2.0.28.504 and must be uploaded for each Media5 model device profile type:

- *<config-file1.cfg>*
- *<config-file2.cfg>*

- 4) Perform the upgrade by group, following the steps in section [5.3.1 General Recommendations for Upgrades](#). Alternatively, omit the group steps and perform the upgrade at the system level.

Appendix A: ReferenceMediatrix 3000/4000/LP/C7Configuration Files

The following is a reference configuration for the Mediatrix 3000/4000/LP/C7 configured for use with BroadWorks.

System Default File: mediatrix<Device Model>-system.txt

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

```
#####
# System Name       : Mediatrix 4104
# Description       : Broadsoft System Template Config File
#####

# DNS - Uncomment the following two lines if are using DNS server addresses
# specified by Broadsoft
# Hoc.StaticDnsServers[Priority=1].IpAddress = "199.19.193.13"
# Hoc.StaticDnsServers[Priority=2].IpAddress = "199.19.193.29"

# Time Server
Hoc.SntpConfigSource = "Static" # Static, or Automatic (dhcp)
Hoc.StaticSntpServerHost = "time-b.nist.gov"

# SIP Servers
SipEp.DefaultStaticMessagingHost = "as.iop1.broadworks.net" # Voicemail
server - SIP Subscription host
SipEp.DefaultStaticRegistrarServerHost = "as.iop1.broadworks.net"
SipEp.DefaultStaticProxyHomeDomainHost = "as.iop1.broadworks.net"
SipEp.DefaultStaticProxyOutboundHost = "199.19.193.9:5060"
SipEp.SupportedDnsQueries = "Srv" # DNS Query: Srv, Naptr, Address (A-
record)

# SIP Transport - Only one (UDP, TCP, TLS) can be enabled at a time
# Default is SIP over UDP
SipEp.TransportConfig[GatewayName=default].UdpEnable = "Enable"
SipEp.TransportConfig[GatewayName=default].TcpEnable = "Disable"
SipEp.TransportConfig[GatewayName=default].TlsEnable = "Disable"

# SIP Registration Time
# RefreshTime = Time to register before registration expires
# By default, a SIP Register is sent 60sec before it expires
SipEp.DefaultRegistrationRefreshTime = "60"
SipEp.DefaultRegistrationExpirationValue = "3600"

# SIP Penalty Box
SipEp.PenaltyBoxEnable = "Disable" # Enable or Disable
SipEp.PenaltyBoxTime = "300"

# SIP Timer
SipEp.InteropTransmissionTimeout = "32"

# Enable SIP Remote Reboot and Check-Sync
SipEp.GwEventHandling[GatewayName=default].Reboot = "Restart"
SipEp.GwEventHandling[GatewayName=default].CheckSync = "TransferScript"

# Config File Download
Conf.ScriptsLocation = "dms/MEDIATRIX-4104/"
Conf.ScriptsTransferSrvHostname = "xsp1.iop1.broadworks.net:80"
```

```
Conf.ScriptGenericFileName = "mediatrix4104-system.txt"
Conf.ScriptSpecificFileName = "mediatrix4104-%mac%.txt"
Conf.ScriptsTransferOnRestartEnable = "Enable"
Conf.ScriptsTransferProtocol = "http"
Conf.ScriptsTransferUsername = "username"
Conf.ScriptsTransferPassword = "password"

# DTMF
# DTMF Transport Method: Inband, OutOfBandUsingRtp (RFC2833),
# OutOfBandUsingSignalingProtocol (SIP Info)
Mipt.DefaultDtmfTransportMethod = "OutOfBandUsingRtp"
# RFC2833 Event payload number
Mipt.DefaultDtmfTransportPayloadType = "101"

# Country Tone set, e.g. NorthAmerica1, UK1, China1, UAE2, UAE2, Brazil1,
# Mexico1, Germany1, Spain1, France1 and more
TelIf.CountrySelection = "NorthAmerica1"

# Digit Map
EpServ.CallDtmfMapAllowed[Index=2].DtmfMap = "*xx"

# CRout Service
CRout.AutoRoutingEnable = "Enable"

# Attach additional Interop settings here

# Restart services
Scm.RestartRequiredServices
```

Device-specific File: mediatrix<Device Model>-<MAC Address>.txt

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

```
#####
# System Name      : Mediatrix 4104
# Description      : Broadsoft Device-Specific Template Config File
#####

# SIP Registered EndPoints
# If the port is not in use, set this to Disable
SipEp.UserAgent[EpId=Port1].Register = "Enable"
SipEp.UserAgent[EpId=Port2].Register = "Enable"
SipEp.UserAgent[EpId=Port3].Register = "Enable"
SipEp.UserAgent[EpId=Port4].Register = "Enable"

# SIP Subscribe for MWI - Disable by default
SipEp.UserAgent[EpId=Port1].MwiSubscribe = "Disable"
SipEp.UserAgent[EpId=Port2].MwiSubscribe = "Disable"
SipEp.UserAgent[EpId=Port3].MwiSubscribe = "Disable"
SipEp.UserAgent[EpId=Port4].MwiSubscribe = "Disable"

# Conference Server settings
EpServ.DefaultConferenceType = "local"
SipEp.DefaultStaticConferenceServerUri = "sip:"

# Timezone
Hoc.StaticTimeZone = ""

# SIP Accounts Per port-----
```

```
# Port 1
SipEp.UserAgent[EpId=Port1].Username = "2425551111"
SipEp.UserAgent[EpId=Port1].FriendlyName = "Thomas"
SipEp.Authentication[Index=1].Username = "2425551111"
SipEp.Authentication[Index=1].Password = "password123"
# Port 2
SipEp.UserAgent[EpId=Port2].Username = "2425552222"
SipEp.UserAgent[EpId=Port2].FriendlyName = "Jimmy"
SipEp.Authentication[Index=2].Username = "2425552222"
SipEp.Authentication[Index=2].Password = "password123"
# Port 3
SipEp.UserAgent[EpId=Port3].Username = ""
SipEp.UserAgent[EpId=Port3].FriendlyName = ""
SipEp.Authentication[Index=3].Username = ""
SipEp.Authentication[Index=3].Password = ""
# Port 4
SipEp.UserAgent[EpId=Port4].Username = ""
SipEp.UserAgent[EpId=Port4].FriendlyName = ""
SipEp.Authentication[Index=4].Username = ""
SipEp.Authentication[Index=4].Password = ""

# Common settings for all -----

SipEp.UserAgent[EpId=Port1].GatewayName = "all"
SipEp.UserAgent[EpId=Port2].GatewayName = "all"
SipEp.UserAgent[EpId=Port3].GatewayName = "all"
SipEp.UserAgent[EpId=Port4].GatewayName = "all"
#
SipEp.Authentication[Index=1].ApplyTo = "Endpoint"
SipEp.Authentication[Index=2].ApplyTo = "Endpoint"
SipEp.Authentication[Index=3].ApplyTo = "Endpoint"
SipEp.Authentication[Index=4].ApplyTo = "Endpoint"
#
SipEp.Authentication[Index=1].EpId = "Port1"
SipEp.Authentication[Index=2].EpId = "Port2"
SipEp.Authentication[Index=3].EpId = "Port3"
SipEp.Authentication[Index=4].EpId = "Port4"
#
SipEp.Authentication[Index=1].ValidateRealm = "Disable"
SipEp.Authentication[Index=2].ValidateRealm = "Disable"
SipEp.Authentication[Index=3].ValidateRealm = "Disable"
SipEp.Authentication[Index=4].ValidateRealm = "Disable"
# -----

# CRout Service
CRout.AutoRoutingEnable = "Enable"
CRout.ApplyConfig

sipEp.RegistrationRefresh
```

References

- [1] Media5 Corp.2014. *Dgw 2.0 Application Software Configuration Guide, Rev20*. Available from Media5 at http://wiki.media5corp.com/wiki/images/8/8e/MTX_Dgw_v2-0_SCG.pdf
- [2] BroadSoft, Inc. 2014. *BroadWorks Device Management Configuration Guide, Release 20.0*. Available from BroadSoft at xchange.broadsoft.com.
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