Cloud Configuration Tool
User Guide

Pro:Idiom® Enabling Web Application
For FTG Mode via CPU Configuration

For Customer Support/Service, please call:

1-888-865-3026

The latest product information and documentation is available online at:

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206-4302

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Notes:
- This document provides examples of typical Cloud Configuration Tool web pages. Your displays may vary from those shown in the document.
- Design and specifications subject to change without prior notice.

Cloud Configuration Tool Overview

This document describes how to use LG's Cloud Configuration Tool web application to create and/or edit an FTG Configuration (.tlx) file that can be used to configure TVs/STBs for Free-To-Guest (FTG) Mode of operation via the CPU. The Cloud Configuration Tool provides options both for advanced and new users; if you are not familiar with the steps to create an FTG Configuration file, you may choose the wizard setup that will guide you through the process of creating the file.

The Cloud Configuration Tool is available online at: **cct.procentric.tv**. For best results, it is recommended that you access the Cloud Configuration Tool using one of the following web browsers: Google Chrome™ 51 or later or Mozilla Firefox® 47 or later.

FTG Mode

FTG Mode enables the decryption of each Pro:Idiom® encrypted channel and also provides logical channel mapping of physical RF channels (analog and digital), IP streams, and Aux inputs. TV/STB operation in FTG Mode is based on which element of the TV will "own" the FTG Channel Map—the CPU or an installed/embedded *b*-LAN™ module. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, as necessary, to determine which of the FTG Modes of operation (FTG Mode via CPU and/or FTG Mode via *b*-LAN) is available and appropriate for your application.

Note: Logical channel mapping of physical RF channels eliminates dash tuning; for example, physical 19-3 can be mapped to logical channel 9. It also allows physical RF channels, IP streams, and Aux inputs to be listed in any order, not only in physical numeric ascending order. Physical channel tuning requires that you include the dash when direct entering RF channel numbers and Aux inputs (the latter designated by 130-0 through 137-0).

Note: For selected models, depending on the types of channels included in the FTG Channel Map, FTG Mode via CPU also provides the option to select either logical or physical tuning (see note above). However, physical channel tuning is not available when IP channels are included in the FTG Channel Map.

The Cloud Configuration Tool is applicable primarily for FTG Mode via CPU configuration and only for those TVs/STBs that support the FTG Configuration (.tlx) file format.

FTG Configuration (.tlx) File / Cloud Configuration Tool Utilities

An FTG Configuration (.tlx) file contains the FTG Channel Map and FTG Installer Menu settings data to be transferred to the TV(s)/STB(s). While a FTG Configuration File Export (Wizard Setup) or File Manager (Advanced Setup) web page provides the facilities for compiling and saving an FTG Configuration file, the Cloud Configuration Tool also incorporates Channel Map and Installer Menu utilities that enable you to define the FTG Channel Map and FTG Installer Menu settings to be saved to the FTG Configuration file. Note that to enable decryption of Pro:Idiom encrypted channels, you must set the appropriate channel attributes on the Channel Map web page.

The FTG Configuration file is then used to configure individual or multiple TVs/STBs at a later time. For individual TV/STB configuration, the FTG Configuration file must be transferred first to a USB memory device and then from the USB memory device to the TV(s)/STB(s). The latter is achieved using an "import" command that is available on the TV/STB (refer to the Commercial Mode Setup Guide for the TV/STB model for further information). For information on remote distribution of the FTG Configuration file, see "Remote Management" on page 6. See also notes below.

Note: An FTG Configuration (.tlx) file must contain an FTG Channel Map in order to configure a TV/STB for FTG Mode. If the FTG Configuration (.tlx) file only contains FTG Installer Menu profile data, the TV/STB will not change modes.

Note: USB memory device / FTG Configuration (.tlx) file configuration is only available for TVs/STBs that are currently in Pass-through Mode or FTG Mode via CPU. If you would like to configure a TV/STB that is currently in another mode (e.g., FTG Mode via *b*-LAN, PPV Mode, etc.) for FTG Mode via CPU, you will need to reset the factory defaults on the TV/STB. Refer to the appropriate Commercial Mode Setup Guide for further information. See also Reference section, "Restoring TVs/STBs to Pass-through Mode," in this document for information on restoring TVs/STBs from FTG Mode via CPU to Pass-through Mode.

Navigation Between Utilities

While the Wizard Setup guides you sequentially from page to page within the Cloud Configuration Tool, if you select the Advanced Setup, you can easily navigate from one page to another, thus facilitating the process of creating and editing the FTG Configuration file. The menu options bar (see ❶ below) at the top left of each page always provides access to the utilities not currently in use. In addition, you may always return to the Cloud Configuration Tool Welcome page or access other useful information from the links at the top right of each page (see ❷ below).

When you have completed your activities in the Cloud Configuration Tool, you can simply close your browser.

Note: If there is no user activity in the Cloud Configuration Tool for approximately 30 minutes, the session will expire, and you will be returned to the Welcome page. In this case, any data not saved to a file will be lost.

It also is often possible to access one page from a related field in another. Refer to information on each of the utilities in the remainder of this document for detailed instruction.

Cloud Configuration Tool Overview (Cont.)

Zoning Features

TV Zoning and Wi-Fi Zoning features for localized, or "Zoned," configurations are available on selected models. See Reference section, "Using Zoning Features," for additional information on the TV Zoning and Wi-Fi Zoning features.

TV Zoning

TV Zoning comprises two elements—Installer Menu profile Zone assignments and Channel Map Zone restrictions.

• Installer Menu Profile Zone Assignments: Depending on the TV/STB model, when applicable, each Installer Menu profile is assigned a Zone (0–8), which allows you to create up to nine different configurations for a single chassis model or chassis ID. This TV Zoning feature enables you to designate Zones within the installation site, and each TV/STB to which a Zone number has been assigned can be configured with Zone-specific settings.

• Channel Map Zone Restrictions: On the Channel Map web page, you can place Zone restrictions on individual channels that may be prohibited or deemed unsuitable for certain locations. One or more Zone restrictions (1–8) may be placed on each channel that is to be restricted.

Wi-Fi Zoning

The Wi-Fi Zoning feature enables you to configure an individual TV/STB or a group of TVs/STBs with a particular Wi-Fi access point's login data to create "Wi-Fi Zones" within the installation site.

Remote Management

Remote management and distribution of the FTG Channel Map and FTG Installer Menu settings to guest room TVs/STBs may be provided by a Pro:Centric® server (Example: PCS500R) connected to the RF distribution system or IP distribution network. That is, the FTG Channel Map and/or FTG Installer Menu settings can be updated without individual room visits.

Use the Pro:Centric Admin Client for the Java Application to load one or more FTG Configuration (.tlx) files on to the Pro:Centric server and administer distribution to the TVs/STBs. Every LG TV/STB capable of downloading an FTG Configuration (.tlx) file from the Pro:Centric server will be configured with the same channel lineup (minus any channels that have been restricted from selected TVs/STBs in accordance with Zone assignments—see Reference section, "Using Zoning Features," for further information). Installer Menu settings are dependent on chassis model IDs; only the models whose Installer Menu settings are included in the FTG Configuration (.tlx) file will be affected. The FTG Configuration (.tlx) file can contain multiple Installer Menu profiles, each with a unique chassis ID and/or Zone assignment, if applicable, to support the different chassis models connected to the RF or IP distribution system/network. Refer to the *Pro:Centric Server Admin Client User Guide* for further information on the Admin Client.

Cloud Configuration Tool Supplemental Information

This section provides additional information that you may find helpful before or while using the Cloud Configuration Tool.

• In both the Wizard Setup and Advanced Setup, an FTG Configuration List provides a snapshot in list format of the FTG Channel Map, FTG Installer Menu profile(s), and Setup Menu profile(s) (if applicable) to be saved in an FTG Configuration (.tlx) file. See example below.

1	Channel Map Summary: Comprises Mapped RF Channels and Mapped IP Channels fields that identify the number of RF and IP channels, respectively, mapped on the Channel Map web page.
2	Installer Menu Summary: Identifies each model for which an FTG Installer Menu profile is loaded (default or user-defined). Each Installer Menu profile includes a Zone number assignment. Default Installer Menu profiles are automatically assigned the default Zone number 0. When applicable, by model, you can change a profile's Zone assignment, as required.
3	Setup Menu Summary: Applicable/displayed with Advanced Setup only. An opened FTG Configuration (.tlx) file may contain TV/STB setup menu settings if the file was initially saved from a TV/STB. The Setup Menu Summary identifies the model(s) for which setup menu profiles are loaded. Each Setup Menu profile includes a Zone designation, which was initially assigned based on the TV Zone # set in the TV/STB before the file save was initiated. When applicable, by model, you can use the Cloud Configuration Tool to change the Zone assignment for each Setup Menu profile. However, note that apart from the Zone designation, TV/STB setup menu settings are not editable.

Cloud Configuration Tool Overview (Cont.)

- On TV/STB models that support the ".tlx" file format, there is an option to save (export) a ".tlx" file from the TV/STB, which may be desirable or required if you want to save customized TV/STB setup menu settings to the FTG Configuration file in addition to the FTG Channel Map and FTG Installer Menu settings and/or if you do not know the RF channels at the site. If saved from a TV/STB, the ".tlx" file will also contain a Setup Menu profile for that model TV/STB (based on its chassis ID and Zone, if applicable). While the Setup Menu profiles cannot be modified using the Cloud Configuration Tool, it can be incorporated and/or compiled into a new FTG Configuration file, along with the FTG Channel Map and FTG Installer Menu profile(s). Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for further information.

- If it becomes necessary to restore TVs/STBs from FTG Mode to Pass-through Mode, there are options that will enable you to do so. See Reference section, "Restoring TVs/STBs to Pass-through Mode," for further information.

Setup Overview for FTG Mode of Operation via CPU

This section provides an overview of the steps to configure an LG Pro:Idiom TV/STB for FTG Mode of operation via its CPU. Detailed instructions for each step are provided in the pages that follow.

1. Launch a web browser, and navigate to the following URL to access the Cloud Configuration Tool: **cct.procentric.tv**.

2. On the Welcome page, click the down arrow at the right of the Select Your Region field, and select the appropriate region for the model(s) you are configuring. Then, click on the **SELECT** button at the right of the field.

3. Once you select your region, you can choose the desired setup option, depending on your familiarity with the utilities and/or your file requirements:

   • To initiate the Wizard Setup, which will guide you through the process of creating a new FTG Configuration (.tlx) file, click on the **WIZARD SETUP** button.

   • To view and/or base a new FTG Configuration file on an existing FTG Configuration (.tlx) file, or if you do not require wizard guidance to complete your activities, click on the **ADVANCED SETUP** button.

   The next three steps briefly describe how to use the Cloud Configuration Tool utilities to create the FTG Configuration (.tlx) file to be used for configuration purposes.

   Note: You can always click on the **CLOUD CONFIGURATION TOOL HOME** link at the top right of each web page to return to the Welcome page, if desired.

4. On the Channel Map web page, create a new or modify an existing FTG Channel Map, as required.

5. (Optional) On the Installer Menu web page, load default settings for a selected model. If necessary, edit the Installer Menu settings.

   Note: Unless you select a different Zone assignment (when applicable), the default Zone 0 is assigned automatically to each newly created Installer Menu profile. Also, an existing FTG Configuration (.tlx) file may contain TV/STB Setup Menu profile(s). If desired and if applicable, by model, you can change the Zone assignment for each Setup Menu profile on the File Manager web page.

   Note: Repeat this step, as necessary, to add additional Installer Menu profiles. Each Installer Menu profile added will appear in the Installer Menu Profile List at the top right of the page.

6. On the FTG Configuration File Export (Wizard Setup) or File Manager (Advanced Setup) page, click on the **EXPORT FILE** button to save the contents of the FTG Configuration List to an FTG Configuration (.tlx) file.

   Note: The FTG Configuration List comprises each element to be included in the new file, including the Channel Map Summary, the Installer Menu Summary, and, if applicable, the Setup Menu Summary. See also "Cloud Configuration Tool Notes" on previous page.

7. Either:

   • Transfer the FTG Configuration file to a USB memory device to be used for individual TV/STB configuration. Refer to the Commercial Mode Setup Guide for the applicable TV/STB model(s) for further information on the process of transferring an FTG Configuration file to a TV/STB.

   • Use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs. Refer to the ***Pro:Centric Server Admin Client User Guide*** for further information.

Accessing the Cloud Configuration Tool and Selecting a Setup Option

1. Launch a web browser, and navigate to the following URL: **cct.procentric.tv**.

2. On the Welcome page, click the down arrow at the right of the Select Your Region field, and select the appropriate region for the model(s) you are configuring. Then, click on the **SELECT** button at the right of the field.
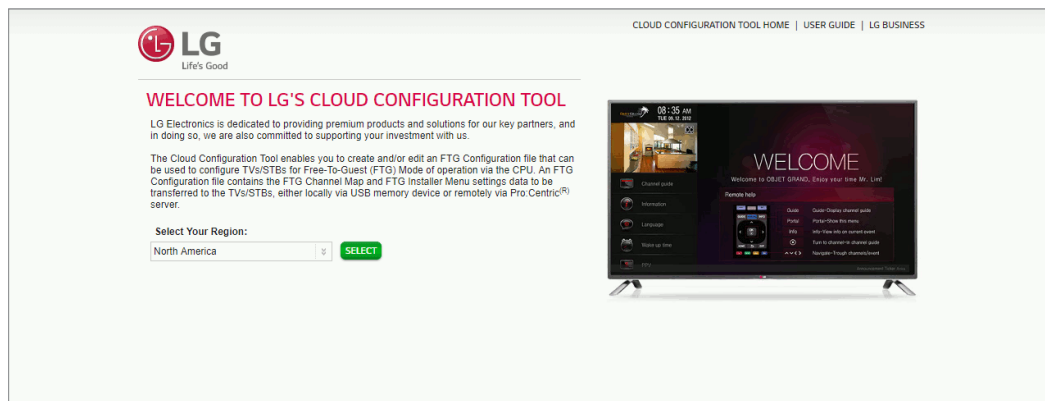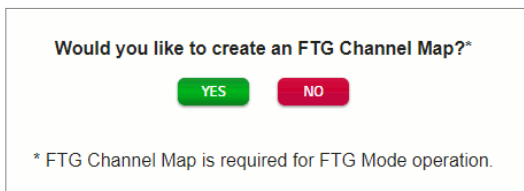

3. Once you select your region, you can choose the desired setup option, depending on your familiarity with the utilities and/or your file requirements:

   • The Wizard Setup will guide you through the process of creating a new FTG Configuration (.tlx) file. To initiate the Wizard Setup, click on the **WIZARD SETUP** button. See "Wizard Setup" on pages 11 to 13 for further information.

   • The Advanced Setup allows you to view and/or base a new FTG Configuration file on an existing FTG Configuration (.tlx) file. You may also wish to select this option if you do not require wizard guidance to complete your activities. To initiate the Advanced Setup, click on the **ADVANCED SETUP** button. See "Advanced Setup" on pages 14 to 20 for further information.
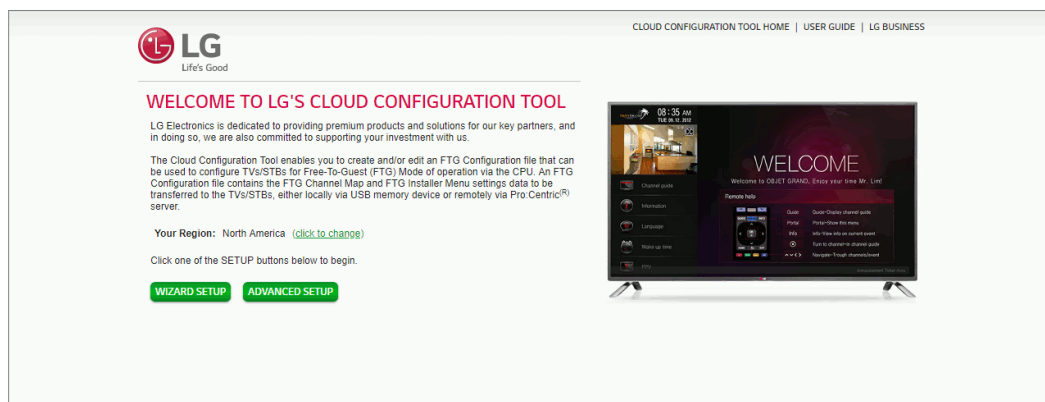
This section provides detailed instruction on creating an FTG Configuration (.tlx) file using the Wizard Setup.

Note: While working in the wizard, use only the wizard buttons. Do not use browser buttons. If you need to return to the Channel Map and/or Installer Menu web pages, you will be able to access either or both from the final wizard page.

1. When you select **WIZARD SETUP** from the Welcome page (see "Accessing the Cloud Configuration Tool and Selecting a Setup Option" above), a new page is displayed with a prompt for you to choose whether you would like to create an FTG Channel Map:

   Would you like to create an FTG Channel Map?*

   [YES]   [NO]

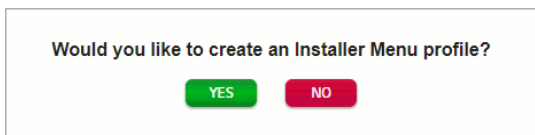   * FTG Channel Map is required for FTG Mode operation.

   • Click **YES** to proceed to the Channel Map web page. Continue with step 2.

   • Click **NO** if you do not want to create an FTG Channel Map (see also note below). Then, go to step 3.

   Note: An FTG Channel Map is required for FTG Mode operation.

2. On the Channel Map page, create the FTG Channel Map. See "Channel Map Configuration" on pages 21 to 24 for further information. Up to 600 logical channels—combined total of both RF and IP mapped channels—can be defined in the FTG Channel Map.

   When you are done, click on the **NEXT STEP** button at the top right of the page.

3. Next, you will be prompted to choose whether you would like to create an FTG Installer Menu profile:

   Would you like to create an Installer Menu profile?

   [YES]   [NO]

   • Click **YES** to proceed to the Installer Menu web page. Continue with step 4.

   • Click **NO** if you do not want to create an Installer Menu profile. Then, go to step 5.

4. On the Installer Menu page, load default FTG Installer Menu settings by model and edit settings, as required. See "Installer Menu Configuration" on pages 25 to 35 for further details.

   When you are done, click on the **NEXT STEP** button at the top right of the page.

5. Next, the FTG Configuration File Export page will be displayed (see example on following page). On this page, the FTG Configuration List is populated with summaries of the FTG Channel Map and FTG Installer Menu profile(s) you created in the previous steps, and you can review the contents of the file.

Wizard Setup (Cont.)

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- If you need to edit any items, double-click on the desired item to return to the Channel Map or Installer Menu web page, as applicable. When you are finished making edits, click on the **DONE** button at the top right of the current page to return to the FTG Configuration File Export page. The FTG Configuration List is automatically updated with all Channel Map and Installer Menu changes.

- Installer Menu profile Zone assignments may be changed on the FTG Configuration File Export page. To change a Zone assignment, click the down arrow at the right of applicable Zone field, and select from the available Zones (0–8).

- To remove an individual item from the FTG Configuration List, click on the ✗ at the right of the applicable item field. At the prompt for confirmation Are you sure? yes no, either click **yes** to confirm and remove the item immediately, or click **no** to retain the item. To clear all current FTG Configuration List contents, click on the **CLEAR LIST** button at the bottom right of the FTG Configuration List.

6. To export the FTG Configuration List contents to an FTG Configuration (.tlx) file on the PC's hard drive for later use:

- Type a brief descriptive name in the File Name field at the bottom of the FTG Configuration List (avoid using special characters, such as ?, &, @, etc.). If desired, you can simply use the default file name, "FTG Configuration."

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- Click on **EXPORT FILE**.

- In the Save As window (if applicable—see note below), select the desired location to which to export the file (you can also edit the file name here, if necessary), and click **Save**.

Note: Depending on the browser you are using and its current settings, files may automatically be saved to the "Downloads" or another designated folder on your PC. If you want to be able to select the folder(s) in which to save the FTG Configuration file(s), check your browser settings.
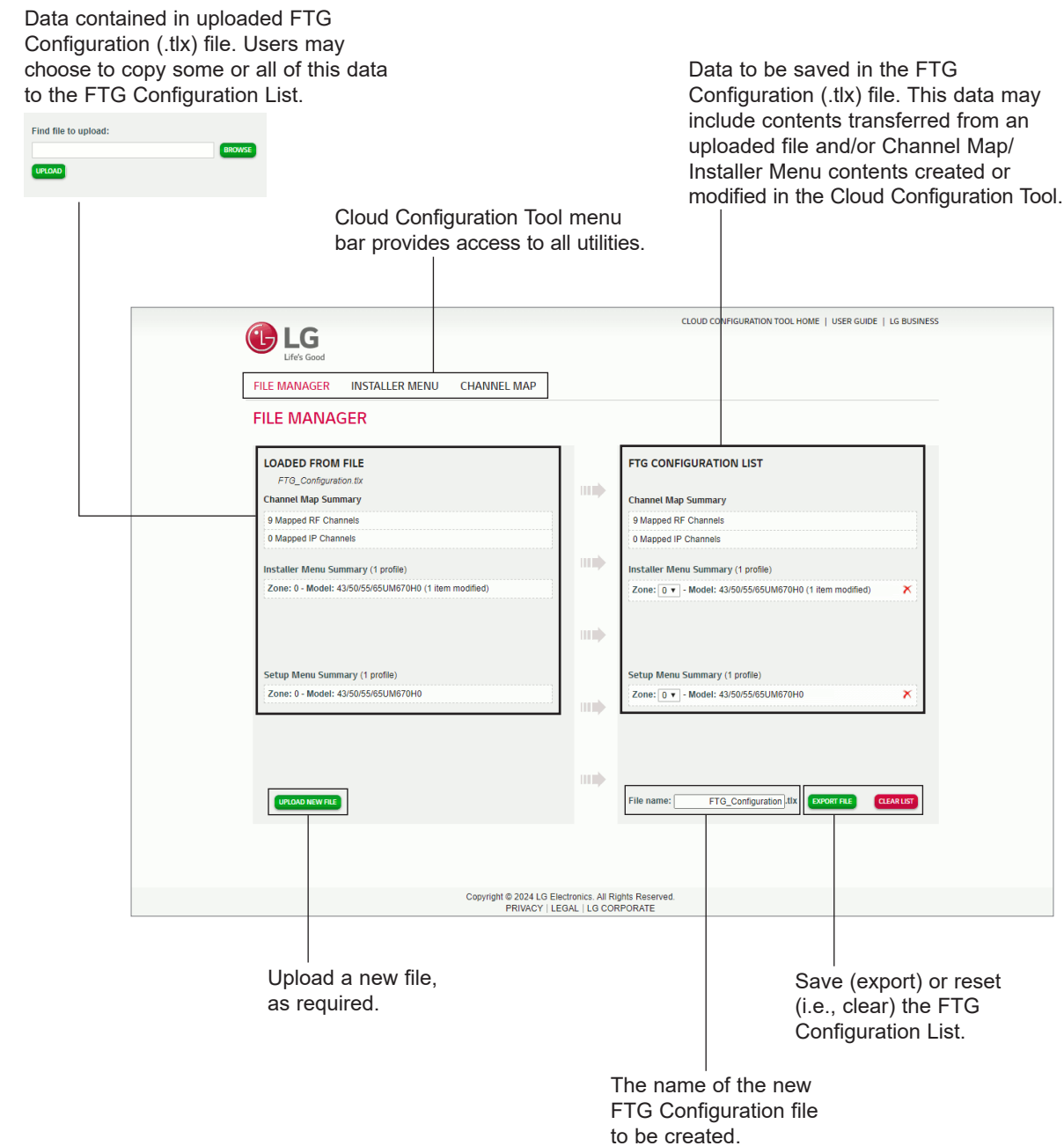
7. If you intend to use it to configure individual TVs/STBs, transfer the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TVs/STBs. Otherwise, use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs. See the ***Pro:Centric Server Admin Client User Guide*** for further information.

Advanced Setup

This section provides detailed instruction on creating an FTG Configuration (.tlx) file using the Advanced Setup. It also describes how to edit an FTG Configuration (.tlx) file.

File Manager Web Page Overview

The File Manager web page (displayed after you select ADVANCED SETUP from the Welcome page) enables you to compile, modify, and save (export) FTG Configuration (.tlx) files. The following example provides an overview reference of the functions available on the File Manager page.

Data contained in uploaded FTG Configuration (.tlx) file. Users may choose to copy some or all of this data to the FTG Configuration List.

Data to be saved in the FTG Configuration (.tlx) file. This data may include contents transferred from an uploaded file and/or Channel Map/ Installer Menu contents created or modified in the Cloud Configuration Tool.

Cloud Configuration Tool menu bar provides access to all utilities.

Upload a new file, as required.

Save (export) or reset (i.e., clear) the FTG Configuration List.

The name of the new FTG Configuration file to be created.

Creating an FTG Configuration File

1. When you select **ADVANCED SETUP** from the Welcome page (see "Accessing the Cloud Configuration Tool and Selecting a Setup Option" on page 10), a File Manager page is displayed.
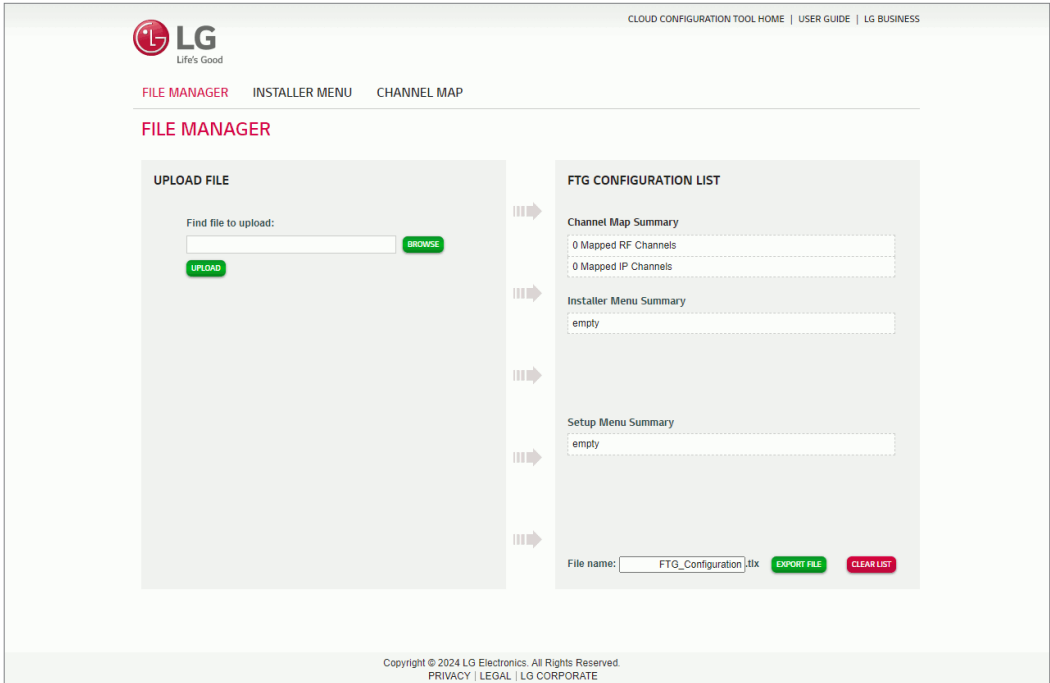
2. (Optional) If desired/appropriate, you may view and/or base the new FTG Configuration file on an existing FTG Configuration (.tlx) file:

   • Click on the **BROWSE** button at the right of the Find File to Upload field, and select/double-click on the desired ".tlx" file. Then, click on the **UPLOAD** button below the Find File to Upload field.

   Once the file is successfully uploaded, the Find File to Upload field is replaced with a Loaded From File summary of the file's contents, including a Channel Map Summary, Installer Menu Summary, and Setup Menu Summary, for example:
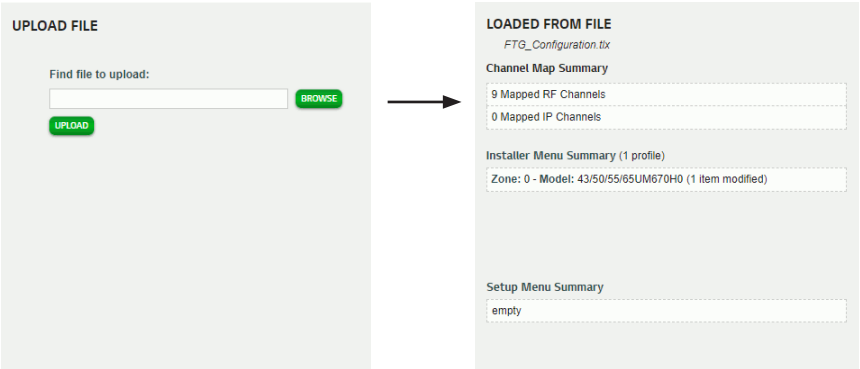
Advanced Setup (Cont.)

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- Double-click on each item in the Loaded From File summary at the left of the page that you would like to copy to the FTG Configuration List at the right of the page. As you move your mouse over the contents of a summary field, the field will be highlighted in blue and ⟫ arrows at the right of the field will indicate that the data may be copied to the FTG Configuration List.

- Edit the configuration of the items in the FTG Configuration List as well as the FTG Configuration List itself, as necessary, to create a new file. See also "Edit an FTG Configuration File" on pages 18 to 20 for additional information on editing an existing file.

Note: While Setup Menu profiles can be included in the new FTG Configuration file (i.e., the profile[s] can be copied to the FTG Configuration List), Setup Menu profiles are not available for editing. However, on the File Manager page, you may change the Zone assignment for a Setup Menu profile, as required, for those models on which the TV Zoning feature is supported. See also "Edit an FTG Configuration File" on pages 18 to 20.

Note: If desired, you can click on the **UPLOAD NEW FILE** button below the list of Loaded From File items to select a different existing FTG Configuration file. If you want to add Installer Menu and/or Setup Menu profiles from more than one existing file to the new FTG Configuration file, make sure to transfer the appropriate items from the currently uploaded file to the FTG Configuration List before uploading a different file.

3. If you need to edit the FTG Channel Map from an existing file (see previous step) or create a new FTG Channel Map, click on **CHANNEL MAP** in the menu options bar at the top left of the page to access the Channel Map web page, and edit/create the FTG Channel Map. See "Channel Map Configuration" on pages 21 to 24 for detailed information. Up to 600 logical channels—combined total of both RF and IP mapped channels—can be defined in the FTG Channel Map.

Note: If an FTG Configuration (.tlx) file that does not contain an FTG Channel Map is transferred to a TV/STB, the TV/STB will not be configured for FTG Mode.

4. (Optional) To load default FTG Installer Menu settings by model, click on **INSTALLER MENU** in the menu options bar at the top left of the page to access the Installer Menu web page, select the desired model/chassis ID and the desired Zone, and then click on the **CREATE PROFILE** button to create a new profile. See "Installer Menu Configuration" on pages 25 to 35 for further details.

The new model profile will be added to the Installer Menu Profile List at the top right of the page, and the Installer Menu items for the selected model will now be displayed on the lower half of the page. The Summary tab shows the features that are available for configuration. Click on any Installer Menu item in the Summary tab or a category tab (User, Tuning, Audio, etc.) to view and/or edit its parameters, as required.

Note: For those models on which the TV Zoning feature is supported, unless you select a different Zone assignment when you create the new profile, the default Zone 0 is assigned automatically.

Note: The TV Zoning feature is not available on all TV/STB models. For models on which TV Zoning is not supported, the Zone field in the Installer Menu page is inaccessible, indicating it is not applicable. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for information on setting the TV Zone # in the TV(s)/STB(s). See also Reference section, "Using Zoning Features," in this document for further information on the TV Zoning feature.

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5. If applicable, click on **FILE MANAGER** in the menu options bar at the top left of the page to return to the File Manager web page. The FTG Configuration List will now be populated with summaries of the FTG Channel Map, FTG Installer Menu profile(s), and, if applicable, Setup Menu profile(s) you created or added in the previous steps (see example below).

6. Review and edit the FTG Configuration List, as necessary.
   - If you need to edit the Channel Map or an Installer Menu profile, double-click on the desired item to access the Channel Map page or the Installer Menu page, as applicable. When you are finished making edits, click on **FILE MANAGER** in the menu options bar to return to the File Manager page. The FTG Configuration List is automatically updated with all Channel Map and Installer Menu changes.
   - Installer Menu and/or Setup Menu profile Zone assignments (when applicable) may be changed on the File Manager page. To change the Zone assignment for an Installer Menu and/or Setup Menu profile, click the down arrow at the right of the Zone field for the applicable profile, and select from the available Zones (0–8). See examples above.

     Note: With the exception of the Zone assignment, Setup Menu profiles are not editable.

   - To remove an individual item from the FTG Configuration List, click on the ✗ at the right of the applicable item field. At the prompt for confirmation Are you sure? yes no , either click **yes** to confirm and remove the item immediately, or click **no** to retain the item. To clear all current FTG Configuration List contents, click on the **CLEAR LIST** button at the bottom right of the FTG Configuration List.

7. To export the FTG Configuration List contents to an FTG Configuration (.tlx) file on the PC's hard drive for later use:
   - Type a brief descriptive name in the File Name field at the bottom of the FTG Configuration List (avoid using special characters, such as ?, &, @, etc.). If desired, you can simply use the default file name, "FTG Configuration."
   - Click on **EXPORT FILE**.

Advanced Setup (Cont.)

- In the Save As window (if applicable—see note below), select the desired location to which to export the file (you can also edit the file name here, if necessary), and click **Save**.

  Note: Depending on the browser you are using and its current settings, files may automatically be saved to the "Downloads" or another designated folder on your PC. If you want to be able to select the folder(s) in which to save the FTG Configuration file(s), check your browser settings.

8. If you intend to use it to configure individual TVs/STBs, transfer the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TVs/STBs. Otherwise, use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs (see the ***Pro:Centric Server Admin Client User Guide*** for further information).

Edit an FTG Configuration (.tlx) File

1. Launch a web browser, and navigate to the following URL: **cct.procentric.tv**.

2. On the Welcome page (see page 10 for Welcome page examples), click the down arrow at the right of the Select Your Region field, and select the appropriate region for the model(s) you are configuring. Then, click on the **SELECT** button at the right of the field.

3. Once you select your region, click on the **ADVANCED SETUP** setup option.

   The File Manager page will be displayed (see also examples in previous procedure).

4. Click on the **BROWSE** button at the right of the Find File to Upload field, and select/double-click on the desired ".tlx" file. Then, click on the **UPLOAD** button below the field.

   Once the file is successfully uploaded, the Find File to Upload field is replaced with a Loaded From File summary of the file's contents, including a Channel Map Summary, Installer Menu Summary, and Setup Menu Summary.

5. Double-click on each item in the Loaded From File summary at the left of the page that you would like to copy to the FTG Configuration List at the right of the page. As you move your mouse over the contents of a summary field, the field will be highlighted in blue and ⟫ arrows at the right of the field will indicate that the data may be copied to the FTG Configuration List.

   Note: Once you copy items to the FTG Configuration List, the corresponding field(s) from the loaded file are emptied.

   Note: While Setup Menu profiles can be included in the new FTG Configuration file (i.e., the profile(s) can be copied to the FTG Configuration List), Setup Menu profiles are not available for editing. You may, however, change the Zone assignment for a Setup Menu profile as described below.

   Note: If desired, you can click on the **UPLOAD NEW FILE** button below the list of Loaded From File items to select a different existing FTG Configuration file. If you want to add Installer Menu and/or Setup Menu profiles from more than one existing file to the new FTG Configuration file, make sure to transfer the appropriate items from the currently uploaded file to the FTG Configuration List before uploading a different file.

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6. There are several options at this time:

   - Add items to the FTG Configuration List: Click on the **CHANNEL MAP** or **INSTALLER MENU** links, respectively, in the menu bar at the top left of the page to create/edit an FTG Channel Map or load/edit FTG Installer Menu settings for a selected model, as required. See "Channel Map Configuration" on pages 21 to 24 and/or "Installer Menu Configuration" on pages 25 to 35 for further information.

   - Remove items from the FTG Configuration List: To remove an individual item from the FTG Configuration List, click on the ✗ at the right of the applicable item field. At the prompt for confirmation Are you sure? yes no , either click **yes** to confirm and remove the item immediately, or click **no** to retain the item. To clear all current FTG Configuration List contents, click on the **CLEAR LIST** button at the bottom right of the FTG Configuration List.

   - To (re)view FTG Channel Map details, double-click in either of the Channel Map Summary (Mapped Channel) fields. This opens the Channel Map web page, and you can edit the FTG Channel Map, as necessary. See "Channel Map Configuration" on pages 21 to 24 for further information.

     Note: If this FTG Configuration file was saved from a TV/STB, it is highly recommended that you verify the file contents/settings. For selected (older) TV models, you must set the "Encrypted" attribute for each encrypted channel in the FTG Channel Map to enable Pro:Idiom decryption of those channels in the TV.

   - To (re)view FTG Installer Menu settings, double-click on the desired Installer Menu profile in the list of Installer Menu Summary items. This opens the Installer Menu web page, and you can edit FTG Installer Menu settings, as well as create new Installer Menu profiles with Zone assignments (as applicable). See "Installer Menu Configuration" on pages 25 to 35 for further information.

Advanced Setup (Cont.)

(Continued from previous page)

- To change the Zone assignment (as applicable) for an Installer Menu and/or Setup Menu profile, click the down arrow at the right of the Zone field for the applicable profile (see example below), and select from the available Zones (0–8).
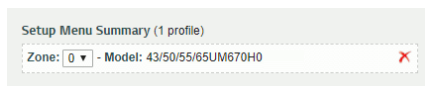
Note: The FTG Configuration List is automatically updated with all Channel Map and Installer Menu changes.

Note: If you set any of the FTG Installer Menu items differently from their defaults, the number of non-default items will be reflected in the Installer Menu profile listing, for example:
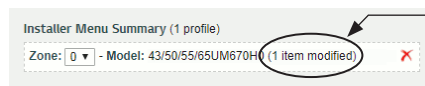
This example shows that one Installer Menu item has been modified.

7. When Channel Map and/or Installer Menu edits are complete, click on **FILE MANAGER** in the menu options bar at the top left of the page to return to the File Manager web page.

8. Export the FTG Configuration List contents to an FTG Configuration (.tlx) file on the PC's hard drive for later use:

   - Type a brief descriptive name in the File Name field at the bottom of the FTG Configuration List (avoid using special characters, such as ?, &, @, etc.). If desired, you can simply use the default file name, "FTG Configuration."

   - Click on **EXPORT FILE**.

   - In the Save As window (if applicable—see note below), select the desired location to which to export the file (you can also edit the file name here, if necessary), and click **Save**.

   Note: Depending on the browser you are using and its current settings, files may automatically be saved to the "Downloads" or another designated folder on your PC. If you want to be able to select the folder(s) in which to save the FTG Configuration file(s), check your browser settings.

9. If you intend to use it to configure individual TVs/STBs, transfer the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TVs/STBs. Otherwise, use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs (see the ***Pro:Centric Server Admin Client User Guide*** for further information).

The FTG Channel Map provides the TV/STB with a list of channels (channel lineup) from which to tune and may include up to 600 channel entries (Logical Channels—RF and IP channels combined). The Channel Map web page enables you to configure the FTG Channel Map for the TV/STB and assign channel numbers, attributes, and restrictions to RF or IP channels. It also enables you to add a label and/or icon to be displayed when a channel is tuned.

If you are using the Wizard Setup, you will be guided to the Channel Map web page as part of the process to create an FTG Configuration file. If you are using the Advanced Setup, you can click on the **CHANNEL MAP** link in the menu options bar at the top left of the current page anytime to access the Channel Map page. It is also possible to access the Channel Map page for editing purposes by clicking on a Mapped Channels field in the FTG Configuration List.

Channel Map Web Page Overview

The following example provides an overview reference of the functions available on the Channel Map page.

Search for existing channels or clear the FTG Channel Map.

(Advanced Setup only) Cloud Configuration Tool menu bar provides access to all utilities.

Click the appropriate button to add a new RF or IP channel to the FTG Channel Map.

(Wizard Setup only) Proceed to next step.

Click the appropriate icon to either edit an existing Logical Channel's data or remove a channel from the FTG Channel Map.

Define Aux inputs in the FTG Channel Map.

Channel Map Configuration (Cont.)

If channels with Pro:Idiom encrypted content are part of the channel lineup, define the channel(s) and set the "Encrypted" attribute to allow an LG Pro:Idiom TV/STB to decrypt the content. Similarly, if channels with content that should be restricted from selected locations, or "Zones" (for example, a lobby area), are part of the channel lineup, define the channel(s), and set the Zone restriction(s) as required.

Refer to the appropriate section below for information on creating or editing an FTG Channel Map.

Create an FTG Channel Map

This procedure describes how to add and define new channels.

Note: Once one or more channels have been defined, a Channel Map Search field is displayed above the list of channels, along with an option to clear the current Channel Map. You may want to use the **CLEAR CHANNEL MAP** button, for example, to clear an FTG Channel Map from a currently uploaded FTG Configuration (.tlx) file.

1. Click on either the **RF CHANNEL** button or the **IP CHANNEL** button at the right of the page above the Channel Map headers, depending on the type of channel you would like to add. New channel fields will be displayed (see examples below).

2. Type a Logical Channel number from 0 to 999, and then define the channel:

   Note: The channels in the FTG Channel Map are listed in logical order. This is the order in which the channels will be tuned by the TV/STB. By default, the Logical Channel numbers automatically increment as they are added, though you can type in a different Logical Channel number (in the range 0 – 999) if desired.

   • For each RF channel: Specify the channel's RF, Major, and Minor numbers. If this is an ATSC 3.0 channel, you must also specify the PLP (Physical Layer Pipe) ID. See example and RF channel field descriptions below.

Field	Range	Description
RF	1 – 137	RF channels designated at the head end (Digital 1 – 135, Analog 1 – 125, Aux 130 – 137).
Major *	1 – 999	Same as RF Channel when Installer Menu item 103 ATSC Mode is set to "1" for Physical Channel number mapping (recommended).
Minor	0 – 999	Set to "0" (zero) if the channel's source is analog; 1 – 999 if the channel's source is digital, minor number is assigned by the content provider.
PLP ID	0 – 255	Required for ATSC 3.0 channels only. Click the ATSC 3.0 checkbox at the right of the field, and then specify the PLP ID.

* When Installer Menu item 103 ATSC Mode is set to "0" for Virtual Channel number mapping, the virtual Channel Major and Channel Minor mapping numbers are provided in the transport stream by the broadcaster.

(Continued from previous page)

- For each IP channel: Specify the IP address, the IP type, and the IP port number of the multicast data stream carrying the video transport stream. Also, enter the program number of the program in the transport stream. See example and IP channel field descriptions below.

Field	Description
IP Address	The IP address of the multicast data stream. Note that the IP address must be an IPv4 multicast address within the designated range of 224.0.0.0 to 239.255.255.255.
IP Type	UDP or RTP, depending on the protocol type required for the delivery system. Click the down arrow at the right of the field, and select the appropriate type from the drop-down list.
IP Port	The IP port number of the multicast data stream.
Prog #	The program number of the program in the transport stream.
Source Address	(Optional) The IP address of the IGMPv3 source, if applicable.

3. To select a channel logo, click the down arrow at the right of the Channel Logo field, and select the appropriate logo name from the drop-down list of options.

4. You can also enter a channel label, if desired. The Label field allows up to 17 characters. Type the appropriate label directly in the field.

5. In the Attribute field, click the checkbox at the left of each applicable channel attribute to be applied. A checkmark indicates that an attribute has been selected.

    - Select **Encrypted** if Pro:Idiom encrypted content will be provided on that channel.

    - The **OSD** (On-screen Display) attribute, selected by default, displays the channel's Logical Channel number as well as the channel label and/or channel icon, if entered.

    - Select **Blank Video** when defining audio-only channels in order to display a blank screen.

6. Set Zone restrictions for the channel, as required, in the Restricted from Zones field. You can place Zone restrictions (1–8) on channels that may be prohibited or deemed unsuitable for selected locations, or "Zones," within the installation environment, for example, a lobby area.

    Click the checkbox at the left of each applicable Zone, as necessary. A checkmark indicates that a Zone restriction has been applied. Note that you can select multiple Zones from which to restrict the channel. Each Zone from which the channel is to be restricted will be identified in the Restricted from Zones column once you save the channel.

Channel Map Configuration (Cont.)

(Continued from previous page)

> **Note:** Refer to the Commercial Mode Setup Guide for the applicable TV/STB model(s) for information on setting the TV Zone # on each TV/STB in a select location so that the TV/STB can omit channels that have been restricted in the FTG Channel Map. However, note that while a channel can be restricted from up to eight Zones, a TV/STB can only ever be in (set for) one Zone. See also Reference section, "Using Zoning Features," in this document for further information on the TV Zoning feature.

7. When you are finished defining the channel, click on the **SAVE** button at the right of the screen (or click **CANCEL** to return to the Channel Map page without saving the new channel).

8. Continue adding RF and/or IP channels to build the FTG Channel Map.

9. When the FTG Channel Map is complete, proceed to the next step as required (i.e., create an FTG Installer Menu profile, export your FTG Configuration file, etc.), depending on your setup/requirements.

Edit an FTG Channel Map

This procedure describes how to edit an existing FTG Channel Map.

1. Access the FTG Channel Map you wish to edit. For example, upload an existing FTG Configuration (.tlx) file and then click on the **CHANNEL MAP** link in the Cloud Configuration Tool menu options bar (Advanced Setup only), or click on a Mapped Channels field in the current FTG Configuration List (Advanced Setup or Wizard Setup).

2. The next step depends on the action you would like to take:

   • To edit a logical channel's definition, click on the ✎ icon at the right of the channel to be edited. All of the channel fields will be available for editing, and you can make any changes necessary. When you are done, click on the **SAVE** button at the right of the screen (or click **CANCEL** to return to the Channel Map page without saving your updates).

   • To remove a channel, click on the ✗ icon at the right of the channel to be removed. At the prompt for confirmation ⬚, either click **yes** to confirm and remove the channel immediately, or click **no** to retain the channel.

   • To add a channel, click on the **RF CHANNEL** button or the **IP CHANNEL** button at the right of the page above the Channel Map headers, as applicable, and add the channel as described in the procedure above.

3. When the FTG Channel Map edits are complete, proceed to the next step as required (i.e., create an FTG Installer Menu profile, export your FTG Configuration file, etc.), depending on your setup/requirements.

   Note: If you are using the Wizard Setup option, and you accessed the Channel Map page from the FTG Configuration File Export page, there will now be a DONE button at the top right of the page, in place of the NEXT STEP button.

The FTG Installer Menu is used to configure the commercial features of the TV/STB, for example, the Tuning Band, Start Channel, Start Volume, Aux Source, etc. The Installer Menu web page allows you to load Installer Menu profiles and modify FTG Installer Menu items.

If you are using the Wizard Setup, you will be guided to the Installer Menu web page as part of the process to create an FTG Configuration file. If you are using the Advanced Setup, you can click on the **INSTALLER MENU** link in the menu options bar at the top left of the current page anytime to access the Installer Menu page. It is also possible to access the Installer Menu page for editing purposes by clicking on an Installer Menu profile field in the FTG Configuration List.

Installer Menu Web Page Overview

The following example provides an overview reference of the functions available on the Installer Menu page.

(Advanced Setup only) Cloud Configuration Tool menu bar provides access to all utilities.

Load default Installer Menu for selected model. Assign Zone as applicable. Once you click on CREATE PROFILE, this Installer Menu profile will be listed under the Installer Menu Profile List, and Installer Menu items will be displayed on the lower half of the page.

(Wizard Setup only) Proceed to next step.

Installer Menu profiles to be included in the FTG Configuration (.tlx) file. The currently active profile is highlighted.

Select tabs for categories of Installer Menu items to set up TV.

Reset default values for currently active configuration profile. A RESET button is also available within each category tab.

Installer Menu Configuration (Cont.)

On the Installer Menu page, you can select the TV/STB model(s) for which commercial configuration is required, assign Zones (0–8), modify Installer Menu settings, set up Pro:Centric parameters, etc. for each model, as needed. Refer to the appropriate section(s) below for information on creating FTG Installer Menu profiles and/or editing FTG Installer Menu settings.
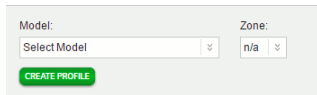
Note: Refer to the Commercial Mode Setup Guide for the TV/STB model(s) for detailed descriptions of Installer Menu items.

Note: A generic Installer Menu profile cannot be created; an Installer Menu profile can only be loaded, based on a TV/STB model (chassis ID) on the Installer Menu web page or from an existing FTG Configuration file. This ensures that only the Installer Menu items pertaining to a particular model are displayed, since Installer Menu items that are not applicable for a selected model are not displayed on the page.

Create an FTG Installer Menu Profile

This procedure describes how to create a new FTG Installer Menu profile on the Installer Menu web page.

1. Click on the down arrow at the right of the Model field (top left of the page), and select the appropriate model/chassis ID from the drop-down list of available models.

2. (Optional) If desired, you can assign a Zone to this Installer Menu profile. Click on the down arrow at the right of the Zone field, and select the appropriate Zone (0–8). If you do not select a Zone, the default Zone 0 will be assigned automatically to the profile.

   Note: The TV Zoning feature is not available on all TV/STB models. For models on which TV Zoning is not supported, the default Zone 0 is assigned and the Zone field is inaccessible, indicating that it is not applicable. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for information on setting the TV Zone # in the TV(s)/STB(s). See also Reference section, "Using Zoning Features," in this document for further information on the TV Zoning feature.

3. Click on the **CREATE PROFILE** button below the Model field.

   The new model profile will be added to the Installer Menu Profile List at the top right of the page, and the Installer Menu items for the selected model will now be displayed on the lower half of the page (see example on previous page). The Summary tab shows the features that are available for configuration. Click on any Installer Menu item in the Summary tab or a category (User, Tuning, Audio, etc.) tab to view and/or edit its parameters (see also "Edit FTG Installer Menu Settings" below).

   Note: If you need to remove an Installer Menu profile from the Installer Menu Profile List, you can simply click on the ✕ icon at the right of the Installer Menu profile to be removed. The profile will be removed immediately; no confirmation is required. It is also possible to delete an Installer Menu profile from the FTG Configuration List on the File Manager page before you export the FTG Configuration file (see "Edit an FTG Configuration File" on pages 18 to 20 for further information).

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> **Note:** Once a profile has been created/added to the Installer Menu Profile List, if you would like to change its Zone assignment, you can do so on the File Manager web page (see procedures in this document for creating or editing an FTG Configuration file). Note that although the same Zone (0–8) can be assigned to different profiles with unique chassis IDs, each chassis ID can only be assigned up to nine different Zones (0–8). For example, if an FTG Configuration List contains two UM670H Installer Menu profiles, the first with a Zone 1 assignment and the second with a Zone 2 assignment, the Zone drop-down list for the first UM670H profile will not include "2" as an available option since a UM670H profile with a Zone 2 assignment is already listed.

4. Repeat steps 1 to 3, as necessary, to add additional Installer Menu profiles to the Installer Menu Profile List at the top right of the page. The currently active profile (i.e., the profile for which the FTG Installer Menu settings are currently displayed) is highlighted.

Edit FTG Installer Menu Settings

The Installer Menu Profile List at the top right of the Installer Menu page lists each profile that has been created, as well as any profiles that are included in an existing/uploaded FTG Configuration file (Advanced Setup only). When you click on/highlight a profile in this list, the Installer Menu items for the selected model will now be displayed on the lower half of the page (see example on page 25). The Summary tab provides an overall list of the FTG Installer Menu items; each of the remaining tabs contains Installer Menu items grouped by category.

1. Click on/highlight the desired Installer Menu profile in the Installer Menu Profile List, and then either click on the desired Installer Menu item in the Summary tab to open the tab with that item, or click on the tab (User, Tuning, Audio, etc.) for the category of items you want to view/edit.

2. Make changes to the Installer Menu items, as required. Note that each time you set an Installer Menu item to a value that is not its default setting, a red asterisk will appear next to the item name. The selection box for the modified item(s) will also be outlined in red on the Summary tab. See examples below.

Installer Menu Configuration (Cont.)

(Continued from previous page)

Refer to the Commercial Mode Setup Guide for the applicable TV/STB model(s) for further information on Installer Menu items. However, for information on start channel settings and requirements, see also "Start Channel Configuration" below, and see "Pro:Centric Setup" and "LAN Setup" on pages 29 to 34 for information, respectively, on Pro:Centric and LAN settings and requirements.

Note: If you need to remove an Installer Menu profile from the Installer Menu Profile List, you can simply click on the ✕ icon at the right of the Installer Menu profile to be removed. The profile will be removed immediately; no confirmation is required. It is also possible to delete an Installer Menu profile from the FTG Configuration List on the File Manager page before you export your FTG Configuration file (see "Edit an FTG Configuration File" on pages 18 to 20 for further information).

Note: Once a profile has been created/added to the Installer Menu Profile List, if you would like to change its Zone assignment, you can do so on the File Manager web page (see procedures in this document for creating or editing an FTG Configuration file). Note that although the same Zone (0–8) can be assigned to different profiles with unique chassis IDs, each chassis ID can only be assigned up to nine different Zones (0–8). For example, if an FTG Configuration List contains two UM670H Installer Menu profiles, the first with a Zone 1 assignment and the second with a Zone 2 assignment, the Zone drop-down list for the first UM670H profile will not include "2" as an available option since a UM670H profile with a Zone 2 assignment is already listed.

Note: If you would like to restore the currently active FTG Installer Menu items to their default values, you can click on the **RESET ALL ITEMS TO DEFAULT** button in the Summary tab. Each tab also has a reset button (RESET CATEGORY ITEMS TO DEFAULT) that enables you to restore all of the items in that category to their default values.

Start Channel Configuration

The default setting for the Start Channel is "Last Channel," i.e., the last channel tuned before the TV/STB was turned OFF will be the channel tuned when the TV/STB is turned ON again. This section describes configuration requirements if you wish to specify an Aux input or RF analog, RF digital, or IP channel as the Start Channel.

1. Click on the **#4 Start Channel** item in the Summary tab to open the Tuning tab, or simply click on the **TUNING** tab (see example below).

(Continued from previous page)

2. Click on the down arrow at the right of the Start Channel field to display the drop-down list of Start Channel options, and set the Start Channel as follows:

   • To select an Aux input as the Start Channel, click **Aux Input**. Then, select the appropriate Starting Aux Source (item #46) option.

   • To select an IP channel as the Start Channel, click **IP Channel**. Then, complete the Start IP Channel fields in the Tuning tab (refer to the IP channel field descriptions on page 23 for information on IP parameters). Note that "IP Channel" is only available as a Start Channel option for TVs/STBs that support IP TV tuning.

   • To select an RF analog channel as the Start Channel (Major), click the appropriate channel number (see note below). Ensure that the Start Channel Minor (item #104) is set to "0" (zero).

   • To select an RF digital channel as the Start Channel (Major), click the appropriate channel number (see note below). Then, select the appropriate value (1–999) for the Start Channel Minor (item #104).

   Note: When ATSC Mode (item #103) is set to "1" (default and recommended) for Physical Channel number mapping, the RF Start Channel (Major) may be any number from 1 to 135. If the ATSC Mode is set to "0" for Virtual Channel number mapping, the RF Start Channel (Major) may be any number from 1 to 999.

Pro:Centric Setup

The Pro:Centric tab on the Installer Menu page enables you to configure Pro:Centric server settings in the TV/STB. This section provides basic information on the settings. Refer to the Commercial Mode Setup Guide for the appropriate TV/STB model(s) for additional information on the Installer Menu items.

Note: The Flash Pro:Centric Application Mode is not available on webOS 4.0 and later models.

Note: The labeling of items #121 and #122 in the Pro:Centric tab depends on the model currently being configured and its supported functionality. For example, P:C RF Wake enables TVs with Wake On RF functionality to receive updates from a Pro:Centric server over the RF distribution system at a specified time while the TV is turned OFF. Similarly, Update Time enables TVs with Wake For Update functionality to receive updates from a Pro:Centric server over the RF or IP distribution system (depending on Data Channel setting) at a specified time while the TV is turned OFF. Refer to the Commercial Mode Setup Guide for the TV/STB model in question for additional information on these items and the available values/features.

Installer Menu Configuration (Cont.)

Data Channel Auto Search Feature

On Pro:Centric TVs/STBs, the Data Channel must be set appropriately to enable Pro:Centric remote management/administration facilities. The latest Pro:Centric TVs/STBs support the Data Channel Auto Search feature.

For TVs/STBs that support this feature and are in Pass-through Mode or FTG Mode via CPU, if item #119 Data Channel is left at its default value (Auto Search), the TV's/STB's Data Channel Auto Search feature will be enabled: once every 24 hours, the TV/STB will attempt to find an active Pro:Centric server.

• If connected to an IP network, the TV/STB will first check for a "procentric.local" DNS entry. If the Pro:Centric server IP address is obtained from a DNS server, Installer Menu item 119 DATA CHANNEL in the TV/STB will be changed from 255 to 253, which designates an IP data channel.

   Note: The automated IP configuration feature requires a "procentric.local" DNS entry, which enables the Auto Search to obtain the Pro:Centric server's IP address. This feature also expects the Pro:Centric server's port number to be set to "80."

• If an IP data channel is not found, the TV/STB searches for an RF data channel. The TV/STB will initiate a search of 10 predefined RF channels (10, 20, 30, ... 100) and then, if necessary, perform a complete search of the RF channels (1 to 135). If the Pro:Centric RF channel is found, Installer Menu item 119 DATA CHANNEL in the TV/STB will be changed from 255 to match the server's RF channel number.

The time at which the Auto Search occurs depends on the setting of items #121 and #122, as well as the TV/STB clock. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for additional information.

Configure Pro:Centric Settings

1. Click on **#119 Data Channel** or another Pro:Centric item in the Summary tab to open the Pro:Centric tab, or simply click on the **PRO:CENTRIC** tab (see example on previous page).

2. Click on the down arrow at the right of the item #119 Data Channel field, and select the appropriate option from the Data Channel drop-down list:

   • To enable the Data Channel Auto Search feature, select **Auto Search**. See also "Data Channel Auto Search Feature" information above. Note that "Auto Search" is only available as a Data Channel value for Pro:Centric TVs/STBs that support this functionality.

   • To disable the Pro:Centric feature of the TV/STB, select **Disabled**. No further settings in this tab are required when the Pro:Centric feature is disabled.

   • If using RF delivery of Pro:Centric and/or E-Z Installation data, select/set the Data Channel from 1 to 135 to match the RF channel number that will be used by the Pro:Centric server as its data channel. *

   • If using IP delivery of Pro:Centric and/or E-Z Installation data, select **IP Address**, **IPv6 Address**, or **IP Domain Name**, depending on how you would like to define the server. Once you select an IP option, data fields for the Pro:Centric server IP address or domain name and the Pro:Centric port # are displayed below the item #121 - #122 fields.

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

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Depending on your selection, either:

− Enter the Pro:Centric server IP address in the Pro:Centric IP Address field. The IP address must match the IPv4 or IPv6 (as applicable) address that is set in the Pro:Centric server.

− Enter the Pro:Centric server domain name—up to 63 characters (no spaces allowed)—in the Pro:Centric IP Domain Name field. Note that in order for the domain name to be resolved to an IP address, there must be a DNS entry for the domain name.

Also, enter the Pro:Centric server port number in the Pro:Centric Port # field. The port number must match the port number that is set in the Pro:Centric server.

Note: IP options are only available as Data Channel values for TVs/STBs that support IP connectivity.

Note: Ensure any IP values are entered correctly. For example, the port number (0 – 65535) must match exactly the port number that has been set for "RF/IP Configuration" in the Pro:Centric Admin Client (see the ***Pro:Centric Server Admin Client User Guide*** for further information).

Note: If "Disabled," the Data Channel will display as "0" in the Installer Menu on the TV/STB. When "Auto Search" is selected in the Pro:Centric tab, the Data Channel will display as "255" in the Installer Menu on the TV/STB (until the Data Channel is determined). When an IP value (IP address or IP domain name) is selected in the Pro:Centric tab, the Data Channel will display as "253" in the Installer Menu on the TV/STB.

3. Set item #98 Pro:Centric as required by clicking on the radio button at the left of the appropriate option.

4. As required, select the appropriate values for items #121 Hours and #122 Minutes. Note that item #121 is based on a 24-hour clock.

LAN Setup

The LAN tab on the Installer Menu page (see example on following page) enables you to set up the network features of TVs/STBs that support IP connectivity. To access the LAN settings, click on a LAN item in the Summary tab, or simply click on the **LAN** tab. Each of the features is described in the subsections that follow.

Note: Features that are not supported for a currently selected TV/STB model will not be displayed in the LAN tab. The sample display on the next page shows a LAN tab for a TV model that supports the full suite of IP features.

Offset Modifications

Note: Modifications to offset settings should be performed by qualified personnel only.

If necessary, due to an audio and/or video stream delay over the IP distribution network, the Offset options at the top of the LAN tab enable you to compensate for synchronization irregularities by allowing audio PTS, video PTS, and (for selected models) PCR offset modifications.

Select the appropriate offset value in each field. Offset values are represented in 10 ms increments from -500/0 ms (depending on model) to +500 ms.

Installer Menu Configuration (Cont.)

Media Share

In the Media Share section of the LAN tab, you can enable/disable selected Media Share features on the TV(s)/STB(s).

Note: Some TV/STB models support additional Media Share features, such as SoftAP and Beacon, that must be enabled/disabled on location via the TV/STB's IP Environment Menu BEFORE the TV/STB is configured for FTG Mode. Refer to the applicable Commercial Mode Setup Guide for further information on Media Share features and the IP Environment / Media Share Menu.

• The LG Smart Share feature allows end users to use the TV/STB to access and view media files (photos, videos, music, etc.) shared by wired DLNA Certified® devices connected to the same LAN as the TV/STB or, on some models, by wireless LG devices using LG's Smart Share application with Wi-Fi Direct®.

Note: Wi-Fi Direct is not available on webOS 4.5 and later models. For webOS 2.0 to webOS 4.0 models, Screen Share MUST be enabled in addition to Smart Share in order for end users to use Wi-Fi Direct. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for further information and/or simply enable both features (as applicable).

• Screen Share enables screen sharing with a Miracast® or Wireless Display (WiDi) capable device (e.g., a laptop with Intel® hardware).

Note: WebOS 5.0 and later models support the Screen Share with PIN feature. If Screen Share with PIN is enabled, end users will be prompted to enter a randomly generated PIN when connecting a device to the TV.

• Media Renderer enables the TV/STB to act as a media renderer to receive content from DLNA Certified devices on the same network.

• (webOS models only) Bluetooth Sound Sync allows end users to listen to audio from a Bluetooth-enabled mobile device through the TV's/display panel's speakers.

   Note: Bluetooth Sound Sync is enabled by default on all webOS 3.5 and later models and so will not appear in the Media Share section of the LAN tab (or in the Media Share Menu on the TV/STB).

• (webOS models only) DIAL (Discovery and Launch) allows end users to play selected application media on the TV from a device with DIAL capability. The device may be used to cast any application for which a TV-compatible application has been created/selected for inclusion in the Pre-loaded Apps Menu (e.g., YouTube). Note that the device must be connected to the same network as the TV.

   Note: DIAL is only accessible in the Media Share section of the LAN tab for webOS 4.0 and later models. For all earlier webOS models, DIAL must be enabled/disabled on location via the TV's/STB's IP Environment Menu BEFORE the TV/STB is configured for FTG Mode.

To enable or disable a feature, click the **Enabled** checkbox below the appropriate feature name. A checkmark in the "Enabled" checkbox means that the feature is enabled. When there is no checkmark in the "Enabled" checkbox, the feature is disabled.

IGMP Version

Note: Modifications to IGMP version settings should be performed by qualified personnel only.

Select the IGMP version by clicking the radio button at the left of the appropriate option in the IGMP Version section of the LAN tab—IGMPv2 (default) or IGMPv3.

Pre-loaded Applications

⚠ **Note: On webOS 3.0 and later models, pre-loaded application settings are not editable via the Cloud Configuration Tool, and so a Pre-loaded Apps section will not be displayed in the LAN tab. For these models, pre-loaded applications must be selected on location via the TV/STB's IP Environment / Pre-loaded Apps Menu BEFORE the TV/STB is configured for FTG Mode. If the TV/STB has already been configured for FTG Mode and you would like to add or remove applications in the future, you will need to import a new ".tlx" file with the appropriate model profile. That is, you will need to use a Master TV/STB of the same model to create and export a ".tlx" file with the desired pre-loaded application selections (along with any other applicable Installer Menu settings), which can be transferred (imported) to the Target TV/STB. Refer to the applicable Commercial Mode Setup Guide for further information.**

For selected TV/STB models (see note regarding webOS 3.0 and later models above), in the Pre-loaded Apps section of the LAN tab, you can choose which of the pre-loaded application icons to make available on the TV(s)/STB(s), either in the Application Launch bar or the Smart Launcher, depending on the TV/STB model. When the Pro:Centric application is disabled, the Application Launch bar/Smart Launcher is available to end users via the PORTAL key on the remote control and appears along the bottom of the display screen.

Each available application for the selected TV/STB model is listed in the Pre-loaded Apps section. Click the checkbox at the left of any option you wish to select or de-select, as necessary. A checkmark indicates that an application is selected.

Note: Depending on the remote control being used with webOS models, the Smart Launcher may also be available to end users via a SMART or 🏠 key on the remote control. Screen Share, Bluetooth Sound Sync, and SoftAP (as Wi-Fi Service) applications are also available in the Smart Launcher once they are enabled (as applicable) in the Media Share section of the LAN tab (see "Media Share" above).

Installer Menu Configuration (Cont.)

VLAN ID

The VLAN ID feature enables you to specify a VLAN ID for the LAN and Aux LAN ports.

Note: VLAN ID is not supported on all TV/STB models. See the applicable Commercial Mode Setup Guide for further information.

• To enable this feature, click the **Enabled** checkbox below the VLAN Enable field. A checkmark in the "Enabled" checkbox means that the feature is enabled. When there is no checkmark in the "Enabled" checkbox, the feature is disabled.

• Direct enter the appropriate values in the LAN ID and AUX LAN ID fields.

Wake On LAN

The Wake On LAN feature enables the TV(s)/STB(s) to receive software updates and/or be powered ON upon receipt of Wake Up Frame packets and/or Magic Packet data via the wired LAN. By default, Wake On LAN is disabled.

Note: To facilitate use of this feature, the appropriate wired connection must be made to the TV/STB.

Note: Wake Up Frame packets are not supported on all TV/STB models. See the applicable Commercial Mode Setup Guide for further information. Magic Packet data is always supported for Wake On LAN.

• To enable software updates upon receipt of Wake Up Frame packets and/or Magic Packet data, click the radio button at the left of the "Update" option in the Wake On LAN/Wake-Up Frame and/or Wake On LAN/Magic Packet section(s) of the LAN tab.

• To enable the TV/STB to power ON upon receipt of Wake Up Frame packets and/or Magic Packet data, click the radio button at the left of the "Power ON" option in the Wake On LAN/Wake-Up Frame and/or Wake On LAN/Magic Packet section(s) of the LAN tab.

Wi-Fi Zones

The Wi-Fi Zones tab on the Installer Menu page provides a listing of all defined Wi-Fi access points and enables you to add new Wi-Fi Zones to an Installer Menu profile. Up to 100 Wi-Fi Zones (1–100) can be added for each FTG Installer Menu profile. When the Wi-Fi Zones list exceeds nine entries, the list becomes scrollable.

See Reference section, "Using Zoning Features," for further information on the Wi-Fi Zoning feature functionality. Note that you must set the TV Zone # appropriately and also set the Wi-Fi Zone # in each TV/STB. That is, to configure a TV/STB with a particular access point's login information, the TV/STB must be configured with the proper FTG Installer Menu profile, along with the proper Wi-Fi Zone data.

At the same time, note that Wi-Fi Zone 100 represents a "global Wi-Fi Zone," which, if defined, enables TVs/STBs with the default Wi-Fi Zone # assignment (0) to obtain access point settings from the Installer Menu profile with which it is configured. Similarly, any TV/STB that does not find its matching Wi-Fi Zone # in the FTG Configuration (.tlx) file, but that does find the global Wi-Fi Zone 100, will be configured with the global access point login data.

Define a Wi-Fi Zone

The following procedure describes how to add a Wi-Fi Zone to an FTG Installer Menu profile.

1. Click on **Wi-Fi Zones** item in the Summary tab to open the Wi-Fi Zones tab, or simply click on the **WI-FI ZONES** tab (see example above).

2. Click on the **NEW WI-FI ZONE** button at the bottom right of the list of existing Wi-Fi Zones.

3. Complete the fields to define the Wi-Fi Zone as follows:

   • Wi-Fi Zone: Type the desired Wi-Fi Zone # (1–100).

   • SSID: Type the appropriate SSID—up to 32 characters (no spaces or special characters allowed)—directly into the SSID field.

   • Security Type: Click the down arrow at the right of the Security Type field, and select the appropriate security option—None, WEP, WPA-PSK (AES), WPA-PSK (TKIP), WPA2-PSK (AES), WPA2-PSK (TKIP), or WPA Auto Detect.

   • Security Key: This field is not applicable/accessible if you selected "None" in the Security Type field. Otherwise, type the password—at least eight, but no more than 32 characters (no spaces or special characters allowed)—or security key/PIN for the access point in the Security Key field.

4. When you have completed the fields as necessary, click on the **SAVE** button at the right of the fields (or click **CANCEL** to return to the Installer Menu page without defining a new Wi-Fi Zone).

Edit or Delete a Wi-Fi Zone

• To edit an existing Wi-Fi Zone definition, click on the ✎ icon at the right of the Wi-Fi Zone to be edited. All of the Wi-Fi Zone fields will be available for editing, and you can make any changes necessary. When you are done, click on the **SAVE** button at the right of the page (or click **CANCEL** to return to the Installer Menu page without saving your updates).

• To remove a Wi-Fi Zone definition, click on the ✗ icon at the right of the Wi-Fi Zone to be removed. At the prompt for confirmation [Are you sure? yes no], either click **yes** to confirm and remove the Wi-Fi Zone immediately, or click **no** to retain the Wi-Fi Zone.

System Requirements / Operation

System Requirements

Cloud Configuration Tool Requirements

• Internet access

• Access the Cloud Configuration Tool using one of the following web browsers: Google Chrome™ 51 or later or Mozilla Firefox® 47 or later

• Additional space required for FTG Configuration file storage

• Ability to transfer an FTG Configuration file to a USB memory device

TV Requirements

• LG Pro:Idiom capable TV/STB that supports the ".tlx" file format for FTG Mode via CPU configuration

System Operation

When an LG Pro:Idiom TV/STB is tuned to a channel that has Pro:Idiom encrypted content and that channel is defined in the FTG Channel Map with the Encrypted attribute set, the FTG configuration enables the TV/STB to decrypt the content.

System Planning and Tips

• Before setting up the system, devise a Logical Channel Mapping Plan and a Master TV/STB Setup.

• The plan should have a layout that determines whether Physical or Virtual Channel numbers will be used and the logical order of the channels in the FTG Channel Map to set the order in which the channels will appear on the TV/STB.

• It is necessary to know the Physical or Virtual Channel number mapping of each channel to be included in the FTG Channel Map. If digital RF channels are to be included, both the Channel Major and Channel Minor mapping numbers are required. For analog channels, the minor channel number is always 0 (zero).

• It is recommended that Installer Menu item 103 ATSC Mode be left at its default setting "1" for Physical Channel number mapping. In this case, the RF Channel and Channel Major mapping numbers are the same.

• When Installer Menu item 103 ATSC Mode is set to "0" for Virtual Channel number mapping, the physical RF Channel number is required to find the Channel Major and Channel Minor mapping numbers provided in the transport stream by the broadcaster. This channel mapping method adds an unnecessary mapping layer and is not recommended.

• For IP channels, you will need to specify the IP settings of their source(s). Check with your content provider for information on the source(s) of the IP content settings.

This section describes how to use the TV Zoning and Wi-Fi Zoning features, when supported, for FTG Mode via CPU configuration.

Note: All TVs/STBs that can be configured using the Cloud Configuration Tool allow Zone restrictions to be placed on channels in the FTG Channel Map. However, additional Zoning features are not supported on all TV models. For (older) models on which TV Zoning is not supported, the default Zone 0 is assigned to each Installer Menu profile and the applicable fields in the Cloud Configuration Tool are inaccessible.

Note: For TV/STB models on which Wi-Fi Zoning is not supported, the Wi-Fi Zones tab will not be displayed.

Note: While Zoning features are primarily intended for use when the TV/STB is configured for FTG Mode via CPU operation, Wi-Fi Zoning, along with selected elements of TV Zoning (Installer Menu and Setup Menu profile Zone assignments), when supported, may also be used with TV/STB cloning processes using a Clone (.tlx) file. Refer to the appropriate Commercial Mode Setup Guide for further information.

TV Zoning Feature

The TV Zoning feature enables you to create localized or specialized configurations for TVs/STBs in selected "Zones" within the installation site, for example, a lobby area, a fitness center, etc. The Cloud Configuration Tool may be used to create an FTG Configuration (.tlx) file that contains multiple Installer Menu and Setup Menu profiles, each with its own Zone assignment. When supported, up to nine unique Zones can be designated for both the FTG Installer Menu and Setup Menu profiles for a single chassis model or chassis ID. On all TVs/STBs, Zone restrictions can also be placed on individual channels in the FTG Channel Map. Thus, for example, you may create an FTG Installer Menu and/or Setup Menu profile to uniquely configure a TV/STB in the hotel lobby and also restrict the channels that are available to be tuned on that TV/STB. The following subsections describe each facet of the TV Zoning feature.

FTG Installer Menu Profile Zone Assignments

For those chassis models on which this feature is supported, default FTG Installer Menu profiles are assigned the default Zone 0. The Cloud Configuration Tool / Installer Menu web page enables you to create multiple Installer Menu profiles for the same chassis model, each with a different Zone assignment (default = Zone 0), to be included in an FTG Configuration (.tlx) file. For example, you may wish to create one FTG Installer Menu profile for the TV in the lobby area (Zone *x*) and another FTG Installer Menu profile for the same model TV in the fitness center (Zone *y*), both of which are different from the FTG Installer Menu profile used for the same model TVs in standard guest rooms (Zone *z*). The TV Zoning feature enables you to save multiple FTG Installer Menu profiles for the same chassis model or chassis ID, each with its own Zone assignment, in one FTG Configuration file. If each TV in the aforementioned Zones has had its TV Zone # set appropriately (see appropriate Commercial Mode Setup Guide), the TV(s) will only be configured by the Installer Menu and/or Setup Menu profile that matches its(their) Zone setting.

Refer to "Installer Menu Configuration" information on pages 25 to 35 for further details on assigning Zones to FTG Installer Menu profiles. On the File Manager web page (Advanced Setup), you can also change the Zone assignment for each Setup Menu profile in the Setup Menu Summary.

Reference: Using Zoning Features (Cont.)

Note: An uploaded FTG Configuration (.tlx) file may contain TV/STB Setup Menu profile(s) if the file was initially saved from or created from one or more files that were saved from a TV/STB. Setup Menu profiles cannot be created in the Cloud Configuration Tool. Each Setup Menu profile includes a Zone designation that was initially assigned based on the TV Zone # set in the TV/STB.

FTG Channel Map Zone Restrictions

In the Cloud Configuration Tool / Channel Map web page, you can place Zone restrictions on individual channels that may be prohibited or deemed unsuitable for certain locations. One or more Zone restrictions (1–8) may be placed on each channel that is to be restricted. For example, if you wish to restrict a channel from Zones 2 and 4, click on the checkbox at the left of both "Zone 2" and "Zone 4" in the Restricted from Zones field when defining or editing that channel.

Refer to "Channel Map Configuration" on pages 21 to 24 for further information on placing Zone restrictions on channels.

Note: While a channel can be restricted from up to eight Zones, a TV/STB can only ever be in (set for) one Zone.

Setting the TV Zone # in the TV/STB

The TV Zone # must be set appropriately on each TV/STB in order for the them to be configured correctly. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, and set the TV Zone # in all applicable TVs/STBs, so that they are configured with corresponding FTG Installer Menu and/or Setup Menu settings and/or can omit channels that have been restricted in the FTG Channel Map. TV Zone 0 is the default TV Zone #.

At the same time, keep in mind that the TV Zone designations are not mutually exclusive. That is, you may opt to place Zone restrictions on selected channels in the FTG Channel Map, but at the same time, you can choose to configure all TVs at the site with the same FTG Installer Menu and/or Setup Menu settings. For example, an FTG Configuration (.tlx) file being used to configure the TVs at a site may contain multiple FTG Installer Menu and Setup Menu profiles with different Zone assignments, as well as an FTG Channel Map with Zone restrictions on several channels.

Each TV that still has the default TV Zone 0 setting will *only* be configured by the Installer Menu and/or Setup Menu profile(s) with a Zone 0 designation. If, on the other hand, the TV Zone # is set to 1, the TV will first look in the file for its matching Installer Menu and/or Setup Menu profiles with a Zone 1 designation. If none of the Installer Menu and/or Setup Menu profile(s) for its chassis model or chassis ID has a Zone 1 designation, the TV will then look for matching profile(s) with a Zone 0 designation. See also example below. For the FTG Channel Map configuration, when the TV Zone # is set to 0, the TV will ignore any Zone restrictions (1–8) that may be placed on channels in the FTG Channel Map. However, when the TV Zone # is set to 1, the TV will omit any channels that have been restricted from Zone 1 in the FTG Channel Map.

Example:

The following table illustrates the configuration of 55/65UV970H TVs (Chassis ID 133-1) depending on the TV Zone # set in the TV and the Zone assignments of the model 55/65UV970H (Chassis ID 133-1) Installer Menu profiles included in the FTG Configuration file.

TV Zone #	Installer Menu Profile Zone Assignment in FTG Configuration File			
	0	1	3	5
Zone 0	X			
Zone 1		X		
Zone 2	X			
Zone 3			X	

X = Installer Menu profile accepted by TV

Wi-Fi Zoning Feature

The Wi-Fi Zoning feature enables you to use a ".tlx" file to configure an individual TV/STB or a group of TVs/STBs with a particular Wi-Fi access point's login data to create "Wi-Fi Zones" within the installation environment.

The Cloud Configuration Tool may be used to create an FTG Configuration (.tlx) file with an FTG Installer Menu profile that contains login data for multiple Wi-Fi access points, each assigned a Wi-Fi Zone #. Up to 100 Wi-Fi Zones can be designated within each FTG Installer Menu profile, thus allowing for distribution of the Wi-Fi network load. For example, if a site has 50 identical model TVs within close proximity, you may wish to designate 10 different Wi-Fi Zones, each with its own access point that has unique login data, so that no more than five of the TVs are connected to one access point at any given time.

Wi-Fi Zone Assignments

Each Wi-Fi access point's login data must be defined in the Wi-Fi Zones tab of the Cloud Configuration Tool / Installer Menu web page. Refer to "Wi-Fi Zones" on pages 34 to 35 for information on defining Wi-Fi Zone parameters.

Setting the Wi-Fi Zone in the TV/STB

In order for a TV/STB to be configured by the proper FTG Installer Menu profile with the desired Wi-Fi access point login data for wireless networking (i.e., SSID, security type, and security key), on location, you must set both the TV Zone # and the Wi-Fi Zone # in the TV/STB. If the Wi-Fi Zone # in the TV/STB is set to 0 (default), the TV/STB will not obtain access point login data from the Installer Menu profile with which it is configured unless the profile contains the global Wi-Fi Zone 100. Similarly, any TV/STB that does not find its matching Wi-Fi Zone # in the ".tlx" file, but that does find the global Wi-Fi Zone 100, will be configured with the global access point login data.

Reference: Using Zoning Features (Cont.)

For example, if the FTG Installer Menu profile in which Wi-Fi Zones are defined has been assigned Zone 3, the TV Zone # must be set to 3 (on location) in order for the TV/STB to be configured by the proper profile. At the same time, the Wi-Fi Zone # in the TV/STB must be set to match the Wi-Fi Zone assignment for the access point login data you wish the TV/STB to use to connect to the wireless network. Thus, if you want the TV/STB to connect to a particular Wi-Fi access point that has had its login data assigned Wi-Fi Zone 2 (as part of the Installer Menu profile that has been assigned Zone 3), you must set the TV Zone # to 3 and the Wi-Fi Zone # to 2 in the TV/STB. On the other hand, if Wi-Fi Zone 100 has been defined within the Zone 3 Installer Menu profile, you may leave the TV's/STB's Wi-Fi Zone # set to 0, and the TV/STB will be configured with the global access point login data.

Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, and set the TV Zone # and the Wi-Fi Zone # in all applicable TVs/STBs.

This section describes how to create a special "Restore_Pass-through_Mode.tlx" file to restore Pass-through Mode/Installer Menu factory defaults on TVs/STBs that are in FTG Mode via CPU. The first option enables you to restore a single TV/STB to Pass-through Mode, while the second enables you to restore multiple TVs/STBs to Pass-through Mode at one time.
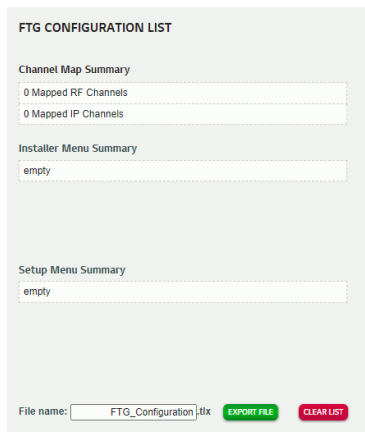
Restore Individual TVs/STBs using a USB Memory Device

Use a USB memory device to transfer a "Restore_Pass-through_Mode.tlx" file, which does not contain any data (i.e., a blank Channel Map and no Installer Menu or Setup Menu profile data), to the TV/STB.

The following procedure describes how to create the "Restore_Pass-through_Mode.tlx" file.

1. Access the Cloud Configuration Tool, and click on the **ADVANCED SETUP** button on the Welcome page. See "Accessing the Cloud Configuration Tool and Selecting a Setup Option" on page 10, as required, for further information on this step.

2. On the File Manager web page, make sure the FTG Configuration List is cleared (see example below).

   Note: If necessary, for example, if you were completing other activities in the Cloud Configuration Tool before you proceeded to create this file, click on the **CLEAR LIST** button at the bottom of the FTG Configuration List to clear all data from the FTG Configuration List.
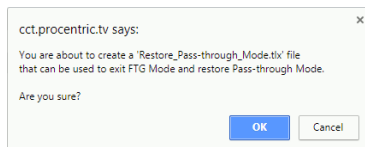
3. Click on the **EXPORT FILE** button.

   A pop-up confirmation window will be displayed at the top of the page to indicate that you are saving a "Restore_Pass-through_Mode.tlx" file. This is a special file for this unique purpose only. Click on **OK** to save the file (or click **Cancel** to return to the File Manager page without saving the file).

Reference: Restoring TVs/STBs to Pass-through Mode (Cont.)

(Continued from previous page)

4. In the Save As window (if applicable—see note below), select the desired location to which to export the file (you can also edit the name here, if necessary, though avoid using special characters, such as ?, &, @, etc.), and click **Save**.

   Note: Depending on the browser you are using and its current settings, files may automatically be saved to the "Downloads" or another designated folder on your PC. If you want to be able to select the folder in which to save the "Restore_Pass-through_Mode.tlx" file, check your browser settings.

5. Transfer the "Restore_Pass-through_Mode.tlx" file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TV/STB.

Restore Multiple TVs/STBs using a Pro:Centric Server

If your system uses a Pro:Centric server for remote management, use the Pro:Centric Admin Client to load a "Restore_Pass-through_Mode.tlx" file (i.e., a file that does not contain any data) on the Pro:Centric server and administer its distribution to the TVs/STBs. See the procedure above for information on creating the "Restore_Pass-through_Mode.tlx" file. Refer to the *Pro:Centric Server Admin Client User Guide* for further information on the Admin Client.

Document Revision History

Date	Description
October 2017	Revision A: New document
January 2018	Revision B: Restore Pass-through Mode and Zone updates
April 2018	Revision C: File Manager updates
October 2020	Revision D: Installer Menu Configuration updates
April 2024	Revision E: Installer Menu and Channel Map updates

Product documentation is available online at: **www.lg.com/us/business**

Notes

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206-4302
Revision E