SAMSUNG LYNK™ REACH 4.0

User Guide

SAMSUNG LYNK™ REACH 4.0 is a solution that allows you to configure content settings on hotel TVs.

Using SAMSUNG LYNK™ REACH 4.0, customize information and content settings required to watch TV or search hotel information, according to the types of guests. Remotely control TVs in rooms to conveniently manage them.

SAMSUNG

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About the solution

SAMSUNG LYNK™ REACH 4.0 is a solution that allows you to configure content settings on hotel TVs.

Using SAMSUNG LYNK™ REACH 4.0, customize information and content settings required to watch TV or search hotel information, according to the types of guests. Remotely control TVs in rooms to conveniently manage them.

Solution default modes

SAMSUNG LYNK™ REACH 4.0 can be used in two modes. Available modes vary, depending on the server configuration method used.

▪ RF mode: This mode supports DTV coaxial based one-way communications and is available when LYNK™ REACH 4.0 is installed on the REACH server.

▪ IP mode: This mode supports network based two-way communications and is available when LYNK™ REACH 4.0 is installed on the server PC.

 Note

Screen displays, fixed menus and features may be provided, depending on the mode in use.

Installation requirements

Hardware

- SAMSUNG LYNK™ REACH Server

- Samsung Hotel TV (REACH 4.0-supported models)

Required software

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

- Microsoft Visual C++ 2008 Redistributable (x86)

- MySQL Server 5.5

- Apache HTTP Server 2.4

- When installing SW-HWRE02A-1002.5 or an earlier version of REACH 4.0 on Windows Server 2008 and Windows Server 2012 systems, .NET Framework 3.5 must be installed and activated.
  For further information, refer to the following:

  – Using Windows Server 2008 OS .NET Framework 3.5   ► Link

  – Using Windows Server 2012 OS .NET Framework 3.5   ► Link

Note

When installing SW-HWRE02A-1100.15 or a higher version of REACH 4.0, .NET Framework 4.5 must be installed. .NET Framework 4.5 is automatically installed when you install REACH 4.0.

System requirements for IP mode

Note

- Computers where REACH 4.0 will be installed must meet the following requirements.

- The following is the minimum requirements based on 500 TVs.

- Capacity equivalent to a server is recommended.

- Using Chrome or FireFox is recommended when launching REACH 4.0. If launched with other browsers, you will not be able to use all features.

- CPU: Octa Core 3.4 GHz greater

- RAM: 8 GB greater

- HDD: 500 GB

- SSD: 256 GB

- OS: Windows 7(for testing), Windows Server 2008 R2 (64-bit), 2012 (64-bit)

- Network Bandwidth: 100 Mbps greater

Rules used in this user guide

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

- SAMSUNG LYNK™ REACH 4.0   →   REACH 4.0
- SAMSUNG LYNK™ REACH Server   →   Server
- Hotel TV   →   TV

Note

- This user guide assumes that IP mode is being used.
- This user guide assumes you have general user privileges, except for when it describes administrator menus. For further information, refer to the following: ▶ Account privileges and available features

Installing/uninstalling REACH 4.0

Installing REACH 4.0

Note

- Running the REACH 4.0 install file automatically installs the Apache HTTP Server, My SQL and Microsoft Visual C++ programs, in this order. These programs are needed to run REACH 4.0. Make sure to install them properly in the correct order.
- If the programs are installed in an order that is not correct, REACH 4.0 may not run properly.
- When the REACH 4.0 install file is run for the first time, anti-virus programs may recognize the file as ransomware. If this occurs, resolve the issue as follows.
  - **Example**: The REACH 4.0 install file is recognized as ransomware by Bitdefender
  - **How to resolve**: **Protection > View Modules > Trusted Applications > Add >** select the REACH 4.0 install file > **OK**

1   Run the REACH 4.0 install file with an administrator account.
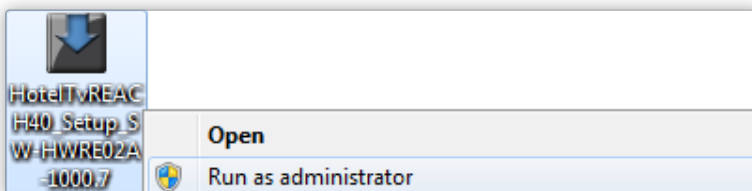
2   The install window appears. Read the instructions and click **Next**.

3   Read the license agreement thoroughly and click **I Agree**.
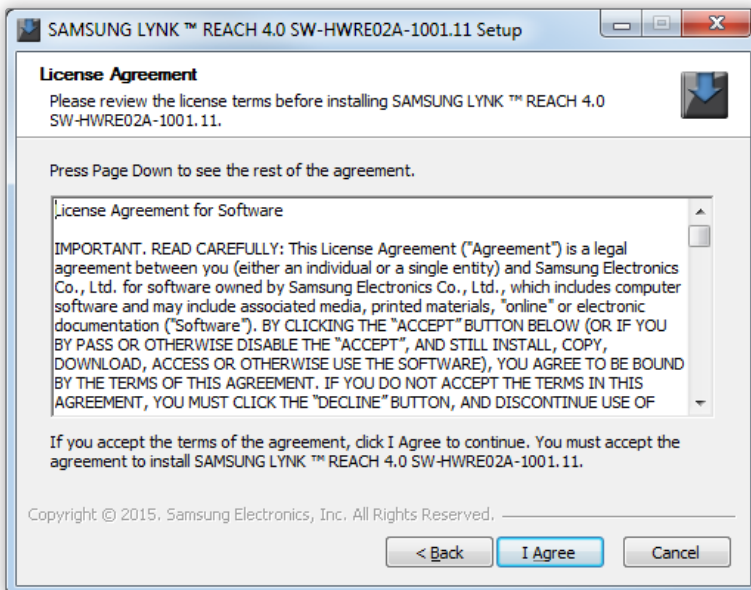
4   Set the destination folder and click **Next**.
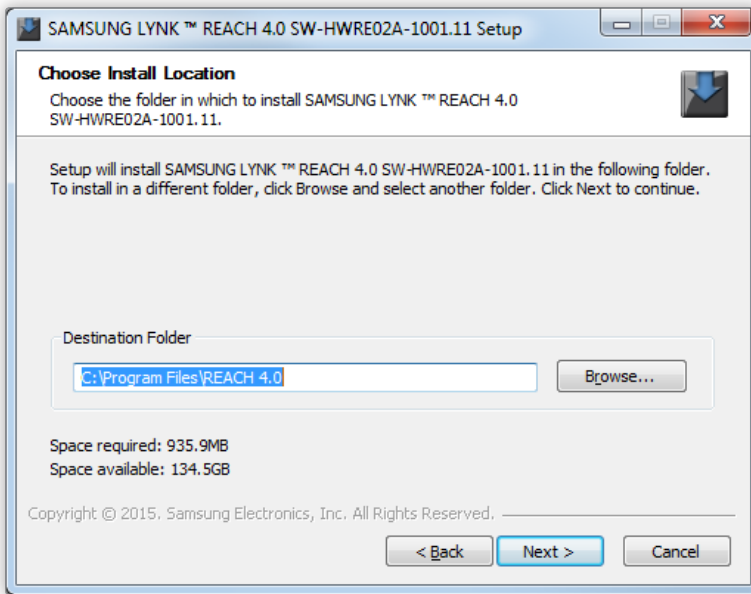
5   Set the folder name and click **Install**.
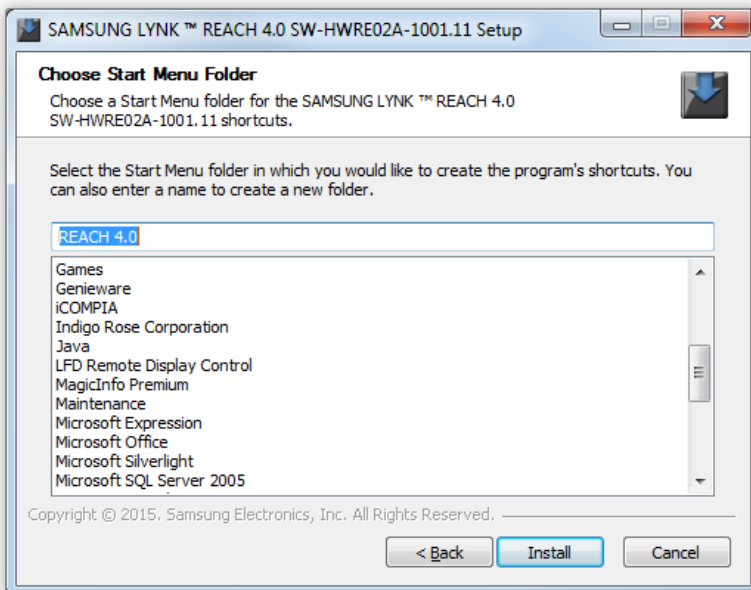
6   After REACH 4.0 install is complete, click **Finish**.

Updating REACH 4.0

1   Download the REACH 4.0 update program from the license server at https://v3.samsunggsbn.com.

2   The install window appears. Read the instructions and click **Next**.

3   The select install type screen appears. Select **Update** and click **Next**.
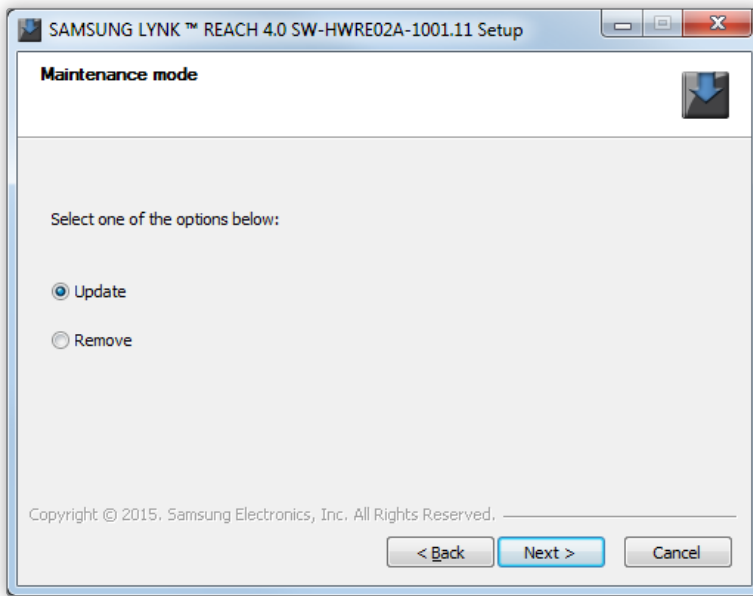
4   After update is complete, click **Finish**.

Uninstalling REACH 4.0

1   Open the uninstall screen using Control Panel or the list of startup applications. Click **Uninstall**.
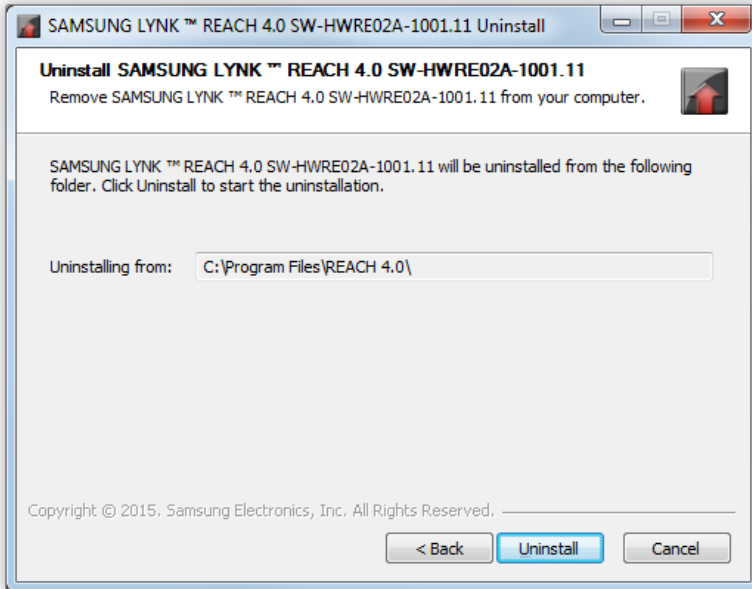
2   After the program uninstall is complete, click **Finish**.
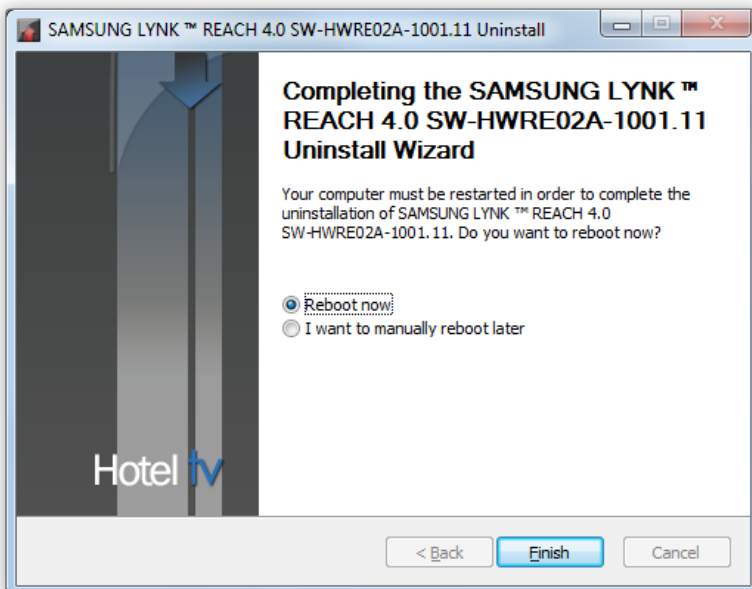
02 Tutorial

Tutorial - RF Mode

Follow these steps to learn how to configure the settings required to use REACH 4.0 in RF mode, create and distribute TV content using REACH4.0, and remotely control TVs.

Note

In RF mode, **REACH Home Channel** must be tuned from the TV to enable real-time data transfer.

Launching REACH 4.0

Open a web browser and connect to https://localhost:443.

Note

For alternatives to launch REACH 4.0, refer to the following: ► Running the webpage

Registering a free license

Register a free license in the license registration window. Registration is required only once, when the software runs for the first time after install.

Note

For details on how to register a free license, refer to the following: ►Registering a free license

1 On the license screen, click **Add > Free Licence**.

2 Enter free license information.

3 After entering the required information, click **Activate**.

4 An activation confirmation window appears. Click **OK**.

Logging in

On the login screen, enter your ID and password and click **SIGN IN**.

- When you run REACH 4.0 for the first time, the default administrator account (ID: qaadmin, password: qaadmin and the default user account (ID: sample, password: qwerty) will be provided. Make sure to change the password to ensure security.

Note

For details on login and accounts, refer to the following: ▶Logging in

Main screen

On the REACH 4.0 main screen, view the available menu items and room information.

Note

For details on each menu item, refer to the following: ▶Main screen

Configuring the REACH 4.0 settings

To use REACH 4.0, configure settings from the Modulator menu and the TV.

REACH channel setup

Note

For details on how to configure REACH channels, refer to the following: ▶REACH channel setup

1 From the menus at the top, click ▭ > **Settings > Modulator**.

2 Configure the Modulator settings required to connect to the TV.

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

Initial TV setup

📝 **Note**

For details on how to configure settings from the TV, refer to the following: ▶Initial TV setup

1 Select **REACH Solution** from the initial TV setup menus.

2 Set **REACH** for the Orsay model and **REACH RF Mode** for the Tizen model to **ON**.

3 Set **REACH IP Mode** to **OFF**.

4 Select Group ID and choose a group ID.

5 To automatically update TV configuration or TV software, use the **REACH Update Time** option to customize the time or set **REACH Update Immediate** to **ON**.

6 Set **Room Number** for the Orsay model and **Room Number** for the Tizen model. Enter the room number.

7 Turn off the TV and then on again.

Configuring room information

Manually register TV information from REACH 4.0.

Registering room info

📝 **Note**

For details on how to register and manage room information, refer to the following: ▶ Managing room info

1 From the menus at the top, click **MANAGEMENT > Room**.

2 Click **New**.

3 Enter room information and click **OK**.

Monitoring room TVs

📝 **Note**

For details on how to monitor TVs, refer to the following: ▶ Monitoring room TVs

On the top menus, click **MONITORING** to monitor the TV connection and room occupancy.

Creating/configuring a project

Create a project to use as TV content.

> 📝 **Note**
>
> For details on how to create a project, refer to the following: ► Creating a new project

1 From the menus at the top, click **PROJECT > New**.

2 Select a project template type and click **OK**.

3 From the edit screen, configure a project, using the following features.

> 📝 **Note**
>
> For details on how to configure a project, refer to the following: ► Configuring a project

4 After editing the project as desired, click **FILE > Save**.

5 A confirmation window appears. Click **Yes**.

6 Save specified settings and then click **FILE > Close** to close the project.

Distributing a project

Distribute the project, configured from REACH 4.0, to the TVs.

> 📝 **Note**
>
> For details on how to distribute a project, refer to the following: ► Distributing a project

Configuring TV settings

From REACH 4.0, configure TV information for each room, including basic TV settings, as well as channel, DRM, ticker, and reset value settings.

> 📝 **Note**
>
> For details on how to configure or manage TV settings, refer to the following: ► Configuring TV settings, Managing registered TV configuration

Distributing TV configuration

TV configuration created using REACH 4.0 can be distributed to TVs.

📝 **Note**

> For details on how to distribute TV configuration, refer to the following: ▶ Distributing TV configuration

Updating TV configuration

TV configuration distributed using REACH 4.0 can be updated from TVs.

📝 **Note**

> For details on how to update TV configuration, refer to the following: ▶ Updating in RF mode

Update TV configuration, using either of the following options:

Option 1 To update manually, select **Support > SW Update** from the TV settings menu or select **System > SW Update** from the initial TV menu, and then follow the displayed instructions. For details, refer to the following: ▶ Manual update

Option 2 To update automatically, in the initial TV menu, select **REACH Solution > REACH Update Time** or **REACH Solution > REACH Update Immediate**, and then restart the TV. For details, refer to the following: ▶ Enabling automatic update, Automatic update

Registering TV software

Upload TV software from your computer to REACH 4.0.

📝 **Note**

> For details on how to register and manage TV software, refer to the following: ▶ Registering TV software, Managing registered TV software

1 From the menus at the top, click **MANAGEMENT > TV Software**.

2 Click **Import**.

3 Configure TV software information.

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

Distributing TV software

Distribute TV software, registered on REACH 4.0, to the TVs.

✐ Note

> For details on how to distribute TV software, refer to the following: ▶ Distributing TV software

1 From the menus at the top, click **DEPLOYMENT**.

2 Click **NEW** and select **TV Software**.

3 Select TV software from the dropdown list and configure the distribution settings.

4 Click **Deploy**.

Updating TV software

Update the TV with TV software distributed from REACH 4.0.

✐ Note

> • For details on how to update TV software, refer to the following: ▶ Updating in RF mode
>
> • SMART TV models released after 2017 do not support TV software updates using a server (RF mode).

Update TV software, using either of the following options:

Option 1 To update manually, select **Support > SW Update** from the TV settings menu or select **System > SW Update** from the initial TV menu, and then follow the displayed instructions. For details, refer to the following: ▶ Manual update

Option 2 To update automatically, in the initial TV menu, select **REACH Solution > REACH Update Time** or **REACH Solution > REACH Update Immediate**, and then restart the TV. For details, refer to the following: ▶ Enabling automatic update, Automatic update

Tutorial - IP Mode

Follow these steps to learn how to configure the settings required to use REACH 4.0 in IP mode, create and distribute TV content using REACH 4.0, and remotely control TVs.

Launching REACH 4.0

Open a web browser and connect to either http://localhost:7001 or https://localhost:7002, based on your protocol settings.

Note

For alternatives to launch REACH 4.0, refer to the following: ► Running the webpage

Logging in

On the login screen, enter your ID and password and click **SIGN IN**.

- When you run REACH 4.0 for the first time, the default administrator account (ID: qaadmin, password: qaadmin and the default user account (ID: sample, password: qwerty) will be provided. Make sure to change the password to ensure security.

Note

For details on login and accounts, refer to the following: ►Logging in

Registering a license

Register a paid or free license in the license registration window.

Note

For details on how to register a license, refer to the following: ►Registering a license

Main screen

On the REACH 4.0 main screen, view the available menu items and room information.

Note

For details on each menu item, refer to the following: ►Main screen

Configuring a protocol

In IP mode, you can customize the method of communication between the server and the TVs. The default protocol is HTTPS.

🖉 **Note**

> For details on how to configure protocol settings, refer to the following: ► Configuring a protocol

1 From the menus at the top, click ⬚ > **Settings > System**.

2 Select a communication method from **Communication Protocol**.

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

Initial TV setup

To use REACH 4.0, configure settings from the TV.

🖉 **Note**

> For details on how to configure settings from the TV, refer to the following: ►Initial TV setup

1 Select **REACH Solution** from the initial TV setup menus.

2 Set **REACH** for the Orsay model and **REACH RF Mode** for the Tizen model to **ON**.

3 Set **REACH IP Mode** to **ON**.

4 Select **Server IP Setting** for the Orsay model and **Server URL Setting** for the Tizen model.

5 When the Reach server's IP address configuration screen appears, fill in the address input field with the appropriate IP address for the address protocol setting, and then select **Done**.

  – Enter "http://REACH IP address/content" if the protocol was set to HTTP.
  – Enter "https://REACH IP address:443/content" if the protocol was set to HTTPS.

6 Set **Room Number** for the Orsay model and **Room Number** for the Tizen model. Enter the room number.

7 Turn off the TV and then on again.

Configuring room information

From REACH 4.0, manually register TV information or view TV information automatically registered for each room.

Registering room info

Note

For details on how to register and manage room information, refer to the following: ► Managing room info

1 From the menus at the top, click **MANAGEMENT > Room**.

2 Click **New**.

3 Enter room information and click **OK**.

Monitoring room TVs

Note

For details on how to monitor TVs, refer to the following: ► Monitoring room TVs

On the top menus, click **MONITORING** to monitor the TV connection and room occupancy.

Creating/configuring a project

Create a project to use as TV content.

Note

For details on how to create a project, refer to the following: ► Creating a new project

1 From the menus at the top, click **PROJECT > New**.

2 Select a project template type and click **OK**.

3 From the edit screen, configure a project, using the following features.

Note

For details on how to configure a project, refer to the following: ► Configuring a project

4 After editing the project as desired, click **FILE > Save**.

5 A confirmation window appears. Click **Yes**.

Distributing a project

Distribute the project, configured from REACH 4.0, to the TVs.

📝 **Note**

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

Configuring TV settings

Use REACH 4.0 to configure settings for TVs in rooms, including initial configuration values, basic information, and information related to channels, DRM, and tickers.

📝 **Note**

For details on how to configure or manage TV settings, refer to the following: ► **Configuring TV settings**, ► **Managing registered TV configuration**

Distributing TV configuration

TV configuration created using REACH 4.0 can be distributed to TVs.

📝 **Note**

For details on how to distribute TV configuration, refer to the following: ► **Distributing TV configuration**

Updating TV configuration

TV configuration distributed using REACH 4.0 can be updated from TVs.

Turn off the TV to perform an update and then turn on the TV again.

Registering TV software

Upload TV software from your computer to REACH 4.0.

📝 **Note**

For details on how to register and manage TV software, refer to the following: ► **Registering TV software**, **Managing registered TV software**

1 From the menus at the top, click **MANAGEMENT > TV Software**.

2 Click **Import**.

3   Configure TV software information.

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

Distributing TV software

Distribute TV software, registered on REACH 4.0, to the TVs.

🗐 Note

For details on how to distribute TV software, refer to the following: ▶ Distributing TV software

1   From the menus at the top, click **DEPLOYMENT**.

2   Click **NEW** and select **TV Software**.

3   Select TV software from the dropdown list and configure the distribution settings.

4   Click **Deploy**.

Updating TV software

Update the TV with TV software distributed from REACH 4.0.

Turn off the TV to perform an update and then turn on the TV again.

- If there is distributed TV software on the server, an update is performed when the TV is turned off.

- Controlling the TV power during the update may cancel the update.

Remotely controlling TVs

🗐 Note

For details on how to monitor and remotely control TVs, refer to the following: ▶ Monitoring room TVs

On the top menus, click **MONITORING** to monitor the TV connection and room occupancy as well as to control the selected TV remotely.

03 Launching REACH 4.0

Running the webpage

1 Launch REACH 4.0, using either of the following options:

Option 1 Click **Start > All Programs > REACH 4.0 > REACH 4.0**.

Option 2 Open a web browser and access the REACH 4.0 website.

- In IP mode, access the website via either http://localhost:7001 or https://localhost:7002, based on the protocol settings.

- In RF mode, access the website via https://localhost:443.

Option 3 Double-click 🔲 on the desktop.

📝 **Note**

REACH 4.0 is compatible with IE (9.0 or higher), Chrome and Firefox.

2 If the security error page appears, click **Advanced > Add Exception** and add the REACH 4.0 website to the security exception list.

📝 **Note**

- The security error page appears differently, depending on the browser you are using. This tutorial assumes that you are using FireFox.

- Adding the website to the security exception list is required only once when the software runs for the first time after install.

Registering a license

When you run REACH 4.0 for the first time after install, you will be prompted to register your product license. Use the program by registering the license key that came with the product or obtaining a free license key.

📝 **Note**

- In RF mode, only a free license can be registered. Registering a license is needed only once when launching the software for the first time after installation.

- In RF mode, the license window appears automatically as soon as a connection to REACH 4.0 is established.

- In IP mode, a paid or free license can be registered. The license should be updated if the expiration date or the maximum number of devices that can be registered is exceeded.

- In IP mode, you can manage a registered license. For further information, refer to the following: ►Managing your REACH 4.0 licenses

- To add or manage licenses in IP mode, go to ⬚ > **Settings > License > License**.

Registering a free license

After installing the program, obtain a free license and then use the program.

📝 **Note**

- In RF mode, you can obtain a free license and use the program without an expiration date.

- In IP mode, obtain a free Trial license and use all features in the program for 30 days.

1 Run REACH 4.0.
  − For further information, refer to the following: ► **Launching REACH 4.0**

2 On the license screen, click **Add > Free Licence**.

3 Enter free license information.

Select the desired free license type. Make sure that IP mode is in use.

❶
- **Trial**: Access all features in REACH 4.0 for 30 days.

- **IPTV Only**: Access **MANAGEMENT > TV Configuration** only for unlimited time.
  TV and IPTV channel configurations can be exported to a USB device and used on a TV via **Clone USB to TV**.

2
Set the Internet connection state to **Connected**.

> 📝 **Note**
>
> To register a license with no Internet connection, select **Disconnected**. Download and register a license from another computer with an available Internet connection. For further information, refer to the following: ► Manually registering a license

3
The obtained free license key is shown.

4
Enter user information.

5
Select the checkbox to agree to the terms and conditions. Click **Terms and Conditions** to view specific terms and conditions.

4 After entering the required information, click **Activate**.

5 An activation confirmation window appears. Click **OK**.
  – The REACH 4.0 main screen appears.
  – If incorrect license information is entered, a warning prompt will appear. If this occurs, correct the information.

Registering a paid license

In IP mode, register the license key that came with the product and then use the program.

1 Run REACH 4.0.
  – For further information, refer to the following: ► Launching REACH 4.0

2 On the license screen, click **Add > Paid Licence**.
  – The license server address is automatically set when REACH 4.0 is installed.

3   Enter paid license information.
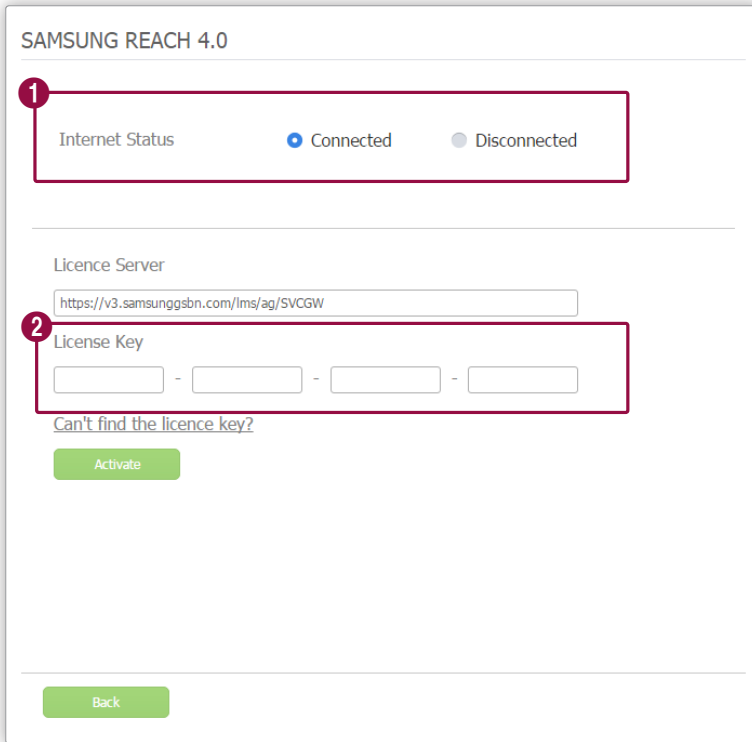
①   Set the Internet connection state to **Connected**.

> 📝 **Note**
>
> To register a license with no Internet connection, select **Disconnected**. Download and register a license from another computer with an available Internet connection. For further information, refer to the following: ► Manually registering a license

②   Enter the license key that came with the product.

4   After entering the required information, click **Activate**.

5   An activation confirmation window appears. Click **OK**.

  – The REACH 4.0 main screen appears.

  – If you change the board of a TV that has a registered license, the previous license and TV information is registered again. As a result, the message "License is not verified" will appear. After replacing the board of a TV, make sure to update the TV information configured for the room and license. For further information, refer to the following: ► Managing TV info

Manually registering a license

If an Internet connection is not available on your computer, obtain and register a license from another computer with an available Internet connection

📝 **Note**

> If an Internet connection is available on your computer, select **Connected** and obtain a license from your computer. For further information, refer to the following: ► Registering a license

1   Run REACH 4.0.

   − For further information, refer to the following: ► Launching REACH 4.0

2   On the license screen, click **Add > Paid Licence** or **Free Licence**.

3   Set Internet Connection to **Disconnected**.
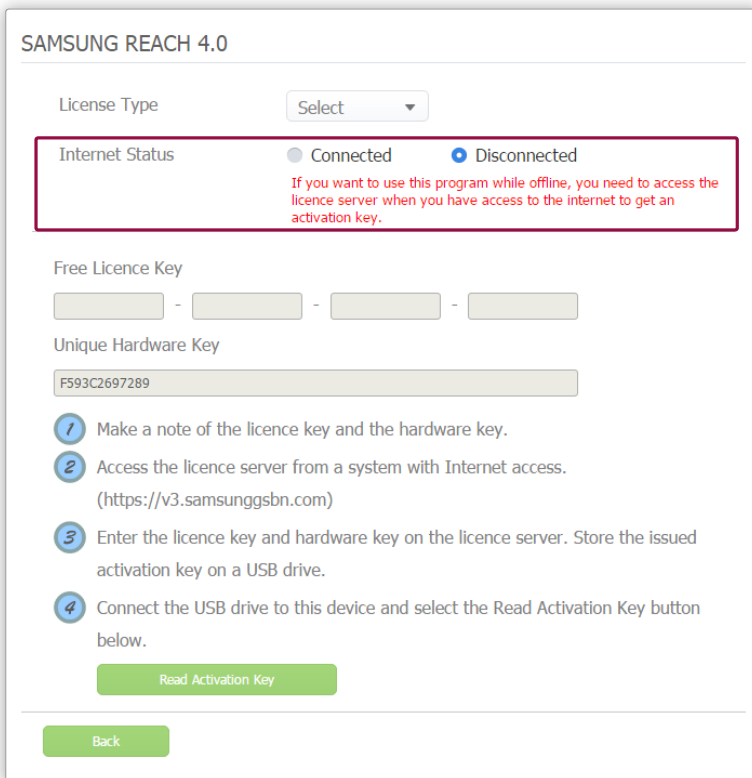
4   Download the license activation file from another computer, following the displayed instructions.

5   Click **Read Activation Key**.

   − Search for a license activation file stored on your computer.

6   If a license activation file is not found on the computer, the select file window appears. Select a mode from the options below and import a license file from another computer.

   − **Browse**: Open a file browser window and select the path of the license file.

– **Enter Manually**: Manually enter the license activation key stored in the Activation.key file.

– **Close**: Close the confirmation window.

7   A notification window appears when activation is successful. Click **OK**.

– The REACH 4.0 main screen appears.

– If incorrect license information is entered, a warning prompt will appear. If this occurs, correct the information.

Logging in

After license activation is complete, access the REACH 4.0 website to manage client information or configure TV content settings.

1   Run REACH 4.0.

– For further information, refer to the following: ► Launching REACH 4.0

2   On the login screen, enter your ID and password and click **SIGN IN**.
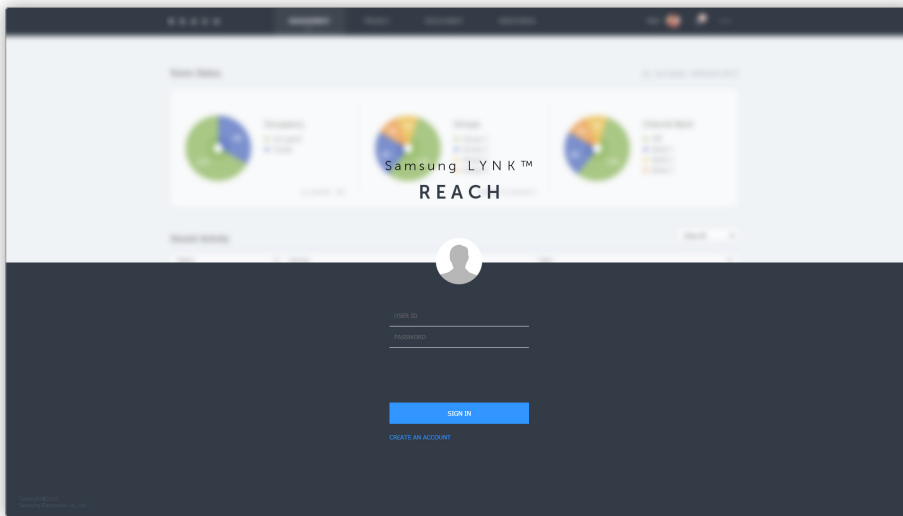
📝 Note

- REACH 4.0 is accessible only to administrators and users approved by administrators to sign up.

- To log in after launching REACH 4.0 with the initial administrator account (ID: gaadmin / password: qaadmin) or initial user account (ID: sample / password: qwerty), make sure to change the password. Make sure to change the password to ensure security.

- If the password is entered incorrectly five times in succession, the current account will become locked and can no longer be used. To unlock the account, log in by entering a CAPTCHA response.

- Note that you are automatically logged out if REACH 4.0 is left idle for one hour.

Registering a user

1   On the login screen, click **CREATE AN ACCOUNT**.

2   Enter account information.

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

   – Once sign-up is approved by the administrator, the user can log in with their ID and use REACH 4.0.

Note

- Fields with * cannot be left blank.

- For further information on sign-up approval, refer to the following: ▶ Approving users for sign up

- User IDs can also be registered by administrators. For further information, refer to the following: ▶ Adding users

Account privileges and available features

REACH 4.0 provides different screen displays, fixed menus and features depending on the privileges assigned to the logged in ID. Check the availability of features assigned to your account privileges before using REACH 4.0.

	User	Administrator
Template management	X	O
Project creation	O	X
Project management	O	X
Project distribution	O	O
TV settings management	O	O
Group management settings	O	O
Room monitoring	O	O
User management	X	O
Access details management	X	O

Note

- Administrator privileges can be assigned to general users as well as administrators. For further information, refer to the following: ▶ Managing user info

- Administrators can distribute all the projects registered on the server. General users can distribute only the projects they have created.

Main screen

The main screen of REACH appears as soon as you log in after activating the product license.

📝 **Note**

Screen layout and fixed menus that are provided can differ from the user guide, depending on the privileges of the logged in ID.
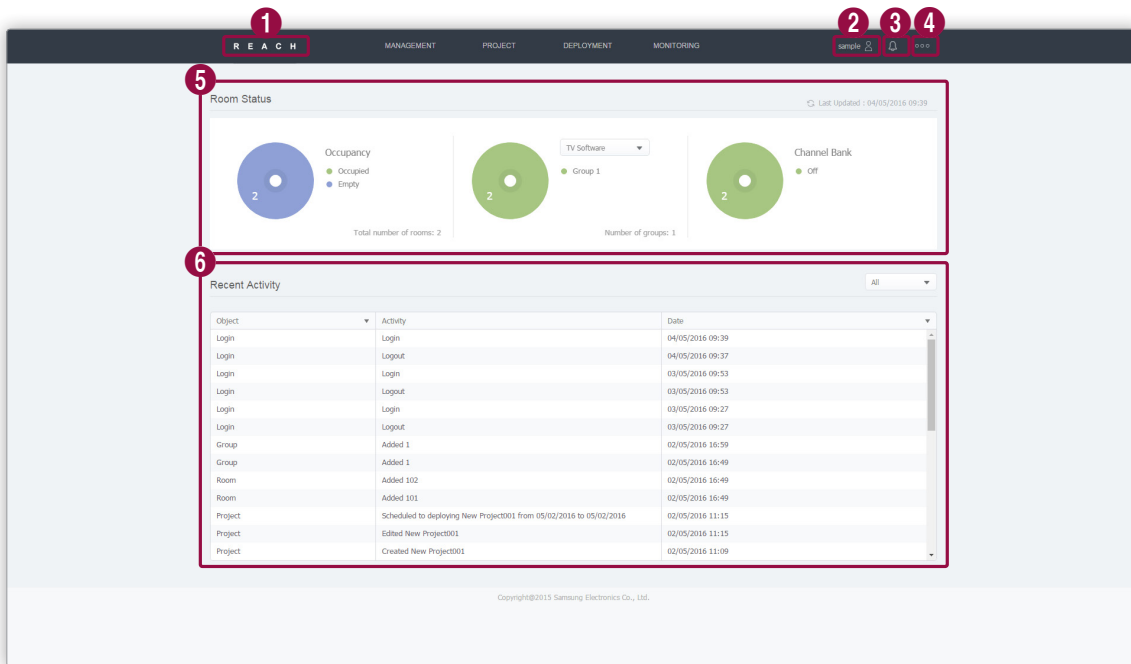
❶   The REACH main screen appears.

❷   The currently logged in ID is shown. Click the ID to view the user name, account privileges, and the last login time. Edit the user information or log out.

❸   View details of notifications, such as received messages or changes to account details.

❹   Access specific menu items.

         ▪ **Settings**: Configure REACH settings. For further information, refer to the following: ► Solution settings

         ▪ **Help**: Display help information for REACH.

         ▪ **About**: View the REACH version and copyright details.

View room information for each info item.

⑤
- ▪ **Occupancy**: View the room occupancy.
- ▪ **Groups**: View the number of rooms by the group. In IP mode, you can select the category to which a group belongs.
- ▪ **Channel Bank**: View the number of configured REACH channels and check whether channels are in use.

⑥ View details of recent management tasks.

Configuring the REACH 4.0 settings

REACH channel setup

In RF mode, to manage a TV via REACH 4.0 or use content created using REACH 4.0 from a TV, set up the REACH channels first.

Note
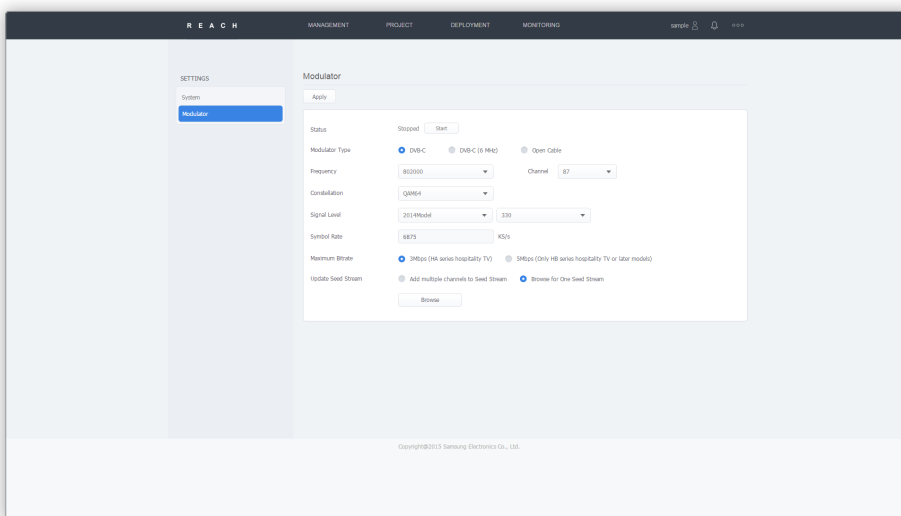
This feature is not available in IP mode.

1 From the menus at the top, click ⚬⚬⚬ > **Settings > Modulator**.

2 Configure the Modulator settings required to connect to the TV.

Status	Status of whether the server is active is shown. To activate the server, click **Start**.
Modulation Type	Select the appropriate cable type for your region. If you are using the solution in Europe, select **DVB-C**. Select **DVB-C (6MHz)** for Taiwan and Philippines, and **OpenCable** for the US.
Frequency	Select a channel frequency from the dropdown list. Each channel number is initially assigned a unique frequency. Change the frequency and then set an appropriate channel.
Constellation	Select a frequency modulation type. ⚠ **Caution** Selecting **QAM64** is required to use REACH 4.0 properly.
Signal Level	Adjust the signal intensity for each REACH Server model.
Symbol Rate	Set the frequency modulation speed.
Maximum Bitrate	Set the maximum transfer rate when sending data from REACH to the TV.
Update Seed Stream	• **Add multiple channels to Seed Stream**: Include multiple streams in the REACH Seed channel. You can also enter a URL and then use real-time streaming. – The REACH Seed channel can include a maximum of four streams. – The channel can include only one real-time streaming feature that uses URL. – The real-time streaming feature is compatible with RTP multicasting format only. • **Browse for One Seed Stream**: Include one stream in the REACH Seed channel.

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

📝 **Note**

- Make sure the REACH channel info configured on the server is identical to the channel info on the room TV. For details on how to set the REACH channel on TVs, refer to the following: ▶REACH channel setup

- By default, the REACH channel is set to 87 and the frequency is set to 603 MHz. For more information on frequencies and channels, refer to the following: ▶ Channels and frequencies

- Set the maximum transfer rate to 3 Mbps if you are using HA series TV models or if a TV group includes HA series models.

- To use with Seed Stream, files
  - cannot exceed the transport stream bit rate 20 Mbit/s
  - must be in mpegts format.
  - video codec: h264 and mpeg2video
  - audio codec: ac3 and mp2

Initial TV setup

To import server info from a TV or update TV software, initial setup is required on the TV.

Note

> Displayed initial TV setup menus can vary depending on the TV model. This user guide is based on the initial TV settings menu on the Orsay model.

Activating REACH 4.0 and configuring mode

To manage a TV via REACH 4.0 or use content created using REACH 4.0 from the TV, activate REACH 4.0 on the TV.

1 Select **REACH Solution** from the initial TV setup menus.

MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

Hospitality Mode	Standalone	Widget Solution
SI Vendor	OFF	System
Power On		
Channel		
Menu OSD		
Clock		
Music Mode		
Remote Jack Pack		
External Source		
Bathroom Speaker		
Eco Solution		
Logo/Message		
Cloning		
REACH Solution		
Network		

When complate, power down TV.
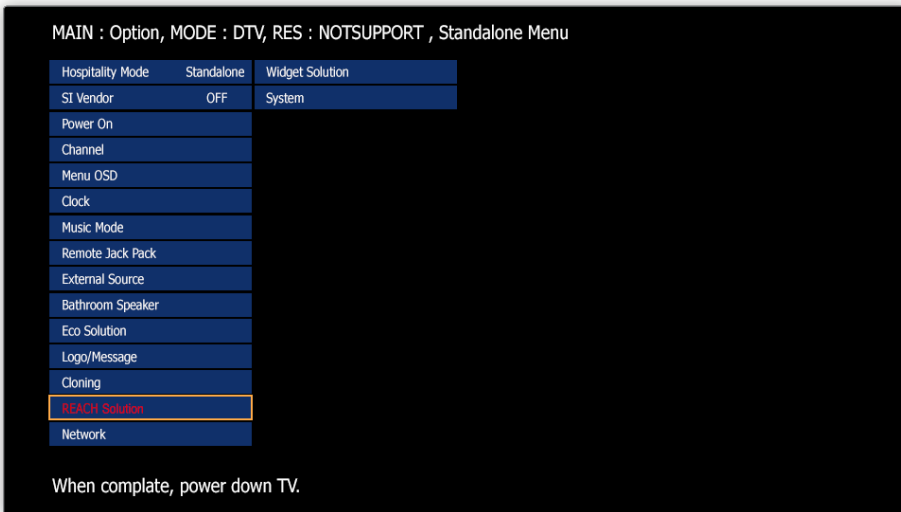
2 Configure connection mode settings.

– To connect to the Orsay model in RF mode, set **REACH** to **ON** and **REACH IP Mode** to **OFF**.
   To connect in IP mode, set **REACH** to **ON** and **REACH IP Mode** to **ON**.

– To connect to the Tizen model in RF mode, set **REACH RF Mode** to **ON** and **REACH IP Mode** to **OFF**.
   To connect in IP mode, set **REACH RF Mode** to **OFF** and **REACH IP Mode** to **ON**.

MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

REACH	ON
REACH IP Mode	ON
Sever IP Setting	ON
REACH Channel	-
REACH Updata Time	-
REACH Updata Immediate	-
Group ID	-
Room Number	
IPG Room Type	Public
REACHConfig Version	0000

When complate, power down TV.
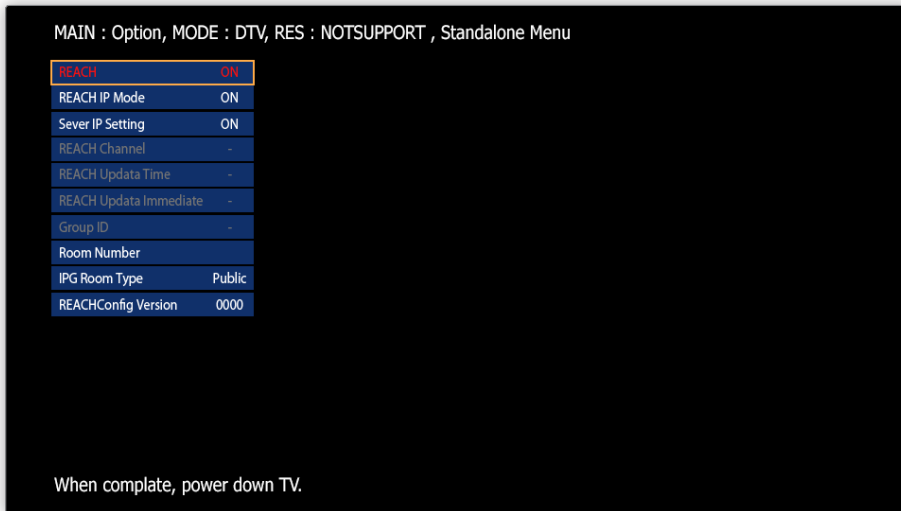
3 Turn off the TV and then on again.

– Changes will be applied to the TV.

REACH channel setup

Set up the REACH channel from a TV.

ℹ Note

To use REACH 4.0 in conjunction with a TV properly, make sure the REACH channel info configured on the TV and server is identical to one another. For details on how to set the REACH channel on the server, refer to the following: ▶REACH channel setup

REACH channel setup in North America

1   From the initial TV setup menus, select **Channel > Channel Setup**.
 – The channel setup menu items will appear.

```
MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

  Channel Setup
  Channel Editor
  Mixed Channel Map           ...
  Dynamic SI                 OFF
  Channel Rescan Message      ON
  Pan Euro MHEG              OFF
  Mychannel                  OFF
  Genre Editor                ...
  Subtitle Auto ON           OFF




  When complate, power down TV.
```

2   Select **Broadcasting > Auto Program**.

Broadcasting

Auto Program   Scan all frequencies for broadcast signals and store channels found.

Antenna   Cable

Channel List

Guide

Edit Channel

Edit Favorites

Audio Options

⌄

3   Select **Start**.

4   Select **Cable** from the list of automatic search modes.

5   Select **Scan**.
    – Channel search will start.

6   If retrieved channels are listed, use the TV remote control to select a channel that displays the default playback screen.

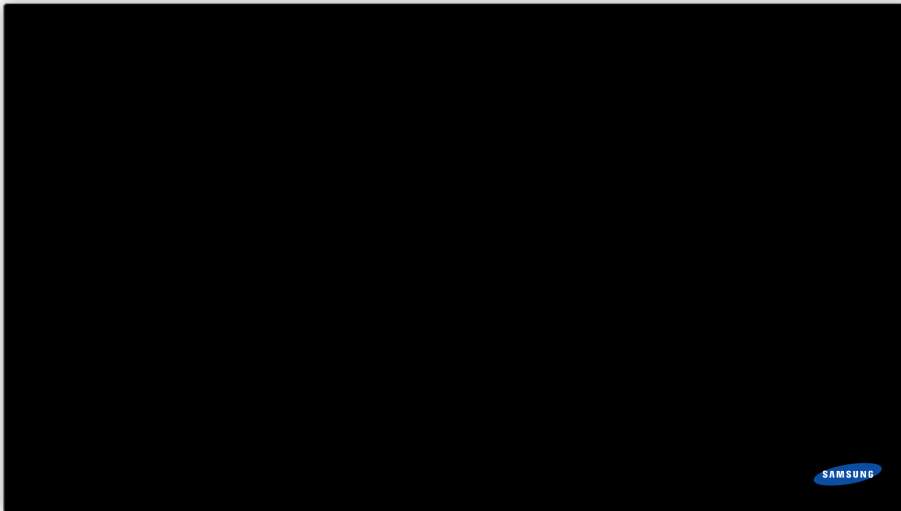## REACH channel setup in Europe

1   From the initial TV setup menus, select **Channel > Channel Setup**.
    – The channel setup menu items on the TV will appear.
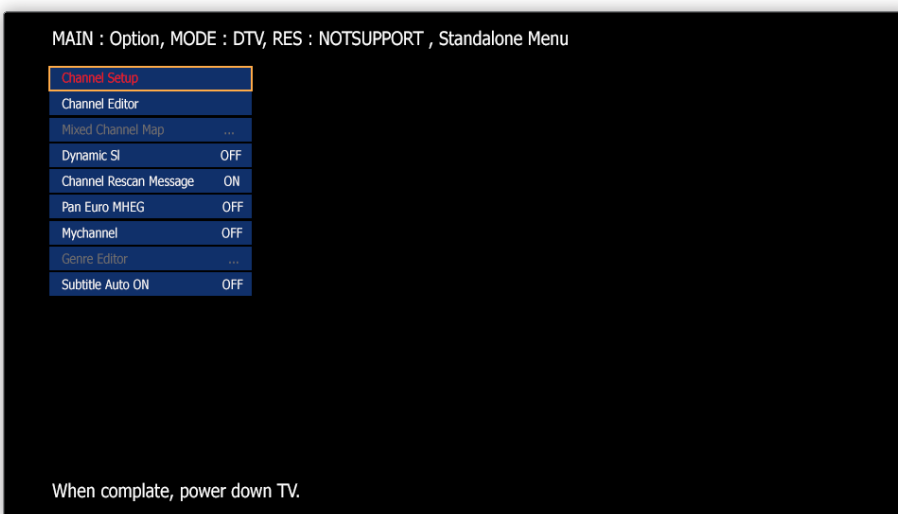
2   Select **Broadcasting > Auto Tuning > Auto Tuning**.

Broadcasting

Auto Tuning

Aerial   Terrestrial

Channel List

Guide

Edit Channel

Edit Favourites

Audio Options

Scans all channels and stores them in the TV's memory

- Auto Tuning
- Cable Search Option

3   Select **Start**.

4   Set automatic search mode, using the following options.

  – **Aerial**: Set the channel search type. Select **Cable**.

  – **Channel Type**: Set the transmission mode for the channel to search for. Select **Digital**.

  – **Scan Mode**: Set the search mode. Select **Full**.

5   Select **Scan**.

  – Channel search will start.

6   If retrieved channels are listed, use the TV remote control to select a channel that displays the default playback screen.
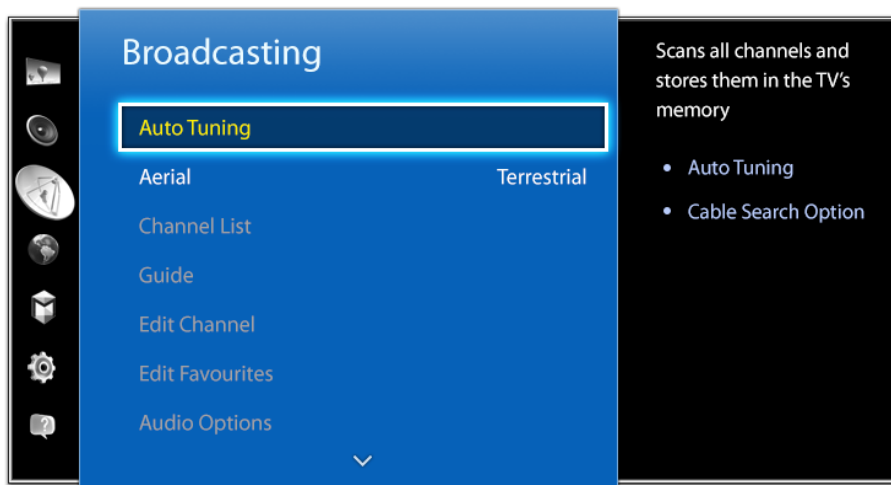
SAMSUNG
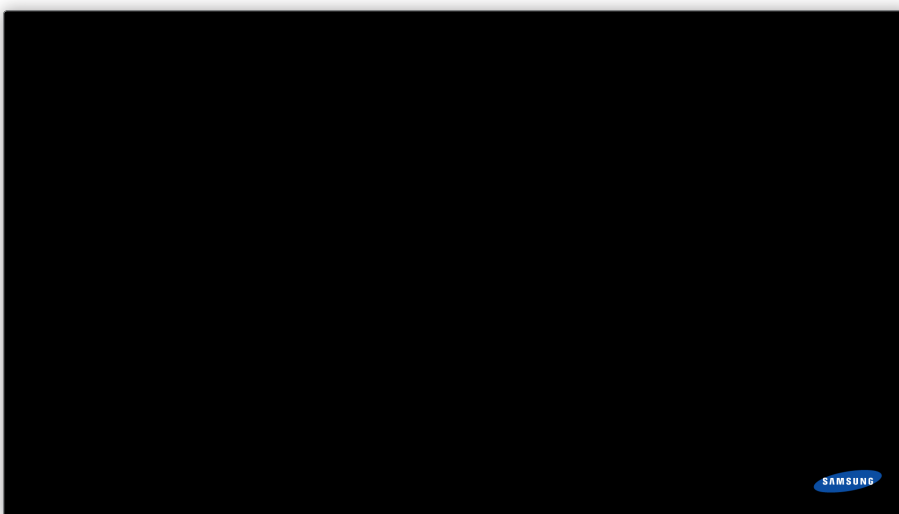
Room number settings

Set a room number from a TV.

Note

To use REACH 4.0 in conjunction with RTV EACH 4.0 properly in RF mode, make sure the room info configured on the TV and server identical to each another. For details on how to set room numbers on the server, refer to the following: ► Managing rooms by room

1 From the initial TV setup menus, select **REACH Solution > Room Number**.

```
MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

 REACH                   ON
 REACH IP Mode           ON
 Sever IP Setting        ON
 REACH Channel            -
 REACH Updata Time        -
 REACH Updata Immediate   -
 Group ID                 -
 Room Number
 IPG Room Type         Public
 REACHConfig Version    0000




When complate, power down TV.
```
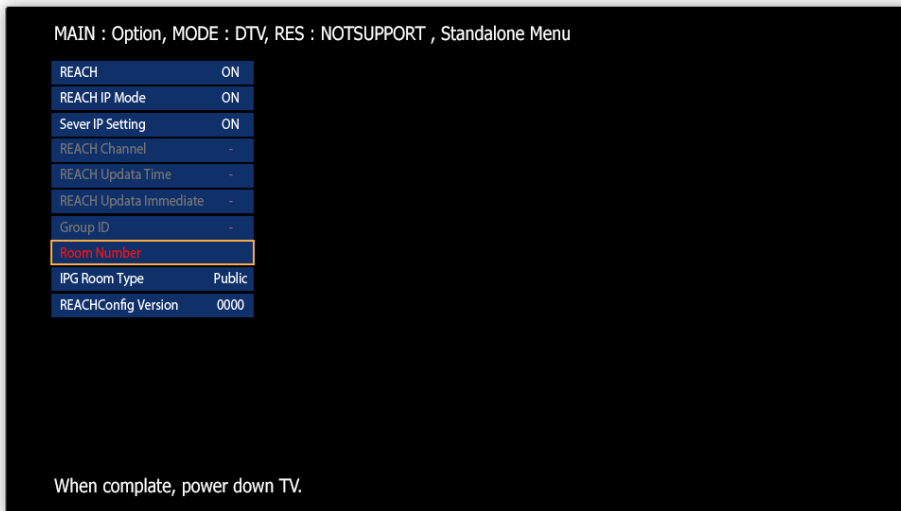
2 Enter a room number using the displayed virtual keyboard.

3 Turn off the TV and then on again.
   – Changes will be applied to the TV.

Group ID settings

From room TVs, group the TVs to assign a group ID to them.

Note

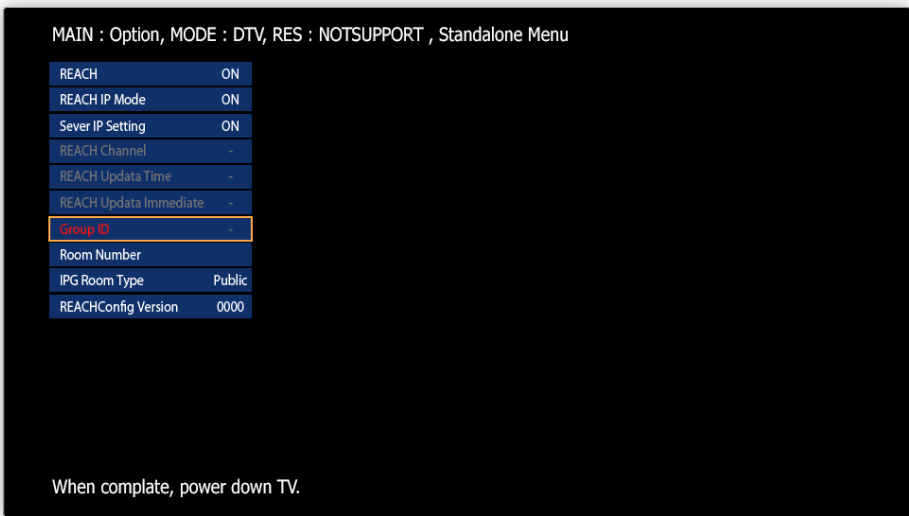- Configure group ID settings only when connecting to RF mode.

- To use REACH 4.0 in conjunction with a TV properly, make sure the group info configured on the TV and server is identical to one another. For details on how to register room TV groups on the server, refer to the following: ► Managing rooms by group

1 From the initial TV setup menus, select **REACH Solution > Group ID**.

```
MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

   REACH                    ON
   REACH IP Mode            ON
   Sever IP Setting         ON
   REACH Channel            -
   REACH Updata Time        -
   REACH Updata Immediate   -
   Group ID                 -
   Room Number
   IPG Room Type            Public
   REACHConfig Version      0000




   When complate, power down TV.
```

2 Select a group ID.

Note

Group IDs can be set in the 1 to 99 range.

3 Turn off the TV and then on again.

   – Changes will be applied to the TV.

Enabling automatic update

Configure settings so that TV settings or software automatically update at a specified time or when the TV is turned off.

Note

- Automatic update is available only when RF mode is in use.

- For details on how to perform automatic update, refer to the following: ► Automatic update

1   Select **REACH Solution** from the initial TV setup menus.

2   To automatically update TV settings or software at a specified time, select **REACH Update Time** and specify the time.

3   To automatically update TV settings or software when the TV is turned off, set **REACH Update Immediate** to **ON**.

4   Turn off the TV and then on again.
  – Changes will be applied to the TV.

Configuring IP mode settings

If IP mode is in use, use the initial TV menu to configure TV network settings, enable REACH 4.0, and then set the IP address for the REACH server.
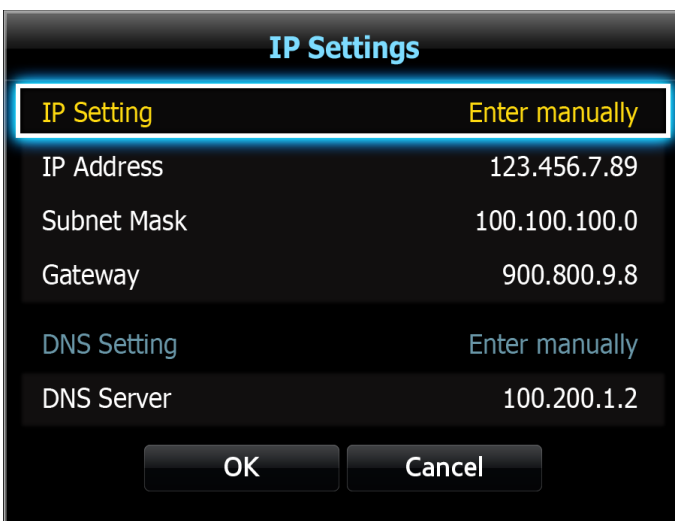
✎ Note

The TV network must be identical to the network of the computer where REACH 4.0 is installed.

1   From the initial TV setup menus, select **Network** > **Network Setup**.

2   The network settings menu appears. Select **Network** > **Network Settings**.

3   On the network settings screen, specify the network type (wired or wireless) and select **Connect**.

4   The network connection settings screen appears. Select **IP Settings**.

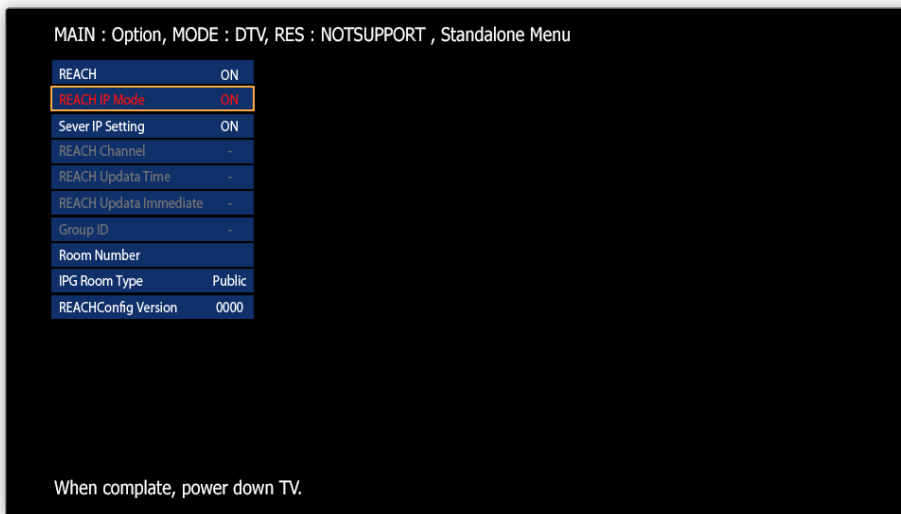5   Use the IP settings screen to configure the IP address and subnet mask, and other IP settings for the TV.

✎ Note

We recommend that the IP address be manually specified by selecting **Enter manually** from **IP Setting**.

IP Settings	
IP Setting	Enter manually
IP Address	123.456.7.89
Subnet Mask	100.100.100.0
Gateway	900.800.9.8
DNS Setting	Enter manually
DNS Server	100.200.1.2
OK	Cancel

6   Select **OK** to save specified IP settings.
  – Configuring TV network settings is complete.

7 Select **REACH Solution** from the initial TV setup menus.

8 Set **REACH IP Mode** to **ON**.

MAIN : Option, MODE : DTV, RES : NOTSUPPORT , Standalone Menu

REACH	ON
REACH IP Mode	ON
Sever IP Setting	ON
REACH Channel	-
REACH Updata Time	-
REACH Updata Immediate	-
Group ID	-
Room Number	
IPG Room Type	Public
REACHConfig Version	0000

When complate, power down TV.

9 Select **Server IP Setting** for the Orsay model and **Server URL Setting** for the Tizen model.

10 When the Reach server's IP address configuration screen appears, fill in the address input field with the appropriate IP address for the address protocol setting, and then select **Done**.

– Enter "http://REACH IP address/content" if the protocol was set to HTTP.

– Enter "https://REACH IP address:443/content" if the protocol was set to HTTPS.

Note

Protocol must be configured using the same method applied in REACH 4.0. For details on how to configure a protocol in REACH 4.0, refer to the following: ► Configuring a protocol

11 Turn off the TV and then on again.

– Changes will be applied to the TV.

04 Creating TV content

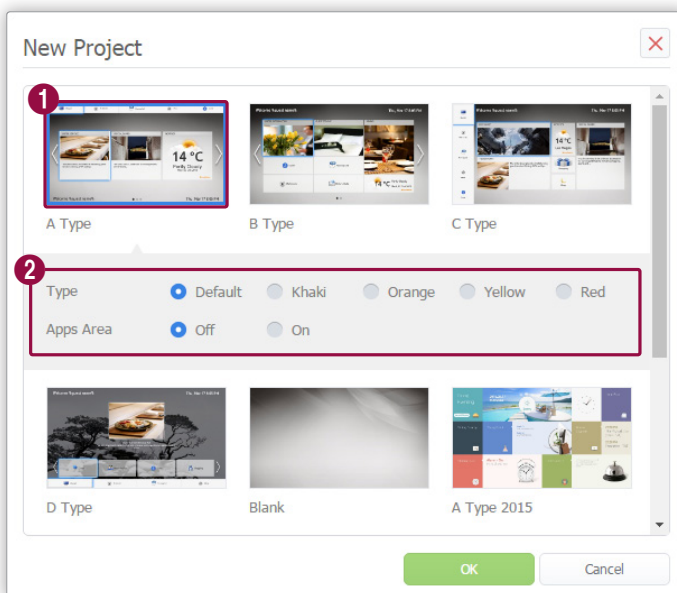## Creating a new project

Create a project to use as TV content.

1 From the menus at the top, click **PROJECT > New**.

Note

> To go to the project list when another project is running, click **FILE > Open**.

2 Select a project template type and click **OK**.
   - The edit screen for a new project with the selected template applied will be displayed.

---

❶ View available template types.

---

❷
- **Type**: Select a theme color for the selected template. If a **A~G Type**-type template is selected, only **Default** colors are supported.
- **Apps Area**: Activate or deactivate the application area in the template. This feature is available only when you are logged in under IP mode.

3   From the edit screen, configure a project, using the following features.

–   Available edit features can vary depending on the selected element type. For further information, refer to the
following: ► Configuring a project
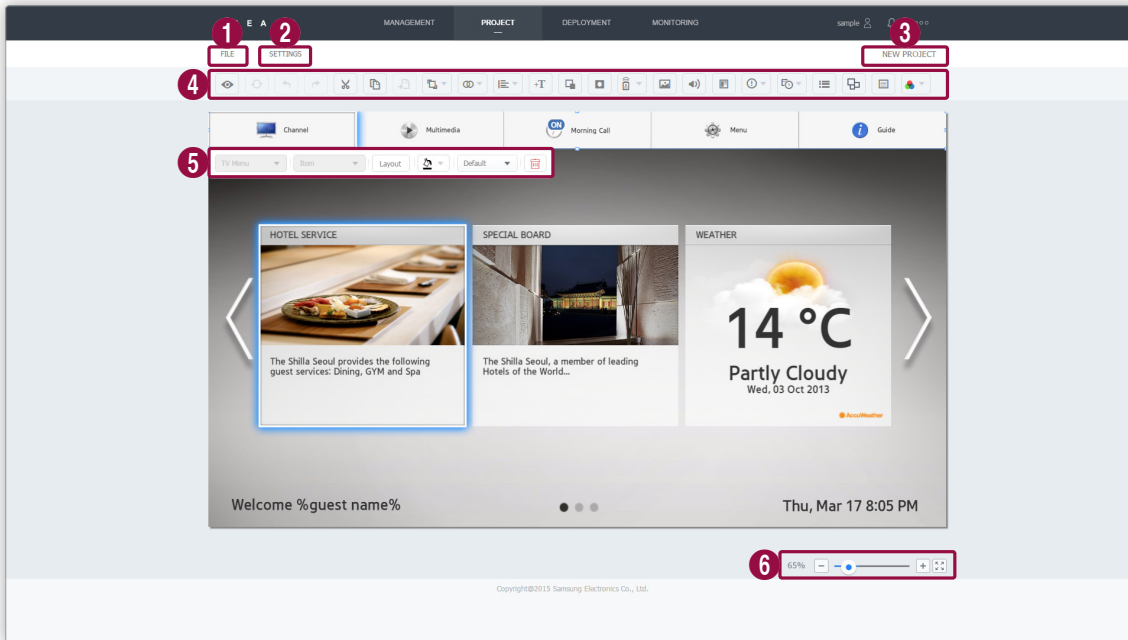
❶	Use this menu to manage files. Clicking the menu will display sub-menu items.
❷	Configure the project preview, element addition, page navigation and project language settings.
❸	The name of the current project is shown.
❹	This is the project toolbar section. Available functions vary, depending on the selected element.
❺	Set properties of an element clicked from the edit section. Available tools are enabled according to the element. Tools that are not available will appear disabled.
❻	Zoom in or out on the edit project screen.

4   After editing the project as desired, click **FILE > Save**.

–   To save under another name, click **FILE > Save as**.

5   A confirmation window appears. Click **Yes**.

–   The project will be saved.

📝 **Note**

Default templates can be set only by administrators. For further information, refer to the following: ►Managing templates

Configuring a project

Configure a project using various edit features of REACH 4.0.

Opening the edit project screen

1 From the menus at the top, click **PROJECT**.

📝 **Note**

To go to the project list when another project is running, click **FILE > Open**.

2 Click the name of the project to edit.

– The edit screen for the project will be displayed.

– If there is no project registered, create a new project. For further information, refer to the following: ► Creating a new project

Editing TV menus

Set a virtual menu that will give you quick access to a specific menu item on the TV.

1 On the edit project screen, click a TV menu element.
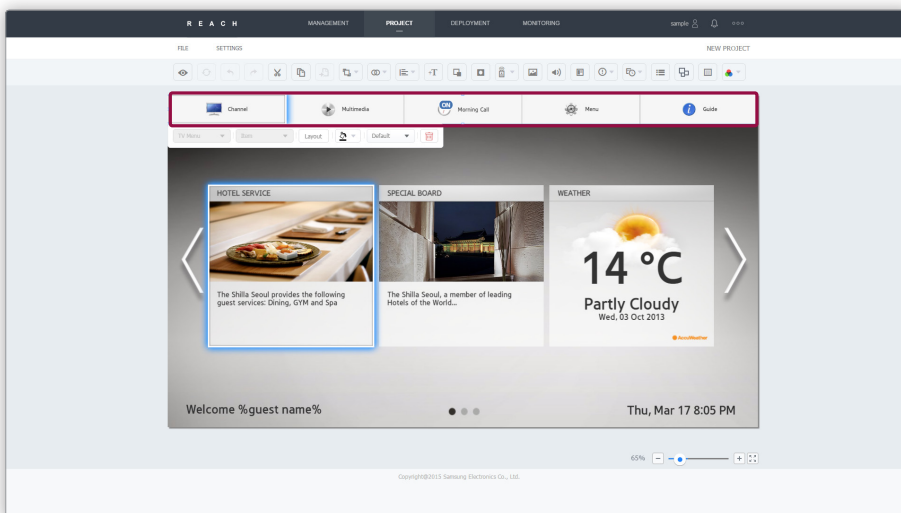
2 Set the element properties using the properties toolbar.

   – **Layout**: Set the element and menu display type for the shortcut menu.

   – ⬚ : Set the menu background color.

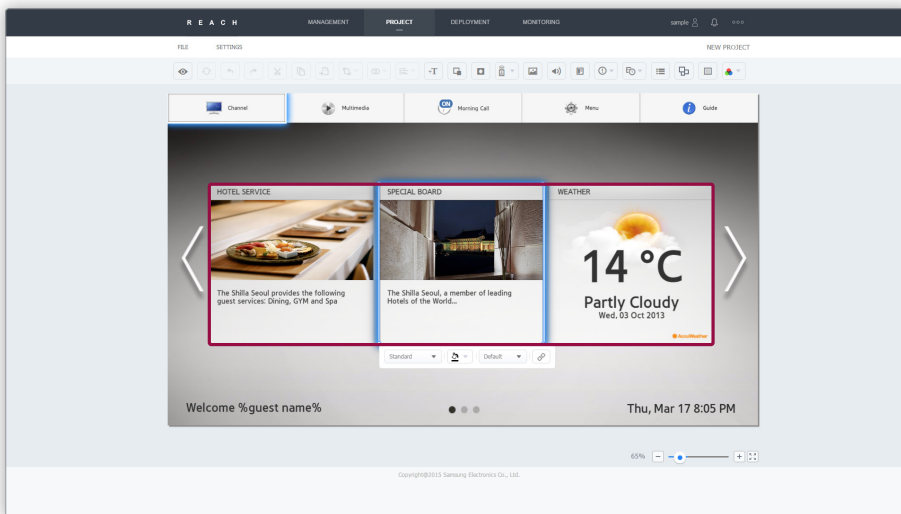   – **Default**: Set the menu font.

   – 🗑 : Delete a TV menu.

📝 **Note**

Double-click the text and image of a TV menu to edit the menu details, if required. For further information, refer to the following: ► Editing text, Editing images

Editing default menu items

Set the default REACH 4.0 menu items for TV content.

1 On the edit project screen, click a default menu element.

2 Set the element properties using the properties toolbar.

   – **Page Type**: Select a page type from **Standard(Hotel Menu)/Widget/Weather/TV Menu**.

   – ⬚ : Set the menu background color.

   – **Default**: Set the menu font.

   – 🔗 : Go to the page where the menu is linked.

Note

- You can edit the text and image of a basic menu. For further information, refer to the following: ► Editing text, Editing images
- Page types provided in the properties toolbar differ by project type:
  - 2014 Type: **Standard/Weather/TV Menu**
  - 2015 Type: **Hotel Menu/Widget/TV Menu**
- **Chromecast** under TV Menu is available for 2015 type projects only.
- For 2014 type projects, **Chromecast** can be found in TV menu element **> Action > Type**: **Launch Native App**.

Adding pop-ups

Add pop-ups to a project.

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, click 🔲 and select **Pop-up**.
  - Alternatively, right-click on the page list and select **New Page > Pop-up**.
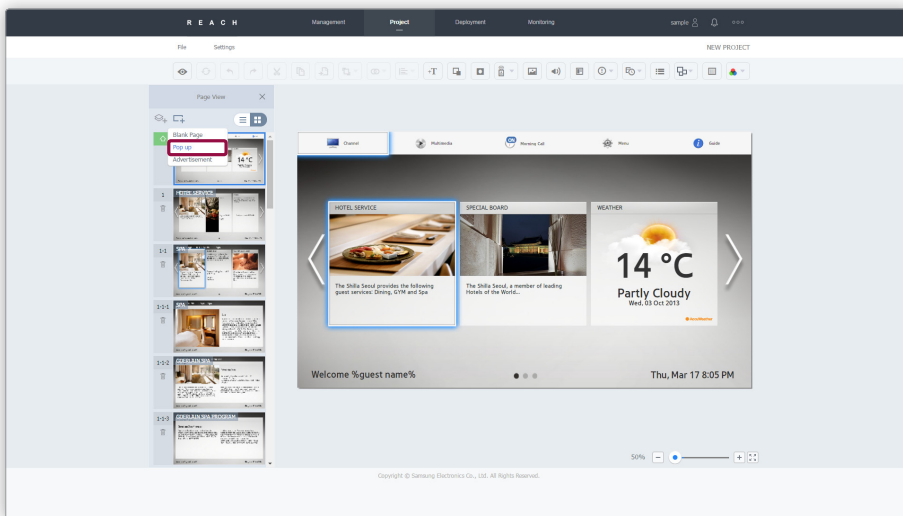
Note

For details on how to edit a pop-up, refer to the following: ► Configuring pop-up settings

Editing page properties

Adding pages

1 On the edit project screen, click **SETTINGS > Page View**.

2 From the list below PAGE VIEW, click ⬜ and select **Blank Page**.
   – Alternatively, right-click on the page list and select **New Page > Blank Page**.

---

❶ Change the mode to view pages.

---

❷ Access a new page that has been added.

Adding ad pages

Add ad pages to a project.

Note

To add an ad page, first activate the ad pop-up function. For further information, refer to the following: ▶ Ad page settings

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, click ⊡₊ and select **Advertisement**.

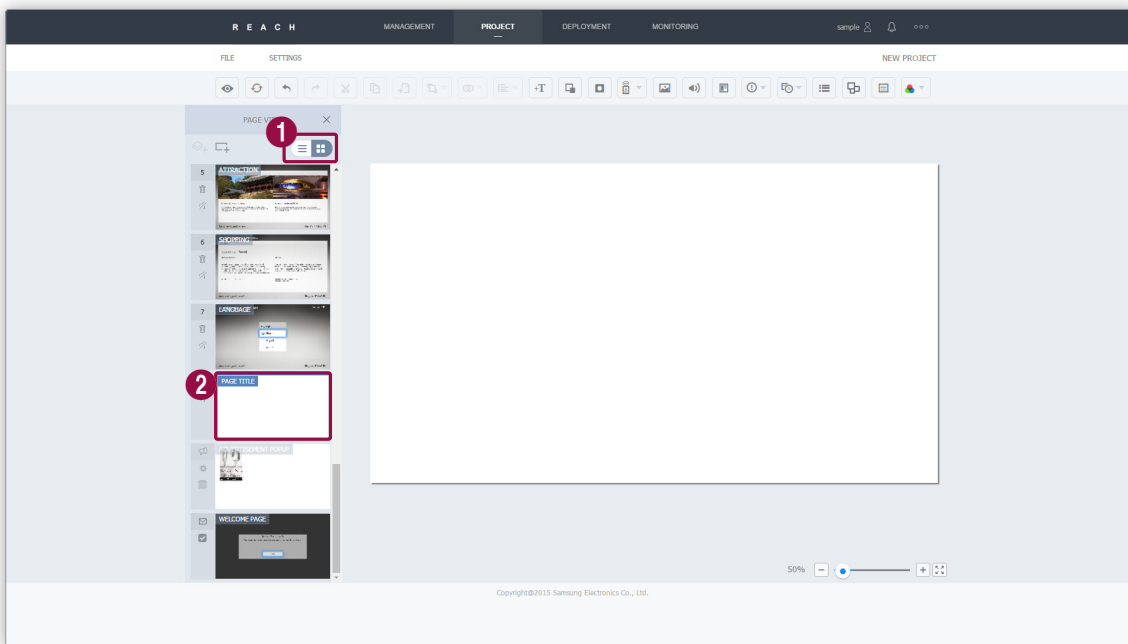–   Alternatively, right-click on the page list and select **New Page > Advertisement**.

Note

For details on how to edit an ad page, refer to the following: ▶ Ad page settings
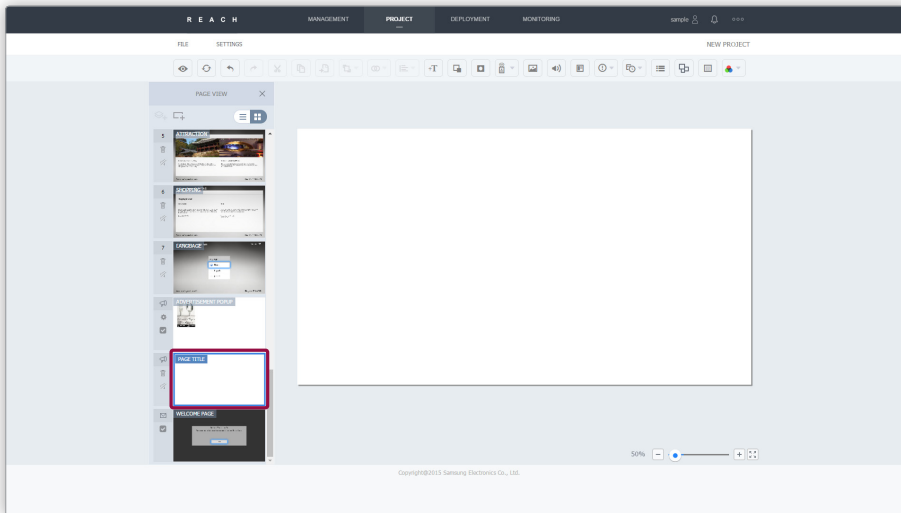
Adding a Chromecast page

Add a Chromecast page to a project.

Note

- For 2014 type projects, **Chromecast** can be found in TV menu element **> Action > Type**: **Launch Native App**.

- For 2015 type projects, **Chromecast** can be found in default menu element **> TV Menu**.

1   On the edit-project screen, click either a TV menu element or default menu element.

2   Select TV menu element **> Action > Type**: Select **Chromecast**, or select default menu element **> TV Menu > Chromecast**, and then specify the **Type**.
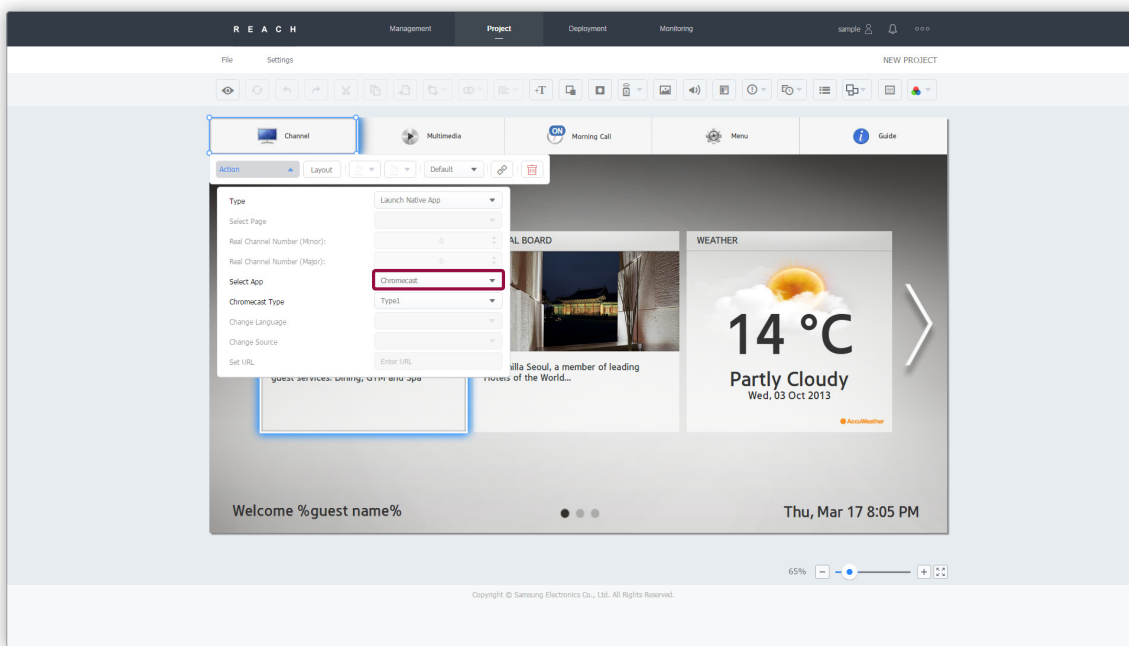
Note

For details on how to edit a Chromecast page, refer to the following: ► Configuring Chromecast page settings

Adding a sub page

1   On the edit project screen, click **SETTINGS > Page View**.

2   Click a page from the list below PAGE VIEW.

3   Click   .

    – A new page will be added under the selected page.

---
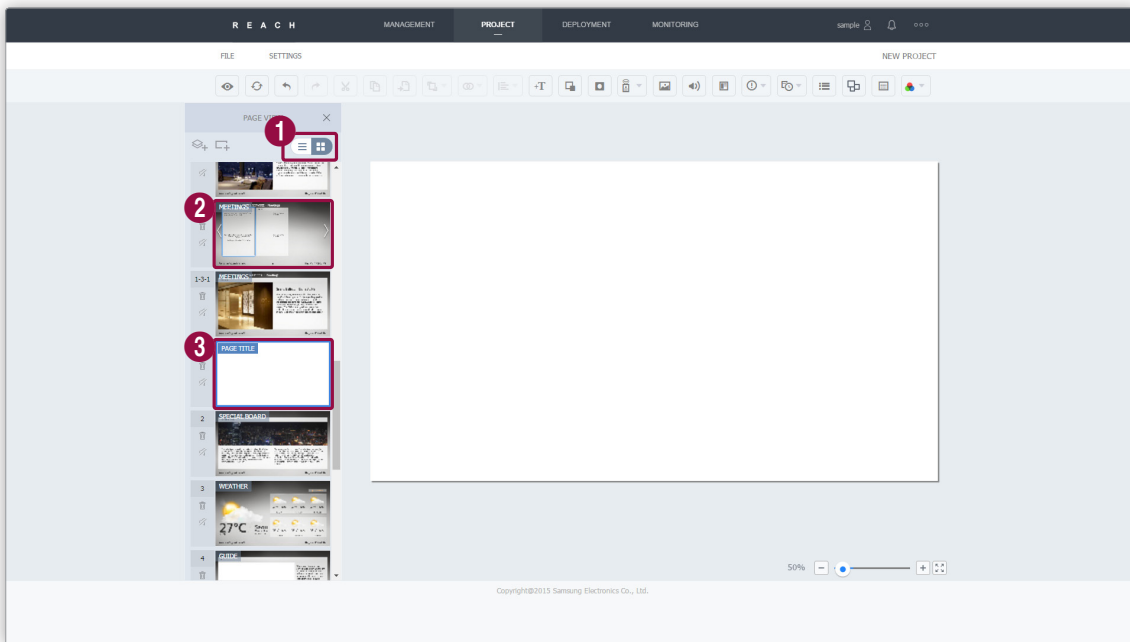
1   Change the mode to view pages.

---

2   View the upper-level page of the added page.

---

3   Access a new sub page that has been added.

Deleting a page

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, click 🗑 for a page.
     –   Alternatively, right-click on a page and select **Delete Page**.

3   A confirmation window appears. Click **Yes**.
     –   The page will be deleted.

Navigating through pages

1   On the edit project screen, click **SETTINGS > Page View**.

2   Click a page from the list below PAGE VIEW.
     –   You will be redirected to the corresponding page.
     –   To go to the uppermost project page, click ⌂ .
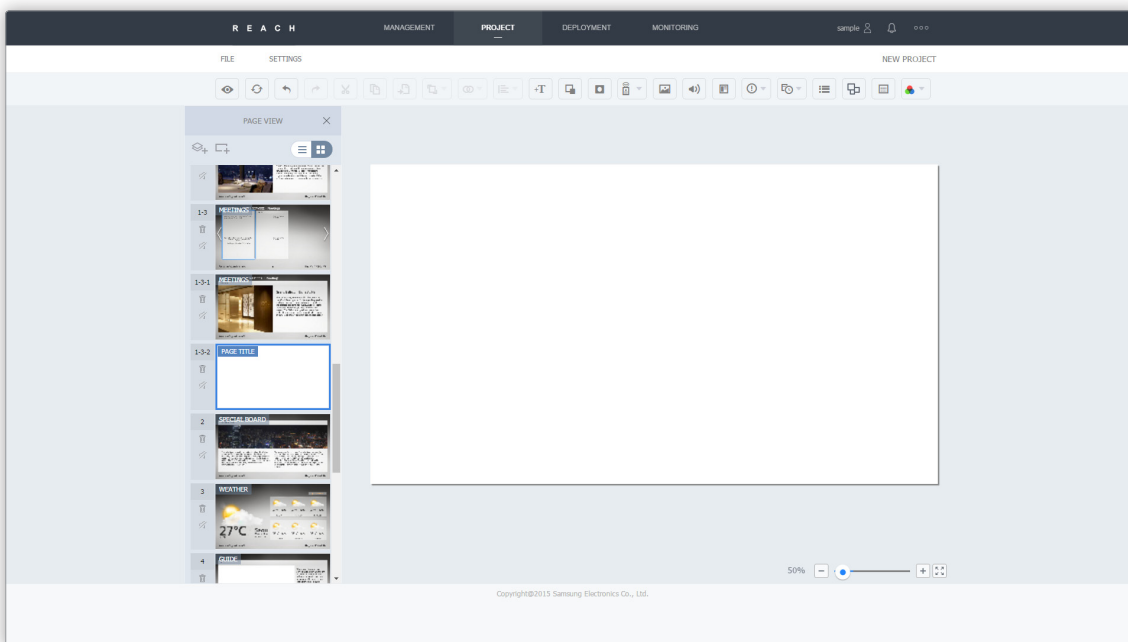
3   To close the list of pages, click ✕ .

Rearranging pages

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, click and drag the page to rearrange to the desired position.

Changing a page name

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, click a page to rename.

3   Right-click on the page and select **Rename**.

4   Enter a new name and press **Enter** on the keyboard.
  - The new name will be applied to the Page View list.

Inserting an audio file

Insert an audio file in a page to set the background music.

1   On the edit project screen, click **SETTINGS > Page View**.

2   Click a page from the list below PAGE VIEW.

3   Click ▨ .
  - Alternatively, right-click on a page and select **Insert Audio**.

4   Select an audio file to insert and click **OK**.
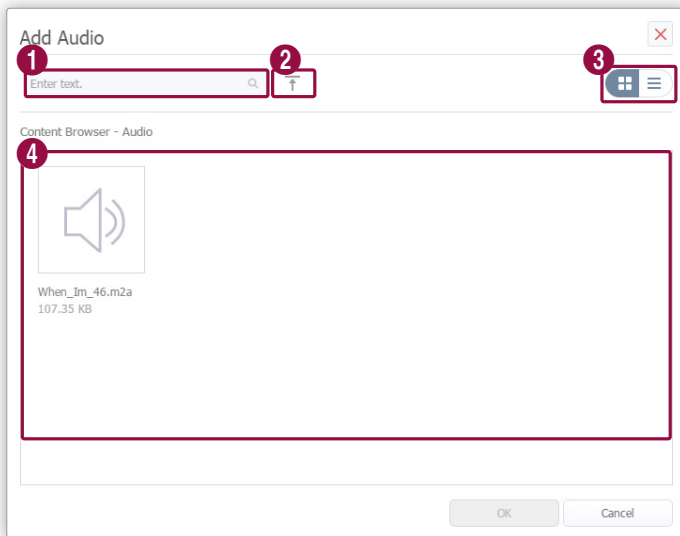
1   Search for an audio file name.

2   Upload an audio file to the server.

3   Change the mode to view audio files.

4   Audio files saved on the server are listed.

Sub-menu layout settings

1   On the project edit page, click a basic menu and select   .
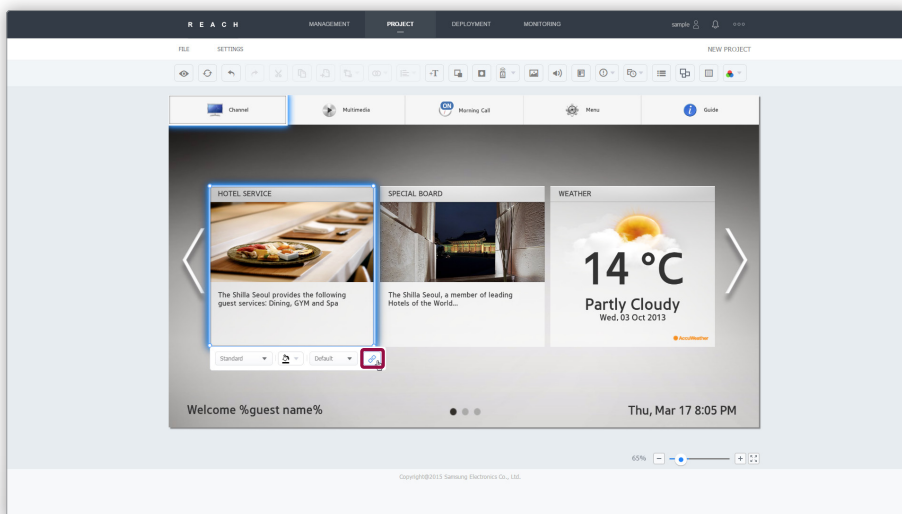
2   On the displayed sub-page, click a menu item to change the layout for.

3   Select a layout from the **Sub type** dropdown list on the toolbar.

    – The selected element layout will be changed.
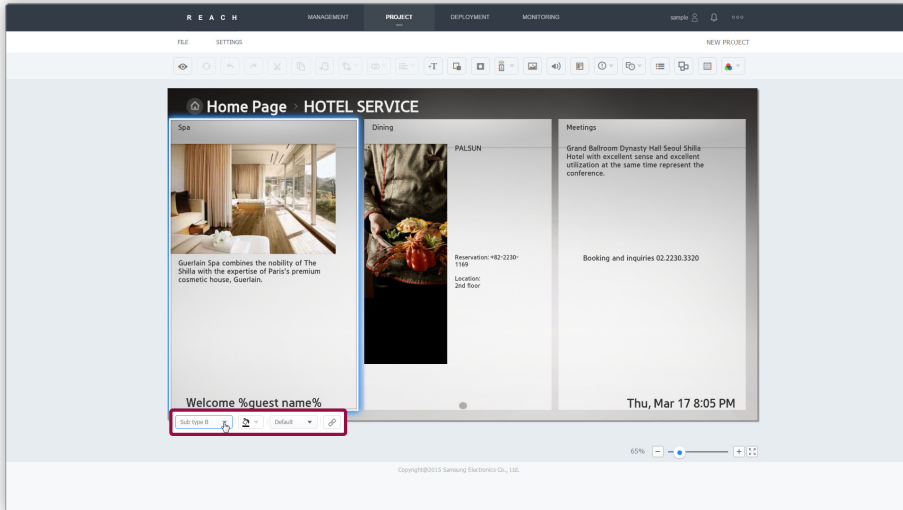
Note

The **Sub type** dropdown list will not appear on the toolbar if the clicked basic menu does not contain sub-menu items.

Configuring pop-up settings

Configure pop-up messages and button functions.

1   On the edit project screen, click **SETTINGS > Page View**.

2   In the list under PAGE VIEW, select the desired **Pop-up** screen.

---
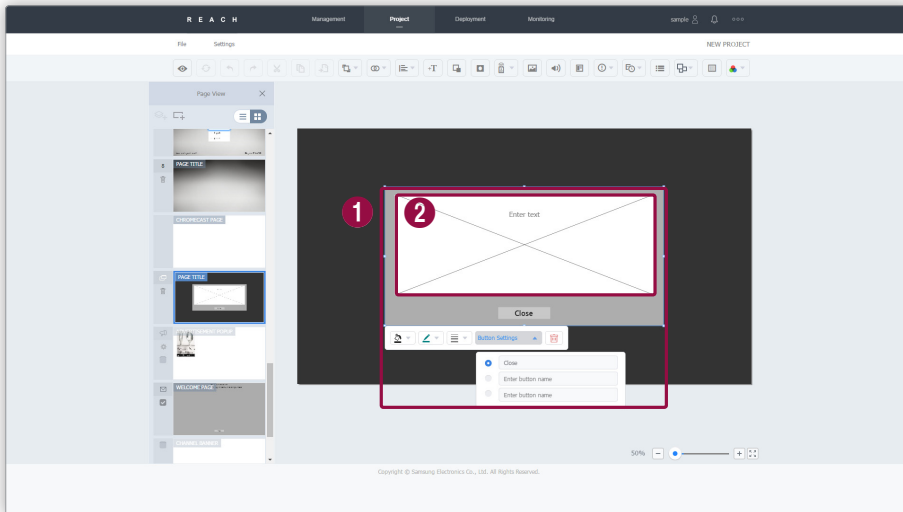
❶   Enter button names under **Button Settings**, and specify functions of the buttons.

---

❷   Select the text and image sections, and configure a pop-up screen.

Ad page settings

Enable or disable pop-up ad mode and configure settings to use pop-up ads.

1   On the edit project screen, click **SETTINGS > Page View**.

2   From the list below PAGE VIEW, select the **Advertisement Popup** checkbox.
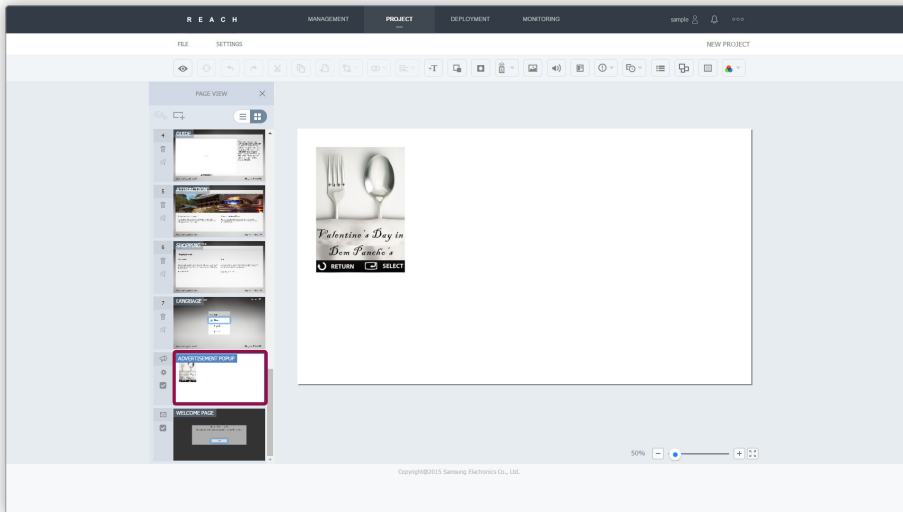
3   Click ⚙ to configure settings to use pop-up ads.
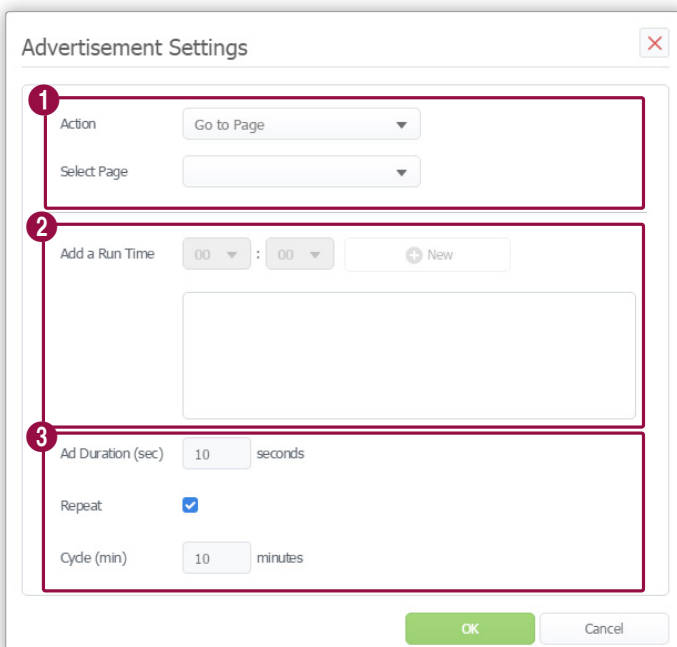
Configure pop-up ad settings, using the following features.

①

- **Action**: Set features to run in pop-up ads.

- **Select Page**: Set pages to be connected to pop-up ads. This option is available when **Action Type** is set to **Go to page**.

- **RCN Major**: Enter a primary channel number displayed on the TV when **Tune to Channel** is selected for **Action Type**.

- **RCN Minor**: Enter a secondary channel number displayed on the TV when **Tune to Channel** is selected for **Action Type**.

Note

Enter -1 if the channel to set consists of a primary channel number. For example, to set a channel numbered 11, enter -1 in **RCN Minor** and 11 in **RCN Major**.

② Set the time to display a pop-up ad. Enter a start time and click **ADD** to add the time to the list. This option is disabled if the pop-up ad is set to appear repeatedly at specific intervals.

③ Set the pop-up ad to appear repeatedly at specific intervals. This option is disabled if the pop-up ad time setting is configured.

- **Ad Duration (sec)**: Set the duration to display a pop-up ad.

- **Repeat**: Select whether to repeat a pop-up ad.

- **Cycle (min)**: Set the time intervals to display the pop-up ad.

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

5 Click **Advertisement Popup** from the PAGE VIEW list and configure pop-up pages.

Note

You can configure a variety of ads by adding ad pages. For further information, refer to the following: ► Adding ad pages

Configuring Chromecast page settings

Configure Chromecast page contents and screen transition settings.

Note

To configure Chromecast page settings, first add a Chromecast page.   ▶ Adding a Chromecast page

1   On the edit project screen, click **SETTINGS > Page View**.

2   In the list under PAGE VIEW, select **CHROMECAST PAGE** and configure a **Chromecast** page.

3   Click **Change Source to Chromecast**, and then select **Action** to specify the **Source** for screen transition.
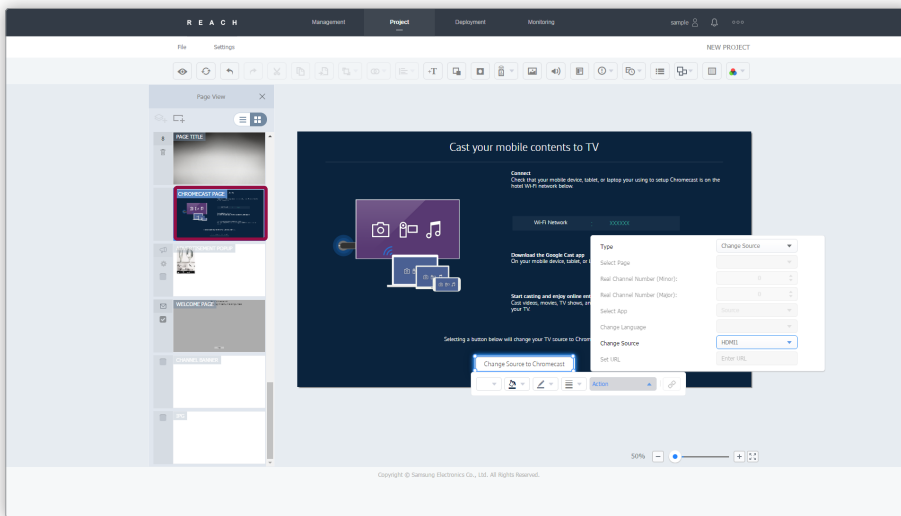
Welcome page settings

Select whether to use a welcome message. Set the message details.

1   On the edit project screen, click **SETTINGS > Page View**.

2   Select the **Welcome page** checkbox in the PAGE VIEW list.

3   Click **Welcome page** and then configure a welcome page.
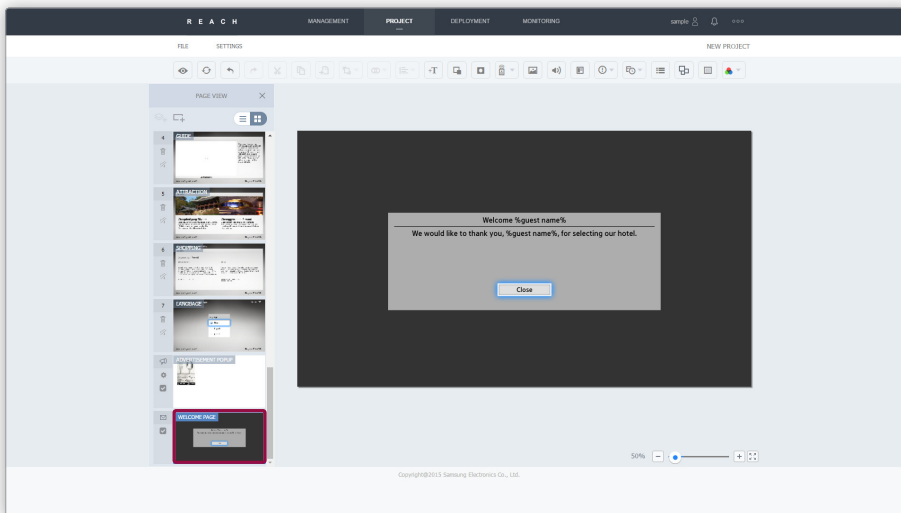
IPG settings

Set the IPG layout displayed on the channel screen.

1   On the edit project screen, click **SETTINGS > Page View**.

2   In the list under PAGE VIEW, select **IPG**.

3   Click **IPG** and configure IPG.

📝 **Note**

- **IPG** under Project supports SMART TVs released after 2017.

- **Broadcaster Logo** displays broadcaster logos of channels configured in **TV Configuration > Channel Map**.

- For details on configuring **Broadcaster Logo** settings, refer to the following: ► Channel info settings

Configuring Channel Banner settings

Set the banner layout displayed on the channel screen.

1   On the edit project screen, click **SETTINGS > Page View**.

2   In the list under PAGE VIEW, select **CHANNEL BANNER**.

3   Click **CHANNEL BANNER** and configure a channel banner.

Note

- **Channel Banner** under Project supports SMART TVs released after 2017.

- **Broadcaster Logo** displays broadcaster logos of channels configured in **TV Configuration > Channel Map**.

- For details on configuring **Broadcaster Logo** settings, refer to the following:　► Channel info settings

Element property settings

Editing text

1   On the edit project screen, double-click the text of the element to edit.

2   Edit the text using the toolbar.
 – To view all the tools in the toolbar, click ▷| .
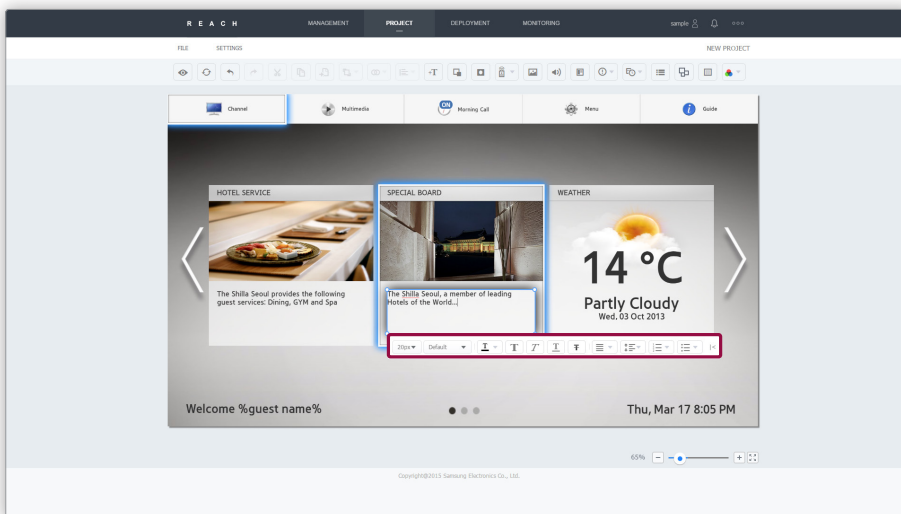
Editing images

1   On the edit project screen, click the image to edit.

2   Edit the image using the toolbar.

     –   ▣ : Open the content library. For further information, refer to the following: ▶ Using the content library

     –   ▣ : Add a slideshow.

     –   ▣ : Adjust the image size.

     –   **Effect**: Adjust the image brightness.

     –   🗑 : Delete an image
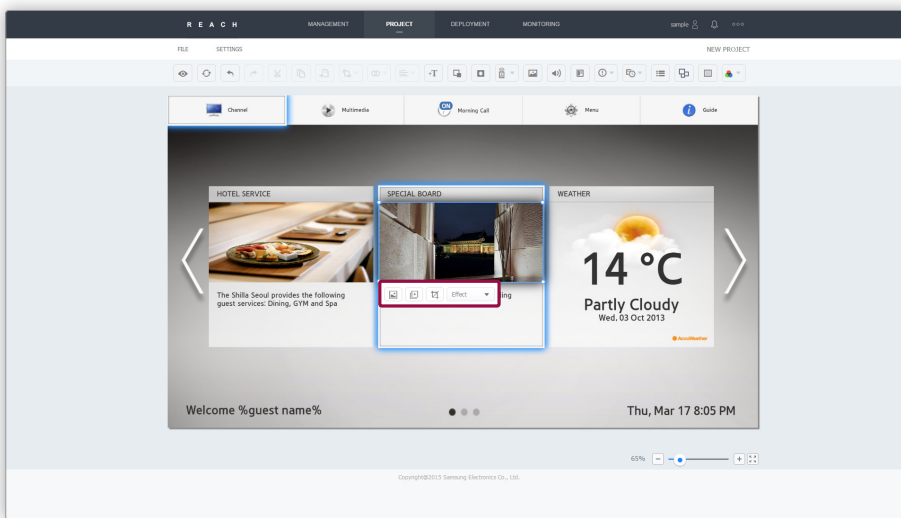
📝 Note

For further information on the content library, refer to the following: ▶ Using the content library

Configuring a slideshow

Configure a slideshow by adding various image files to the image section.

1   On the edit project screen, click the image to edit.

2   Click ▣ from the toolbar.
     – The edit slideshow window will appear.

3   Configure a slideshow using the following features.
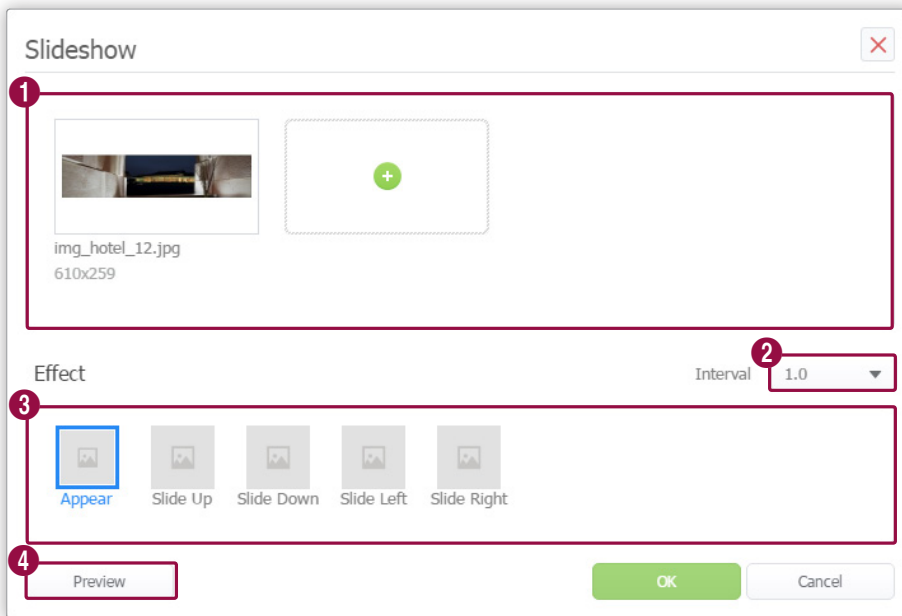
❶	View the slideshow images. To add an image, click ⊕.
❷	Set the image transition time.
❸	Set the image transition effect.
❹	Preview a configured slideshow.

4   After configuring the slideshow, click **OK**.

📝 **Note**

Some features in the slide show may not be supported on a TV with substandard specifications.

Using quick edit menu items

Right-clicking on an element displays quick edit menu items.

1   On the edit project screen, right-click on an element.

2   Edit using the following features.
- **Cut**: Cut the selected element.
- **Copy**: Copy the selected element.
- **Paste**: Paste an element that has been copied or cut.
- **Delete**: Delete the selected element.
- **Arrange**: Set the order of the selected element.
- **Align**: Align the selected elements using a desired mode. This option is enabled only when multiple elements are selected.
- **Group**: Group the selected elements. This option is enabled only when multiple elements are selected.

Note

- To go to the page linked to a basic menu, right-click on the menu and select **Go to transition**.
- To select multiple elements simultaneously, click one element after another while holding the Shift key down on the keyboard.

Using the toolbar

Access functions to edit projects, preview projects, change theme colors and add elements.
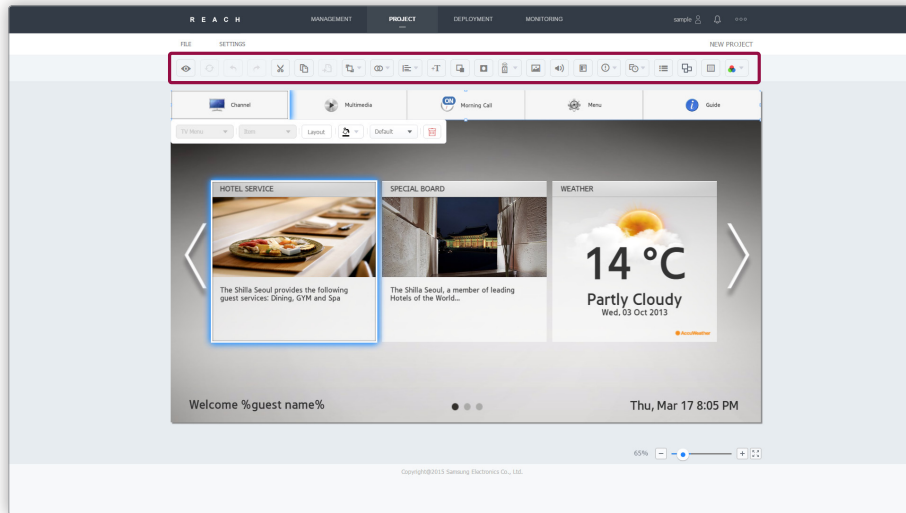
Using the edit tools

Use the toolbar to conveniently make additional changes to a project being edited.

1　Click an element from the edit screen.

2　Edit using the following features.

– 　**Preview**: Preview the project in full screen.

– 　**Reset**: Reset changes made to the project.

– 　**Undo**: Undo changes to restore to the previous state.

– 　**Redo**: Redo changes.

– 　**Cut**: Cut the selected element.

– 　**Copy**: Copy the selected element.

– 　**Paste**: Paste an element that has been copied or cut.

– 　**Arrange**: Set the order of the selected element.

– 　**Group**: Group the selected elements. This option is enabled only when multiple elements are selected.

– 　**Align**: Align the selected elements using a desired mode. This option is enabled only when multiple elements are selected.

Grouping elements

Select multiple elements from the edit page to group and edit the elements simultaneously.

1   Select elements, using one of the following options:
    Option 1   Select elements while holding down the **Shift** key on the keyboard.
    Option 2   Drag the mouse to select elements.

2   Select ⊚▾ **> Group** from the toolbar at the top.

📝 **Note**

   Another way to group elements is to use the quick edit menu.

Adding elements

Add an element to a project being edited.

1   Click an element from the toolbar.

2   Drag the element to the edit section. You can adjust the element size, if necessary.
    −   The element will be added to the edit section.

⁺T Text

Add text. To edit text, double-click an element and edit using the toolbar. For further information on editing text, refer to the following: ► Editing text

▫ Rectangle

Add rectangle elements. Select the added element and configure the detailed element settings using the toolbar, if necessary.

▫ Button

Add elements used to perform additional functions using buttons on the TV remote control. Available additional functions include navigating through pages, quickly accessing channels with shortcuts, and changing languages.

   ▪   Select the added element and configure the detailed element settings using the toolbar, if necessary.

   ▪   To set the action of a button on the TV remote control, click **Action** from the toolbar.

Type	Select a function to run when the button is pressed.
Select Page	Specify a page to connect to when the button is pressed after the **Go to page** function is selected.
RCN Minor	Enter a primary channel number displayed on the TV when the **Tune to Channel** function is selected.

RCN Major	Enter a secondary channel number displayed on the TV when the **Tune to Channel** function is selected.
	Note
	Enter -1 if the channel to set consists of a primary channel number. For example, to set a channel numbered 11, enter -1 in **RCN Minor** and 11 in **RCN Major**.
Select App	Select an application to run when the button is pressed after the **Launch native app** function is selected.
Change Language	Select a language to switch to when the button is pressed after the **Change Language** function is selected.

Remote Control Guide

Add an element used to quickly access a specific function by pressing a shortcut button on the TV remote control.

- Select the added element and configure the detailed element settings using the toolbar, if necessary.
- If you select ▦ , ↺ , or ⤇ the basic function assigned to a button on the remote control is performed.
- If you select **A** , **B** , **C** , **D** , or *i* , you can specify an action to perform when a button is pressed on the TV remote control. To specify a button action, click **Action** on the toolbar.

Image

Add image elements. Select the added element and configure the detailed element settings using the toolbar, if necessary. For further information on editing images, refer to the following: ► Editing images

Audio

Add audio files. For further information, refer to the following: ► Inserting an audio file

Home Channel Viewer

Add an element that gives you direct access to Seed Stream in REACH. Select the added element and configure the detailed element settings using the toolbar, if necessary.

- It is possible to configure channels in IP mode. Selecting **off** disables the home channel setting option. To set the home channel when this option is disabled, specify a channel.

Note

Enter -1 if the channel to set consists of a primary channel number. For example, to set a channel numbered 11, enter 11 in **RCN Minor** and -1 in **RCN Major**.

ⓘ ▾ Information

Add variable elements such as weather information, time settings, welcome messages and client names.

Channel Information

Add an element that shows information on the channel currently playing on the TV. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Check-in Message

Add welcome messages.

Click **Info > Check-in Message** and configure message settings.

- Select the added element and configure the detailed element settings using the toolbar, if necessary.

Settings	Configure the welcome message settings. • **Start Time**: Set the time to start the welcome message. • **End Time**: Set the time to end the welcome message. • **Message**: Set the welcome message type.

Date/Time

Add an element that shows the current date and time to a page. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Type	Set the date and time display mode.

Path

Add the full path of the current page to the page. For example, if you add this element to the Sauna page under Spa in the HOTEL SERVICE menu, the page will display the full path to the page, which is HOTEL SERVICE > Spa > Sauna. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Guest Name

Add an element that shows the room guest names entered in the server to a page. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Room Number (or Room Name)

Add an element that shows the room number (room name) to a page.

TV SoftAP Information

Add an element that shows the TV SoftAP information of the room to a page.

Version

Add an element that shows the version info of a project. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Pay-per-view Remaining Time

Add an element that shows the duration of room occupancy to a page. Select the added element and configure the detailed element settings using the toolbar, if necessary.

Widget

Add an element that shows the language selection screen, flight info or wake-up call status, in the form of a widget.

Billing Information

Add a widget element that shows details of hotel bills.

- Select the added element, and then use the toolbar to delete the element or change the element font and layout, if necessary.
- To configure detailed text settings for an element using the toolbar, select the text section of the element.
- To configure detailed image settings for an element using the toolbar, select the image section of the element.

📝 Note

 IP mode includes **Express check out** button that allows check-out by guests in their room. Click **Edit message** at the bottom of the widget component to add a messages to a display whether check out is enable.

Flight Information

Add a widget element that provides flight information.

- Select the added element, and then use the toolbar to delete the element or change the element font, if necessary.
- To configure detailed text settings for an element using the toolbar, select the text section of the element.
- To use the flight info widget, first set the flight info API on the server. For further information, refer to the following: ► Flight widget settings

Language

Add a widget element used to change the language of a project on TVs.

- Select the added element, and then use the toolbar to delete the element or change the element font and the number of languages to display on the element, if necessary.
- To configure detailed text settings for an element using the toolbar, select the text section of the element.

Wake-Up call

Add a widget element that shows wake-up call settings including whether a wake-up call is enabled.

- Select the added element, and then use the toolbar to delete the element or change the element font, if necessary.
- To configure detailed text settings for an element using the toolbar, select the text section of the element.

Weather in Detail

Add a widget element that shows today's weather and upcoming weather forecast to a page.

▪ Select the added element, and then use the toolbar to delete the element or change the font and the date and time display mode, if necessary.

▪ To configure detailed text settings for an element using the toolbar, select the text section of the element.

▪ To use the weather widget, first set the weather API in REACH. For further information, refer to the following: ► Weather widget settings

Weather Summary

Add a widget element that shows the current weather to a page.

▪ Select the added element, and then use the toolbar to delete the element or change the font, if necessary.

▪ To configure detailed text settings for an element using the toolbar, select the text section of the element.

▪ To use the weather widget, first set the weather API in REACH. For further information, refer to the following: ► Weather widget settings

Message

Add a widget element used to view received messages.

▪ Select the added element, and then use the toolbar to delete the element, if necessary.

▪ To configure detailed text settings for an element using the toolbar, select the text section of the element.

 Note

This feature is available in IP mode only.

Message Counter

Add a widget element that shows the number of new messages.

▪ Select the added element, and then use the toolbar to delete the element, if necessary.

▪ To configure detailed image settings for an element using the toolbar, select the image section of the element.

IPG

Add an IPG widget element displayed on the channel screen.

▪ Select the added element, and then use the toolbar to delete the element or change the font, if necessary.

▪ To configure detailed text settings for an element using the toolbar, select the text section of the element.

▪ Select the hotel logo section of the new element, and insert a hotel logo image.

 Note

• **IPG** under Project supports SMART TVs released after 2017.

• **Broadcaster Logo** displays broadcaster logos of channels configured in **TV Configuration > Channel Map**.

• For details on configuring **Broadcaster Logo** settings, refer to the following: ► Channel info settings

☰ Menu Bar

Add a shortcut element for a TV menu item. A maximum of three to five shortcut items can be added.

Click **Menu Bar**, and specify the number of applications to be displayed and the display mode.

- To edit the menu icon, double-click the icon section of the element.

- To edit the menu name, double-click the text section.

- Select the added element and configure the detailed element settings using the toolbar, if necessary. For further information, refer to the following: ► Editing TV menus

TV Menu	Specify menu items to display.
Select type	Select a menu display mode.

⊞ Apps

Add a widget element used to run applications installed on TVs.

- Select the added element, and then use the toolbar to delete the element or change the layout, background color or font, if necessary.

- Use the layout to specify the number of applications, installed on TVs, to be displayed on the screen and how the applications will be displayed.

- To configure detailed text settings for an element using the toolbar, select the text section of the element.

✎ Note

- For **Type 1**, use the layout to specify the number of applications and the display mode. Actual applications are displayed on TVs, according to the order they were installed on the TVs.

- For **Type 2**, use the layout to specify the number of applications. The layout can also be used to select the delete-user info option and SMART Hub app menu option. After an element is added, the user can select **Editor > App Title** and then specify the application to be displayed on the screen by entering the name of an application installed on the TV.

Page background settings

1   Set the page background using one of the following options.
      Option 1   On the toolbar, click ▤ **Background**.
      Option 2   On the edit screen, right-click on the page section and select **Background**.

2   Select a background mode.
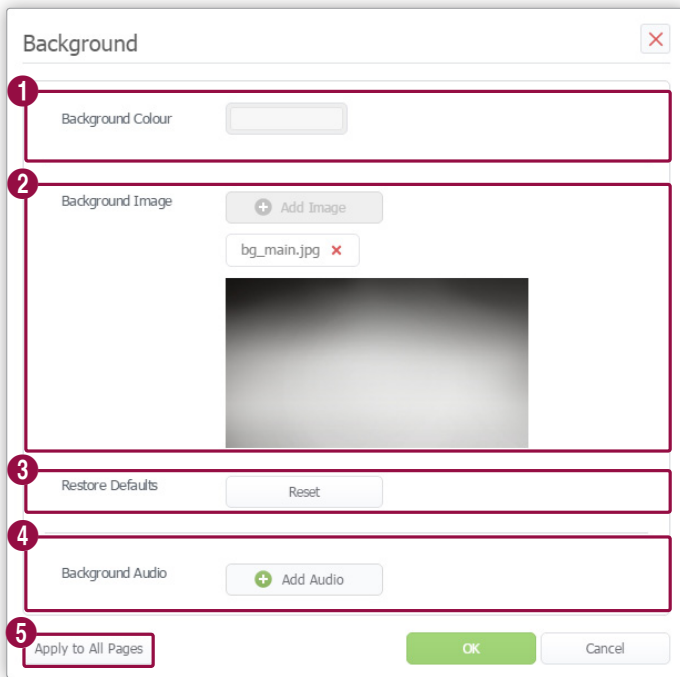
❶   Set the background color.

❷   Set the background image. To select an image file, click **Add Image**.

     ⬚ **Note**

       Adding a new image is not possible if another image is already applied to the background. Click ✕ to delete the current image first.

❸   Apply the default theme settings.

❹   Set the background audio. To select an audio file, click **Add Audio**.

     ⬚ **Note**

       Adding a new audio file is not possible if another audio file is already applied to the background. Click ✕ to delete the current audio file first.

❺   Apply the current settings to all pages.

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

Theme settings

Set the color theme that highlights a selected page menu item.

🗹 Note

This feature is not available for templates that do not support themes.

1   On the toolbar, click 🎨 ▾ **Themes**.

2   Click a theme color.
 – The theme color that highlights a selected menu item will be updated.
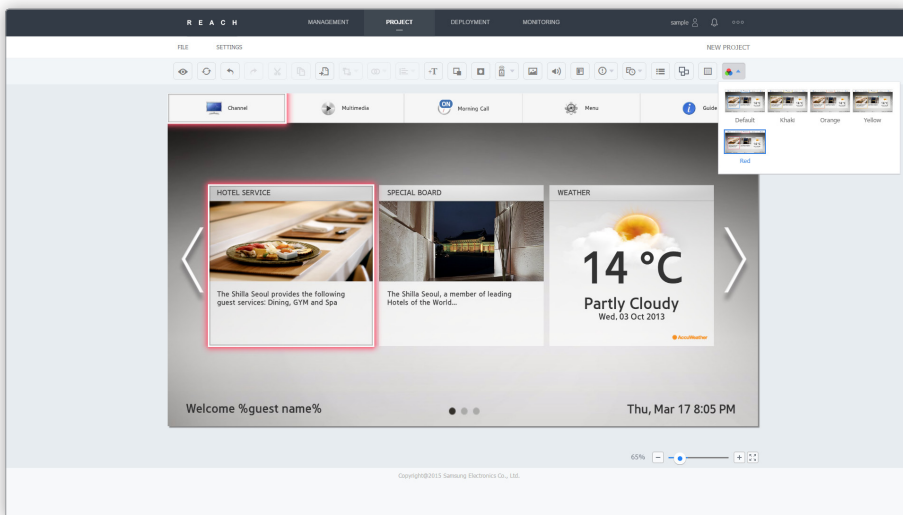
Configuring project settings

Configure page navigation and project language settings.

Using the content library

Upload or download content in the content library on the server.

1 Click **SETTINGS > Content Management**.

2 Use the following features in the content library.
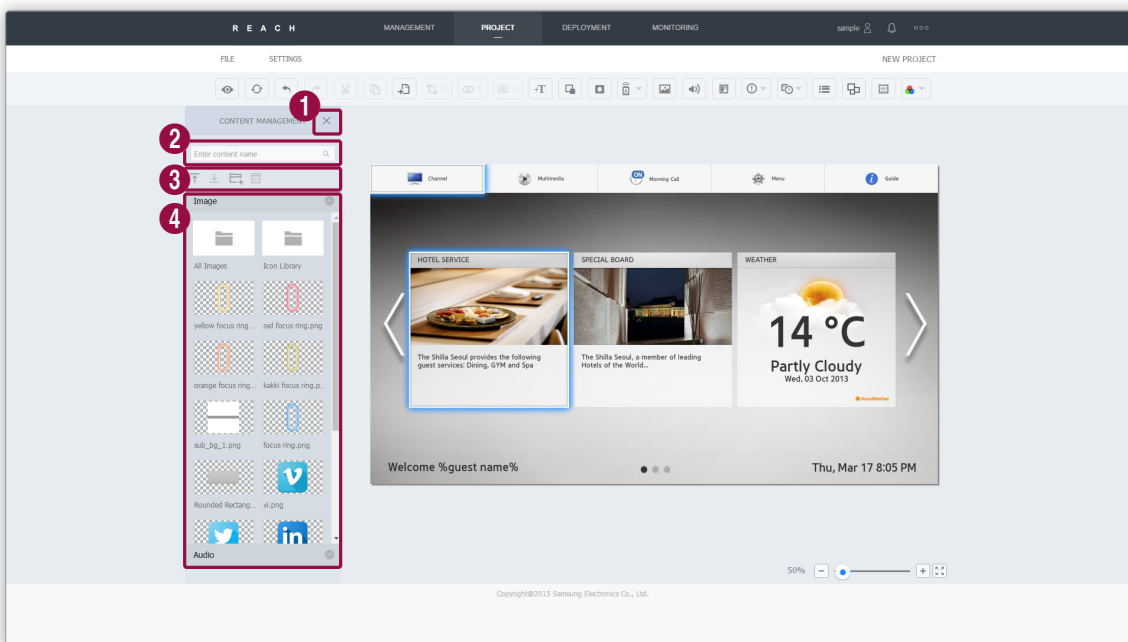
❶	Close the content library menu.
❷	Search for content names.

You can manage content.

- ▪ ⬆ : Upload content saved on your computer to the library.

- ▪ ⬇ : Download the selected content to your computer.

- ▪ 🗂 : Create a virtual folder where you can manage files.

③

- ▪ 🗑 : Delete the selected content from the library. Default content items which are locked can be deleted only by administrators.

📝 Note

Supported file formats are shown below.

- • Image: jpg, jpeg, png / Audio: m2a, mp3

④   View content by types.

Adding fonts

In addition to basically provided fonts, add custom fonts.

📝 Note

- • Supported font files include true type (.ttf) and open type (.otf) files.

- • To use an additional font, make sure to name the file using "SamsungSmart_font name.ttf" as the format.

1 On the edit screen, click **SETTINGS > Font > Font Management**.

    – The Font Management screen will appear.

2 Click **NEW**.

3 Click **Browse** and go to the path where your fonts are saved.

4 Select a font and click **OPEN**.

5 Click **OK**.

6   In the Font Management screen, configure the font settings using the following features.
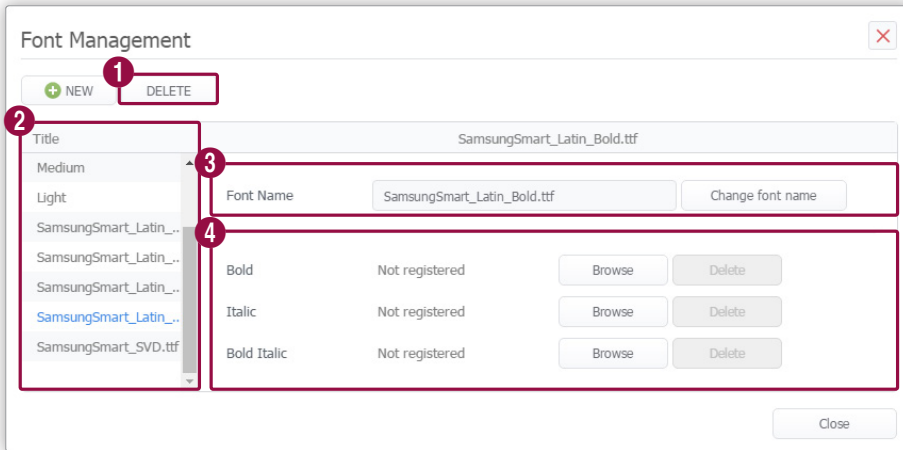
①   Delete the selected font.

②   Added fonts are listed.

③   Change the file name of the selected font. Enter a file name and click **Change font name**.

④   Add or manage bold or italic font files required for each font. For example, the Arial font requires Arialbd.ttf, which is a bold font file, in addition to the basic font file. You can add these additional font files to use specific variations of a font.

Changing the system font

Change the font used for all Project pages.

1   On the edit screen, click **Settings > Font > Change All Fonts**.

2   Select the desired font
  – New font is applied to all Project pages.

Setting the default display language for TV content

1   Click **SETTINGS > Language**.

2   Select the desired language.
   – The selected language will be displayed by default when TV content plays.
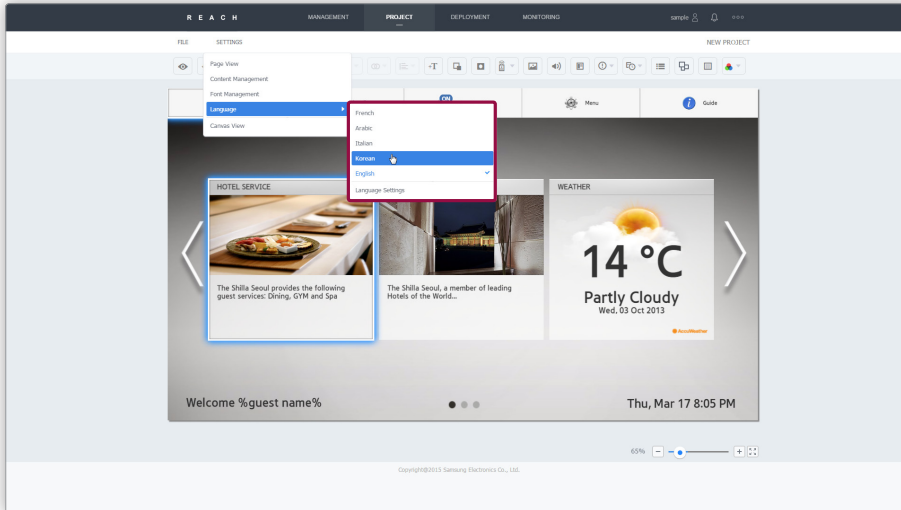
Setting supported languages for TV content

1   Click **SETTINGS > Language**.

2   Click **Language Settings**.

3   Set supported languages, using the following features.
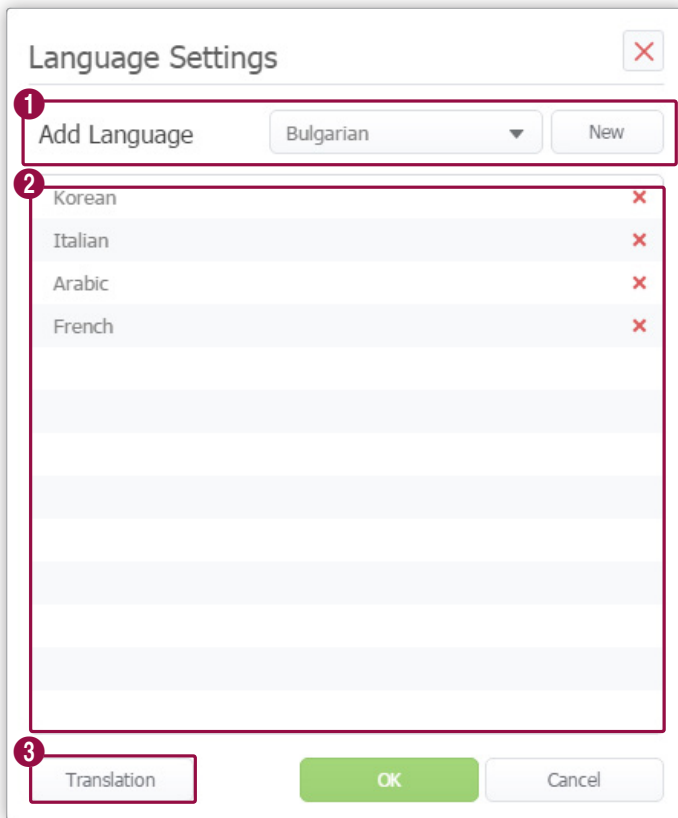
❶	Add supported languages. Select a language from the dropdown list and click **New**.
❷	View supported languages that have been added.
❸	Add translations for a supported language. For further information, refer to the following: ▶ Adding translations for supported languages

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

Adding translations for supported languages

Add translations for a supported language.

1 Click **SETTINGS > Language > Language Settings**.

2 Click **Translation**.

3 Add translations, using the following features.
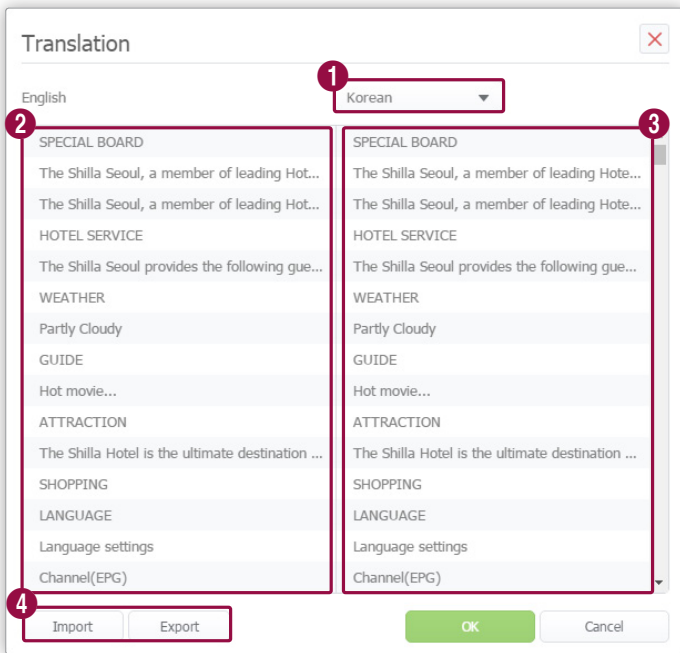
❶ Select a language for translation. Only a language added in **Language Settings** can be selected.

❷ View text translated into English.

❸ View text translated into the language selected in step ❶. To edit translated text, click it.

Import or export translations.

❹
- **Import**: Import translations in .xls format from the computer.
- **Export**: Export translations as an Excel file.

4　To edit translated text, select a language from the dropdown list and click the text.

5　Enter a new translation in the **Translation** window.
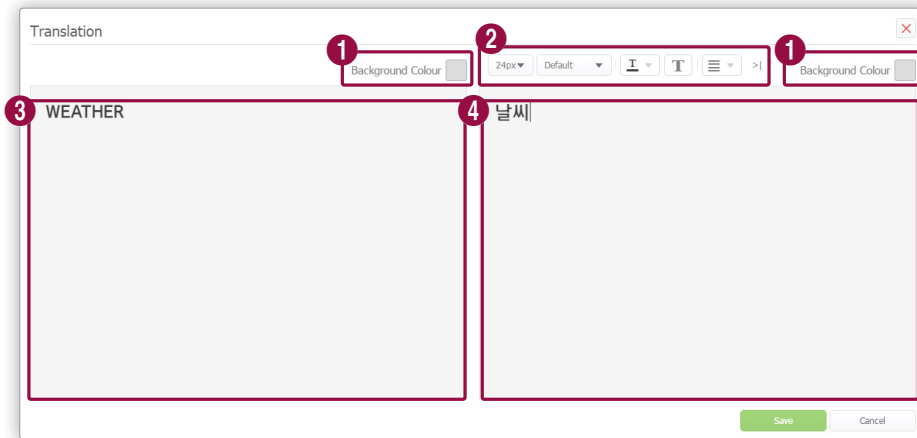
❶	Set the background color.
❷	Configure detailed text settings.
❸	View text translated into English.
❹	Enter translations for the specified language.

6　Click **Save**.

Edit settings

Change the guideline settings for the edit section.

1 Configure the editing environment, using one of the following options.
   Option 1   Click **SETTINGS > Canvas View**.
   Option 2   On the edit screen, right-click on the page section and select **Canvas**.

2 Change the edit settings, using the following features.
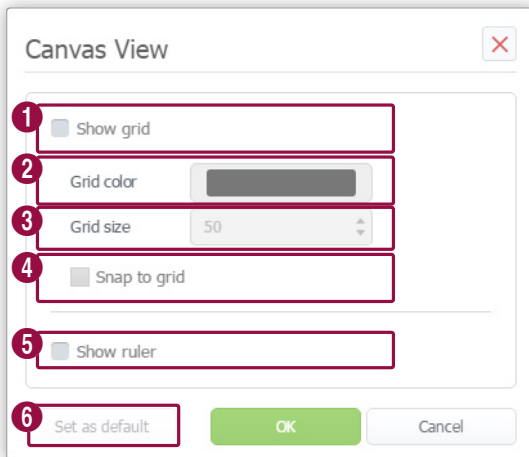
❶	Display or hide the grid in the edit section.
❷	Change the grid color.
❸	Change the grid size. Select a size from the dropdown list.
❹	Set elements dragged by the mouse to be positioned automatically based on the grids.
❺	Display or hide the ruler in the edit section.
❻	Reset the grid settings for the edit section.

3 To save the configured settings, click **OK**.

Setting the default project

Set a previously saved project as the default project.

When a new TV connects to the server, the default project is automatically distributed to the TV.   ► Configuring Auto Deploy Project settings

 Note

- · This feature is available in IP mode only.

- · When a new TV connects to the server, the default project is distributed to the TV only when there is no project previously distributed through **Group ID : All**.

1 On the top menu bar, click **PROJECT** and select **Edit**.

2 From the project list, select a project to be used as the default project and click **Set as Default Project**.

3 Select a language for the default project, and click **Continue**.

4 Select **Enable Auto Deploy Project** to turn on automatic distribution of the default project when a new TV connects to the server, and then click **Build Now**.

5 After the project is built, click **OK**. In the list of project thumbnails, you can see that the built project has been set as the default project.

Saving a configured project

1 After editing the project as desired, click **File > Save**.
    – To save under another name, click **File > Save as**.

2 A confirmation window appears. Click **Yes**.
    – The project will be saved to the list of projects.

Managing projects

Edit or delete a stored project.

1 Click **PROJECT** from the top menus and select a project name.

Note

To go to the project list when another project is running, click **File > Open**.

2 Click **FILE** and manage the project using the following functions.

– **New**: Start a new project.

– **Open**: Edit a project. For further information, refer to the following: ► Configuring a project

– **Rename**: Change a project name.

– **Save**: Save the current project.

– **Save as**: Save the current project as another name.

– **Import**: Import a project from your computer to the server.

– **Export**: Export a project to your computer from the server.

– **File Information**: View the name, the last saved time and the user ID of the current project.

– **Close**: Close the current project.

Distributing a project

1 From the menus at the top, click **PROJECT**.

2 In the project list, click **Deploy** for the project to be distributed.

3 Use the **Deploy** pop-up window to configure distribution settings.

Configure the settings to distribute the project. To display the project on the TV immediately after it is distributed, select the **Force the Hotel TV app to restart after the update.** checkbox.

❶
- **Group ID**: Set a TV group to distribute the project to.
- **Version**: Set the project version. If you distribute a project to a TV that already has a newer version of project, the project on the TV will not be updated. If you set the project version to 0, the project will be distributed irrespective of the previously distributed project version. The version will be reset.
- **Language**: Set the display language for the project.

❷
Set the distribution schedule. If **Deploy Immediately** is selected, the project is distributed immediately. To distribute the project at a specified time, select **Schedule Deploying**.

- **Start**: Set the time to start distribution.
- **End**: Set the time to end distribution.

📝 **Note**

To distribute a project on an ongoing basis without an end time, select the **Unlimited** checkbox.

❸   Set the distribution date.

❹   Set the distribution time. Click on ⊕ or a blank time slot.

- Drag the selected section to move to another time slot. Alternatively, drag the arrow on the border to adjust the time.

4   After configuring the required settings, click **Deploy**.

5   If a window appears prompting to confirm deleting the existing project, click **OK**.

6   When a notification window appears after distribution is complete, click **OK**.

Note

It is possible to distribute a project together with TV configuration or TV software. For details, refer to the following: ▶ Parallel distribution

Deleting a distribution project

1   From the menus at the top, click **DEPLOYMENT**.

2   Click **Delete**.

3   Select a project checkbox from the **Deploy Management** list and click **Delete**.

05 Managing TVs from REACH 4.0

Managing room info

Managing rooms by room

Register and manage a room.

Registering room info

1 From the menus at the top, click **MANAGEMENT > Room**.

2 Click **New**.

3 Enter room info and click **OK**.
- ***Room Number**: Enter the room number.
- ***IP Address**: Select IPv4 or IPv6, and enter the IP address for a room's TV. Make sure that IP mode is in use.
- ***Mac Address**: Enter the MAC address for a room's TV. Make sure that IP mode is in use.
- **Channel Bank**: Using the dropdown list, set the channel type accessible to the room TV.
- **Start Date**: Set the date and time to start viewing channels.
- **End Date**: Set the date and time to end viewing channels. The duration of use of a TV is automatically calculated based on the specified date and time.
- **Apps Area**: Enable or disable the application area on TV content.
- **Project Language**: Select a display language for TV content.
- **Guest Name**: Enter the guest name. If more than one guest is staying in the room, click **ADD GUEST** to add input fields.
- **Company Name**: Enter the group name of the guest.

Note

- * Required information for room registration (MAC Address not required for RF mode)

- Set PMS info and simultaneously upload all the room info registered in the PMS, if required. For further information, refer to the following: ► Managing room info

- If an Excel file containing room info is available, import the file to upload all the room info simultaneously. For further information, refer to the following: ► Managing room info

- Make sure the room number is identical to the room number on the TV. For further information, refer to the following: ► Room number settings

- In channel group settings, group 1 refers to a group of free channels that are accessible from any room. Groups 2 and 3 refer to groups of paid channels. If group 2 or 3 is selected, the group will automatically switch to group 1 after a specified viewing period. If a channel group is not specified, paid channels are accessible from the room. For further information, refer to the following: ► Managing registered channel info

- If you configure a channel bank for a room without configuring a channel bank for each channel, all channels configured for the TV may disappear.

Managing the room info list

1 From the menus at the top, click **MANAGEMENT > Room**.

2 Manage room info, using the following features.
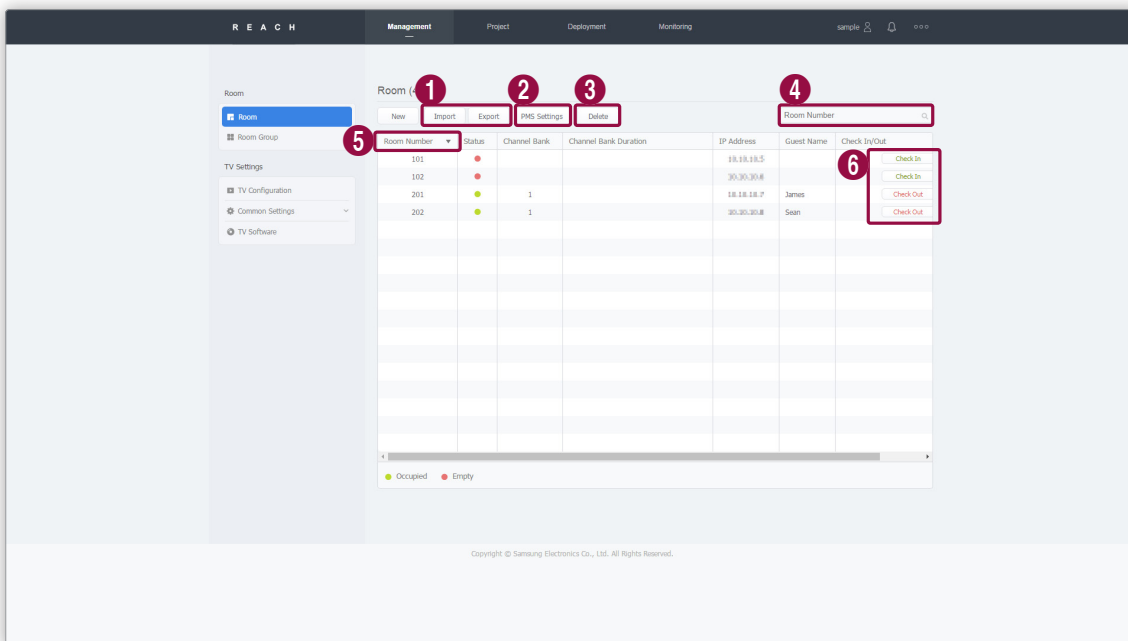
● 1	- **Import**: Import a room info file from your computer to register the info on the server simultaneously.
	- **Export**: Export room info as an Excel file to your computer from the server.
● 2	Click **PMS Settings** and configure IP address and port for REACH API Server and Property Management System (PMS) to sync REACH 4.0 and PMS. This allows the management of rooms registered in REACH 4.0 via PMS.
● 3	Delete room information.

4	Search for a room number.
5	Rearrange room numbers in ascending or descending order.
6	Click repeatedly to switch the room status between check-in and check-out.

Managing rooms by group

Group rooms to simplify the steps required to manage rooms.

Registering a group

1   From the menus at the top, click **MANAGEMENT > Room Group**.

2   Click **New**.

3   Set group info and click **OK**.

1 Select a group category.

> 🖉 **Note**
>
> This feature is available in IP mode only.

2 Set the group ID. Select a number from the dropdown list.

3 Type a memo or brief description about the group.

4 Select room TVs to assign to the group.

- ▪ **All Rooms**: Room TVs registered on the server are listed. Select TVs from the list and click 　▶　 to move the TVs to the group.

- ▪ **Selected Rooms**: Room TVs registered in the group are listed. Select TVs from the list and click 　◀　 to delete the TVs from the group. The TVs will no longer belong to any group.

🖉 **Note**

- Fields with * cannot be left blank.

- In RF mode, make sure the group ID is identical to the group ID on the TV. For further information, refer to the following: ▶ Group ID settings

Managing registered groups

1 From the menus at the top, click **MANAGEMENT > Room Group**.

2 Manage room info, using the following features.

---
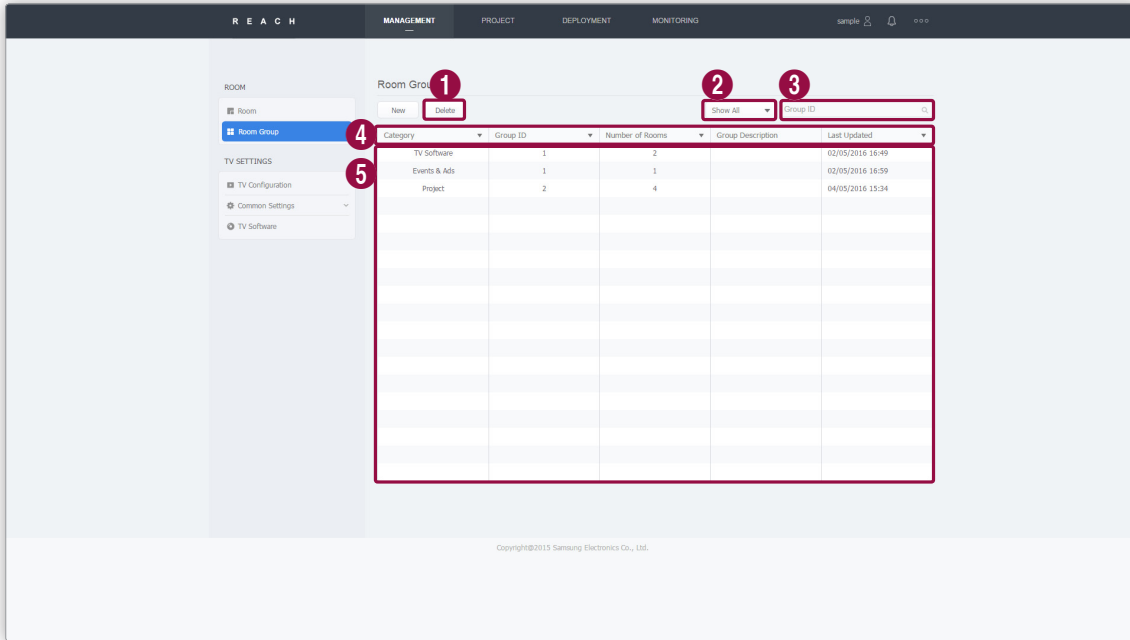
❶ Delete group information.

Select a group category to view the group list.

❷ 📝 **Note**

This feature is available in IP mode only.

---

❸ Search for a group ID.

---

❹ Rearrange the list by item in ascending or descending order.

---

❺ View the list of registered groups.

Monitoring room TVs

View room TV connections and room occupancy.

1   From the menus at the top, click **MONITORING**.

2   Monitor rooms, using the following features.

---
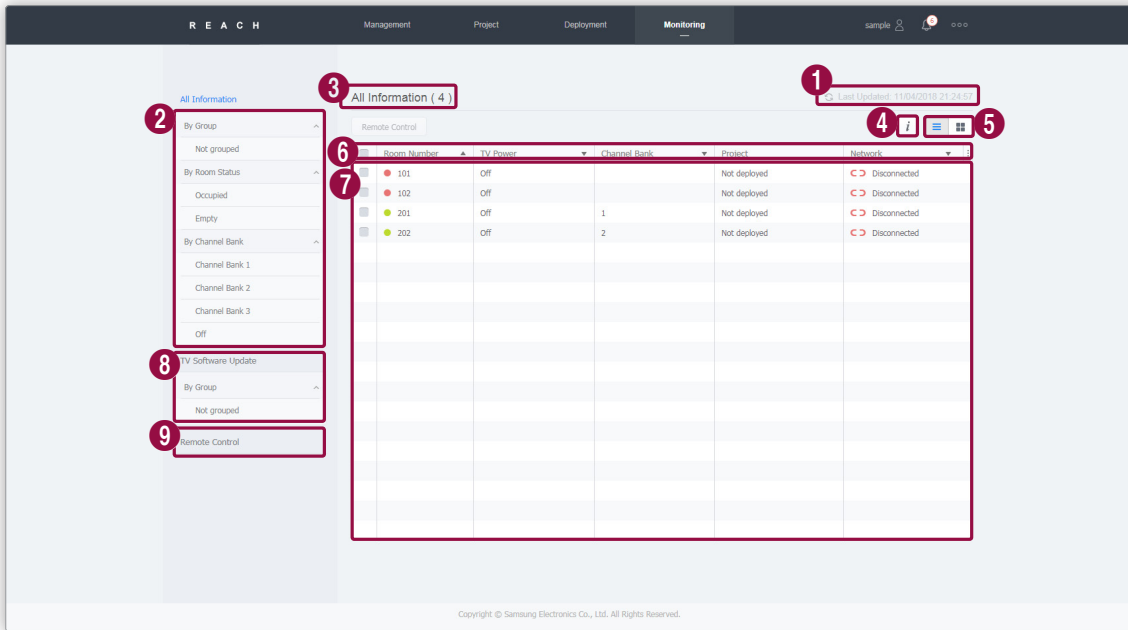
❶   The last update time is shown.

---

❷   View a list of rooms by the group or the room state.

Remotely control TVs in selected rooms. To remotely set features, date and time, select a room from the list and click the button.

- **Command**: Selectable features include power on/off, restart, and change external input source on the TV. Select a feature from the dropdown list.

- **Execution Schedule > Run Immediately**: Select to run the feature selected in Command immediately.

❸   **Execution Schedule > Specify Date and Time**: Select to run the feature selected in Command on specified date and time.

- **Execution Schedule > Repeated Schedule**: Select to run and repeat the feature selected in Command on specified day(s) of the week and time.

📝 **Note**

This feature is available in IP mode only.

---

❹   View state information by the icon.

❺	Change the view mode.
❻	Rearrange the list by item in ascending or descending order. To change the criteria to sort the list, click ⋮ .
❼	Registered rooms are listed.
❽	View software update status after deploying it from REACH 4.0. View TV information for all rooms with a software update history, or only the rooms where the update failed. Redeploy TV software to rooms with an unsuccessful update history. Remotely control TVs in selected rooms. To remotely set features, date and time, select a room from the list and click the button. **✎ Note** This feature is available in IP mode only.
❾	View records of remote control events performed in REACH 4.0. **✎ Note** This feature is available in IP mode only.

Managing TV configuration

Configuring TV settings

Configure settings for TVs in rooms.

Registering basic TV model info

1   From the menus at the top, click **MANAGEMENT > TV Configuration**.

2   Click **New**.

3   Enter TV model information to be registered, and click **OK**.

   – ***Configuration Title**: Enter a unique name for the TV to register.

   – ***Year**: Set the year the TV was manufactured.

   – ***Region**: Set the TV region. This option is enabled if the manufacture date is set.

   – ***Series**: Set the TV series. This option is enabled if the manufacture date is set.

   – ***Model No.**: Set the TV model name. This option is enabled if the manufacture date is set.

   – ***S/W Name**: Automatically enters the name of the software supported on the configured TV model.

Note

   • Fields with * cannot be left blank.

   • When required information is entered, the TV configuration screen automatically appears.

Extracting and registering TV configuration

1   Select **Cloning** from the initial TV setup menus.

2   Select **Clone TV to USB** to save TV configuration to a USB device.

3   Insert the USB device containing TV configuration into the computer where REACH 4.0 is installed.

4   On the top menus in REACH 4.0, click **MANAGEMENT > TV Configuration**.

5   Click **Import**.

6   On the Import Room List screen, specify import conditions and click **Browse**.

7   Select the TV configuration file.

8   Click **OK**.

Channel info settings

Set channel information for the selected TV.

1   From the menus at the top, click **MANAGEMENT > TV Configuration**.

2   Click the desired TV configuration name.

3   Click **Channel Map**.
    – Channels available on the TV will be listed.

4   Click **New**.
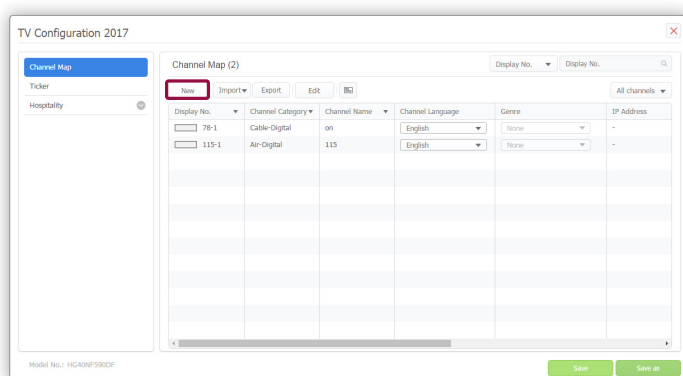
5 In the displayed add channel window, fill in the input fields and click **OK.**

 – **Channel Category**: Select a channel type such as air or cable. You can also select a signal type for each channel type. Available items for configuration vary, depending on the selected channel type (Air, Cable or IP) and signal type (Analog, Digital or External) for the channel type.

 – **Channel Name**: Set the channel name.

 – **Program No.**: In Europe, enter a channel number that can be viewed from rooms. In the US, set the program number for channel.

 – **Display No.**: This has a function similar to Program No. in Europe.

 – **IP Address**: This option appears only when the channel type is set to IP. Enter an IP address to which to connect.

 – **Port**: This option appears only when the channel type is set to IP. Enter port information for the IP to which to connect.

 – **Associate with Program Guide**: This option appears only when the channel type is set to IP. To use this feature, first activate the program guide. For further information, refer to the following: ► Setting up a program guide

 – **Frequency**: This option appears only when the signal type is set to Digital. Set the channel frequency.

 – **Service ID**: This option appears only when the signal type is set to Digital. Enter a service ID for a channel.

 – **Color System**: This option appears only when the signal type is set to Analog. Set the color output mode for a TV.

 – **Sound System**: This option appears only when the signal type is set to Analog. Set the sound output mode for a TV.

 – **PTC No.**: This is an actual channel number that is used during communication between broadcast stations and the server. It is different from Display No..

 – **Modulation**: This option appears only when the signal type is set to Digital. Set the channel encoding type.

 – **Bandwidth**: This option appears only when the signal type is set to Digital. Set the channel bandwidth.

 – **Symbol Rate**: This option appears only when the signal type is set to Digital. Set the channel modulation speed.

 – **External Source**: This option appears only when the channel type is set to External. Set the external input source type.

 – **PLT ID**: This option appears only when the channel and signal type is set to a combination of Air + Digital.

 – **Broadcaster Logo**: Set the broadcaster logo for a channel. Only .png files smaller than 20 kb can be set as logos.

6 After configuring the required settings, click **Save.**

 – To save under another name, click **Save as.**

 Note

 • Ensure that all the input fields are filled in.

 • IP channels can only be configured for TVs that support **REACH IP Mode.** To configure an IP channel, first create a TV configuration from the REACH Server to ensure availability of the channel on the TV. For further information, refer to the following: ► Distributing TV configuration

 • For the US and Canada, configuring program information is a simple process that involves setting up a program guide. For further information, refer to the following: ► Configuring channel information using a program guide

 • For further information on how to manage registered channels, refer to the following: ► Managing registered channel info

Configuring channel information using a program guide

For the US and Canada, set up a program guide and easily configure channel information using data contained in the program guide.

> **Note**
>
> To configure channel information using a program guide, first set up the program guide. For further information, refer to the following: ▶ Setting up a program guide

1 From the menus at the top, click **MANAGEMENT > TV Configuration**.

2 Click a TV information item.

3 Click **Channel Map**.

4 Click **Import > Program Guide**.

> **Note**
>
> The load-program guide feature is displayed only in TV configuration for North America and Canada.

5 Click **YES**.

Registering a ticker

Register ticker information in the selected TV. Ticker refers to a service that displays weather conditions, stock prices and other information on the TV. Tickers appear at specified time intervals.

> **Note**
>
> TV models released after 2016 do not support the ticker feature.

1 From the menus at the top, click **MANAGEMENT > TV Configuration**.

2 Click a TV information item.

3 Click **Ticker**.

4 Click **NEW**.

5 Enter ticker information and click **OK**.
   - **Message**: Enter text to display along with the ticker.
   - **Image**: Set the ticker image. Click **Add Image** and select an image. To delete a registered image, click ✕ .

6   Click **Options**.
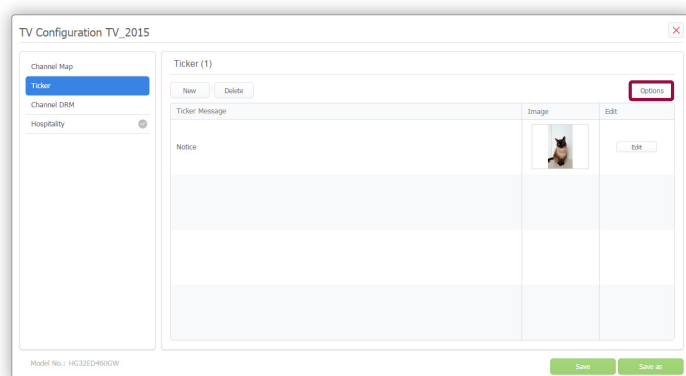
7   Configure detailed settings for the ticker and click **OK**.

  – **Repeat**: Set the frequency to display the ticker on the TV screen.

  – **Ticker Interval(mins)**: Set the interval in minutes to display the ticker on the TV screen.

  – **Text Color**: Set the color of the text to display along with the ticker. To change the color, click **Choose** to select a color and click **Close**.

  – **Background Color**: Set the ticker background color. To change the background color, click **Choose** to select a color and click **Close**.

8   After configuring the required settings, click **Save**.

  – To save under another name, click **Save as**.

Managing channel DRM

Manage IPTV channel DRM for the selected TV configuration.

Note

DRM (Digital Rights Management) is used to restrict the use of content to specific purposes intended by the copyright holder.

1   From the menus at the top, click **MANAGEMENT > TV Configuration**.

2   Click a TV information item.

3   Click **Channel DRM**.

4   Enter DRM information.

  – **DRM TYPE**: Select a DRM type.

Note

REACH provides two types of DRMs ideal for management of Hotel Smart TV services: Verimatrix VCAS and Samsung SCAS. Series models 690 and 890 released in North America after 2014 support IP Pro:idiom.

- **COMPANY NAME**: Enter a DRM provider's company name.
- **DRM IP**: Enter a DRM IP.

5 After entering the required information, click **Save**.

- To apply settings, click **Apply**.

Changing TV configuration

Use REACH 4.0 to change or manage configuration menus provided on TVs.

1 From the menus at the top, click **MANAGEMENT > TV Configuration**.

2 Click a TV configuration name from the list.

- The TV configuration screen appears.
- If no TV is found in the list, register a TV first. For further information, refer to the following: ► Configuring TV settings

3 Click the **Hospitality** tab.

4 Click **REACH Solution** from the list of menu items.

5 Configure TV settings required to interact with REACH 4.0.

- **REACH IP Mode**: Select **On** if IP mode is in use. If RF mode is in use, select **Off**. If **REACH IP Mode** is set to **On**, configure **Server IP Setting**. If **REACH IP Mode** is set to **Off**, configure **REACH Server Channel** / **REACH Channel**, **Ticker**, **REACH Update Time**, and **REACH Update Immediate**.
- **REACH IP Setting**: Enter "REACH 4.0 IP." For further information, refer to the following: ►Initial TV setup
- **REACH Server Channel** / **REACH Channel**: Configure the REACH channel settings on the TV. Make sure the settings are identical to the REACH channel settings on the server. For further information, refer to the following: ►REACH channel setup
- **Ticker**: It is possible to turn on or off ticker on TV models released in 2016 or earlier. For further information, refer to the following: ► Registering a ticker
- **REACH Update Time**: Set the time to sync the TV with the server when the TV is turned off. The time can either be a specific time or repeat interval.
- **REACH Update Immediate**: Enable or disable the mode to manually sync the TV with the server when the TV is turned off.
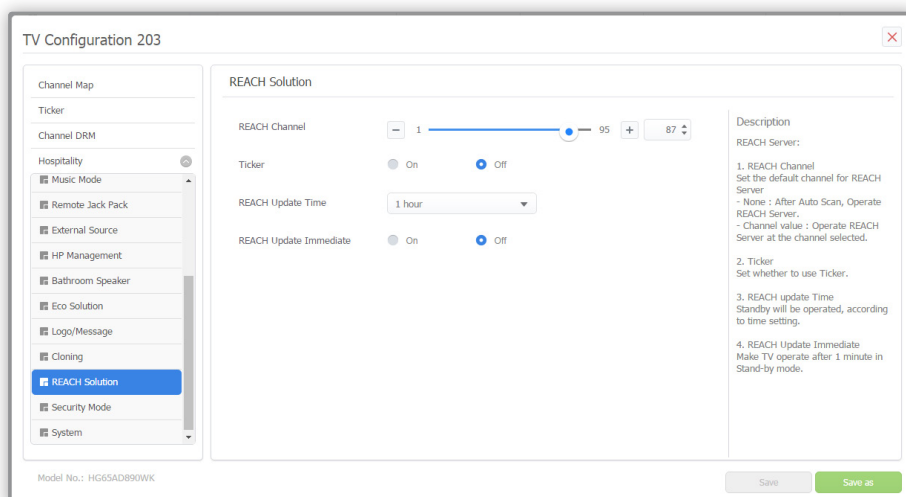
Note

If **REACH Update Immediate** is set to **On**, **1hour** and **2hours** under **REACH Update Time** are disabled.

6 From other configuration menus, click the desired sub-menu item and configure settings.

7 After configuring the required settings, click **SAVE**.

   – The TV settings will be saved on the server.

   – To save under another TV configuration, click **SAVE AS**.

8 To apply saved configuration values to TVs, the TV configuration must be distributed from the server. For further information, refer to the following: ► Distributing TV configuration

Note

• The displayed menu items are the same as the menu items on the TV. For details on initial configuration menus, refer to the following: ►Initial TV setup

• To manage a TV using REACH 4.0 or use REACH 4.0 on the TV, make sure to turn on REACH in the initial TV configuration menu. For further information, refer to the following: ► Activating REACH 4.0 and configuring mode

• To specify a particular channel in **Hospitality Mode > Power On > Power On Channel Num**, the channel must be included in **Room Type:Default**.

Managing registered TV configuration

1   From the menus at the top, click **MANAGEMENT > TV Configuration**.

2   Manage TV info, using the following options.

---
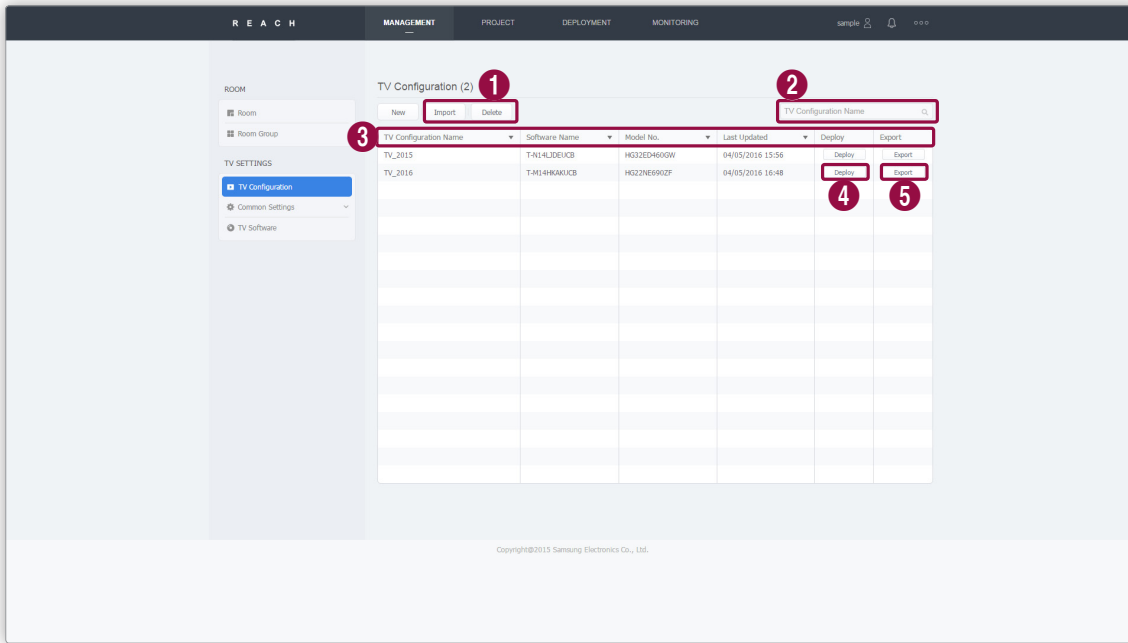
❶   Register new TV information. You can also manage registered information.

   ▪ **Import**: Import TV info from your computer to the server.

   ▪ **Delete**: Delete TV information.

---

❷   Search TV information.

---

❸   Rearrange the list by item in ascending or descending order.

---

❹   Distribute TV information. For further information, refer to the following: ▶ Distributing TV configuration

---

❺   Export TV info saved on the server to your computer or a removable disk. Exported info can be copied to a TV using a removable disk.

Managing registered channel info

Edit or delete channel information of the selected TV.

1　From the menus at the top, click **MANAGEMENT > TV Configuration**.

2　Click a TV information item.

3　Click **Channel Map**.

   – Channels available on the TV will be listed.
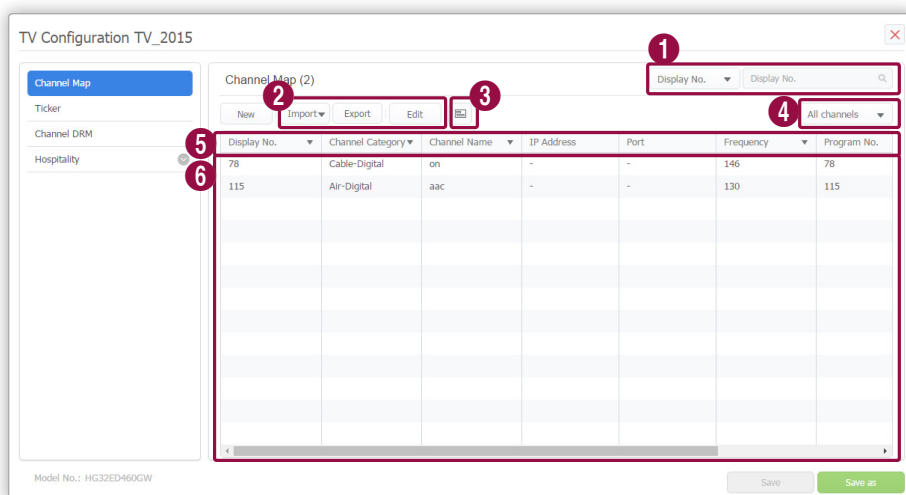
❶　Search registered channels. Select a search criterion from the dropdown list.

❷　▪ **Import**: Import channel information and a program guide to the server. For further information on the program guide, refer to the following:　▶ Setting up a program guide
   ▪ **Export**: Export channel info to your computer from the server.
   ▪ **Edit**: Edit channel information.

❸　View the program guide.

❹　Sort registered channels by channel type. Select a type from the dropdown list.

   📝 **Note**

   To delete or edit TV information, first categorize the channel type. Follow this same step when changing the display order for information items.

❺　Rearrange the list by item in ascending or descending order.

❻　Registered channels are shown.
   ▪ Use the scroll bar to view related information.
   ▪ Configure a channel bank for each channel.
   ▪ To use the channel bank feature configured for each channel in a room, make sure a TV configuration is applied to the room.

4   After configuring the required settings, click **Save**.

– To save under another name, click **Save as**.

Managing registered ticker info

📝 **Note**

TV models released after 2016 do not support the ticker feature.

1   From the menus at the top, click **MANAGEMENT > TV Configuration**.

2   Click a TV information item.

3   Click **Ticker**.
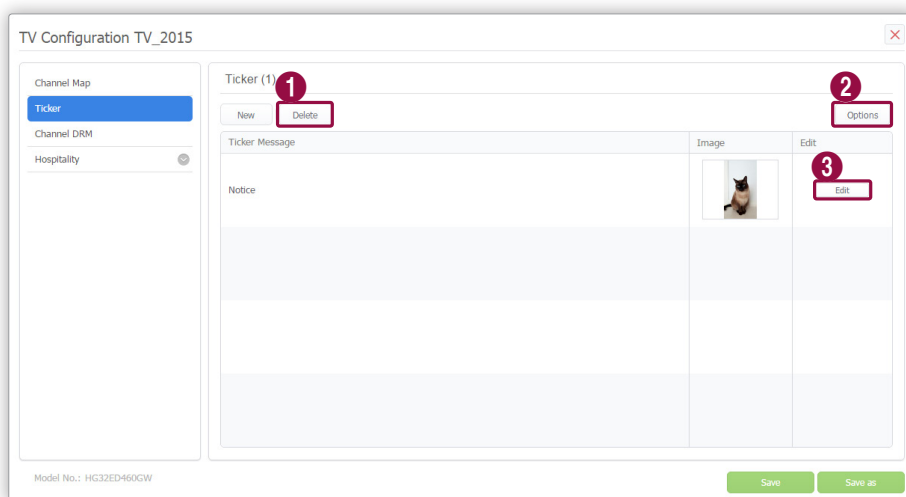
①   Delete a ticker.

②   Configure detailed settings for a ticker such as the display frequency/duration and the text color.

③   Edit a ticker.

4   After configuring the required settings, click **Save**.

– To save under another name, click **Save as**.

Distributing TV configuration

Distribute TV configuration to TVs.

📝 **Note**

> Check the following before distributing TV configuration.
>
> • TV configuration should be distributed to the same TV models with the same TV firmware version.
>
> • It is best to update all TVs to the latest TV software version before distributing TV configuration.

1 From the menus at the top, click **MANAGEMENT > TV Configuration**.

2 Click **Deploy** for the TV configuration to be distributed.

3 Use the **Deploy** pop-up window to configure distribution settings.

Configure settings for distributing TV configuration.

❶

▪ **Group ID**: Specify a target TV group to distribute the TV configuration.

▪ **Version**: Set the TV configuration version. If a TV configuration version being distributed is older than the version on a TV, the TV will not perform an update. If setting the TV version to 0, the TV configuration is distributed, irrespective of the version of the previous configuration on the TV, and resets the configuration on the TV.

▪ **Opiton:** To distribute along with an applied ticker, select the **Ticker** checkbox.

2	Set the distribution schedule. If **Deploy Immediately** is selected, TV configuration is distributed immediately. To distribute TV configuration at a specified time, select **Schedule Deploying**. ▪ **Start**: Set the time to start distribution. ▪ **End**: Set the time to end distribution. **✎ Note** To continuously distribute TV configuration without specifying the end time, select **Unlimited**.
3	Set the distribution date.
4	Set the distribution time. Click on ➕ or a blank time slot. ▪ Drag the selected section to move to another time slot. Alternatively, drag the arrow on the border to adjust the time.

4 Click **Deploy**.

5 When a notification window appears after distribution is complete, click **OK**.

✎ Note

- After distribution of TV configuration in RF mode, manual update should be performed from TVs or automatic update should be turned on. For further information, refer to the following: ► Updating in RF mode

- After distribution of TV configuration in IP mode, an update automatically takes place when TVs are turned off. To check to see that TV configuration has been distributed properly, turn off the TVs and then on again.

- It is possible to distribute TV configuration together with a project. For details, refer to the following: ► Parallel distribution

Canceling distribution of TV configuration

1 From the menus at the top, click **DEPLOYMENT**.

2 Click **Delete**.

3 Select the TV configuration to cancel, and then click **Delete**.

Managing TV software

Registering TV software

Upload TV software from your computer to the server.

1 From the menus at the top, click **MANAGEMENT > TV Software**.

2 Click **Import**.

3 Configure TV software information.
 – **TV Software Title**: Enter a TV software name.
 – **Software**: Import TV software from your computer. Click **Browse** to open a path and select a TV software file.

 Note

 File formats shown below can be added as TV software:
 • RF mode: OTA format
 • IP mode: BEM format

4 After configuring the required settings, click **OK**.
 – The file is uploaded to the server.

Managing registered TV software

1   From the menus at the top, click **MANAGEMENT > TV Software**.

2   Manage software, using the following features.
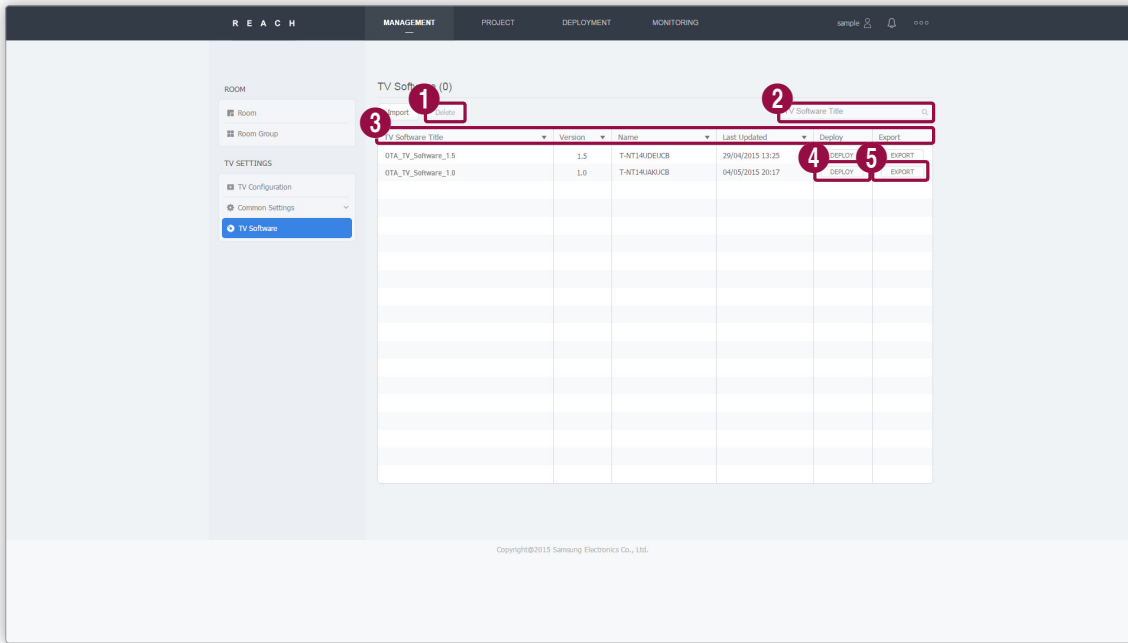
❶   Delete TV software.

❷   Search registered TV software.

❸   Rearrange the list by item in ascending or descending order.

❹   Distribute TV software to TVs.

❺   Export TV software to your computer from the server.

Distributing TV software

Distribute registered TV software to TVs.

1   From the menus at the top, click **MANAGEMENT > TV Software**.

2   Click **Deploy** for the TV software to be distributed.

3   Use the **Deploy** pop-up window to configure distribution settings.

❶   Set the distribution schedule. If **Deploy Immediately** is selected, TV software is distributed immediately. To distribute TV software at a specified time, select **Schedule Deploying**.

- **Start**: Set the time to start distributing the project.
- **End**: Set the time to end distributing the project.

📝 **Note**

To distribute TV software on an ongoing basis without an end time, select the **Unlimited** checkbox.

❷   Set the distribution date.

❸   Set the distribution time. Click ➕.

- Drag the selected section to move to another time slot. Alternatively, drag the arrow on the border to adjust the time.

4 Click **Deploy**.

5 When a notification window appears after distribution is complete, click **OK**.

Note

- In RF mode, distributed TV software needs to be manually updated from the TV. For further information, refer to the following: ► Updating TV configuration or TV software

- In IP mode, you can deploy TV software to up to 10 TVs at once. Distributed TV software automatically updates when the TV is turned off. To check to see that TV software has been successfully distributed, turn the TV off and on, and then click **Management > Room** in REACH 4.0. Use the **Main Firmware** and **Submicom Firmware Column** menu items to check the distribution results.

- It is possible to distribute TV configuration together with a project. For details, refer to the following: ► Parallel distribution

Parallel distribution

Distribute a project together with registered TV software and TV configuration created using the REACH 4.0 server.

1 From the menus at the top, click **DEPLOYMENT**.

2 Click **Add** and select the **TV Information** tab.

3 Select either **TV Configuration** or **TV Software**.

4 Use the dropdown list to select the **TV Configuration** or **TV Software** to be distributed, and configure distribution settings.

5 To distribute a project together, click the **Project** tab.

6 Select a project from the dropdown list and configure the distribution settings.

7 After configuring the required settings, click **Deploy**.

8 When you are prompted to confirm that you want to remove the previous distribution, click **OK**.

Note

- To distribute either **TV Configuration** or **TV Software** only, select the **TV Information** tab, configure distribution settings for the **TV Configuration** or **TV Software**, and then click **Deploy**.

- To distribute a project only, select the **Project** tab, configure distribution settings for the project, and then click **Deploy**.

Configuring additional information

Configure weather, flight, event and ad information.

Weather widget settings

Configure settings for the weather widget provided on TVs.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Weather Infofmation**.

3 Configure detailed settings.
   – **Weather API**: Select a weather widget type.
   – **Country & City**: Set the area to display weather info.
   – **Temperature Scale**: Set the unit to display temperatures.
   – **Update Cycle**: Set the interval to update weather info.
   – **Language:** Set the display language for weather information.

4 After configuring the required settings, click **Apply**.

Flight widget settings

Configure settings for the widget that provides flight info.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Flight Information**.
   – **Widget ON/OFF**: Select whether to use a flight widget.
   – **Flight API**: Select a flight widget type.
   – **Country & City**: Set a region to display flight info.
   – **Airport**: Set airports to display flight info.
   – **App ID**: Enter information in App ID format obtained from FLIGHTSTATS.
   – **App Key**: Enter a license key obtained from **FLIGHTSTATS**.
   – **Update Cycle**: Set the time interval to update flight info (unit: seconds).

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

   Note

   Flight widget licenses can be obtained from the following webpage:

   https://www.flightstats.com/developers/bin/view/Account+Services/account_types

Adding messages and notices

Add a message or notice to display on TVs. Messages and notices are displayed only when general TV channels are viewed.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Message**.

3 Click **New** and select a message type.

4 Configure detailed settings.
  - **Title**: Enter a message or notice title.
  - **Recipient Type**: Select a recipient type to which to send the message or notice.
  - **Group ID/Room Number**: Select a group or room to which to send the message or notice.
  - **Message**: Enter the content of the message or notice.
  - **Image**: Add image(s) to the message or notice.
  - **Sending Options**: Configure the time options for sending the message or notice.
  - **Closing Option**: Configure the options to close the notice window.

5 After configuring the required settings, click **Send**.

Deleting a message or notice

Delete messages or notices. It is not possible to delete messages or notices that have already been sent.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Message**.

3 Click **Delete** and select the message or notice to delete.

4 Click **Delete**.

Registering events or ads

Register an event or ad to display on TVs at a specified time. Events and ads are displayed only when general TV channels are viewed.

1   From the menus at the top, click **MANAGEMENT > Common Settings**.

2   Click **Event & Ads**.

3   Select a room group tab.
   – To register an event or ad to TVs in all rooms, select All.

Note

For further information on groups, refer to the following: ▶ Managing rooms by group
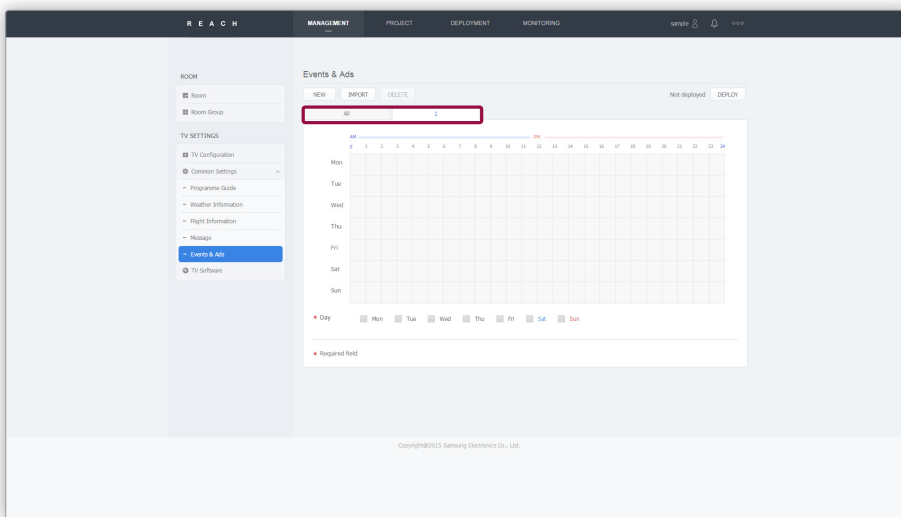
4   Click **New**.
   – The add event screen will be displayed.

5   Configure event or ad settings, using the following options.

---
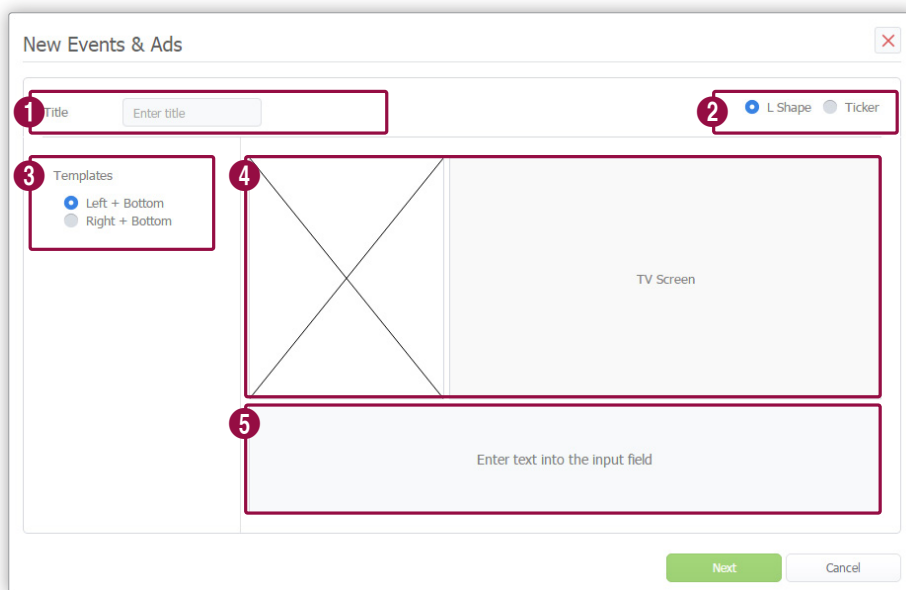
❶   Enter an event or ad title.

---

❷

Select an ad type.

- ▪ **L Shape**: Organize an ad with images or text.
- ▪ **Ticker**: Organize an ad with text.

---

❸

- ▪ **Templates**: Specify the position of an image or text to insert in the template. The template section on the right changes according to the selected option.
- ▪ **Fill**: Select an element type to insert in the area next to the TV screen section. This option is available when L Shape is selected.

---

❹

Use this image box to insert image files. Click 🖼 to import the desired image from the content library.

📝 **Note**

This section turns into a text box if you select **Text** from **Fill**.

---

❺   Use this text box to input text. You can configure detailed text settings using the toolbar.

6   After entering the required details, click **Next** and configure the ad time settings.
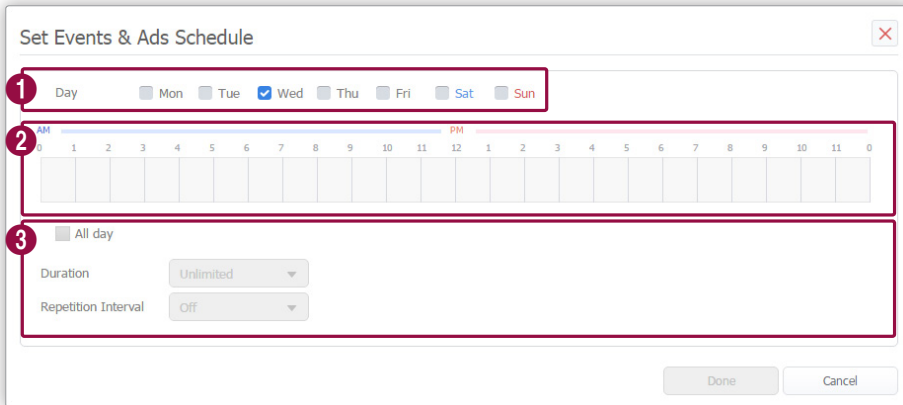
①   Select days of the week to run an event or ad. Select the checkboxes of desired days of the week.

②   Set the time slot to display an event or ad. If you click on ➕ or a blank time slot, the time slot is highlighted in blue. Drag the selected section with the mouse to move to another time slot. Alternatively, drag the arrow on the border to adjust the time.

　　📝 **Note**

　　　　To deselect a time slot, right-click on the time slot highlighted in blue and select **Delete**.

③   Set the time to start and end an event or ad. Click the arrows to set the start and end times. To play an event or ad all day, select the **All day** checkbox.

7   After configuring the required settings, click **Done**.

📝 **Note**

In RF mode, the event and ad pages can be updated only when a room's TV is set to the REACH channel.

Importing events or ads

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Event & Ads**.

3 Click a room group tab to which to add an event or ad.

4 Click **IMPORT**.

5 On the Import Event & Ads screen, specify import conditions and click **Browse**.

6 Select an event or ad file.

7 Click **OK**.

Editing events or ads

Edit registered events or ads by time slot.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Event & Ads**.

3 Click a room group tab where the event or ad to edit is saved.

4 Double-click the colored section.
   – Alternatively, right-click on the section and select **Edit page**.
   – The edit screen, where you can edit events or ads assigned to the time slot, appears.

5 Edit the details, using the following features.
   – Edit specific details using the same method when adding events or ads. For details, refer to the following: ► Registering events or ads

6 After editing as desired, click **OK**.
   – The register screen will be displayed.

7 To save changes, click **APPLY**.

Copying event and ad schedule

Copy events and ads from a specific room group and apply them to other room groups.

1   From the menus at the top, click **MANAGEMENT > Common Settings**.

2   Click **Event & Ads**.

3   Click a room group tab where the event or ad to copy is saved.

4   Right-click on the highlighted section and select **Copy to**.

5   Select the room group to paste the event or ad.
     – To register the event and ad to TVs in all rooms, select **All**.

6   Click **OK**.
     – The copied event and ad will apply to selected room group(s).

Exporting events or ads

1   From the menus at the top, click **MANAGEMENT > Common Settings**.

2   Click **Event & Ads**.

3   Click a room group tab to which to export an event or ad.

4   Right-click on the event or ad to export and select **Export**.

5   On the Export screen, click **Select Location**.

6   Specify a path to export the event or ad.

7   Click **Export**.

Distributing events or ads

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click the **Event & Ads** tab.

3 Select a room group tab to which to distribute an event or ad.
   – To register an event or ad to TVs in all rooms, select **All**.

4 Under Schedule, select an event or ad and click **DEPLOY**.
   – The event or ad will be distributed to the TVs under the selected group and automatically displayed on the TVs at the specified start time.

Blocking the initial TV setup menus

Block access to the initial TV setup menus to prevent room TV users from changing the settings.

Note

In IP mode, this feature can be run from the Remote Control menu. For further information, refer to the following: ► Monitoring room TVs

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Factory Lock**.

3 Select whether to block access to initial setup menus, using the following options.
   – **Enabled**: Disable user access to initial menu items.
   – **Disabled**: Enable user access to initial menu items.

4 After configuring the required settings, click **Apply**.

Enabling/disabling Auto Power On/Off

Automatically turn on or off the room TV when a guest checks in or out of a room.

Note

This feature is available in IP mode only.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Auto Power On/Off**.

3 Configure required settings, and click **Apply**.

Setting up a program guide

Import and add EPG info of a previously used channel to the channel info configured on the server.

1 From the menus at the top, click **MANAGEMENT > Common Settings**.

2 Click **Program Guide**.

3 Set up a program guide, using the following options.

- **Auto Update**: Update the program guide automatically.
- **Browse**: Set the mode to import EPG info of a previously used channel map.
  - **From local machine**: Import and use a file in .xml format that contains EPG info from your computer.
  - **From server**: Import EPG info from Guest-tek.
- ***Server URL**: View the path of Guest-tek to import EPG info. This option appears only when Browse is set to From server.
- **User name**: Set the administrator name that will manage EPG info. This option appears only when Browse is set to From server.
- **Password**: Set the password for the administrator that will manage EPG info. This option appears only when Browse is set to From server.
- ***File Path**: This option appears only when **From local machine** is selected under Browse. Manually enter the path to the .xml file containing the EPG information saved on the actual REACH 4.0 server. For example, "C:\temp\Epg\samsung_epg.xml" can be manually entered.
- **Update Cycle**: Set the time interval to import EPG info automatically from the specified path.

4   After configuring the required settings, click **Apply**.

5   Click   to view loaded EPG data.

6   If you are using Samsung EPG Broker, click **Monitoring** to monitor information related to EPG Broker Service, On TV Server status, EPG settings, and EPG data update.

 Note

- The program guide feature is available in North America, Canada, and Europe (IPTV) only.

- Fields with * cannot be left blank.

- You can register channel information using a program guide. For further information, refer to the following: ► Configuring channel information using a program guide

- To use the **Monitoring** available in the program guide, you must have Samsung EPG Broker version 0.01.037 or higher fully installed and configured.

Updating TV configuration or TV software

TV configuration or TV software distributed from the REACH 4.0 server can be updated from TVs.

 Note

- For details on how to register and manage TV configuration from the REACH 4.0 server, refer to the following: ► Configuring TV settings, Managing registered TV configuration

- For details on how to register and manage TV software from the REACH 4.0 server, refer to the following: ► Managing TV software

Updating in RF mode

Manual update

1   Open the TV configuration or TV software update window, using either of the following options:

  – Searching TV configuration or TV software previously distributed from the server to room TVs will start.
  Option 1   From the TV settings menu, select **Support > SW Update**.

      – To access the TV settings menu, press the menu button on the TV remote control.
  Option 2   From the initial TV setup menus, select **System > SW Update**.

2   Select **OK**.

  – TV configuration or TV software is updated.

  – Controlling the TV power during the update may cancel the update.

Automatic update

1 Configure automatic update settings from the TV. For details, refer to the following: ► Enabling automatic update

2 Turn off the TV to perform an update and then turn on the TV again.

Note

- If you specify the **REACH Update Time**, make sure that the TV is turned off at the specified time to ensure that an update performs.

- Controlling the TV power during the update may cancel the update.

Updating in IP mode

Turn off the TV to perform an update and then turn on the TV again.

- If there is distributed TV settings or TV software on the server, an update is performed when the TV is turned off.

- Controlling the TV power during the update may cancel the update.

06 Managing REACH 4.0

Managing my info

View or edit information on the logged in ID.

1 Click the user ID at the top menu bar.

2 When the account information window appears, click **Account**.

3 View or edit information, and then click **OK**.

Note

- Fields with * cannot be left blank.

- ID and Name cannot be edited.

- To change the password, click **Change Password**.

Solution settings

Configure REACH 4.0 settings.

Configuring system settings

Specify a display language for REACH 4.0 and configure REACH settings.

1   From the menus at the top, click ▣ **> Settings > System**.

2   Customize system settings.
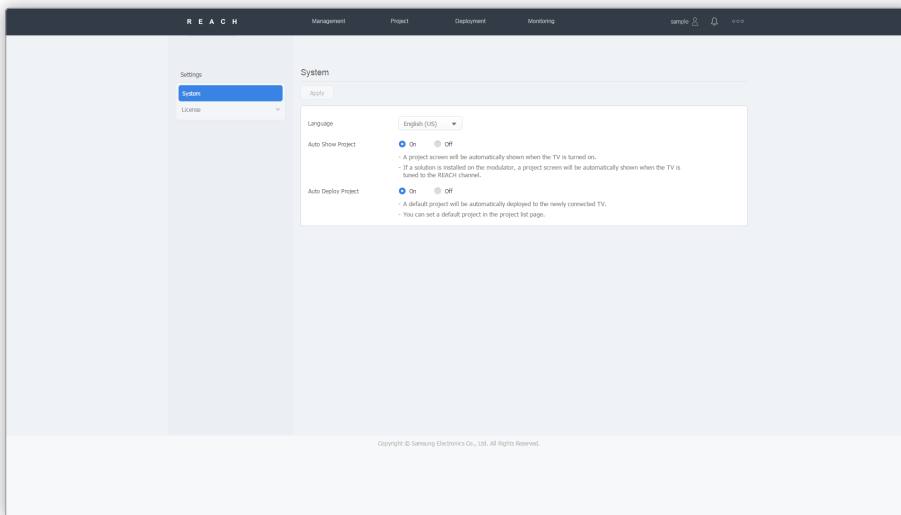
– **Language**: Change the display language of REACH.

– **Auto Show Project**: Specify how to run the REACH contents. To automatically play TV media when the TV is turned on, select **ON**. To play TV media when the Home button on the remote control is pressed after the TV is turned on, select **OFF**.

– **Auto Deploy Project**: Configure settings for distributing the default project when a TV connects to the server for the first time. To automatically distribute the default project, select **ON**. To prevent the default project from automatic distribution, select **OFF**.

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

– Changes are applied to REACH 4.0.

Managing your REACH 4.0 licenses

Obtain a paid or free license, and manage your license.

📝 Note

- This feature is available in IP mode only.

- Registering the same license twice will not renew or update the existing license while the pop-up message **Activation was successful.** is still visible.

1   From the menus at the top, click [⚬⚬⚬] > **Settings**.

2   Click **Licence > Licence**.

3   Manage your licenses, using the following menu options:

---
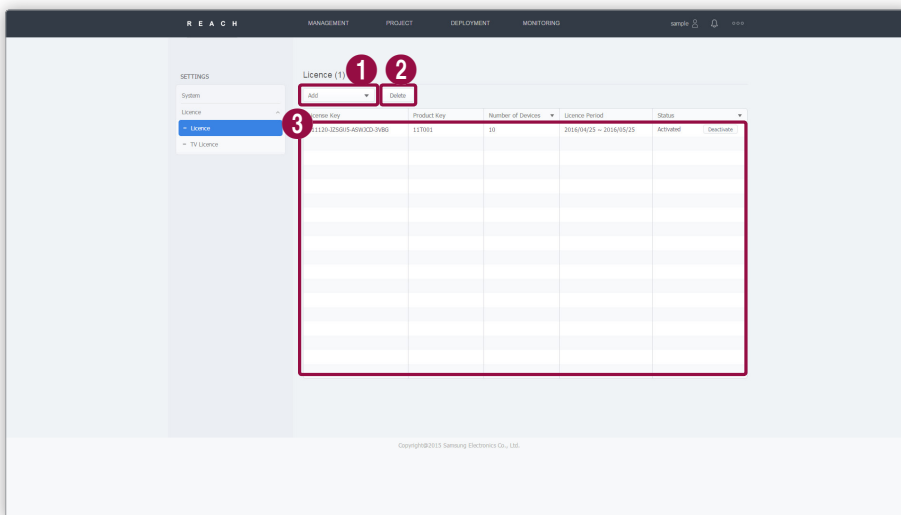
❶   Add a license. For further information, refer to the following: ▶Registering a free license, Registering a paid license

---

❷   Delete a registered license.

---

❸   Registered licenses are shown. To deactivate a license, click **Deactivate**.

Managing TV info

View and manage information about TVs registered in REACH 4.0.

📝 **Note**

> This feature is available in IP mode only.

1 From the menus at the top, click [∘∘∘] **> Settings**.

2 Click **Licence > TV Licence**.

3 Manage TV information, using the following menu items.

---

❶ Delete TV information.

---
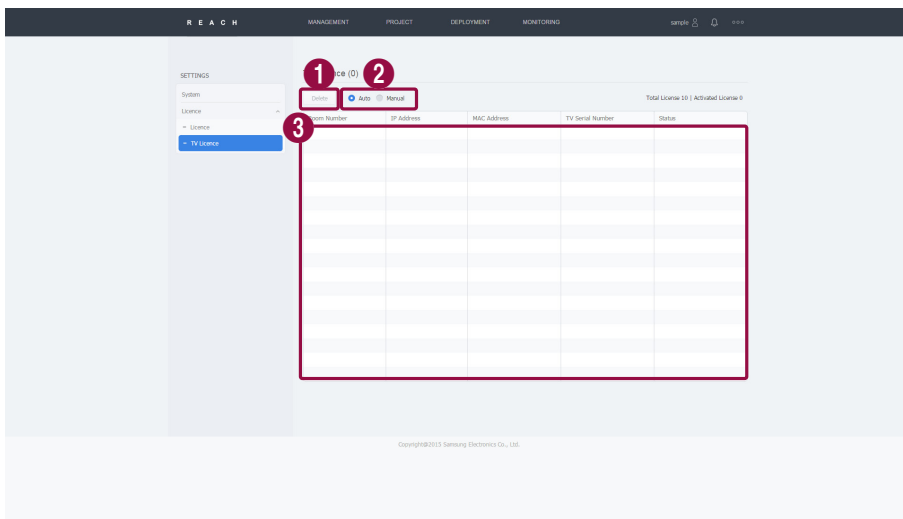
❷ Import TV information automatically or manually.

---

❸ TV information is shown.

Downloading the user guide

1 From the menus at the top, click ⬚ > **Help**.

2 When the help window appears, view details.
  – To download the user guide, click the provided URL.

Viewing version info

View the version and copyright details of REACH 4.0 and the required software.

1 From the menus at the top, click ⬚ > **About**.

2 View the info and click **Close**.

07
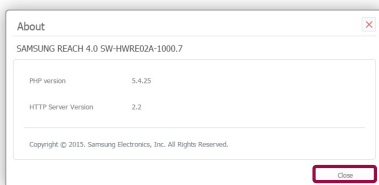
Using the administrator menus

Administrator menus

Use the REACH administrator menus. To use administrator menus, first log in with an administrator account.

🖉 Note

- When you run REACH 4.0 for the first time, the default administrator account (ID: qaadmin, password: qwerty) will be provided. Make sure to change the password to ensure security.

- For further information on administrator privileges, refer to the following: ▶ Account privileges and available features
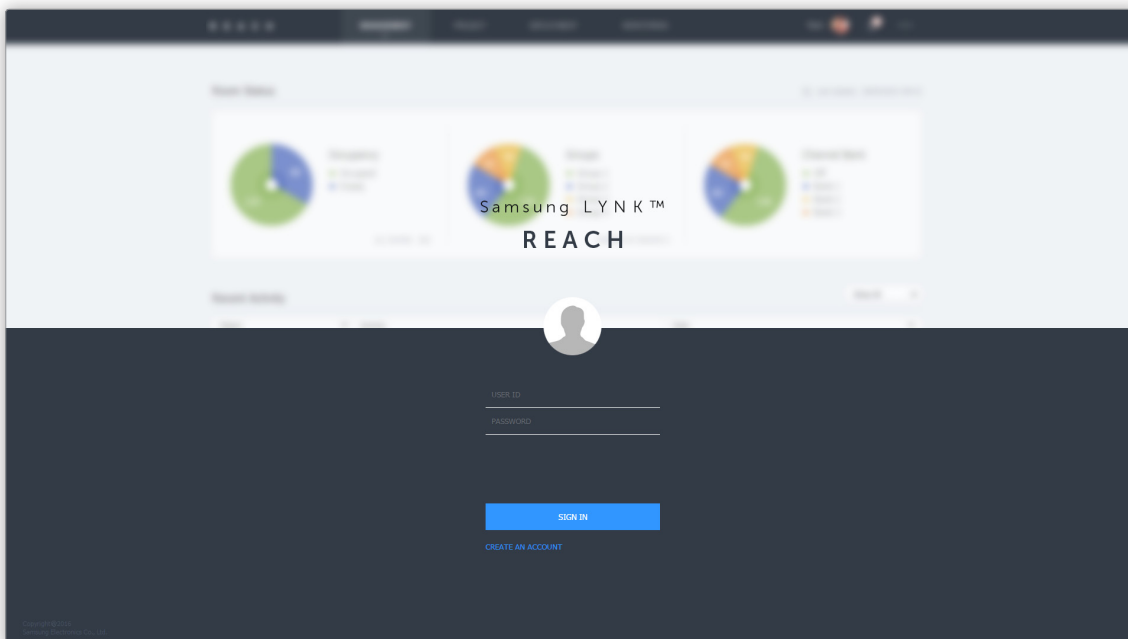
Configuring a protocol

In IP mode, customize the method of communication between the server and TVs.

Note

> The default protocol is HTTPS.

1 From the menus at the top, click > **Settings > System**.

2 Select a communication method from **Communication Protocol**.

Note

> Make sure that this setting is identical to the setting for the TV. For details on how to configure protocol settings from the TV, refer to the
> following: ▶Configuring IP mode settings

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

Managing access records

Manage access records for REACH 4.0.

Note

> This feature is accessible only to administrators. For further information on administrator privileges, refer to the following: ▶ Account privileges
> and available features

1 From the menus at the top, click > **Settings > Logs**.

2 Manage access records, using the following features.
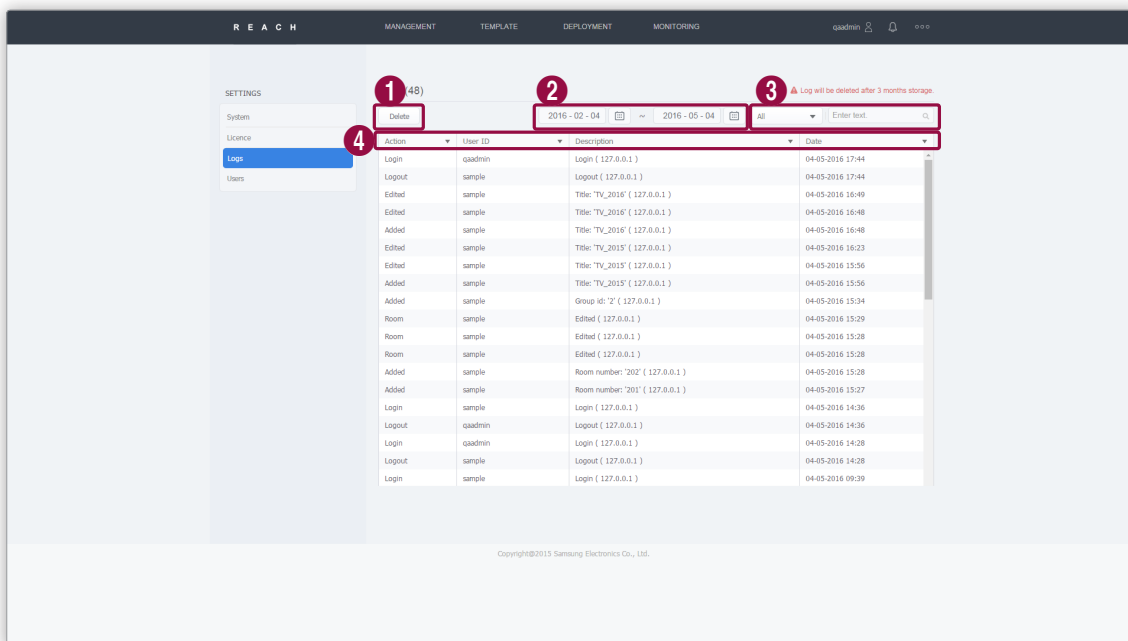
❶　　Delete access records.

❷　　Select a period to view access records for.

❸　　Search access records. To change the search criterion, click the dropdown list and select another criterion.

❹　　Rearrange the list by item in ascending or descending order.

Managing users

Manage information on REACH 4.0 users.

Approving users for sign up

REACH 4.0 is accessible only to administrators and administrator-approved users. View the information on a user that applied to sign up and approve the sign up.

1   From the menus at the top, click ⬚ > **Settings > Users**.

2   Click **Approve** for the desired user account.

   –   The selected IDs will be approved for sign up.
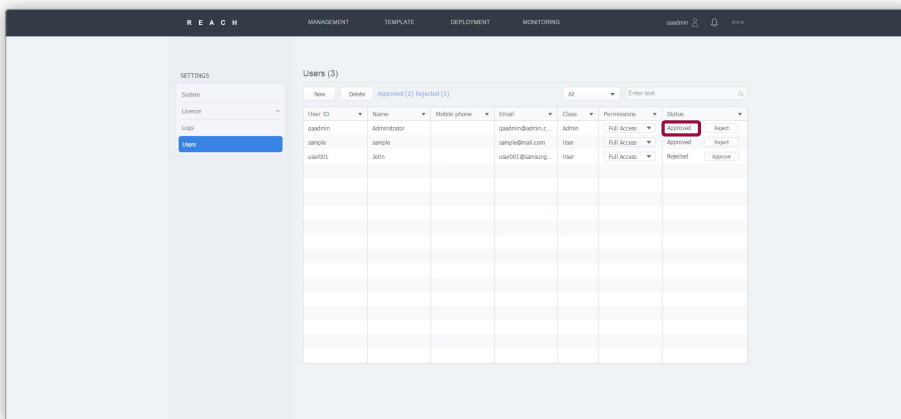
📝 **Note**

   Users with approved IDs can access REACH 4.0 immediately after logging in.

Canceling sign-up approval

Cancel approval of IDs to prevent specific users from accessing REACH 4.0, if required.

Click **Reject** for the desired user account.

   ▪   Sign-up approval for the IDs will be canceled. Users with canceled IDs can no longer log in.

📝 **Note**

   Sign-up approval status for each ID can be found under **Status** in the list.

Adding users

The administrator can create an ID to add a user.

1   From the menus at the top, click ⬚ **> Settings > Users**.

2   Click **New**.

3   Enter account information.

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

   – The user can access REACH 4.0 after logging in with their ID.
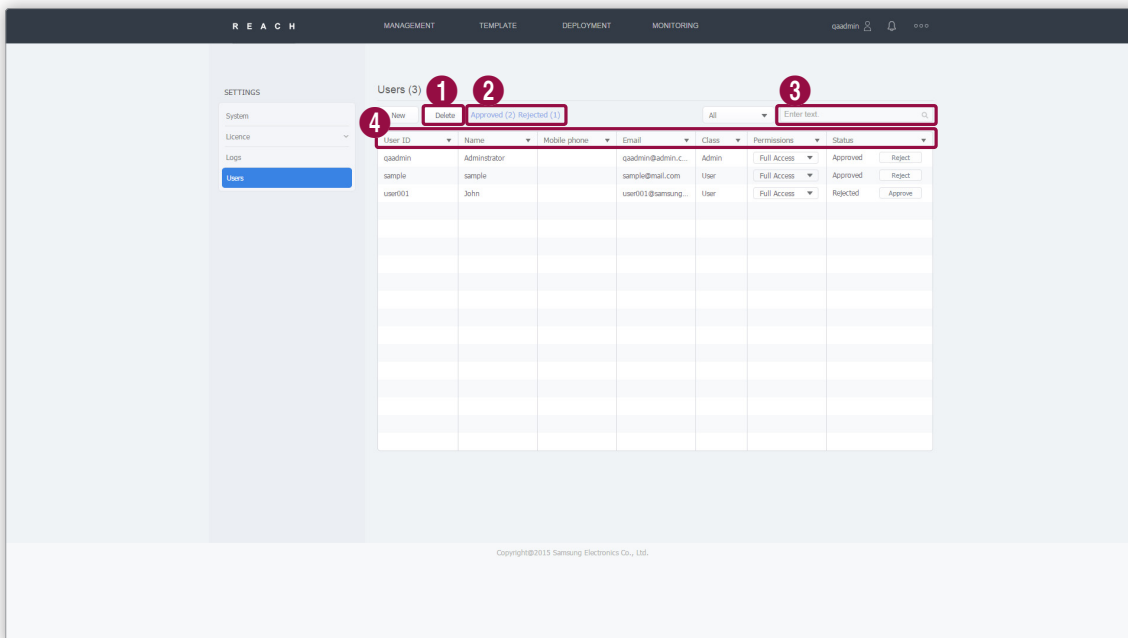
📝 **Note**

•   Fields with * cannot be left blank.

•   Users added by the administrator also require an approval process. For further information on sign-up approval, refer to the following: ► Approving users for sign up

Managing user info

Manage information on users that have signed up. Assign administrator privileges to users.

1   From the menus at the top, click ⬚ **> Settings > Users**.

2   Manage users, using the following features.

❶	Delete a user.
❷	View the number of user accounts that have been approved or rejected for sign-up.
❸	Search user information. To change the search criterion, click the dropdown list and select another criterion.
❹	Registered user information is shown. Rearrange the list by item in ascending or descending order.

Managing templates

Add templates that will be provided to REACH 4.0 users by default. Change the layouts of templates.

Adding a template

1   From the menus at the top, click **TEMPLATE > New**.

📝 **Note**

To go to the project list when another project is running, click **FILE > Open**.

2   Select a template type and click **OK**.

–   The edit screen with the selected template applied will be displayed.
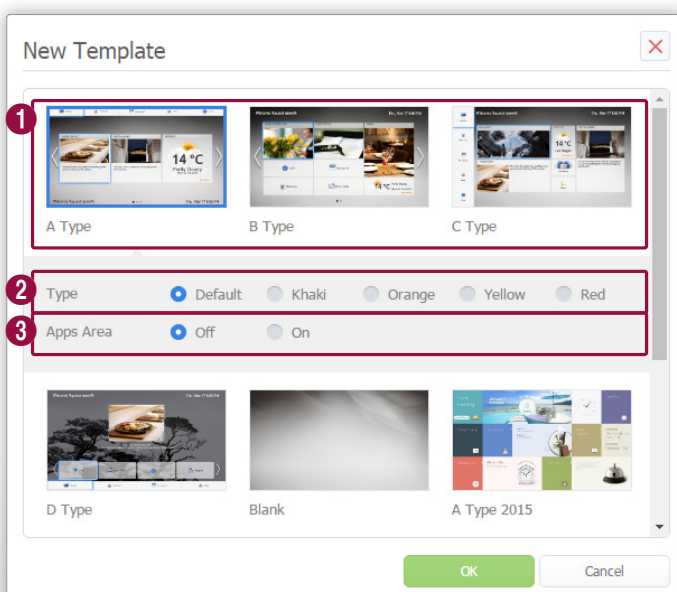
❶	View available template types.
❷	Select a theme color for the selected template. Available colors to select can vary depending on the template type.
❸	Enable or disable TV applications.
	📝 **Note**
	This feature is available in IP mode only.

3   Select a template type and click **OK**.

– The edit screen will be displayed.

– Templates can be configured using the same method as configuring projects. For further information, refer to the following: ▶ Configuring a project

4   To save the template, click **File > Save**.

5   A confirmation window appears. Click **Yes**.

– The template will be added to the list of templates and provided to the user as a basic template.

08 Appendix

Summary of features

Features	REACH 4.0 RF (Pre 2015 models)	REACH 4.0 RF (models released after 2016)	REACH 4.0 IP
REACH project	✓	✓	✓
Events and ads	✓	✓	✓
Events and ads (ticker)	X	✓	✓
Ticker	✓	X	X
Auto Show Project	X	✓	✓
REACH channel	✓	✓	X (Not required)
Access REACH projects from any channel	X (Accessible from REACH channels only)	X (Accessible from REACH channels only)	✓
Update REACH data from any channel	X (Available from REACH channels only)	X (Available from REACH channels only)	✓
FHD resolution	X	✓	✓
Flight and weather info	✓	✓	✓
Hybrid IP channel	X	✓	✓
TV settings and software update	✓	✓	✓
Virtual Standby	X	X	✓
Message and notice widget info	X	✓	✓
Availability of the SMART Hub app within REACH projects	✓ (Only for models in EU and ASIA)	✓	✓
Activation of the SMART Hub app within REACH projects	✓ (Only for models in EU and ASIA)	✓	✓
Mouse input	X	✓	✓
Real-time monitoring	X	X	✓
Factory settings lock	✓	✓	✓
Remote control command	X	X	✓
Auto-detect connected TVs	X	X	✓
Open API	✓	✓	✓
Express Checkout	X	X	✓
Evaluation license	X	X	✓
IPTV only license	X	X	✓
Multi-channel spooling	X	✓	X
Auto-set TV time	✓	✓	✓
Home Channel Viewer (view REACH channels)	✓	✓	✓ (specific channels can be selected)

Features	REACH 4.0 RF (Pre 2015 models)	REACH 4.0 RF (models released after 2016)	REACH 4.0 IP
Launch web browser(s)	✓ (Only for models in EU and ASIA)	✓	✓
Change input source	✓	✓	✓
SSL	✓	✓	✓

Channels and frequencies

Table A.1

Channel and frequency table (cable STD [J.83B] - open cable type)

CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
1	75	31	267	61	447	91	627	121	777
2	57	32	273	62	453	92	633	122	783
3	63	33	279	63	459	93	639	123	789
4	69	34	285	64	465	94	645	124	795
5	79	35	291	65	471	95	93	125	801
6	85	36	297	66	477	96	99	126	807
7	177	37	303	67	483	97	105	127	813
8	183	38	309	68	489	98	111	128	819
9	189	39	315	69	495	99	117	129	825
10	195	40	321	70	501	100	651	130	831
11	201	41	327	71	507	101	657	131	837
12	207	42	333	72	513	102	663	132	843
13	213	43	339	73	519	103	669	133	849
14	123	44	345	74	525	104	675	134	855
15	129	45	351	75	531	105	681	135	861
16	135	46	357	76	537	106	687		
17	141	47	363	77	543	107	693		
18	147	48	369	78	549	108	699		
19	153	49	375	79	555	109	705		
20	159	50	381	80	561	110	711		
21	165	51	387	81	567	111	717		
22	171	52	393	82	573	112	723		
23	219	53	399	83	579	113	729		
24	225	54	405	84	585	114	735		
25	231	55	411	85	591	115	741		
26	237	56	417	86	597	116	747		
27	243	57	423	87	603	117	753		
28	249	58	429	88	609	118	759		
29	255	59	435	89	615	119	765		
30	261	60	441	90	621	120	771		

Table A.2

Channel and frequency table (cable [DVB-C_256QAM] type)

CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
01	114	31	354	61	594	91	834
02	122	32	362	62	602	92	842
03	130	33	370	63	610	93	850
04	138	34	378	64	618	94	858
05	146	35	386	65	626	95	866
06	154	36	394	66	634		
07	162	37	402	67	642		
08	170	38	410	68	650		
09	178	39	418	69	658		
10	186	40	426	70	666		
11	194	41	434	71	674		
12	202	42	442	72	682		
13	210	43	450	73	690		
14	218	44	458	74	698		
15	226	45	466	75	706		
16	234	46	474	76	714		
17	242	47	482	77	722		
18	250	48	490	78	730		
19	258	49	498	79	738		
20	266	50	506	80	746		
21	274	51	514	81	754		
22	282	52	522	82	762		
23	290	53	530	83	770		
24	298	54	538	84	778		
25	306	55	546	85	786		
26	314	56	554	86	794		
27	322	57	562	87	802		
28	330	58	570	88	810		
29	338	59	578	89	818		
30	346	60	586	90	826		

Table A.3

Channel and frequency table (cable DVB-C [6MHz] type)

CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
01		31	267	61	447	91	627	121	777
02	57	32	273	62	453	92	633	122	783
03	63	33	279	63	459	93	639	123	789
04	69	34	285	64	465	94	645	124	795
05	79	35	291	65	471	95	93	125	801
06	85	36	297	66	477	96	99	126	807
07	177	37	303	67	483	97	105	127	813
08	183	38	309	68	489	98	111	128	819
09	189	39	315	69	495	99	117	129	825
10	195	40	321	70	501	100	651	130	831
11	201	41	327	71	507	101	657	131	837
12	207	42	333	72	513	102	663	132	843
13	213	43	339	73	519	103	669	133	849
14	123	44	345	74	525	104	675	134	855
15	129	45	351	75	531	105	681	135	861
16	135	46	357	76	537	106	687	136	867
17	141	47	363	77	543	107	693	137	873
18	147	48	369	78	549	108	699	138	879
19	153	49	375	79	555	109	705	139	885
20	159	50	381	80	561	110	711	140	891
21	165	51	387	81	567	111	717	141	897
22	171	52	393	82	573	112	723	142	903
23	219	53	399	83	579	113	729	143	909
24	225	54	405	84	585	114	735	144	915
25	231	55	411	85	591	115	741	145	921
26	237	56	417	86	597	116	747	146	927
27	243	57	423	87	603	117	753	147	933
28	249	58	429	88	609	118	759	148	939
29	255	59	435	89	615	119	765	149	945
30	261	60	441	90	621	120	771	150	951

09 Open Source Announcement

To send inquiries and requests for questions regarding open sources, contact Samsung via Email (oss.request@samsung.com).

- This product uses some software programs which are distributed under the GPLv2
- This product uses some software programs which are distributed under the LGPLv2.1.

GPL software: CutyCapt

LGPL software : FFmpeg, phpexcel, fancy-settings, gettext

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