



## VXML Interaction Server Configuration Guide Version 5.0.4

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## VXML Interaction Server Requirements and Compatibility

### Overview

VXML Interaction Server (VIS) 5.0.4 is compatible with these Virtual Hold components:

VXML Interaction Server Release	Virtual Hold Release	Platform Toolkit Release	Open VXML Toolkit Library Release
5.0.1	7.6.11 to 7.6.13	4.0	5.0.0
	8.0.3		
5.0.2 through 5.0.4	7.6.14 or later		5.1.0
	8.0.4 or later		
5.0.2 Hotfix 1	7.6.14 or later		

VIS has been validated with the following Web servers:

- Apache Tomcat 6 and 7 (Windows only)
- Apache Tomcat 7 (Linux 5 only)
- WebLogic (10.3.6 only)

Media files may be stored separately from the VIS application. The following web servers have been validated for use as media servers:

- Apache Tomcat 6 and 7
- Microsoft IIS 6 and 7
- Apache HTTP Server 2.x

## Configuring the VXML Interaction Server (toolkit.properties)

### Overview

The configuration information for the VXML Interaction Server is stored in a `toolkit.properties` file. The `toolkit.properties` file contains settings that are used to determine routing decisions within the system. The following `toolkit.properties` template files are included with the build of VXML Interaction Server.

- `avp.h323.toolkit.properties` (select this when H.323 inbound or outbound is used)
- `avp.sip.toolkit.properties` (select this when SIP inbound and outbound are used)
- `cic.toolkit.properties`
- `gvp.toolkit.properties`
- `ucce.toolkit.properties`
- `uccx.toolkit.properties`
- `voxeo.toolkit.properties`
- `vtop.toolkit.properties`

These files are stored in the following location: `\\x.x.x.xxx.VXML_Interaction_Server.xxx\Sample Configuration`  
To configure the VXML Interaction Server, perform the following steps:

1. Create a `VirtualHold` folder on the same server and same drive that Apache Tomcat is installed on.
2. Copy the appropriate `toolkit.properties` template file to the `VirtualHold` folder.

**Note:**

In Linux systems, copy the file to the `/etc/VirtualHold` folder.

3. Rename the template file to **`toolkit.properties`**.
4. Open the `toolkit.properties` file in a text editor.
5. Edit the file for your specific configuration based on the comments contained in the sample file.
6. **Save** and **Close** the file.

### Optional: Changing the Location of the `toolkit.properties` File

If you want to store the file in a different location, you have two choices: create an environment variable, or configure Apache Tomcat to identify the new location. The default location is `C:/VirtualHold`.

For the environment variable, perform the following steps on the server that contains the VXML Interaction Server:

1. Right-click **My Computer** and select **Properties**.
2. (Windows 7) In the *System* window, click **Advanced system settings** in the left pane.

3. In the *System Properties* window, select the Advanced tab, then click **Environment Variables ....**
4. Under System Variables, click **New...** to add a new environment variable.
5. Enter the Variable name as **VHT\_VIS\_PATH**.
6. Enter the Variable value as the path to the toolkit.properties file.
7. Click **OK** twice, then close the *System* window.
8. Restart the server.

Or, on the server that contains Apache Tomcat, perform the following steps:

1. Open the **Apache Tomcat Java Properties** and select the Java tab.
2. Select the Advanced tab, then click **Environment Variables ....**
3. Enter the path to the toolkit.properties file in the Java Options text window.
4. Click **Apply**.

For Linux systems:

1. Enter **/tomcat/bin** in command prompt.
2. Create a file named setenv.sh.
3. Open the setenv.sh file.
4. Edit the file with a new location.
5. Put the toolkit.properties file in the location specified in the setenv.sh file.
6. Restart Apache Tomcat.

## Configuring toolkit.properties for External Media Files

### Overview

The VXML Interaction Server can play voice prompts hosted on other media servers. These external media servers are configured in the toolkit.properties file.

Below is a sample toolkit.properties file for external media files.

**Note:** The external media settings are case insensitive.

Number of media servers: (external.mediaserver.count=1)

- When two or more media servers are used, change **external.mediaserver.count=1** to **external.mediaserver.count=X** (where X is the number of servers).

Path to each server: (external.mediaserver.1=http://[path to server])

- Change this to point to the directory where the voice files are stored on the first server.
- Add additional lines for **external.mediaserver.2**, etc. as needed (one line per server).

**Note:** Both HTTP and HTTPS are supported.

Balanced or failover mode: (external.mediaserver.distribution=)

- **balanced:** Individual prompts will be played from all media servers in a balanced fashion. (The distribution will be equally spread among all servers.)
- **failover:** All prompts will be played from the first server only. If the first server is not available, the second server in the list will be used. If the second is not available, the third will be used, and so on. (This setting is only effective if multiple servers are used.)

**Note:** Balanced mode will automatically handle a failover scenario. If one server fails, the other servers are used and the unavailable server is skipped. The Apache Tomcat log indicates which media servers are configured, but does not log the individual prompts. Prompts are logged in the browser log for GVP, CVP, or AVP (or other voice platform used). Both logs include the path to the server.

Failure log level: (external.mediaserver.logging=)

- **none:** A failure message will only be logged for the external media files if all servers fail.
- **first:** A failure message will only be logged for the first server to fail. Subsequent failures for that server are not logged. The other servers are logged upon start, but not fail.
- **all:** All possible success and failure messages will be logged.

**Note:** Refer to [Media Server Logging in Tomcat](#) for sample log messages.



If this setting does not exist, the log level will default to "first".

## Configuring Language and Custom Media Fields in EyeQueue

### Overview

You must configure the Language and Custom Media fields in the **Adv Settings** ⇒ **Language Settings** section of EyeQueue for each segment to contain the correct language and custom folder name.

1. In the Select a Segment field, choose the segment.
2. Select the Language option, then enter the name for the language used by this segment exactly as shown here: Dutch, English, FrenchCanadian, SpanishNA or MandarinChinese.
3. Select the Custom Media option, then enter the folder name from the media server containing customized voice prompts for this segment.

**Note:** If the Custom Media value is blank or is not a valid folder name, the VXML Interaction Server will use the files from the Default folder for the specified language.  
If the Language value is blank or is not a valid language name, the VXML Interaction Server will use the files from the Default folder for English.

4. Click **Submit**.

The language and custom media settings will take effect immediately. No restart of Virtual Hold is required.

## Customizing External Media Files

### Overview

Many clients use customized sets of voice prompts, instead of the standard voice files provided by Virtual Hold. The custom voice prompts must be organized using a specific folder structure so that the VXML Interaction Server will recognize them and play them correctly.

You can stage the voice files on any machine as you copy and arrange them. Then you will deploy the files to the media server(s).

You can use the "voices" folder provided in the Virtual Hold Download Center as a starting point, or you can create a new parent folder to hold the voice files. This documentation assumes you are starting with the voices folder.

The voices (parent) folder must contain a subfolder for each language used. These folders must be named VHT\_Dutch, VHT\_English, VHT\_FrenchCanadian, and/or VHT\_SpanishNA. Each language folder must contain a subfolder named Default, and optionally extra subfolders containing custom files. The VXML Interaction Server will look for a custom voice file first. If a custom file cannot be found, it will use the files from the Default folder.

If you are using the voices folder from Virtual Hold with no changes, you can skip the steps below. Refer to the deployment steps listed in the [Deploying External Media Files](#) topic.

To set up custom prompts for VXML Interaction Server:

1. Navigate to the voices folder. Open the subfolder for the first language.
2. You will see a Default folder. This folder contains the standard set of voice prompts. We recommend making a copy of this folder under a different name (such as VHT\_Defaults). This will preserve the files in case you need to use them later for troubleshooting.
3. Delete the contents of the Default folder and copy the files for the first custom call script here. Be sure this folder contains the full set of voice files.

**Note:** The Default folder must also contain these four additional files:

- .library
- ContactNumber.grxml
- ContactNumber.regex
- recordtone.wav

4. To set up a second call script, create a new folder (at the same level as Default) and copy the custom prompts for the second call script into it.
5. Repeat step 4 for the remaining call scripts.

**Note:** The new folders only need to contain those files which differ from the default. However, you may choose to copy entire prompt sets into the new folders. This will make the copying process simpler, but will result in more .wav files being stored on the media server(s).

Any major variation (such as male/female voice or US English/British English) must contain the full prompt set in its folder. It must also include blank .wav files to replace any files that are present in the default set that should not be played. This is to avoid mixing genders or languages. Refer to the **Sample Voice Project** below.





6. Make sure each subfolder under [first language] contains an empty .library file (size 0 KB). If needed, copy the .library file from the Default folder and paste it into the others.
7. Repeat steps 1-6 for other supported languages.
8. Deploy the voices folder and its contents to the media server(s). Refer to [Deploying External Media Files](#).
9. Configure EyeQueue to contain the correct language and custom folder name. Refer to [Configuring Language and Custom Media Fields in EyeQueue](#).

The changes will take effect immediately. No restart is needed.

## Sample Voice Project

A client has six call scripts in English: four in US English and two in British English. The voice project should be set up in \voices\VHT\_English as follows:

- The default set of US English prompts in "Default"
- Custom prompts only in US English in "VHTCallScript\_2", "VHTCallScript\_3", and "VHTCallScript\_4"
- Full prompt sets in British English in "VHTCallScript\_5" and "VHTCallScript\_6"

If any prompt is missing from either 5 or 6, it will be played from "Default", which will be US English instead of British English.