

This document serves as a preliminary documentation regarding the Video Script Playable. This feature is subject to review/approval and may be updated/modified in the near future. This is available as of Unity 2017.1.b4.

Video Script Playable

The Video Script Playable provides video playback through the *VideoPlayer* component. It offers a *Timeline* video playback solution for the time being. A complete Video Playable integration is already on the development roadmap. This integration will offer more flexibility and will deliver a more complete set of tools.

Script Entities

VideoPlayableBehaviour (inherits from *PlayableBehaviour*)

The *VideoPlayableBehaviour* script handles the video playback through the *VideoPlayer* component and its *VideoClip* asset. It provides a basic set of functionalities: change a *VideoClip* asset, enable looping, mute audio track, set preload time, set video clip in-time, video scrubbing.

Note : Audio playback is only enabled in Play Mode and *AudioSources* must be properly set up in the *VideoPlayer* component beforehand.

VideoScriptPlayableAsset (inherits from *PlayableAsset*)

Represents the *PlayableAsset* from which the *VideoPlayableBehaviour* is created.

VideoSchedulerPlayableBehaviour (inherits from *PlayableBehaviour*)

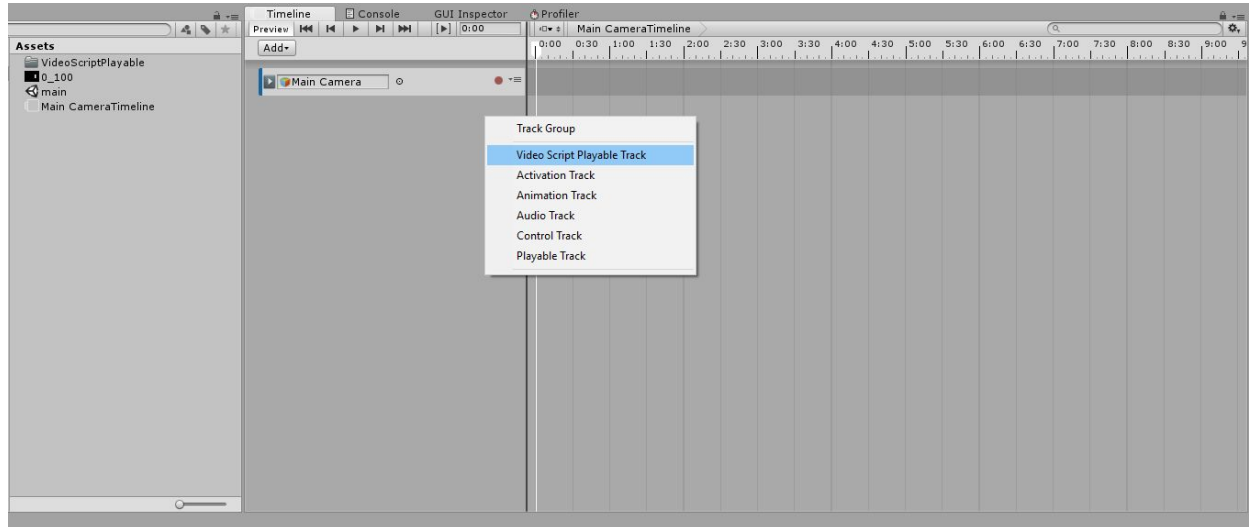
Script Playable Mixer used to schedule video preparation/release. Propagating *PlayableDirector* component and *Timeline* clips down to this entity allows proper control of the resources used during *Timeline* playback.

VideoScriptPlayableTrack (inherits from *TrackAsset*)

Represents the *TrackAsset* for the *VideoPlayableBehaviour*. It instantiates the *VideoSchedulerPlayableBehaviour* and sets its *PlayableDirector* and *Timeline* clips needed for video clip scheduling.

How-to

Creating a Video Script Playable Track



The Video Script Playable track will become available in your *Timeline* simply by importing the *VideoScriptPlayable* folder directly in your Project Assets folder.

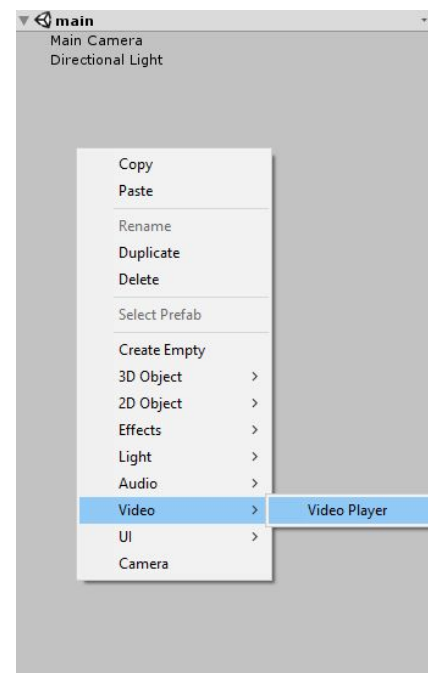
Creating a VideoPlayer Component

Since the Video Script Playable is integrated using the *VideoPlayer* component, a *GameObject* holding a *VideoPlayer* component must be in your scene and referenced by the *VideoScriptPlayableAsset*.

Some properties of the *VideoPlayer* will be forced by the *VideoPlayableBehaviour* or overridden through the *VideoScriptPlayableAsset*.

Forced :

- Play On Awake
- Wait For First Frame
- Alpha
- Frame / Time
- Time Reference
- Loop Point Reached callback
- Source
- External Reference Time

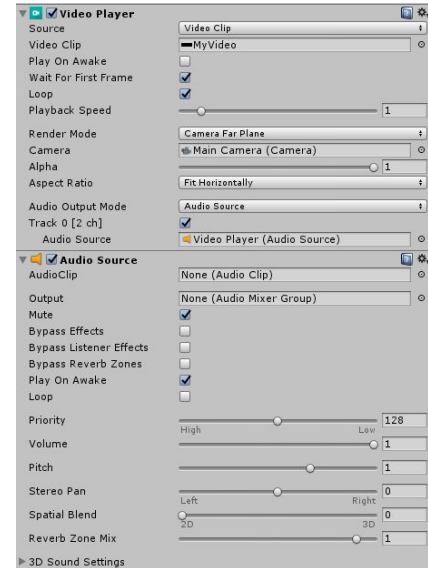


Overridden :

- Video Clip
- Loop
- AudioSource Mute

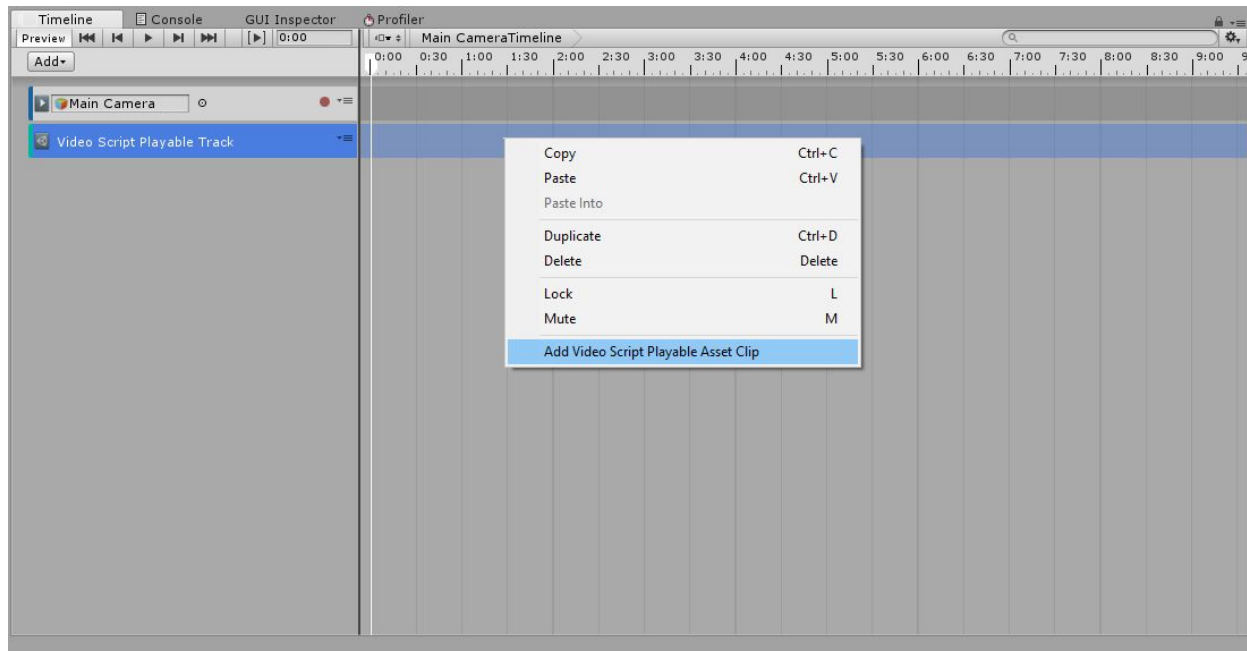
Make sure your **Render Mode / Render Target** are properly set since those are not exposed in the *VideoScriptPlayableAsset*.

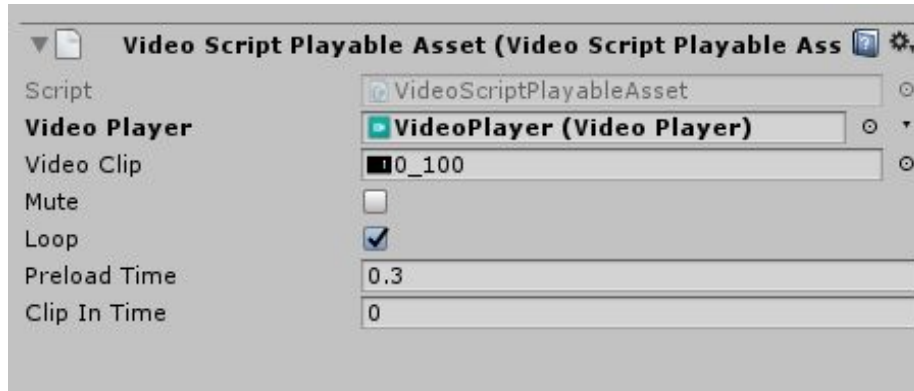
Note: Video *Timeline* clips blending will only work if **Render Mode** is set to **Camera Mode** (Far, Near) as this is the only mode supporting transparency. Also note that it is recommended to use one unique *VideoPlayer* per *VideoScriptPlayableAsset*.



Creating a Video Script Playable Asset Clip

Once your track is created, you can select it and add a *VideoScriptPlayableAsset* clip through the contextual menu.





The *VideoScriptPlayableAsset* only exposes *Timeline*-relevant *VideoPlayer* component properties. It also offers **Preload Time** and **Clip In Time** parameters allowing some extra control on *Timeline* video playback. **Preload Time** defines the prebuffering period (in seconds) before the clip is scheduled to play. In this example, the *VideoSchedulerPlayableBehaviour* invokes the video preparation 0.3 seconds before the **Clip Timing Start** allowing the *VideoPlayer* to reserve the resources needed for playback and preload some of the content. **Clip In Time** (in seconds) specifies the video time at which the playback will start once the *Timeline* clip has started.

Note: Enabling the *VideoScriptPlayableAsset* **loop** property will loop playback from frame 0 as opposed to the **Clip In Time**.

