Readme – Pro TexturePlayer 1.2.6

Pro TexturePlayer provides a set of powerful image playback, display, and loading APIs for your professional apps/games. Easy load and display image sequences in your Unity app and game.

The best solution for displaying image banners, posters that load with URL and local file path, or load images from the local folder and play like a slideshow or simply display them like a gallery app.

This package is integrated with several important features that tackle many issues for loading, displaying and managing images for your app. Optimized for better performance, ease of use, and help prevent app crashes when a large number of images are loaded.

Highlights

- **Image Cache Management**
  Cache the downloaded images on local storage (Application Paths), so your app doesn't need to re-download the images every time between runs.
- **Memory Usage Optimization**
  Significantly less memory usage when multiple images loaded in one player. Ensure better stability and performance.
- **Texture Resize**
  Resize the loaded textures without changing the origin files, by inputting the target width and height in the Play method.
- **Texture Player Controls**
  Play, Pause, Resume, Stop, PlayForward, PlayBackward, Display particular image by texture index, examples of Callbacks for handling events such as image click event.

One of our popular assets - **Image Loader** is included in this package~

Features

Pro TexturePlayer

- Play images with list/array of URLs or local paths.
- Play textures list/array.
- Play images from the local folder with the folder path (the application paths, not the native gallery),
- Play images like a slideshow, or just simply display them.
- Playback Controls: Play, Pause, Resume, Stop, PlayForward, PlayBackward, etc.
- Customizable playback frame rate.
- Trigger callbacks/events with the image ID of the particular image (e.g. click on the image to trigger an event by its ID).
- Build-in image resize feature, easily constraint the size of all the images by specifying the target width and height. Unifying your image size on loaded and saving memory usage.
- Optimize Memory Usage option, significantly reducing memory usage for loaded textures.
- Supports display on UGUI Image & RawImage, Renderers(Cube, Plane, Sphere etc.);
- Displays on materials/objects that supports Texture2D or Sprite. Easy to extend with the PlayerComponent.

PLUS: All features of ImageLoader asset (on the AssetStore)

Please find the Readme document of ImageLoader at the below path:

Assets/SWAN Dev/ImageLoader/Readme - ImageLoader.pdf

Visit **Image Loader** page on our website.

Bonus Features

EasyIO Plugin: supports saving & loading image, text, class object, and file byte array on different platforms. Provides the ability for your app to write files in IndexedDB, so the cache management system can work correctly on WebGL.

(1) Pro TexturePlayer Components

1. **Base: IMBX_PlayerComponent**
   The base class of the Pro TexturePlayer. Includes the Play methods, player control methods, callback methods, and clear method. Also uses to hold the textures and related variables. Extend with this component to support displaying textures on UI components or other materials.

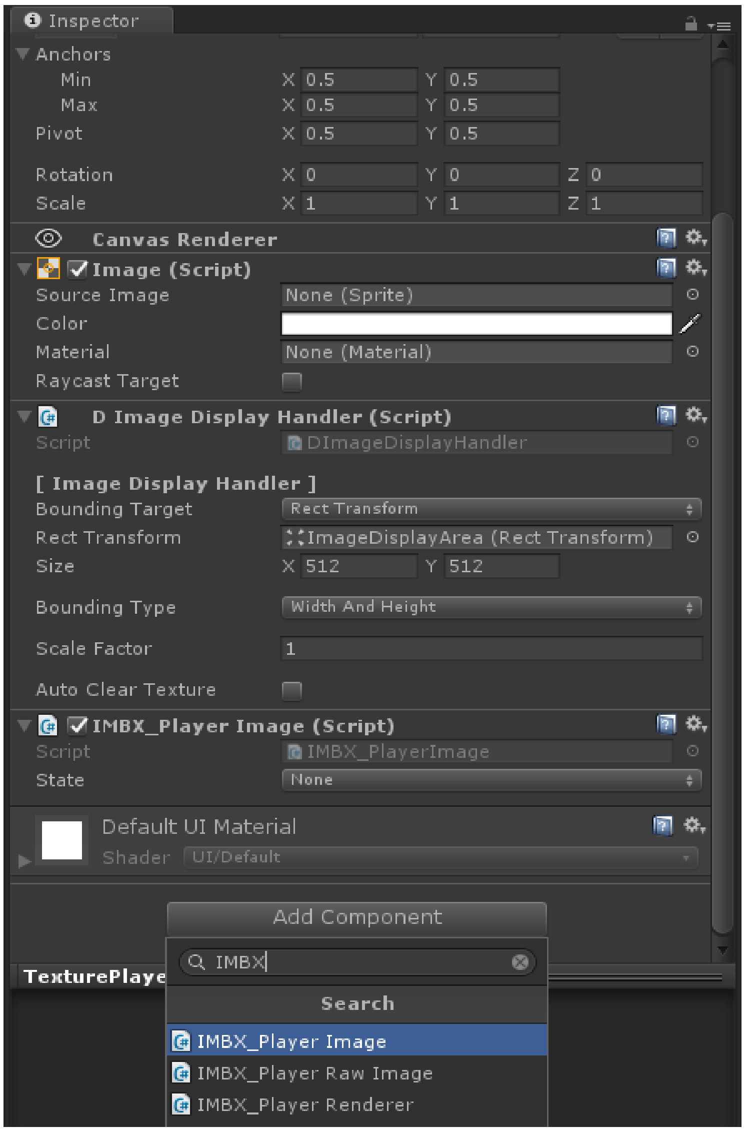
2. **IMBX_PlayerImage**
   Extends the PlayerComponent, supports display textures on UGUI Image.

3. **IMBX_PlayerRawImage**
   Extends the PlayerComponent, supports display textures on UGUI RawImage.

4. **IMBX_PlayerRenderer**
   Extends the PlayerComponent, supports display textures on Mesh Renderers such as Plane, Cube, Sphere etc.

   Add a component (e.g. IMBX_PlayerImage**) to an object in the scene or prefab, add a reference in your script and link the object:**

```
public IMBX.IMBX_PlayerImage proTexturePlayer;
```



```
Anchors
  Min                 X 0.5   Y 0.5
  Max                 X 0.5   Y 0.5
Pivot                 X 0.5   Y 0.5

Rotation              X 0     Y 0     Z 0
Scale                 X 1     Y 1     Z 1

Canvas Renderer
Image (Script)
Source Image          None (Sprite)
Color
Material              None (Material)
Raycast Target

D Image Display Handler (Script)
Script                DImageDisplayHandler

[ Image Display Handler ]
Bounding Target       Rect Transform
Rect Transform        ImageDisplayArea (Rect Transform)
Size                  X 512   Y 512

Bounding Type         Width And Height

Scale Factor          1

Auto Clear Texture

IMBX_Player Image (Script)
Script                IMBX_PlayerImage
State                 None

Default UI Material
Shader                UI/Default

Add Component
IMBX
Search
IMBX_Player Image
IMBX_Player Raw Image
IMBX_Player Renderer
TexturePlaye
```

(2) Texture Player API

After adding a player component to the target object in your scene or prefab, reference it to your script(see the provided example scenes). Then simply call the methods of the component to play and control the player.

e.g. proTexturePlayer.Play(...);

Play Methods:

Play(List<string>:imagePaths, float:fps, bool:optimizeMemoryUsage,
bool:ensureInSequence);

Play(List<string>:imagePaths, float:fps, bool:optimizeMemoryUsage,
int:maxUnifyWidth, int:maxUnifyHeight, bool:ensureInSequence);

Play(Texture2D[]:textures, float:fps, bool:optimizeMemoryUsage, int:maxUnifyWidth,
int:maxUnifyHeight);

Play(Texture2D[]:textures, float:fps, bool:optimizeMemoryUsage);

Play(string:fullFolderPath, float:fps, bool:optimizeMemoryUsage, int:maxUnifyWidth,
int:maxUnifyHeight, Enum.ImageFormatFiltering:imageFormatFilter,
int:maxNoOfImage, int:startIndex);

Play(string:fullFolderPath, float:fps, bool:optimizeMemoryUsage,
Enum.ImageFormatFiltering:imageFormatFilter,
int:maxNoOfImage, int:startIndex);

Callbacks:

SetOnPlayStartedCallback(Action<int, int>:onPlayStartedCallback);
This callback will be fired when the texture player started (once only). Returns the texture width and height with the callback.

SetOnPlayingCallback(Action<TextureIMBX, int>:onPlayingCallback);
This callback will be fired per frame when the player is playing. Returns the currently played texture and frame index with the callback.

SetOnLoadingCompleteCallback(Action:onLoadingCompleteCallback);
This callback will be fired when all the loading process finished.

Player Control Methods:

float PlaybackSpeed {get; set;}
bool IgnoreTimeScale {get; set;}
Common control: Pause(); Resume(); Stop();
Extra control: PlayOnce(); PlayBetween(int:startIndex, int:endIndex);
Set playback loop counter: SetLoop(int:loop);
Set playback direction: PlayForward(); PlayBackward(); Reverse();
Set to specific frame: SetDisplayFrame(int:frameIndex);

(3) Storage Cache & Loader Management

The ImageLoader functions are integrated into Pro TexturePlayer, it provides highly customizable settings for loading images and handles cache management per folder to cache images in the device storage. This can be done by setting appropriate parameters in the **LMGT** object (**LoaderManagement**) before loading images, like the below example.

Example:

loader.**LMGT**.CacheMode = ImageLoader.CacheMode.UseCached;
(**loader** can be a ImageLoader, ImageBatchLoader or ImageQueuedLoader instance)*

- **Cache Mode**
  ImageLoader.CacheMode : CacheMode
  (The behavior for handling Load and Cache files. ***NoCache***: do not auto save the image; ***UseCached***: download at the first time, use the locally cached file if exist; ***Replace***: download and replace the locally cached file if exist.)

- **Cache Directory**
  string : CacheDirectory (Getter)
  (The root directory for loading and storing/caching image files. Supports the application paths only, e.g. Application.persistentDataPath.)

  FilePathName.AppPath : CacheDirectoryEnum
  (The enum that determines which application path to load and save(cache) file to.)

- **Cache Folder Path**
  string : CacheFolderPath (Getter)
  (The cache folder path that combined by the root CacheDirectory and FolderName.)

- **Sub-Folder**
  string : FolderName
  (The sub-folder under cache directory for loading and storing(caching) files to.)

- **Cache as per URL**
  bool : CacheAsPerUrl
  (If 'true', for URL start with 'http', the loader will cache the image as per URL address.)

- **Batch FileName Prefix (for batch loader)**
  string : FileNamePrefix
  (The filename prefix for storing images. The final filename is combined by this prefix, separator, and index together.)

- **File Extension**
  string : FileExtension
  (Suggest use .jpg or .png only)

- **Number of Digits for the Index follow the Filename Prefix (for batch loader)**
  uint : FileIndexFormatDigitsCount
  (e.g. For digits count = 5, and index = 12, the result index string becomes 00012)

- **File Name Starting Index (for batch loader)**
  uint : FileNameStartingIndex
  (Set this value to set an offset for the filename index. The default starting index is 0.)

- **Separator text between the File Name and Index (for batch loader)**
  string : FileNameAndIndexSeparator
  (Please use filename friendly characters only)

- **Max. Files Per Folder**
  uint : MaxCacheFilePerFolder
  (The maximum number of files to cache per folder. Auto deletes the older files if exceed this limit. Zero means no limit.)

- **Min. Keep File Time**
  uint : MinTimeForKeepingFiles
  (e.g. m_MinTimeForKeepingFiles = 86400, 86400 seconds = 1 day
  For images in the target folder that modified within 1 day will not be auto deleted.)

- **File Expire Time**
  uint : MaxTimeForKeepingFiles
  (e.g. m_MaxTimeForKeepingFiles = 864000, 864000 seconds = 10 days
  Delete images modified more than 10 days ago.)

- **Loading Retry**
  uint : LoadingRetry
  (Number of times to retry when a loading failed. Retry per second until the retry value is Zero.)

- **Loading Timeout**
  float : LoadingTimeOut
  (The max time duration for waiting for the download process, stop and kill the loader if time exceeds.)

- **Allow/Avoid Loading the same URL (at the same time)**
  bool : AllowDuplicateDownload
  (If 'true', allows downloading the same URL using multiple loaders, else it will not start a new download if that URL is being downloaded.)

- **Options to deal with Texture Creation and Image Data**
  LoadingMode : LoadFileMode
  (An enum with several options, that you can select to create texture or not, or only return the image bytes data for custom decoding using custom image decoders, etc.)

- **Check if an image exists in the cache folder of this LMGT object:**
  bool: HasStorageCache(string:filename);

(4) Extra

Set waiting time for a particular frame:
proTexturePlayer.SetFrameDelay(int:frameIndex, float:delayTimeInSeconds);

Set to display a particular frame:
proTexturePlayer.SetDisplayFrame(int:frameIndex);

Get the current frame index:
proTexturePlayer.m_CurrentFrameIndex;

Get total frame count:
proTexturePlayer.m_TotalFrame;

Add a texture to the player:
proTexturePlayer.AddTexture(Texture2D:texture, float:interval, int:imageIndex);

Remove a texture from the player:
proTexturePlayer.RemoveTexture(int:index);

(5) Image Loader (Included)

A powerful asset for loading local and online images, with both in-memory cache, storage cache management features for managing loaded files.

Details please refer to the Readme document in the ImageLoader folder.
Visit our website.

THANK YOU

Thank you for using this package!
For any question and bug report please contact us at swan.ob2@gmail.com.
Remember to rate this asset on the Asset Store. Your review is always appreciated, and very important to the development of this asset!

Review And Rating

Visit our asset page to find out more!
https://www.swanob2.com/assets

SWAN DEV