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.

本文档用作有关视频脚本可播放的初步文档。此功能需要审核/批准，并可能在不久的将来更新/修改。从 Unity 2017.1.b4 开始提供。

视频脚本可播放

视频脚本可播放通过 VideoPlayer 组件提供视频播放。它暂时提供 Timeline 视频播放解决方案。完整的 Video Playable 集成已经在开发路线图中。这种集成将提供更大的灵活性，并将提供更完整的工具集。

脚本实体

VideoPlayableBehaviour（继承自 PlayableBehaviour）

VideoPlayableBehaviour 脚本通过 VideoPlayer 组件及其 VideoClip 资源处理视频播放。它提供了一组基本功能：更改 VideoClip 资源，启用循环，静音音轨，设置预加载时间，设置视频剪辑及时，视频清理。

注意：音频播放仅在播放模式下启用，并且必须事先在 VideoPlayer 组件中正确设置 AudioSources。

VideoScriptPlayableAsset（继承自 PlayableAsset）

表示从中创建 VideoPlayableBehaviour 的 PlayableAsset。

VideoSchedulerPlayableBehaviour（继承自 PlayableBehaviour）

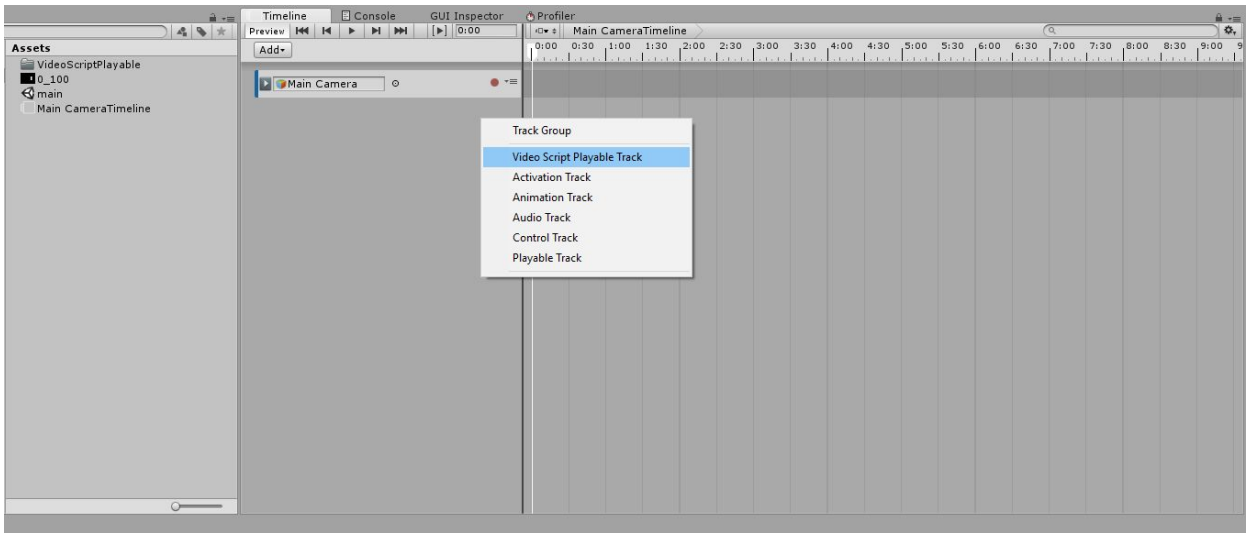
脚本可播放混音器用于安排视频准备/发布。将 PlayableDirector 组件和时间轴剪辑向下传播到此实体可以正确控制时间轴播放期间使用的资源。

VideoScriptPlayableTrack（继承自 TrackAsset）

表示 VideoPlayableBehaviour 的 TrackAsset。它实例化 VideoSchedulerPlayableBehaviour 并设置视频剪辑调度所需的 PlayableDirector 和 Timeline 剪辑。

How-to

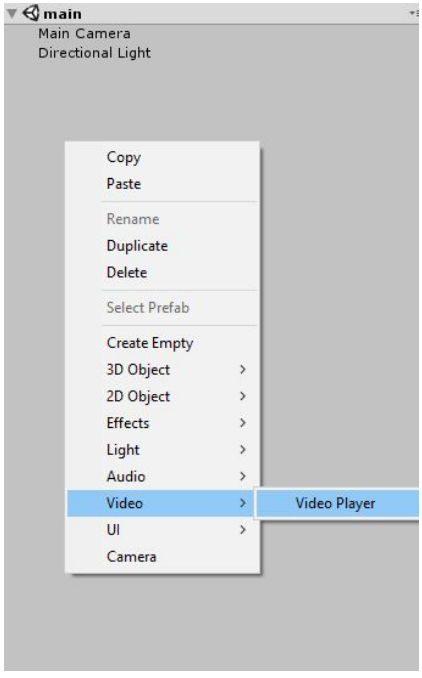
Creating a Video Script Playable Track



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*.



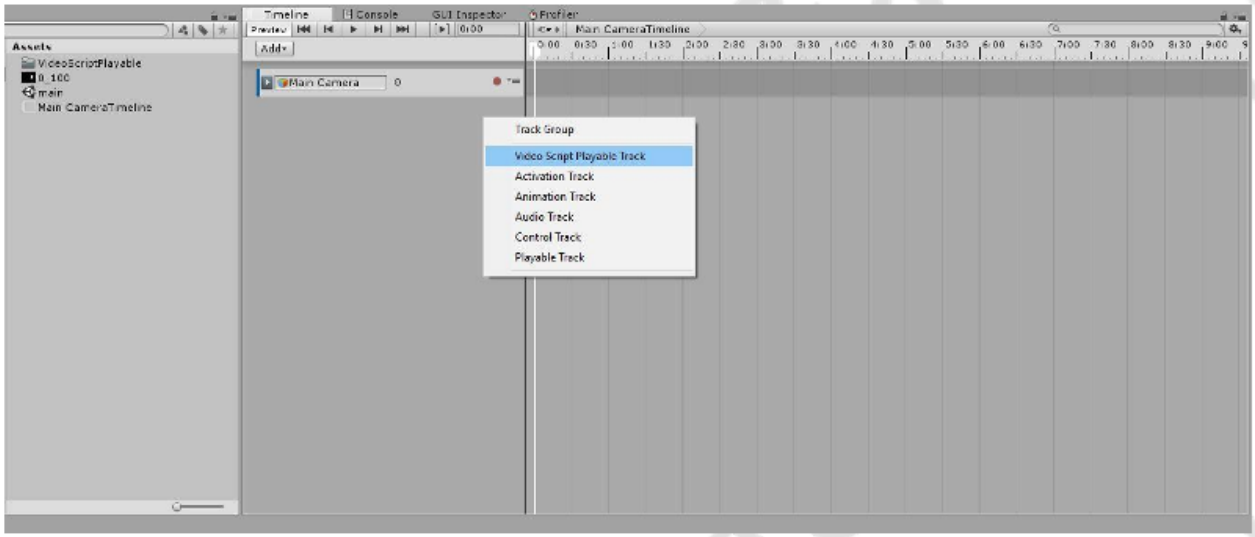
Some properties of the *VideoPlayer* will be forced by the *VideoPlayableBehaviour* or overridden through the *VideoScriptPlayableAsset*.

Forced :

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

如何

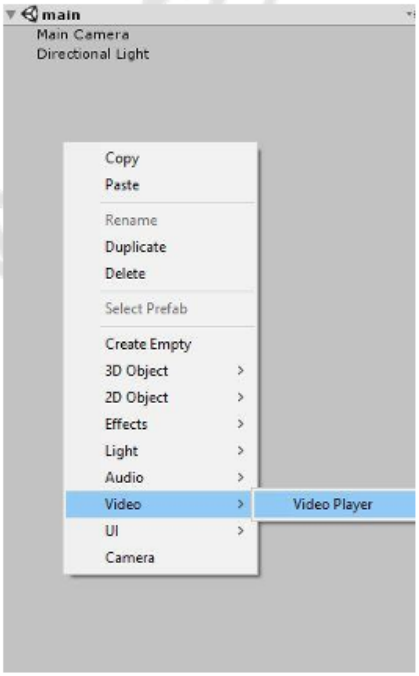
创建视频脚本可播放曲目



只需导入，即可在时间轴中使用视频脚本可播放曲目
*直*接在 Project Assets 文件夹中的 VideoScriptPlayable 文件夹。

创建 VideoPlayer 组件

由于 Video Script Playable 是使用 VideoPlayer 组件集成的，因此持有 VideoPlayer 组件的 GameObject 必须位于场景中并由 VideoScriptPlayableAsset 引用。



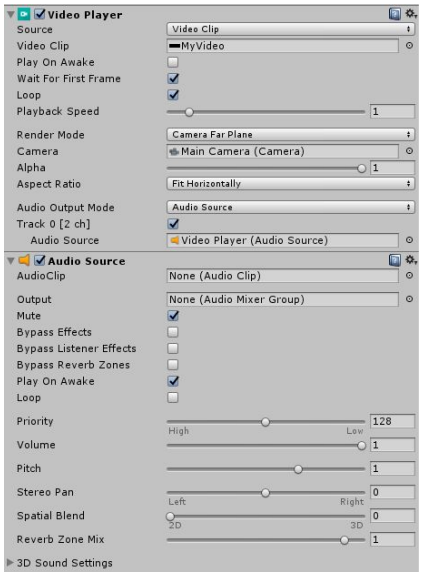
VideoPlayer 的某些属性将由 VideoPlayableBehaviour 强制执行或通过 VideoScriptPlayableAsset 覆盖。

强迫：

- 玩清醒
- 等待第一帧
- A
- 帧/时间
- 时间参考
- 循环点到达回调
- 资源
- 外部参考时间

Overridden :

- Video Clip
- Loop
- AudioSource Mute

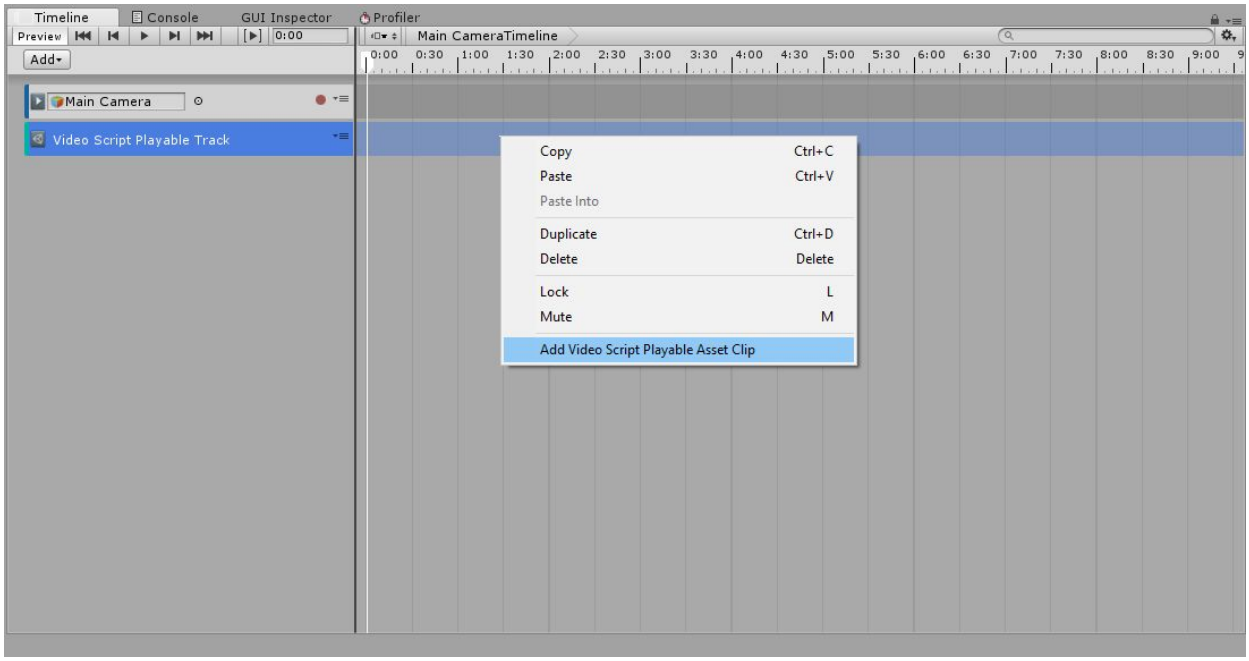


Make sure your **Render Mode / Render Target** are properly set since those are not exposed in the *VideoScriptPlayableAsset*.

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*.

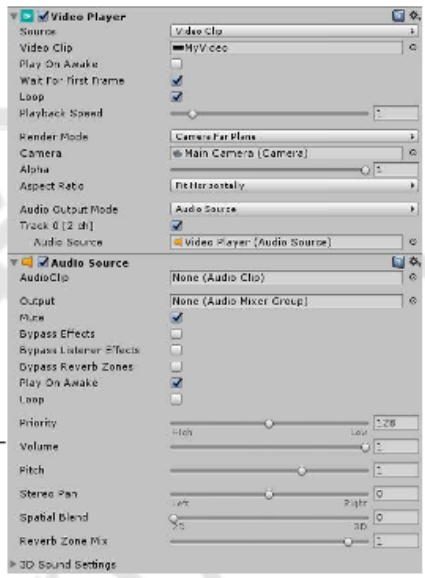
Creating a Video Script Playable Asset Clip

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



被覆盖：

- 录像片段
- 环
- AudioSource 静音

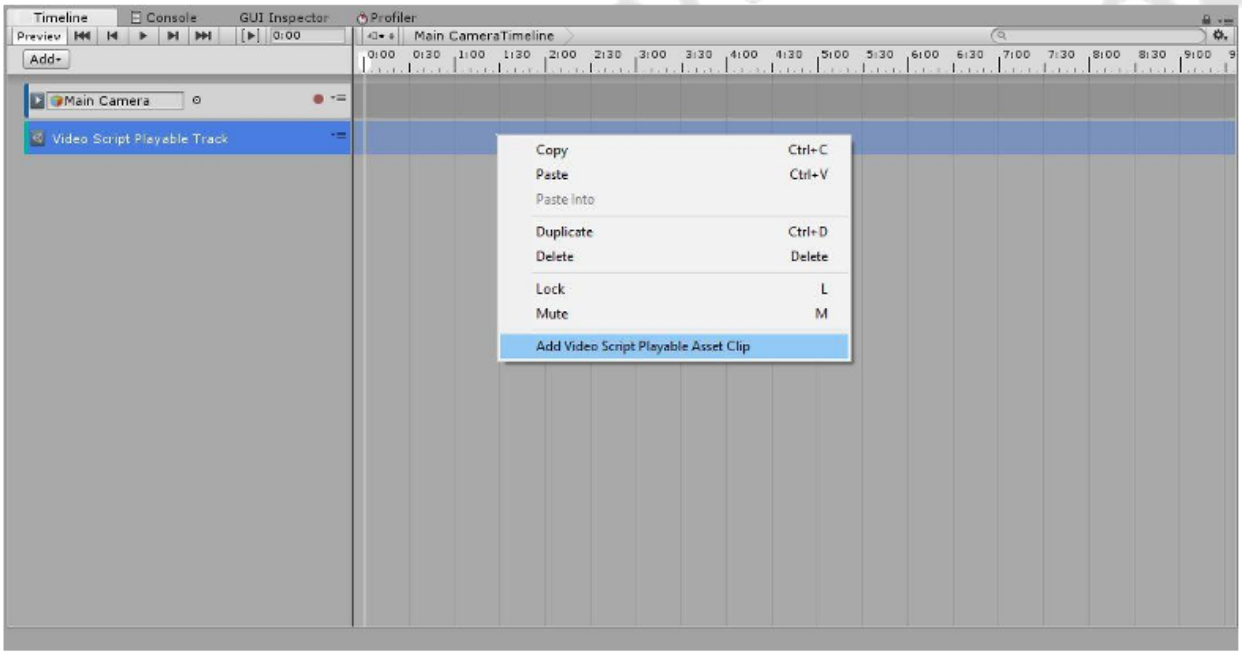


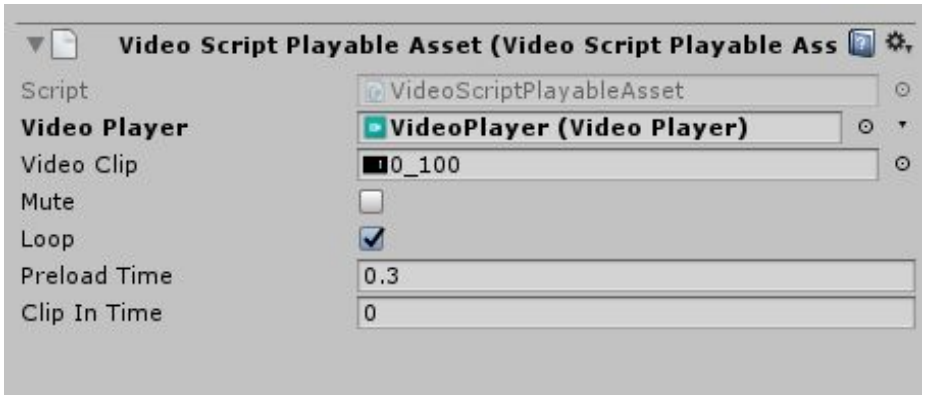
确保正确设置渲染模式/渲染目标，因为它们未在 VideoScriptPlayableAsset 中公开。

注意：视频时间轴剪辑混合仅在渲染模式设置为摄像模式（远，近）时才有效，因为这是唯一支持透明度的模式。另请注意，建议每个 VideoScriptPlayableAsset 使用一个唯一的 VideoPlayer。

创建视频脚本可播放的资产剪辑

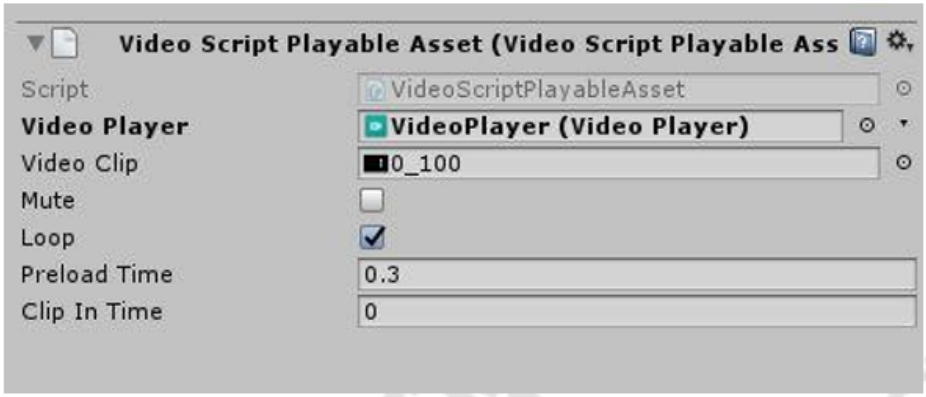
创建轨道后，您可以选择它并通过上下文菜单添加 VideoScriptPlayableAsset 剪辑。





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**.



VideoScriptPlayableAsset 仅公开与时间轴相关的 VideoPlayer 组件属性。它还提供预加载时间和时间片段参数，允许对时间轴视频播放进行一些额外控制。预加载时间定义了预定剪辑播放前的预缓冲时间（以秒为单位）。在此示例中，VideoSchedulerPlayableBehaviour 在剪辑定时开始前 0.3 秒调用视频准备，允许 VideoPlayer 保留播放所需的资源并预加载一些内容。
Clip In Time（以秒为单位）指定播放一旦开始播放的视频时间
的时间轴剪辑已开始。

注意：启用 VideoScriptPlayableAsset 循环属性将从第 0 帧循环播放而不是剪辑时间。