



**Dynamic MoH Solution**  
*for*  
**BroadSoft BroadWorks® Platform**  
**Version 19, SP1 and later**

**Administration Guide**

*Version 1.2 – Aug 2014*

## TABLE OF CONTENTS

Why “Dynamic On Hold” is needed .	3
Additional features.	3
How does it work	4
Bandwidth Requirements	5
More about Dynamic Updates	5
Installation & Configuration of the Solution	6
SIP Registration	6
SIP Playback	6
Platform Configuration	7
BroadSoft SIP Interop Accreditation	9
Contact Information	10

## WHY “DYNAMIC” ON HOLD IS NEEDED

Focus group research conducted independently in 2006 revealed that waiting callers perceived MOH as boring, repetitive and never changing, in general it was a negative experience. Captivate set about changing the face of on hold messaging with “dynamic on hold” that mixes daily content with client specific messages. With the optional interesting content items updated daily, this overcame all the negative perceptions and made waiting on hold interesting, inspirational and educational. Captivate MoH is provided as a fully managed service with all updated fully automated.

In 2010, Captivate On Hold recognised the growing trend toward hosted voice, particularly on the BroadWorks platform.. The inability to connect an external MoH device to the platform meant that our fully “managed on hold” service required a software solution, which was developed specifically for and accredited by BroadSoft.

A very popular feature of the Captivate MoH solution is that it plays the audio file to callers from a random point each time a caller is placed on hold, even during the same call. Other features include the ability to manage the on hold content remotely and automatically, to date stamp specific parts of the audio to start and stop at specified times and dates and change multiple client site MoH content concurrently.

Whilst we all know that callers will not be on hold for long, it does mean that frequent callers are unlikely to hear the same audio each time they call. Additionally there is no practical limit to the length of the audio that can be provided.

Here’s a link to a demo exemplifying the current on hold experience in most hosted voice systems without Captivate: [Frustration.mp3](#)

## ADDITIONAL FEATURES

Another feature of the Captivate solution is the ability to create reports to provide important metrics that can be used for caller experience management.

Captivate On Hold maintains a record of the number and duration of calls placed on hold. The data show that the average caller hold time is 60.5 seconds, and that 74.67% of callers were placed on hold more than once during the same call. This data can be provided by customers if required.

## HOW DOES IT WORK?

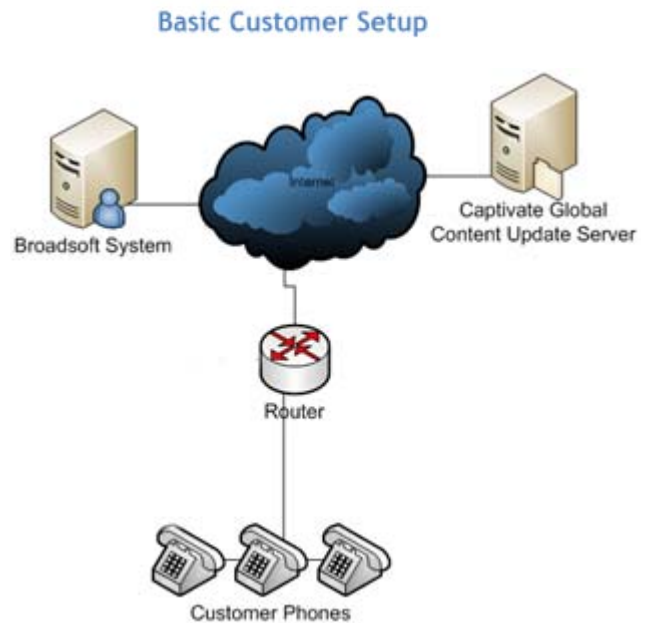
The *External Music on Hold Device* section of the BroadWorks platform allows a service provider to specify an address which the platform will contact for on-hold content. Upon a caller being placed on hold, the BroadWorks platform will utilize SIP transfer methods to connect the person being placed on hold to the specific SIP URI for the client MoH.

The Captivate On Hold MoH Server will register with the BroadWorks platform as the contact for the SIP URI selected as the music on hold source. Any calls placed on hold will then be transferred and the server will automatically answer, playing back the content which has been requested as a loop. Callers placed on hold will “drop into” the audio loop at a random point, even in the same call.

Site specific content can be selected by setting up multiple groups for Music on Hold. Within each group for Music on Hold, a different URI must be used.

Each of the registered URIs will contain an in-dial number or name, which will represent a playlist of items to be played back. For example, the device will register as [salesstream@syd.customer.com](mailto:salesstream@syd.customer.com) where salesstream is the DID, and syd.customer.com is the domain or realm in which the BroadWorks system is run.

The second Music on Hold group would have the Music on Hold set to use [servicestream@syd.customer.com](mailto:servicestream@syd.customer.com) and have the service desk phones assigned to use it for on hold content.



## **BANDWIDTH REQUIREMENTS**

Several considerations need to be made in order to effectively supply music on hold requirements. The Captivate MoH Server will supply, as requested by the BroadWorks platform, an RTP stream for each caller that is placed on hold. Each RTP stream will utilize 64kbps (g.711) of bandwidth whilst the caller is on hold, plus minimal traffic for SIP signalling.

The Captivate MoH Server can be used to service any number of clients. Audio for each client can be provided from the Captivate On Hold MoH Server, and are nominated by a *client specific* identifier. Multiple sites belonging to a single client requiring different MoH audio will each be assigned a unique client name. This may be utilized when an organization has multiple branches or businesses in different regions requiring different promotions or language and dialect variations.

## **MORE ABOUT DYNAMIC UPDATES**

The key to understanding the dynamic update capability is that the Captivate MoH Server automatically creates a “playlist” of short (10-20 second) audio files, rather than using a single static (fixed length) audio file. Use of the Captivate On Hold solution also means there is no practical limit to the duration of the audio presented to the caller – ideal for busy call centres with long wait times.

Dynamic updates refer to the fact that updates to the content occur dynamically throughout the day. Each half hour, the server checks the Captivate MoH Server for updates.. When updated audio is created, it will be played.

Once configured, the service will not need to be administered. All updates are done by the automated process. In this way any changes that the client requires to the audio can be automatically applied to the clients MoH stream within an hour minutes of being produced.

## **INSTALLATION & CONFIGURATION OF THE SOLUTION**

To establish a new user; the carrier or service provider needs to configure a Captivate On Hold compatible device as detailed below, then supply Captivate On Hold with the following information;

- The SIP URI created for the device to register to,  
and
- SIP Authentication details to use for registration (if required)

Captivate On Hold will then configure the Captivate MoH Server to register using the settings. This will enable client specific content created by a licensed regional MoH audio provider to be delivered to the clients BroadWorks platform which will then be supplied to the end user handsets.

## **SIP REGISTRATION**

The SIP Proxy will maintain the registration with BroadSoft indefinitely. For multiple registrations, the SIP Proxy can use the same Authentication details.

The proxy supports registrations to multiple platforms. Any changes to the SIP Proxy information or Authentication details will require Captivate On Hold to be notified.

## **SIP PLAYBACK**

The playback component will run indefinitely, playing as a loop. Upon receiving a request for content (SIP INVITE), the server will answer the call and start to deliver the audio from the requested client specific audio stream. All callers to a single URI will be delivered the same audio, at the same time, however playback will commence from a different point in the client MoH loop each time a caller is placed on hold, even in the same call.

This is a very important feature of the Captivate solution. Apart from our software solution - there is only the capacity to save a static audio file into the platform. This system dictates that every time a call is placed on hold - the audio starts from the same place, even in the same call. There is a growing disapproval of this repetitive audio, so strengthening demand for Captivate MoH.

## PLATFORM CONFIGURATION

1. Login at the appropriate administration level (system, service provider, enterprise, or group)
2. Browse to System->Resources->Identity/Device Profiles
3. Enter in the Identity/Device Profile Name the name CaptivateOnHold
4. For the Identity/Device Profile Type: select Generic SIP Music On Hold
5. Select OK



Group

### Options:

[Profile](#)

### Resources

[Services](#)

[Acct/Auth Codes](#)

[Call Center](#)

[Meet-Me Conferencing](#)

[Utilities](#)

## Identity/Device Profile Add

Add a new group identity/device profile.

OK

Cancel

\* Identity/Device Profile Name:

Identity/Device Profile Type:

Protocol:

Host Name/IP Address:

Port:

Transport:

MAC Address:

Serial Number:

Description:

Outbound Proxy Server:

STUN Server:

Physical Location:

OK

Cancel

## PLATFORM CONFIGURATION (Cont'd.)

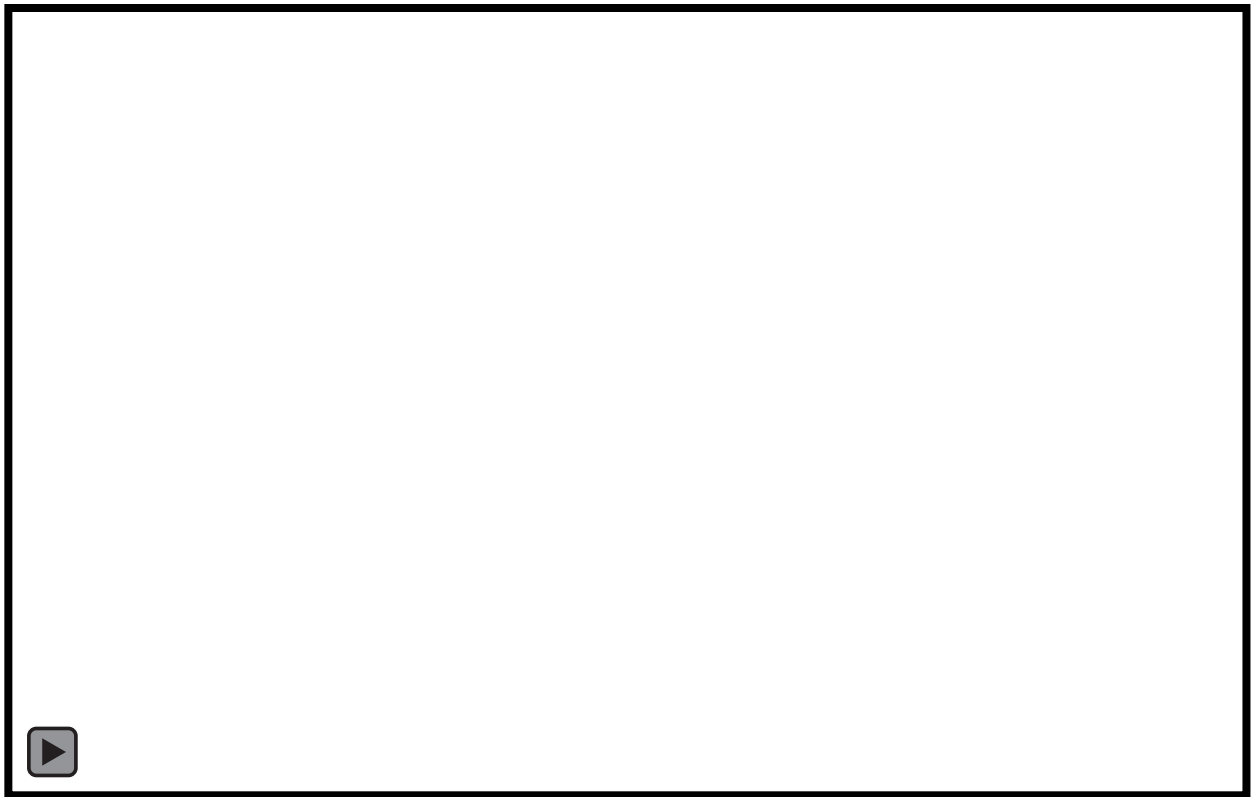
- o Browse to (group)->Services->Music/Video On Hold Modify to configure the Music on Hold service for that group:
- o Select **Enable Music/Video during Call Hold**.
- o Select Enable Music/Video During Call Park
- o Select **External Source** and Identity/Device Profile from the *Identity/Device Profile Name* drop down menu
- o Select the previously created device profile instance of CaptivateOnHold
- o Name the Line/Port with a unique identifier for the client/site that the MoH is to be provided for.

The screenshot shows the Broadsoft web interface for configuring Music/Video On Hold. On the left is a navigation menu with 'Options:' containing 'Profile', 'Resources', 'Services' (selected), 'Acct/Auth Codes', 'Call Center', 'Meet-Me Conferencing', and 'Utilities'. The main panel is titled 'Music/Video On Hold Modify' with the subtitle 'Modify the selected Music/Video On Hold source.' Below this is a 'Saved' status bar and 'OK', 'Apply', and 'Cancel' buttons. The configuration is divided into 'General Settings' and 'Internal Calls Settings' tabs. Under 'General Settings', there are three checked options: 'Enable music/video during Call Hold', 'Enable music/video during Call Park', and 'Enable music/video during Busy Camp On'. Below these is the 'Music/Video On Hold message:' section with a 'Preferred Audio Codec:' dropdown set to 'None'. There are radio buttons for 'System Defined Music/Video' and 'External Source' (selected). Under 'External Source', there are radio buttons for 'Identity/Device Profile' (selected) and 'None'. Below this is a form for 'Identity/Device Profile' with fields for 'Identity/Device Profile Name' (set to 'Captivateonhold (Group)'), '\* Line/Port' (set to 'Testing'), and 'Contact sip:' (with a dropdown set to '@las.iopi.broadworks.net'). A link 'Configure Identity/Device Profile' is next to the name field. At the bottom of the 'General Settings' section is a 'Registrations (Also saves current screen data)' section with a radio button for 'Custom Music/Video File' and an 'Audio:' dropdown set to 'None'. 'OK', 'Apply', and 'Cancel' buttons are at the bottom of the page.

- o Once saved record the SIP address generated and send to [MoHLink@captivateonhold.com](mailto:MoHLink@captivateonhold.com) and Captivate On Hold will add the address on the Captivate MoH Server.
- o For any additional group(s) which require MoH content perform these steps again, using another unique **Line/Port** name, and provide the generated SIP address to Captivate On Hold



Here's a short video of the configuration above being done.



If you are unable to view this embedded video it can be played by clicking [here](#)

August 5, 2010

BroadSoft is pleased to announce that the following Captivate Global device and device firmware versions have been formally validated with the specified BroadWorks Releases. The devices listed below have met an acceptable level of conformance with the BroadWorks SIP interface. Any remaining issues and limitations from the interoperability testing are documented in the BroadSoft Partner Configuration Guide (PCG) for the device below. The PCG is available to customers on the BroadSoft Xchange website.

BroadSoft validates that the device works properly with the BroadWorks SIP interface. BroadSoft does not validate qualitative aspects of the device or other device capabilities, which are outside the scope of the SIP signaling interface. For device feature and performance testing results, please consult Captivate Global.

The validation is only for the Captivate Global firmware release(s) and BroadWorks software versions listed below. Any other previous releases that may have been tested are documented in the PCG.

Captivate Global MoH  
Version 1.0  
BroadWorks Release 17.0

\*This validation applies to all maintenance releases to this firmware version

Thanks,



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