LYNK SINC Server is a web-based solution designed to construct widgets installed on TVs in hotel rooms. LYNK SINC Server allows you to manage TVs conveniently. Remotely control the power supply, send messages, or update firmware.



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# **Open Source Announcement**

01

# Before getting started

# Rules used in this user guide

Functions are described according to the following rules in this user guide.

# **Program and device names**

Program and device names are written as follows in this user guide.

- LYNK SINC Server → LSS
- Hotel Smart TV → TV

# Running a menu

- Instructions on how to run a menu is as follows:
  - Select **Network > Network Settings** from the displayed network settings menu.
  - → You should select **Network**, and then select **Network Settings**.
- The information on how to run menus provided by the operating system such as those in Control Panel is for Microsoft Windows 7.

# Key terms used in LSS

LSS is a web-based solution designed to configure TV widgets.

Widgets on TVs in hotel rooms can provide guests with easy access to a range of information and applications. A widget appears after a TV turns on. Widgets allow guests to watch TV, search hotel information and use TV applications. Widget format and information provided in a widget can be customized according to the guest type.

LSS allows you to conveniently manage TVs. Manage TV channels, remotely control the power supply, or update firmware.

This section provides definitions of key terms when using LSS. Familiarize yourself with frequently used terms and definitions. This will allow you to take advantage of the many useful functions in LSS.

- Widget: Refers to an application that allows a user to conveniently access a range of functions and information on a device.
   TV widgets provide various information, including hotel facilities and neighborhood information, in the form of menus.
- Project: Refers to a group of pages that construct a TV widget. A project consists of a main page and several menu pages.
- Main page: Refers to a page that appears by default after a widget runs.
- Menu page: Refers to a page that contains various information (menus) provided in a widget. A menu page can be accessed by selecting a menu from the main page.
- Template: Refers to a pattern where the arrangement of menu sections and layout (text, image and video) sections is predefined. Configure menu page settings using a variety of templates provided in LSS.
- Layout: Refers to a pattern, which is a component of a template, where the arrangement of image, video and text sections is defined.

### Note

For details on pages and components of a project, refer to the following: Project settings









# **Main functions**

#### **Customizable TV widget configuration**

- Arrange menus and pages in a widget as desired.
- Text, image, video and audio sources can be used to construct menus and pages in a widget.
- Resize and rearrange text boxes, images or video screens.

#### **Remote TV management**

- Send messages such as welcome messages and notices to TVs.
- Remotely control the power supply to (turn on/off) TVs.

#### **Managing IPTV channel groups**

• Create and distribute IPTV channel groups to TVs.

#### Grouped TV management depending on the occasion

- Conveniently manage TVs by grouping TVs to distribute a project to.
- Conveniently manage TVs by grouping TVs by task, such as sending a message or a firmware upgrade.

# **Installation requirements**

# **Operating system**

- Microsoft Windows 2008 Server (x86, x64)
- Microsoft Windows 2012 Server (x64)



- The program can be installed on Windows 7 if it is used as a trial for small deployments.
- To use Microsoft Windows 2012 Server offline, you must enable .NET Framework 3.5 manually before installing LSS. For further information, refer
  to the following:
   Configuring the settings for .NET Framework 3.5

#### Web browser

■ Chrome Browser

#### **Network**

■ Wired network

#### **Port numbers**

- TCP 80, 443, 444, 30000~30005
- UDP 30000~30005



Keep the above ports open to ensure communication between the TV and LSS.

#### **Software**

■ Microsoft Visual C++ 2010 Redistributable Package (x86)



To use LSS, make sure to install Microsoft Visual C++ 2010 Redistributable Package (x86). For further details on installation, refer to the following: 

Installing Microsoft Visual C++ 2010 Redistributable Package (x86)

Installing Microsoft Visual C++ 2010 Redistributable Package (x86)

# **Development language**

■ PHP (Hypertext Preprocessor) 5

#### Web server

■ Apache 2.2.x

#### **Database**

■ CUBRID 9.2

#### **Framework**

■ Codelgniter 1.7.2

# Software installation

# **Installing LSS**



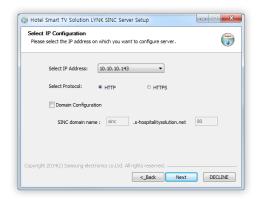
Run the LSS install file.
 Read the install instructions thoroughly, and click Next.



2 Read the license agreement thoroughly, and click **ACCEPT** if you agree.



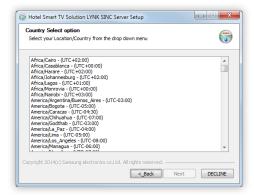
3 Select a program type to install and click **Next**.



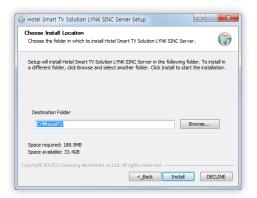
4 Select HTTP or HTTPS for the protocol, enter a domain name and port information, and click **Next**.



If you have enabled **Domain Configuration**, make sure to configure the DNS settings to access the specified LYNK SINC URL.



Select a city and time zone, then click **Next**.

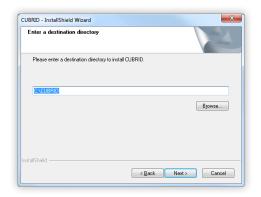


6 Specify the install path, and click **Install**.



- 7 Read the CUBRID install instructions thoroughly, and click **Next**.
- Note

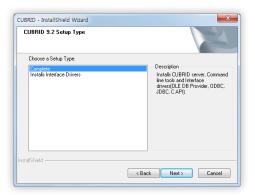
CUBRID is an open source database management system (DBMS) developed by CUBRID. CUBRID, which is required to use LSS, will also be installed.



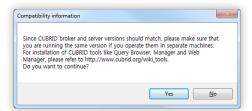
8 Specify the CUBRID install path, and click **Next**.



9 Read the CUBRID license agreement thoroughly, and select I accept the terms of the license agreement if you agree. Click Next.



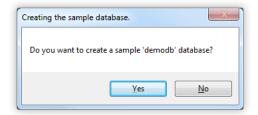
10 Select Complete from the CUBRID install type, and click Next.



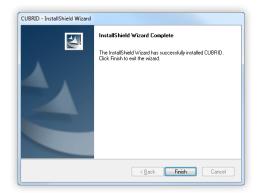
11 Read compatibility information for CUBRID, and click Yes to continue.



12 Click **Next** to start CUBRID installation.



13 Click **Yes** to create a sample database.



14 Click **Finish** when the window appears confirming that the CUBRID installation is complete.



15 When the CUBRID website page appears, close the page.

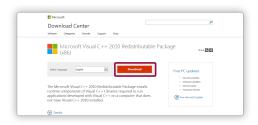


- 16 When LSS installation is complete, click Finish.
  - $\,-\,$  If installation is complete, the LSS webpage will automatically appear.



To uninstall the program, go to Start > All Programs > Hotel Smart TV LYNK SINC > Uninstall.

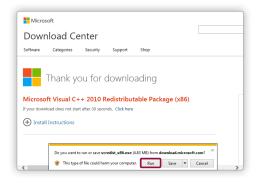
# Installing Microsoft Visual C++ 2010 Redistributable Package (x86)



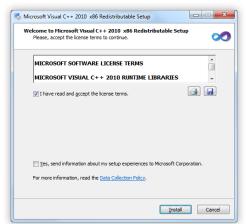
1 Launch a web browser and go to the page (http://www.microsoft.com/download/en/details.aspx?id=5555) to download the install file.
Click **Download** from the displayed page.



2 If a prompt appears asking whether you want to install additional software or functions, click **No thanks and continue**.



A window will appear at the bottom of the web browser page asking if you want to install Microsoft Visual C++ 2010 Redistributable Package (x86). Click **Run**.



4 Read the terms and conditions thoroughly, and click the checkbox for I have read and accept the license terms if you agree. Click Install.

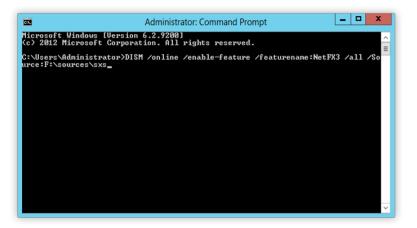


5 Click **Finish** when the window appears confirming that the installation is complete.

# Configuring the settings for .NET Framework 3.5

To use the Microsoft Windows 2012 Server operating system when the Internet is not connected, you must enable .NET Framework 3.5 manually before installing LSS.

- On the Windows 2012 Server computer, click the **Start** button. Next, enter **cmd** in the run window at the bottom of the Start menu, then press **Enter** on the keyboard.
- 2 Enter the following command in the command prompt window.
  DISM /online /enable-feature /featurename:NetFX3 /all /Source:boot file path



Note

Ensure that a Windows boot file exists in the boot file path you entered.

3 After the command is running, install LSS.

# Post-installation checklist

# LSS webpage accessibility

1 Launch a web browser, go to the LSS webpage, and check that the login page appears properly.

### Note

The login page access address depends on the protocol selected when the software was installed.

- If HTTP is selected: http://localhost/
- If HTTPS is selected: https://sinc.s-hospitalitysolution.net:444



2 Check to make sure that you can log in properly.

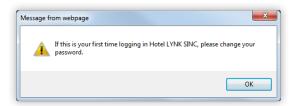
# Note

The super administrator account is registered in the program by default. Log in using the following super administrator account information.

- ID: admin
- Password: admin123

# Changing a password

1 If you log in for the first time after LSS is installed, a message appears advising you to change the password. Click **OK**.



2 Change the password.



- Make sure to change the default password (admin123) which has been set for privacy during installation.
- For further details on how to change a password, refer to the following: 

  Editing my account info.

# Activating the product license

When you run LSS for the first after install, you must perform the license activation process. For further details on registering a license, refer to the following: 

License management

# **About LSS**

# Login

Launch a web browser, and go to the LSS webpage. The login page will appear.



#### Note

To access LSS from a computer where LSS is not installed, enter the IP address (http://LSS IP) for the computer where LSS is installed in the web browser address bar.

# **User types**

LSS users are classified as super administrators and general administrators. Super administrators and general administrators are assigned different privileges for menus and functions. General administrators need approval from a super administrator to log in to LSS.

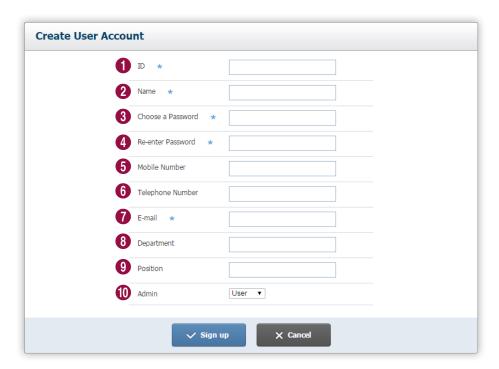


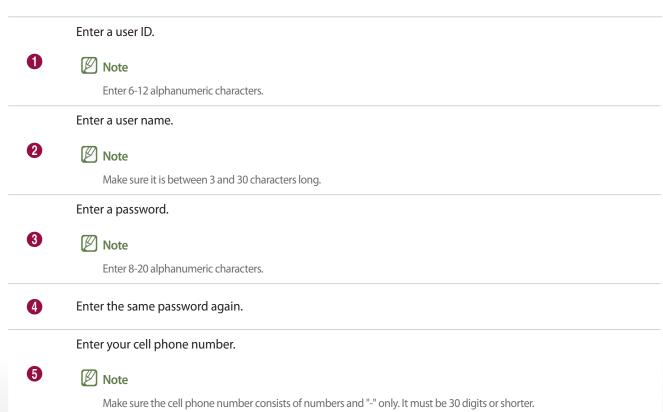
- · The super administrator privileges are only given to the admin account, which is registered by default when LSS is installed.
- For details on privileges for administrators, refer to the following: 

  Administrator menu

# Registering a general administrator

- 1 Click **Sign Up** on the login page.
- 2 Enter the required account information in the displayed account registration page.
  - Fields with \* cannot be left blank.





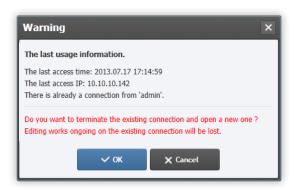
Enter your landline phone number. 6 Note Make sure the cell phone number consists of numbers and "-" only. It must be 80 digits or shorter. Enter your email address. a Note Make sure it is 50 characters or shorter. Enter your department. 8 Note Make sure it is 80 characters or shorter. Enter your position. 9 Note Make sure it is 10 characters or shorter. Select a specific administrator role for the user. 1 • Admin: Assign super administrator role. • User: Assign general administrator role.

- 3 After entering the required information, click **OK**.
  - To cancel registering a general administrator and go back to the login page, click Cancel.
  - After approval from the super administrator, log in to the solution with the registered account.
- Note
  - An alternative way to register a general administrator is to use the **Admin** menu after logging in with a super administrator account. For details, refer to the following: Adding a user
  - For details on user approval, refer to the following: 

    Approving a user

# Simultaneous access restriction

It is not possible to access LSS with the same account from multiple computers simultaneously. If you attempt to log in from a computer using an account that is already logged in from another computer, the following message window will appear.



To disconnect from the previous computer and then connect to the current computer, click **OK**. To remain connected to the previous computer, click **Cancel**.

#### Note

Note that tasks being performed on the current computer will not be saved if a new computer is connected.

### Note

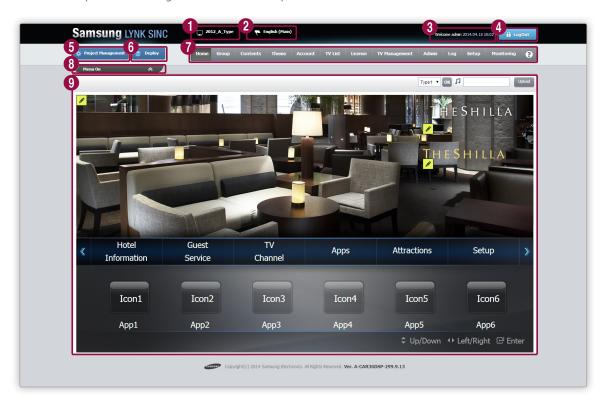
If you refresh LSS or click another menu on the current computer after connecting to a new computer, a disconnection message will pop up and the login page will appear.

# Main page

Log in to LSS to open the main page as follows:

### Note

- Some functions in LSS are not accessible to general administrators. This is the reason some menus do not appear when a general administrator is logged in.
- Descriptions in this user guide are based on the super administrator account in order to cover all functions in LSS.



1 View the name of the project currently loaded in the 9 section of the LSS main page.

View the language currently used in menus and messages including the welcome message.

2 Note

For details on configuring the language, refer to the following: Language settings

- 3 View the login date and time.
- 4 Log out.
- 6 Create, edit or delete a project. Import a project from a computer or export a project to a computer.
- Distribute a project or a list of channels to a TV group. Withdraw a project or a list of channels that have been distributed.

The LSS main menus are displayed.

Click a menu if you want to access a page of a specific menu.



- 7
- The **Admin** and **Setup** menus are only accessible to the super administrator. These menus will not appear when a general administrator is logged in.
- Click **Home** if you want to go to the main page. An alternative way to go to the main page is to click the program name at the top left of the page.
- Click oif you want to download the LSS user guide. The user guide is provided as a PDF file.
- For details on menus, refer to the following: 

  More about the functions in LSS
- 8 Manage the menu pages of a project. Click <a> / <a> ✓ to open or close the list.</a>

The main page of the project currently loaded is displayed.

.

Note

- The main page of the currently loaded project contains the same widget main page that appears on TVs after a project is distributed
- To access a page of a specific menu, select a menu from the menu bar at the top.

03

# **Managing projects**

Create, configure and distribute a project used as a TV widget.



- To use a variety of languages in project menu pages, first make sure to add a project language to LSS. For details on adding languages, refer to
  the following:
   Activating a menu language
- To practice making and distributing a project, refer to the following: 

  Tutorial

# Making a project

# **Creating a project**

- 1 To create a project, click **Project Management > New Project** at the top left.
- Configure the settings required to create a project from the displayed window.



Enter a new project name.



2



Make sure it is between 1 and 34 characters long.

Select a default metadata type.

- Blank: Select if you want to create a project with empty pages that contain no images or text.
- **Default**: Select if you want to create a project with pages that contain default images and text.



Metadata refers to sources that construct a widget layout such as images, text, videos and audio.

#### Select a widget type.

- Widget 2011 [01]: This is the default widget, which uses the same user interface and graphics as the TV widgets released in 2011. You can create a maximum of seven user menus. User menus are provided in bar format at the bottom of the main page of a project.
- Widget 2012 [01]: This is the default widget, which uses the same user interface and graphics as the TV widgets released in 2011. You can create a maximum of 15 user menus. User menus are provided in bar format at the bottom of the main page of a project.
- Widget 2012 [02]: This gallery widget displays user menus on the main page of a project similar to pictures at an exhibition. You can create a maximum of 15 user menus.



- Widget 2014 [A]: This gallery widget displays user menus on the main page of a project similar to pictures at an exhibition. The widget provides basic menus as a menu bar at the top. You can use basic menus and create a maximum of ten user menus.
- Widget 2014 [B]: This gallery widget provides user menus and basic menus on the main page of a project similar to a slideshow. You can use basic menus and create a maximum of ten user menus.
- Widget 2014 [E]: Users that have a registered license and only use the IPTV function can use this widget to distribute IPTV content to a TV.

### Note

- For details on user menus and basic menus, refer to the following: 

  Menu structure
- For details on default widgets and gallery widgets, refer to the following: Main page settings for the default widget,

  Main page settings for the gallery widget

Select a theme to decide the style of the widget.

Available theme types vary depending on the selected widget type (default widget/gallery widget). In addition to the themes provided by default in LSS, it is possible for users to create new themes by widget type.





For details on how to create themes, refer to the following: Making a theme

- 3 After configuring the required settings, click **OK**.
- 4 Click **OK** in the confirmation window if you want to create the project.
  - The main page of the new project will be loaded on the screen.
  - Configure the detailed settings for the main page and menu pages of the project.



For details on configuring the page settings of a project, refer to the following: Project settings

# **Duplicating a project**

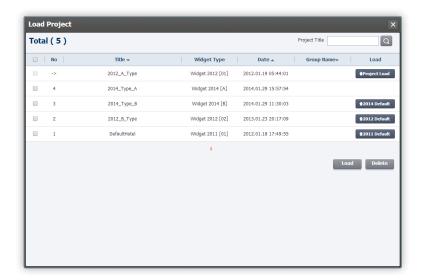
Apply a new theme to the project currently loaded on the screen and create a duplicate project.

- 1 To duplicate a project, click **Project Management > Save as Project** at the top left.
- 2 Select a project name and theme from the project duplication window.
  - Make sure the project name is between 1 and 34 characters long.
  - Available theme types vary depending on the widget type of the original project (default widget/gallery widget).
- 3 After configuring the required settings, click **OK**.
- 4 Click **OK** in the confirmation window if you want to duplicate the project.
  - The main page of the duplicated project will be loaded on the screen.
  - Configure the settings for the main page and menu pages of the duplicated project.
  - If a project with a page being edited is duplicated, changes in the page that have not been saved will only be applied to the duplicate project.

# Loading/deleting a project

To delete or load a project saved in LSS into the screen, click **Project Management > Load Project** at the top left.

• A list of projects will appear.



#### Note

If no project has been distributed to TVs, a default project will be distributed. In the list of projects, default projects will display 2011 Default, 2012 Default, 2014 Default or 2011/2012 under Load.

- 2011 Default: This refers to a project distributed by default to TVs released in 2011.
- 2012 Default: This refers to a project distributed by default to TVs released in 2012 or 2013.
- 2014 Default: Represents the default project distributed to TVs released in 2014 and after.
- 2011/2012: Represents the default project distributed to TVs released in 2011, 2012 or 2013.

For details on specifying the default project, refer to the following: 

Basic settings for LSS

### Loading a project

- 1 From the project list, select the checkbox of the project to be loaded on the screen.
- 7 Click Load below the list.
  - The project currently loaded on the screen displays **Project Load** under **Load** in the list.
  - It is not possible to load multiple projects simultaneously.
- 3 Click **OK** in the confirmation window if you want to load the project.
  - The main page of the selected project will be loaded on the screen.

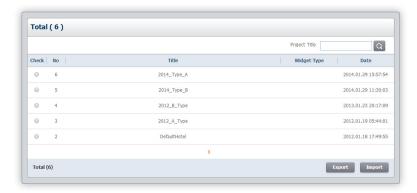
# **Deleting a project**

- Select a project checkbox from the project list.
- 2 Click **Delete** below the list.
  - It is possible to delete multiple projects simultaneously.
  - The project currently loaded on the screen displays Project Load under Load in the list and cannot be deleted.
  - It is not possible to delete projects that have been distributed to TVs and are currently in use.
- 3 Click OK in the confirmation window if you want to delete the project.
  - The selected project will be removed from the list.

# Importing/exporting a project

To import a project saved on the computer to LSS or export a project saved in LSS to the computer, click **Project Management > Import/Export Project** at the top left.

• A list of projects will appear.



### Importing a project

- Click Import below the project list.
- In the project import window displayed, enter a new name for the project that will be imported.
  - Make sure the project name is between 1 and 34 characters long.
- 3 Click Upload to select a project to import.
- 4 After configuring the required settings, click **OK**.
  - The selected project will be uploaded and added to the project list.
  - To cancel importing a project and go back to the list, click **Cancel**.

### **Exporting a project**

- From the project list, click Check for the project that will be exported.
  - It is not possible to export multiple projects simultaneously.
- 2 Click **Export** below the project list.
  - The selected project will be zipped.
- Click Save in the window displayed at the bottom asking if you want to save the project.
  - The selected project will be downloaded.

# **Project settings**

Configure the settings for the main page and menu pages of a project loaded in LSS. This section shows the project menu structure and describes how to configure the settings for the main page and menu pages.



It is not possible to change the settings for projects that have been distributed to TVs. Pages of a distributed project that are permitted by the super administrator can be edited. For details, refer to the following: 

Managing user menus

# **Project menu settings**

Manage menus, and edit menu pages.

To edit the menus of a loaded project, click Menu On at the top left.

#### Menu structure

Menus are divided into user menus and basic menus.





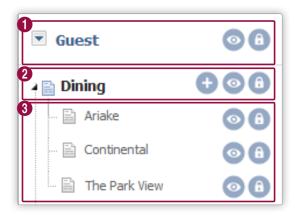
Customize user menus so that necessary information can be provided to customers. Menus can be added or deleted. Sub-level menus can be added or edited. User menus are accessible from any widget type.



Basic menus are provided as shortcuts and give room guests access to useful features related to TV channels and the weather info service. In basic menus, adding and editing menus or sub-level menus are restricted. Basic menus are accessible only from 2014 widget types.

#### User menu structure

User menus are in a three-level structure.



Top-level user menus are displayed on the main page of the TV screen.

- Widget 2011 [01]: You can create a maximum of seven parent menus.
- Widget 2012 [01], Widget 2012 [02]: You can create a maximum of 15 user menus.
- 0
- Widget 2014 [A], Widget 2014 [B]: You can create a maximum of 10 user menus.

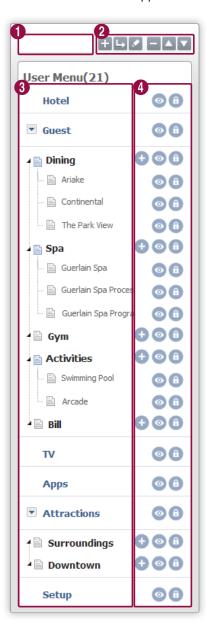


If the number of top-level menus on the main page exceeds six after additional top-level menus have been added, click / at both ends of the menu bar to view or select a menu that is hidden.

- 2 Sub-menus are found under top-level menus. A top-level menu can have a maximum of 20 sub-menus.
- 3 Lower sub-menus are found under sub-menus. A sub-menu can have a maximum of 20 lower sub-menus.

### Managing user menus

- To manage user menus, click **Menu On** at the top left of the screen.
  - The menu editor will appear.



Edit the selected user menu name.





An alternative way to edit a menu name or change the font size is to click for a menu name from the main page of a project.

#### Edit a user menu.

- 🛨: Add a menu of the same level as the menu selected from the menu editor.
  - To delete a menu, select a menu from the menu editor and click
- 2
- It is not possible to delete top-level menus provided by default.
- Add a lower-level menu under the menu selected from the menu editor.
- Save an edited menu name.
- ✓ I Move the selected menu in the menu editor.

View menu names and levels. Click a menu item if you want to go to a menu page.





An alternative way to go to a menu page is to click a menu from the main page of a project.

Display or hide a menu or configure other settings.

- O: Hide a menu. A hidden menu will not be displayed on the widget. To display a hidden menu on the widget, click
- ①: Lock a project to prevent it from being edited. To unlock a project, click ②.
- G: Add an image file you want to insert in a menu when editing the Widget 2012 [02], Widget 2014 [A], Widget 2014 [B] project (gallery widget). After an image file is added, the icon will change to . Place the mouse cursor on the changed icon if you want to preview the added file as a thumbnail.



- Super administrator privileges are required to lock or unlock distributed projects to prevent them from being edited.

  Distributed projects that are locked or unlocked are indicated by ① or ① respectively.
- Projects not distributed to TVs can be edited regardless of whether the function to edit pages is active or not.

2 Alternatively, right-click on a menu from the menu editor and edit the menu using the convenient context menus.

Add Menu
Rename
Active
Add Sub menu
Menu Lock
Menu up
Menu down
Delete

Add Menu	Add a menu at the same level as the selected menu.
Rename	Rename the selected menu.
Active	Display or hide the selected menu on the widget.
Add Sub menu	Add a lower-level menu under the selected menu.
Menu Lock	Activate or deactivate the menu editing function.
Menu up	Move the selected menu up.
Menu down	Move the selected menu down.
Delete	Delete the selected menu.

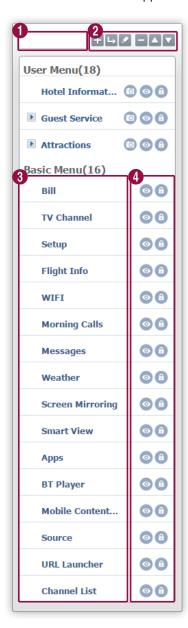
### Note

If you right-click in a page set to a language other than the default editing language, the Rename function is only available. For details on specifying the default language used to edit pages, refer to the following: 

Specifying the default language used to edit menu pages

# Managing basic menus

- 1 To manage basic menus, click **Menu On** at the top left of the screen.
  - The menu editor will appear.



1 Edit the selected basic menu name.

Edit a basic menu.

- 2 Save an edited menu name.
  - 🔼 / 💟: Move the selected menu in the menu editor.
- 3 View menu names. Click a menu item to go to the relevant menu page.

Display or hide a menu or configure other settings.

• O: Hide a menu. A hidden menu will not be displayed on the widget. To display a hidden menu on the widget, click .



■ ①: Lock a project to prevent it from being edited. To unlock a project, click ②.



- Super administrator privileges are required to lock or unlock distributed projects.
- Projects not distributed to TVs can be edited regardless of whether the function to edit pages is active or not.
- 2 Alternatively, right-click on a menu from the menu editor and edit the menu using the convenient context menus.

Add Menu
Rename
Active
Menu Lock
Menu up
Menu down

Add Menu	Add a menu at the same level as the selected menu.
Rename	Rename the selected menu.
Active	Display or hide the selected menu on the widget.
Menu Lock	Activate or deactivate the menu editing function.
Menu up	Move the selected menu up.
Menu down	Move the selected menu down.

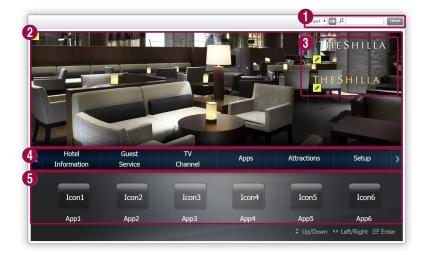
## Main page settings for the default widget

Access to configure the main page settings varies depending on the widget type (default or gallery widget) selected when creating a project.

Default widget refers to the widget type **Widget 2011** [01] or **Widget 2012** [01] selected when creating a project. The main page of a project is used as the main page of the TV widget.

#### Main page layout of default widgets

Run a default widget to display the main page as shown below.



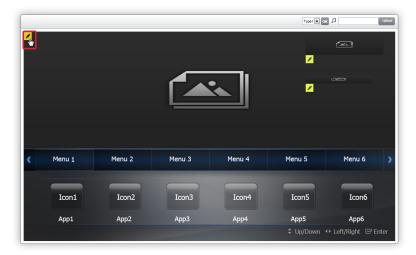
- 1 Set the page type and background music.
- Set the default image.
- 3 Set the logo image.
- 4 Set user menus.
- 6 Applications are displayed in this section.
- Note

Information above assumes you are using Widget 2012[01]. The displayed page can vary depending on the selected widget type.

## **Default image settings**

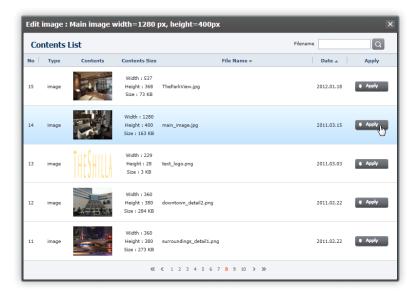
Specify the default image used as the background for the main page.

1 Click the pencil icon in the upper left corner of the default image section on the main page.

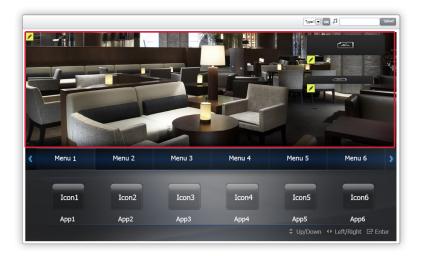


- 2 From the content list window displayed, click **Apply** next to the desired image file.
  - Alternatively, click the desired image preview thumbnail.
- Note

To use image files saved in a computer, refer to the following: 
Uploading content



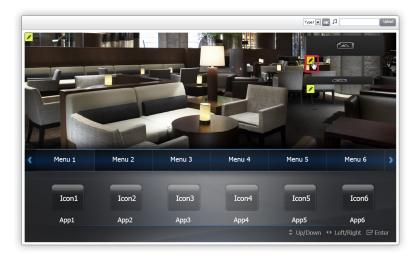
- 3 Click **OK** in the confirmation window if you want to select the image.
  - The selected image will be set as the default image.



#### Logo image settings

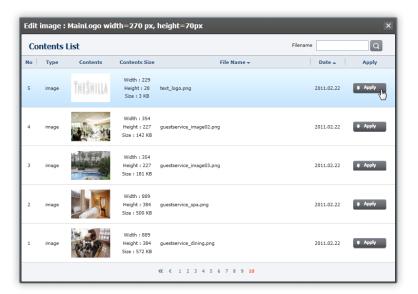
Specify the logo image displayed on the main page.

1 Click the pencil image at the top right of the default image section on the main page.

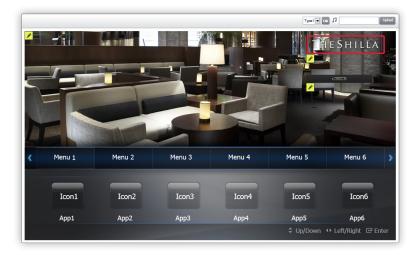


- 2 From the content list window displayed, click **Apply** next to the desired image file.
  - Alternatively, click the desired image preview thumbnail.
- Note

To use image files saved in a computer, refer to the following: 
Uploading content

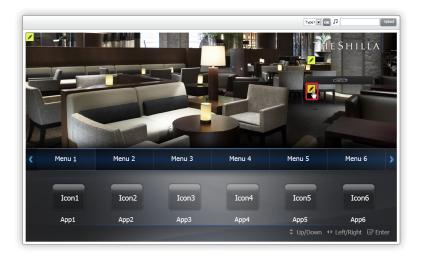


- 3 Click **OK** in the confirmation window if you want to select the image.
  - The selected image will be set as the logo image.



#### Note

Click the pencil icon below the logo image section on the main page if you want to specify the logo image displayed on menu pages. The logo image for menu pages can be configured using the same method as the one used for the main page.



#### Menu name settings

Specify the top-level menu names in a project.

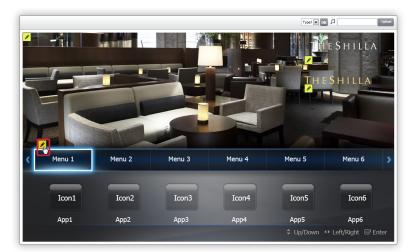


For details on the menu hierarchy, refer to the following: 

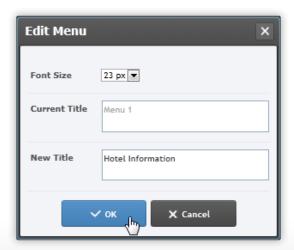
User menu structure

1 Place the mouse cursor on a top-level menu name on the main page. Click the displayed pencil icon.

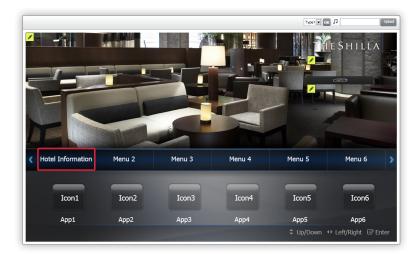
- For a project that uses Widget 2012 [01] as the widget type, you can create up to 15 root menus. Up to six top-level menus are displayed on a single page. To view additional menus that are hidden, click \( \) at both ends of the menu bar.
- For details on adding top-level menus, refer to the following: ightharpoonup Managing user menus



- 2 Configure the required settings from the menu name settings window. Click **OK**.
  - Font Size: Specify the menu text size (unit: pixels).
  - Current Title: The current menu name is shown.
  - New Title: Enter a new menu name.



– The menu name will be updated according to the entered settings.



## Main page type settings

Specify the main page type.

Select a type from the dropdown list at the top right of the default image section. Click **OK**.

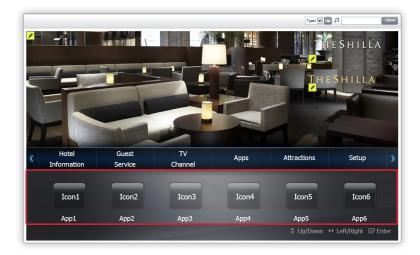


- Select **Type 1** if you want to display the TV application section.

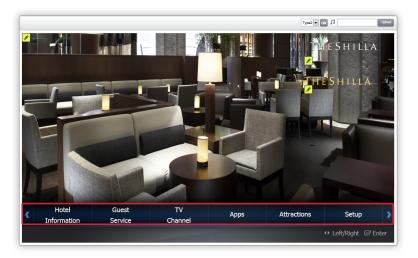
## Note

- LSS displays the application section only. The icons and names of actual applications installed on a TV can be viewed from the TV after a project is distributed.
- Applications are arranged in the order shown on the TV. For details on how to rearrange applications, refer to the following: 

  Changing the arrangement of TV applications



- Select **Type 2** if you do not want to display the TV application section.



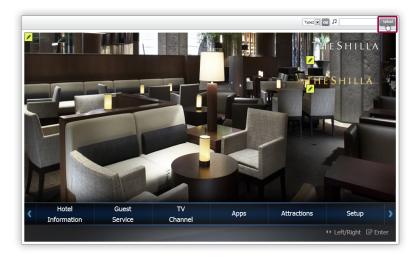
## **Background music settings**

Specify the background music for the main page.

**Note** 

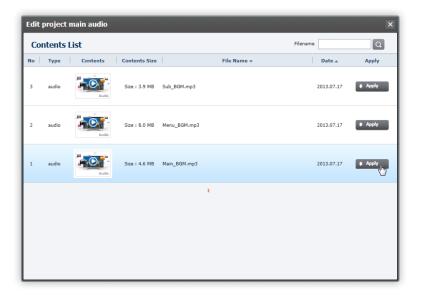
Specified background music will repeat continuously while the main page is displayed.

1 Click **Upload** in the right corner above the default image section.

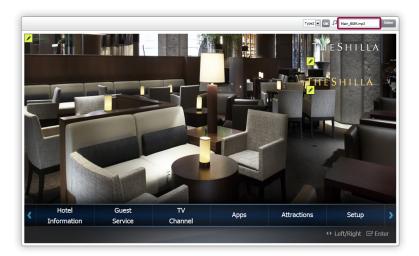


- 2 From the content list window displayed, click **Apply** next to the desired music file.
  - Alternatively, click the desired music preview thumbnail.
- Note

To use music files saved on a computer, refer to the following: 
Uploading content



- 3 Click **OK** in the confirmation window if you want to select the music.
  - The selected music will be set as the background music for the main page.



## Main page settings for the gallery widget

Access to configure the main page settings varies depending on the widget type (default or gallery widget) selected when creating a project.

Gallery widget refers to Widget 2012 [02], Widget 2014 [A], Widget 2014 [B], which is one of the widgets that can be selected when creating a project. The main page of a project is used as the main page of the TV widget.

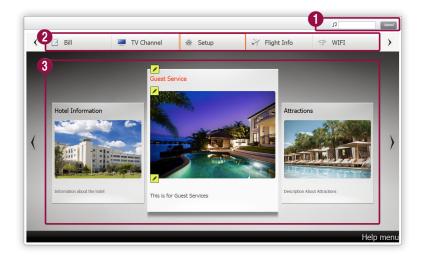
#### Note

- The default image, the menu names and the background music for the gallery widget main page can be configured using the same method as the one used for the default widget. For details, refer to the following: 

  Main page settings for the default widget
- The gallery widget main page does not provide the menu used to specify the logo image and main page type. To use a logo image, use an image containing a logo as the default image.

#### Main page layout of gallery widgets

Run a gallery widget to display the main page as shown below.



- 1 Set the background music.
- Set basic menus.
- 3 Set user menus.

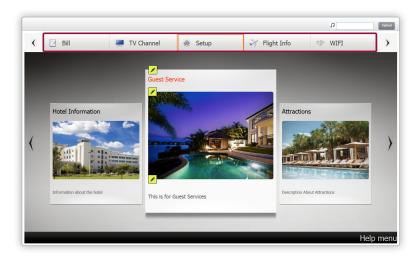
- · Information above assumes you are using Widget 2014 [A]. The displayed page can vary depending on the selected widget type.
- If Widget 2014 [B] is selected, drag a basic menu or user menu to relocate it. To resize a user menu, drag \int found at the bottom right of the menu.

#### **Previewing basic menus**

Basic menus are provided as shortcuts and give room guests access to frequently used features related to TV channels and the weather info service. Users can customize the names and activation status of basic menus and the provided default information. Changing information by adding a sub-level menu is restricted. To preview a menu page shown to customers, click a menu from the basic menu section of the main page.

- Elements under a basic menu can be enabled or disabled using the menu editor found at the top left of the screen. For details, refer to the following: 

  Managing basic menus
- Some of the basic menus may not be displayed on a single page. Click ( / ) at both ends of the basic menu section to view hidden menus.



Bill	Directly access the hotel bill info of room guests.
TV Channel	Directly access TV channel info.  For details on configuring and editing channels, refer to the following: <a href="https://www.managingletv.channelinfo.">Managingletv.channelinfo.</a> Channel info.
Setup	Directly access the select language window.
Flight Info	Access the view flight info window.  To configure flight info provided to customers, refer to the following:   Flight info  settings
Network(WIFI)	Access the view network info window.
Morning Calls	Directly access the wake-up call settings window. Customers can configure their wake-up call settings.
Messages	Access the message box.
Weather	Access the view weather info window.  To configure weather info provided to customers, refer to the following: <u>Weather info</u> <u>settings</u>

Screen Mirroring	Access the screen mirroring window. Customers can display the screens of their Android devices on room TVs.
Smart View	Access the smart view window. Customers can download the smart view application.
Apps	Access the start TV application window. Customers can immediately start a downloaded TV application.
BT Player	Access the start Bluetooth window. Customers can play music by connecting their smart devices such as cell phones and tablets via Bluetooth.
Mobile Content Sharing	Select screen mirroring or smart view to display the selected feature window.
Source	Display the input source page set from the server.
URL Launcher	Directly connect to the specified URL as soon as a web browser is launched. The URL can be set from the server.
Channel List	Display the IPTV channel list page.

## User menu icon image settings

Specify the images for top-level menu icons in a project.



For details on the menu hierarchy, refer to the following: 

User menu structure

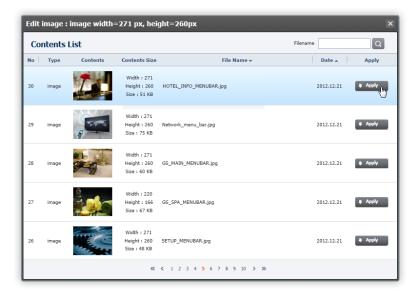
Place the mouse cursor on a top-level menu icon on the main page. Click the displayed pencil icon.

- An alternatively way to specify the menu icon images is to open the menu editor at the top left and click 💿 next to a menu name.
- For projects that use the gallery widget type, it is possible to create six or more top-level menus. Up to five top-level menus are displayed on a single page. To view hidden menus, click \( \lambda \) at both ends of the menu bar.

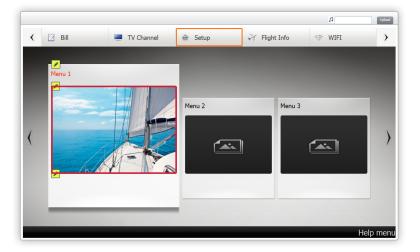


- 2 From the content list window displayed, click **Apply** next to the desired image file.
  - Alternatively, click the desired image preview thumbnail.
- Note

To use image files saved in a computer, refer to the following: 
Uploading content



- 3 Click **OK** in the confirmation window if you want to select the image.
  - The selected image will be set as the menu icon image.



## User menu page settings

To configure menu page settings, select a page template and layout.

## Page template settings

A page template contains menus and pages. Select a page layout to arrange text, images and videos and add content files in the page.

Available template types are as follows:

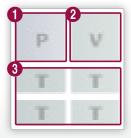
Menu Type/Sub Type	This template can be used in the default widgets <b>Widget 2011</b> [01] and <b>Widget 2012</b> [01]. Select this type if you want to display menus on the left side of the TV screen and construct a page on the right side.
Menu List Type/List Type	Select this type if you want to display menus on the left side of the TV screen and arrange selectable lists on the right side.
Full Type	Select this type if you want to construct a page in full screen mode on the TV without displaying menus. These templates are available for top-level menus only. If one of these templates is selected, it is not possible to add a sub-level menu.
Other Type	Select this type if you want to construct a TV channel selection page and a settings page. This type can only be selected from a top-level menu.  Note  This template does not appear in 2014 widget types.



- Displayed template choices vary depending on the menu level. For a top-level menu, it is possible to select all types of templates. For a submenu, the **Menu Type** and **Menu List Type** templates can only be selected. The **Menu Type** template can only be selected for a lower sub-menu.
- Displayed template names can vary depending on the widget type.

## **Layout components**

Components of layouts in a page can be used as follows:



Insert an image file.
Insert a video file.
Insert text.

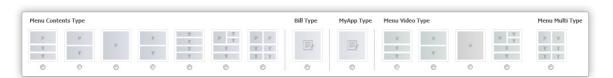
#### Layouts by template

Types of layouts available for each template are as follows:



Displayed layouts available for each template may vary depending on the widget type. In order to cover all layouts, widgets are configured and described according to their function in this user guide.

#### Menu Type/Sub Type templates



Select the **Menu Contents Type** layout if you prefer a structure consisting of images and text. Select **Menu Video Type** if you prefer a structure consisting of videos and text. Select **Menu Multi Type** if you prefer a structure consisting of images, videos and text. To display the TV application auto-run page, select **MyApp Type**. To display the **Express Checkout** page, select the **Bill Type** layout.



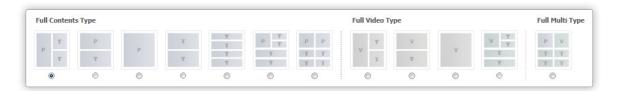
- The layouts above appear when the **Menu Type** template is selected from Widget 2011 [01]. To select the **MyApp Type** layout from the widgets other than Widget 2011 [01], select the **Other Type** template.
- The MyApp Type layout can be configured from any widget under LSS. The layout is only displayed and available on TVs released in 2013.
- For details on how to create an auto-run menu for a TV application using MyApp Type, refer to the following: Weather application auto-run menu settings

#### Menu List Type/List Type templates



The Menu List Type template provides a structure consisting of photo and text lists.

#### **Full Type templates**



These templates provide layouts similar to the **Menu Type** templates, except for a few differences. In these templates, menus are not displayed on the left side of the TV screen and the **Bill Type** layout is not available. These templates are available for top-level menus only.

#### Other Type templates



These templates provide layouts suitable to construct pages used to change the TV channel, display applications and configure various settings. The **Other Type** templates can be selected from a top-level menu only.

- TV Type, Apps Type and Language Type layouts are displayed in Full Type/Only Type mode and do not show menus on the screen.
- To edit the instructions on how to use Allshare(DLNA) and Smart View that will be displayed on the customer screen, select
  the Wifi Type layout. The Wifi Type layout is only available for 2012 widgets.

- The Wifi Type layout cannot be selected from Widget 2011 [01].
- To use the Bill Type or MyApp Type layout from Widget 2011 [01], select the Menu Type template.
- The MyApp Type and Wifi Type layouts can be configured from any widget under LSS. These widgets are only displayed and available on TVs released in 2013.
- This template does not appear in 2014 widget types.

#### Page layout settings

Change the location and size of the image, video and text layouts arranged in a page, if required.

#### Changing the image/video layout properties

1 To change the image or video layout settings, click the desired layout.



Enter a location value to relocate the image or video layout.



Note

Alternatively, drag • above a layout to move the layout to the desired location.

Enter a size value to resize the image or video layout.



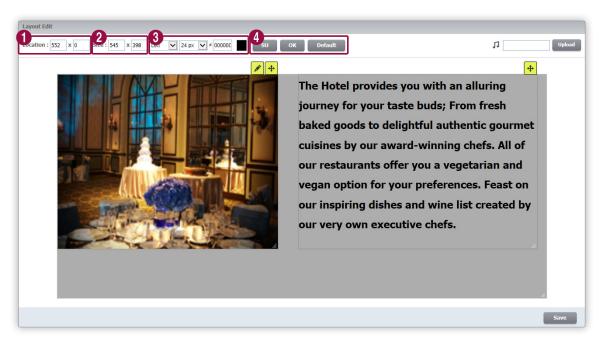
- Alternatively, drag Figure below a layout to resize the layout as desired.
- To keep the original aspect ratio of an image file, click the **Keep aspect original ratio of the image** checkbox.



- **OK**: Select if you want to apply the changed layout size and location.
- **Default**: Select if you want to restore the default location and size of an edited layout.
- 2 To save the changes, click **Save**.

#### Changing text layout properties

1 To edit a text layout, click the desired layout.



Enter a location value to relocate the text layout.

1 Note

Alternatively, drag • above a layout to move the layout to the desired location.

Enter a size value to resize the text layout.

2 Note

Alternatively, drag is below a layout to resize the layout as desired.

- Select a text alignment mode and a text size from the dropdown lists. Change text color by entering an HTML color code or by selecting a color from the color palette.
  - **SU**: Add superscript to text.
- OK: Select if you want to apply changes.
  - **Default**: Select if you want to restore the default settings.
- 2 To save the changes, click **Save**.

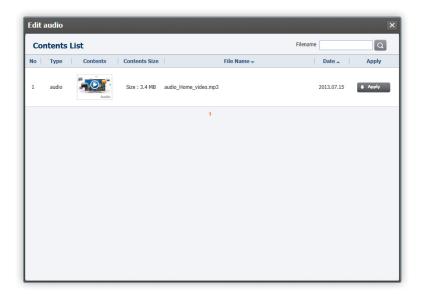
## **Page settings**

Configure page settings by adding content files.

#### Menu page background music settings

Specify the background music for menu pages.

- 1 Click **Upload** in the right corner above the layout section.
- 2 From the content list window displayed, click **Apply** next to the desired music file.
  - Alternatively, click the desired music preview thumbnail.



Note

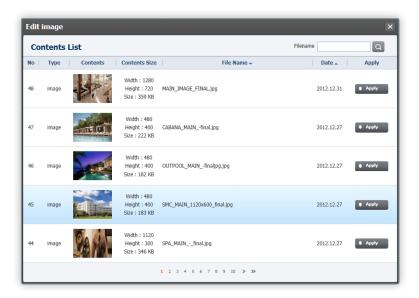
To use music files saved on a computer, refer to the following: 
Uploading content

- 3 Click **OK** in the confirmation window if you want to select the music.
  - The selected music will be set as the layout background music.

#### Inserting an image into a layout

Insert an image into a layout, if required.

- 1 Click 🖊 above the image layout.
- 2 From the content list window displayed, click **Apply** next to the desired image file.
  - Alternatively, click the desired image preview thumbnail.



Note

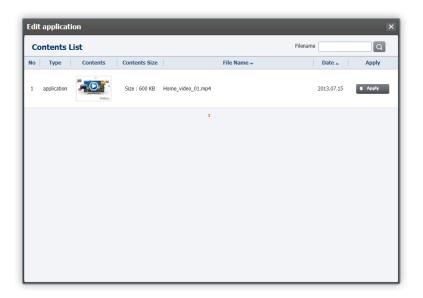
To use image files saved in a computer, refer to the following: 
Uploading content

- 3 Click **OK** in the confirmation window if you want to select the image.
  - The selected image will be added to the layout.

#### Inserting a video into a layout

Insert a video into a layout, if required.

- Click 
   <u>▲</u> above the video layout.
- 2 From the content list window displayed, click **Apply** next to the desired video file.
  - Alternatively, click the desired video preview thumbnail.



Note

To use video files saved on a computer, refer to the following: 
Uploading content

- 3 Click **OK** in the confirmation window if you want to select the video.
  - The selected video will be added to the layout.
- 4 It is possible to load a video file by linking to an external URL for the video file.
  - Click the External Url Check checkbox, and enter an external URL.

# Distributing a group of projects/channels

Distribute a group of projects or IPTV channels to TVs. View or withdraw a list of distributed projects or IPTV channels, if required.

Projects or channels are distributed to TV groups, not individually to a specific TV. A group of distributed projects or IPTV channels will be sent to all the TVs in the recipient TV group.



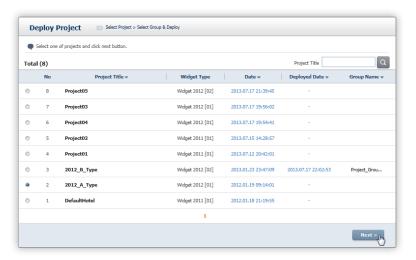
TVs that have no projects will display the default project. For details on specifying the default project, refer to the following: 

Basic settings for LSS

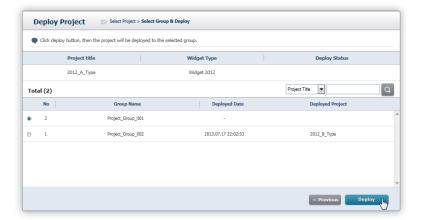
Basic settings for LSS

## Distributing a project

- To distribute a project, click **Deploy > Deploy Project** at the top left.
- Select a project from the displayed project list. Click Next.
  - For a project that has been distributed before, the distribution date and the recipient TV groups will appear on the list.
  - Click a project name from the list to proceed to the next step.

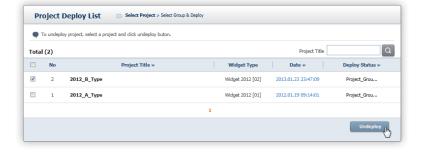


- 3 Select a recipient group from the displayed TV group list. Click Deploy.
  - The distributed project can be used as a widget in all the TVs under the selected TV group.
  - The **Deploy** button will not appear until a recipient TV group is selected.
  - To change the project to be distributed, click **Previous**.
  - For a TV group that has been a recipient of a project before, the distribution date and the distributed project will appear
    on the list.
  - For details on TV groups that receive distributed projects, refer to the following: ► Managing project recipient groups
  - For a distributed project to be applied to a recipient TV, the TV should be switched to another page or turned off and then
    on again.



## Withdrawing a distributed project

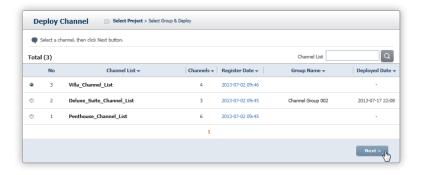
- To withdraw a distributed project, click Deploy > Project Deploy List at the top left.
- Select a project from the displayed list of distributed projects. Click **Undeploy**.



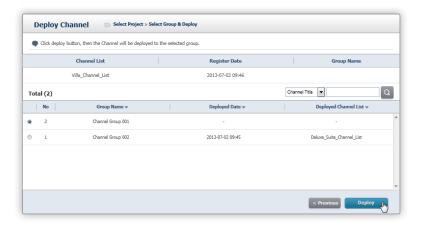
- 3 Click **OK** in the confirmation window if you want to withdraw the IPTV channel group.
  - The selected project will be withdrawn from the recipient TV group.

## Distributing an IPTV channel group

- To distribute an IPTV channel group, click Deploy > Deploy Channel at the top left.
- Select a channel group from the displayed IPTV channel group list. Click **Next**.
  - For a channel group that has been distributed before, the distribution date and the recipient TV groups will appear on the list.
  - Click a channel group name from the list to proceed to the next step.

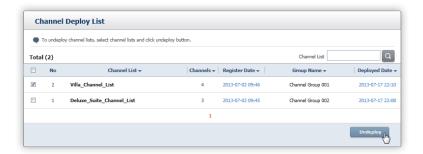


- 3 Select a recipient group from the TV group list. Click Deploy.
  - The channels in the distributed channel group are accessible from all the TVs under the selected TV group.
  - The **Deploy** button will not appear until a recipient TV group is selected.
  - To change the channel group to be distributed, click **Previous**.
  - For a TV group that has been a recipient of a channel group before, the distribution date and the distributed channel group will appear on the list.
  - For details on IPTV channel groups to be distributed, refer to the following: ► Managing IPTV channel groups
  - For details on TV groups that receive distributed IPTV channel groups, refer to the following:
     Managing IPTV channel recipient groups
  - For a distributed IPTV channel list to be applied on a recipient TV, the TV should be turned off and then on again.



## Withdrawing a distributed IPTV channel group

- 1 To withdraw a distributed IPTV channel group, click **Deploy > Channel Deploy List** at the top left.
- 2 Select a channel group from the IPTV channel group list. Click **Undeploy**.



- 3 Click **OK** in the confirmation window if you want to withdraw the IPTV channel group.
  - The selected IPTV channel group will be withdrawn from the recipient TV group.

04

# More about the functions in LSS

Learn more about the key menu items and functions provided in LSS.



To go to the main page, click **Home** from the menu bar at the top of the LSS page. To download the LSS user guide, click **2**.

# **Group management**

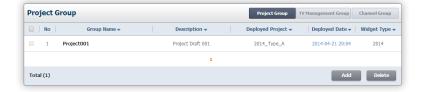
Efficiently manage projects, IPTV channels and TVs by grouping TVs connected to LSS.

To use the group management function, click **Group** from the menu bar at the top.

## Managing project recipient groups

Efficiently distribute projects created from LSS by grouping TVs.

To manage project recipient groups, click **Group > Project Group**.



#### Creating a project recipient group

- 1 To create a project recipient group, click **Add** from the list.
- 2 Enter a group name and description. Select a widget type.
  - To use a widget under Widget 2011 [01] from TVs released in 2011, select 2011 TV models.
  - To use a widget under Widget 2012 [01] or Widget 2012 [02] from TVs released in 2012 or 2013, select 2012-2013 TV models.
  - To use Widget 2014 [A] and Widget 2014 [B] from TVs released in 2014 and after, select 2014-2016 TV models.



## Note

LSS provides Widget 2011 [01] and Widget 2012 [01] (default widgets) and Widget 2012 [02], Widget 2014 [A], Widget 2014 [B] (gallery widget). Select the appropriate widget type for the TVs in the group.

- 3 Select a TV checkbox from the **Unselected IP** list. Click **2**.
  - The selected TV will be moved to the Selected IP list.
  - To deselect a TV, select a TV checkbox from the Selected IP list and click <</li>
- 4 Click **OK** to add the new group to the list.
  - To reset the settings, click **Reset**.
  - To cancel creating a group and go back to the list, click **Cancel**.

## Editing a project recipient group

- 1 To edit a project recipient group, click a group name from the list.
- 2 Change the settings required to edit a group from the displayed window. Click **OK**.
  - To restore the previous settings, click **Reset**.
  - To cancel editing a group and go back to the list, click **Cancel**.



## Deleting a project recipient group

- To delete a project recipient group, select a group checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected project recipient group will be deleted.
- Note

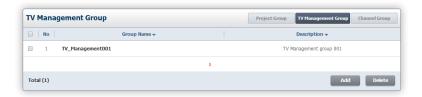
To delete a recipient group that has a project, first withdraw the project. For details on withdrawing distributed projects, refer to the following: 

Withdrawing a distributed project

## Managing TV management groups

Group TVs connected to LSS. This allows you to efficiently manage the TVs. Available features include distributing messages, controlling TVs remotely and firmware upgrades.

To manage TV management groups, click **Group > TV Management Group**.



#### Creating a TV management group

- 1 To create a TV management group, click **Add** from the list.
- 2 Enter a group name and description. Select a widget type.
  - To create a TV management group to apply to TVs released in 2011, select 2011 TV Models.
  - To create a TV management group to apply to TVs released in 2012 and 2013, select 2012-2013 TV Models.
  - To create a TV management group to apply to TVs released in 2014 and after, select 2014-2016 TV Models.



- 3 Select a TV IP address checkbox from the Unselected IP list. Click ...
  - The selected TV will be moved to the **Selected IP** list.
  - To deselect a TV, select a TV IP address checkbox from the Selected IP list and click <</li>

- 4 Click **OK** to add the new group to the list.
  - To reset the settings, click **Reset**.
  - To cancel creating a group and go back to the list, click Cancel.

#### **Editing a TV management group**

- 1 To edit a TV management group, click a group name from the list.
- 2 Edit details of the TV management group as desired from the displayed window.



- 3 Click OK to save the changes.
  - To restore the previous settings, click Reset.
  - To cancel editing a group and go back to the list, click Cancel.

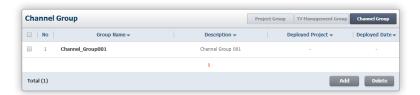
## Deleting a TV management group

- 1 To delete a TV management group, select a group checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected TV management group will be deleted.

## Managing IPTV channel recipient groups

Efficiently distribute IPTV channels by grouping TVs.

To manage IPTV channel recipient groups, click **Group > Channel Group**.



#### Creating an IPTV channel recipient group

- To create an IPTV channel recipient group, click **Add** from the list.
- 2 Enter a group name and description. Select a widget type.
  - To create an IPTV channel distribution group to apply to TVs released in 2011, select 2011 TV Models.
  - To create an IPTV channel distribution group to apply to TVs released in 2012 and 2013, select 2012-2013 TV Models.
  - To create an IPTV channel distribution group to apply to TVs released in 2014 and after, select 2014-2016 TV Models.



- 3 Select the desired TVs from the **Unselected IP** list. Click ...
  - The selected TV will be moved to the **Selected IP** list.
  - To deselect TVs, select the desired TVs from the Selected IP list and click <a>I</a>.

- 4 Click **OK** to add the new group to the list.
  - To reset the settings, click **Reset**.
  - To cancel creating a group and go back to the list, click Cancel.

#### Editing an IPTV channel recipient group

- 1 To edit an IPTV channel recipient group, click an IPTV channel name from the list.
- 2 Edit details of the IPTV channel recipient group as desired from the displayed window.



- 3 Click OK to save the changes.
  - To restore the previous settings, click Reset.
  - To cancel editing a group and go back to the list, click Cancel.

## Deleting an IPTV channel recipient group

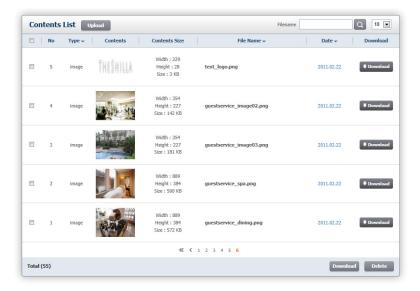
- 1 To delete an IPTV channel recipient group, select a group checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected IPTV channel recipient group will be deleted.

## **Content management**

Upload or download content files on a computer. Content files can be used to make pages.

To manage content files, click **Contents** from the menu bar at the top.

Click ▲ / ▼ next to the desired header to rearrange content files in ascending or descending order.



## Note

Content restrictions and recommendations

- Maximum image resolution: 3264X2448
- Recommended video resolution: 1024X768
- · Recommended video playback method: Streaming URL
- For details on video and music file restrictions, refer to the following page: 
   http://www.samsungdforum.com/Guide/rel00010/index.html

## **Uploading content**

- 1 To upload content files, click **Upload** above the list.
- Click File Select, and select a file.
  - A content file up to 1GB can be uploaded.
  - Click **Stop** if you want to cancel a file upload process.
  - To delete an added file before uploading the file to LSS, click ▼ from the file list.



- 3 Click OK to add the uploaded file to the list.
  - To cancel uploading a file and go back to the list, click Cancel.

## **Downloading content**

- To download a content file uploaded in LSS, click **Download** for the desired file from the list.
- 2 To download multiple content files, select file checkboxes from the list and click **Download** below the list.
  - The selected files will be downloaded one after another.
- Note

To download multiple files, make sure to disable the pop-up blocker function in the Internet browser. For details on disabling the pop-up blocker function, refer to your Internet browser user guide.

## **Deleting content**

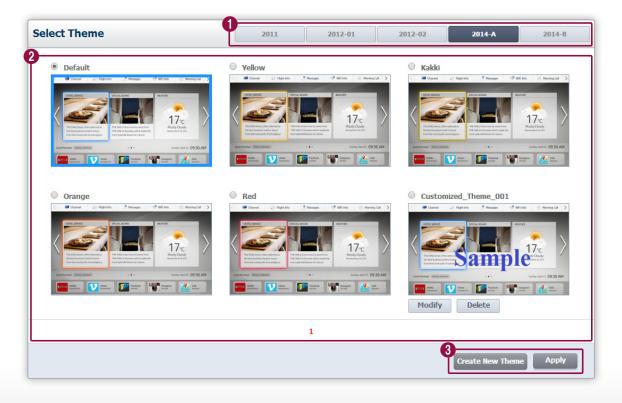
- To delete a content file, select a file checkbox.
- 7 Click **Delete** below the list.
- 3 Click **OK** in the confirmation window if you want to delete.
  - The selected content file will be deleted.

# Theme management

Use the provided default themes that can be applied according to the TV model. It is possible to create new themes.

To manage themes, click **Theme** from the menu bar at the top.

- Themes refer to a group of graphic components in a TV widget, such as the buttons, background image and colors. LSS provides five types of widgets by default: Widget 2011 [01], Widget 2012 [01], Widget 2012 [02], Widget 2014 [A] and Widget 2014 [B]. These default widgets can be applied by TV model. It is possible to use the four default themes provided for each default widget type, or create new themes.
- Default themes for each default widget type: Widget 2011 [01] and Widget 2012 [02], which are the default widgets, provide the Default, Purple, Green and Brown themes. Widget 2012 [02], Widget 2014 [A] and Widget 2014 [B], which are gallery widgets, provide the Default, Purple, Green and Red themes. Default themes cannot be edited or deleted.

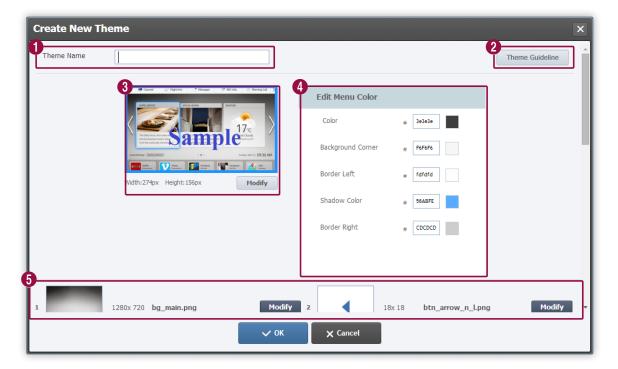


- 1 Select the desired default widget type.
- Default and customized themes are displayed. Customized themes display **Modify** and **Delete** at the bottom. These options are not available for default themes.
  - Create New Theme: Create a new customized theme.
    - Apply: Apply the theme selected from the list.

### Making a theme

3

- 1 To make a new theme, click **Create New Theme** from the **Select Theme** page.
- 2 Configure the settings required to create a theme from the displayed window.



- 1 Enter a theme name.
- View the theme guidelines. For details on the theme guidelines, refer to the following:

  ▶ Viewing the theme guidelines
- Insert a representative image to be displayed on the list of theme choices. To insert a representative image, click **Modify**.
  - An image file with the resolution of 274x156 is recommended.

Specify the colors for general menus and active menus by entering an HTML color code or clicking the color palette.

Add a design element for a theme. To add a design element, click Modify.

6 Note

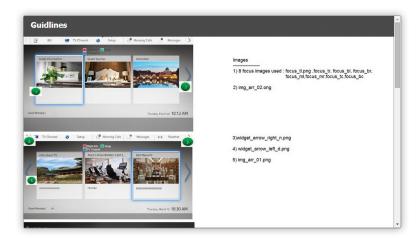
Image files in .png format are supported. The recommended size in pixels for a file can be found in the corresponding design element.

- 3 After configuring the required settings, click **OK**.
  - To cancel creating a theme and go back to the list, click Cancel.

#### Viewing the theme guidelines

Using the theme guidelines, preview where design elements will be applied on a theme page.

- 1 To view the theme guidelines, click **Theme Guideline** in the **Create New Theme** window.
- 2 View where the design elements will be applied from the displayed theme guidelines window.



Note

The theme guidelines function shows a sample of the locations of design elements used in a theme. It is not possible to preview the actual image of a theme with design elements applied.

### **Editing a theme**

- 1 To edit a customized theme, click **Modify** below a customized theme in the list.
- Themes can be edited using the same method used when making a theme. Edit the theme properties as desired from the displayed window.



- 3 To download all the design elements used in a theme as a zipped file, click Download Images Zip File.
- 4 To save an edited theme, click OK.
  - To cancel editing a theme and go back to the list, click **Cancel**.

## Deleting a theme

- To delete a customized theme, click **Delete** below a customized theme in the list.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected theme will be deleted.

### Applying a theme

Select a theme from the list, and click Apply.

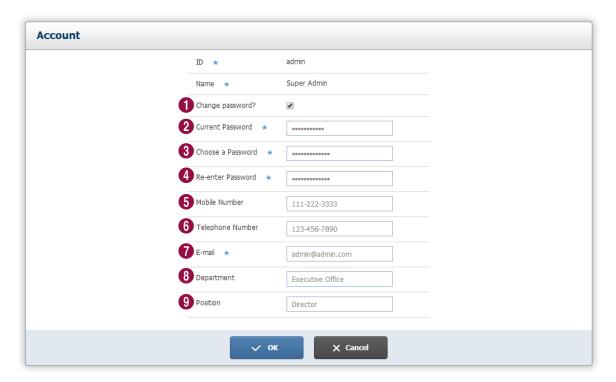
# My account management

View or edit your account information.

Click Account on the main page.

## Editing my account info.

- 1 Edit the details as desired.
  - Fields with \* cannot be left blank.
  - ID and Name cannot be edited.



- To change the password, click the checkbox. The current password and new password fields will be enabled.
- 2 Enter the current password.

Enter a new password.

Note

Enter 8-20 alphanumeric characters.

4 Enter the new password again.

	Enter your cell phone number.
<b>5</b>	Note
	Make sure the cell phone number consists of numbers and "-" only. It must be 30 digits or shorter.
	Enter your landline phone number.
6	Note
	Make sure the cell phone number consists of numbers and "-" only. It must be 80 digits or shorter.
	Enter your email address.
7	Note
	Make sure it is 50 characters or shorter.
	Enter your department name.
8	Note
	Make sure it is 80 characters or shorter.
	Enter your position.
9	
	Make sure it is 10 characters or shorter.

2 After entering the required information, click **OK**.

# TV list management

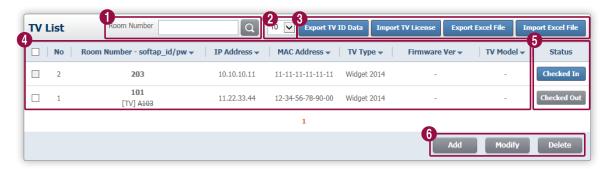
After LSS connects to TVs that have been configured, TV information will be displayed on the TV list.

The TV list can be used to manage identification information of TVs in rooms. If the IP addresses of TVs in rooms are not managed from PMS, communication between the PMS and TVs can be relayed by mapping TV information to room numbers.

To add a TV license to LSS, or to add and manage information on TVs in all rooms, click TV List from the menu bar at the top.

#### Note

PMS (Property Management System) refers to a hotel room management system. The system connects to LSS to provide necessary information for hotel room management.



- 1 Use room numbers to search a list of TVs.
- 2 Select a number to specify the maximum number of TVs to be listed on the page.
  - Export TV ID Data: Export the MAC addresses of TVs in all rooms registered in the list.
- Import TV License: Register licenses for TVs released in 2012.
  - Export Excel File: Export mapping information of TVs in all rooms registered in the list as an Excel file.
  - Import Excel File: Import an Excel file that contains TV mapping information and update the TV list.
- View TV information registered in LSS.
  - Click / renext to the desired header to rearrange the list in ascending or descending order.

View or manually specify the occupancy by room.

- Checked Out: The room is not occupied.
  - Check In: The room is in use (occupied).
  - Add: Add TVs to the list by manually entering TV information in the mapping table.
- Modify: Edit desired TV information.
  - **Delete**: Delete desired TV information.

### Managing TV info.

Import or export TV information and conveniently manage the information.

### **Exporting TV ID**

Export a MAC address to a computer. A MAC address identifies a TV and can be used to check a TV license. To export a TV ID, click Export TV ID Data.

• The TV\_ID.list file will be downloaded to the computer.

### Importing a TV license

- 1 To register an additional TV license, click Import TV License.
- 2 Click **Upload**, and select a license file.



- 3 To upload the license file, click **OK**.
  - To cancel uploading a license and go back to the list, click Cancel.

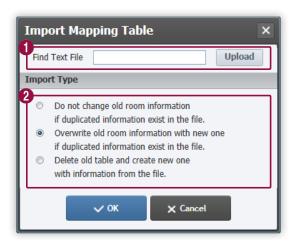
### **Exporting mapping info.**

To export mapping information as an Excel file, click Export Excel File.

• An Excel file containing mapping information will be downloaded to the computer.

#### Importing mapping info.

- 1 To import a downloaded mapping info file to LSS, click Import Excel File.
  - The mapping info file uploader window will appear.



Import a desired mapping info file.

To import a mapping info file, click **Upload** and select a file.

Select how to handle files being imported to LSS when the files contain information that already exists.

- Do not change old room information if duplicated information exist in the file: Select this mode if you do not want duplicate mapping information to be imported to LSS.
- Overwrite old room information with new one if duplicated information exist in the file: Select this mode if you want the current mapping information in LSS to overwrite the new information.
- Delete old table and create new one with information from the file: Select this mode if you want the new information to overwrite the current information in LSS.
- 2 After configuring the required settings, click **OK**.

## Managing the room occupancy

Manually configure the room occupancy settings from LSS, if required.

### **Check-in settings**

- 1 To manually change the occupancy status to checked-in mode, click **Checked Out** under **Status** for the desired room on the list.
- The check-in settings window appears. Select a language and click AddGuest.



3 The guest info input window appears. Fill in the required input fields and click **OK**.



Guest Name	Enter the guest name.
Company Name	Enter the company information of the guest.
Guest Id	Assign an ID for the guest to use during their stay at the hotel.

- 4 After adding the guest, click **OK** in the check-in settings window.
  - To cancel check-in and go back to the list, click Cancel.



Mapping tables with the occupancy status set to checked-in mode cannot be edited or deleted.

### **Check-out settings**

- 1 To manually change the occupancy status to checked-out mode, click **Checked In** for the desired room on the list.
- 2 Select a guest checkbox from the check-out settings window and click **Checkout**.
  - To add a guest, click **AddGuest**. Guests can be added using the same method used when configuring check-in settings.



## Managing mapping tables

Manage mapping tables by manually entering information on TVs in rooms.



Mapping tables with the occupancy status set to checked-out mode can only be edited or deleted. For details on check-out settings, refer to the following: 

Check-out settings

#### Adding a mapping table

- 1 To manually add a mapping table, click **Add** below the list.
- 2 Configure the settings required to add a mapping table from the displayed window.



Room Number	Enter a room number.
Softap ID	Set the tethering ID for the TV.
IP Address	Enter the IP address of the TV.
MAC Address	Enter the MAC address of the TV.
TV Type	Select a TV type from the dropdown list.

- After configuring the required settings, click **OK**.
  - To cancel adding a mapping table and go back to the list, click **Cancel**.

#### Editing a mapping table

- 1 To edit a mapping table, select an item checkbox from the list.
- 2 Click **Modify** below the list.



- 3 Edit the details, and click **OK**.
  - To cancel editing a mapping table and go back to the list, click **Cancel**.

### Deleting a mapping table

- 1 To delete a mapping table, select an item checkbox from the list.
- 2 Click **Delete** below the list.
- 3 Click **OK** in the confirmation window if you want to delete.
  - The selected mapping table will be deleted.

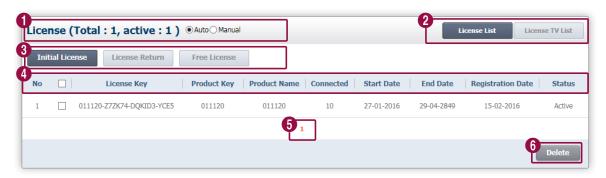
# License management

View a registered LSS license. Add a new license, if required. License registration allows a connection to TVs to be established. Connected TVs can be managed from LSS.

To use the license management function, click **License** from the menu bar at the top.

### **Managing licenses**

To view or add a license, click License > License List.



- Total: View the total number of currently registered licenses.
- active: View the total number of Active Status licenses.
- Auto/Manual: Select Auto if you want TVs recognized by LSS to be automatically connected. Select Manual if
  you want to manually connect TVs recognized by LSS by approving the connections from the License TV List
  menu.
- Note

For further details on how to approve TV connections, refer to the following: 

Approving a TV connection

- 2
- License List: Display a list of licenses registered in LSS.
- License TV List: Display a list of TVs recognized by LSS.
- Initial License: Register a license.
- License Return: Return a license.
  - Free License: Use a free license.

- License Key: View the registered license keys.
- **Product Key**: View the unique key assigned to the product.
- **Product Name**: View the product name.
- Connected: View the maximum number of TVs that can be connected using a license.

#### Note

"9999" will be displayed if the number of TVs that can be connected is unlimited.

- Start Date: View the start date to use the license.
- End Date: View the license expiration date.
- Registration Date: View the date a license was registered.
  - Status: View whether the license is active.

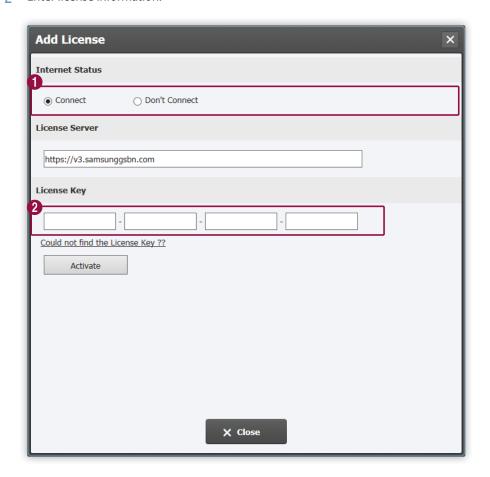
#### Note

Full and trial versions of licenses are available. The license term and the number of TVs that can be connected vary depending on the license version.

- Full version (Standard) license: The license term for the full version is unlimited. Licenses can be divided into two types: the first allows only a limited number of TVs to be connected, and the second has no restrictions and allows an unlimited number of TVs to be connected.
- Trial version (Demo) license: The license term for a trial version is limited. TVs will be disconnected once the license expires. The number of TVs that can be connected varies by license.
- 6 Click a page number to display a list of licenses on the corresponding page.
- 6 Delete: Delete a license.

#### Registering a license

- Click Initial License above the list of licenses.
  - The register license window will appear.
- 2 Enter license information.



Select your Internet environment.



#### Note

- If an Internet connection is not available, select Don't Connect and activate your license following the displayed instructions.
- To register a license offline, access the license server at https://v3.samsunggsbn.com and obtain a license activation key.
- 2 Enter the obtained license key.

- 3 Click Activate.
- 4 Click **OK** in the registration confirmation window.
- 5 A notification message appears when the license is successfully registered. Click **Close** and close the register license window.
  - The registered license will be added to the license list.
- Note

Without a registered license, it is not possible to establish connections with TVs.

#### **Returning a license**

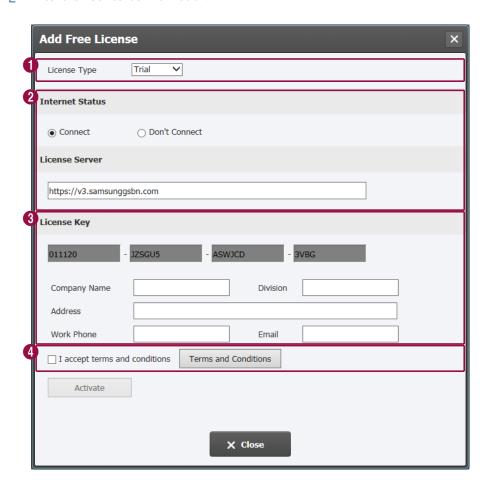
A license key used on an LSS program on a computer cannot be used on an LSS program on another computer. If an LSS program will be installed on another computer or if the program no longer needs to be used, return your license.

- Select a license checkbox to return from the list of licenses. Click **License Return** above the list of licenses.
  - The return license window will appear.
- Select your Internet environment and click Continue.
- Note
  - If an Internet connection is not available, select Don't Connect and return your license following the displayed instructions.
  - To return a license offline, access the license server at https://v3.samsunggsbn.com and enter the key to return the license.
- 3 A prompt appears requiring a confirmation to return the license. Click **OK**.
- 4 A notification window appears when the license is successfully returned. Click **OK**.

### Using a free license

Obtain a free license to use a trial version of LSS.

- 1 Click **Free License** above the list of licenses.
  - The register free license window will appear.
- 2 Enter the free license information.



Select a desired free license type.



- Trial: Access all functions provided by LSS for 30 days.
- IPTV Only: Access the IPTV channel-related menus and the function to distribute channels without time limits.

#### Select your Internet environment.

2

#### Note

- If an Internet connection is not available, select Don't Connect and activate your free license following the displayed instructions.
- To register a free license offline, access the license server at https://v3.samsunggsbn.com and obtain a license activation key.
- 3 Enter in user information for the free license.
- 4 Select the agree to terms of use checkbox. To view the terms of use in detail, click **Terms and Conditions**.
- 3 Click Activate.
- 4 Click **OK** in the registration confirmation window.
- 5 A notification message appears when the license is successfully registered. Click **Close** and close the register license window.
  - The registered license will be added to the license list.

### **Connecting TVs**

View information on TVs recognized by LSS. Approve connections for recognized TVs.

Click License > License TV List to manage connection settings with TV.

Note

For LSS to recognize TVs, first configure the LSS connection settings from the TVs. For details on TV settings, refer to the following: > TV settings



- Total: View the maximum number of TVs that can be connected using the licenses currently registered.
  - active: View the number of TVs currently connected.
- License List: Display a list of licenses registered in LSS.
  - License TV List: Display a list of TVs recognized by LSS.
  - Room Number: View the room number assigned to a TV.
  - IP Address: View the IP address assigned to a TV.
- MAC Address: View the MAC address assigned to a TV.
  - TV Type: View the type of a TV. The type of a TV depends on the widget type used on the TV.
  - Status: View whether a TV has been approved to connect to LSS.
- 4 Click a page number to display a list of TVs on the corresponding page.
- Approve: Approve the selected TV to connect to LSS.
   Unapprove: Disconnect the selected TV from LSS.

#### Approving a TV connection

If **Manual** is selected as the TV connection method in **License List**, TVs recognized by LSS need approval to connect to the program. Perform the approval process from **License TV List**.



If **Auto** is selected as the TV connection method, TVs recognized by LSS will automatically connect to the program without going through an approval process.

- 1 Click a TV checkbox from the TV list.
- Note

The approval process is only applicable to TVs that have Unapproved displayed under the Status option.

- 2 Click **Approve** below the TV list.
- 3 Click OK in the confirmation window if you want to proceed with approval.
- 4 Click OK in the confirmation window if you want to complete approval.
  - On the TV list, the **Status** mode for the TV will change to **Approved**.

#### Disconnecting a TV

To disconnect a TV from LSS, cancel the TV connection approval.

- 1 Click a TV checkbox from the TV list.
- Note

The disconnection process is only applicable to TVs that have **Approved** displayed under the **Status** option.

- 2 Click **Unapprove** below the TV list.
- 3 Click **OK** in the confirmation window if you want to proceed with disconnection.
- 4 Click **OK** in the confirmation window if you want to complete disconnection.
  - On the TV list, the **Status** mode for the TV will change to **Unapproved**.

# TV management

Manage IPTV channels, messages, TV widget info, remote control features and TV firmware.

Click TV Management from the menu bar at the top.

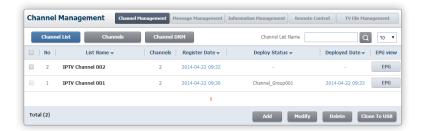
## **Managing IPTV channel groups**

Add or edit IPTV channel groups.

Click TV Management > Channel Management > Channel List to manage IPTV channel groups.

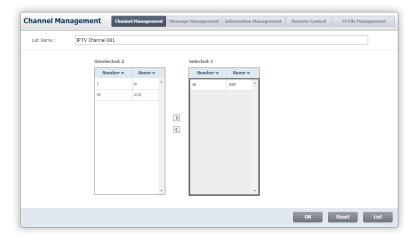


To add an IPTV channel group, first add IPTV channel information to LSS. For details on adding IPTV channel information, refer to the following: Adding IPTV channel info.



### Adding an IPTV channel group

To add an IPTV channel group, click Add below the list.



- 2 Enter an IPTV channel group name.
- 3 Select IPTV channels displayed under Unselected. Click ...
  - − To return an IPTV channel to the Unselected list, select an IPTV channel under Selected and click <</p>
- 4 After configuring the required settings, click **OK**.
  - To reset the settings, click **Reset**.
  - To cancel adding a group and go back to the list, click List.

#### **Editing an IPTV channel group**

- Select a group checkbox from the list. Click **Modify**.
  - An alternative way to edit a group is to select a group name from the list.
  - An IPTV channel group can be edited using the same method used when adding a group.
- 2 Click **OK** to save the changes.
  - To restore the previous settings, click Reset.
  - To cancel editing a group and go back to the list, click List.

#### Deleting an IPTV channel group

- 1 Select a group checkbox from the list. Click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected IPTV channel group will be deleted.

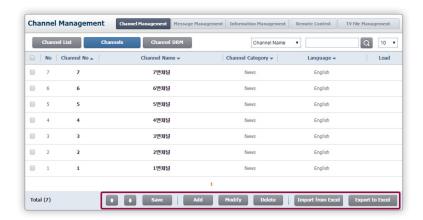
### Saving IPTV channel group info to USB

- 1 Select a group checkbox from the list. Click **Clone To USB**.
- When the select USB window appears, set the destination folder.
  - Information about the selected IPTV channel group will be saved as a zipped file.

## Managing IPTV channel info.

Add or manage IPTV channel information in LSS.

Click TV Management > Channel Management > Channels to manage IPTV Channel information.



<b>*</b> / <b>*</b>	Swap the selected channel number with the channel above or below it.
Save	Save updated information of a changed channel number.
Add	Add IPTV channel information.
Modify	Edit previously added IPTV channel information.
Delete	Delete IPTV channel information.
Import from Excel	Import IPTV channel information from an Excel file that was previously exported.
Export to Excel	Export all information about IPTV channels as an Excel file.

### Adding IPTV channel info.

- 1 To add IPTV channel information, click **Add** below the list.
- 2 Fill in the input fields required to enter IPTV channel information from the displayed window.



Channel Number	Enter an IPTV channel number that is selectable from TVs in rooms.
Channel Name	Enter an IPTV channel name.
Channel IP	Enter the IP address of the IPTV channel.
Channel Port	Enter the port number of the IPTV channel.
Channel Category	Specify the IPTV channel category using the dropdown list.
Channel Language	Specify the IPTV channel language using the dropdown list.
Audio Delay	If the audio is out of sync with the video, specify an Audio Delay value to sync them.  Note  Audio Delay can be filled in with an integer within a range of 0-500 (unit: 1/1000 seconds).
Channel Payment	Select whether to provide the IPTV channel for free or for a charge.
Select EPG	Import EPG info for the IPTV channel.  For details on EPG info, refer to the following:  Creating EPG data

- 3 After entering the required information, click **OK**.
  - To cancel adding a channel and go back to the list, click Cancel.

#### Editing IPTV channel info.

- 1 To edit IPTV channel information, select an IPTV channel checkbox from the list and click **Modify**.
  - An alternative way to edit IPTV channel information is to select an IPTV channel name or number from the list.
- 2 Click **OK** to save the changes.
  - To cancel editing a mapping table and go back to the list, click **Cancel**.

### Deleting IPTV channel info.

- 1 To delete IPTV channel information, select an IPTV channel checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected IPTV channel information will be deleted.

## Managing IPTV channel DRM

- 1 To configure the DRM settings for IPTV channels, click **TV Management > Channel Management > Channel DRM**.
- 2 Fill in the input fields required to add DRM information in the displayed window.



COMPANY NAME	Enter the DRM provider name.
DRM TYPE	Select a DRM type.  Note  LSS defaults to Verimatrix VCAS DRM and Samsung SCAS DRM. These are suitable for Hotel Smart TV service. IP Pro:idiom is also supported on TVs from the NC690 and NC890 series released in the U.S. in 2014.
DRM IP	Enter the DRM IP.

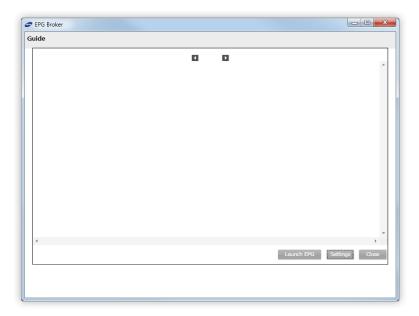
- 3 After entering the required details, click **OK**.
  - The IPTV channel DRM information will be saved.
- **Note**

**DRM** (Digital Rights Management) refers to a technology that restricts the use of distributed content which is controlled by the copyright owner.

#### **Creating EPG data**

Create data consisting of information on configuring programs to use on IPTV. Using the provided basic data, conveniently configure and use the program information.

- Run EPG Broker, which was installed along with the LSS program.
- 2 Click **Settings** from the EPG Broker window.



- 3 Enter EPG environment info and click Save.
  - Entering the provided environment info allows you to use basic data.
  - After the provided environment info is entered, basic data will be displayed in the EPG Broker window and saved as an XML file.

Zip Code	Select a country from the dropdown list and specify a zip code. To use basic data, select <b>United States</b> and set the zip code to <b>73167</b> .
Provider	Select the provider from the dropdown list. To use basic data, select 321045.
Update	Select an update cycle from the dropdown list. To use basic data, select Every 1 Day.
File Location	Set the destination folder to save EPG data. To use basic data, set the destination folder to C:\HotelTV\htdocs\data\epgxml.

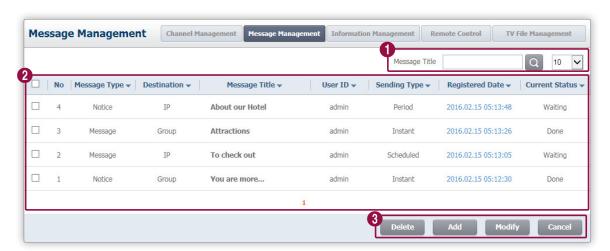
- The example path above assumes the LSS program is installed on the C drive. The path can vary depending on the drive where the program is installed.
- 4 Check to see that all the information is correctly entered and click **Close**.
- Note

To edit data, edit C:\HotelTV\htdocs\data\epgxml\Samsung\_epg.xml and load data to EPG Broker again.

### **Managing messages**

Efficiently manage messages to be distributed to hotel guests.

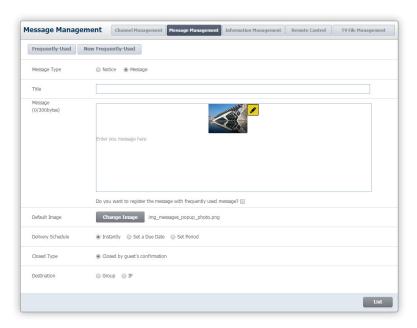
Click TV Management > Message Management to manage messages.



- Search for a message title. Specify the maximum number of messages to be displayed in a list.
- View message details. Click / mext to the desired header to rearrange the list in ascending or descending order.
  - **Delete**: Delete the selected message from the list. If the message is scheduled for distribution, you must cancel distribution first.
- Add: Create a new message.
  - Modify: Edit a message scheduled for distribution.
  - Cancel: Cancel distribution of a scheduled message.

### **Adding messages**

- 1 To add a message to be distributed to hotel guests, click **Add** below the list.
- 2 Fill in the input fields required to add a message in the displayed page.



Frequently-Used	Select a frequently-used message.
New Frequently-Used	Add a frequently-used message.
Message Type	<ul> <li>Notice: Select this mode if you want messages to be distributed as pop-ups on the main page and saved in the message box.</li> <li>Message: Select this mode if you want to distribute messages to the message box or attach images.</li> </ul>
Title	Enter a message title.
Message	Enter the content of the message.  Click the Do you want to register the message with frequently used message? checkbox if you want to add the entered message title and content to the list of frequently-used messages.  Note  A message up to 90 bytes can be transmitted.  When the message type is set to Message, you can view attached images as thumbnails. To change an attached image, click
Default Image	Attach an image to a message. To change an attached image, click <b>Change Image</b> .  Note  This feature is only available when the message type is set to Message.

	<ul> <li>Instantly: Select if you want to send a message immediately.</li> </ul>
	<ul> <li>Set a Due Date: Select if you want to distribute a message at a specified date and time.</li> </ul>
Delivery Schedule	Set Period: Distribute a message for a specified period.
	Note
	Setting items to schedule a message distribution will appear if <b>Set a Due Date</b> is selected. Select a date and time.
	<ul> <li>Closed by guest's confirmation: Select if you want a distributed message to be removed from the screen after a guest reads the message.</li> </ul>
	<ul> <li>Closed automatically after: Select if you want a message to be automatically removed after displaying on the TV screen for a specified time.</li> </ul>
Closed Type	Note
	<ul> <li>A dropdown list used to specify the message display duration will appear if Closed automatically after is selected. Specify the display duration.</li> </ul>
	<ul> <li>If Message Type is set to Message, ClosedType is automatically set to Closed by guest's confirmation and cannot be changed.</li> </ul>
	Group: Select if you want to distribute a message by TV management group.
	<ul> <li>IP: Select if you want to distribute a message to specific TVs.</li> </ul>
Destination	
	To distribute a message by group, first register a TV management group in LSS. For details on TV management groups, refer to the following:  Managing TV management groups

- After configuring the required settings, click **OK**.
  - To reset the settings, click **Reset**.
  - To cancel creating a message and go back to the list, click **List**.

### Editing a scheduled message

- 1 To edit a scheduled message before distributing it, select a message checkbox from the list and click **Modify**.
- 2 A message can be edited using the same method used when adding a message. Click **OK** to save the changes.
  - To restore the previous settings, click Reset.
  - To cancel editing a message and go back to the list, click Cancel.
- Note

It is not possible to edit a message set to be distributed immediately.

#### Canceling a message distribution schedule

- 1 To cancel a scheduled message before distributing it, select a message checkbox from the list and click Cancel.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected message distribution schedule will be deleted.

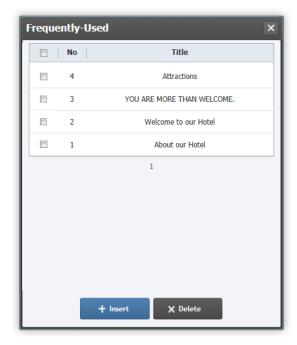


It is not possible to cancel distribution of a message set to be distributed immediately.

### Using frequently-used messages

Conveniently create a message using frequently-used messages.

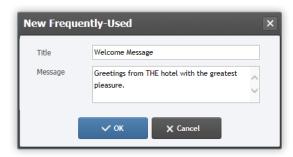
- 1 To use a frequently-used message, click **Frequently-Used** in the message creation page.
- 2 Select a message checkbox, and click **Insert**.



3 To delete a message from the list of frequently-used messages, select a message checkbox and click **Delete**.

### Adding frequently-used messages

- 1 To add a frequently-used message, click **New Frequently-Used** in the message creation page.
- 2 Enter a message title and content required to add a frequently-used message in the displayed window.

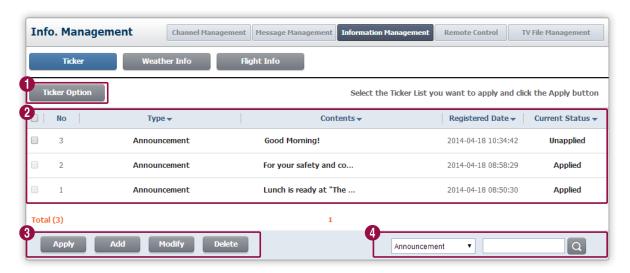


- 3 After entering the required information, click **OK**.
  - To view an added message, click **Frequently-Used** in the message creation page.

## Managing ticker messages

Ticker messages refer to messages displayed at the bottom of a TV screen. Add or edit a ticker message to send while watching IPTV.

To manage ticker messages, click TV Management > Information Management > Ticker.



1 Configure ticker message settings.

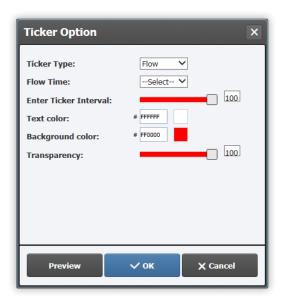
Ticker messages are listed. Click / heat to the desired header to rearrange content files in ascending or descending order.

- Type: The ticker message type is shown.
- Contents: The content of the ticker message is shown.
  - Registered Date: The date the ticker message was created is shown.
  - Current Status: The ticker message status is shown. Unapplied is displayed if a ticker message has not been sent. Applied is displayed if a message has been sent.
  - Apply: Send a ticker message.
  - Add: Create a new ticker message.
  - Modify: Edit a ticker message.
  - Delete: Delete a ticker message.
- 4 Search ticker messages.

### Ticker message settings

Configure ticker message settings such as the background, text size and color.

- 1 Click **Ticker Option** above the list of ticker messages.
- 2 From the settings window, configure settings using the following options and click **OK**.
  - To preview configured settings, click **Preview**.

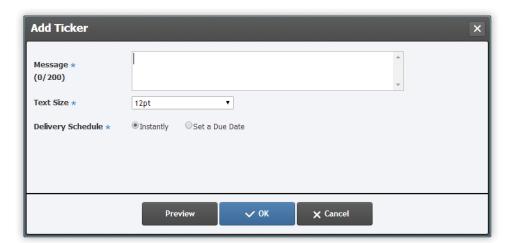


Ticker Type	<ul> <li>Select a ticker message type.</li> <li>Fixed: Display a fixed message at the bottom of the TV screen.</li> <li>Flow: Display a scrolling message at the bottom of the TV screen.</li> </ul>
Flow Time	Set the scroll speed of the ticker message.  Note  This feature is only available when the ticker message type is set to Flow.
Enter Ticker Interval	Set the time interval between ticker messages when displaying multiple messages.
Text color	Set the text color of the ticker message.
Background color	Set the background color of the ticker message.
Transparency	Adjust the transparency of the ticker message.

### Adding ticker messages

Create and save a ticker message to the list of ticker messages as a message waiting to be sent.

- 1 To add a ticker message, click **Add** below the list.
  - The add ticker message window will appear.
- 2 Enter ticker message info and click **OK**.
  - To preview a new ticker message, click **Preview**.



Message	Type the content of the message to send.
Text Size	Set the text size.
Delivery Schedule	<ul> <li>Specify when to send the message.</li> <li>Instantly: Send the message immediately.</li> <li>Set a Due Date: Send the message at a specified time. Set the date and time to send the message.</li> </ul>

- 3 Click **OK** to save the settings.
  - The created ticker message will be added to the list.

#### Sending ticker messages

Send a ticker message that is waiting to be sent.

- Select the checkbox of a message to send from the list of ticker messages.
- 2 Click **Apply** below the list.
- 3 Click **OK** to confirm the transmission.
  - The ticker message will be sent to the room TVs where IPTV is being viewed.

#### **Editing ticker messages**

Edit a ticker message that is waiting to be sent.

- Select the checkbox of a message to edit from the list of ticker messages.
- 2 Click **Modify** below the list.
- 3 Edit the message using the edit message window. A message can be edited using the same method used when creating a message.

#### **Deleting ticker messages**

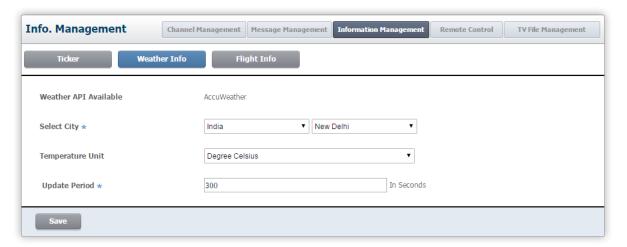
Delete a ticker message that is waiting to be sent.

- Select the checkbox of a message to delete from the list of ticker messages.
- Click Delete below the list.
- 3 Click **OK** to confirm the deletion.
  - The ticker message will be removed from the list.

# Weather info settings

Weather info displayed on room TVs is transmitted in real time from the AccuWeather website. Select a country and city to display weather info. Set the info update cycle.

- 1 To configure weather info settings, click **TV Management > Information Management > Weather Info**.
- Configure the required settings and click Save.



Weather API Available	The website to import weather info from is shown.
Select City	Set the country and city to display weather info.
Temperature Unit	Temperature unit is shown.
Update Period	Set the info update cycle.

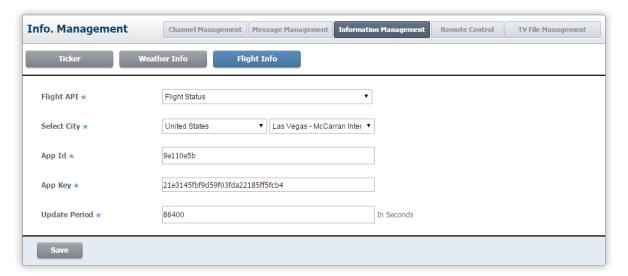
# Flight info settings

Flight info displayed on room TVs is transmitted in real time from the Flight Status website. Select a country and city to display flight info. Set info used to sign up on the Flight Status website. Specify the info update cycle.



To use information from the Flight Status website, sign up for the website. For further information, refer to the following: Signing up for the Flight Info website

- 1 To configure weather info settings, click **TV Management > Information Management > Flight Info**.
- 2 Configure the required settings and click **Save**.



Flight API	The website to import flight info from is shown.
Select City	Set the country and city to display flight info.
App Id	Enter your app ID obtained when you signed up on flightstats.com.
Арр Кеу	Enter your app key obtained when you signed up on flightstats.com.
Update Period	Set the info update cycle.

### Signing up for the Flight Info website

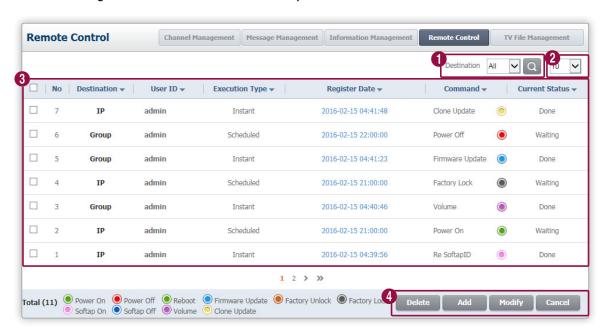
LYNK SINC 3.0 sends flight info from flightstats.com to room TVs. To use flight info, sign up at flightstats.com and obtain an app ID and key.

- 1 Access https://developer.flightstats.com/.
- 2 Click **Register** at the top right of the screen.
- 3 Enter membership info required to sign up. Make sure to set **Product Interest** to **API Services**.
- 4 After entering the required information, click **Sign up**.
  - An email confirming your sign-up will be sent to the personal email address you entered in your membership info.
- 5 Access your personal email and go to the address linked to the sign-up confirmation email.
- from the displayed page, log in using the ID and password you entered in your membership info.
- 7 After logging in, click **Dashboard** at the top right of the screen.
  - You can view information on your account that you signed up.
- 8 Click **View** in the account info page.
  - You can view your app ID and key.

# Remotely controlling TVs

Remotely control TVs registered in LSS.

Click TV Management > Remote Control to remotely control TVs.



- Select **Group** or **IP** to sort the targets that are remotely controlled.
- 2 Select a number to specify the maximum number of items to be displayed in the list.

View details on remote control commands. Remote control commands refer to commands used to remotely control

- 3 IVs.
  Click ▼ / ▼ next to the desired header to rearrange content files in ascending or descending order.
  - **Delete**: Delete the selected remote control command from the list. If the remote control command is scheduled, you must cancel the scheduled remote control command first.
  - Add: Add a remote control command.
    - Modify: Edit a scheduled remote control command.
    - Cancel: Cancel a scheduled remote control command.

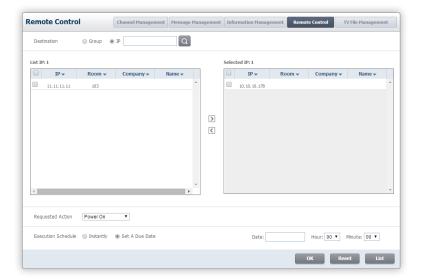
### Adding a remote control command

Remotely control TVs in rooms using LSS. Note that it is only possible to remotely control TVs released in 2013 when the TVs are turned on or the **Virtual Standby** function is active.

#### Note

The Virtual Standby function only turns off the TV panel without turning off the main power of a TV set.

- 1 To add a remote control command, click **Add** below the list.
- 2 Configure the settings required to add a remote control command from the displayed window.



#### Destination

- Group: Select if you want to send a remote control command to a TV group. Select a group from the list, and click ...
- IP: Select if you want to send a remote control command to specific TVs.
   Select the IP addresses of desired TVs from the list. Click .

#### **Note**

To distribute a message by group, first register a TV management group in LSS. For details on TV management groups, refer to the following:

Managing TV management groups

Requested Action	<ul> <li>Power On: Select if you want to turn on TVs.</li> </ul>
	<ul> <li>Power Off: Select if you want to turn off TVs.</li> </ul>
	• <b>Firmware Update</b> : Update the TV to a TV firmware registered in LSS.
	• Clone Update: Update TV configuration to TV configuration files registered in LSS.
	<ul> <li>Reboot: Select if you want to restart TVs.</li> </ul>
	<ul> <li>Factory Unlock: Set the feature to be accessible from any country.</li> </ul>
	• Factory Lock: Set the feature to be accessible only from specified countries.
	<ul> <li>Volume: Select if you want to adjust the sound volume of TVs.</li> </ul>
	Softap On: Enable the tethering feature.
	<ul> <li>Softap Off: Disable the tethering feature.</li> </ul>
	<ul> <li>Note</li> <li>Firmware updates take place as soon as a TV begins to turn off. The update will take between 5-15 minutes. Controlling the power to a TV while the firmware is being updated may cancel the update.</li> <li>If you turn on Clone Update, there is an automatic update when the TV turns off after a remote control command is transmitted.</li> </ul>
	<ul> <li>A volume control menu item will appear if Volume is selected. Select a value within the range of 0-100.</li> </ul>
Execution Schedule	• Instantly: Select if you want to send a remote control command immediately.
	<ul> <li>Set A Due Date: Select if you want to send a remote control command on a specified date.</li> </ul>
	Note
	Setting items to schedule a message distribution will appear if <b>Set A Due Date</b> is selected. Enter a date and time.

- 3 After configuring the required settings, click **OK**.
  - To reset the settings, click **Reset**.
  - To cancel adding a remote control command and go back to the list, click **List**.

# Deleting a remote control command from the list

- 1 To delete a remote control command from the list, select a control command and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected remote control command is deleted from the list.

#### Note

- To delete a scheduled remote control command, you must cancel the scheduled event first.
- It is not possible to delete a remote control command that was already transmitted.

### Editing a remote control command

- To edit a remote control command scheduled for transmission, select a control command checkbox from the list and click Modify.
- Click OK to save the changes.
  - To restore the previous settings, click **Reset**.
  - To cancel editing a remote control command and go back to the list, click List.

#### **Note**

It is not possible to edit a remote control command that has already been transmitted.

### Canceling a remote control schedule

- To cancel a remote control schedule, select a control command checkbox from the list and click Cancel.
- When the deletion confirmation dialog box appears, click
  - The scheduled remote control event that has been selected is canceled.

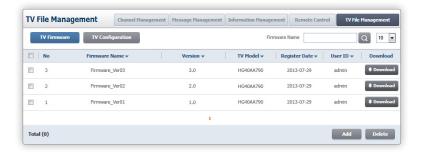
#### **Note**

It is not possible to cancel a remote control command that was already transmitted.

# Managing TV firmware

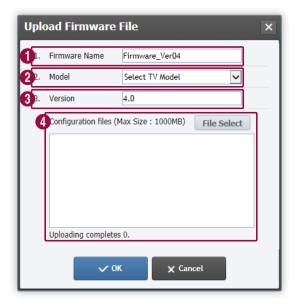
Register and manage TV firmware in LSS.

Click TV Management > TV File Management > TV Firmware to manage TV firmware.



### **Adding TV firmware**

- To add TV firmware, click **Add** below the list.
- 2 Configure the settings required to add TV firmware from the displayed window.



- 1 Enter the name of firmware.
- 2 Select a TV model from the dropdown list.

3 Enter the version of firmware.

Upload a firmware file.

Click File Select, and select a firmware file.

- 4
- To upload a zipped firmware file, unzip the file to the desired folder and then upload the upgrade.msd file to the folder.
- Note

A firmware file up to 1GB can be uploaded.

- 3 After configuring the required settings, click **OK**.
  - To cancel uploading a firmware, click Cancel.
- Note

Uploaded firmware can be distributed to TVs using the TV remote controlling function. For details on remotely controlling TVs, refer to the following: 

Adding a remote control command

### **Deleting TV firmware**

- To delete TV firmware, select a firmware checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected TV firmware will be deleted.

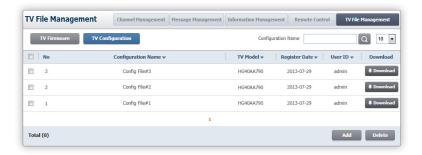
### **Downloading TV firmaware information**

- 1 To download TV firmware information registered in LSS to a computer, click **Download** for the desired firmware on the list.
- 2 Select a destination folder, and click **OK**.
  - A memo pad file containing the selected TV firmware information will be downloaded.

# Managing TV configuration files

Add and manage TV configuration files in LSS.

Click TV Management > TV File Management > TV Configuration to manage TV configuration files.



### Adding TV configuration files

- 1 To add a TV configuration file, click **Add** below the list.
- 2 Configure the settings required to add a TV configuration file from the displayed window.



1 Enter a configuration name.

Select a TV model from the dropdown list.

Upload a configuration file.

Click File Select, and select a configuration file.

3

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A configuration file up to 1GB can be uploaded.

Upload a booting logo.

Click **Upload**, and select a booting logo.

- Note
  - An image file up to 2MB can be uploaded.
  - The booting logo image file name is Samsung.bmp.
  - A booting logo image file with the resolution of 1280X720 is recommended.
- 3 After configuring the required settings, click **OK**.
  - To cancel adding a configuration file and go back to the list, click Cancel.

### Checking the result of TV configuration file distribution

A configuration file is distributed successfully to TVs via a remote control command in the Remote Control menu if the TVs are the same model. Check to ensure that TV configuration files have been distributed successfully, using the steps below:



For details on remote control commands in Remote Control, refer to the following: Remotely controlling TVs

- Go to C:\HotelTV\htdocs\bin\logs\sdap. The folder is created on the C drive during LSS installation.
  - Assume that the path to the HOTELTV folder is the C drive.
- Open the sdap.log-2013-08-29.txt file.
  - The date in the log file name may vary depending on the user.
- 3 If TV configuration files are distributed successfully, the following information appears in the log file.
  - The date, firmware version and LSS IP address shown in the information may vary depending on the user.

#### When a command to distribute TV settings is sent from LSS

SERVER 1600 SYSTEM CLONE URL=http://200.200.100.100:444/data/firm/firmware/23/clonefile\_url.txt CLONEVERSION=20130829094728 ACK=YES

#### When a remote control command for TV configuration is received

CLIENT 100 SYSTEM CLONE RESULT=SUCCESS REASON=READY MAC=aa:aa:aa:aa:aa:aa:aa

#### When TV configuration is duplicated successfully with the TV turned off

#### When TV information updates

#### Deleting a TV configuration file

- To delete a TV configuration file, select a file checkbox from the list and click Delete.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected configuration file will be deleted.

### **Downloading TV configuration files information**

- To download a TV configuration file information saved in LSS to a computer, click **Download** for the desired file on the list.
- Select a destination folder, and click OK.
  - A memo pad file containing the selected TV configuration file information will be downloaded.

# Administrator menu

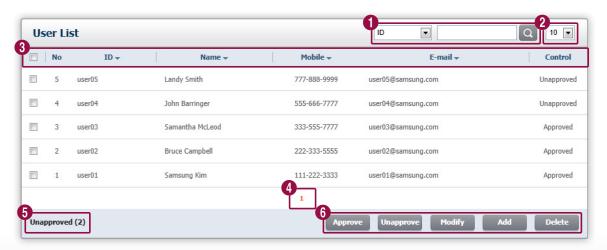
To add or delete a general administrator, or to edit information on a general administrator, click **Admin** from the menu bar at the top.



The Admin menu is accessible to the super administrator only.

LSS users are classified as super administrators and general administrators.

- Super administrator: This is an account (admin) provided by default when LSS is installed. Users with this user account can access all LSS menus and create a super administrator account for another user.
- General administrator: This is an administrator account added by the super administrator from the **Admin** menu. The **Admin** and **Setup** menu items do not appear when a general administrator is logged in.



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Search users by ID, name or approval status (approved/unapproved).

- Specify the number of users displayed on each user list page.
  - **ID**: View a user ID.
  - Name: View a user name.
- Mobile: View the cell phone number of a user.
  - E-mail: View the email address of a user.
  - Control: View whether a user has been approved by the super administrator to use LSS.
- 4 Click a page number to display a list of users on the corresponding page.
- Wiew the number of users currently not approved on the user list.
  - Approve: Approve the selected user to use LSS.
  - **Unapprove**: Cancel the approval to use LSS for the selected user.
- Modify: Edit information on the selected user.
  - Add: Add a user.
  - Delete: Delete the selected user.

#### **Note**

Sort users by the criterion including ID or name on the user list in ascending or descending order, using ▼/▲ next to the desired criterion.

# Approving a user

For a general administrator to use LSS, approval from the super administrator is required.

- 1 Click a user checkbox from the user list.
- Note

The approval process is only applicable to users that have **Unapproved** displayed under the **Control** option.

- Click Approve below the user list.
- 3 Click OK in the approval confirmation window.
  - On the user list, the **Control** mode for the user will change to **Approved**.

# Canceling approval for a user

Cancel the approval for a user to prevent the user from using LSS, if required.

1 Click a user checkbox from the user list.



The process to cancel approval is only applicable to users that have Approved displayed under the Control option.

- 2 Click **Unapprove** below the user list.
- 3 Click **OK** in the confirmation window if you want to cancel approval.
  - On the user list, the **Control** item for the ID changes to **Unapproved**.

# Editing user info.

Edit user information, if required.

- 1 Click a user checkbox from the user list.
- 2 Click **Modify** below the user list.
- 3 Edit information as desired in the displayed page.
- Note
  - An alternative way to edit user information is to click a user ID or name from the user list.
  - Fields with \* cannot be left blank.
- 4 Click **OK** to save the changes.
  - You will be redirected to the user list page. The corresponding user information has been changed in the user list.
  - To cancel editing user information and go back to the list, click **Cancel**.

# Adding a user

Add a super administrator or general administrator.

- 1 Click **Add** below the user list.
- 2 Enter the user information in the user account creation page.
- Note

Fields with \* cannot be left blank.

- 3 After entering the required information, click **Add**.
  - You will be redirected to the user list page. The corresponding user has been added in the user list.
  - To cancel adding a user and go back to the list, click Cancel.

# **Deleting a user**

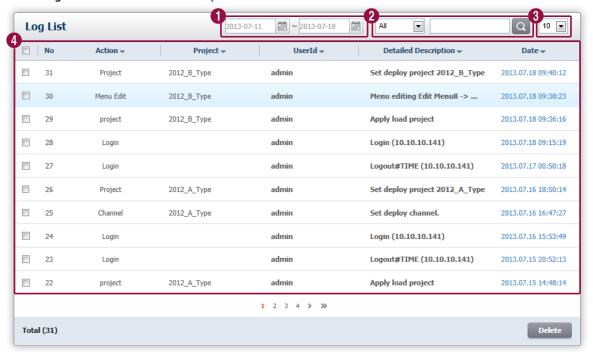
Delete a super administrator or general administrator.

- 1 Click a user checkbox from the user list.
- 7 Click **Delete** below the user list.
- 3 Click **OK** in the confirmation window if you want to delete.
  - The corresponding user has been deleted in the user list.

# Log management

Briefly view the connection and service records in LSS.

Click **Log** from the menu bar at the top.



1 Click above the list to display logs generated in a specified period.

Search logs.

- Select **All**, **User ID** or **Project** from the dropdown list to specify the search criterion. Enter a keyword in the search box.
- Select a number from the dropdown list to specify the maximum number of logs to be displayed in the list.
- View log details.
  - Click  $\blacktriangle$  /  $\blacktriangledown$  next to the desired header to rearrange content files in ascending or descending order.

# **Deleting a log**

- 1 To delete a log, select a log checkbox from the list and click **Delete**.
- 2 Click **OK** in the confirmation window if you want to delete.
  - The selected log will be deleted.

# **Settings**

Configure basic settings to use LSS including the menu language.

Click Setup from the menu bar at the top.



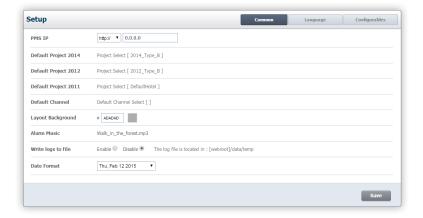
The **Setup** menu is accessible to the super administrator only.

LSS users are classified as super administrators and general administrators.

- Super administrator: This is an account (admin) provided by default when LSS is installed. Users with this user account can access all LSS menus and create a super administrator account for another user.
- General administrator: This is an administrator account added by the super administrator from the **Admin** menu. The **Admin** and **Setup** menu items do not appear when a general administrator is logged in.

# **Basic settings for LSS**

- 1 To configure basic settings for LSS, click **Setup > Common**.
- 2 Configure the basic settings.



PMS IP	Enter the IP address of the PMS that will be connected to LSS.
	Note
	PMS (Property Management System) refers to a hotel room management system. The system connects to LSS to provide necessary information for hotel room management.
Default Project 2014	To select a default project to be distributed to TVs released in 2014 and after, click <b>Project Select</b> , select a project, and then click <b>Default</b> .
	Note
	The specified default project will be displayed on TVs that do not have a project.

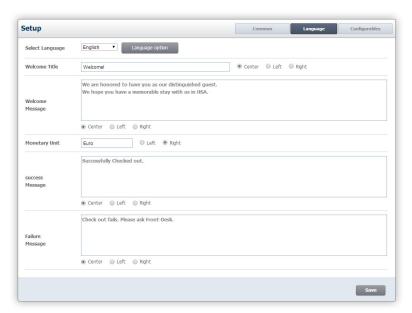
Default Project 2012	To specify the default project to be distributed to TVs released in 2012 or 2013, click Project Select. Select a project, and click Default.  Note  The specified default project will be displayed on TVs that do not have a project.
Default Project 2011	To specify the default project to be distributed to TVs released in 2011, click <b>Project Select</b> . Select a project, and click <b>Default</b> .
Default Channel	Specify default channels to distribute. Click <b>Default Channel Select</b> , select channels and then click <b>Default</b> .
Layout Background	Specify the LSS background color by entering an HTML color code or by clicking the color palette and selecting a color.
Alarm Music	Add music files to use on alarms.
Write logs to file	<ul> <li>Save communication details between TV widgets, LSS and PMS as a file.</li> <li>Enable: Select if you want to enable the function that saves communication detail to a file.</li> <li>Disable: Select if you want to disable the function that saves communication details to a file.</li> <li>Note  A log saved as a file will be stored for 90 days.</li> </ul>
Date Format	Select a format to display dates.

<sup>3</sup> After configuring the required settings, click **Save**.

# Language settings

Specify the language used to edit projects and the TV widget menu language.

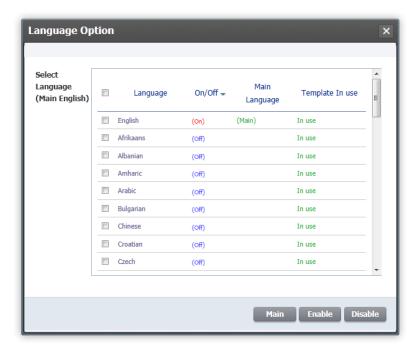
Click **Setup > Language** to specify the language.



### Activating a menu language

To select a language to use to configure TV widgets or projects, first activate the language from LSS.

- 1 Click Language Option.
- 2 Select a language checkbox, and click **Enable**.
  - An active language will display **On** in the list.
  - An active language can be selected from the TV widget settings menu.

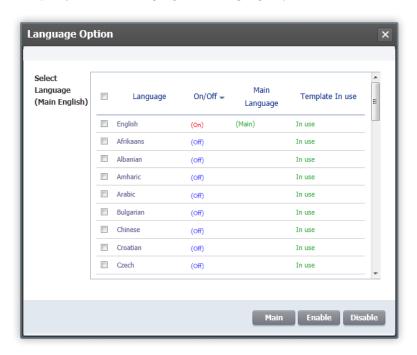


- 3 To deactivate a language, select a language checkbox and click **Disable**.
  - Languages that are not active will display **Off** in the list.
- 4 To save the changes, click **Save**.
  - Languages available to be used to edit pages will display In use.

### Specifying the default language used to edit menu pages

Default edit language can only be used to configure images in a menu page. The default edit language is set to ensure consistency when editing and designing menu pages for each language.

1 To specify the default language, click Language Option.



- Select a language checkbox, and click Main.
  - The default language used to edit pages will be updated to the selected language.
- 3 To save the changes, click **Save**.

### Changing the menu language

To change the language used to configure TV widgets or projects, select a language from the dropdown list under **Select Language**.

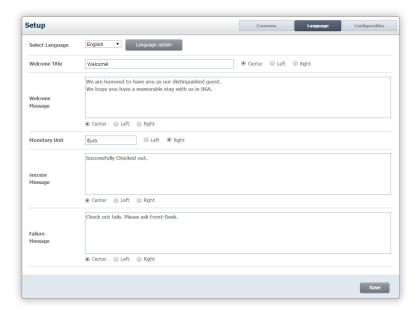


- Projects edited from LSS are managed by language. If English is selected, the content language of all pages in a project will change to English.

  Any changes will be saved to pages in English.
- To edit a page using a desired language, change the language setting.

# Managing welcome messages

Manage welcome messages to be displayed on the TV widget by language. To manage welcome messages by language, select a language from the **Select Language** dropdown list.



### Welcome message title settings

- Enter a welcome message title in the Welcome Title field.
  - A welcome message title can be up to 30 characters long.
- Select a location to display the title from Center/Left/Right.
- 3 To save the changes, click Save.

### Welcome message content settings

- Enter the content of a welcome message in the Welcome Message field.
  - The content of a welcome message can be up to 500 characters long.
- 2 Select a location to display the message from **Center/Left/Right**.
- 3 To save the changes, click Save.

### **Currency unit settings**

- To specify the currency unit to be displayed on Express checkout bills, select a language from the Select Language dropdown list.
- 2 Enter a unit in the **Monetary Unit** field.
- 3 Select a location to display the unit from Left/Right.
- 4 To save the changes, click **Save**.

# **Managing Express checkout messages**

Manage Express checkout result messages for guests by language. To manage Express checkout messages by language, select a language from the **Select Language** dropdown list.

#### **Check-out success message settings**

- 1 To specify the message to be displayed on TVs when Express checkout is successful, enter a message in the **success Message** field.
- 2 Select a location to display the message from Center/Left/Right.
- 3 To save the changes, click **Save**.

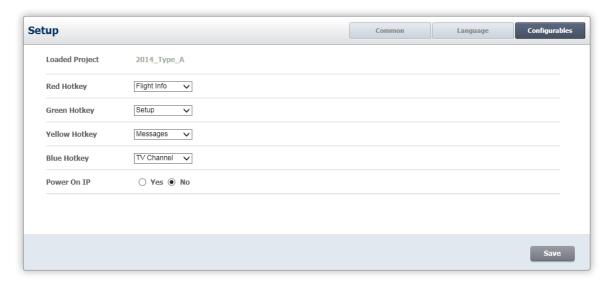
### Check-out failure message settings

- 1 To specify the message to be displayed on TVs when Express checkout fails, enter a message in the Failure Message field.
- 2 Select a location to display the message from **Center/Left/Right**.
- 3 To save the changes, click **Save**.

# Special feature settings for 2014 widgets

Set the remote control hot key feature and the select channel feature. These features are provided only to 2014 widgets.

- To set special features provided to 2014 widgets, click **Setup > Configurables**.
- 2 Fill in the required input fields and click **Save**.



Loaded Project	View the widget type currently loaded.
Red Hotkey	Set the feature to run when the red button is pressed on the remote control.
Green Hotkey	Set the feature to run when the green button is pressed on the remote control.
Yellow Hotkey	Set the feature to run when the yellow button is pressed on the remote control.
Blue Hotkey	Set the feature to run when the blue button is pressed on the remote control.
Power On IP	<ul> <li>Yes: Set the IPTV channel info to be displayed as the first page when a room TV is turned on.</li> </ul>
	• <b>No</b> : Set the main page of the selected widget type to be displayed as the first page when a room TV is turned on.

# Monitoring

To view the TV network status and the room occupancy status, click **Monitoring** from the menu bar at the top.

• The Monitoring window will appear.



- Specify the monitoring update cycle using the dropdown list.
  - The default cycle is set to Auto.
- View the last monitoring update time. Click **Stop** if you want to stop monitoring.
- 3 View the room number, network status and check-in status for a TV connected to LSS.

If monitoring update has not been performed properly, click Sync to manually sync with PMS.

Note

PMS (Property Management System) refers to a hotel room management system. The system connects to LSS to provide necessary information for hotel room management.

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# TV settings

To connect and manage a TV from LSS, first configure the TV settings. Configure the TV settings following the instructions below:



The menu names, pages, or paths may vary depending on the TV model.

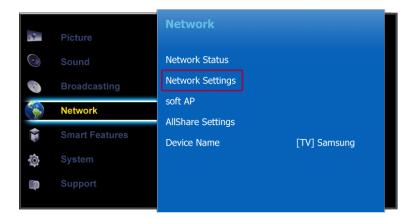
# TV network settings

To connect a TV to LSS, make sure to configure the TV network settings.

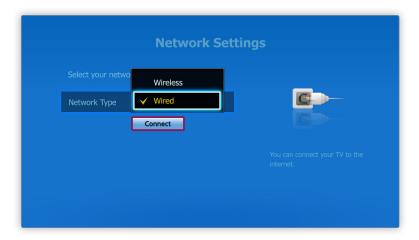
- 1 Turn on the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 3 Select Network > Network Setup from the TV default settings menu.



Select **Network > Network Settings** from the displayed network settings menu.



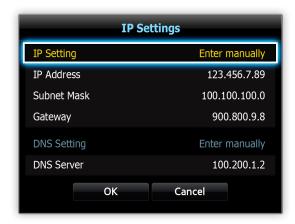
From the network settings page, select a network type (wired/wireless) and click **Connect**.



- 6 Select IP Settings from the displayed network connection information page.
  - The IP settings page will appear.

- 7 From the IP settings page, specify the IP settings including the TV IP address and subnet mask.
  - Select Obtain automatically from IP Setting if you want the IP settings to be configured automatically. Select Enter manually if you want to configure the IP settings manually.
- Note

It is recommended to select **Enter manually** from **IP Setting** and manually configure the IP settings using a desired IP address.

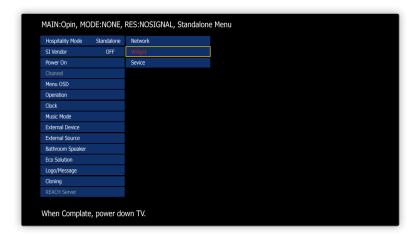


- 8 Select **OK** to save the configured IP settings.
  - The TV network settings are complete.

# LSS IP settings required to connect TVs

After configuring the TV network settings, configure the LSS settings to enable LSS to recognize the TV. After configuring the connection settings, it is possible to manage a TV after TV connection approval from LSS.

- 1 Turn on the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 3 Select Widget > License Server IP Setting from the TV default settings menu.



4 In the displayed LSS IP settings page, enter the LSS IP address to be connected to the TV. Set the port number to 444.



- 5 Select **Enter** to save the configured IP settings.
  - The LSS settings from the TV are complete. LSS can recognize the TV now.

# LSS IP settings required to distribute projects

Configure the LSS connection settings. Connection settings are required to distribute projects (widgets), IPTV channel groups or messages from LSS to TVs.

- 1 Turn on the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 3 Select **Widget** from the TV default settings menu.



- 4 Configure the following settings from the displayed widget settings menu.
  - Set Widget Mode to ON.
  - Set Solution Type to SINC Server.
  - To use IPTV, set IPTV Mode to ON.
- Note

Set IPTV Mode to OFF if you do not want to use IPTV channels. If OFF is selected for a TV, none of the IPTV channel settings configured from LSS will be applied to the TV.

- Set Virtual Standby to ON or OFF.

Note

To reduce the time it takes to boot a TV, set Virtual Standby to ON. If Virtual Standby is set to ON, power consumption can increase.



- 5 Select **ServerURL Setting** from the widget settings menu.
- When the LSS IP settings screen appears, enter "http://LSS IP address/browser" or "https://SINC domain name.s-hospitalitysolution.net:port number/browser" (e.g., https://sinc.s-hospitalitysolution.net:444/browser) in the address input window and select Done.
  - The settings required to distribute a project are complete.

### Note

If a distributed project is not found on a TV, check to make sure that the TV source is set to **App TV hospitality Browser**.



06

# **Tutorial**

# Creating and distributing projects for VIP rooms

Explore the process to create and distribute TV widgets (projects) from LSS targeting guests staying in hotel VIP rooms.

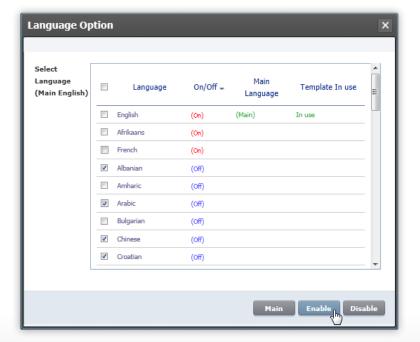


This tutorial assumes you are using a VIP room TV released in 2012 and the Widget 2012 [01] type.

### Activating a menu language

Activate a language to use to configure projects.

- Click **Setup > Language > Language option** from the menu bar at the top.
- 2 Select a language checkbox and then click **Enable** from the displayed language activation window.



- 3 Click **OK** in the displayed activation confirmation window.
  - The selected language will activate.



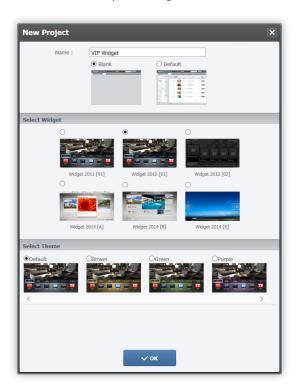
The language that will be used to configure projects must be activated before creating a project.

# **Creating a project**

Create a project for VIP rooms.

- 1 To create a project, click **Project Management > New Project** at the top left.
- 2 Configure the settings required to create a project from the displayed window.
- Note

This tutorial assumes you are using a VIP room TV released in 2012 and the Widget 2012 [01] type.



3 After configuring the required settings, click **OK**.

- 4 Click **OK** in the confirmation window if you want to create the project.
  - The main page of the new project will be loaded on the screen.





For details on the settings required when creating a project, refer to the following: 

Creating a project

# Menu settings

Configure the menu settings for a VIP Widget project. Click Menu on from the left side of the page.

• The menu editor will appear.



### Constructing top-level user menus

Configure the settings for the top-level menus which appear on the main page of a project.

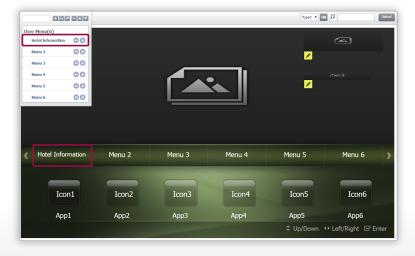
- 1 Right-click on Menu 1 from the top-level menu names in the menu editor.
- 2 Select Rename from the context menu items.



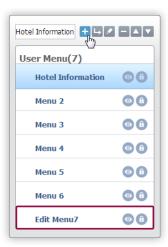
From the menu name settings window, specify the text size and menu name. Click **OK**.



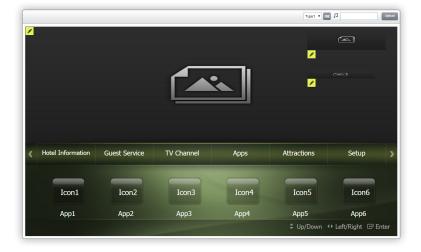
- The menu name will be updated. Specify the names of the other menu items using the same method.



- 4 To add a top-level menu, select a top-level menu name and click 🛨 from the menu editor.
  - A top-level menu section will be added in the menu editor.



- 5 Right-click on the new top-level menu section.
- 6 Select **Rename** from the context menu items to specify the menu name using the previously mentioned steps.
  - Configured top-level menus can be found on the main page.



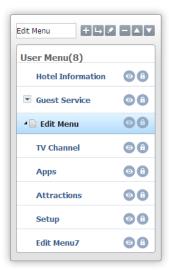
## Sub-level/lower sub-level user menu settings

Configure the settings for sub-menus and lower sub-menus that are found under a top-level menu.

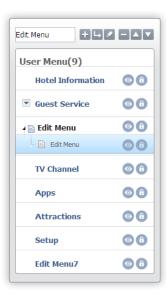
- 1 Right-click on a top-level menu in the menu editor.
- 2 Select **Add Sub menu** from the context menu items.



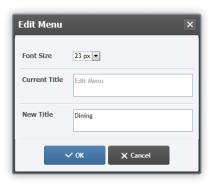
- A sub-menu will be created.



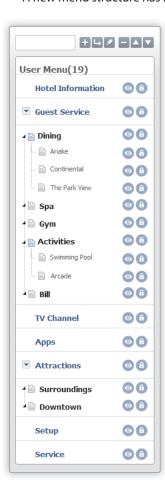
- Similarly, right-click on a sub-menu and select **Add Sub menu** if you want to create a lower sub-menu.



- 3 Right-click on Edit Menu that has been created.
- 4 Select **Rename** from the context menu items to specify the menu name.



- A new menu structure has been created as follows:



#### **Basic menu settings**

To use widgets released in 2014, configure basic menus after configuring user menus.



For details on basic menu settings, refer to the following: Managing basic menus

For details on configuring project menu settings including the menu hierarchy, refer to the following: Project menu settings

# Main page settings

Configure the main page settings of a TV widget for VIP rooms.



For details on the main page settings such as the default image, text and background music, refer to the following:

▶ Main page settings for the default widget, Main page settings for the gallery widget

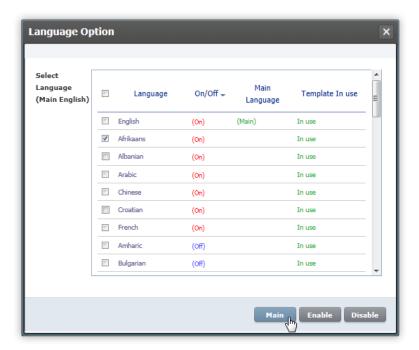
## Menu page settings

Configure the settings for the menu pages that will be provided to users.

#### Specifying the default edit language

Specify the default edit language.

- Click **Setup > Language > Language option** from the menu bar at the top.
- 2 Select a language checkbox and then click **Main** from the displayed language selector window.



- 3 Click **OK** in the displayed setting confirmation window.
  - The selected language will be set as the default edit language.
- Note

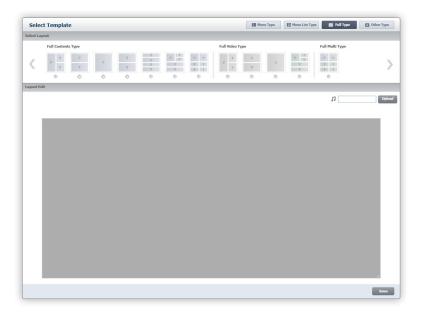
Default edit language refers to a language used to configure images to ensure a consistent language is used when editing menu pages. To use a variety of languages when editing menus, refer to the following: 

Selecting a menu page language

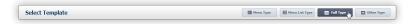
#### User menu page template and layout settings

Configure the template and layout settings for a menu page.

- 1 Click **Menu on** from the left side of the page.
- 2 Click a menu item from the menu editor.
  - The page settings window will appear.



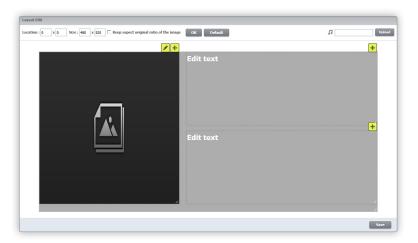
- 3 Select a template type to be applied to the page.
  - Available template type choices vary depending on the menu type (top-level menu, sub-menu or lower sub-menu).



- 4 Select a layout type to be applied to the page.
  - Available layout type choices vary depending on the template type applied to the page.



- After a layout is selected, the detailed menu page settings window will appear as follows:



#### Detailed settings for user menu pages

Configure the menu page settings using text and content, such as images, videos and audio.

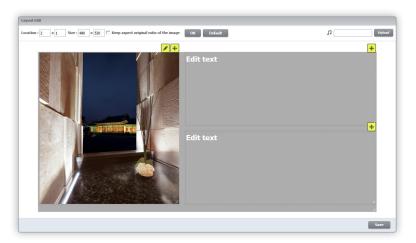
Note

Available content types and the availability of text can vary depending on the selected template and layout.

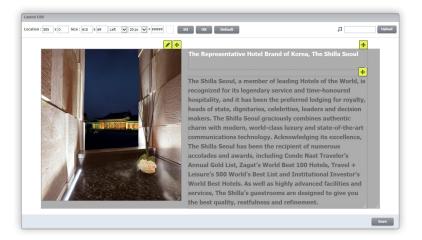
1 To insert an image, click the pencil icon above the image section in the menu page settings window.



- 2 Select an image from the content list window. Click **OK**.
  - The selected image will appear in the image section.



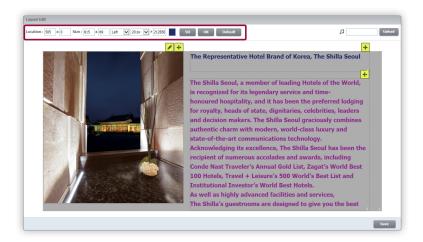
3 Click the text section, and enter text.



- 4 To change text layout properties, click in the desired text section.
  - The selected text section properties such as the location will appear at the top of the menu page settings window.

- 5 Change the properties such as the text layout location/size, text alignment/size and text color. Click **OK**.
  - The text layout will be updated according to the new settings.
  - To cancel changing a layout and go back to the default settings, click **Default**.
- Note

Image and video layouts can be changed using the same method.



- 6 To set the background music, click **Upload** on the right side of the menu page settings window.
- 7 Select a music file from the content list window. Click **OK**.
  - The selected music will be set as the menu page background music.



- After configuring the required menu page settings, click **Save** at the bottom of the page.
- 9 Click OK in the confirmation window if you want to apply the new settings.
  - The new settings will be applied to the menu page.
- Note

For details on components of menu pages, refer to the following: 
User menu page settings

#### Selecting a menu page language

Configure different menu pages for each language by selecting a desired language.

- 1 Click **Setup > Language** from the menu bar at the top.
- 2 Select a language from the Select Language dropdown list.



- 3 After configuring the required settings, click **Save**.
- 4 Configure menu pages for the selected language.

#### Note

- A new font for a language can be viewed after the corresponding project is distributed to TVs. To check the updated font when editing menu pages, distribute the project to TVs.
- Images in menu pages can only be changed using the default edit language. This ensures a consistent language is used. For details on selecting
  a default edit language, refer to the following:
   Specifying the default edit language

## Distributing a project

#### Settings before distributing a project

To distribute a created VIP Widget project to TVs in VIP rooms, connect the TVs to LSS first.

Configure the required TV connection settings.



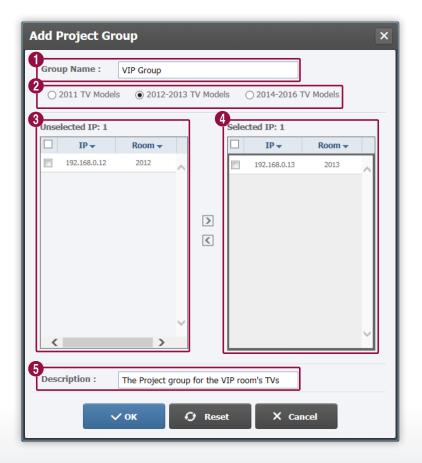
For details on TV settings, refer to the following: 
TV settings

#### Creating a recipient TV group to distribute a project

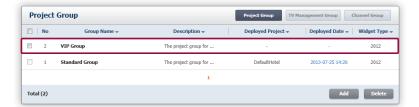
Projects are distributed by TV group.

Create a recipient group of TVs in VIP rooms to distribute a VIP Widget project to.

- 1 Click **Group > Project Group** from the menu bar at the top.
- Click Add below the list of project recipient groups.
- 3 Configure the settings required to add a group from the displayed window.



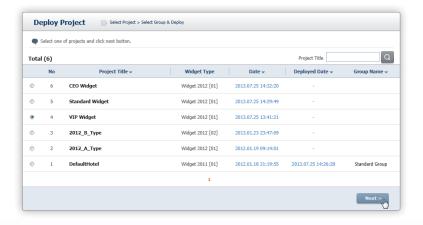
- 1 Enter a group name for the TVs in VIP rooms.
- 2 Select the widget type (Other TV models) used on the TVs in VIP rooms.
- **3** To add a VIP room TV to the group, select a TV checkbox and click **≥**.
- To delete a TV from the group, select a TV checkbox and click .
- **5** Enter a brief description of VIP Group.
- 4 After configuring the required settings, click **OK**.
  - VIP Group will be added to the list of project recipient groups.



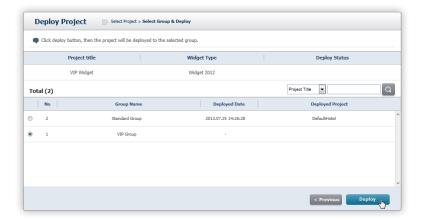
#### Distributing a project

Distribute a VIP Widget project to VIP Group, which is a group of TVs in VIP rooms.

- 1 Click **Deploy > Deploy Project** at the top left.
- Select VIP Widget from the displayed project list. Click Next.



- 3 Select VIP Group from the displayed TV group list. Click **Deploy**.
  - The VIP Widget project can be used as a widget on all TVs in VIP rooms.
  - The **Deploy** button will not appear until a recipient TV group is selected.



#### Note

Check to make sure that the project has been distributed properly, using the following methods:

- Click Deploy > Project Deploy List on the left side of the page. Check that the VIP Widget project is in the list of distributed projects.
- Turn on the TVs in VIP rooms and check that the main page of the VIP Widget project is displayed on the TVs.

# IPTV news channel group settings and distribution

Explore the process to add and distribute a news channel or channel group to TVs.

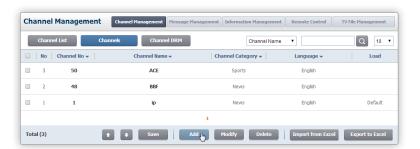


To distribute an IPTV news channel group to TVs, make sure the TVs are registered in PMS.

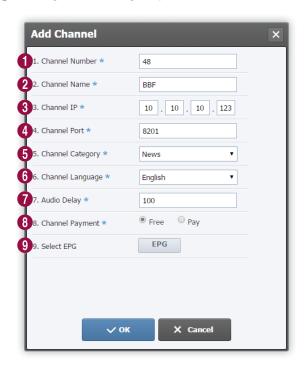
## **Registering IPTV channels**

Register a news channel.

- 1 Click TV Management > Channel Management > Channels from the menu bar at the top.
- Click Add below the channel list.



Configure the settings required to add a channel from the displayed window.

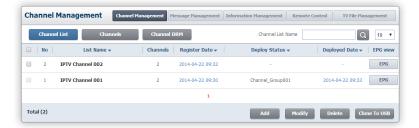


- Enter an IPTV channel number. 0 Enter an IPTV channel name. 3 Enter the IP address of the IPTV channel. 4 Enter the port number of the IPTV channel. 6 Select **News** as the IPTV channel type from the dropdown list. 6 Select an IPTV channel language from the dropdown list. 7 Specify the Audio Delay value used to manually sync the IPTV audio and video. Select whether to provide the IPTV channel for free or for a charge. 8 Import EPG info for the IPTV channel. 9
- 4 After configuring the required settings, click **OK**.
  - The channel will be added.

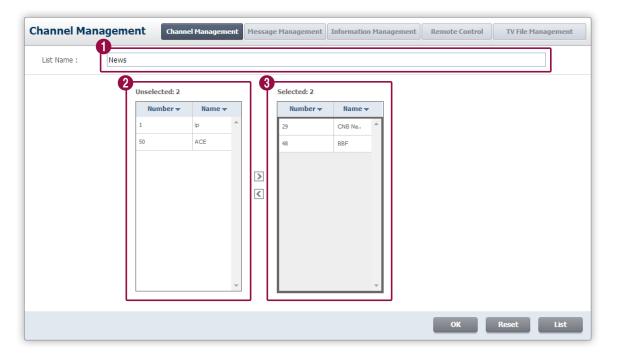
# **IPTV** channel group settings

Make a group of news channels.

- 1 Click TV Management > Channel Management > Channel List from the menu bar at the top.
- Click Add below the channel list.



3 Configure the settings required to add a group from the displayed window.



- 1 Enter News as the IPTV channel group name.
- 2 To add a news channel to the group, select a channel from the list and click ...
- 3 To delete a news channel from the group, select a channel and click  $\boxed{ }$ .
- 4 After configuring the required settings, click **OK**.
  - A new IPTV channel group named News will be added.

# Creating a recipient TV group to distribute an IPTV channel group

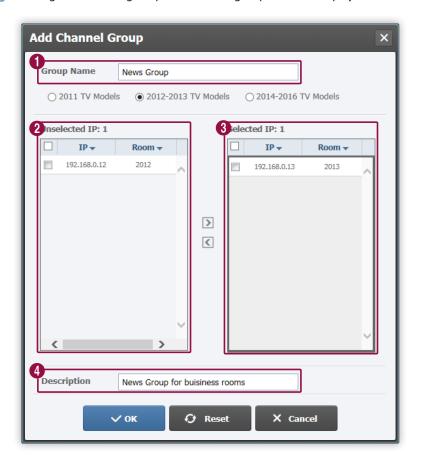
Channel groups are distributed by TV group.

Create a recipient group of TVs to distribute a news channel group to.

- 1 Click **Group > Channel Group** from the menu bar at the top.
- Click Add below the list of IPTV channel recipient groups.



3 Configure the settings required to add a group from the displayed window.



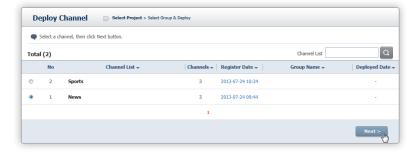
- 1 Enter News Group as the IPTV channel recipient group name.
- **2** To add a TV to the group, select the IP address of a TV and click **≥**.

- To delete a TV from the group, select the IP address of a TV and click  $\boxed{ }$ .
- 4 Enter a description of the IPTV channel recipient group.
- 4 After configuring the required settings, click **OK**.
  - A new IPTV channel recipient group named News Group will be added.

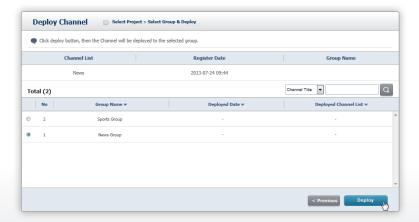
# Distributing an IPTV channel group

Distribute a news channel group to News Group.

- Click **Deploy > Deploy Channel** from the menu bar at the top left.
- Select News from the displayed IPTV channel group list. Click Next.
  - Click a channel group name from the list to proceed to the next step.



- 3 Select News Group from the displayed IPTV channel recipient group list. Click Deploy.
  - The channels in the distributed channel group are accessible from all the TVs under the selected IPTV channel recipient group.
  - The **Deploy** button will not appear until an IPTV channel recipient group is selected.





Check to make sure that the IPTV channel group has been distributed properly, using the following methods:

- · Click Deploy > Channel Deploy List on the left side of the page. Check that the News channel group is in the list of distributed channel groups.
- Turn off the TVs in VIP rooms and then turn on again. Check that the distributed news channels are displayed on the TVs. TVs update TV information, such as the channel list and firmware version, while the power is turning on. Make sure to turn off the power and then on again.

# Weather application auto-run menu settings

Using the MyApp Type layout, create an auto-run menu page to make a specified TV application run automatically.

In this section, learn how to make the weather application run automatically by creating a menu page named Apps and then selecting the created menu from a TV widget.

First, information on the application list saved on a TV will need to be registered in LSS and then distributed to the other TVs.



The menu to automatically run a TV application using MyApp Type is only available on TVs released in 2013.

## Copying application list info saved on a TV

- 1 Connect a destination USB memory device to the TV.
- 2 Turn on the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 4 Select **Network > Apps Edit** from the TV default settings menu.
- When a list of applications appears, select **More Apps**.
- 6 When the application configuration page appears, select Options > Clone TV to USB.
  - Files that contain information on the TV application list will be copied to the USB memory device.
  - Remember the location of the weather application on the list. The location is needed when configuring auto-run settings.
- Note

Assume that the weather application is the second item on the list.

7 After the information is copied, turn off the TV and then on again.

## Uploading copied TV application list info to LSS

- 1 Connect the USB memory device that contains copied information on the TV application list to the computer.
- 2 Access the LSS webpage.
- 3 Click TV Management > TV File Management > TV Configuration from the menus at the top of the LSS page.
- 4 Click **Add** below the list of TV configuration files.
- 5 Configure the settings required to add a TV configuration file from the displayed window.
  - Using the file upload option, upload the files that contain information on the TV application list.

#### Note

For details on how to configure settings from the window used to add TV configuration files, refer to the following: 

Adding TV configuration files

- After configuring the required settings, click **OK**.
  - After files are uploaded successfully, the TV application list information will be automatically distributed to the TV models that were specified in the window used to add configuration files.

#### **Note**

Using LSS logs, check to ensure that the files have been distributed successfully to TVs. For details on how to view distribution logs for TV configuration files, refer to the following: 

Checking the result of TV configuration file distribution

## Creating a TV application auto-run menu

- Import a project to create an auto-run menu to the LSS page.
- Note

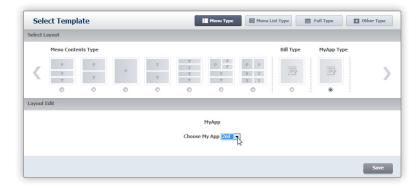
For details on how to import a project, refer to the following: Loading/deleting a project

- 2 Create a new menu page named Apps.
  - To use a previously created menu page, select the desired menu page.
- Note

For details on creating and editing a menu page, refer to the following: 

Managing user menus

- 3 Select MyApp Type from the page layouts found in the menu page configuration screen.
  - Template type where MyApp Type is found varies for each widget type.
- 4 Select 2nd from the dropdown list showing the arrangement of TV applications.
  - The weather application that is the second item on the TV application list will be set to run automatically.



- 5 To save the changes, click **Save**.
- 6 Distribute the project.
- Note

For details on how to distribute a project, refer to the following: Distributing a project

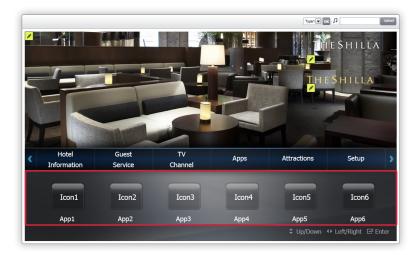
7 Select Apps from the widget menus on the TV to check to ensure that the weather application runs automatically.

# Changing the arrangement of TV applications

Customize the arrangement of TV applications according to your preference.

#### Note

- To apply a new arrangement of applications to the application auto-run menu, copy and then distribute the list information again.
- The arrangement of applications shown in the application section of the default page will also be updated according to the customized order.



- 1 Turn on the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 3 Select Network > Apps Edit from the TV default settings menu.
- 4 When a list of applications appears, select **More Apps**.
- 5 When the application configuration page appears, select **Options > Edit My Apps**.
- 6 Select an application to rearrange from the displayed **My Apps** list.
- Move the application to the desired location using the arrow buttons on the remote control and then press ENTER.
- 8 After rearranging applications as desired, turn off the TV and then on again.

# Using the IPTV function only

To only use the IPTV function without creating a project in LSS, obtain a free license to access the IPTV channel-related menus and the function to distribute channels without time limits.

On the LSS screen, click License > License List > Free License and obtain a IPTVOnly type free license.

#### Note

For further details on obtaining a free license, refer to the following: 
Using a free license

- 2 Turn on the TV where you will use the IPTV function, then connect a USB storage device to the TV.
- Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
  - In reset mode, the initial TV settings menu appears.
- 4 Select **Widget** from the TV default settings menu.
- 5 Select **ServerURL Setting** from the widget settings menu.
- 6 When the LSS IP configuration screen appears, delete all the address input fields. Next, select **Done**.
- 7 Press **Return** on the Samsung remote control to return to the initial TV setup menu.
- Select **Cloning** from the TV default settings menu.
- Select Clone USB to TV to save TV information onto the USB storage device.
- 10 Connect the USB storage device containing the saved TV information to the LSS.
- 11 On the LSS screen, click TV Management > Channel Management > Channel List.
- 12 Select a channel and click Clone To USB.
  - Information about the selected IPTV channel group will be saved as a zipped file.
- 13 Unzip the downloaded IPTV channel group information file.
  - The HospitalityBrowser folder will appear.
- 14 Copy the **HospitalityBrowser** folder as a child folder under the TV information folder on the USB storage device.
- 15 Connect the USB storage device containing the copied IPTV channel group information to the TV.
- 16 Press Mute > 1 > 1 > 9 > ENTER on the Samsung remote control to enter factory mode.
- 17 Select **Cloning** from the TV default settings menu.
- 18 Select Clone USB to TV to save the channel information from the USB storage device to the TV.
  - Use the IPTV channel function on the TV.

07

# Data backup

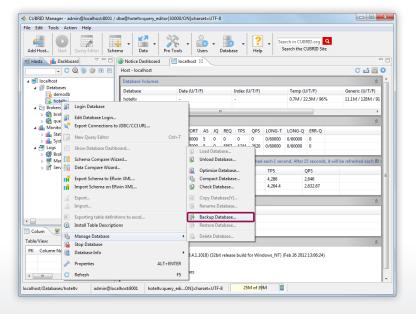
Back up database and data files in LSS.

# Database backup and restore

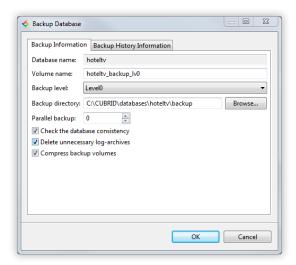
Back up or restore database in LSS using the CUBRID manager program.

# **Database backup**

- Download and install the latest version of the CUBRID manager install file from the following path:
  - http://ftp.cubrid.org/CUBRID\_Tools/CUBRID\_Manager/
- 2 After the installation is complete, run the program.
- 3 Right-click on the HOTELTV database name and select Manage Database > Backup Database.



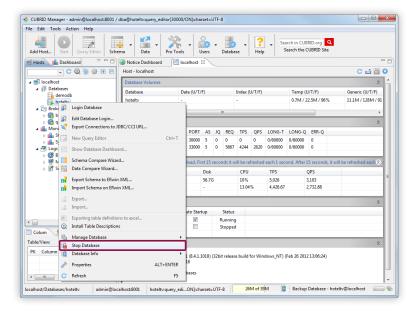
Select the **Delete unnecessary log-archives** checkbox. Click **OK**.



- 5 Specify the destination backup folder. Click **OK**.
  - The HOTELTV database will start the backup process.

#### **Database restore**

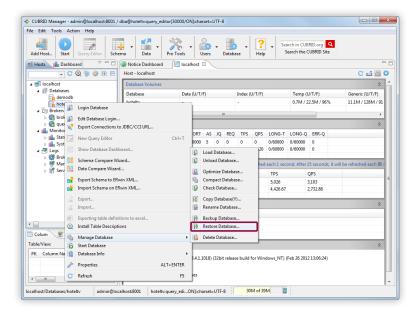
- 1 To restore the HOTELTV database, run the CUBRID manager.
- Right-click on the HOTELTV database name and select Stop Database.



- Go to the path C:\CUBRID\databases\hoteltv and delete all files except the lob folder. The path is created in the C drive when CUBRID is installed.
- Note

Assume that the path to the CUBRID folder is the C drive.

4 Right-click on the HOTELTV database name and select Manage Database > Restore Database.



- 5 Deselect the Select restore date and time checkbox in the database restore window.
- 6 Select the **Select available backup information** checkbox.
- 7 Select Level 0 file.
- 8 Click **Browse...** to select a backup file to be restored.
- 9 Click OK to start database restore.

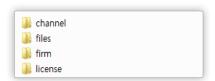
# LSS data file backup

Back up channel information, content files, TV firmware and TV license data files saved in LSS.

1 Go to C:\HotelTV\htdocs\data, which is the destination folder created in the C drive when LSS is installed.



Assume that the path to the HOTELTV folder is the C drive.



channel	This folder holds channel setting files including the ChannelMap.xml file.
files	This folder holds content files that are used when editing a project.
firm	This folder holds TV firmware files.
license	This folder holds TV License Key files.

2 Zip the folders you want to back up and save the folders to the desired location.

08

# **Troubleshooting**

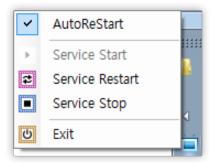
In the occurrence of a problem when using LSS, resolve the problem according to the troubleshooting guide below.

# Resolving a failure involving message transmission, TV power control or channel list transmission

If the function to send messages, control the power supply to TVs or send channel lists does not work properly, restart Socket, register the Apache in firewalls or disable firewalls to resolve the issue.

## **Restarting Socket monitoring**

1 To restart Socket monitoring, right-click on the icon on the computer task bar.



- If the Service Start item is active, click Service Restart.
  - Socket monitoring will restart.

#### When the Socket monitoring icon is not found on the task bar

1 Go to C:\HotelTV\htdocs\bin, which is the destination folder created in the C drive when LSS is installed.



Assume that the path to the HOTELTV folder is the C drive.

- Double-click HotelCMSMonitor.exe.
  - When the icon appears on the task bar, restart Socket monitoring.

# Registering the Apache server in firewalls

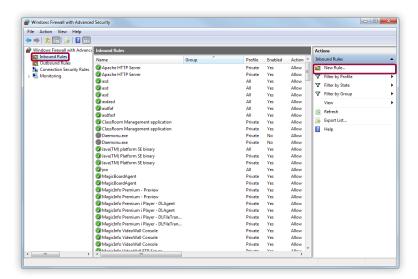
If there is an issue with transmitting messages/channel lists or a problem with TV power control persists after restarting Socket monitoring, register the Apache server in the inbound and outbound rules of Windows Firewall.

#### Adding inbound rules

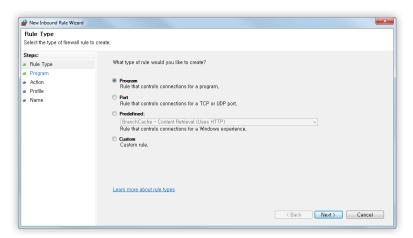
- 1 On the computer, select **Start > Control Panel > Windows Firewall > Advanced settings**.
- Note

The Control Panel path is based on the icon view mode.

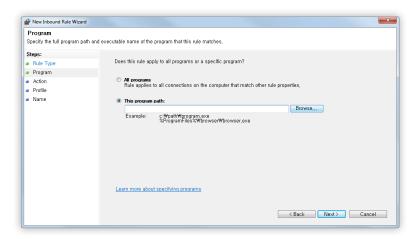
2 Select Inbound Rules, and click New Rule.



3 Select Program, and click Next.



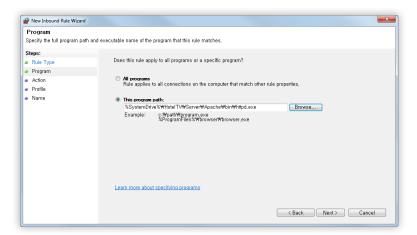
4 Select **This program path**, and click **Browse**.



- 5 Go to C:\HotelTV\Server\Apache\bin, which is the destination folder of Apache when LSS is installed.
- Note

Assume that the path to the HOTELTV folder is the C drive.

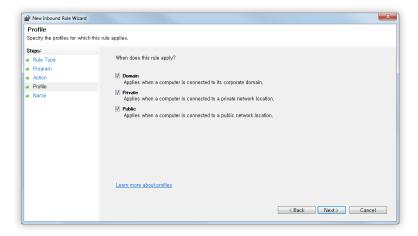
Select httpd.exe, and click Next.



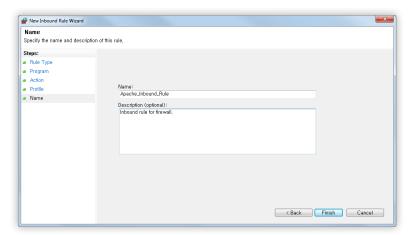
7 Select Allow the connection, and click Next.



8 Select the **Domain**, **Private** and **Public** checkboxes. Click **Next**.

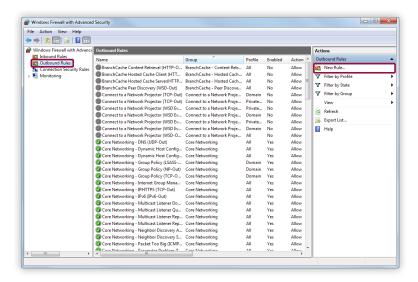


Enter a rule name and description. Click **Finish**.



#### Adding outbound rules

- On the computer, select **Start > Control Panel > Windows Firewall > Advanced settings**.
- 2 Select Outbound Rules, and click New Rule.



From this step, the same instructions used when adding inbound rules apply. Go to step 3 in the instructions on how to add inbound rules.

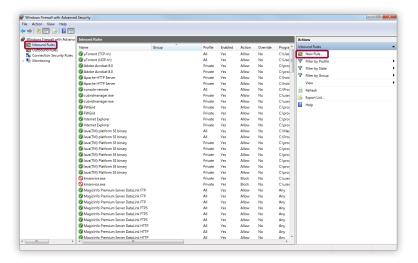
## Registering communication ports

#### Registering a TCP port

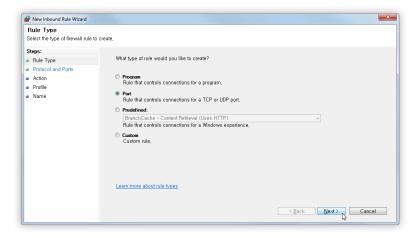
- On the computer, select Start > Control Panel > Windows Firewall > Advanced settings.
- Note

The Control Panel path is based on the icon view mode.

2 Select Inbound Rules, and click New Rule.

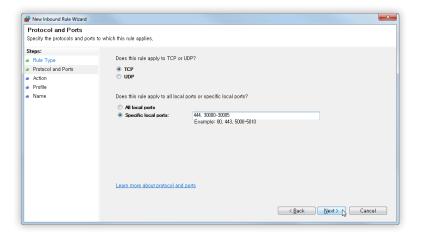


3 Select Port and then click Next.



4 Select **TCP** and then enter 444, 30000-30005 in the **Specific local ports** field.

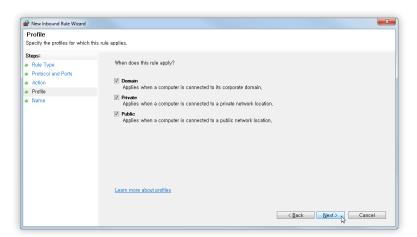
5 Click Next.



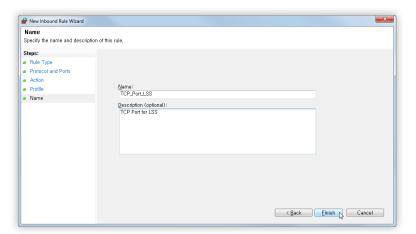
Select Allow the connection, and click Next.



7 Select the Domain, Private and Public checkboxes. Click Next.



Enter a rule name and description. Click **Finish**.

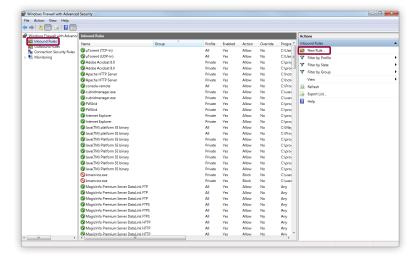


## Registering a UDP port

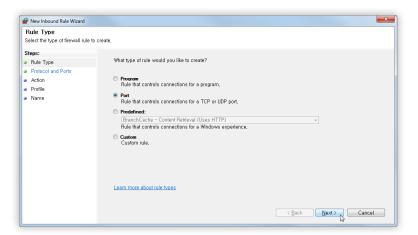
- 1 On the computer, select **Start > Control Panel > Windows Firewall > Advanced settings**.
- Note

The Control Panel path is based on the icon view mode.

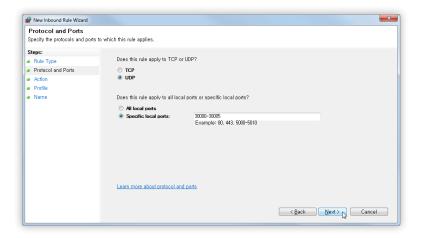
2 Select **Inbound Rules**, and click **New Rule**.



3 Select Port and then click Next.



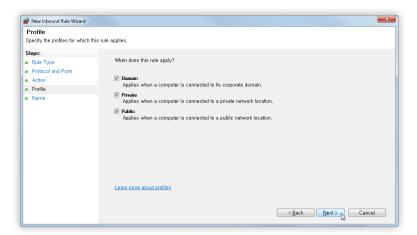
- 4 Select **UDP** and then enter 30000-30005 in the **Specific local ports** field.
- 5 Click Next.



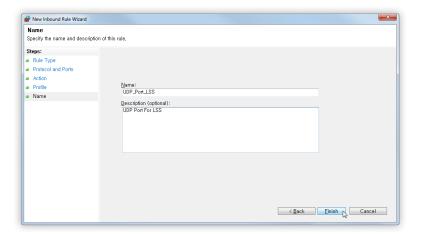
6 Select **Allow the connection**, and click **Next**.



Select the **Domain**, **Private** and **Public** checkboxes. Click **Next**.

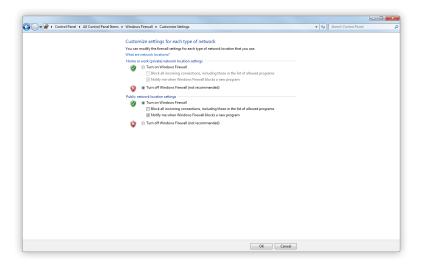


8 Enter a rule name and description. Click **Finish**.



## **Disabling firewalls**

- 1 From the PC, go to Start > Control Panel > Windows Firewall > Turn Windows Firewall on or off.
- 2 Select Turn off Windows Firewall (not recommended) under Home or work (private) network location settings.



### Checklist to go through in the occurrence of a TV power control issue

If a TV cannot turn on or off, resolve the issue following the steps below.

### **Checking the Virtual Standby settings**

To use the remote power control function, first enable the Virtual Standby function on the TV while in factory mode.

- To enter factory mode, press Mute > 1 > 1 > 9 > Enter on the TV remote control.
  - In reset mode, the initial TV settings menu appears.
- 2 Set **Widget > Virtual Standby** to **On** from the TV default settings menu.



- 3 Turn off the TV.
  - The changes will be saved.

### Router port settings

The remote power-on function (Wake On Lan, hereinafter WOL) is used to control a device by sending a magic packet to a network via a UDP port.

Generally, the WOL packet operates when the network addresses of a sender device (LSS) and recipient device (TV) are set to Class C Subnet of the same Gateway. To send the WOL packet to Class C Subnet of a different Gateway, enable UDP port forward from the router.

If the function to turn on TVs does not work properly, contact the network administrator.

Example If the IP address is "192.168.10.122", configure the subnet according to the following subnet addresses for each class:

- Class A Subnet: 0.0.0.0 ~ 127.255.255.255
- Class B Subnet: 128.0.0.0 ~ 191.255.255.255
- Class C subnet: 192.0.0.0 ~ 233.255.255.255

## Resolving a project distribution failure

If a project created in LSS cannot be distributed to TVs, resolve the issue following the steps below.

### **TV** settings

Resolve a project distribution issue by changing TV settings while in factory mode.

Press Mute > 1 > 1 > 9 > Enter on a Samsung remote control to enter factory mode.

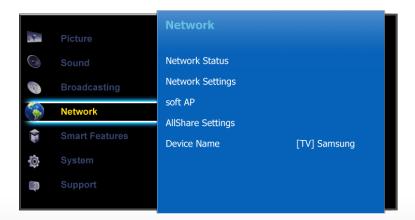
• In reset mode, the initial TV settings menu appears.

### **Changing network settings**

1 In factory mode, select Network > Network Setup.



2 Select **Network > Network Settings** from the displayed network settings menu.



- 3 From the network settings page, select a network type (wired/wireless) and click **Connect**.
- 4 Select **IP Settings** from the displayed network connection information page.
- 5 Configure the IP settings including the IP address and subnet mask.
- 6 Select **OK** to save the configured IP settings.

### Widget settings

In factory mode, select **Widget > License Server IP Setting**.



- 2 Enter the IP address and port number of LSS. Press **Enter** on the remote control.
- 3 Turn off the TV.
  - The changes will be saved.

### **Checking LSS**

After configuring the network and widget settings, check to make sure that the TV has been added to **TV List** in LSS.

## Resolving a content file upload failure

The content file upload function uses Adobe Flash Player.

To install Flash Player on the computer, download and install the latest install file from the following website:

► http://get.adobe.com/kr/flashplayer/

## Resolving a PMS info transmission failure

If a data transfer failure message appears with a delay of three seconds or longer during communication between LSS and PMS, resolve the issue according to the following steps.



PMS (Property Management System) refers to a hotel room management system. The system connects to LSS to provide necessary information for hotel room management.

- Go to C:\HotelTV\htdocs, which is the destination folder created in the C drive when LSS is installed.
- **Note**

Assume that the path to the HOTELTV folder is the C drive.

- 2 Double-click the **cms.config** file, or open the file in a memo pad.
- 3 Set **pmswaittime** and **widgetwaittime** to a value larger than 3, which is the default value. Save the file.
  - The settings will be updated.

pmswaittime=3 widgetwaittime=3

## Resolving a port conflict

If access to LSS is not available due to a port conflict, resolve the issue according to the following steps:

Go to C:\HotelTV\Server\Apache\conf, which is the destination folder created in the C drive when LSS is installed.



Assume that the path to the HOTELTV folder is the C drive.

2 Double-click the **httpd.conf** file, or open the file in a memo pad.

```
#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
# listen 12.34.56.78:80
Listen 80
#
# Dynamic Shared Object (DSO) Support
```

- 3 Change the Listen 80 value on row 46.
  - A value within the range of 81 3029 can be entered.
- 4 Save the file, and restart the Apache server.
  - The settings will be updated.

## Speeding up the TV boot time

The TV boot speed may vary depending on the size of content included in LSS projects. If the boot speed is slow, enable the **Virtual Standby** function on the TV while in factory mode. This will speed up the boot time. For details on **Virtual Standby** settings, refer to the following: Checking the Virtual Standby settings



If the Virtual Standby function is set to ON, power consumption can increase.

## Resolving a TV time error

Go to C:\HotelTV, which is the destination folder created in the C drive when LSS is installed.



Assume that the path to the HOTELTV folder is the C drive.

- Open the php.ini file.
- 3 Change "date.timezone=" under [Date] to "date.timezone=continent/city" in the file.
  - Remove ";" in front of date.timezone.

### **Note**

- To find the time zone name for a continent/city, go to the following link. Select a continent from the link, and then select a city to set the time zone. http://www.php.net/manual/en/timezones.php
- Example The following is an example of the time zone set to Asia/Hong Kong.

4 Save the **php.ini** file. Restart the computer or Apache to update the settings.

### Resolving weather info errors

If the message "Network Not Available" appears after you save weather info settings, follow the below steps to resolve the issue:

- 1 On the PC, click the **Start** button, enter "cmd" in the **run** box, and then press **Enter** on the keyboard.
- 2 Enter "ping -n 1 -w 1000 samsungmobile.accu-weather.com" in the cmd window.
- If a message appears that the requested time has expired or if the loss rate appears to be high, contact the Internet service provider or check the Internet cable connections on your computer.

### Resolving errors when running EPG Broker

If an issue occurs when you run EPG Broker, it is possible an anti-virus program caused a registry conflict when the LSS program was installed. Disable firewalls, close anti-virus programs, and then install the LSS program again.

### **Disabling firewalls**

- 1 From the PC, go to Start > Control Panel > Windows Firewall > Turn Windows Firewall on or off.
- 2 Select Turn off Windows Firewall (not recommended) under Home or work (private) network location settings.

09

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