Tazman-Audio

Fabric v2.2.1.Beta

Release Notes

Contents

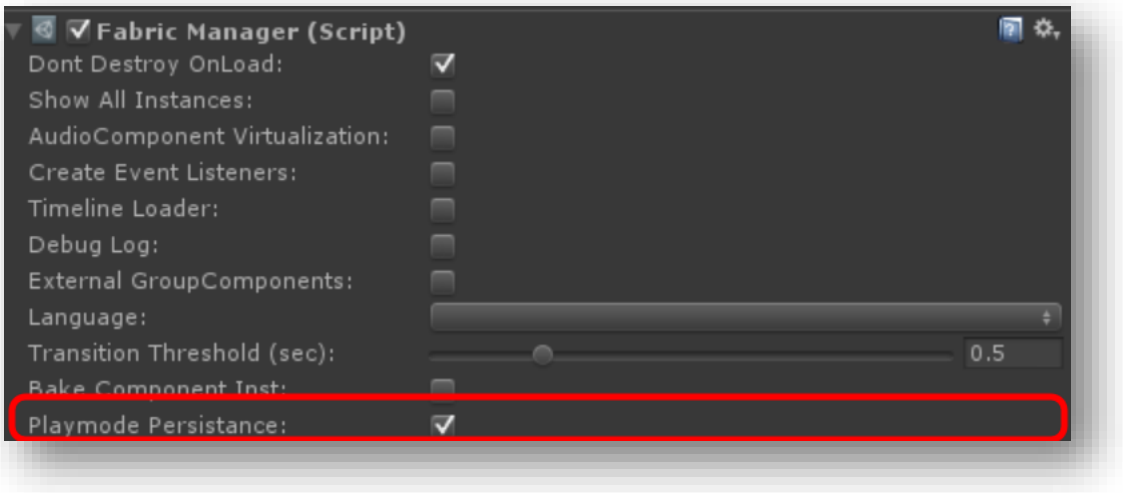
11-14-2014

Version 2.2.1.Beta

This is a beta version with considerable changes and new features implemented.

Playmode persistence

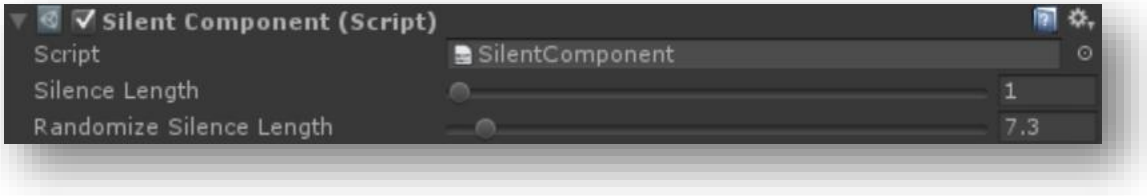
This beta version allows for any changes during editor play mode to persist even after the editor has stopped playing. This is ideal for live tweaking and balancing the mix of the game.



By default this feature is enabled but it is possible to disable it in the Fabric manager inspector UI as shows above.

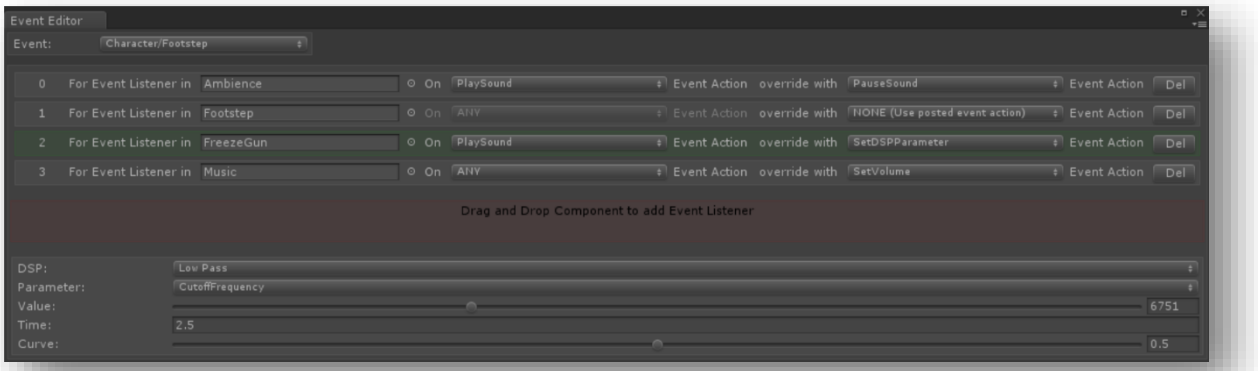
NOTE: At the moment there is a known issue with tweaking the timeline component which will be resolved for the official release.

Silent Component



The main purpose of the silent component is to be used as a child of other Fabric components and introduce a fixed or random length of silence.

EventEditor Window



The event editor window provides a great way to display all the event listeners associated with each event. It also allows to set the override actions as well as their properties.

PostEventNotify

A new set of PostEventNotify functions are available that allow to post events and get various notifications back such as:

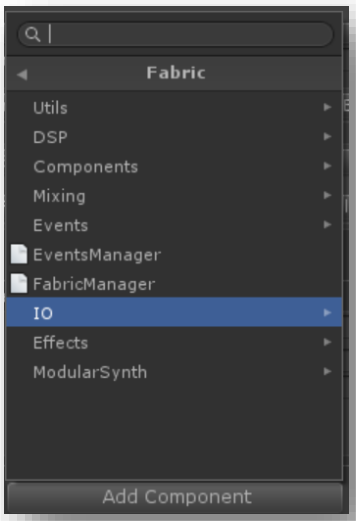
```
public enum EventNotificationType
{
    OnFinished,
    OnSequenceNextEntry,
    OnSequenceAdvance,
    OnSequenceEnd,
    OnSwitch,
}
```

Here is a script example on how to post an event and listen for a notification.

```
public void Notify(Fabric.EventNotificationType type, object info, GameObject gameObject)
{
    Debug.Log("OnNotify:" + type + "GameObject:" + gameObject.name);

    if (info != null)
    {
        if (type == Fabric.EventNotificationType.OnSequenceAdvance)
        {
            Fabric.Component c = info as Fabric.Component;

            if (c != null)
            {
                Debug.Log("Info: " + c.name);
            }
        }
    }
}


void Update ()
{

    if (Input.GetKeyDown(KeyCode.Alpha1))
    {
        Fabric.EventManager.Instance.PostEventNotify("Simple", gameObject, Notify);
    }
}
```

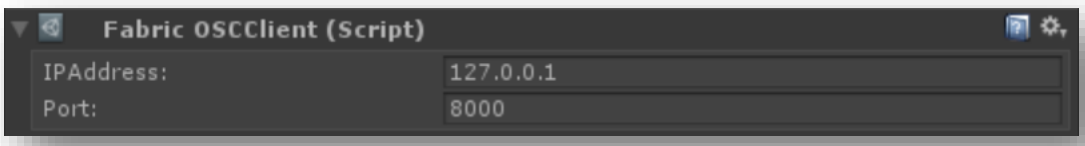
OSC Support

Another exciting new feature that has been added in this version of Fabric is OSC support. It allows for live tweaking in-game parameters on a games running either on the editor or on devices.



The OSC components are available through the game object “Add Component” menu option and are located inside the “Farbic/IO” folder. In there you will find the OSCClient and OSCServer components

OSC Client

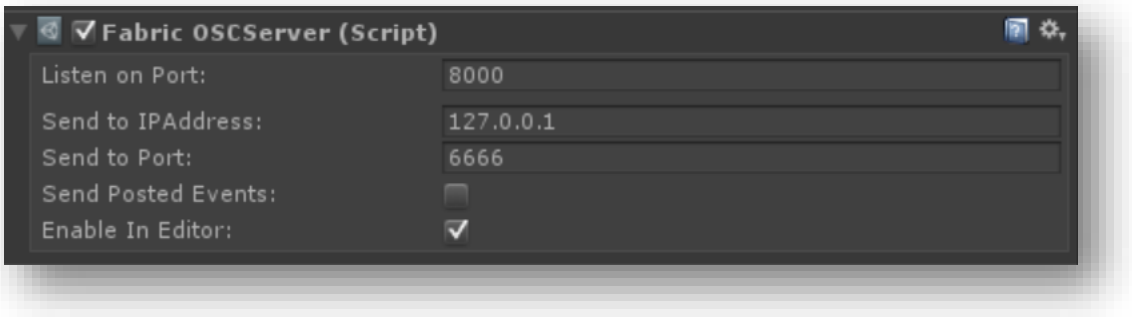


The OSC Client is mainly focused for live in-game tweaking and is responsible for sending all of the detected component changes. Almost all of the Fabric component properties are tweakable unless they are references to other components, this is something that will be supported in the future.

The IPAddress and port is the address in which an OSC Server should be present and ready to listen for the component changes.

OSC Server

This OSC Server component is mainly responsible for listening to OSC messages send by an OSC Client (editor or other application such TouchOSC)



The OSC Server uses the IP address of the device it's running on so it's only possible to set port

The server also allows to send events that have been posted in the game thus allowing them to be captures on any external application. This is a great method to post events from the game and use an external audio software to design/preview the creation of sound effects before importing them into Fabric.

It's also possible for the server to run in the editor therefore allowing external audio software to tweak component properties from a control surface.

Sending OSC Commands to Fabric

To send OSC commands from an application (i.e. TouchOSC) they need to be of the following format:

/ComponentPath/Fabric.ComponentName/PropertyName , Value

- ComponentPath: Is the full hierarchical path of the component separated by the '_' character (i.e. Audio_SFX_Explosion)
- Fabric.ComponentName: Is the name of the component located in the game object
- PropertyName: The name of the property to send the command
- Value: The value to set depending on the type (float, int, string etc.)

NOTE: Please refer to the OSC Component Commands section for a full list of all the commands available. There is also a TouchOSC layout files and a scene that demonstrated these features.

The type of messages that Fabric is sending for live in-game tweaking of parameters is:

- /fabric/componentpath, path (string)
    - Path of the component to select for sending OSC commands.

  NOTE: This command will cache all of the component properties on the selected game object so only the necessary changes will be send/updated over the network.

- /fabric/component, component (string), property (string), value (object)
    - Component name includes the Fabric namespace (i.e. Fabric.AudioComponent)
    - Property name usually start with an '_' (i.e. _volume, _pitch)
    - Property values supports: float, bool, int, double, string

- /fabric/event, name (string)
    - The event name

FABRIC OSC Component and Property commands

Component

NOTE: This is the base component inherited by most Fabric components (i.e. SequenceComponent, AudioComponent etc) so in order to send command to the base component you need to use the name of the inherited component and prefix the properties names with the **"base."** String.

```
 Fabric.(Selected Component Name) ,  base._dspComponents ( DSPComponent[] )
 Fabric.(Selected Component Name) ,  base._isComponentActive ( Boolean )
 Fabric.(Selected Component Name) ,  base._maxInstances ( Int32 )
 Fabric.(Selected Component Name) ,  base._stealingBehaviour (
ComponentStealingBehaviour )
 Fabric.(Selected Component Name) ,  base._minimumPlaybackInterval ( Single
)
 Fabric.(Selected Component Name) ,  base._overrideParentVolume ( Boolean )
 Fabric.(Selected Component Name) ,  base._volume ( Single )
 Fabric.(Selected Component Name) ,  base._volumeRandomization ( Single )
 Fabric.(Selected Component Name) ,  base._mute ( Boolean )
 Fabric.(Selected Component Name) ,  base._overrideParentPitch ( Boolean )
 Fabric.(Selected Component Name) ,  base._pitch ( Single )
 Fabric.(Selected Component Name) ,  base._pitchRandomization ( Single )
 Fabric.(Selected Component Name) ,  base._override2DProperties ( Boolean )
 Fabric.(Selected Component Name) ,  base._pan2D ( Single )
 Fabric.(Selected Component Name) ,  base._pan2DRandomization ( Single )
 Fabric.(Selected Component Name) ,  base._override3DProperties ( Boolean )
 Fabric.(Selected Component Name) ,  base._priority ( Int32 )
 Fabric.(Selected Component Name) ,  base._panLevel ( Single )
 Fabric.(Selected Component Name) ,  base._spreadLevel ( Single )
 Fabric.(Selected Component Name) ,  base._dopplerLevel ( Single )
 Fabric.(Selected Component Name) ,  base._maxDistance ( Single )
 Fabric.(Selected Component Name) ,  base._minDistance ( Single )
 Fabric.(Selected Component Name) ,  base._rolloffMode ( AudioRolloffMode )
 Fabric.(Selected Component Name) ,  base._overrideFadeProperties ( Boolean
)
 Fabric.(Selected Component Name) ,  base._fadeInTime ( Single )
 Fabric.(Selected Component Name) ,  base._fadeInCurve ( Single )
 Fabric.(Selected Component Name) ,  base._fadeOutTime ( Single )
 Fabric.(Selected Component Name) ,  base._fadeOutCurve ( Single )
 Fabric.(Selected Component Name) ,  base._overrideBypassProperties (
Boolean )
 Fabric.(Selected Component Name) ,  base._bypassEffects ( Boolean )
 Fabric.(Selected Component Name) ,  base._bypassListenerEffects ( Boolean
)
 Fabric.(Selected Component Name) ,  base._bypassReverbZones ( Boolean )
 Fabric.(Selected Component Name) ,  base._overrideMusicTimeSettings (
Boolean )
 Fabric.(Selected Component Name) ,  base._musicTimeSettingsIndex ( Int32 )
 Fabric.(Selected Component Name) ,  base._musicTempo ( Single )
 Fabric.(Selected Component Name) ,  base._musicTimeSignatureLower ( Int32
)
 Fabric.(Selected Component Name) ,  base._musicTimeSignatureUpper ( Int32
)
 Fabric.(Selected Component Name) ,  base._fadeParameter (
InterpolatedParameter )
 Fabric.(Selected Component Name) ,  base._componentStatus (
ComponentStatus )
```

```
 Fabric.(Selected Component Name) ,  base._multipleInstancesPerGameObject (
Boolean )
 Fabric.(Selected Component Name) ,  base._componentVirtualization (
Boolean )
 Fabric.(Selected Component Name) ,  base._componentVirtualizationEvents
 Fabric.(Selected Component Name) ,  base.profiler ( CodeProfiler )
 Fabric.(Selected Component Name) ,  base._RTPManager ( RTPManager )
 Fabric.(Selected Component Name) ,  base.Guid ( String )
```

SequenceComponent

```
 Fabric.SequenceComponent ,  _currentlyPlayingComponent ( Component )
 Fabric.SequenceComponent ,  _playlist ( Component[] )
 Fabric.SequenceComponent ,  _playlistPlayToEnd ( Boolean[] )
 Fabric.SequenceComponent ,  _resetOnFirstPlay ( Boolean )
 Fabric.SequenceComponent ,  _syncToMusicOnFirstPlay ( Boolean )
 Fabric.SequenceComponent ,  _transitionOffset ( Single )
 Fabric.SequenceComponent ,  _transitionOffsetRandomization ( Single )
 Fabric.SequenceComponent ,  _sequenceType ( SequenceComponentType )
 Fabric.SequenceComponent ,  _sequencePlayMode ( SequenceComponentPlayMode
)
 Fabric.SequenceComponent ,  _sequenceAdvanceMode (
SequenceComponentAdvanceMode )
```

TimelineComponent

```
 Fabric.TimelineComponent ,  _isOneShot ( Boolean )
```

TimelineLayer

```
 Fabric.TimelineLayer ,  _regions ( TimelineRegion[] )
 Fabric.TimelineLayer ,  _parameters ( ParameterToProperty[] )
 Fabric.TimelineLayer ,  _controlParameter ( TimelineParameter )
```

AudioComponent

```
 Fabric.AudioComponent ,  _audioClip ( AudioClip )
 Fabric.AudioComponent ,  _audioClipHandle ( AudioClipHandle )
 Fabric.AudioComponent ,  _dynamicAudioClipLoading ( Boolean )
 Fabric.AudioComponent ,  _dynamicAudioClipUnloadDelay ( Single )
 Fabric.AudioComponent ,  _dynamicAsyncAudioClipLoading ( Boolean )
 Fabric.AudioComponent ,  _audioClipAssetPath ( AudioClipAssetPath )
 Fabric.AudioComponent ,  _delay ( Double )
 Fabric.AudioComponent ,  _delayInBeats ( Int32 )
 Fabric.AudioComponent ,  _loop ( Boolean )
 Fabric.AudioComponent ,  _numLoops ( Int32 )
 Fabric.AudioComponent ,  _numLoopsLeft ( Int32 )
 Fabric.AudioComponent ,  _loopMarkersLoaded ( Boolean )
 Fabric.AudioComponent ,  _dontPlay ( Boolean )
 Fabric.AudioComponent ,  _dontStopOnDestroy ( Boolean )
 Fabric.AudioComponent ,  _ignoreVirtualization ( Boolean )
 Fabric.AudioComponent ,  _randomizePosition ( Boolean )
 Fabric.AudioComponent ,  _randomizeMinPosition ( Single )
 Fabric.AudioComponent ,  _randomizeMaxPosition ( Single )
```

```
Fabric.AudioComponent ,  _syncWithMusicTime ( Boolean )
Fabric.AudioComponent ,  _musicExitCueTime ( Double )
Fabric.AudioComponent ,  _markers ( List`1 )
```

SilentComponent

```
Fabric.SilentComponent ,  _silenceLength ( Single )
Fabric.SilentComponent ,  _randomizeSilenceLength ( Single )
```

RandomComponent

```
Fabric.RandomComponent ,  _playMode ( RandomComponentPlayMode )
Fabric.RandomComponent ,  _randomWeights ( Int32[] )
Fabric.RandomComponent ,  _looped ( Boolean )
Fabric.RandomComponent ,  _delay ( Single )
Fabric.RandomComponent ,  _delayRandomization ( Single )
Fabric.RandomComponent ,  _delayMaxRandomization ( Single )
Fabric.RandomComponent ,  _shareRandomNoRepeatHistory ( Boolean )
```

TimelineRegion

```
Fabric.TimelineRegion ,  _component ( RandomComponent )
Fabric.TimelineRegion ,  _volumeEnvelope ( Envelope )
Fabric.TimelineRegion ,  _x ( Single )
Fabric.TimelineRegion ,  _loop ( Boolean )
Fabric.TimelineRegion ,  _width ( Single )
Fabric.TimelineRegion ,  _autopitchenabled ( Boolean )
Fabric.TimelineRegion ,  _autopitchreference ( Single )
Fabric.TimelineRegion ,  _startMode ( RegionStartMode )
Fabric.TimelineRegion ,  _loopMode ( RegionLoopMode )
Fabric.TimelineRegion ,  _regionIsActive ( Boolean )
Fabric.TimelineRegion ,  _fadeInType ( CurveTypes )
Fabric.TimelineRegion ,  _fadeOutType ( CurveTypes )
Fabric.TimelineRegion ,  _regionVolume ( Single )
```

MusicComponent

```
Fabric.MusicComponent ,  _transitions ( List`1 )
Fabric.MusicComponent ,  _defaultComponent ( Component )
Fabric.MusicComponent ,  _toComponent ( Component )
Fabric.MusicComponent ,  _syncToMusicOnFirstPlay ( Boolean )
```

GroupComponent

```
Fabric.GroupComponent ,  _showInMixerView ( Boolean )
Fabric.GroupComponent ,  _targetGroupComponentPath ( String )
Fabric.GroupComponent ,  _isRegisteredWithMainHierarchy ( Boolean )
Fabric.GroupComponent ,  _ignoreUnloadUnusedAssets ( Boolean )
Fabric.GroupComponent ,  _registeredWithMainRefCount ( Int32 )
```

SamplePlayerComponent

```
 Fabric.SamplePlayerComponent ,  sampleFileInstance ( SampleFileInstance )
 Fabric.SamplePlayerComponent ,  sampleFileName ( String )
 Fabric.SamplePlayerComponent ,  _channelGains ( Single[] )
 Fabric.SamplePlayerComponent ,  _leftLoopMarker ( Int32 )
 Fabric.SamplePlayerComponent ,  _rightLoopMarker ( Int32 )
```

RandomAudioClipComponent

```
 Fabric.RandomAudioClipComponent ,  _playMode ( RandomComponentPlayMode )
 Fabric.RandomAudioClipComponent ,  _randomWeights ( Int32[] )
 Fabric.RandomAudioClipComponent ,  _shareRandomNoRepeatHistory ( Boolean )
 Fabric.RandomAudioClipComponent ,  _audioClips ( AudioClip[] )
 Fabric.RandomAudioClipComponent ,  _looped ( Boolean )
 Fabric.RandomAudioClipComponent ,  _loopDelay ( Single )
 Fabric.RandomAudioClipComponent ,  _delayRandomization ( Single )
 Fabric.RandomAudioClipComponent ,  _delayMaxRandomization ( Single )
```

SwitchComponent

```
 Fabric.SwitchComponent ,  _selectedComponent ( Component )
 Fabric.SwitchComponent ,  _startOnSwitch ( Boolean )
 Fabric.SwitchComponent ,  _syncToMusicOnFirstPlay ( Boolean )
 Fabric.SwitchComponent ,  _switchComponentSwitchType (
SwitchComponentSwitchType )
```

DialogAudioComponent

```
 Fabric.DialogAudioComponent ,  _audioClipReference ( String )
```

AssetBundleAudioComponent

```
 Fabric.AssetBundleAudioComponent ,  _audioClipReference ( String )
 Fabric.AssetBundleAudioComponent ,  _fallbackLocation ( String )
```

IntroLoopOutroComponent

```
 Fabric.IntroLoopOutroComponent ,  _stages ( Component[] )
 Fabric.IntroLoopOutroComponent ,  _transitionOffset ( Single )
 Fabric.IntroLoopOutroComponent ,  _transitionOffsetRandomization ( Single
)
 Fabric.IntroLoopOutroComponent ,  _playLoopToEnd ( Boolean )
```

WwwAudioComponent

```
Fabric.WwwAudioComponent ,  _fileLocation ( wwwFileLocation )
Fabric.WwwAudioComponent ,  _audioType ( AudioType )
Fabric.WwwAudioComponent ,  _is3D ( Boolean )
Fabric.WwwAudioComponent ,  _isStreaming ( Boolean )
Fabric.WwwAudioComponent ,  _languageSupported ( Boolean )
Fabric.WwwAudioComponent ,  _loadOnStart ( Boolean )
Fabric.WwwAudioComponent ,  _audioClipReference ( String )
```

RTPManager

```
Fabric.RTPManager ,  _parameters ( RTPParameterToProperty[] )
Fabric.RTPManager ,  _RTPParameters ( List`1 )
```

TimelineParameter

```
Fabric.TimelineParameter ,  _name ( String )
Fabric.TimelineParameter ,  _min ( Single )
Fabric.TimelineParameter ,  _max ( Single )
Fabric.TimelineParameter ,  _loopBehaviour ( ParameterLoopBehaviour )
Fabric.TimelineParameter ,  _velocity ( Single )
Fabric.TimelineParameter ,  _seekSpeed ( Single )
Fabric.TimelineParameter ,  _seekTarget ( Single )
Fabric.TimelineParameter ,  _value ( Single )
Fabric.TimelineParameter ,  _resetToDefaultValue ( Boolean )
Fabric.TimelineParameter ,  _markers ( RTPMarkers )
```

AudioClipHandle

```
Fabric.AudioClipHandle ,  _audioClipPath ( String )
```

Envelope

```
Fabric.Envelope ,  _points ( Point[] )
Fabric.Envelope ,  _selectedPoint ( Int32 )
```

SampleFileInstance

```
Fabric.SampleFileInstance ,  _position ( Int32 )
Fabric.SampleFileInstance ,  _start ( Int32 )
Fabric.SampleFileInstance ,  _end ( Int32 )
Fabric.SampleFileInstance ,  _loop ( Boolean )
```

ParameterToProperty

```
Fabric.ParameterToProperty ,  _parameter ( TimelineParameter )
Fabric.ParameterToProperty ,  _property ( Property )
Fabric.ParameterToProperty ,  _envelope ( Envelope )
```

RTPMarkers

```
Fabric.RTPMarkers ,  _markers ( List`1 )
Fabric.RTPMarkers ,  _keyOffMarker ( RTPMarker )
```

Marker

```
Fabric.Marker ,  name ( String )
Fabric.Marker ,  offsetSamples ( Int32 )
Fabric.Marker ,  offsetTime ( Single )
```

MusicTransition

```
Fabric.MusicTransition ,  _fromComponent ( MusicTransitionHolder )
Fabric.MusicTransition ,   transition ( MusicTransitionHolder )
Fabric.MusicTransition ,  _toComponent ( MusicTransitionHolder )
```

RTPParameterToProperty

```
Fabric.RTPParameterToProperty ,  _parameter ( RTPParameter )
Fabric.RTPParameterToProperty ,  _property ( RTPProperty )
Fabric.RTPParameterToProperty ,  _previousPosition ( Vector3 )
Fabric.RTPParameterToProperty ,  _volumeMeter ( VolumeMeter )
Fabric.RTPParameterToProperty ,  _rtpModulator ( RTPModulator )
Fabric.RTPParameterToProperty ,  _type ( RTPParameterType )
Fabric.RTPParameterToProperty ,  _envelope ( Envelope )
```

RTPParameter

```
Fabric.RTPParameter ,  Name ( String )
Fabric.RTPParameter ,  _value ( Single )
Fabric.RTPParameter ,  _min ( Single )
Fabric.RTPParameter ,  _max ( Single )
Fabric.RTPParameter ,  _loopBehaviour ( ParameterLoopBehaviour )
Fabric.RTPParameter ,  _velocity ( Single )
Fabric.RTPParameter ,  _seekSpeed ( Single )
Fabric.RTPParameter ,  _seekTarget ( Single )
Fabric.RTPParameter ,  _resetToDefaultValue ( Boolean )
Fabric.RTPParameter ,  _markers ( RTPMarkers )
```

RTPMarker

```
Fabric.RTPMarker ,  _value ( Single )
Fabric.RTPMarker ,  _label ( String )
Fabric.RTPMarker ,  _keyOffEnabled ( Boolean )
Fabric.RTPMarker ,  _keyOff ( Boolean )
```

Point

```
Fabric.Point ,  _x ( Single )
Fabric.Point ,  _y ( Single )
Fabric.Point ,  _curveType ( CurveTypes )
```

RTPProperty

```
Fabric.RTPProperty ,  _property ( Int32 )
Fabric.RTPProperty ,  _name ( String )
Fabric.RTPProperty ,  _min ( Single )
Fabric.RTPProperty ,  _max ( Single )
```

VolumeMeter

```
Fabric.VolumeMeter ,  volumeMeterState ( VolumeMeterState )
Fabric.VolumeMeter ,  _is3D ( Boolean )
Fabric.VolumeMeter ,  profiler ( CodeProfiler )
```

RTPModulator

```
Fabric.RTPModulator ,  type ( ModulatorType )
Fabric.RTPModulator ,  frequency ( Single )
Fabric.RTPModulator ,  phase ( Single )
Fabric.RTPModulator ,  amplitude ( Single )
Fabric.RTPModulator ,  offset ( Single )
Fabric.RTPModulator ,  invert ( Single )
```