

BRAVIA Signage

Help

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1. Overview

To configure playback content and playlists, content delivery schedules and power schedules, use the Operation web application. The Operation web application consists of multiple pages with the following features.

- **[Schedule Delivery] page**
 - Register and manage the content delivery schedule and power schedule for every group of displays in accordance with the date, day of the week, and time.
 - A content delivery schedule consists of the date or day of the week, a start time and end time, and a playlist.
 - A power schedule consists of the date or day of the week, and a power on time and off time.
- **[Interrupt Delivery] page**
 - In addition to schedule delivery, also provides support to publish interrupt delivery in emergencies and irregularities.
- **[Playlist] page**
 - On this page, playlists can be registered with the contents registered on the [Content Library] page and any URL. Playlists are lists that include the playback order of content such as videos, still images, and HTML. For example, if you want to play back content in the order of video A, still image B, and video C, the playlist is a list in the order of video A, still image B, and video C.
 - Videos, images, and HTML can be specified as content of playlists, and playback duration can be also specified for each content.
 - The content of a playlist is normally published and played back via a network, but content can be downloaded from a USB flash memory connected via the display's USB port, and the downloaded file can be played back if a playlist download configuration is enabled.
- **[Contents Library] page**
 - This page provides content management features such as adding content to playlists, showing the content list, changing content name, and folder management.
- **[Content Creation] page**
 - On this page, content can be created in accordance with the selected layout and materials on this page. Videos, images, HTML, and BRAVIA's external input can be selected as materials.
- **[Display Management] page**
 - On this page, display information (display name, IP address, MAC address, model name, firmware version, etc.) and running conditions (power on/off, offline, error, etc.), groups are shown and managed. Display is managed in units called "groups", and schedule and interrupt delivery are registered and managed in each group.
 - Displays can also be controlled to enable and disable power, and reboot via network.
- **[Event Log] page**
 - On this page, log messages at daily signage operations are displayed, such as the display's running conditions, playlist playback results, etc.
- **[Settings] page**
 - This page is for configuring the settings of these features and other settings for signage operation.

2. Basic operation

This section describes the basic displayed contents and operations of Operation web application.

Overview of this application

Operation web application is composed of the following:

(A) Top of screen

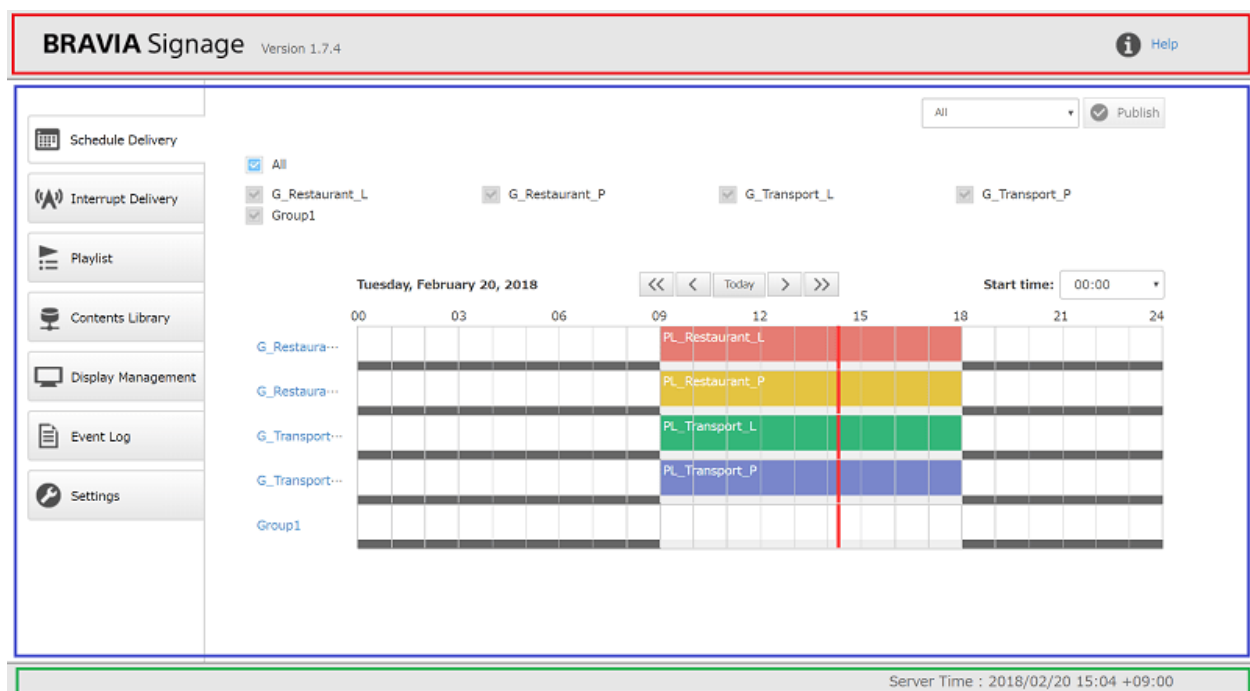
- **BRAVIA Signage Server Version:** The BRAVIA Signage Server version is displayed in the upper left of screen.
- **i Icon:** When you mouse over the i icon on the upper right of the screen, the network adapter name and IP address (only for IPv4) of the server PC are displayed. The information of multiple servers is displayed if multiple IP addresses are allocated, such as when using both wired LAN and wireless LAN.
- **Help:** This documentation is displayed when you click the [Help] link on upper right of screen.

(B) Center of screen

- **Menu Tab:** The menu tab is displayed on the left of the screen.
- **Operation Area:** The operation screen is displayed on the right of the screen in accordance with the menu selected from the menu tab.

(C) Bottom of screen

- **Server Time:** The PC time that BRAVIA Signage Server runs on is displayed. BRAVIA Signage Player runs based on this time, such as schedule delivery, power schedule, etc.



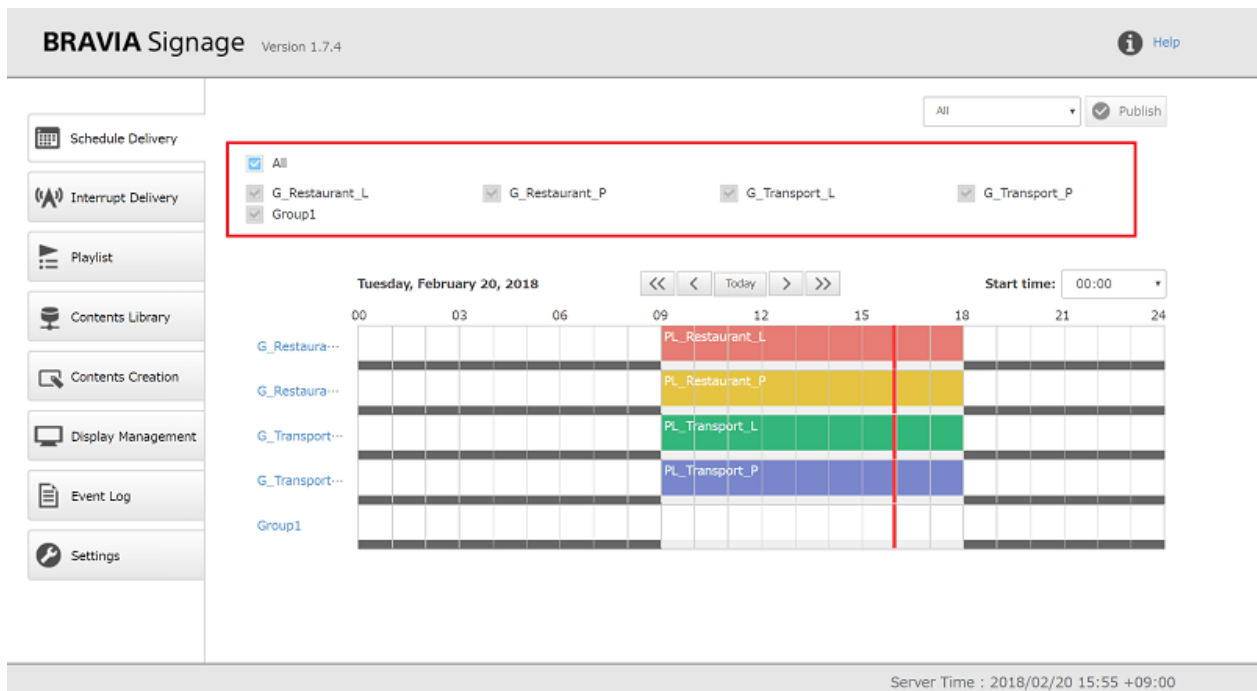
The following description mainly describes how to operate in “Operation area”. The captured screen images in the following descriptions may be older than your current version, but the procedures and operations are the same.

Schedule delivery

On this page, delivery schedules and power schedules can be managed. This section describes how to operate on this page. Not only schedules that specify “day of week” but also schedules that specify “date” can be registered, and end times after 24:00, such as 25:00, can be specified. Refer to [Advanced schedule management](#) about these advanced uses.

Appearance of [Schedule Delivery] page

- Group names registered on the [Display Management] page are displayed at the top of the screen. Delivery schedules and power schedules of the checked groups are displayed on the screen.



- Schedule information is displayed for each group. Each group name is displayed at the left of the scheduler.

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All

☒ All

☒ G_Restaurant_L

☒ G_Restaurant_P

☒ G_Transport_L

☒ G_Transport_P

☒ Group1

Tuesday, February 20, 2018

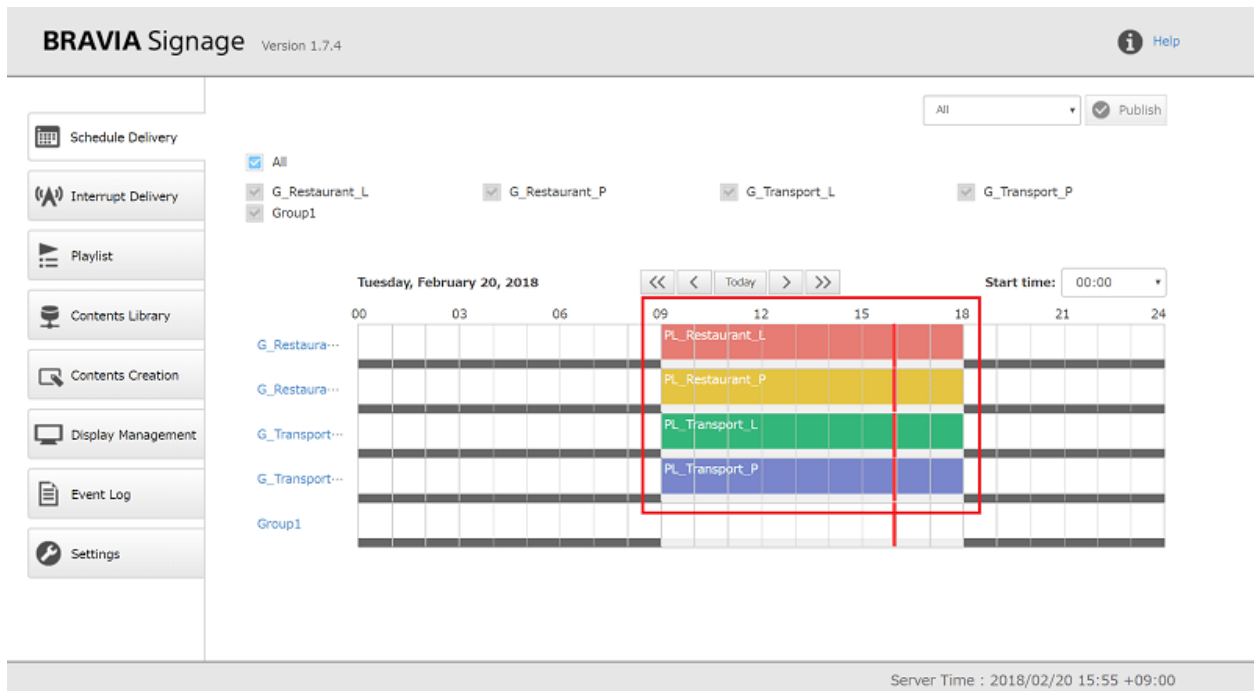
<< < Today > >>

Start time: 00:00

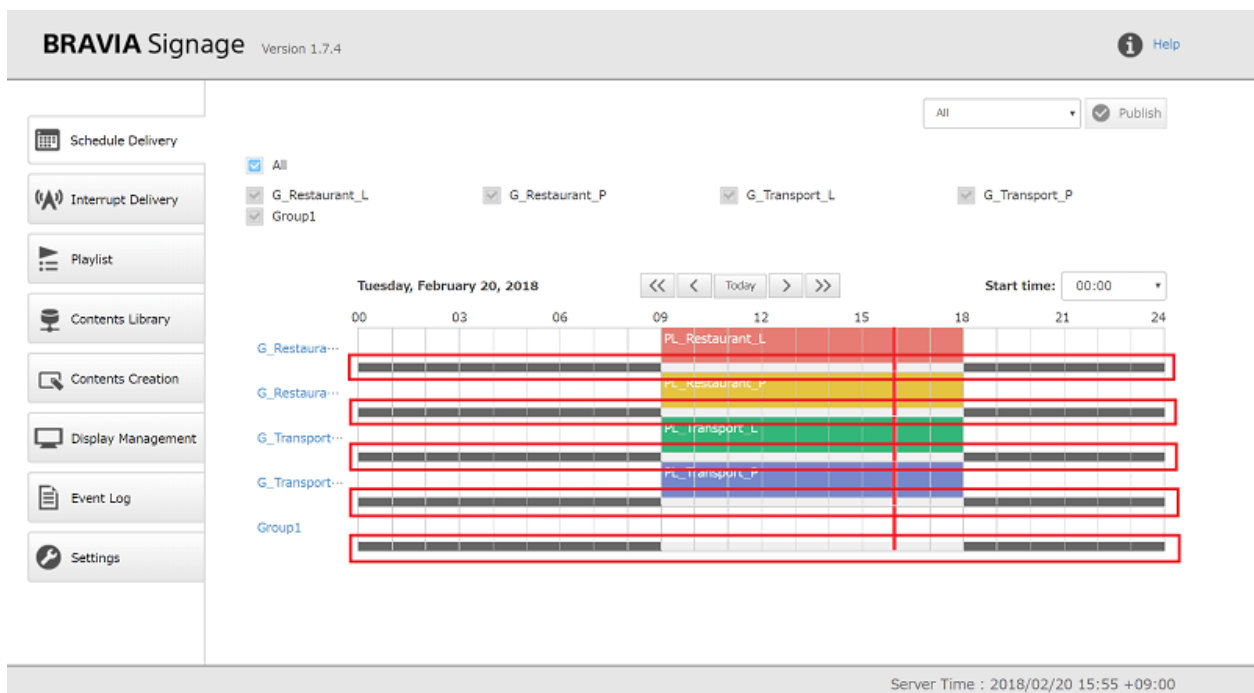
	00	03	06	09	12	15	18	21	24
G_Restaura...					PL_Restaurant_L				
G_Restaura...					PL_Restaurant_P				
G_Transport...					PL_Transport_L				
G_Transport...					PL_Transport_P				
Group1									

Server Time : 2018/02/20 15:55 +09:00

- The registered schedule information is displayed with playlist names and 24 colors. When you mouse over the registered schedule, the details of the schedule information are displayed.

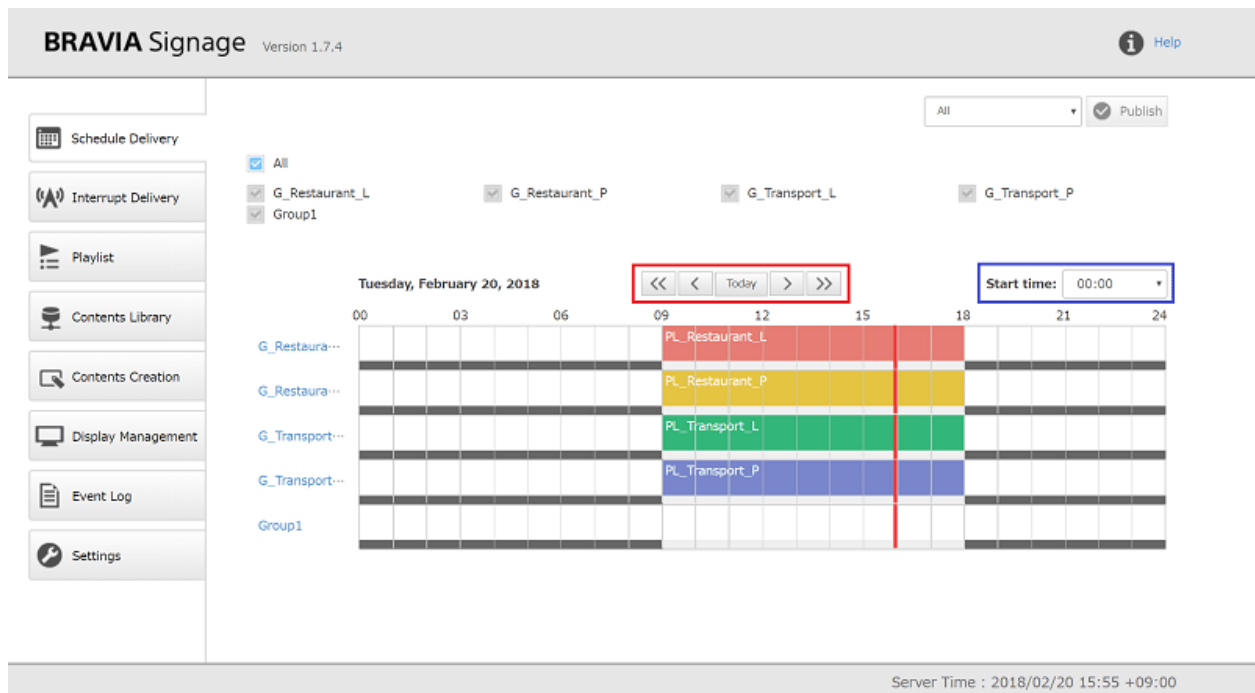


- In addition, the power schedule is displayed with the delivery schedule on the bottom of scheduler. Light gray indicates “period of power on” and dark gray is “period of power off”.



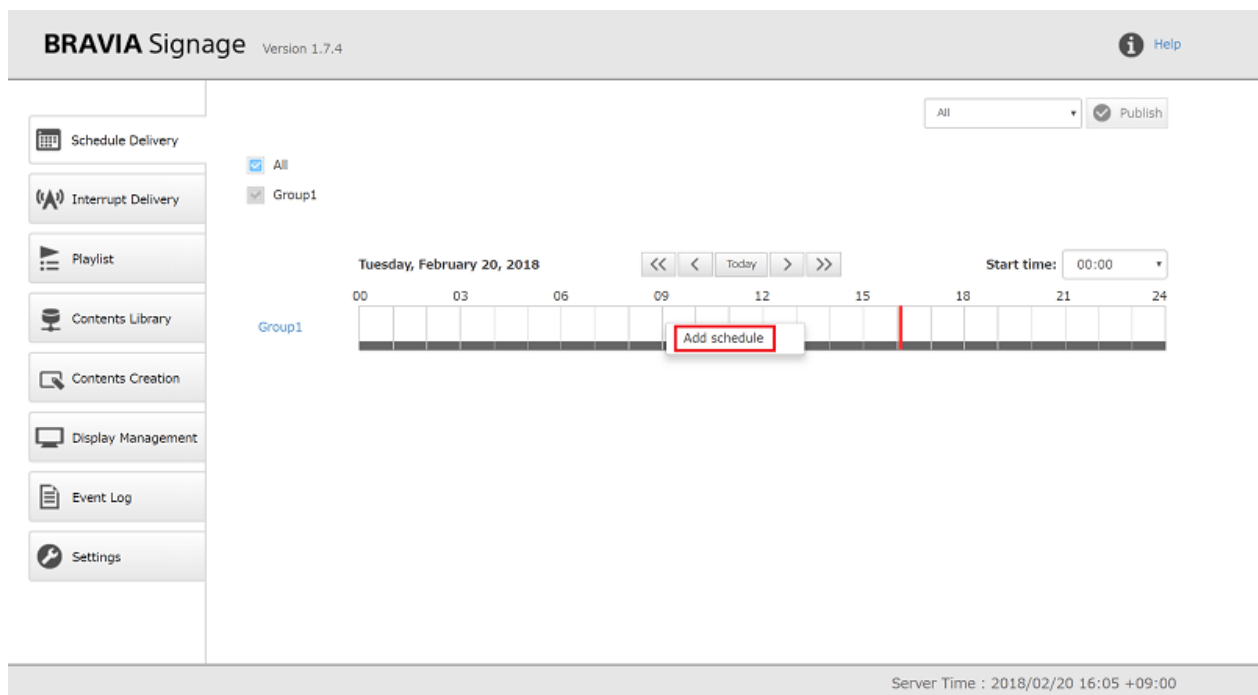
How to operate scheduler

- The current date can be changed by pushing [Today] button, [<] button, [>] button, [<<] button, [>>] button. When you push each button, the display switches between the schedules of the current date, the previous day, the following day, 1 week before, and 1 week later.
- Times from 00:00 to 21:00 can be selected at 3 hour intervals in the [Start time] box. The start time on the scheduler can be changed in accordance with the user's operation time zone. For example, [Start time] can be used to switch the display from "15:00" if your store opens at 18:00.



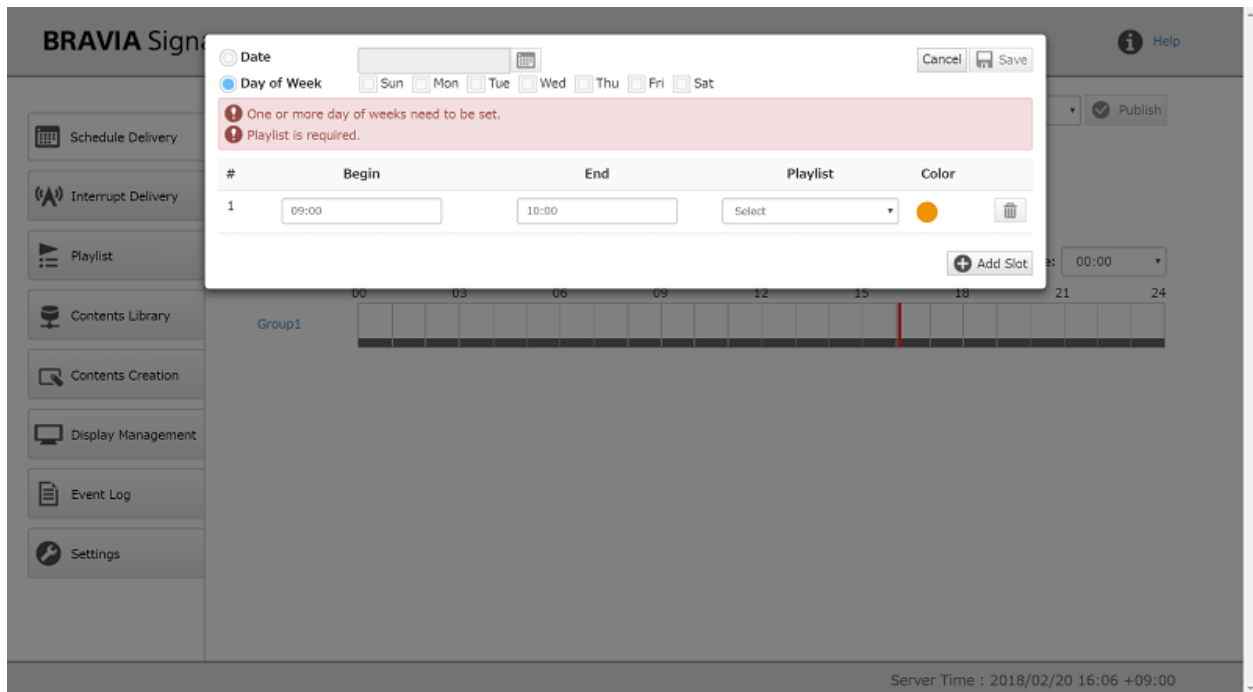
How to register new schedule

- [1] Click on the scheduler of the target group and select [Add schedule].

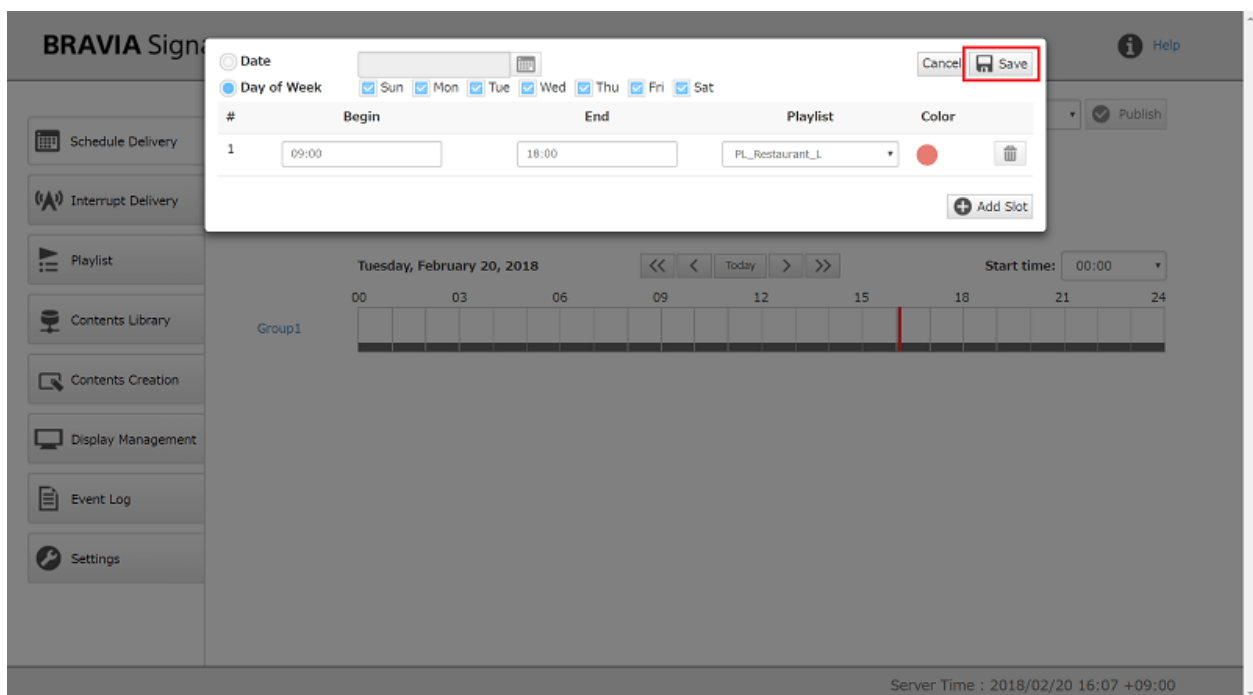


[2] Input the required items on the dialog in accordance with the message displayed on the top of the screen. Schedule information consists of the following items. Multiple combinations of start times and end times, playlists and background colors can be specified. If specifying multiple combinations, more input fields can be added by pushing the [Add slot] button.

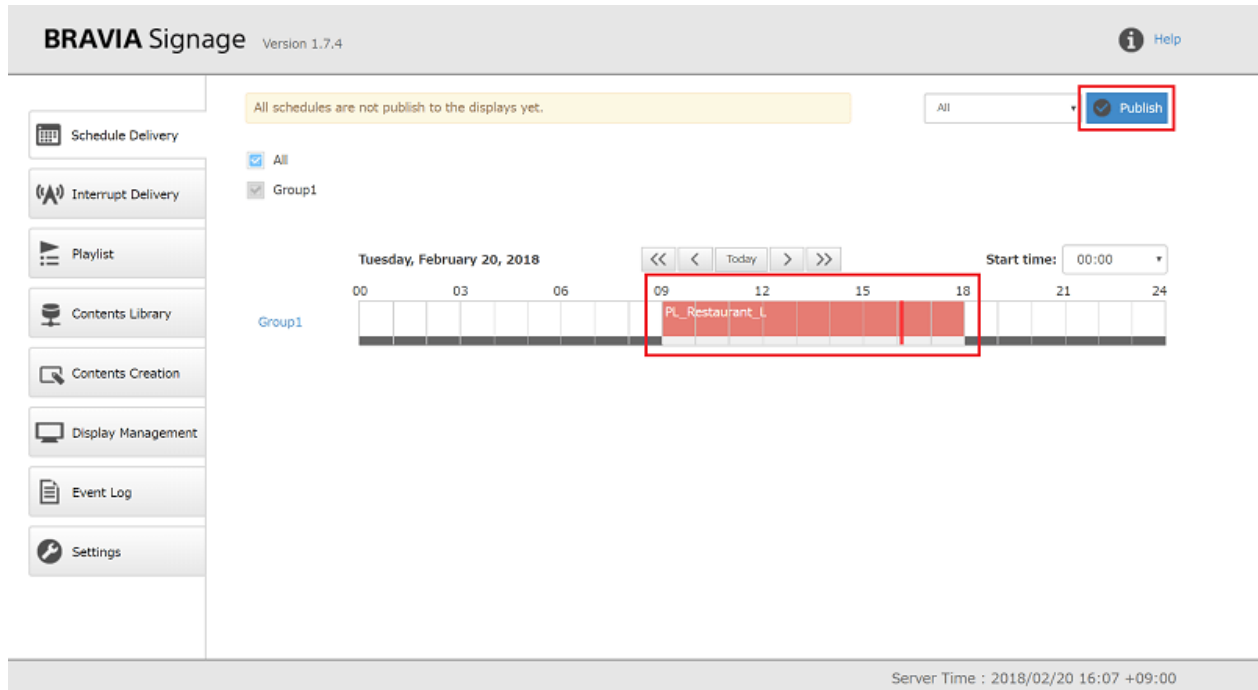
- “Day of week” or “date” of playback
- Begin time and end time
- Played back playlist
- Background color on scheduler



[3] When you enter the required items, the [Save] button is enabled. After you push this button, the registered schedule is displayed on this page.



[4] The registered data must be published to play the playlist on the display (BRAVIA Signage Player). Push the [Publish] button after selecting a group name from the select box in the top of the screen. It should be noted that BRAVIA Signage Player gets the time and time zone from the server BRAVIA Signage Server runs on and the BRAVIA Signage Player does not use the time and time zone set on display.



How to change schedule

[1] Click on the registered schedule, and select [Edit schedule].

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☒ G_Restaurant_L ☒ G_Restaurant_P ☒ G_Transport_L ☒ G_Transport_P ☒ Group1

Tuesday, February 20, 2018 << < Today > >> Start time: 00:00

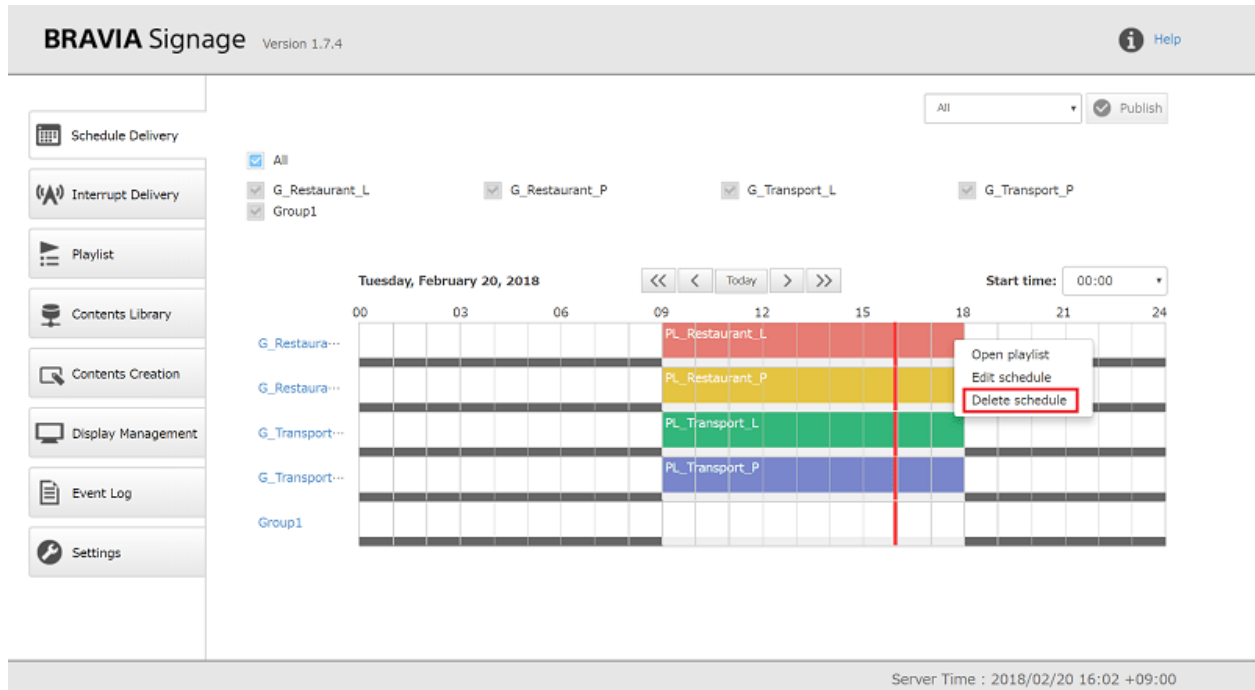
	00	03	06	09	12	15	18	21	24
G_Restaura...					PL_Restaurant_L				
G_Restaura...					PL_Restaurant_P				
G_Transport...					PL_Transport_L				
G_Transport...					PL_Transport_P				
Group1									

Server Time : 2018/02/20 16:02 +09:00

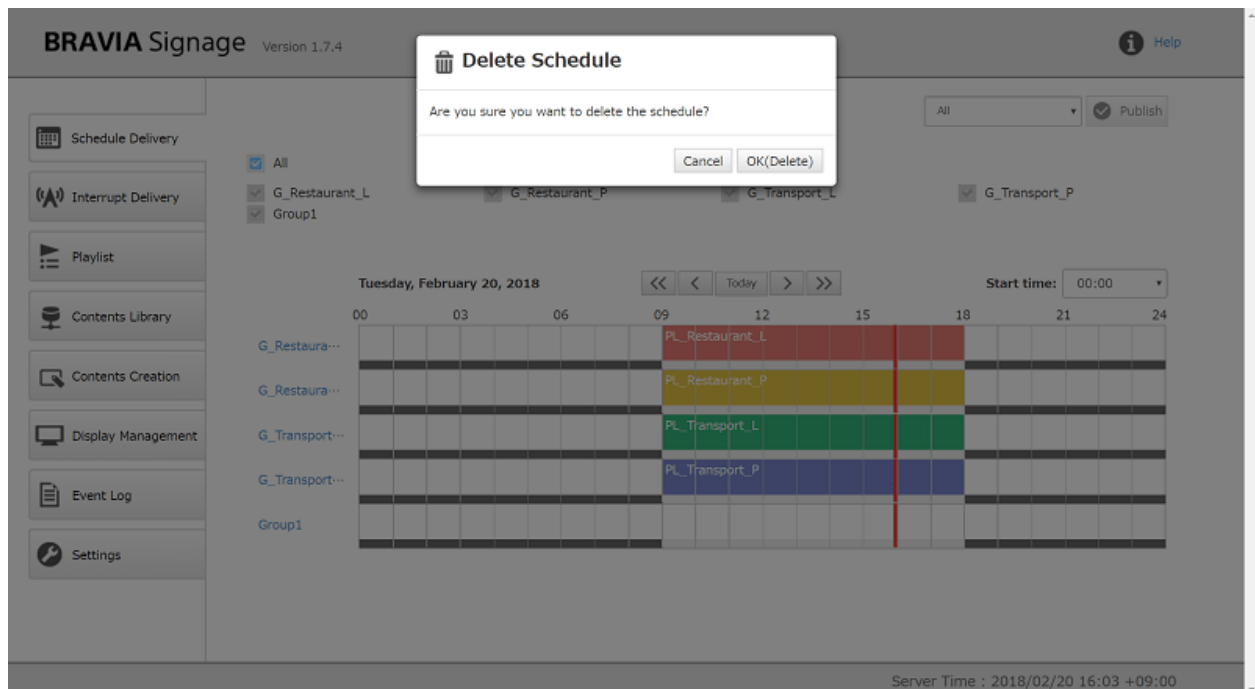
[2] Execute steps [2] to [4] of “**How to register new schedule**”.

How to delete schedule

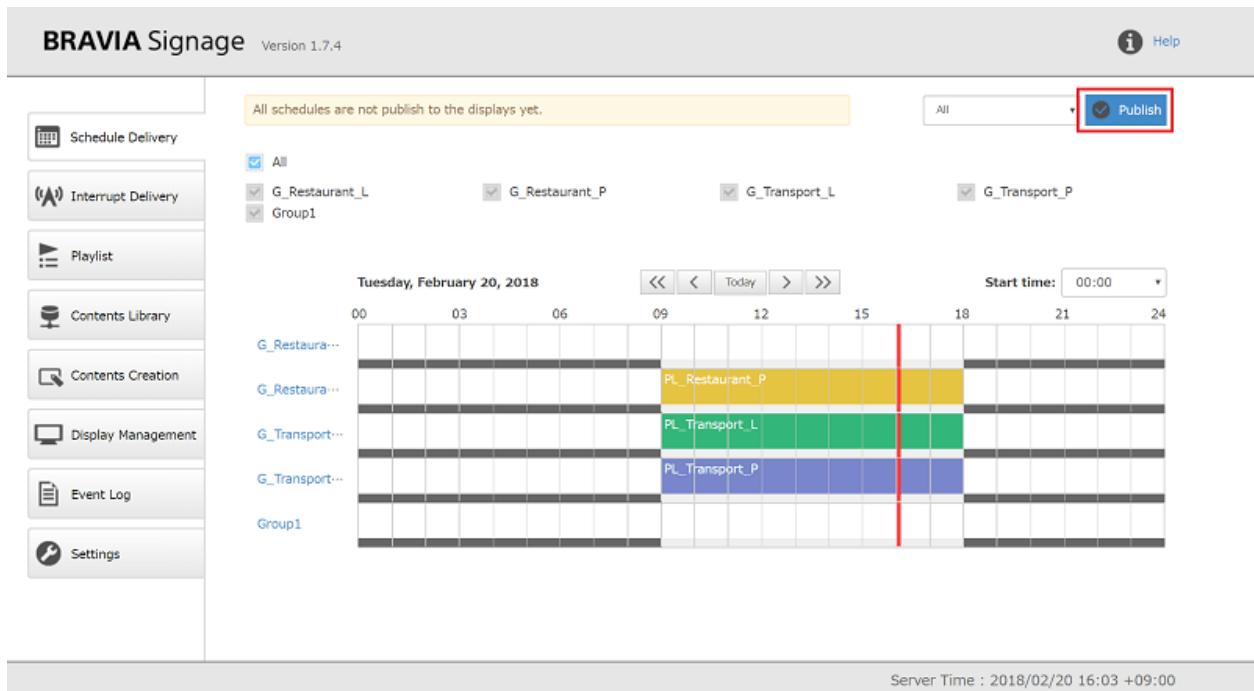
[1] Click on the registered schedule, and select [Delete schedule].



[2] When selecting “OK(Delete)” on the dialog, the schedule is deleted from this page.



[3] To update the published schedule data to display, publish again to the display. Push the [Publish] button after selecting a group name from select box in the top of the screen.



How to register and edit power schedule

If selecting “Specified power schedule” on the [Settings] page, the power schedule can also be registered. When adding a new group on the [Display Management] page, the power schedule of the new group is also registered as power on from “09:00” to “18:00” on all days of the week.

[1] When you click on the power schedule area, the dialog appears.

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Settings

All

☒ All

☒ G_Restaurant_L

☒ G_Restaurant_P

☒ G_Transport_L

☒ G_Transport_P

☒ Group1

Tuesday, February 20, 2018

<< < Today > >>

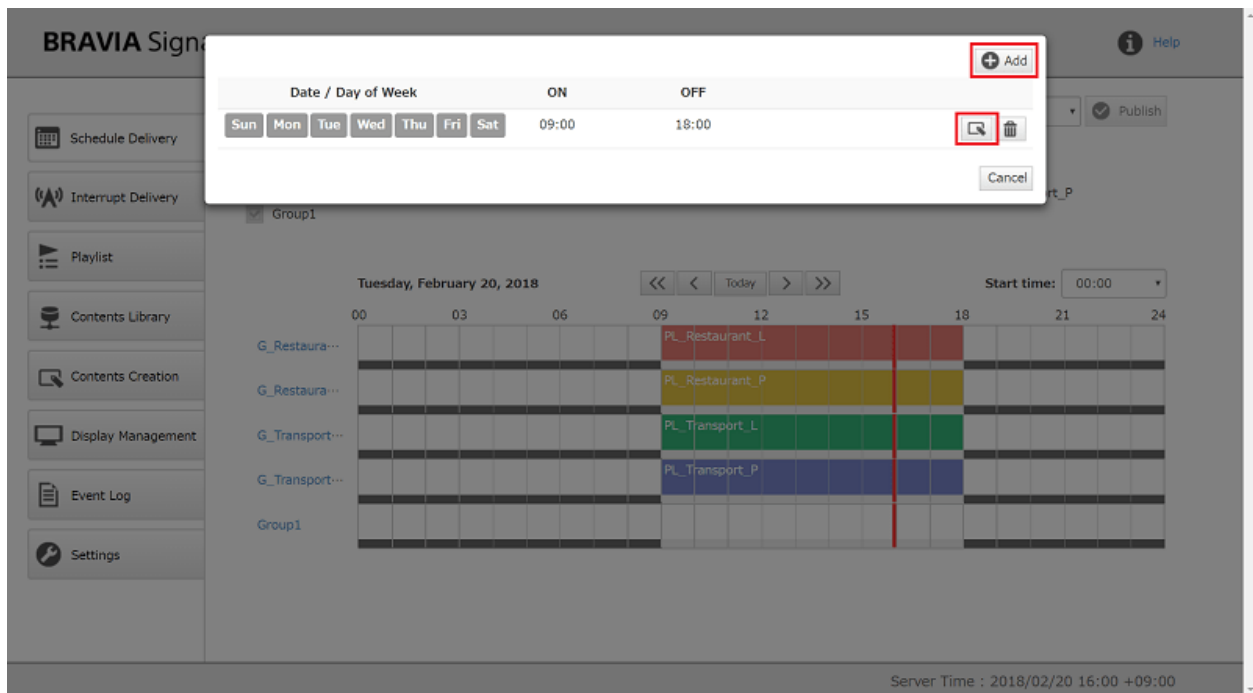
Start time: 00:00

	00	03	06	09	12	15	18	21	24
G_Restaura...					PL_Restaurant_L				
G_Restaura...					PL_Restaurant_P				
G_Transport...					PL_Transport_L				
G_Transport...					PL_Transport_P				
Group1									

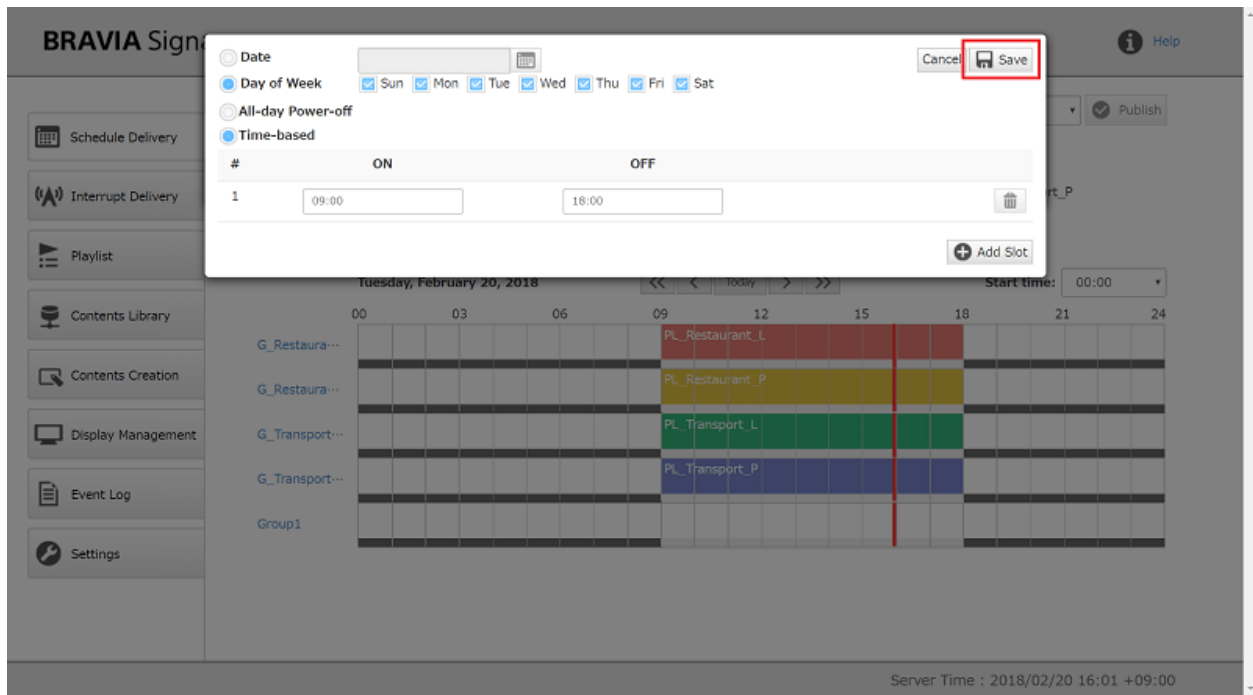
Server Time : 2018/02/20 16:00 +09:00

[2] After you push the [Add] button or edit button on the dialog, the power schedule can be edited. The power schedule consists of the following items. If using “Time-based”, multiple combinations of ON and OFF time can be specified. If specifying multiple combinations, more input fields can be added by pushing the [Add slot] button.

- “Day of week” or “date”
- “All-day Power-off” or “Time-based”
- ON and OFF time if using “Time-based”

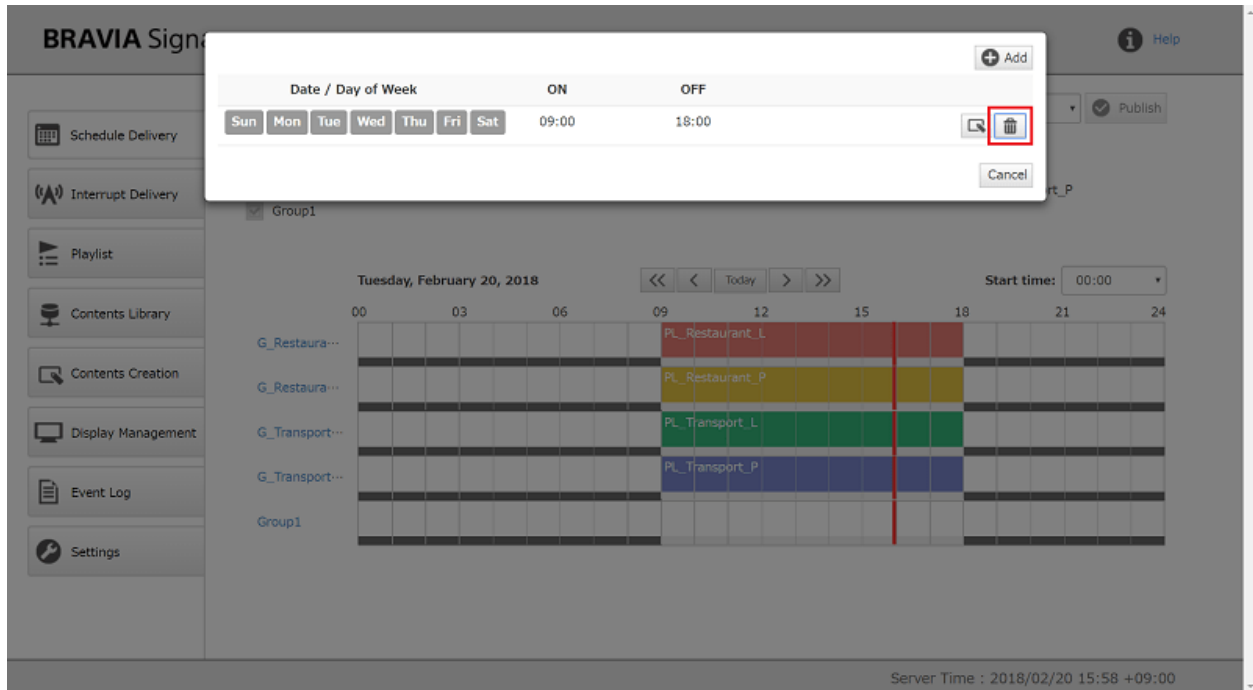


[3] When you enter the required items, the [Save] button is enabled. After you push this button, the registered power schedule is displayed on this page.

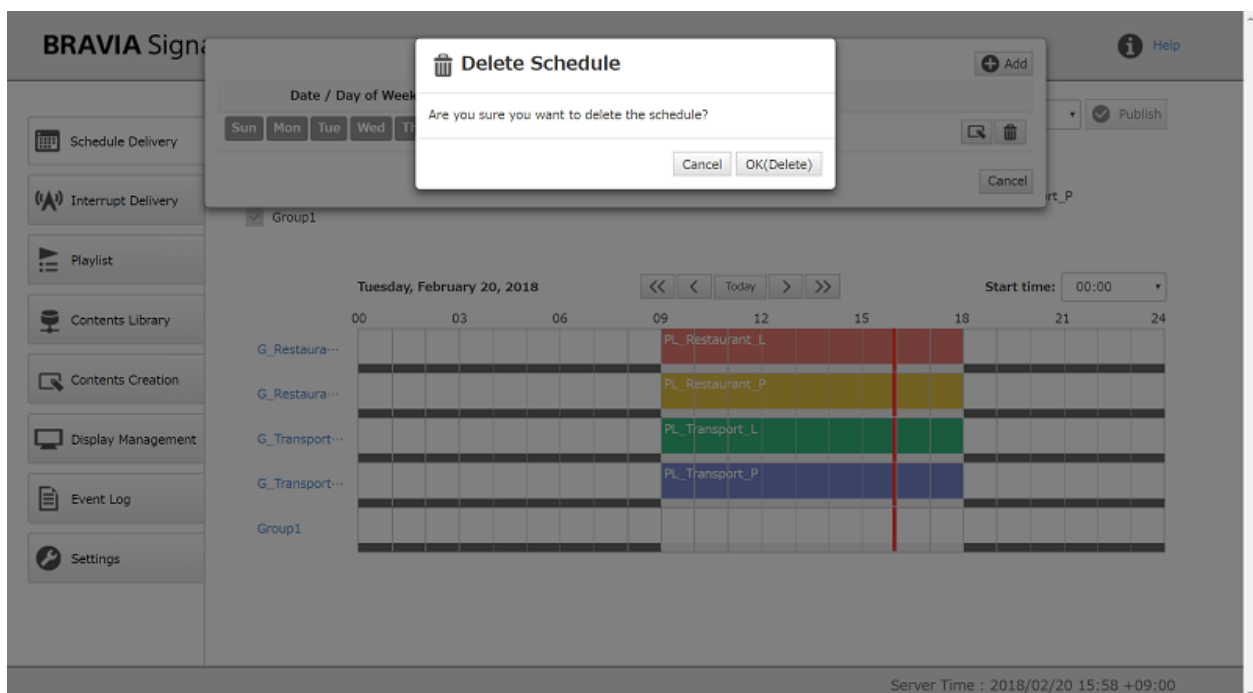


How to delete power schedule

[1] When you click the registered power schedule on the scheduler, the dialog appears.



[2] When you push the delete button on the dialog and select “OK(Delete)” on the next dialog displayed, the power schedule is deleted from this page.



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All

☒ All

☒ G_Restaurant_L

☒ G_Restaurant_P

☒ G_Transport_L

☒ G_Transport_P

☒ Group1

Tuesday, February 20, 2018

<< < Today > >>

Start time: 00:00

	00	03	06	09	12	15	18	21	24
G_Restaura...					PL_Restaurant_L				
G_Restaura...					PL_Restaurant_P				
G_Transport...					PL_Transport_L				
G_Transport...					PL_Transport_P				
Group1									

Server Time : 2018/02/20 15:59 +09:00

Interrupt delivery

In addition to schedule delivery, also provides support to publish interrupt delivery in emergencies and irregularities. On this page, the interrupt delivery information can be registered and managed. This section describes how to operate on this page.

Appearance of [Interrupt Delivery] page

- The registered interrupt delivery information is a combination that consists of name to identify, a published playlist name, and operation buttons.
- The background of the running interrupt delivery information is displayed in green.
- The registered interrupt delivery information can be filtered by the [Search by Name:] box and [Status] buttons.

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Search by Name:

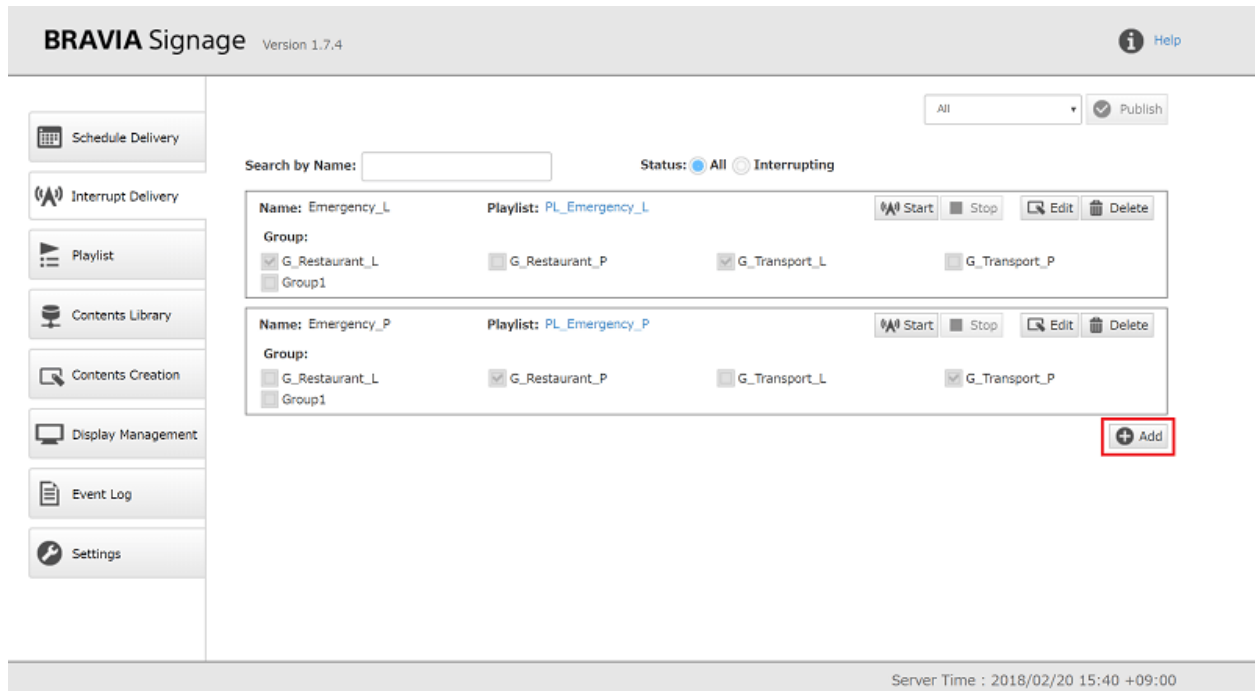
Status: ☒ All ☐ Interrupting

Name: Emergency_L Playlist: PL_Emergency_L Group: <input checked="" type="checkbox"/> G_Restaurant_L <input type="checkbox"/> G_Restaurant_P <input checked="" type="checkbox"/> G_Transport_L <input type="checkbox"/> G_Transport_P <input type="checkbox"/> Group1	<input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
Name: Emergency_P Playlist: PL_Emergency_P Group: <input type="checkbox"/> G_Restaurant_L <input checked="" type="checkbox"/> G_Restaurant_P <input type="checkbox"/> G_Transport_L <input checked="" type="checkbox"/> G_Transport_P <input type="checkbox"/> Group1	<input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Server Time : 2018/02/20 15:40 +09:00

How to register and edit the interrupt delivery

[1] New interrupt delivery information is added when you push the [Add] button on the right of the screen or the lower right.



[2] Input [Name], [Playlist], and [Group] in accordance with the message displayed on the top of the screen. When you input the required items, the [Save] button is enabled. When you push this button, the interrupt delivery can be registered.

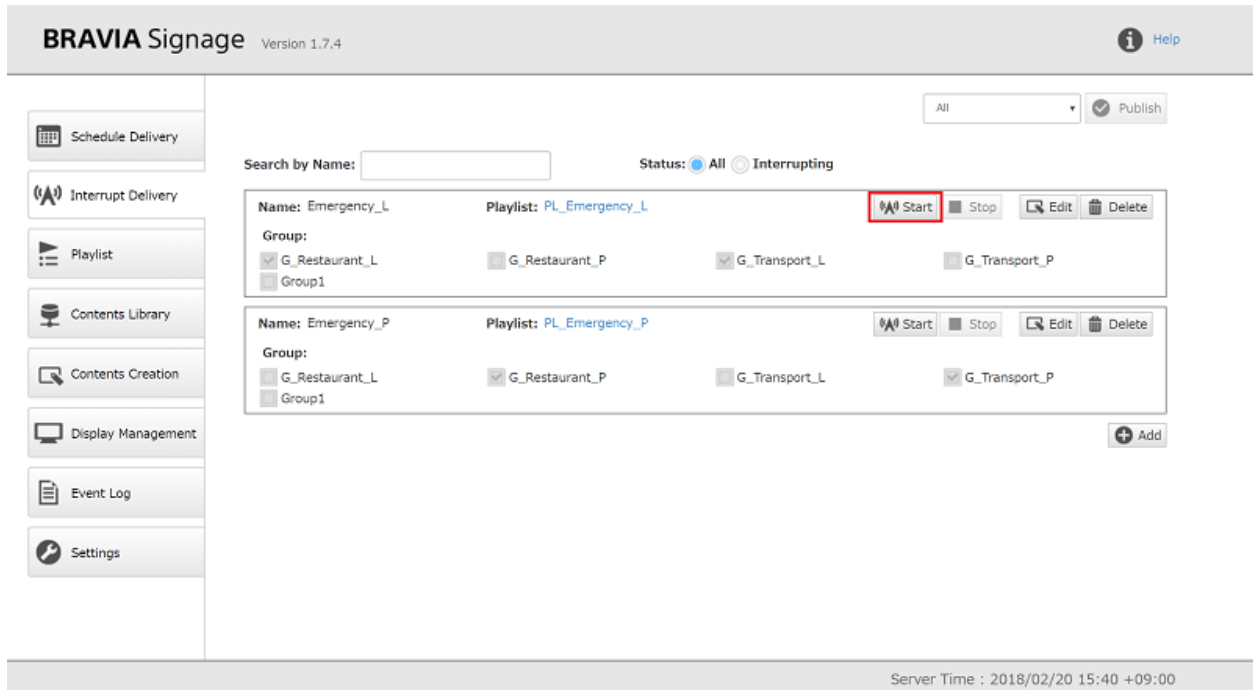
The screenshot displays the BRAVIA Signage management interface. On the left is a sidebar with navigation options: Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area shows a list of interrupt delivery items. At the top, there's a search bar and a status filter set to 'All'. Three items are listed: 'Emergency_L', 'Emergency_P', and 'Interrupt Delivery3'. The 'Interrupt Delivery3' item is highlighted with a red rectangular box. Each item has fields for Name, Playlist, and a Group of checkboxes (G_Restaurant_L, G_Restaurant_P, G_Transport_L, G_Transport_P). Action buttons (Start, Stop, Edit, Delete) are present for each item. The 'Interrupt Delivery3' item has a 'Save' button instead of 'Edit'. An 'Add' button is at the bottom right of the list.

Server Time : 2018/02/20 15:40 +09:00

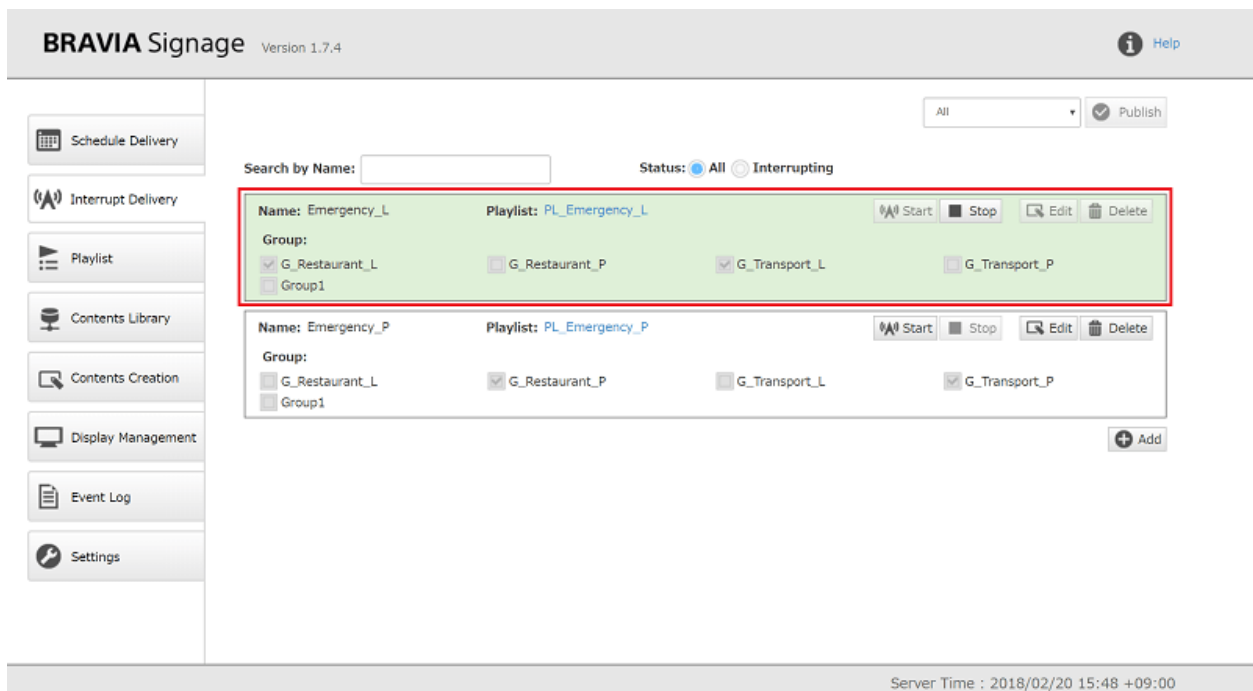
[3] To edit the registered interrupt delivery information, push the [Edit] button, edit the input items, and push the [Save] button.

How to start the interrupt delivery

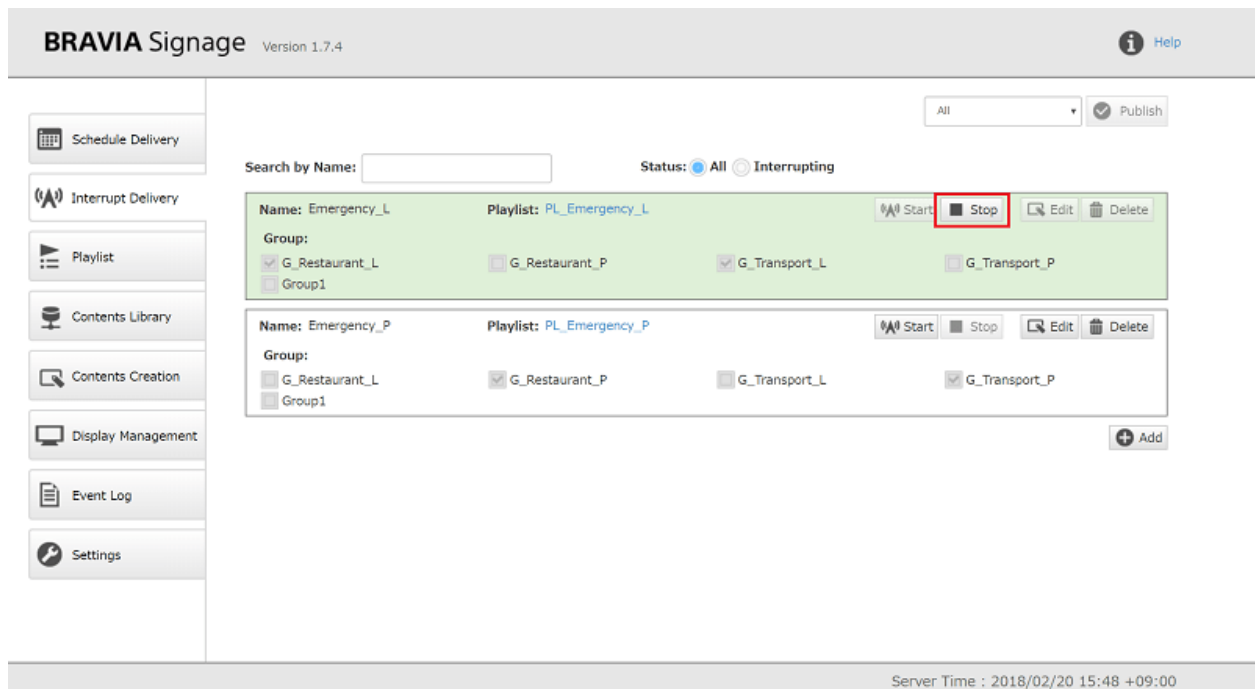
[1] Push the [Start] button of the interrupt delivery.



[2] After pushing the button, the background of the interrupt delivery information is displayed in green. When you start the delivery, the playlist is played back on the displays regardless of the status of schedule delivery.

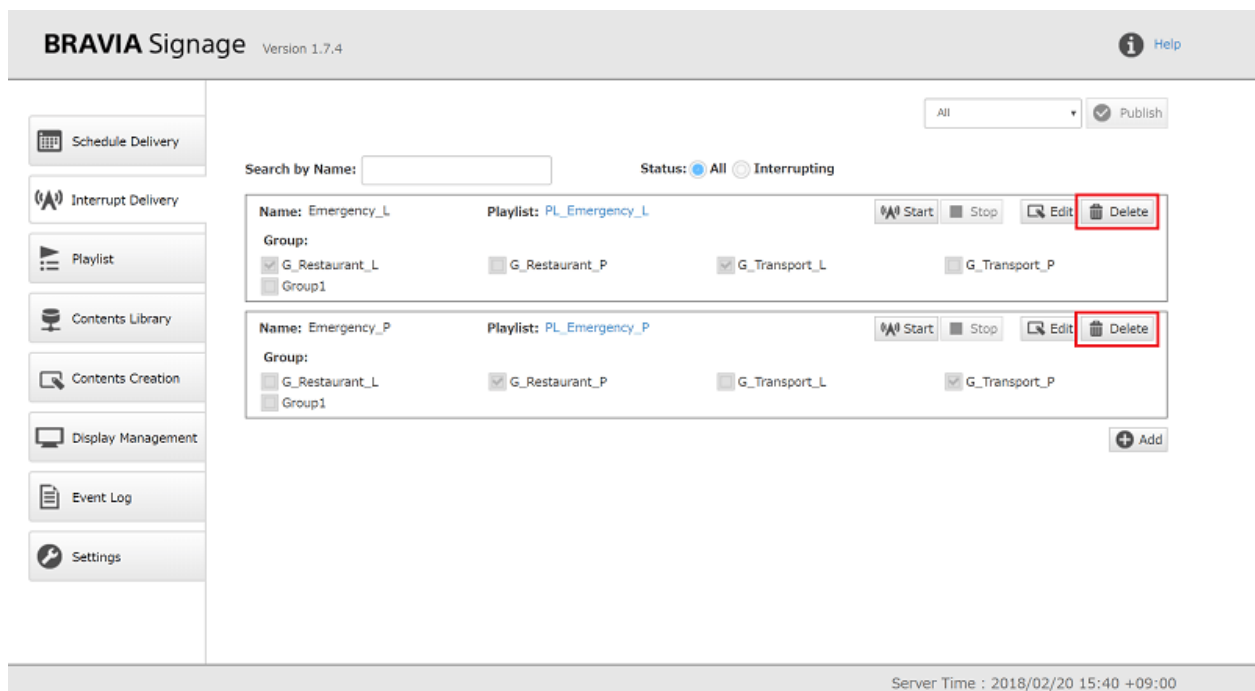


[3] To stop the currently running interrupt delivery, push the [Stop] button.



How to delete the interrupt delivery

[1] Push the [Delete] button of the interrupt delivery.



[2] When you select “OK(Delete)” on the next dialog displayed, the

interrupt delivery information on this page is deleted.

Playlist

On this page, playlists can be registered and managed. Playlists are lists that include the playback order of content such as videos, still images, and HTML. For example, if you want to play back content in the order of video A, still image B, and video C, the playlist is a list in the order of video A, still image B, and video C. This section describes playlist specifications and how to operate on this page.

Appearance of [Playlist] page

- A playlist consists of the name to identify URL of content, content type of URL, accessible status of URL, duration to play content of URL, and download settings.

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Playlist: All Publish + Add

Name	#	URL	Type	Status	Duration (sec)	Download
PL_Transport_L	1	Demo/Transport_L/transport_system.jpg	Photo (4K)	✓	10	OFF
PL_Restaurant_L	1	Demo/Restaurant_L/restaurant_01.mp4	Video (MP4)	✓	35	OFF
	2	Demo/Restaurant_L/restaurant_02.jpg	Photo (4K)	✓	8	
	3	Demo/Restaurant_L/restaurant_03.jpg	Photo (4K)	✓	8	
	4	Demo/Restaurant_L/restaurant_04.jpg	Photo (4K)	✓	8	
	5	Demo/Restaurant_L/restaurant_05.jpg	Photo (4K)	✓	8	
More...						
PL_Transport_P	1	Demo/Transport_P/transport_system.jpg	Photo (4K)	✓	10	OFF
PL_Restaurant_P	1	Demo/Restaurant_P/restaurant_01.mp4	Video	✓	35	OFF

Server Time : 2018/02/20 15:50 +09:00

- Under [URL], a URL that starts with “http://” or a URL string of content registered on the [Content Library] page is displayed. If the former is displayed, a “U” icon is displayed at the beginning of the URL string. If the later, a “C” icon is displayed.
- The content type of content specified in [URL] is displayed in [Type].

Type	Descriptions
Photo	Still image (JPEG, BMP, GIF, PNG formatted image)
Photo (4K)	Still image with 4K resolution (JPEG formatted image)
Video (MP4)	MP4 formatted video
Video (MPEG2TS)	MPEG2TS formatted video
Video (4K)	MP4 formatted video with 4K resolution
Video (M3U8)	m3u8 formatted file for HTTP Live Streaming. Refer to " Appendix V. m3u8 file ".
HTML	All types other than those listed above

- The status displayed in [Status] shows whether the content specified in [URL] can be accessed or not.

	Descriptions
✓	It has succeeded to access the content's URL.
⊘	It has failed to access the content's URL. Confirm the content's URL if this icon appears.
↻	Checking to access the content's URL.

- The duration of content specified in [URL] is displayed in [Duration]. If multiple URLs are included in a playlist, each URL plays and switches to the next content in order. The played time (sec) of each URL is displayed as the duration. Settings other than numbers are as follows:

Duration	Descriptions
Video Length	Indicates to use the length of the video content. If a number is specified instead of video length, the video length is not used and it switches to the next URL after the specified duration.
Endless	Indicates to continue playing without switching. If there is one URL and the type is "Photo", "Photo(4K)", or "HTML", this value is displayed as [Duration].

- “ON” or “OFF” are displayed in [Download] as download settings of the playlist. If you select “enable”, instead of network streaming, content will be downloaded to the USB flash memory connected to the display via the USB port, and that file is played.

How to register new playlist

[1] When you push the [Add] button on the upper right, the dialog appears. Input the required items in accordance with the message displayed on the top. A playlist consists of the following items, and multiple combinations of [URL], [Type], and [Duration] can be specified. If specifying multiple, more input fields can be added by pushing the [Add] button.

- Playlist name
- URL of playback content
- Content type of content specified in URL
- Duration of content specified in URL
- Download setting

When inputting these, refer to the descriptions on “**Appearance of [Playlist] page**” and the following:

- Content registered on the [Content Library] page can also be specified as [URL].
- The following items are not supported as the hostname of a URL string input to [URL]. In addition, specify not the folder name but the file name in [URL].
 - localhost
 - 127.0.0.1
 - NETBIOS name

- IP address in IPv6
- The following limitations exist for URL strings input to [URL].
 - No support for websites with X-Frame-Option headers as published HTML content.
 - No support for any HTTP authentication, but if you are using [Playlist download](#), there is support for only basic authentication.
- If you specify “Auto” as [Type], the type is automatically selected based on the extension of the file in [URL]. If you specify an image with 4K resolution or a video with 4K resolution, this automatic feature selects “Photo” or “Video(MP4)”. [Type] must be manually selected if using an image or video with 4K resolution.

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Playlist: All Publish

+ Add

Name	#	URL	Type	Status	Duration (sec)	Download	
PL_Transport_L	1	Demo/Transport_L/transport_system.jpg	Photo (4K)	✓	10	OFF	Edit Delete
PL_Restaurant_L	1	Demo/Restaurant_L/restaurant_01.mp4	Video (MP4)	✓	35	OFF	Edit Delete
	2	Demo/Restaurant_L/restaurant_02.jpg	Photo (4K)	✓	8		
	3	Demo/Restaurant_L/restaurant_03.jpg	Photo (4K)	✓	8		
	4	Demo/Restaurant_L/restaurant_04.jpg	Photo (4K)	✓	8		
	5	Demo/Restaurant_L/restaurant_05.jpg	Photo (4K)	✓	8		
More...							
PL_Transport_P	1	Demo/Transport_P/transport_system.jpg	Photo (4K)	✓	10	OFF	Edit Delete
PL_Restaurant_P	1	Demo/Restaurant_P/restaurant_01.mp4	Video	✓	35	OFF	Edit

Server Time : 2018/02/20 15:50 +09:00

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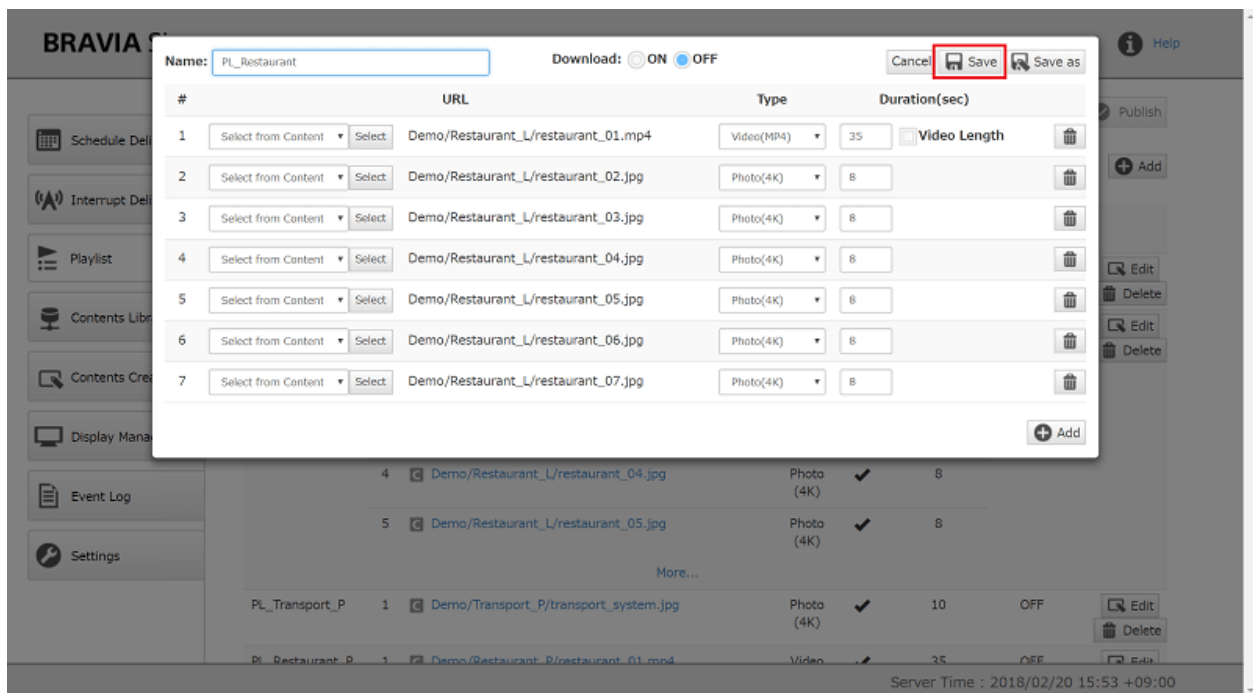
Name: Download: ☐ ON ☒ OFF Cancel Save

! Name is required.
 ! URL must be reasonable value.

#	URL	Type	Duration(sec)	
1	<input type="text" value="Select"/>	<input type="text" value="Auto"/>	<input type="text" value="8"/>	Add

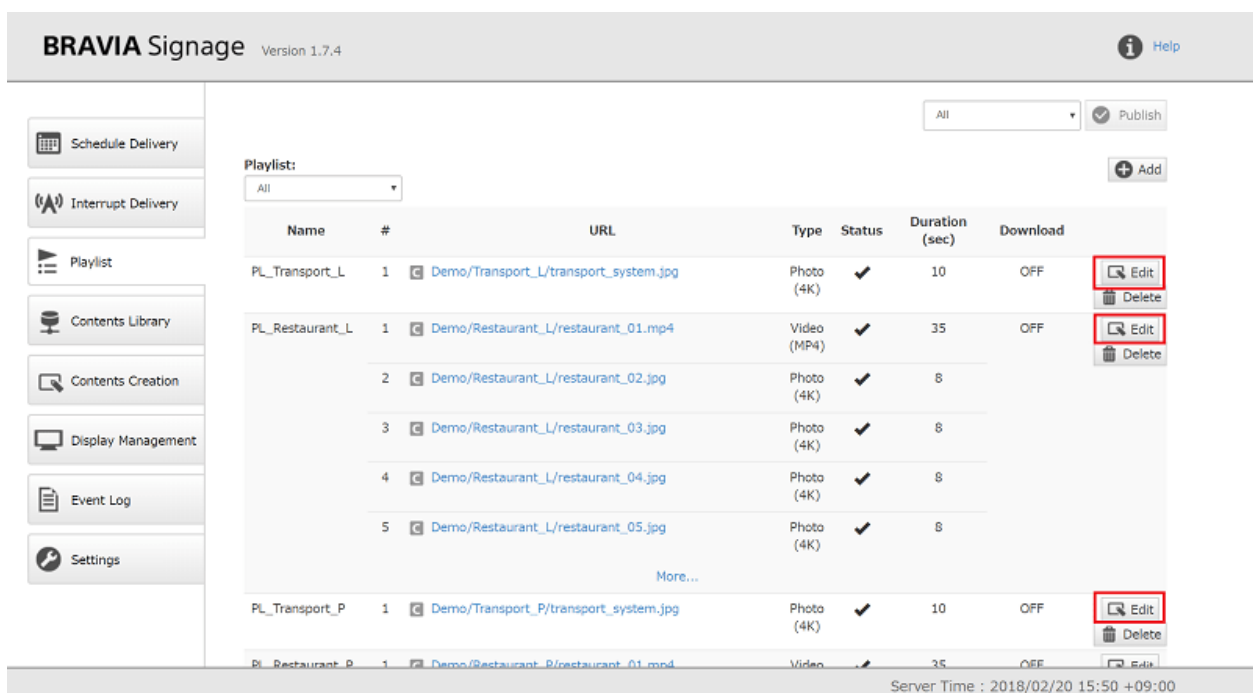
Server Time : 2018/02/20 15:53 +09:00

[2] When you input the required items, the [Save] button is enabled. When you push this button, the playlist is registered and displayed on this page.



How to edit playlist

[1] Push the [Edit] button on the right of the target playlist information.



[2] The dialog appears next, and you operate in accordance with steps [1] and [2] of “**How to register new playlist**”. In addition URL order can be changed by drag and drop.

How to copy registered playlist

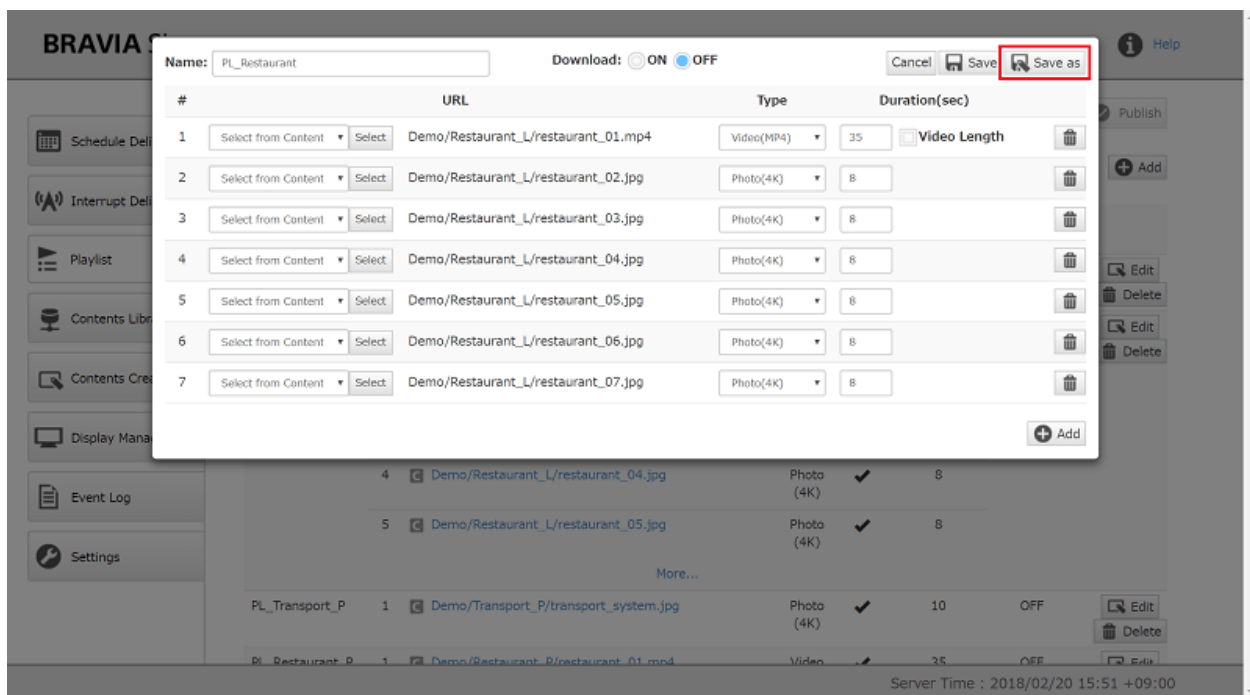
[1] Push the [Edit] button on the right of the target playlist information.

The screenshot shows the BRAVIA Signage web interface. On the left is a sidebar with navigation options: Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area displays a table of registered playlists. The first playlist, 'PL_Transport_L', is selected. Its details are shown in a table with columns: Name, #, URL, Type, Status, Duration (sec), Download, and actions (Edit and Delete). The 'Edit' button for this playlist is highlighted with a red box. Below the first playlist, there is a 'More...' link and a second playlist 'PL_Transport_P' is partially visible. The server time at the bottom right is 2018/02/20 15:50 +09:00.

Name	#	URL	Type	Status	Duration (sec)	Download	Actions
PL_Transport_L	1	Demo/Transport_L/transport_system.jpg	Photo (4K)	✓	10	OFF	[Edit] [Delete]
PL_Restaurant_L	1	Demo/Restaurant_L/restaurant_01.mp4	Video (MP4)	✓	35	OFF	[Edit] [Delete]
	2	Demo/Restaurant_L/restaurant_02.jpg	Photo (4K)	✓	8		
	3	Demo/Restaurant_L/restaurant_03.jpg	Photo (4K)	✓	8		
	4	Demo/Restaurant_L/restaurant_04.jpg	Photo (4K)	✓	8		
	5	Demo/Restaurant_L/restaurant_05.jpg	Photo (4K)	✓	8		
More...							
PL_Transport_P	1	Demo/Transport_P/transport_system.jpg	Photo (4K)	✓	10	OFF	[Edit] [Delete]
PL_Restaurant_P	1	Demo/Restaurant_P/restaurant_01.mp4	Video	✓	35	OFF	[Edit] [Delete]

[2] The dialog appears next, and you operate in accordance with step [2] of “**How to edit playlist**”.

[3] After changing the playlist name to a not previously registered name, the [Save as] button is enabled. When you push this button, the playlist is copied with the changed name.



How to delete playlist

[1] Push the [Delete] button on the right of the target playlist information.

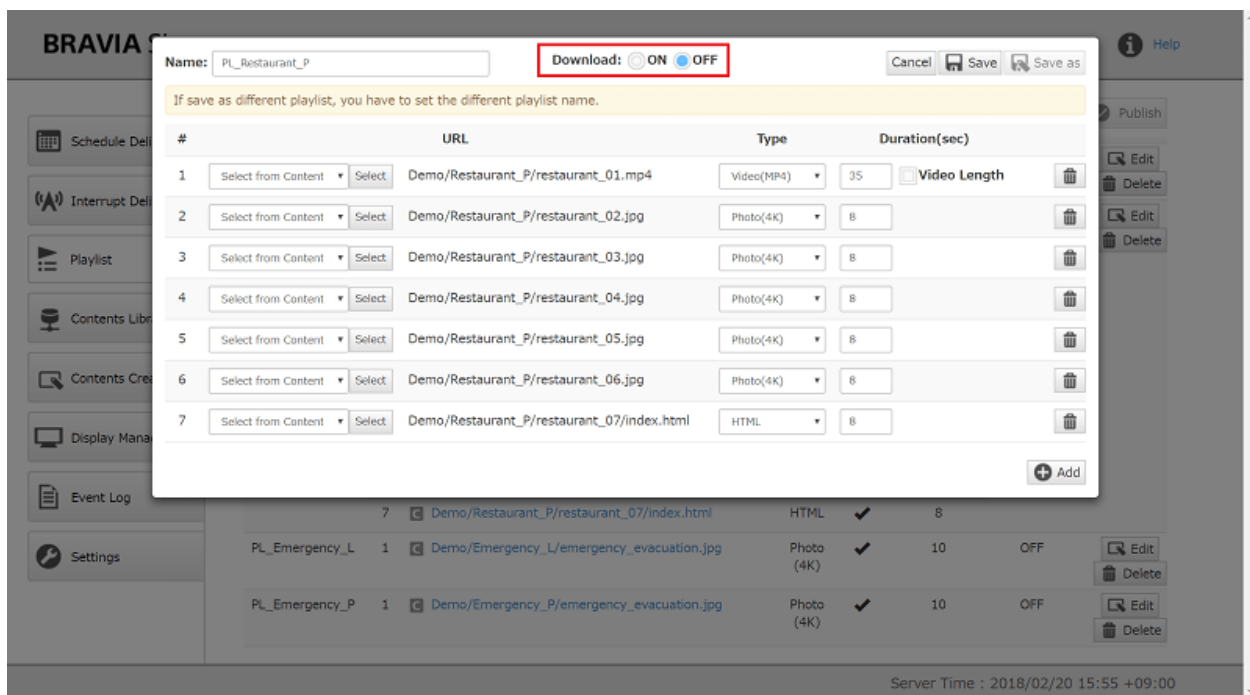
The screenshot shows the BRAVIA Signage management interface. On the left is a sidebar with navigation options: Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area displays a table of playlists. The 'Playlist' dropdown is set to 'All'. At the top right, there are 'Publish' and 'Add' buttons. The table has columns for Name, #, URL, Type, Status, Duration (sec), and Download. Three 'Delete' buttons are highlighted with red boxes: one for 'PL_Transport_L', one for 'PL_Restaurant_L' (item 2), and one for 'PL_Transport_P'. A 'More...' link is visible below the first playlist group. The server time at the bottom right is 2018/02/20 15:50 +09:00.

Name	#	URL	Type	Status	Duration (sec)	Download
PL_Transport_L	1	Demo/Transport_L/transport_system.jpg	Photo (4K)	✓	10	OFF
PL_Restaurant_L	1	Demo/Restaurant_L/restaurant_01.mp4	Video (MP4)	✓	35	OFF
	2	Demo/Restaurant_L/restaurant_02.jpg	Photo (4K)	✓	8	
	3	Demo/Restaurant_L/restaurant_03.jpg	Photo (4K)	✓	8	
	4	Demo/Restaurant_L/restaurant_04.jpg	Photo (4K)	✓	8	
	5	Demo/Restaurant_L/restaurant_05.jpg	Photo (4K)	✓	8	
PL_Transport_P	1	Demo/Transport_P/transport_system.jpg	Photo (4K)	✓	10	OFF
PL_Restaurant_P	1	Demo/Restaurant_P/restaurant_01.mp4	Video	✓	35	OFF

[2] When you select “OK(Delete)” on the next dialog that appears, the playlist information is deleted from this page.

Use playlist download

When you specify [Download] as “ON” when registering and editing a playlist, playlist and the playback contents can be downloaded to a USB flash memory connected via the display’s USB port and instead of network streaming these downloaded files can be played. Refer to [Playlist download](#) for details on download trigger and other notices.



Contents library

This page provides content management features such as managing contents with folders, changing content names, etc. The contents registered on this page can be referred to from the [Playlist] page. This section describes how to operate on this page.

Appearance of [Contents Library] page

- The folder path for contents management is displayed on the top of the screen.
- When you register contents, the icon indicating content type, the folder name or file name as content name, the last modified date, and the file size are displayed in the center of this page.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery
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Contents Library
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Contents Library > Demo > Restaurant_L

#	Name	Last Modified Date	File Size
1	restaurant_01.mp4	2017-10-13 23:00:00	44.11MB
2	restaurant_02.jpg	2017-10-13 23:00:00	1.35MB
3	restaurant_03.jpg	2017-10-13 23:00:00	1.89MB
4	restaurant_04.jpg	2017-10-13 23:00:00	2.93MB
5	restaurant_05.jpg	2017-10-13 23:00:00	1.44MB
6	restaurant_06.jpg	2017-10-13 23:00:00	1.66MB
7	restaurant_07.jpg	2017-10-13 23:00:00	1.31MB

Drop files or folders here

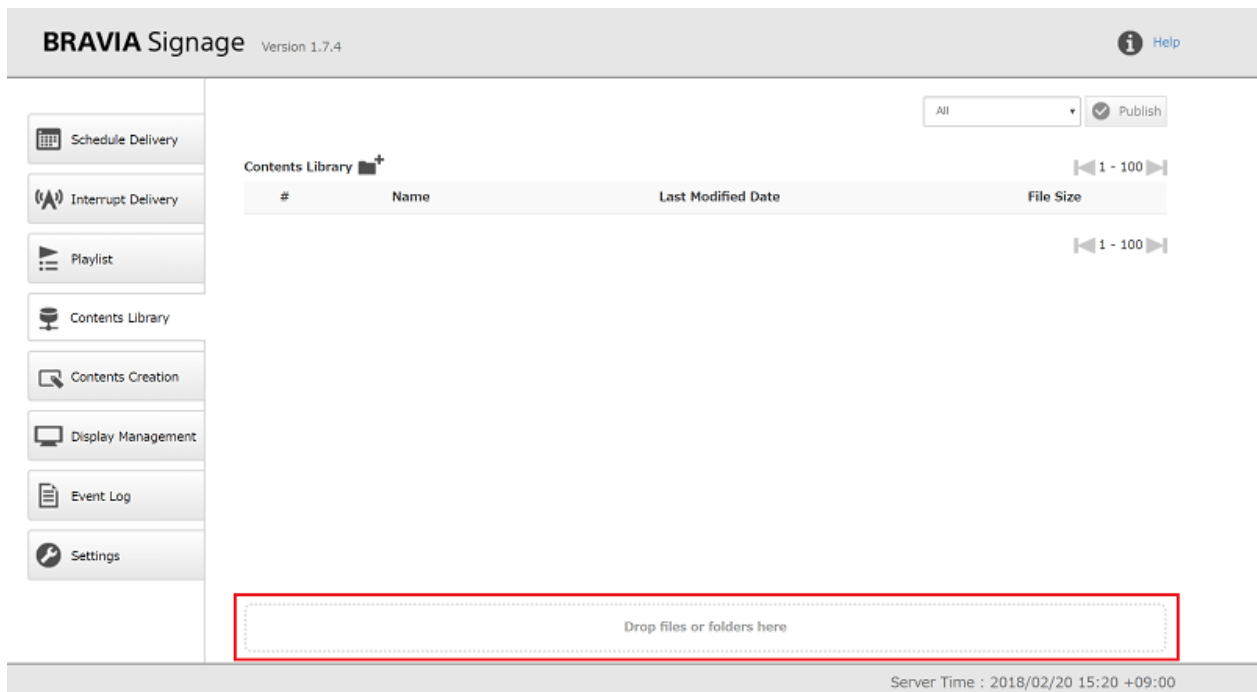
Server Time : 2018/02/20 15:19 +09:00

How to add new content

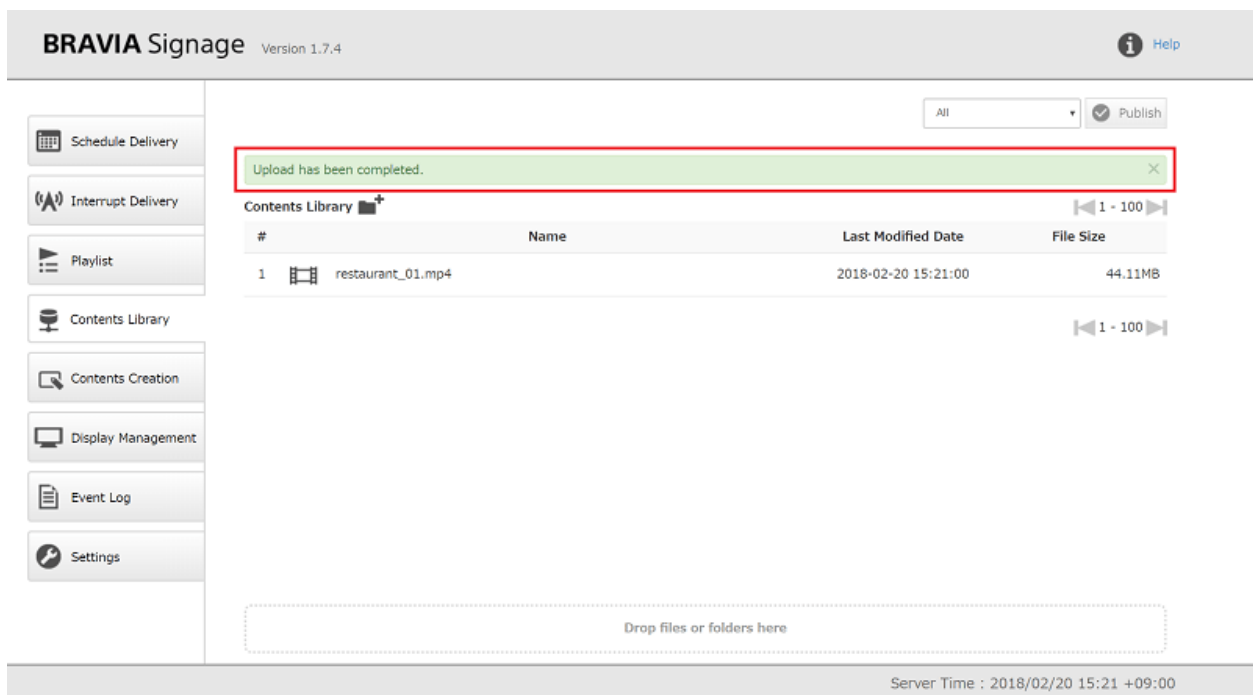
[1] Open the [Contents Library] page with the Chrome browser. There is no support for operation with IE.

[2] Drag and drop the files or folders to [Drop files or folders here] displayed on the bottom of the screen to add contents. It should be noted that the following contents are not supported:

- Files with a size of 4 GB and over.
- Files and folders with names that includes multi-byte characters.
- Files and folders with names that are 50 characters long or more, including extensions.



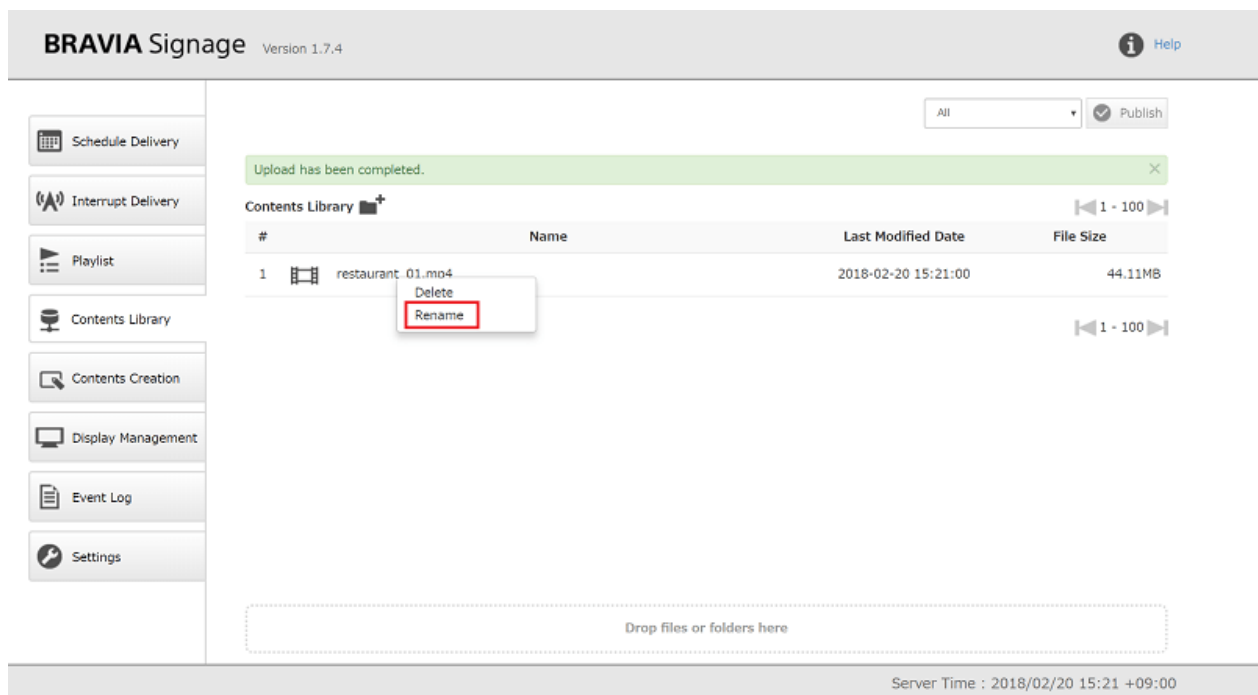
[3] Registering of contents starts and the status is displayed at the top of the screen. After registration is complete, the contents are displayed in the center of the screen. After registration is complete, the content can be previewed in another tab of the browser when you double-click the content.



If a preview of the content cannot be displayed, check whether the IP address included in the URL in the address bar of the browser is correct. For example, the IP address of the content library may not be properly configured as in the following situations. In that case, correctly configure the IP address of the content server in accordance with how to configure “CONTENTS_SERVER_URL” in 1.3. of “BRAVIA Signage Advanced User Guide” and restart BRAVIA Signage Server.

- There are multiple network interfaces with the same IP address.
- After setup of BRAVIA Signage Server and registering the contents with the content library feature with the network offline, the server PC was connected to the network and an IP address was assigned, etc.

[4] After being registered, you can change the content name by selecting the content, right-clicking, and selecting [Rename].



The screenshot shows the BRAVIA Signage web interface. The top header displays "BRAVIA Signage" and "Version 1.7.4". A left sidebar contains navigation buttons: "Schedule Delivery", "Interrupt Delivery", "Playlist", "Contents Library", "Contents Creation", "Display Management", "Event Log", and "Settings". The main area shows a "Contents Library" table with columns: "#", "Name", "Last Modified Date", and "File Size". A single entry is listed: "1 restaurant_01.mp4" with a last modified date of "2018-02-20 15:21:00" and a file size of "44.11MB". A context menu is open over this entry, showing "Delete" and "Rename" options, with "Rename" highlighted by a red box. Above the table, a green message bar states "Upload has been completed." and a "Publish" button is visible. Below the table is a dashed box labeled "Drop files or folders here". The footer shows "Server Time : 2018/02/20 15:21 +09:00".

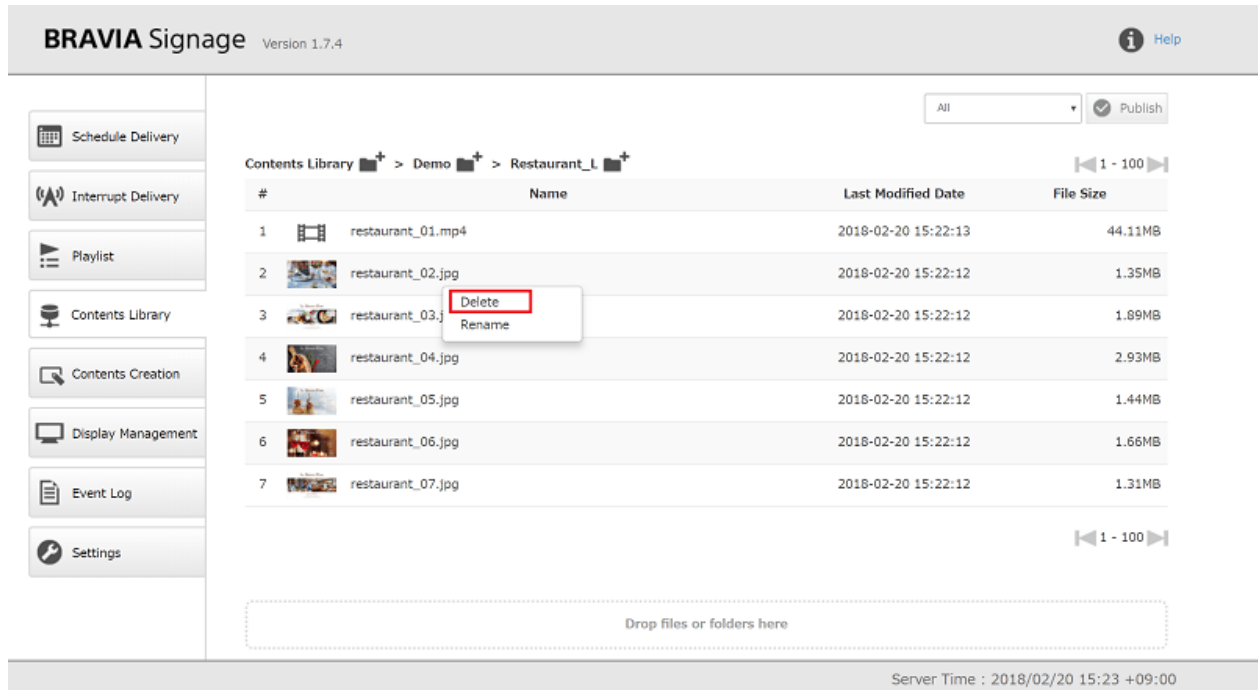
#	Name	Last Modified Date	File Size
1	restaurant_01.mp4	2018-02-20 15:21:00	44.11MB

How to update content

- To update registered content, delete content and register it again, or add content with the same name to overwrite the old content. If the updated contents are used in playlists, the contents are required to be downloaded again to display them. In that case, refer to [Playlist download](#) for operation details.

How to delete content

[1] Select the content, right-click, and select [Delete].



[2] When you select “OK(Delete)” on the next dialog displayed, the content is deleted from this page.

Content management with folder

- The folder can be created by clicking the folder icons displayed on the folder path at the top of this page. Click the icon and input the folder name.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library



Contents Creation

Display Management

Event Log

Settings

All ☒ Publish

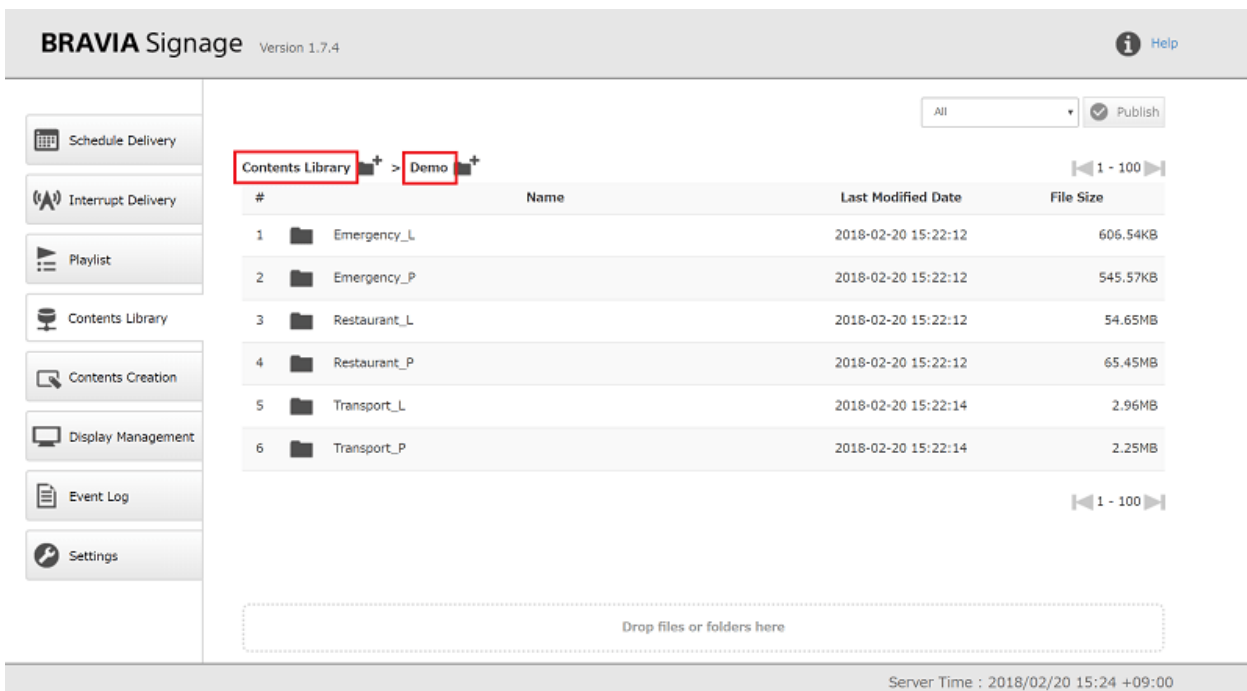
Contents Library  > Demo 

#	Name	Last Modified Date	File Size
1	Emergency_L	2018-02-20 15:22:12	606.54KB
2	Emergency_P	2018-02-20 15:22:12	545.57KB
3	Restaurant_L	2018-02-20 15:22:12	54.65MB
4	Restaurant_P	2018-02-20 15:22:12	65.45MB
5	Transport_L	2018-02-20 15:22:14	2.96MB
6	Transport_P	2018-02-20 15:22:14	2.25MB

Drop files or folders here

Server Time : 2018/02/20 15:24 +09:00

- The current folder can be changed by clicking the folder name on the folder path at the top of this page.



The screenshot shows the BRAVIA Signage web interface. On the left is a sidebar with navigation icons for Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area displays the 'Contents Library' with a breadcrumb path 'Contents Library > Demo'. Below the path is a table of content items. The table has columns for '#', 'Name', 'Last Modified Date', and 'File Size'. It lists six items, all created on 2018-02-20. At the bottom of the main area is a dashed box labeled 'Drop files or folders here'. The footer shows 'Server Time : 2018/02/20 15:24 +09:00'.

#	Name	Last Modified Date	File Size
1	Emergency_L	2018-02-20 15:22:12	606.54KB
2	Emergency_P	2018-02-20 15:22:12	545.57KB
3	Restaurant_L	2018-02-20 15:22:12	54.65MB
4	Restaurant_P	2018-02-20 15:22:12	65.45MB
5	Transport_L	2018-02-20 15:22:14	2.96MB
6	Transport_P	2018-02-20 15:22:14	2.25MB

- Note that files are overwritten when you add content with the same name as content in the same folder.

Use other HTTP server

- When BRAVIA Signage Server is installed, Apache HTTP Server is also installed and initial settings for the content library feature are configured to use Apache. If you have already used another contents management server or want to use one, that server can be used and configured to work with the content library feature. Refer to [Advanced contents library setting](#) for how to configure.

Contents creation

On this page, content can be created in accordance with the selected layout and material on this page. The created content can be registered to the [Content Library] page, specified to the playlist, and published to the displays. This section describes how to create content and notices. To use this feature, [Menu Tab] of [Contents Creation] on the [Settings] page must be set to “Show”.

How to create content

[1] Select a content layout from [1. Layout] at the top of the screen.

BRAVIA Signage Version 1.7.4 Help

All Publish

Please fill out all required form.

1. Layout

2. Materials

#	Recommended Resolution	Name	Type
---	------------------------	------	------

Server Time : 2018/02/20 15:13 +09:00

[2] When you select the layout, the materials can be specified on [2. Materials]. Specify the materials in accordance with the number displayed on the layout icon selected in step [1] and the following:

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

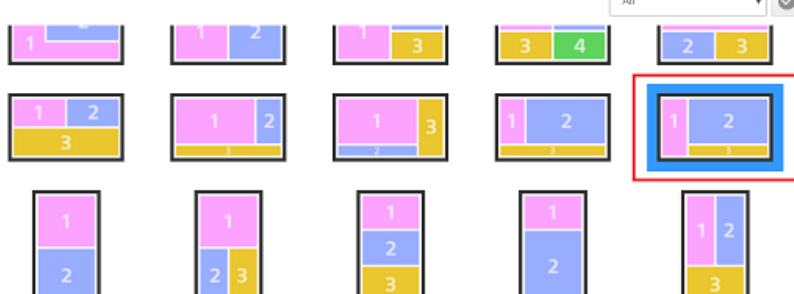
Contents Creation

Display Management

Event Log

Settings

All ✓ Publish



2. Materials

#	Recommended Resolution	Name	Type
1	384 x 1080 Select		Select
2	1536 x 864 Select		Select
3	1536 x 216 Select		Select

Server Time : 2018/02/20 15:13 +09:00

- There are three approaches for specifying materials: selecting files saved to the PC, inputting a URL, and selecting to use the external input of the display. Select “Select File”, “Input URL” or “External Input” for each.
 - If you select “Select File”, the [Select] button appears. Push this button and select a file from the files saved to the PC. It should be noted that there is no support for files with names containing multi-byte characters and files with a size of 4 GB and over.
 - If you select “Input URL”, the input field appears. Input the URL string. It should be noted that there is no support for the website response X-Frame-Option header.
 - If you select “External Input” and publish to displays, video from the display external input can be displayed. The displayed video input is the input enabled in [Input] of display settings. It should be noted that the portrait layout is not supported for selecting external input.
- Refer to the value displayed in [Recommended Resolution] for the resolution of materials specified to each area of the layout.
 - If the aspect ratio of the specified material is different from the value of [Recommended Resolution], the content is downscaled with a maintained aspect ratio and displayed on the published displays. In that case, the displayed position is center.
 - In addition, if the specified material is at a lower resolution than [Recommended Resolution], the content is displayed without scaling at the center of the published displays.
- Multiple videos can be specified as materials. If you specify the multiple video, any of one of the specified videos is displayed on the published displays, though all specified videos are displayed in the preview of step [5].
- In addition, there is no support for content creation with both video (MP4, MPEG2TS, 4K) and external input.

[3] Input [Type] after specifying the materials. Refer to the following for [Type].

- Refer to [Playlist](#) for [Type] if selecting “Select File” in step [2].
- Specify “HTML” as [Type] if selecting “Input URL” in step [2].

[4] If needed, specify BGM in accordance with the following. If specifying BGM, BGM can be played with contents without audio, such as images.

- There is no support for BGM if specifying video (MP4, MPEG2TS, 4K) as material in step [2].
- The following are the supported audio formats to be specified as BGM.

Protocol	Container	Codec	MIME type	Others
HTTP(S)	MP4	AAC-LC	audio/aac	32kHz, 44.1kHz, 48kHz / 384kbps(max) / 5.1ch
		HE-AAC	audio/aac	32kHz, 44.1kHz, 48kHz, 2ch
HTTP(S)	MP3	MP3	audio/mp3	32kHz, 44.1kHz, 48kHz, 2ch

[5] After you input the required items, the [Preview] button on the bottom of screen is enabled. If needed, push this button. When you push this button, another tab is opened on the browser and the content can be previewed.

- If you select “External Input” as material, it cannot be displayed in preview.
- The specified video may not be previewed depending on the settings of your PC.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery
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2. Materials

#	Recommended Resolution	Name	Type
1	384 x 1080	sample_01.jpg	Photo
2	1536 x 864	External Input	
3	1536 x 216	sample_02.jpg	Photo

3. BGM
No BGM

Preview Create

Server Time : 2018/02/20 15:16 +09:00

[6] After you input the required items, the [Create] button on the bottom of screen is enabled. Push this button.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery
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2. Materials

#	Recommended Resolution	Name	Type
1	384 x 1080	sample_01.jpg	Photo
2	1536 x 864	External Input	
3	1536 x 216	sample_02.jpg	Photo

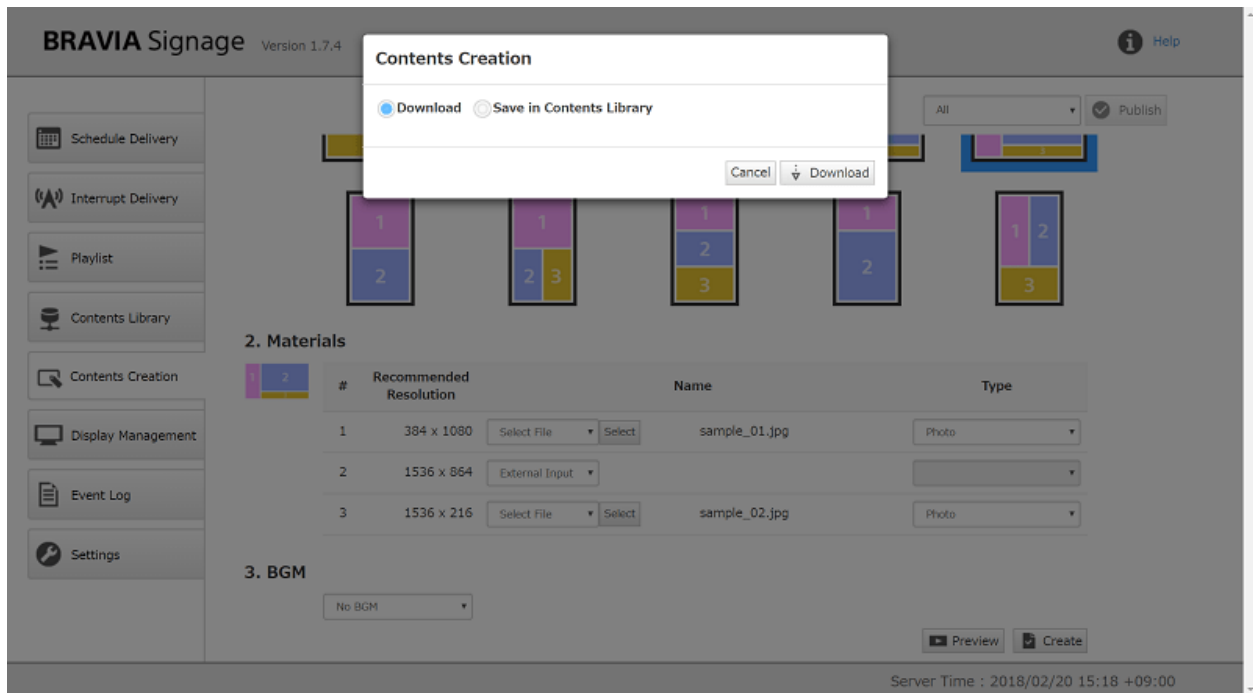
3. BGM
No BGM

Preview Create

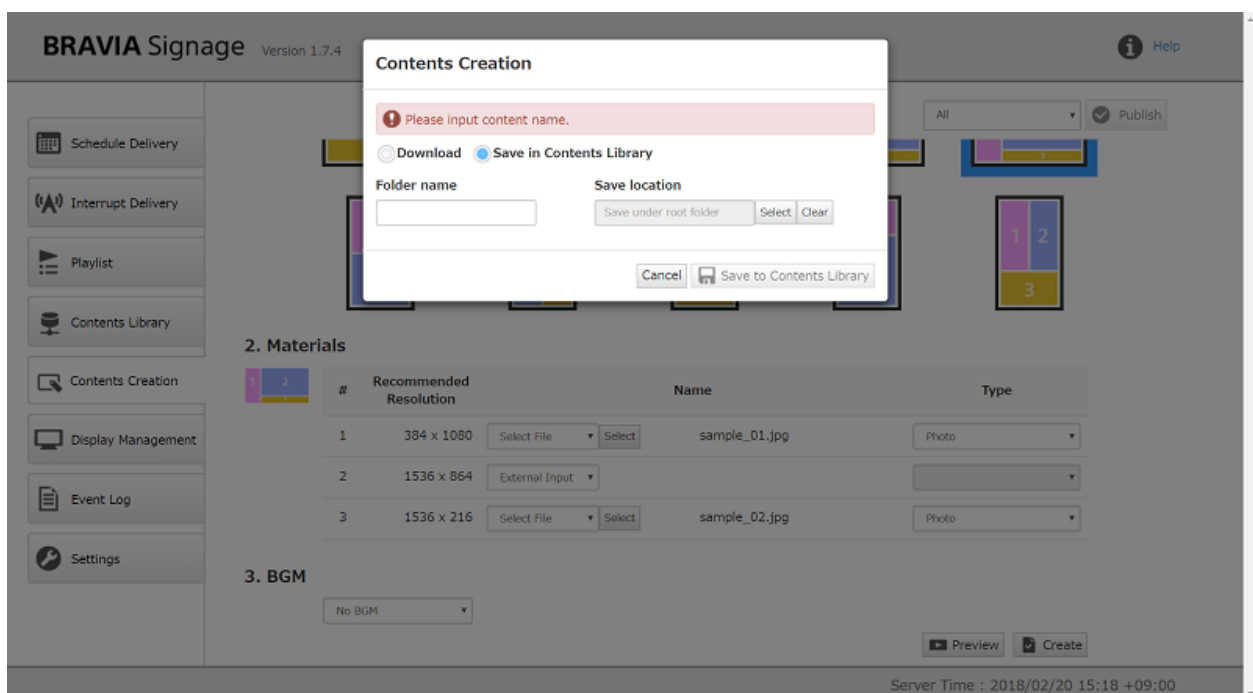
Server Time : 2018/02/20 15:16 +09:00

[7] A dialog is displayed next. Select either [Download] or [Save in Contents Library], and create the content.

- If you select [Download], the created content is downloaded in zip format after you push the [Download] button. When you extract the downloaded zip file and open index.html with a browser content the same as that previewed in step [5] is displayed.



- If you select [Save in Contents Library], the created content can be directly saved to the [Contents Library] page. When you push the [Save to Contents Library] button, the content whose name is a string input in [Folder name] is created and uploaded to the folder specified in [Save location]



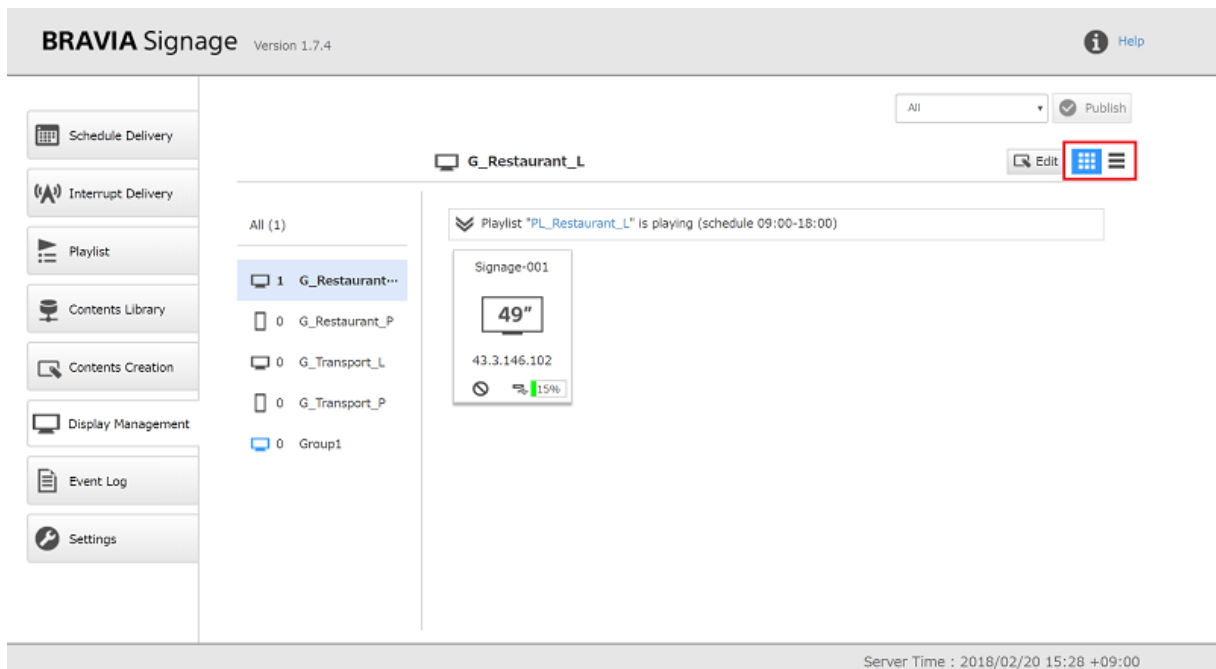
Display management

On the [Display Management] page, groups and displays can be managed. A group is used to manage multiple displays, and the delivery information registered to the [Schedule Delivery] page and [Interrupt Delivery] page is specified in each group. This section describes how to operate on this page.

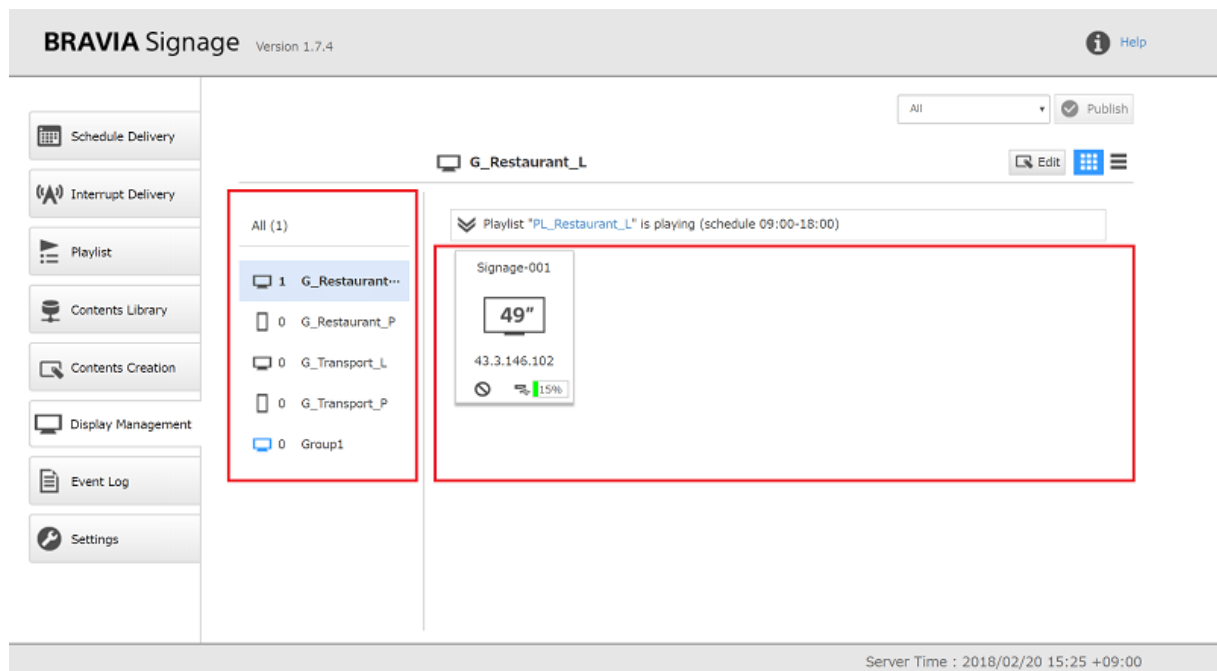
In addition, timezone setting can be configured for every group, and there is a feature to operate in areas and countries with multiple timezones. Refer to [Configuration across multiple timezones](#) for details.

Appearance of [Display Management] page

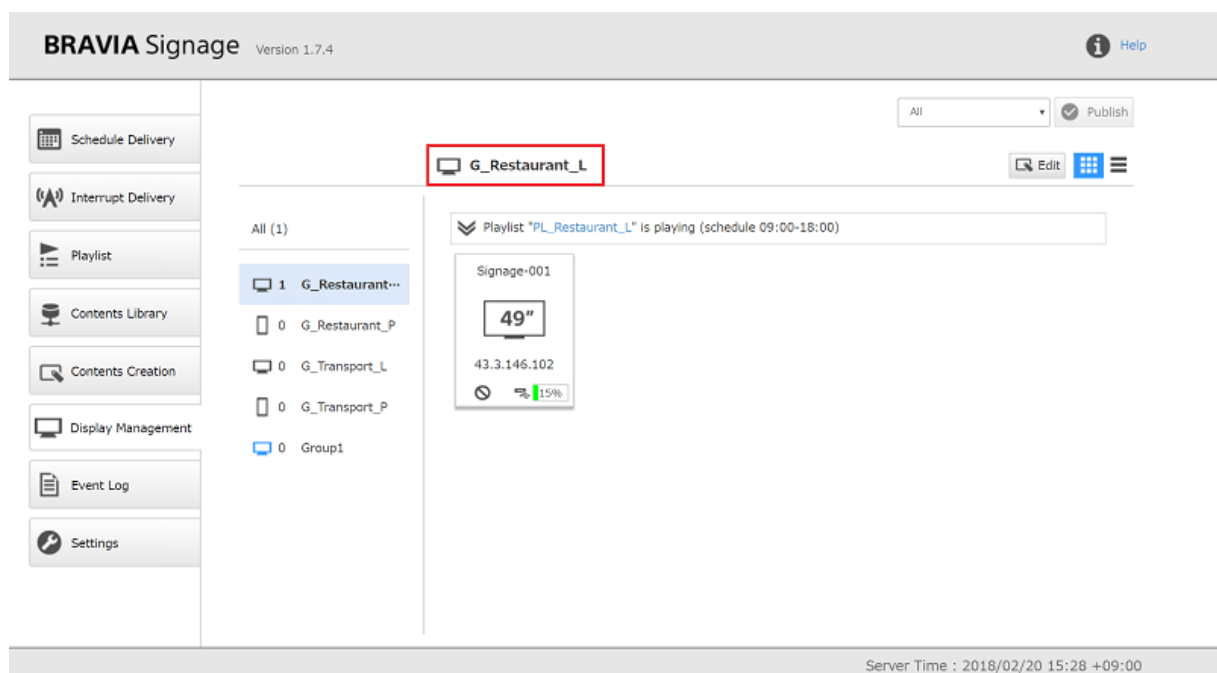
- “Tile view” or “List view” can be selected from the upper right of the screen.



- The group list is displayed on the left of the screen, and displays are shown at right of the screen in accordance with the selected group in the group list. The blue icon in the group list indicates the initial group that is registered when the displays are newly added.

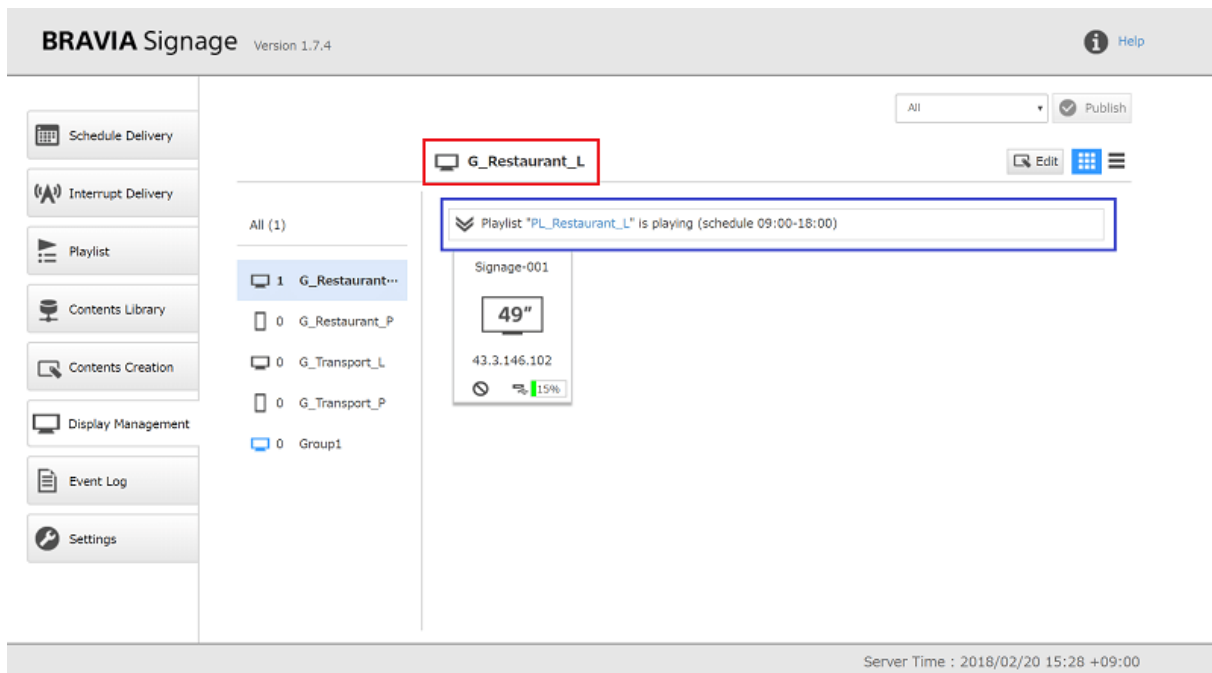


- The group name and the information to identify the display orientation as landscape or portrait are displayed at the top of the screen in accordance with the selected group.



Group information

- The group name, display orientation, and group status are displayed as group information.
- The group name is displayed at the top of the screen, and landscape or portrait is displayed on the left. Group status is displayed at the top of the display list.



Group Status

Status	Descriptions
Playlist {playlist name} is playing (schedule {begin time}-{end time})	Indicates the status the schedule delivery is running.
Playlist {playlist name} is playing (interrupt {interrupt delivery name})	Indicates the status the interrupt delivery is running.
There is no content to play	Indicates the status power schedule is in the ON period, but no playlist is delivered.
Scheduled to power off	Indicates the status power schedule is in the OFF period.

- If at least one display is in a group and while delivering a playlist, the detailed delivery status of the display can be checked. When you open the group status and select a display, the details are displayed as follows.

The screenshot displays the BRAVIA Signage management interface. On the left is a sidebar with navigation options: Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area is titled 'G_Restaurant_L' and shows a list of displays under 'All (1)'. The first display, 'G_Restaurant_P', is selected. A red box highlights the detailed status for 'Signage-001', which is currently playing the playlist 'PL_Restaurant_L' (scheduled 09:00-18:00). The details include: Display name: Signage-001, Display status: Playing, URL: http://43.3.151.179/Demo/Restaurant_L/restaurant_02.jpg, and Playing status: 00:00:01/00:00:08. Below the details, a small thumbnail shows the display's physical characteristics: 49" size, IP address 43.3.146.102, and a 15% battery level indicator. The top right of the interface shows a 'Publish' button and a help icon. The bottom right corner indicates the server time as 2018/02/20 15:26 +09:00.

BRAVIA Signage Version 1.7.4 Help

All Publish

G_Restaurant_L Edit Menu

All (1)

- 1 G_Restaurant...**
- 0 G_Restaurant_P
- 0 G_Transport_L
- 0 G_Transport_P
- 0 Group1

Playlist "PL_Restaurant_L" is playing (schedule 09:00-18:00)

Details

- Display name: Signage-001
- Display status: Playing
- URL: http://43.3.151.179/Demo/Restaurant_L/restaurant_02.jpg
- Playing status: 00:00:01/00:00:08

Signage-001

49"

43.3.146.102

15%

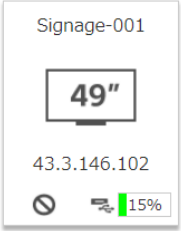
Server Time : 2018/02/20 15:26 +09:00

Display information

- The following information is displayed as display information.

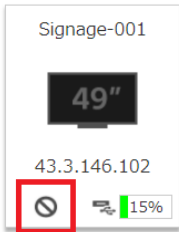
Item	Descriptions
Name	This is the specified name to identify each display. If you select tile view, this is displayed at the top of each display's information.
IP address	If you select tile view, this is displayed in the center of each display's information.
MAC address	If you select tile view, this is shown only when the detailed information is displayed. If you select list view, this is shown by mouseover on the IP address information.
Model name and inch	This is displayed only in tile view. The model name can be shown only in the detailed information, and inch is the number shown on the display icon.
Firmware	The firmware version of the display is displayed. This can be displayed in only the detailed tile view.
Software	The player version installed on the display is displayed.
Storage	The usage of a USB flash memory connected via the display's USB port is displayed. If you select tile view, it is displayed on the lower right of the display icon.
Condition	Refer to the following.
Download Status	Refer to the following.

- Display running condition can be checked from this page. The condition is shown with the icon color as follows. In addition, additional text information is also displayed in list view.

Status	Icon color	Descriptions
Power ON	<div>Signage-001  43.3.146.102   15%</div>	Indicates the display power status is ON.
Power OFF	<div>Signage-001  43.3.146.102   15%</div>	Indicates the display power status is OFF.
Offline	<div>Signage-001  43.3.146.102</div>	Indicates the display is not connected with the network, such as during rebooting.
Disable	<div>Signage-001  43.3.146.102</div>	Indicates the display is disabled.

- Playlist download status can be checked from this page. In tile view, this is displayed as the status icon on the lower left of the display icon. In list view, this is displayed in [Download].

Tile view



List view

Name	IP address	Storage	Status	Control	Download
Signage-001	43.3.146.102	<div><div></div>15%</div>	Power ON	<div>OFF</div> <div>Reboot</div>	<div><div></div></div> <div>Disable</div>

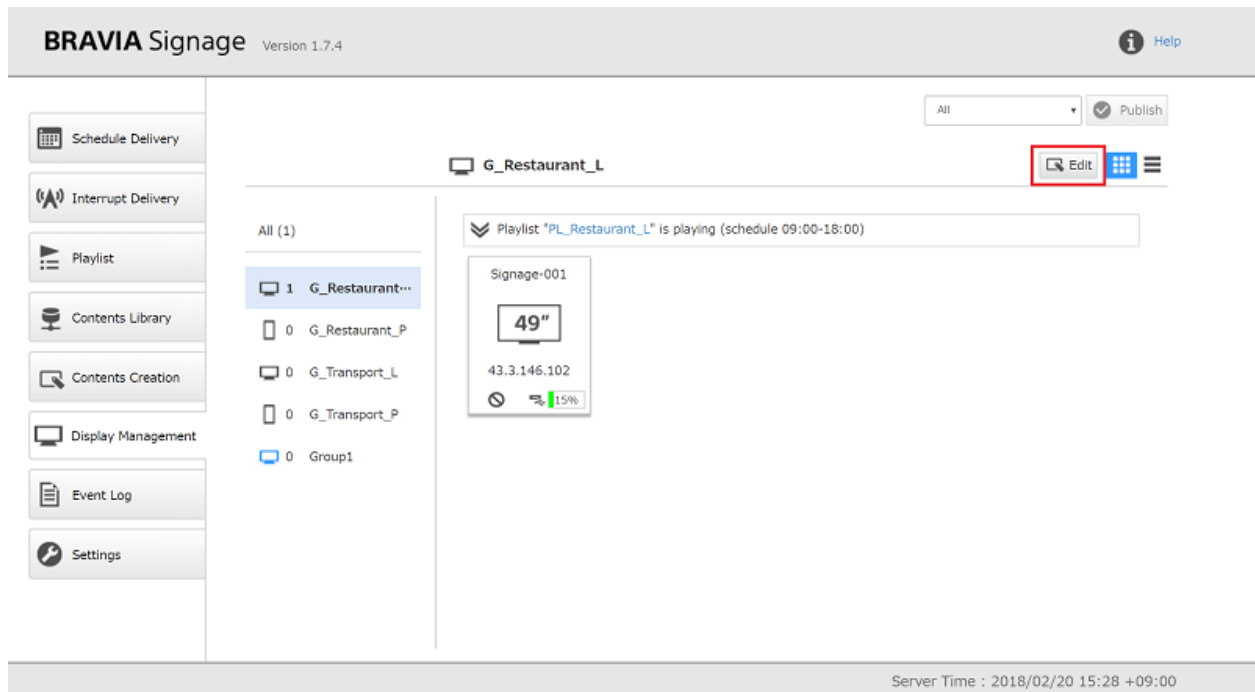
The descriptions of playlist download statuses are as follows:

Status	Icon	Description
No Status		Indicates no playlist whose download settings are enabled.
Waiting		This is shown if there are some playlists whose download settings are enabled and there are no playlists that failed downloading.
Downloading		This is shown if there are some playlists whose download settings are enabled and the download status is not "Downloaded", "Failed", or "Waiting".
Downloaded		This is shown if there are some playlists whose download settings are enabled and all playlists have completed downloading.
Failed		This is shown if there are some playlists whose download settings are enabled and there are playlists that failed downloading.

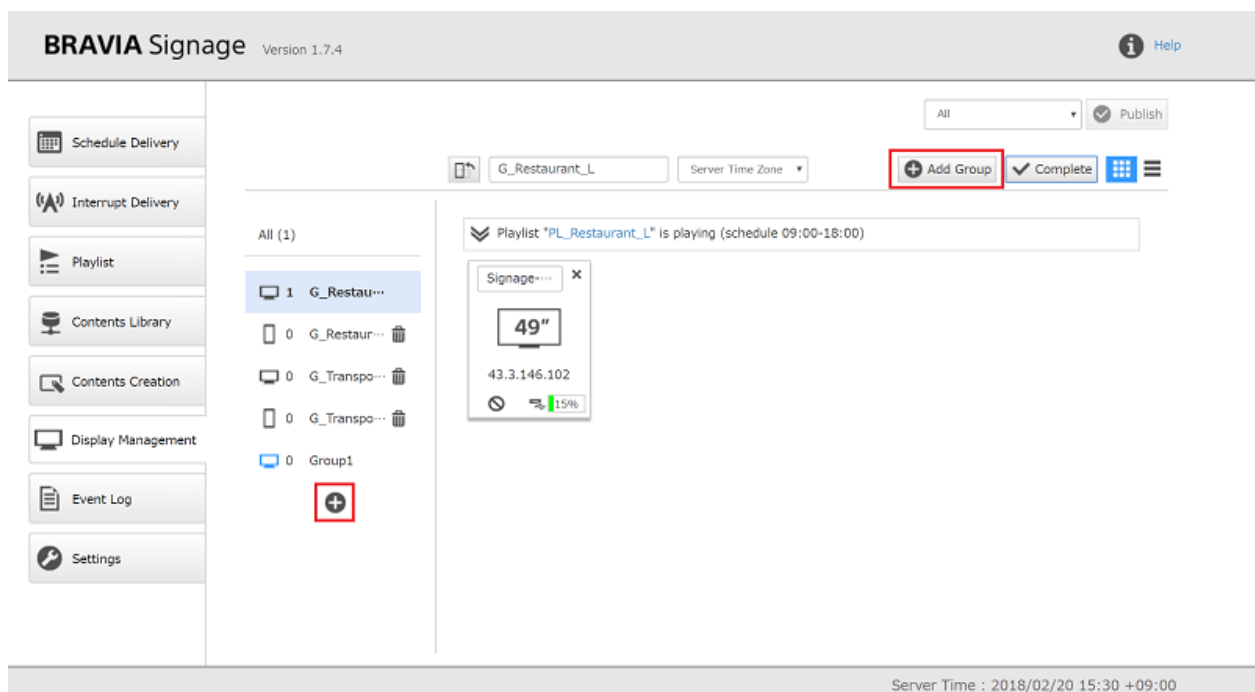
</div>

How to register new group

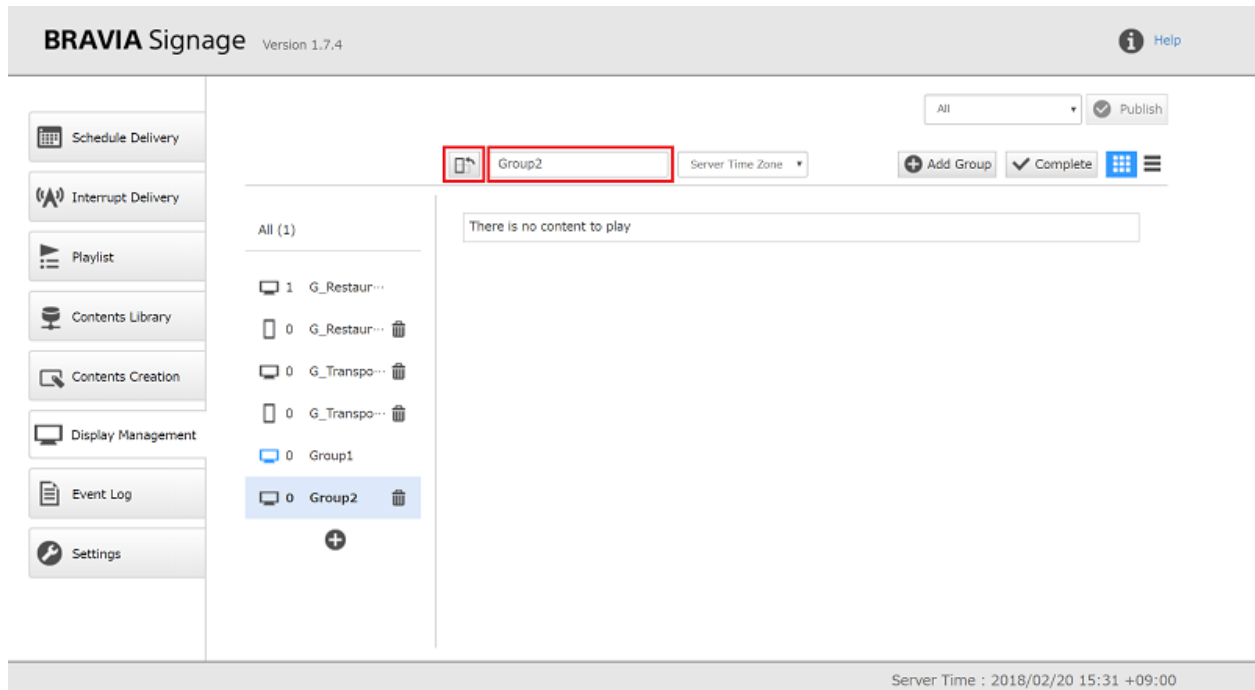
[1] Push the [Edit] button on the upper right of the screen.



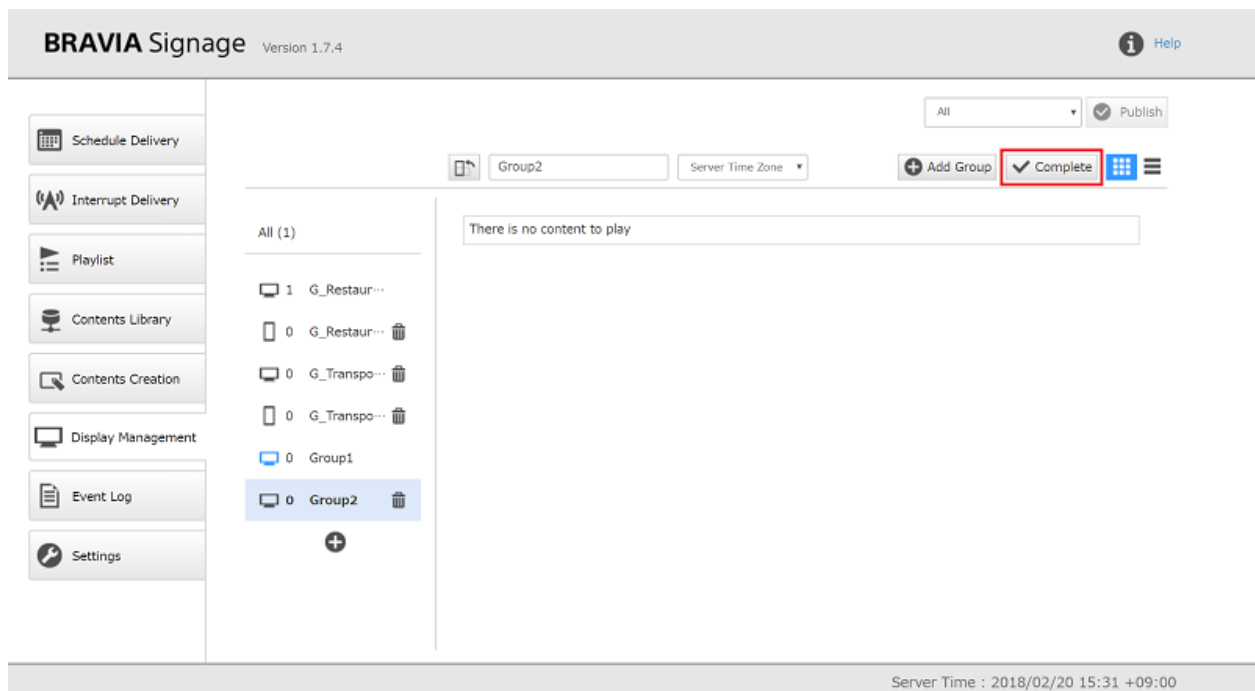
[2] After you push this button, the [Add Group] button and [+] button under the group list are displayed. When you push either button, a new group is added.



[3] If needed, the group name can be changed by editing the group name displayed on the upper left of the screen. In addition, when you click the icon on left of the group name, the information to identify display orientation as landscape or portrait can be configured.



[4] Lastly, push the [Complete] button on the upper right of the screen.



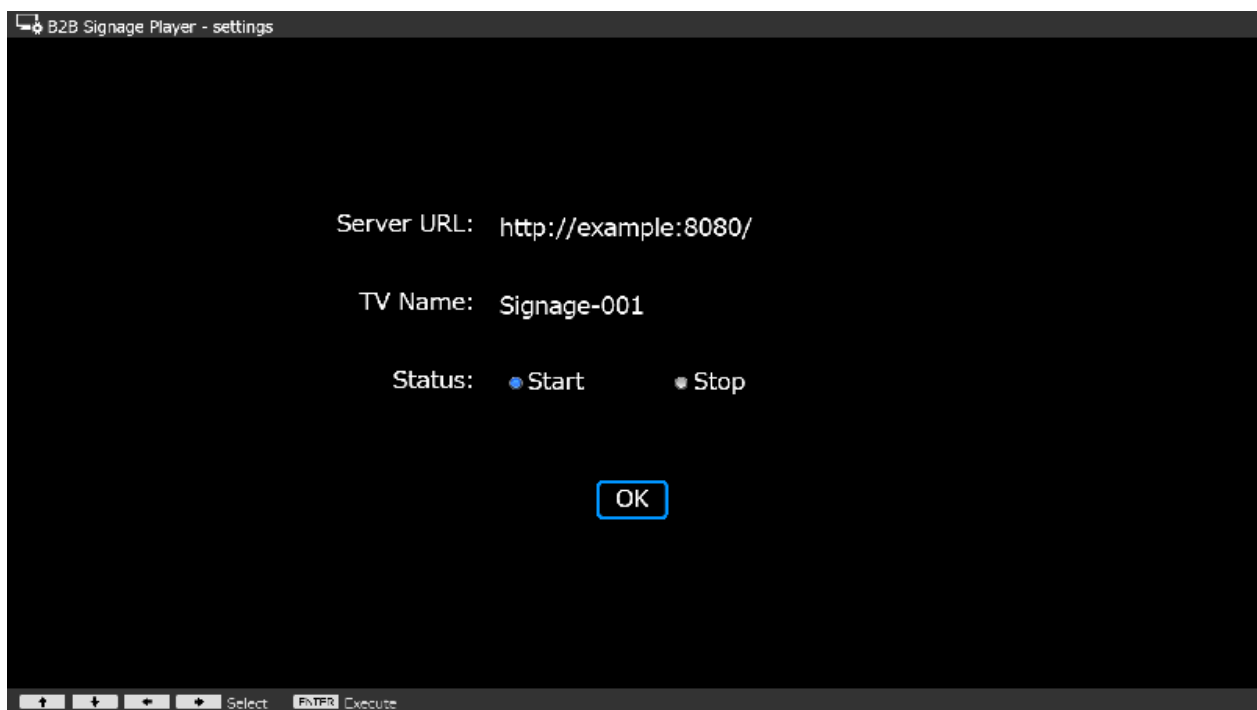
How to edit group information

- Refer to the steps [1], [3], and [4] in “**How to register new group**”.

How to register new display

To register a new display to the [Display Management] page, BRAVIA Signage Player installed to the display must be configured.

[1] Make the file “config.txt” as follows and save it in the root folder of the USB flash memory. When you insert it to the display’s USB port, the following screen appears on the display. When you select [Start] and push the [OK] button on this screen, BRAVIA Signage Player can be configured in accordance with the settings described in config.txt.

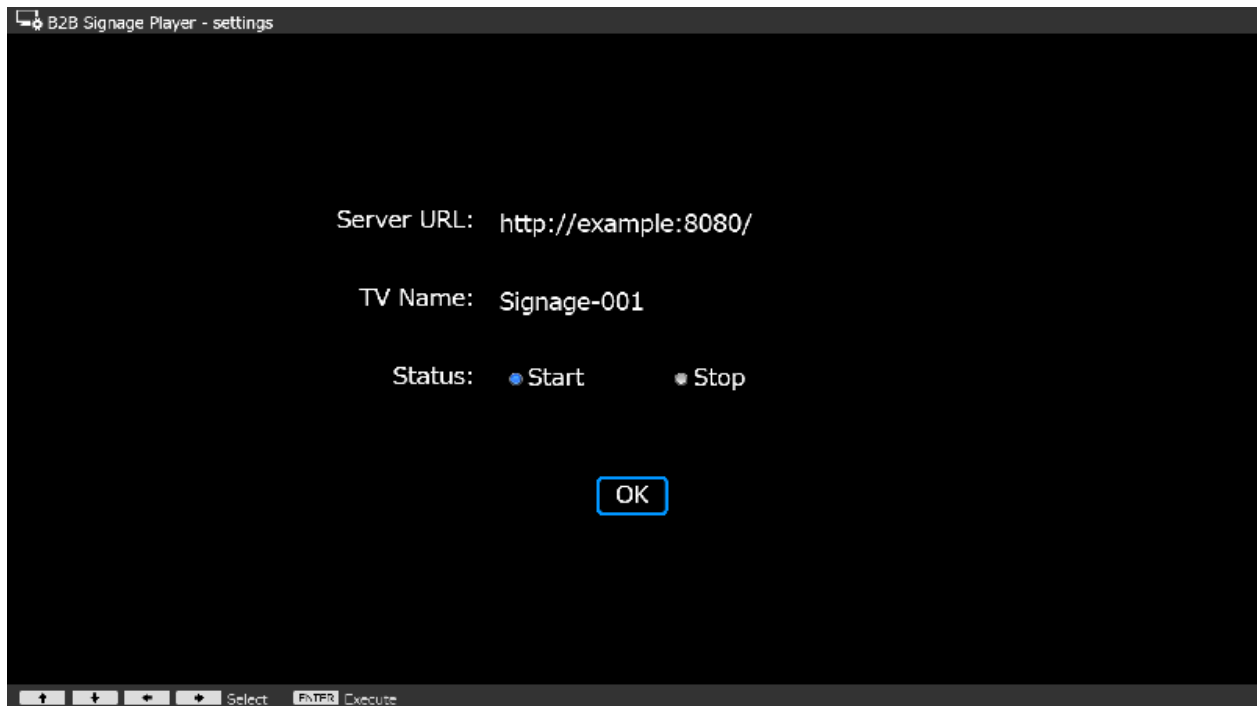


“config.txt” is a configuration file for BRAVIA Signage Player. This must be a JSON formatted description, and settings such as the display name and URL of BRAVIA Signage Server are described. This section describes only the minimum required settings. Refer to [Appendix IV. config.txt specification](#) for more details.

The following is one example. Configure BRAVIA Signage Server URL as a “server” key and identify the display name as “tv-name”. Configure as in the following example for other settings as well.

```
"settings" : {  
  "server" : "http://example:8080/",  
  "tv-name" : "Signage-001",  
  "override" : true  
},  
"version" : "1"
```

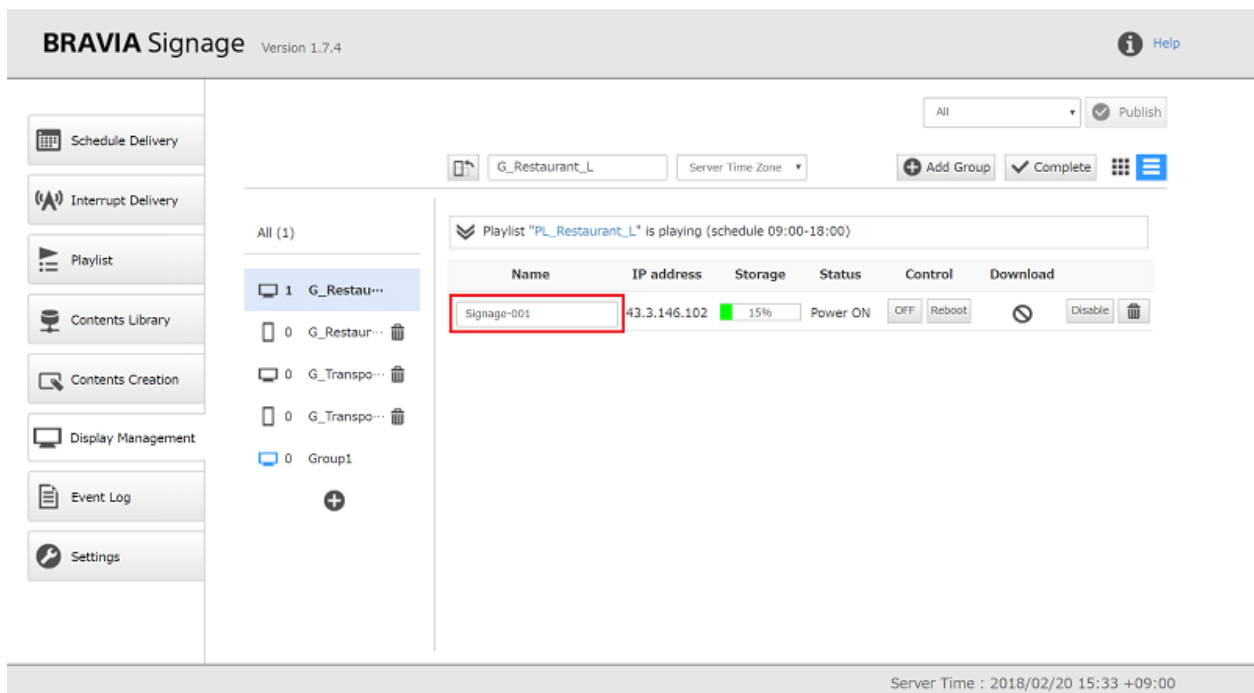
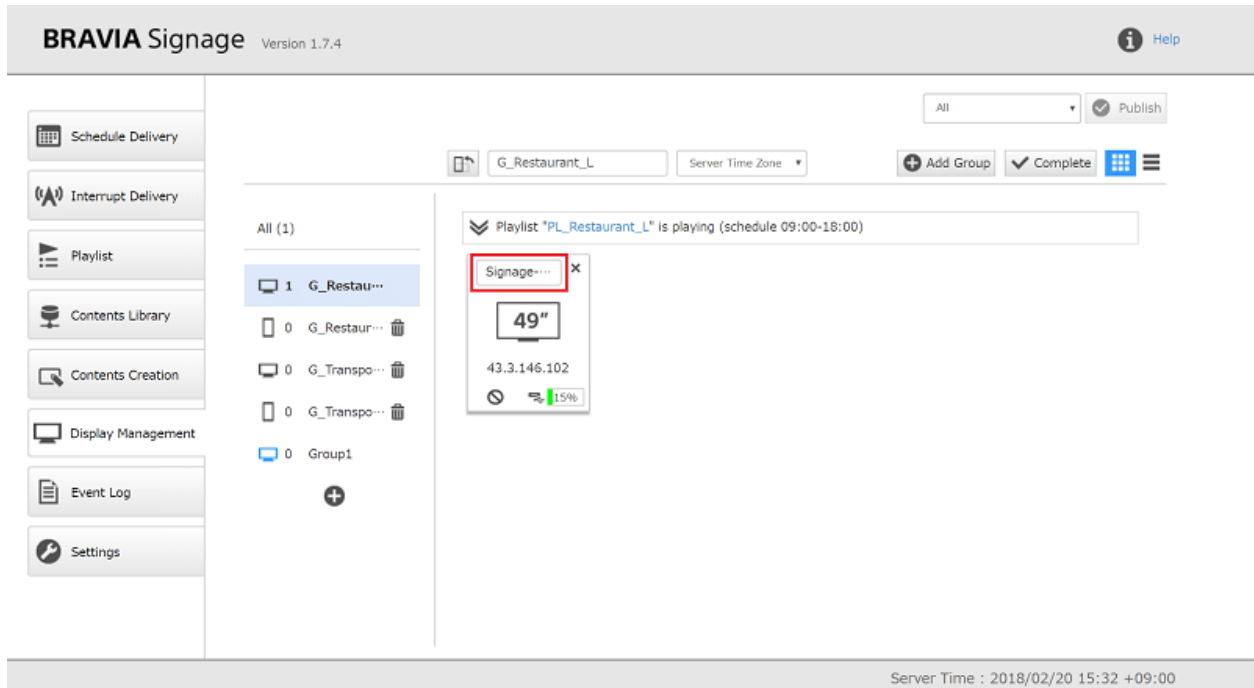
[2] Display information is registered and displayed on the [Display Management] page after configuration, and the display is registered to the initial group, whose icon is blue.



How to move display to other group

[1] Push the [Edit] button on the upper right of the screen.

[2] After pushing this button, the group the display belongs to can be changed when you drag the display information from the display list and drop it in to the group in the group list.



[3] Lastly, push the [Complete] button on the upper right of the screen.

How to change display name

- [1] Push the [Edit] button on the upper right of the screen.
- [2] After pushing this button, edit the field of the display name.
- [3] Lastly, push the [Complete] button on the the upper right of the screen.

How to change initial group

- Open the [Settings] page and change this from [Initial Group] of [Display]. Check that the display icon is blue in the group list of the [Display Management] page after changing.

BRAVIA Signage Version 1.7.4 Help

All Publish

Display Edit

Power Management ☐ Auto power off except during schedule delivery ☒ Specified power schedule

Daily Reboot ☒ Enabled ☐ Disabled(Reboot Time: 4:00)

Initial Group Group1

Enable or Disable when display is added ☒ Enable ☐ Disable

Download Edit

Download Trigger ☒ Download at the fixed time ☐ Download immediately when particular event causes as settings change

Download Time 3:00

Report Edit

Mail Report ☒ Enabled ☐ Disabled Send Test Mail

Language ☒ English ☐ Japanese ☐ Chinese

Report Items ☒ Daily Play Report ☒ Download Report ☒ Error Report

Mail To example@example.com

Server Time : 2018/02/20 15:33 +09:00

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Contents Creation

Display Management

Event Log

Settings

All (1)

1 G_Restaurant...

0 G_Restaurant_P

0 G_Transport_L

0 G_Transport_P

0 Group1

All

Publish

Edit

G_Restaurant_L

Playlist "PL_Restaurant_L" is playing (schedule 09:00-18:00)

Signage-001

49"

43.3.146.102

15%

Server Time : 2018/02/20 15:28 +09:00



How to delete group and display information



- After you push the [Edit] button on the upper right of the screen, these can be deleted by pushing the trash icon and the “x” mark. After deleting the information, push the [Complete] button on the upper right of the screen.



BRAVIA Signage Version 1.7.4 Help



Schedule Delivery | Interrupt Delivery | Playlist | Contents Library | Contents Creation | Display Management | Event Log | Settings

All (1)

1 G_Restau...  

0 G_Restau...  

0 G_Transpo...  



0 G_Transpo...  

0 Group1

Server Time Zone

Add Group Complete

Playlist "PL_Restaurant_L" is playing (schedule 09:00-18:00)

Signage-001  

49"

43.3.146.102



15%



Server Time : 2018/02/20 15:30 +09:00



BRAVIA Signage Version 1.7.4 Help



Schedule Delivery | Interrupt Delivery | Playlist | Contents Library | Contents Creation | Display Management | Event Log | Settings

All (1)

1 G_Restau...  

0 G_Restau...  

0 G_Transpo...  



0 G_Transpo...  

0 Group1

Server Time Zone

Add Group Complete

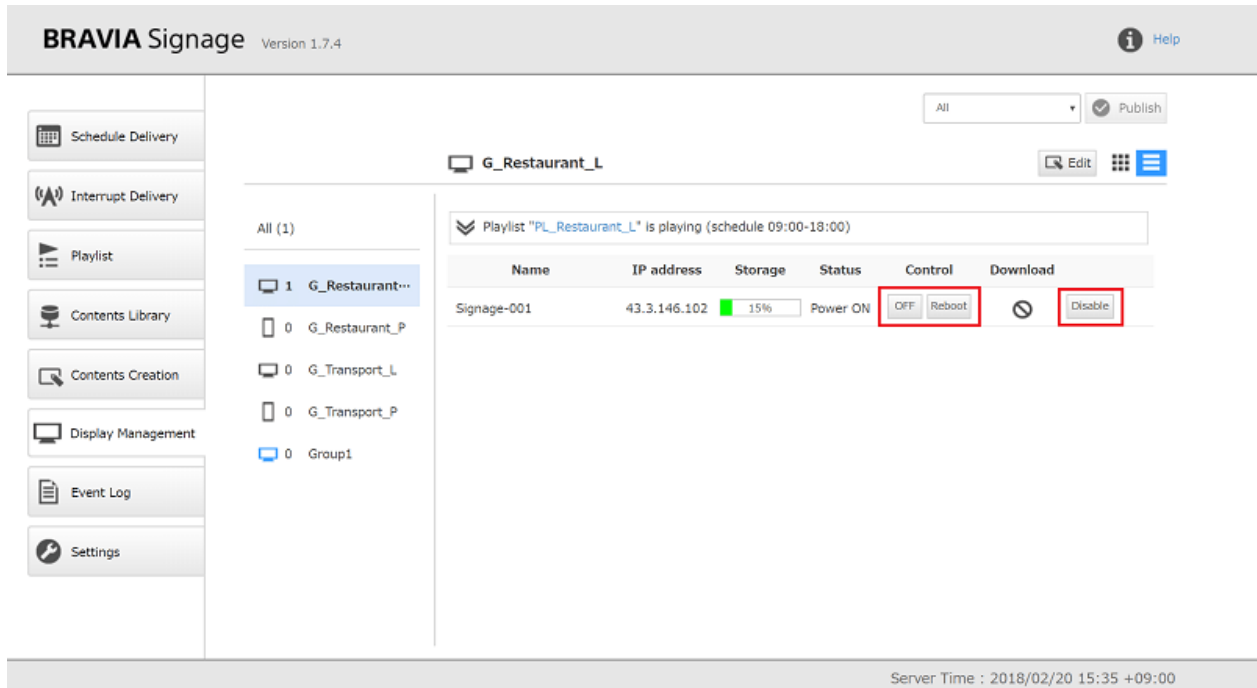
Playlist "PL_Restaurant_L" is playing (schedule 09:00-18:00)

Name	IP address	Storage	Status	Control	Download
Signage-001	43.3.146.102	15%	Power ON	OFF Reboot	Disable  

Server Time : 2018/02/20 15:33 +09:00

How to control display from remote place

- The power ON/OFF, rebooting, and enabling/disabling of the display can be controlled from a remote place. When you select list view, each operation button is displayed. Push those buttons.



- To enable and disable are the operations to enable or disable connection of BRAVIA Signage Player with BRAVIA Signage Server. When operating to change from enabled to disabled, target displays start to reboot, and BRAVIA Signage Player cannot connect to BRAVIA Signage Server after booting.

Others

- When you select tile view, the detailed information is displayed by mouseover operation on the display icon. In addition, when you right-click while the detailed information is displayed, [Copy details to clip board] appears. If you select this, the display information can be copied and pasted to a text editor, etc.
- Similarly, when you select [Download event log], the event log can be downloaded. The event logs received from BRAVIA Signage Player are saved and shown, and downloaded as files in another [Eventlog] screen. Event logs saved in the display can be directly obtained and downloaded as files when [Download event log] is selected. BRAVIA Signage Player retries to send event logs to BRAVIA Signage Server for a maximum of 10 minutes after an event occurs, considering an operation environment where the network quality is low. On the other hand, if the network continues to be offline for 10 minutes or more, such as through infrastructure and network failure etc., this retry is useless. In that case, to obtain event logs for troubleshooting, etc., use this feature.

Event log

On this page, log messages of daily signage operations are displayed, such as the displays' running conditions, playlist playback results, playlist download results, etc.

Log messages

Log messages are displayed when the following events occur. Refer to [Appendix III. The details of event log](#) for details.

System-related Event

- BRAVIA Signage Server started
- Failed to send mail report
- Display switched to another BRAVIA Signage Server
- Display switched between enable/disable from the [Display Management] page

Event of Signage Operation

- Changed and published the delivery schedule, power schedule, etc.
- Change in the displays' running conditions (online/offline, power on/off, reboot)
- Playback event (playback start and result)
- Playlist download (download start and result)

These events are grouped by level:

- **Info** : If the BRAVIA Signage runs without system and operation failure, level event logs are notified during operation events (Playback starts, etc.). You can check that there are no errors or warnings by monitoring these level logs.
- **Warning** : Notifies when the operation has failed. If this log message is notified, you need to confirm the BRAVIA's status and configuration in accordance with the log.
- **Error** : Notifies when BRAVIA and the software have broken down.

Filter displayed log

- When using select boxes and radio buttons at the top of screen, the log messages filtered by group name, display name, date, and level can be displayed.

BRAVIA Signage Version 1.7.4 i Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Contents Creation

Display Management

Event Log

Settings

All Publish

Group:
All

Display:
All

Date:
All

Log Level:
☒ All ☐ Error and Warning

Download Log

1 - 100

#	Date	Display	Level	Description
1	2018-02-20 15:25:50	Signage-001	Info	Playlist "PL_Restaurant_L" started.
2	2018-02-20 15:25:30	Signage-001	Info	The display was powered on.
3	2018-02-20 15:06:12	Signage-001	Info	The settings were applied to the display.
4	2018-02-20 14:29:07	Server	Error	Failed to send a mail report.
5	2018-02-20 14:29:06	Signage-001	Warning	The display was powered off.
6	2018-02-20 14:29:00	Signage-001	Info	Playlist "PL_Restaurant_L" finished successfully.
7	2018-02-20 14:18:33	Signage-001	Info	The settings were applied to the display.
8	2018-02-20 14:10:24	Signage-001	Info	The display was powered on.

Server Time : 2018/02/20 15:39 +09:00

Export log and setting information

An event log can be downloaded as a file. When contacting customer support for troubleshooting etc., this feature helps you explain your situation.

- When you push the [Download Log] button on the upper right of the screen, the dialog opens. Select the date on the dialog and push the [Download] button, to download the log file.

BRAVIA Signage Version 1.7.4 i Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Display Management

Event Log

Settings

All Publish

Group:
All

Display:
All

Date:
All

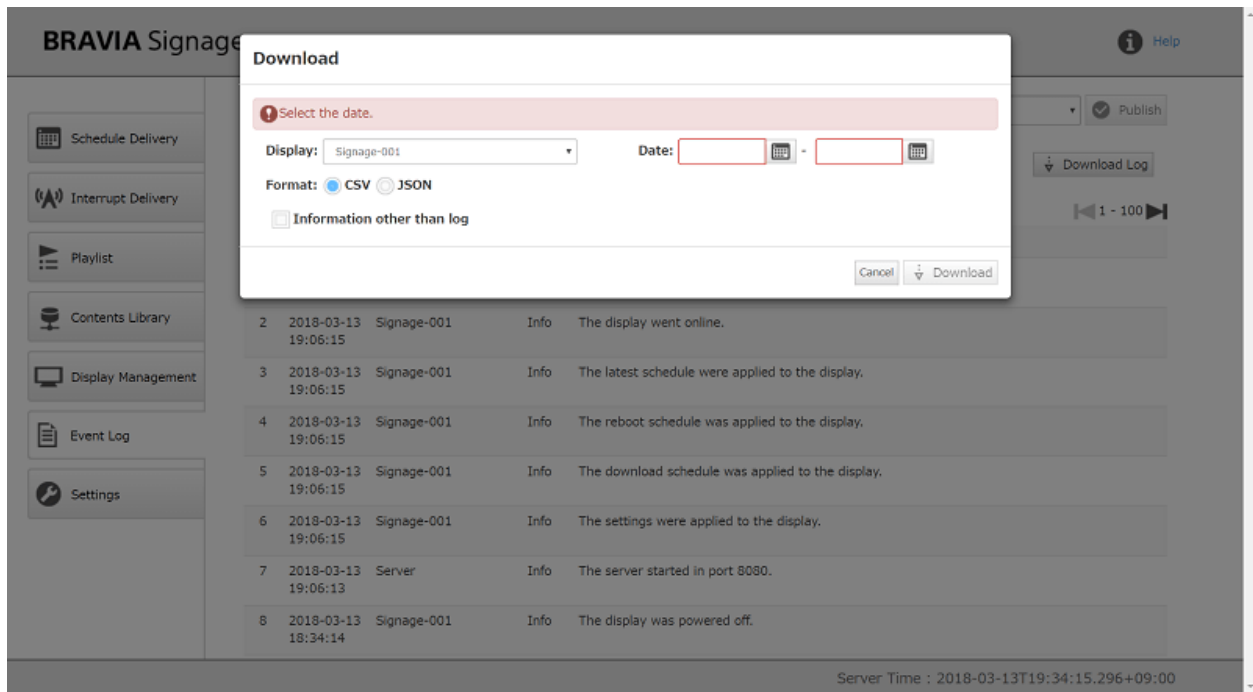
Log Level:
☒ All ☐ Error and Warning

Download Log

1 - 100

#	Date	Display	Level	Description
1	2018-03-13 19:06:25	Signage-001	Info	The display was powered off.
2	2018-03-13 19:06:15	Signage-001	Info	The display went online.
3	2018-03-13 19:06:15	Signage-001	Info	The latest schedule were applied to the display.
4	2018-03-13 19:06:15	Signage-001	Info	The reboot schedule was applied to the display.
5	2018-03-13 19:06:15	Signage-001	Info	The download schedule was applied to the display.
6	2018-03-13 19:06:15	Signage-001	Info	The settings were applied to the display.
7	2018-03-13 19:06:13	Server	Info	The server started in port 8080.
8	2018-03-13 18:34:14	Signage-001	Info	The display was powered off.

Server Time : 2018-03-13T19:35:08.770+09:00



- Dates can be specified for a period of up to 7 days.
- CSV or JSON can be specified as the downloaded file format.
- If checking [Information other than log], the information saved in the database is also downloaded with the event log file.

Settings

On the [Settings] page, you can configure BRAVIA Signage as follows.

Display

- This is the configuration for display management.

Items	Value	Descriptions
Power Management	Auto power off except during schedule delivery	If enabled, the display's power is automatically disabled except during schedule delivery registered in [Schedule Delivery] page.
	Specified power schedule (Initial Value)	If enabled, the power schedule can be manually specified on the [Schedule Delivery] page.
Daily Reboot	Enable	Enable daily reboot. Also configure the reboot time.
	Disable (Initial Value)	Disable daily reboot.
Initial Group	-	Though the display is added to the [Display Management] page on the BRAVIA Signage Server when starting BRAVIA Signage Player for the first time, this configuration is to select which group the display belongs to at this time.
Enable or Disable when display is added	Enable (Initial Value)	When displays are registered to the [Display Management] page, configure the initial value to enable or disable.
	Disable	

Download

- This is the configuration for triggering content download to start.

Items	Value	Descriptions
Download Trigger	Download at the fixed time (Initial Value)	Contents download runs at the specified time every day. Also configure [Download Time].
	Download immediately when a particular event occurs as a settings change	Refer to " Trigger Content Download Starts " in " Appendix I. Playlist download specification ".
Download Time	3:00 (Initial Value)	Set the download time at the fixed time if [Download Trigger] is "Download at the fixed time".

Report

- BRAVIA Signage has a feature to send emails to a specified email address detailing errors that occurred and playback and download results found during daily operations. This is the configuration for that feature. To use this feature, prepare an SMTP server supported for SMTP-AUTH (PLAIN). If there is no user authentication for the SMTP server, this feature does not run.

Report items

Report	Descriptions
Daily Play Report	Reports on playback results of contents of the previous day are sent at 1:00 a.m. every day.
Download Report	Reports on download results of playlists are sent. Reports are sent when all download of a playlist finishes.
Error Report	<p>The following reports are sent. Reports are sent immediately when any error occurs.</p> <ul style="list-style-type: none"> - Display went offline. - Display failed to be powered on according to the power schedule. - Display failed to be powered off according to the power schedule. - Display was powered on because of a factor other than the power schedule. - Display was powered off because of a factor other than the power schedule. - A playlist failed to start playing. - Some contents failed to be played back after a playlist start playing. - A content failed to play. - Download of playlist finishes, but a part of contents fails to be downloaded. - A content failed to be downloaded, and display retried downloading. - A content failed to be downloaded.

Items

Items	Value	Descriptions
Mail Report	Enable	Enable or disable mail report.
	Disable (Initial Value)	
Language	English (Initial Value)	Select language of mail report as English, Japanese, or Chinese.
	Japanese	
	Chinese	
Report Items	Daily Play Report	If enabled, sends Daily Play Reports.
	Download Report	If enabled, sends Download Reports.
	Error Report	If enabled, sends Error Reports.
Mail To (*)	-	Email address to receive mail reports. You can configure multiple addresses with ",". The initial value is "example@example.com".
Mail From (*)	-	Email address to send mail reports. Initial value is "example@example.com".
SMTP Server (*)	-	SMTP server address to send mail reports. The initial value is "smtp.example.com:25".
User Name (*)	-	User account to access the SMTP server. The initial value is "username".
Password (*)	-	Password to access the SMTP server. The initial value is "password".

(*) The setting value is not displayed. If it has been set, it will be

displayed as “Configured”, and if it has not been set, it will be displayed as “Not Configured”. If you want to change the setting value, enter the value and save it. To delete the setting value, check the “Delete” check box and save.

Transition Effect

- This is the configuration for transition effects between contents if multiple contents are specified in a playlist.

Items	Value	Descriptions
Effect Type	Disable (Initial Value)	Disable the effect.
	Fade In/Out	Enable the Fade In/Out effect at the transition.
Effect Duration (sec)	1 (Initial Value)	Time of Fade In/Out

Contents Library

- This is the configuration to use the features on the [Contents Library] page.

Items	Value	Descriptions
Document Root	C:\Apache24\htdocs (Initial Value)	Document root folder of web server used as the contents library.

Contents Creation

- This is the configuration to use the features on the [Contents Creation] page.

Items	Value	Descriptions
Menu Tab	Show	Show the [Contents Creation] page in the tab.
	Hide (Initial Value)	Hide the [Contents Creation] page in the tab.

3. Advanced use and notice

This section describes the advanced uses of signage operation with BRAVIA Signage and notice.

Advanced schedule management

Auto power off management

If “Auto power off except during schedule delivery” is enabled in [Power Management] of the [Settings] page, the display’s power is automatically disabled except during schedule delivery. When starting and stopping interrupt delivery during power off, the display’s power is automatically enabled and then disabled.

BRAVIA Signage Version 1.7.4 Help

Display Power Management Auto power off except during schedule delivery Specified power schedule Edit

Daily Reboot Enabled Disabled(Reboot Time: 4:00)

Initial Group Group1

Enable or Disable when display is added Enable Disable

Download Edit

Download Trigger Download at the fixed time Download immediately when particular event causes as settings change

Download Time 3:00

Report Edit

Mail Report Enabled Disabled Send Test Mail

Language English Japanese Chinese

Report Items Daily Play Report Download Report Error Report

Mail To example@example.com

Server Time : 2018/02/20 16:37 +09:00

Manual power schedule management

If “Specified power schedule” is enabled in [Power Management] of the [Settings] page, the power schedule can be manually specified. In that case, if the timezone of the delivery schedule and the power schedule overlap each other, the power schedule takes priority over the delivery schedule.

Date based scheduling

When registering a schedule, schedules with a specified “day of week” or “date” can be registered. If both schedules exist, the schedule with a specified “date” takes first priority and the schedule with a specified “day of week” takes next priority.

For example, if the following two schedules are registered,

```
Schedule(1)
  Date: Wed, February 14
  Start time: 12:00
  End time: 15:00
  Playlist: Playlist1

Schedule(2)
  Day of week: Mon, Tue, Wed, Thu, Fri
  Start time: 09:00
  End time: 18:00
  Playlist: Playlist2
```

[1] Playlist2 is played from 09:00 to 18:00 on Monday, Tuesday, Thursday, and Friday. [2] Playlist2 is played from 09:00 to 18:00 every Wednesday except Wednesday, February 14. [3] Playlist1 is played from 12:00 to 15:00 on Wednesday, February 14 and Playlist2 is not played from 09:00 to 12:00 or from 15:00 to 18:00.

Time across dates

When registering a schedule, times after 24:00 can be specified as the end time. For example, times from 00:00 to 48:00 can be specified when registering a delivery schedule and power schedule, such as starting the delivery at 21:00 and stopping at 25:00.

As described in “**Date based scheduling**”, although a schedule with a specified “date” takes first priority and a schedule with a specified “day of week” takes next priority when using both specified “date” and “day of week” schedules, it should be noted that:

[1] If you registered a schedule with a specified date and whose end time is after 24:00, both that schedule and the schedule with a specified “day of week” will run on the day after the specified date. For example, if you register the following two schedules, both schedules run on Thursday, February 15.

e.g. Both schedules specified "Wed, February 14" and "Thursday" are registered

Schedule(1)

Date: Wed, February 14
Start time: 23:00
End time: 25:00
Playlist: Playlist1

Schedule(2)

Day of week: Mon, Tue, Wed, Thu, Fri
Start time: 22:00
End time: 26:00
Playlist: Playlist2

Behaviour

Tue, February 13	00:00 to 02:00: Playlist2 is played.
	22:00 to 24:00: Playlist2 is played.
Wed, February 14	23:00 to 24:00: Playlist1 is played.
Thu, February 15	00:00 to 01:00: Playlist1 is played.
	01:00 to 02:00: Playlist2 is played.
	22:00 to 24:00: Playlist2 is played.
Fri, February 16	00:00 to 02:00: Playlist2 is played.
	22:00 to 24:00: Playlist2 is played.

[2] If you register the following two schedules, each schedule indicates the same date and time, but the behaviour of “Schedule(1)” is different from that of “Schedule(2)” because “Schedule(1)” is treated as the schedule of “Thu, February 15” and “Schedule(2)” is treated as the schedule of “Wed, February 14”.

```
Schedule(1)
Date: Thu, February 15
Start time: 00:00
End time: 01:00
Playlist: Playlist1
```

```
Schedule(2)
Date: Wed, February 14
Start time: 24:00
End time: 25:00
Playlist: Playlist1
```

For example, displays run as follows:

e.g. Schedule specified "Thu, February 15" takes priority

```
Schedule(1)
Date: Thu, February 15
Start time: 00:00
End time: 01:00
Playlist: Playlist1
```

```
Schedule(2)
Day of week: Mon, Tue, Wed, Thu, Fri
Start time: 22:00
End time: 26:00
Playlist: Playlist2
```

```
Behaviour
Tue, February 13  00:00 to 02:00: Playlist2 is played.
                  22:00 to 24:00: Playlist2 is played.
Wed, February 14  00:00 to 02:00: Playlist2 is played.
                  23:00 to 24:00: Playlist2 is played.
Thu, February 15  00:00 to 01:00: Playlist1 is played.
Fri, February 16  00:00 to 02:00: Playlist2 is played.
                  23:00 to 24:00: Playlist2 is played.
```

e.g. Schedule specified "Wed, February 14" takes priority

```
Schedule(1)
Date: Wed, February 14
Start time: 24:00
End time: 25:00
Playlist: Playlist1
```

```
Schedule(2)
Day of week: Mon, Tue, Wed, Thu, Fri
Start time: 22:00
End time: 26:00
Playlist: Playlist2
```

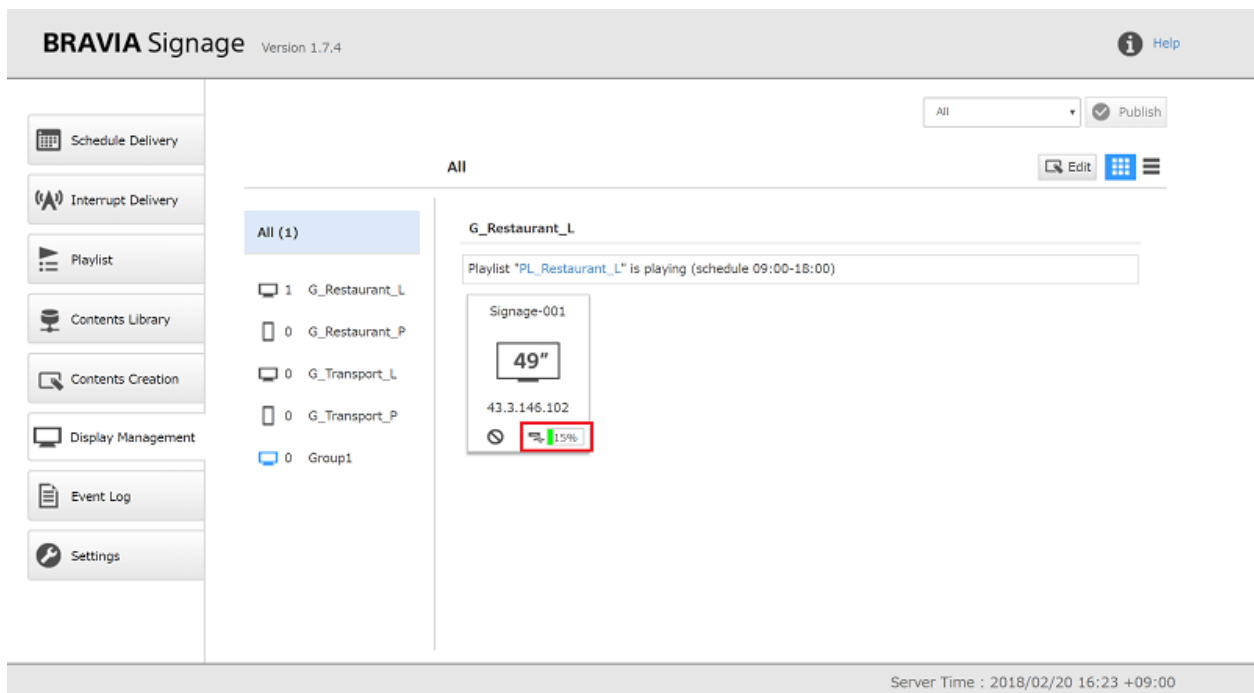
```
Behaviour
Tue, February 13  00:00 to 02:00: Playlist2 is played.
                  22:00 to 24:00: Playlist2 is played.
Wed, February 14  Any playlists are not played.
Thu, February 15  00:00 to 01:00: Playlist1 is played.
                  01:00 to 02:00: Playlist2 is played.
                  22:00 to 24:00: Playlist2 is played.
Fri, February 16  00:00 to 02:00: Playlist2 is played.
                  23:00 to 24:00: Playlist2 is played.
```

Playlist download

How to use playlist download

When publishing playlists to a display, playback contents can be downloaded to a USB flash memory connected to the display and instead of network streaming these downloaded files can be played. This section describes how to use this feature.

[1] Check whether the USB flash memory is inserted to the display's USB port or not. This can also be checked on the [Display Management] page, shown as "Storage" for each display information on that page. It should be noted that contents are not downloaded and played by network streaming if the download setting is enabled but the display does not have a USB flash memory.



BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Contents Creation

Display Management

Event Log

Settings

All

All (1)

Name	IP address	Storage	Status	Control	Download
Signage-001	43.3.146.102	<div><div></div>15%</div>	Power ON	<div>OFF</div> <div>Reboot</div>	<div></div> <div>Disable</div>

1 G_Restaurant_L

0 G_Restaurant_P

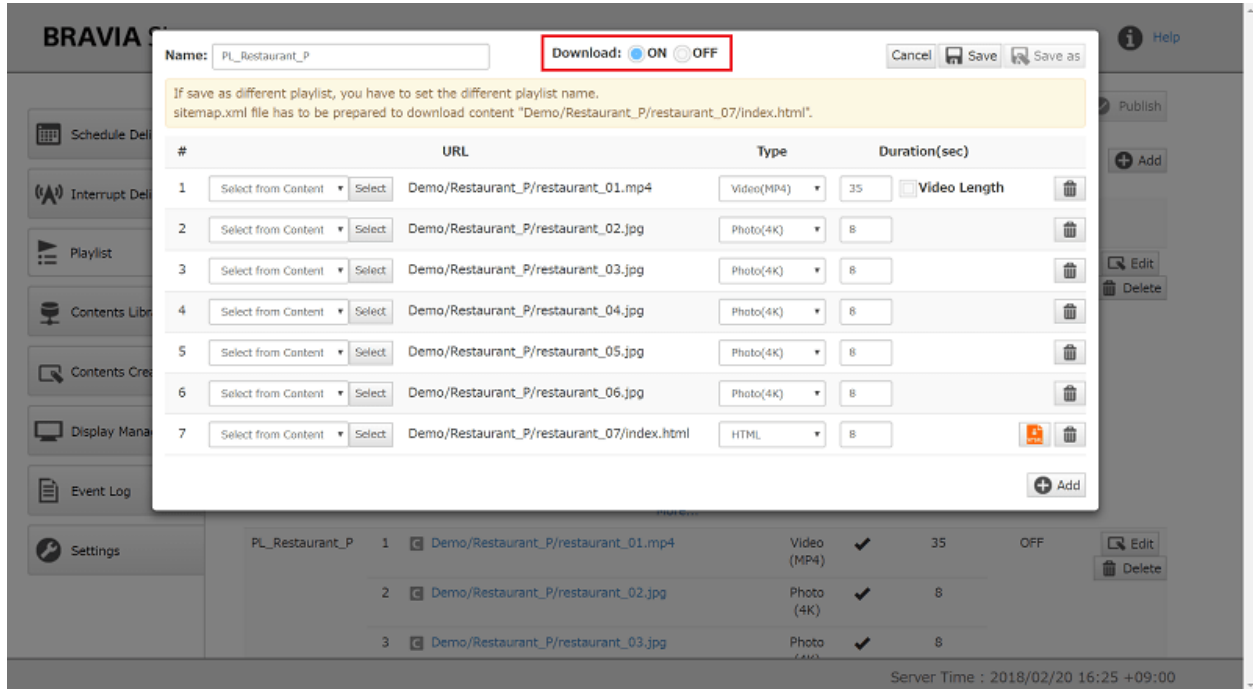
0 G_Transport_L

0 G_Transport_P

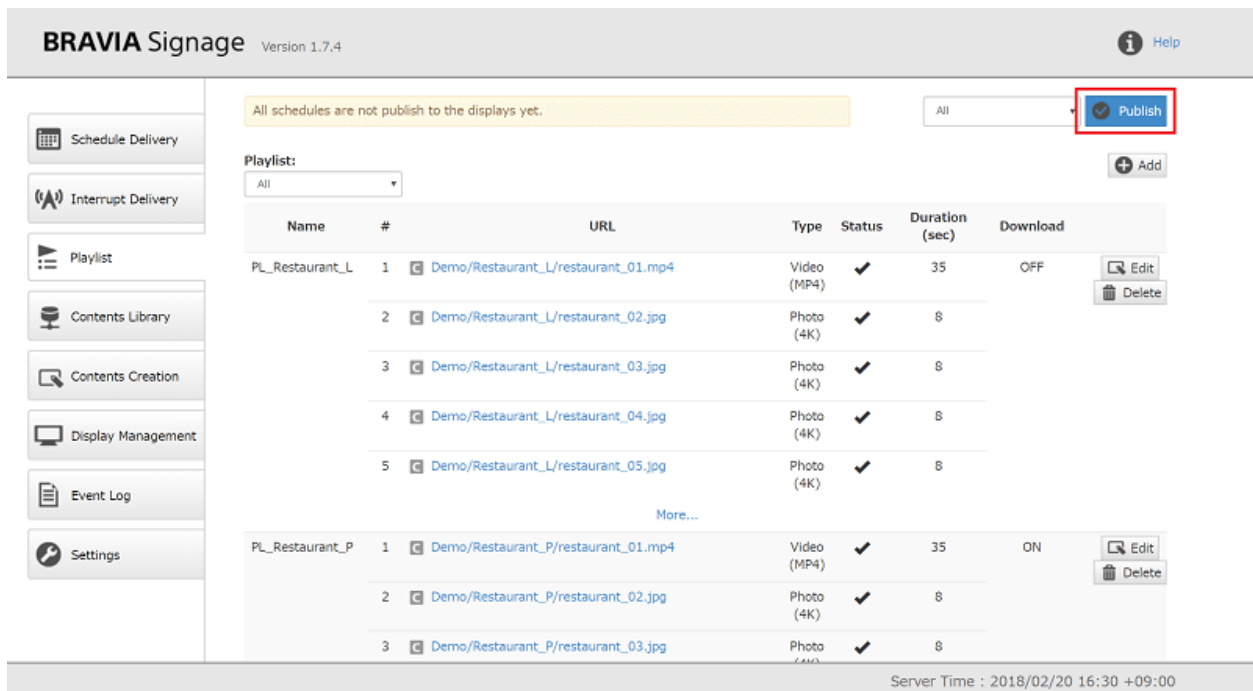
0 Group1

Server Time : 2018/02/20 16:24 +09:00

[2] Change to enable the [Download] setting on the [Playlist] page. If contents whose [Type] is “HTML” exist in the playlist, the sitemap file must be created to download this HTML content. Refer to “**How to make sitemap file**” as follows for details.



[3] If the playlist edited in step [2] is taken from a schedule registered to the [Schedule Delivery] page, push the [Publish] button at the top of screen and publish the edited information to the displays.



[4] Settings are completed. Download will start in accordance with the settings of [Download] on the [Settings] page. Download status can be checked from [Download] for each display on the [Display Management] page. It should be noted that the contents are played by network streaming if download has not been completed and switch to file playback after download has been completed. Refer to [Appendix I. Playlist download specification](#) for details of content download trigger.

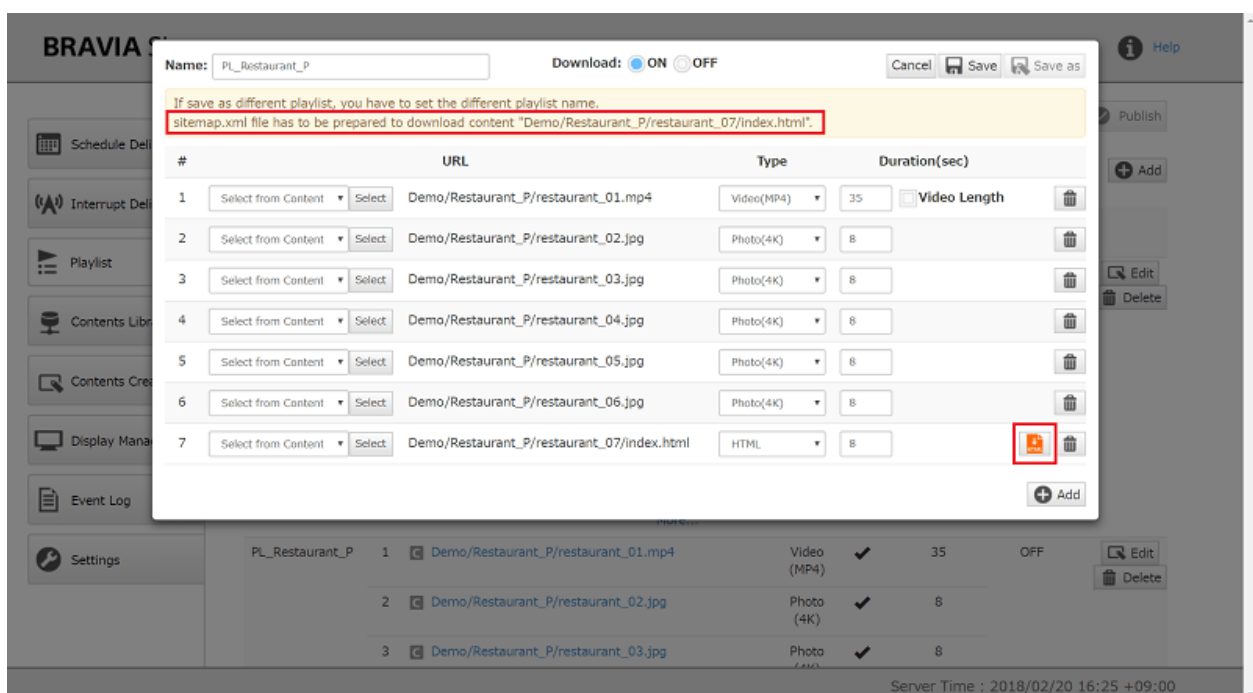
How to make sitemap file

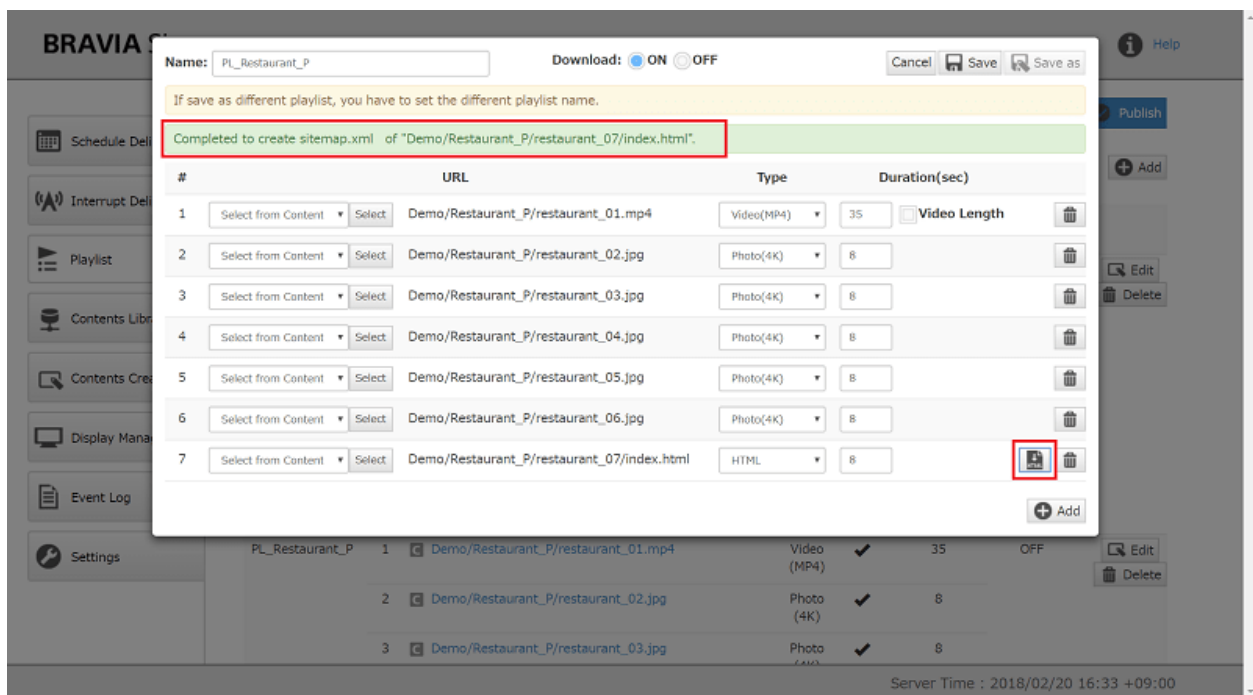
A sitemap file which lists files (such as images, videos, JavaScript, CSS etc.) used in an HTML file should be downloaded and is required for HTML download. Only files listed in the sitemap are downloaded. The format of a sitemap is XML, as defined by <http://www.sitemaps.org/index.html>. The following two approaches are used to make this sitemap file in BRAVIA Signage.

[a] Use the function to create sitemap file

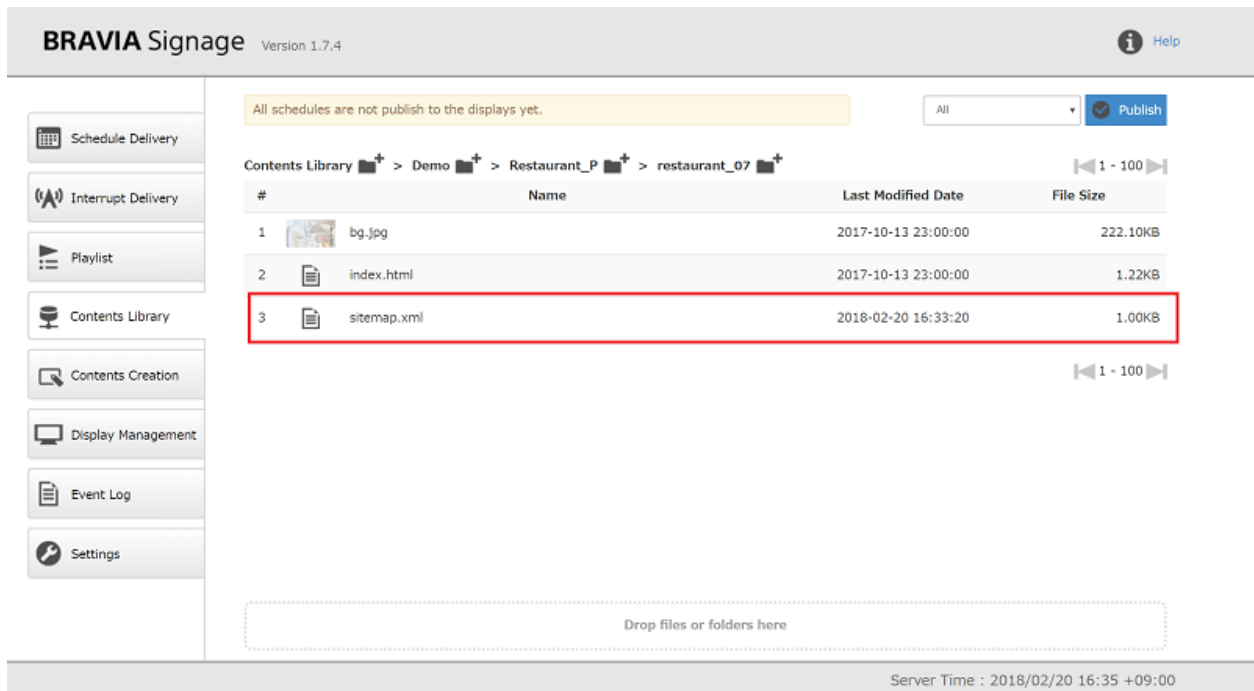
In HTML content uploaded in [Content Library] page, the sitemap.xml can be created with the function provided on the [Playlist] page.

[1] The button to create sitemap.xml is displayed as follows when the [Download] setting is enabled on a playlist that includes HTML content on the [Playlist] page. If the button color is orange, that means that the sitemap file does not exist or HTML content with sitemap.xml has been updated. If the button color is gray, that means that the sitemap file has been created. When you push this button, sitemap.xml is created in the same folder as the index.html specified as the URL of the playlist. If sitemap.xml has already been created and you push this button, the old sitemap file is overwritten.





[2] Open the [Contents Library] page and open the folder containing the sitemap.xml created in step [1], and check whether sitemap.xml was successfully created or not.



In order to use this function, it should be noted that the following restrictions exist:

- An HTML file that is an entry point exists in the root folder of the HTML content.
- The name of the HTML file that is an entry point is “index.html”.

If the usage is not within the range of these restrictions, the sitemap.xml cannot be properly created.

[b] Create manually sitemap file

HTML content that is not within the range of restrictions described in “[a] Use feature to create sitemap file” needs to be created manually.

- For not managing content with the [Content Library] page, such as content management with other content management servers.
- The name of the HTML file that is an entry point is not “index.html”, or it is put in a folder that is not the root folder of the content.

Refer to [Appendix II. Sitemap file specification](#) for details of sitemap file specification used in BRAVIA Signage.

Redownload after contents are updated

Redownload is required if the contents in the playlist are updated after the playlist download has been executed. If the contents are updated, the contents will be redownloaded at the next download as described in [Appendix I. Playlist download specification](#).

Advanced contents library setting

Use other HTTP server

When BRAVIA Signage Server is installed, Apache HTTP Server is also installed and initial settings for the content library feature are configured to use this Apache. If you have already used other contents management servers or want to use one, that server can be used and configured to work with the content library feature. This section describes how to configure this feature.

- Add the environment variable to your server configuration file (braviasignageserver.xml in the installation directory) and specify the document root path string of your HTTP server to [Document Root] of [Content Library].
- After editing the configuration file, restart the server.
- Confirm that the setting values are applied on the Setting tab.

```
<service>
  <id>braviasignageserver.exe</id>
  <name>BRAVIA Signage Server</name>
  <description>BRAVIA Signage Server</description>
  <executable>%BASE%\app.exe</executable>
  <arguments>--max_old_space_size=2000 -- -f "%BASE%\server\app.js" -l "BRAVIA Signage Server" -g 0.25 -w 1 -r 3 -a
n</arguments>
  <logmode>reset</logmode>
  <startmode>Automatic</startmode>
  <env name="NODE_ENV" value="production"/>
  <env name="CONTENTS_SERVER_DOCROOT" value="C:\Apache24\htdocs"/>
</service>
```

The screenshot shows the BRAVIA Signage web interface (Version 1.8.3) with the 'Settings' tab selected. The interface includes a sidebar with navigation options: Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main content area displays various configuration settings. The 'Contents Library' section is highlighted with a red box, showing the 'Document Root' set to 'C:\Apache24\htdocs'. Other settings include Language (English, Japanese, Chinese), Report Items (Daily Play Report, Download Report, Error Report), Mail To, Mail From, SMTP Server, User Name, Password, Transition Effect (Effect Type: Disabled, Fade In/Out; Effect Duration: 1), and Contents Creation (Menu Tab: Show, Hide). The server time is displayed at the bottom as 2023/03/17 12:23 +09:00.

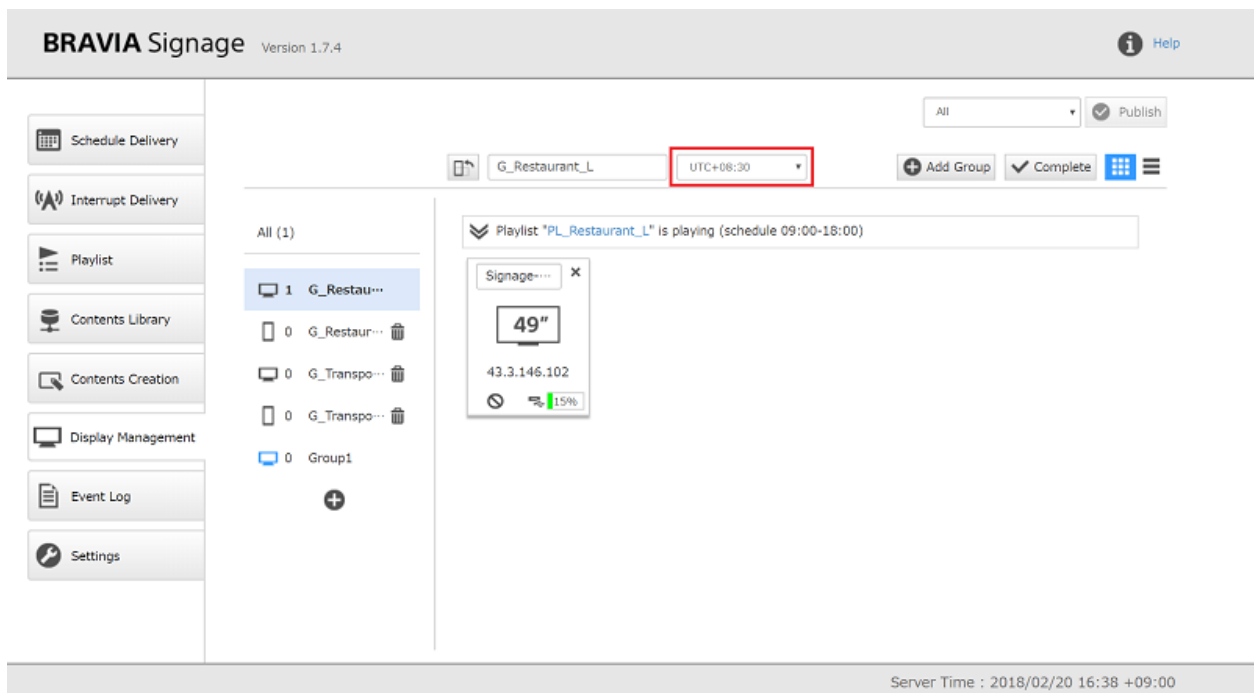
- Document Root indicates the root folder path of the HTTP server that is accessible from the outside.
- BRAVIA Signage Server needs to put the uploaded contents in the document root folder of the HTTP server when contents are uploaded. The server PC that BRAVIA Signage Server is running on needs to access the document root folder, and the document root folder must be mounted on the server PC if BRAVIA Signage Server accesses your HTTP server via network.

Configuration across multiple timezones

When operating in areas and countries with multiple timezones, schedules can be managed on the [Schedule Delivery] page without considering the time difference. The timezone can be configured for every group on the [Display Management] page, and the displays of each group run based on the time under the configured timezone.

How to configure

[1] Open the [Display Management] page, push the [Edit] button on the upper right of the page and change the timezone setting.



[2] When you push the [Complete] button after changing, the timezone is displayed with the group name, and all displays in edited groups will reboot.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Contents Creation

Display Management

Event Log

Settings

All (1)

1 G_Restaurant...

0 G_Restaurant_P

0 G_Transport_L

0 G_Transport_P

0 Group1

All UTC+08:30

Edit

Playlist "PL_Restaurant_L" is playing (schedule 09:00-18:00)

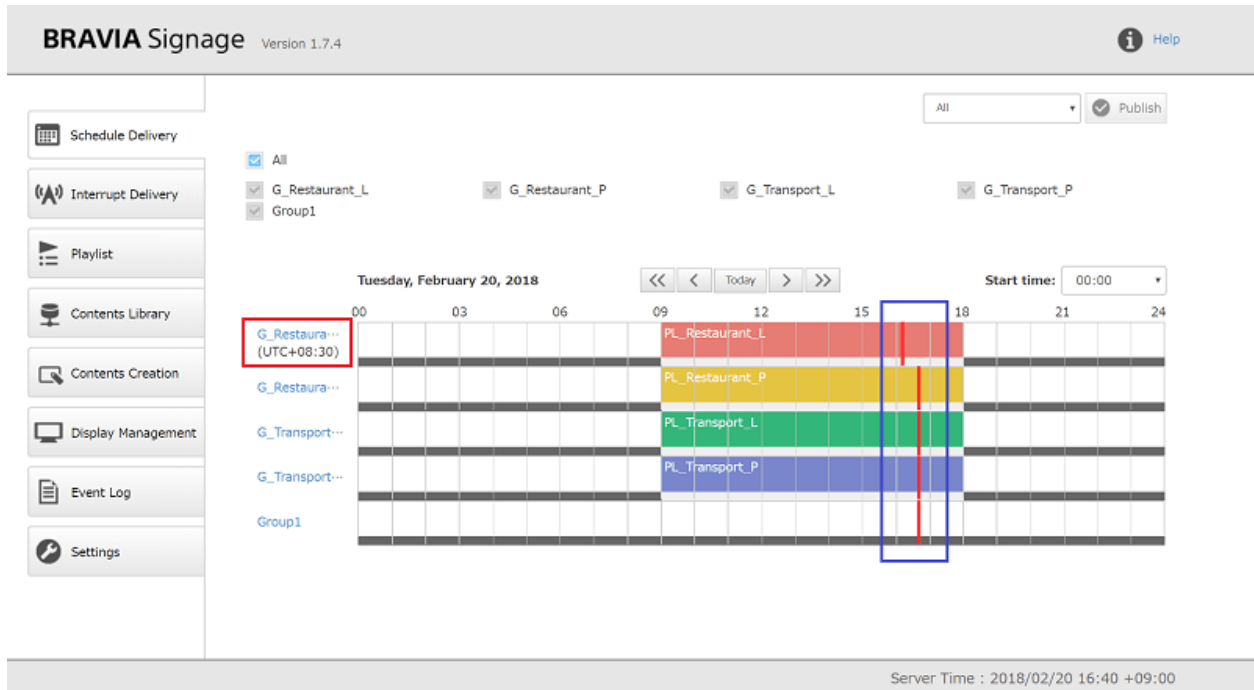
Signage-001

49"

43.3.146.102

Server Time : 2018/02/20 16:39 +09:00

[3] After displays reboot in step [2], displays start schedule delivery and power schedule based on the time under the changed timezone. When you open the [Schedule Delivery] page, the timezone under the group name is displayed and the red line on scheduler that indicates the current time, is displayed offset by the difference between the server time and the time under the timezone.



Mail reporting

BRAVIA Signage has a feature to send emails to specified email addresses detailing the errors that occurred and playback and download results in daily operations. Report by email is as follows:

Report items

Report	Descriptions
Daily Play Report	Reports on playback results of contents of the previous day are sent at AM 1:00 every day.
Download Report	Reports on download results of playlists are sent. Reports are sent when all download of a playlist finishes.
Error Report	<p>The following reports are sent. Reports are sent immediately when any error occurs.</p> <ul style="list-style-type: none">- Display went offline.- Display failed to be powered on according to the power schedule.- Display failed to be powered off according to the power schedule.- Display was powered on because of a factor other than the power schedule.- Display was powered off because of a factor other than the power schedule.- A playlist failed to start playing.- A part of contents failed to be played back after a playlist start playing.- A content failed to play.- Download of playlist finishes, but a part of contents fails to be downloaded.- A content failed to be downloaded, and retry to download.- A content failed to be downloaded.

How to configure

[1] Open the [Settings] page and configure items of [Report] in accordance with [Settings](#).

[2] When you push the [Send Test Mail] button after configuration, check whether the configurations are correct or not. If you input each configuration and push this button, the following test mail is sent in accordance with the configurations such as SMTP server URL, user name, password, etc.

BRAVIA Signage Version 1.7.4 Help

Schedule Delivery

Interrupt Delivery

Playlist

Contents Library

Contents Creation

Display Management

Event Log

Settings

All Publish Save

Report

Mail Report Enabled Disabled Send Test Mail

Language English Japanese Chinese

Report Items Daily Play Report Download Report Error Report

Mail To

Mail From

SMTP Server

User Name

Password

Transition Effect Edit

Effect Type Disabled Fade In/Out

Effect Duration(sec)

Contents Library Edit

Document Root

Contents Creation Edit

Server Time : 2018/02/20 16:36 +09:00

About send test mail

Report	Subject	Descriptions
Daily Play Report	[BRAVIA Signage] MAIL REPORT SETTINGS TEST for Daily Play Report	SUCCESS!!! SETTINGS for Download Report are OK.
Download Report	[BRAVIA Signage] MAIL REPORT SETTINGS TEST for Download Report	SUCCESS!!! SETTINGS for Daily Play Report are OK.
Error Report	[BRAVIA Signage] MAIL REPORT SETTINGS TEST for Error Report	SUCCESS!!! SETTINGS for Error Report are OK.

[3] Push the [Save] button after configuration.

The screenshot shows the BRAVIA Signage web interface (Version 1.7.4). On the left is a sidebar with navigation icons for Schedule Delivery, Interrupt Delivery, Playlist, Contents Library, Contents Creation, Display Management, Event Log, and Settings. The main area is titled 'Report' and contains several configuration sections:

- Report Settings:** Includes a 'Mail Report' toggle (set to 'Enabled'), a 'Language' dropdown (set to 'English'), and 'Report Items' checkboxes for 'Daily Play Report', 'Download Report', and 'Error Report' (all checked). Below these are input fields for 'Mail To', 'Mail From', 'SMTP Server', 'User Name', and 'Password'.
- Transition Effect:** Includes an 'Effect Type' dropdown (set to 'Disabled') and an 'Effect Duration(sec)' field (set to '1').
- Contents Library:** Includes a 'Document Root' field (set to 'C:\Apache24\htdocs\').

At the top right of the main area, there are buttons for 'Publish' and 'Save' (highlighted with a red box), and a 'Send Test Mail' button. The bottom status bar shows 'Server Time : 2018/02/20 16:36 +09:00'.

Appendix I. Playlist download specification

When publishing playlists to displays, playback contents can be downloaded to a USB flash memory connected to the display and instead of network streaming these downloaded files can be played. This section describes the download specifications and notices.

Downloaded Playlist

Of the playlists of the [Schedule Delivery] page and [Interrupt Delivery] page, the playlists with “download” enabled are downloaded.

Trigger Content Download Starts

Content download starts at the trigger as seen in the following: It should be noted that the trigger is in accordance with “Download” in the [Settings] page.

[a] If “Download at the fixed time” is selected

- Download starts at the time configured on the [Settings] page.

[b] If “Download immediately when particular event causes as settings change” is selected

- Download starts as seen in the following:

Playlist used in [Schedule Delivery] page

- When the [Publish] button is pushed, download starts.
- When BRAVIA turns from offline to online such as rebooting display, download starts.

Playlist used in [Interrupt Delivery] page

- When the interrupt delivery is saved on the [Interrupt Delivery] page, download starts.
- When the playlist is saved on the [Playlist] page, download starts.
- When BRAVIA turns from offline to online such as when rebooting the display, download starts.

Redownload to update after registered content and playlist are updated

If playlists and contents are updated, download starts as seen in the following:

[a] If downloaded playlist are updated

- BRAVIA Signage checks the newest playlist when the download starts such as above “ **Trigger Content Download Starts**”, and BRAVIA Signage updates the downloaded content by re-downloading and deletion.

[b] If contents used in downloaded playlist are updated

- BRAVIA Signage checks the newest contents on the contents library when the download starts. BRAVIA Signage refers to the Last-Modified header or Etag header in HTTP response from the contents library to check whether the content is updated or not. If these headers are not included in HTTP response from the contents library, BRAVIA Signage will always download not only updated contents, but also non-updated ones.

Playback of not downloaded contents

If the downloaded playlist has not been downloaded, contents in the playlist are played back via the network. After download is completed, it switches to playback with downloaded files.

Others

- The downloaded content is saved in the USB storage device connected to the BRAVIA USB port. BRAVIA Signage will not be able to recognize the content directly copied to the USB storage device on a PC, etc. as downloaded content.
- BRAVIA Signage doesn't support multiple USB insertion. You can use only one USB storage device for each display.

Appendix II. Sitemap file specification

A sitemap file which lists files (such as images, videos, JavaScript, CSS etc.) used in an HTML file should be downloaded and is required for HTML download. Only files listed in the sitemap are downloaded. The format of a sitemap is XML defined by <http://www.sitemaps.org/index.html>.

This section describes this sitemap file specification for HTML download in BRAVIA Signage.

Path name of sitemap file

The name of a sitemap file must be “sitemap.xml” and must be located on the same or higher path as an URL of HTML specified in a playlist.

e.g.

- URL of HTML:
- <http://www.example.com/app/index.html>
- URL of sitemap (Either one is allowed):
- <http://www.example.com/app/sitemap.xml>
- <http://www.example.com/sitemap.xml>

Tag name defined in sitemap file

The following are XML tags used for HTML download in BRAVIA Signage.

Tag name	Parent Tag	Edit	Descriptions
urlset	-	Required	Root tag. Set the following value as "xmlns". "http://www.sitemaps.org/schemas/sitemap/0.9"
url	urlset	Required	Parent tag of downloaded URL
loc	url	Required	downloaded URL

URLs listed in a sitemap must be of the same scheme and same or lower path as the URL of a sitemap.

e.g.

- URL of sitemap:
- <http://www.example.com/app1/sitemap.xml>
- Valid URLs in sitemap:
- <http://www.example.com/app1/app1.js>
- <http://www.example.com/app1/image/image.jpg>
- Invalid URLs in sitemap:
- <http://www.example.com/app2/app2.js>
- <http://www.example.com/style.css>
- <https://www.example.com/app1/app1.js>

Example of sitemap file

The following are examples which can be used for HTML download in BRAVIA Signage. The following example of the sitemap.xml is included in the installer package.

e.g. Example of sitemap.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
  <url>
    <loc>http://www.example.com/app/video/video.mp4</loc>
  </url>
  <url>
    <loc>http://www.example.com/app/main.js</loc>
  </url>
  <url>
    <loc>http://www.example.com/app/style.css</loc>
  </url>
</urlset>
```

Others

- Use a relative path to specify an image file, a video file, JavaScript file, CSS file, etc. A file specified by URL such as “http://” or “https://” is obtained not from the downloaded file, but through the network directory.

Appendix III. The detail of event log

• System-related Event

Log	Level	Descriptions
The server started in port 8080.	Info	Notify when BRAVIA Signage Server starts.
Failed to send a mail report.	Warning	Notify when mail report fails to be sent as follows: - the configuration of [Report] in the [Settings] is missing, - or display is offline, etc.
Start to switch to another server.	Info	Notify when BRAVIA Signage Player switched to connect to another BRAVIA Signage server with the feature for Sler, External API.
Failed to switch to another server.	Warning	Notify when BRAVIA Signage Player failed to switch to another BRAVIA Signage server with the feature for Sler, External API.
The display's enable/disable was changed.	Info	Notify when enable/disable is switched in [Display Management] page.

• Event of Signage Operation

Log	Level	Descriptions
(1) Display Status (online/offline)		
The display went online.	Info	Notify when display turns from offline to online.
The display went offline.	Warning	Notify when display turns from online to offline. If this message is notified, confirm whether display connects to the network or not. It should be noted that display turns to offline when a USB storage device with config.txt is inserted to the BRAVIA USB port.
The display will reboot.	Info	Notify when BRAVIA is rebooted.
(2) Display Status (power on/off)		
The display was powered on.	Info	Notify when display power turns on in accordance with the power schedule.
The display was powered off.	Info	Notify when display power turns off in accordance with the power schedule.
The display failed to be powered on.	Error	Notify when display power does not turn on in accordance with the power schedule. If this message is notified, confirm : - whether there is a difference between display's Pre-shared Key and "pre-shared key" of config.txt. - whether display power on/off can be controlled from the [Display Management] page or not after rebooting display. - whether display is broken or not, etc.
The display failed to be powered off.	Error	Notify when display power does not turn off in accordance with the power schedule. If this message is notified, confirm : - whether there is a difference between display's Pre-shared Key and "pre-shared key" of config.txt. - whether display power on/off can be controlled from the [Display Management] page or not after rebooting display. - whether display is broken or not, etc.
The display was powered on.	Warning	Notify when display power turns on due to a factor other than the power schedule. If this message is notified, it may be that: - Power on occurred in accordance with display's settings (power saving setting) - Power on occurred with remote controller by someone. - Operation is missing from the [Display Management] page.
The display was powered off.	Warning	Notify when display power turns off due to a factor other than the power schedule. If the message is notified, it may be that: - Power off occurred in accordance with display's settings (power saving setting) - Power off occurred with remote controller by someone. - Operation is missing from the [Display Management] page.

(3) Change settings from Operation web application		
The latest schedule was applied to the display.	Info	Notify when published from the [Schedule Delivery] page.
The power schedule was applied to the display.	Info	Notify when the schedule was updated from the [Schedule Delivery] page.
The download schedule was applied to the display.	Info	>Notify when display was connected to BRAVIA Signage server.
The reboot schedule was applied to the display.	Info	>Notify when display was connected to BRAVIA Signage server.
The settings were applied to the display.	Info	Notify when the configuration has been changed from the [Settings] page.
(4) Playback of Schedule Delivery		
Playlist {playlist name} started.	Info	Notify when the playback of a playlist starts.
Playlist {playlist name} finished successfully.	Info	Notify when the playback of a playlist has completed.
Playlist {playlist name} failed to start.	Warning	Notify when the playlist fails to playback. If this message is notified, confirm that: - The configuration of the playlist is correct or not on the [Playlist] page. - If URLs of the playlist exist or not.
Playlist {playlist name} finished unsuccessfully.	Warning	Notify when a part of the content of the playlist fails to playback. If this message is notified, confirm that: - The configuration of the playlist is correct or not in the [Playlist] page. - If URLs of the playlist exist or not.
Failed to play {URL}	Warning	Notify with the above when it fails to playback.
(5) Playback of Interrupt Delivery		
Playlist {playlist name} started as the interrupt delivery.	Info	Notify when the playback of a playlist starts.
Playlist {playlist name} completed successfully as the interrupt delivery.	Info	Notify when the playback of a playlist has completed.
Playlist {playlist name} failed to start as the interrupt delivery.	Warning	Notify when the playlist fails to playback. If this message is notified, confirm that: - The configuration of the playlist is correct or not on the [Playlist] page. - If URLs of the playlist exist or not.
Playlist {playlist name} completed unsuccessfully as the interrupt delivery.	Warning	Notify when a part of contents of playlist fails to playback. If this message is notified, confirm that: - The configuration of the playlist is correct or not on the [Playlist] page. - If URLs of the playlist exist or not.
Failed to play {URL}	Warning	Notify with the above when it fails to playback.
(6) Content Download		
Download of playlist {playlist name} started.	Info	Notify when content download starts.
Download of playlist {playlist name} completed successfully.	Info	Notify when content download has completed.
Download of playlist {playlist name} completed successfully. Nothing to be downloaded.	Info	Notify there are no updated contents even though download started.
Download of playlist {playlist name} completed unsuccessfully.	Warning	Notify when a part of the content download fails.
Failed to download the content. It will be retried.	Warning	Notify when a part of the content download fails. After this notification, BRAVIA will retry to download.
Failed to download the content.	Warning	Notify when content download fails. Retry to download if needed after checking that there is network connection between display and server, whether network trouble occurs or not, etc.
Downloaded contents of playlist {playlist name} were deleted.	Info	After completing download of contents, when the "download" configuration of the playlist is disabled, then downloaded content is deleted. Notify when the downloaded content is deleted.

Appendix IV. config.txt specification

config.txt is the setting file of BRAVIA Signage Player. When you copy this file to the root folder of USB flash memory and insert it to the USB port of the display to which BRAVIA Signage Player installed, this player is set in accordance with settings configured in config.txt. This section describes the specifications of config.txt.

File format

- The format of this config.txt must be JSON, and the encoding format must be UTF-8.
- It should be noted that some displays do not read config.txt with Byte Order Mark and BRAVIA Signage Player may not start. Because there are some general text editors that apply Byte Order Mark when editing and saving, be careful when editing and saving config.txt.

Settings

- Settings in config.txt is as follows:

Items		Type	Edit	Descriptions
settings		Object	Required	Indicates the configurations for BRAVIA Signage Player.
	server	String	Required	Configure BRAVIA Signage Server URL as http://[server ip address]:[port]. e.g. http://192.168.100.100:8080 The max string length is 160 characters. If it exceeds 161, the exceeded characters are removed.
	tv-name	Number	Required	Configure display's name displayed on the Operation Web Application. (It should be noted that you can change display's name from the Operation Web Application.) The max string length is 20 characters. If it exceeds 21, the exceeded characters are removed. In addition, you can use any Unicode character excluding " and \.
	connection-error	Object	Optional	Indicates the configurations for the connection from BRAVIA Signage Player to BRAVIA Signage Server.
	initial-timeout	Number	Optional	Configure timeout (sec) when BRAVIA Signage Player connects to BRAVIA Signage Server for the first time. This is for the first setup of BRAVIA Signage Player. If it is not configured in config.txt, initial timeout is 60 seconds.
	timeout	Number	Optional	Configure timeout (sec) when BRAVIA Signage Player connects to BRAVIA Signage Server. If "-1" is specified, configure as no timeout. In that case, connection error message is not shown on the screen. If "59" or under is specified, timeout is 60 seconds. If it is not configured in config.txt, timeout is 300 seconds.
	reboot	Boolean	Optional	Configure whether display reboots or not when timeout occurs. true: Displays the error message if timeout occurs. false: Does not display the error message if timeout occurs. If it is not configured in config.txt, this is configured as false.
	override	Boolean	Optional	Configure whether or not to override the configuration ("server" and "tv-name") when inserting USB storage device with config.txt. true: Overrides in accordance with config.txt in the USB storage device. Even if you change display's name from the Operation Web Application, it is overwritten. false: It is not overwritten even if a USB storage device with config.txt is inserted. If it is not configured in config.txt, this is configured as false. And in only initial setup, even if false, this is configured as true.
	ssl-authentication	Boolean	Optional	When connected to a server with SSL, configure whether or not BRAVIA Signage Player verifies the SSL certificate. true: enables verification false: disables verification If it is not configured in config.txt, this is configured as false
	connection	Object	Optional	Indicates the configurations for connection protocol from BRAVIA Signage Player to BRAVIA Signage Server.
	transports	Array	Optional	Configure the connection protocol from BRAVIA Signage Player to BRAVIA Signage Server. only "websocket": use websocket only "polling": use HTTP Long Polling both "websocket" and "polling": basically use "websocket", but use HTTP Long Polling if websocket is unavailable for some reason. If it is not configured in config.txt, this is configured as "websocket".
	pre-shared-key	String	Optional	Configure the Pre-Shared key value set to display. This configuration is used only when the Pre-Shared Key is configured on display.
version		String	Required	Indicates this config.txt version. Configure "1".

Example of config.txt

Some examples of config.txt are as follows:

- **config.txt example (1)**

BRAVIA Signage Player times out in 300 seconds and displays the error message, if it can't connect to BRAVIA Signage Server.

```
{
  "settings" : {
    "server" : "http://example.com:8080",
    "tv-name" : "Signage-001",
    "connection-error" : {
      "timeout" : 300,
      "reboot" : false
    },
    "override" : false
  },
  "version" : "1"
}
```

- **config.txt example (2)**

BRAVIA Signage Player never displays the error message and continues to play downloaded schedules and contents, if it can't connect to BRAVIA Signage Server.

```
{
  "settings" : {
    "server" : "http://example.com:8080/",
    "tv-name" : "Signage-001",
    "connection-error" : {
      "timeout" : -1,
      "reboot" : false
    },
    "override" : false
  },
  "version" : "1"
}
```

- **config.txt example (3)**

```
{
  "settings" : {
    "server" : "http://example.com:8080",
    "tv-name" : "Signage-001",
    "connection-error" : {
      "initial-timeout" : 120,
      "timeout" : 300,
      "reboot" : true
    },
    "override" : true,
    "ssl-authentication" : true,
    "connection" : {
      "transports" : ["websocket", "polling"]
    },
    "pre-shared-key" : "1234"
  },
  "version" : "1"
}
```

Appendix V. m3u8 file

Content delivery with HTTP Live Streaming can be used in BRAVIA Signage, and this can be used with .ts files and .m3u8 files. This section describes .m3u8 files.

The following is the example of a .m3u8 file.

```
#EXTM3U
#EXT-X-VERSION:3
#EXTINF:100.00,
sample_1.ts
#EXTINF:100.00,
sample_2.ts
#EXT-X-ENDLIST
```

The following are descriptions of tags used in the example of .m3u8 above.

Tag Name	Descriptions
EXTM3U	Indicates that this file is a .m3u8 file.
EXT-X-VERSION	Indicates the version of the .m3u8 file.
EXTINF	Indicates the duration of the .ts file described on the next line.
EXT-X-ENDLIST	Indicates the end of the playlist.