

Synchronize players

URL: <https://docs.grassfish.com/docs/synchronize-players>

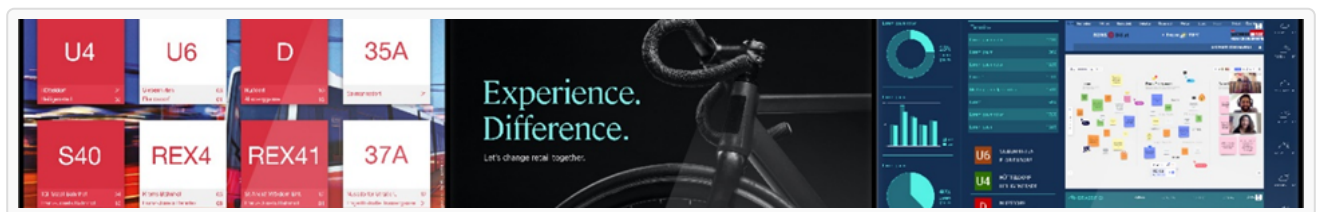
Archiviert am: 2025-07-17 18:40:14

Synchronize your players to simultaneously play spots on multiple screens. This can be useful, for example, if you want to create a video wall that displays synchronized content across all screens.

Synchronized players can operate in the following ways:

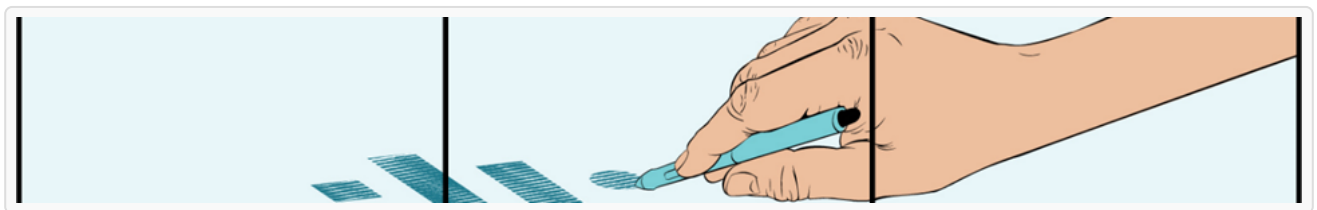
Synchronized content with different spots

- Each player can play different content.
- The lead player controls the transition from one spot to the next. This means that all synchronized players switch to the next spot at the same time.
- For an optimal viewing experience, all content should be the same length.



Synchronized content across all screens

- Create the appearance of one “big” spot across multiple screens.
- The individual spots start at the exact same time, controlled by the lead player.
- For an optimal viewing experience, all content should be the same length.



System requirements and limitations

Ensure that you meet the following system requirements for player synchronization:

Software

Android Player version 11.17.0 or later

Linux Player version 11.2 or later

Windows Player version 11.2 or later

Tizen Player version 11.11.0 or later

Your players must be set up in the IXM One.

Hardware

The performance of the sync depends on the performance of the hardware.

You can synchronize players of each technology (Android, Windows, Linux, Tizen) with each other. However, please consider the limitations of each technology.

Only Linux and Windows Player 11.15 can be synchronized with Android and Tizen.

The synchronized player PCs must be connected in the same local area network (LAN).

We don't recommend using a wireless network (WLAN).

We have successfully tested synchronization via VPN, but your mileage may vary.

Note

You can't synchronize Linux and Windows Player version 11.13 with later versions.

Limitations

Synchronization works with different spot types and IXM One features. However, the following limitations apply:

Unsupported spot types

Audio

Streaming

Unsupported features if sync tags are not used on all spots

Spot transition
Playlist priority
Loops
Play only x spots from the playlist
Shuffle playlist

Synchronize players

You must synchronize the lead player with the followers. You can have any number of followers.

For a seamless playback, we recommend that all synchronized spots have the same length. If not, the synchronized spot playback works in the following ways:

- If a spot on a follower is completed before the lead player has started a new spot, the screen on the follower stays black, displays the playlist background color, or the last frame until there's a new lead spot.
- If a spot on the lead player is completed before a follower has finished playing it, the follower spot is interrupted and the next lead spot starts playing.

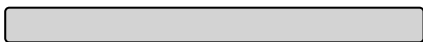
How to synchronize

There are different ways to configure the synchronized start of spots: complete synchronization, sync tags, or synchronized spot transition.

Complete synchronization

With this option, the lead player informs the followers about the next spot and when the spot changes, everyone plays the same spot.

This option covers most use cases, but not video walls or special solutions.



Sync tags

You can assign the same sync tag to the lead spot and all follower spots that should start simultaneously. The sync tag acts as a sender of sync commands on the lead spot, and as a receiver on the follower spots. This allows you to select specific spot to start simultaneously.

With this feature you can easily create a video wall.

How it works

1. Prior to the spot transition, the lead player sends a 'preload' command with the sync tag to all followers in the sync group.
2. The followers preload the spot with the sync tag.
3. When the lead player sends the sync command ('PlayNextSpot' request), the preloaded spot starts on the follower players.

Note

If you want to use sync tags, you must create them in the IXM One and assign them to the desired spots. For more information, refer to the IXM One webhelp.

Synchronized spot transition

With this option, the lead player sends a sync command ('PlayNextSpot' request) and the next spot in the playlist starts on the follower players. This allows the simultaneous start of all spots in the sync group. However, you can't select specific spots.

This option is not supported on Tizen.

How it works

1. Prior to the spot transition, the follower player preloads the next spot in the playlist.
2. After playing the current spot, the follower players wait for the lead player's 'Start' command.

Configure players

You must configure the synchronization settings in the IXM One player configuration. The settings are similar across Windows and Linux, Android, and Tizen players, but some players have more settings depending on their capabilities.

Note

Lead and follower players require different settings. However, you can configure this in the configuration on the player in the same configuration group.

To configure your players, perform the following steps:

1. In the IXM One, go to the player configuration or the configuration group:
 -
 - For an individual player, go to **Channels > Location**. Double-click on your player and select **Edit** next to **Configuration** in the **Edit player** window.
 -

For a configuration group, go to **Administration > Player > Configuration groups** and double-click on the configuration group.

2. In the **Edit configuration group** window, select **Display extended modules**.

3. Under **Modules**, select **Player > Sync**.

Setting	Description
define a screen of this player as sync master	<p>Specify the number of the screen that acts as sync master.</p> <p>The first screen has number 1.</p> <p>Default value: -1 (deactivated)</p> <hr/> <p>This setting is not available on Tizen Players.</p>
define a split of this player as sync master	<p>Specify the number of the split that acts as sync master.</p> <ul style="list-style-type: none">◦ If the screen layout contains only one split, the split number is 1.◦ You can find the split number in the screen layout. <p>Default value: -1 (deactivated)</p>
enable synced spot switch	<p>Select to enable synchronized spot transition.</p> <p>This setting is not required if you only want to enable synchronized preload and transition.</p> <hr/> <p>This setting is currently not available on Tizen.</p>
enable synced preload for spots with synctags	<p>Select to enable synchronized preload and transition.</p> <hr/> <p>This setting is only available on Android Players.</p>
sync group	<p>Specify a number of your choice to assign the sync group.</p> <p>Default value: -1 (deactivated)</p>
multicast ip for sync communication	<p>Specify a multicast IP address that the lead player uses for sync communication.</p> <p>In general, you can leave the default value.</p>
udp port for sync communication	<p>Specify a UDP port that the lead player uses for sync communication.</p> <p>You can leave the default value if you only have one player.</p>

disable sync while playing events	<p>Select to disable synchronization while the leader is playing events.</p> <p>In this case, the followers switch to regular synchronization mode.</p>
skip spots with sync tags while sync is inactive	<p>Select to not play spots with sync tags on the leader.</p> <p>The follower ignores all sync commands from the leader until sync is complete. The follower switches back to sync mode when sync is complete.</p>
heartbeat interval for sync communication	<p>Specify in which interval the lead player sends heartbeat signals.</p> <p>The heartbeat is a signal that the lead player is still alive and playing.</p> <p>In general, you can leave the default value.</p>
heartbeat timeout for sync communication	<p>Specify a timeout after which the synchronization is considered failed.</p> <p>In this case, the follower player leaves sync mode and starts playing regular spots.</p> <p>The heartbeat is a signal that the lead player is still alive and playing.</p> <p>Use at least a value three-times as big as the heartbeat interval.</p> <p>In general, you can leave the default value.</p>
sync master priority	<p>Specify a number that determines the probability of a player becoming the sync master.</p> <p>Default value: 5</p> <hr/> <p>This setting is not available on Tizen Players.</p>
set sync master election algorithm	<p>Select one of the following algorithms:</p> <ul style="list-style-type: none"> ◦ ID-ELECTION: automatically assigns a master. The player with the lowest ID wants to synchronize must be set to ID-ELECTION. ◦ MANUAL: synchronized players elect a master. <p>We recommend MANUAL for the general use case.</p> <hr/> <p>This setting is not available on Tizen Players.</p>
distribute livetags	<p>Select to distribute live tags from the lead player to the followers.</p> <hr/> <p>This setting is currently not supported on Tizen.</p>
allow synchronising all spots / enable exact spot sync using spot objects	<p>Select to allow synchronizing all spots in a playlist.</p> <p>Note that all players must use the same program to play the spots.</p>

use spot objects to synchronise

Select to use spot objects to synchronize all an event playlist.

Note that this must be set on all players.

We strongly recommend to use this setting if

This setting is the default on Tizen Players and

4. Click **Save** to save your changes.

5. Repeat the configuration steps for all players that you want to synchronize.

Edit configuration group [default group]

*Name: default group *Group: Qt Player

☒ Display extended modules

Modules

- Player
 - Backend
 - Keyboard
 - Logging
 - Sync**
 - Timeouts
 - Transitions
 - VirtualKeyboard
 - Window
- PlayerSurveyor
 - Backend
- ScreenController
 - Logging
 - Screen
- Server
 - Logging
 - Server
- Updater
- VendorService

Settings Search ...

Sync (Player) Last changed

define a screen of this player as sync master ⓘ

define a split of this player as sync master ⓘ

enable synced spot switch ⓘ ☐

sync group ⓘ

multicast ip for sync communication ⓘ

udp port for sync communication ⓘ

disable sync while playing events ⓘ ☒

skip spots with synctags while sync ☐

Last changed: 22.07.2024 11:10:87
Last fetched: ---

Export Import Save Cancel