

emt-sdk

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Chapter 1

Namespace Index

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Class Index

3.1 Class List

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(1) Device -> Server	27
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Information for the server to filter out what content the device is capable of (interactively) displaying.	29
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Main emt_sdk event communication server-client used for both receiving and sending events from/to other devices. Should not be used in user code.	36
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Client event relaying connection for any external applications using emt_sdk events. Receives master local, remote and events sent through this client.	39
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Server -> Device Message wrapper to allow identifying which message was sent using protobuf.	88

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Describes screen keystone transformation quad Coordinate space starts at -1, -1 for the bottom left corner And ends at 1, 1 for the top right corner	90
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Chapter 4

Namespace Documentation

4.1 `emt_sdk` Namespace Reference

4.2 `emt_sdk.Communication` Namespace Reference

Classes

- class [ExhibitConnection](#)
- class [JsonObjectStringReader](#)

Enumerations

- enum `ConnectionStateEnum` {
 Disconnected , **Connected** , **VersionCheck** , **VerifyRequest** ,
 VerifyWait , **Verified** , **DescriptorSent** , **PackageInfoReceived** }

4.3 `emt_sdk.Events` Namespace Reference

Classes

- class [EventManager](#)
Main `emt_sdk` event communication server-client used for both receiving and sending events from/to other devices. Should not be used in user code.
- class [EventRelayClient](#)
Client event relaying connection for any external applications using `emt_sdk` events. Receives master local, remote and events sent through this client.
- class [EventRelayServer](#)
Server event relaying connection for any external applications using `emt_sdk` events. Relays local, remote and even relayed events to a connected [EventRelayClient](#).

4.4 emt_sdk.Extensions Namespace Reference

Classes

- class **IMessageExtensions**
Extensions for protobug communication
- class **PackageExtensions**
Implementation of Package logic. Extensions are used due to Package being autogenerated.
- class **VersionExtensions**

4.5 emt_sdk.Generated Namespace Reference

4.6 emt_sdk.Generated.ScenePackage Namespace Reference

Classes

- class [Action](#)
- class [CanvasDimensions](#)
- class **ConditionConverter**
- class **Converter**
- class **DisplayTypeConverter**
- class [Element](#)
- class **InputTypeConverter**
- class [Mapping](#)
- class [Metadata](#)
- class [Package](#)
- class [PackageClass](#)
- class **PackageTypeConverter**
- class [Parameters](#)
- class [Sync](#)

Enumerations

- enum **Condition** {
 Above , **AboveOrEquals** , **Below** , **BelowOrEquals** ,
 Equals }
- enum **InputType** {
 Event , **Gesture** , **GestureDrag** , **Value** ,
 ValueTrigger }
- enum **PackageType** { **Data** , **Script** }
- enum **DisplayType** {
 Gallery , **Model** , **Multires** , **Quiz** ,
 Scene , **Video** }

4.7 emt_sdk.Scene Namespace Reference

Classes

- class [Gallery](#)
Definition of gallery specific data
- class [GltfObject](#)
Definition of 3D scene specific data
- class [VideoScene](#)
Definition of video scene specific data

4.8 emt_sdk.ScenePackage Namespace Reference

Classes

- class [PackageLoader](#)

4.9 emt_sdk.Settings Namespace Reference

Classes

- class [ColorSetting](#)
- class [CommunicationSettings](#)
- class [DisplaySetting](#)
- class [IPWSetting](#)
[Settings](#) for an Interactive Projection Wall
- class [SkewSetting](#)
Describes screen keystone transformation quad Coordinate space starts at -1, -1 for the bottom left corner And ends at 1, 1 for the top right corner

4.10 Naki3D Namespace Reference

4.11 Naki3D.Common Namespace Reference

4.12 Naki3D.Common.Protocol Namespace Reference

Classes

- class [BestUserChangedData](#)
- class [CameraReflection](#)
Holder for reflection information generated from camera.proto
- class [CECMessage](#)
- class [ClearPackage](#)
Instructs the device to clear/unload the loaded package, optionally deleting the package data.

- class **CommandsReflection**
Holder for reflection information generated from commands.proto
- class [ConnectionAcknowledgement](#)
(2) Server -> Device
- class **ConnectionReflection**
Holder for reflection information generated from connection.proto
- class [ConnectionRequest](#)
(1) Device -> Server
- class [DeviceDescriptor](#)
Information for the server to filter out what content the device is capable of (interactively) displaying.
- class [DeviceMessage](#)
Device -> Server Message wrapper, same as above.
- class [EncryptionInfo](#)
For setting up p2p encryption in case of
- class [Environment](#)
- class [EventScript](#)
- class [GestureData](#)
Raspi -> Device
- class [HandMovementData](#)
- class [Image](#)
- class **KeyboardReflection**
Holder for reflection information generated from keyboard.proto
- class [KeyboardUpdateData](#)
Raspi -> Device
- class [LoadPackage](#)
Instructs the device to load the specified resource and start displaying it.
- class **ManagementReflection**
Holder for reflection information generated from management.proto
- class [ManagementRequest](#)
We've covered there's going to be an optional management app, but not the capabilities, just a placeholder
- class [ManagementResponse](#)
- class [Model3D](#)
- class [MouseButtonData](#)
- class [MouseMoveData](#)
Raspi -> Device
- class **MouseReflection**
Holder for reflection information generated from mouse.proto
- class [MouseScrollData](#)
- class [Ping](#)
Basically an empty ping message, just to maintain connection.
- class [Resource](#)
- class **ResourceReflection**
Holder for reflection information generated from resource.proto
- class [Scene3D](#)
- class [SensorControlMessage](#)
Device -> RasPi Message wrapper, same as above.
- class [SensorInfo](#)
- class [SensorList](#)
- class [SensorListRequest](#)
- class [SensorMessage](#)
RasPi -> Device Message wrapper, same as above.
- class **SensorReflection**

- Holder for reflection information generated from sensor.proto*
- class [ServerMessage](#)
 - Server -> Device Message wrapper to allow identifying which message was sent using protobuf.*
- class **TypesReflection**
 - Holder for reflection information generated from types.proto*
- class [Vector2](#)
- class [Vector3](#)
- class [VersionInfo](#)
 - Same for both peers, version for compatibility checks. Probably SEMVER?*
- class [Video](#)
- class **WrappersReflection**
 - Holder for reflection information generated from wrappers.proto*

Enumerations

- enum **GestureType** {
GestureWaving = 0 , **GestureSwipeLeft** = 1 , **GestureSwipeRight** = 2 , **GestureSwipeUp** = 3 ,
GestureSwipeDown = 4 , **GesturePush** = 5 , **GestureTest** = 6 , **GestureWaving** = 0 ,
GestureSwipeLeft = 1 , **GestureSwipeRight** = 2 , **GestureSwipeUp** = 3 , **GestureSwipeDown** = 4 ,
GesturePush = 5 , **GestureTest** = 6 }
- enum **HandType** { **HandLeft** = 0 , **HandRight** = 1 , **HandLeft** = 0 , **HandRight** = 1 }
- enum [PerformanceCap](#) {
[Slow](#) = 0 , [Medium](#) = 1 , [Fast](#) = 2 , [Slow](#) = 0 ,
[Medium](#) = 1 , [Fast](#) = 2 }
- enum [SensorType](#) {
Gesture = 0 , **Image** = 1 , **Depth** = 2 , **Light** = 3 ,
Microphone = 4 , [lr](#) = 5 , **Gesture** = 0 , **Image** = 1 ,
Depth = 2 , **Light** = 3 , **Microphone** = 4 , [lr](#) = 5 }
- enum **DeviceType** {
Unknown = 0 , **lpw** = 1 , **Pge** = 2 , **Unknown** = 0 ,
lpw = 1 , **Pge** = 2 }
- enum **KeyActionType** { **KeyUp** = 0 , **KeyDown** = 1 , **KeyUp** = 0 , **KeyDown** = 1 }
- enum **MouseActionType** { **ButtonUp** = 0 , **ButtonDown** = 1 , **ButtonUp** = 0 , **ButtonDown** = 1 }
- enum **MouseScrollType** { **ScrollUp** = 0 , **ScrollDown** = 1 , **ScrollUp** = 0 , **ScrollDown** = 1 }
- enum [CECAction](#) { **PowerOn** = 0 , [PowerOff](#) = 1 , **PowerOn** = 0 , [PowerOff](#) = 1 }
 - Reverse control*
- enum **GestureType** {
GestureWaving = 0 , **GestureSwipeLeft** = 1 , **GestureSwipeRight** = 2 , **GestureSwipeUp** = 3 ,
GestureSwipeDown = 4 , **GesturePush** = 5 , **GestureTest** = 6 , **GestureWaving** = 0 ,
GestureSwipeLeft = 1 , **GestureSwipeRight** = 2 , **GestureSwipeUp** = 3 , **GestureSwipeDown** = 4 ,
GesturePush = 5 , **GestureTest** = 6 }
- enum **HandType** { **HandLeft** = 0 , **HandRight** = 1 , **HandLeft** = 0 , **HandRight** = 1 }
- enum [PerformanceCap](#) {
[Slow](#) = 0 , [Medium](#) = 1 , [Fast](#) = 2 , [Slow](#) = 0 ,
[Medium](#) = 1 , [Fast](#) = 2 }
- enum [SensorType](#) {
Gesture = 0 , **Image** = 1 , **Depth** = 2 , **Light** = 3 ,
Microphone = 4 , [lr](#) = 5 , **Gesture** = 0 , **Image** = 1 ,
Depth = 2 , **Light** = 3 , **Microphone** = 4 , [lr](#) = 5 }
- enum **DeviceType** {
Unknown = 0 , **lpw** = 1 , **Pge** = 2 , **Unknown** = 0 ,
lpw = 1 , **Pge** = 2 }
- enum **KeyActionType** { **KeyUp** = 0 , **KeyDown** = 1 , **KeyUp** = 0 , **KeyDown** = 1 }
- enum **MouseActionType** { **ButtonUp** = 0 , **ButtonDown** = 1 , **ButtonUp** = 0 , **ButtonDown** = 1 }
- enum **MouseScrollType** { **ScrollUp** = 0 , **ScrollDown** = 1 , **ScrollUp** = 0 , **ScrollDown** = 1 }
- enum [CECAction](#) { **PowerOn** = 0 , [PowerOff](#) = 1 , **PowerOn** = 0 , [PowerOff](#) = 1 }
 - Reverse control*

4.12.1 Enumeration Type Documentation

4.12.1.1 CECAction [1/2]

enum `Naki3D.Common.Protocol.CECAction`

Reverse conrtol

Enumerator

PowerOff	TODO: Brightness, saturation, etc...
PowerOff	TODO: Brightness, saturation, etc...

4.12.1.2 CECAction [2/2]

enum `Naki3D.Common.Protocol.CECAction`

Reverse conrtol

Enumerator

PowerOff	TODO: Brightness, saturation, etc...
PowerOff	TODO: Brightness, saturation, etc...

4.12.1.3 PerformanceCap [1/2]

enum `Naki3D.Common.Protocol.PerformanceCap`

Enumerator

Slow	Can play video, perhaps display simple models (e.g. 2-core with Intel iGPU).
Medium	Slow + can display reasonably complex scenes, models with interaction (e.g. the current prototype mini PC)
Fast	Medium + can work with/display more complex data, like point clouds or unoptimized meshes, volumetric data (for possible future display types)
Slow	Can play video, perhaps display simple models (e.g. 2-core with Intel iGPU).
Medium	Slow + can display reasonably complex scenes, models with interaction (e.g. the current prototype mini PC)
Fast	Medium + can work with/display more complex data, like point clouds or unoptimized meshes, volumetric data (for possible future display types)

4.12.1.4 PerformanceCap [2/2]

enum [Naki3D.Common.Protocol.PerformanceCap](#)

Enumerator

Slow	Can play video, perhaps display simple models (e.g. 2-core with Intel iGPU).
Medium	Slow + can display reasonably complex scenes, models with interaction (e.g. the current prototype mini PC)
Fast	Medium + can work with/display more complex data, like point clouds or unoptimized meshes, volumetric data (for possible future display types)
Slow	Can play video, perhaps display simple models (e.g. 2-core with Intel iGPU).
Medium	Slow + can display reasonably complex scenes, models with interaction (e.g. the current prototype mini PC)
Fast	Medium + can work with/display more complex data, like point clouds or unoptimized meshes, volumetric data (for possible future display types)

4.12.1.5 SensorType [1/2]

enum [Naki3D.Common.Protocol.SensorType](#)

Enumerator

Ir	TODO: other sensors?
Ir	TODO: other sensors?

4.12.1.6 SensorType [2/2]

enum [Naki3D.Common.Protocol.SensorType](#)

Enumerator

Ir	TODO: other sensors?
Ir	TODO: other sensors?

Chapter 5

Class Documentation

5.1 emt_sdk.Generated.ScenePackage.Action Class Reference

Properties

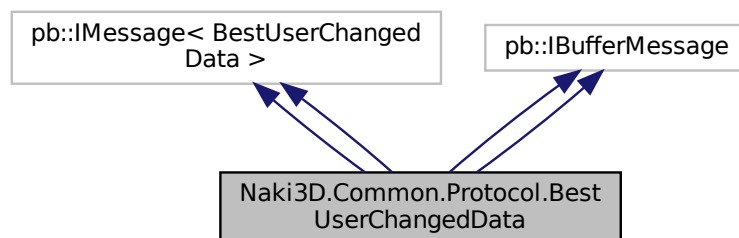
- [Mapping](#) **Mapping** [getset]
- string **Name** [getset]
- InputType **Type** [getset]

The documentation for this class was generated from the following file:

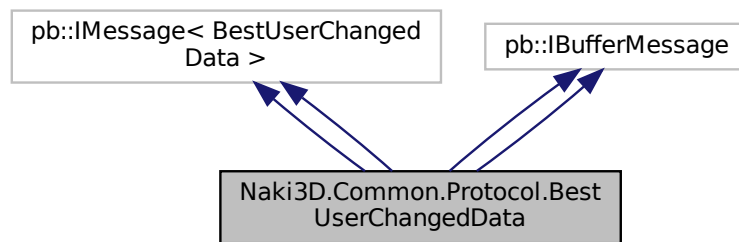
- emt-sdk/Generated/ScenePackage/Package.cs

5.2 Naki3D.Common.Protocol.BestUserChangedData Class Reference

Inheritance diagram for Naki3D.Common.Protocol.BestUserChangedData:



Collaboration diagram for Naki3D.Common.Protocol.BestUserChangedData:



Public Member Functions

- **BestUserChangedData** ([BestUserChangedData](#) other)
- [BestUserChangedData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([BestUserChangedData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([BestUserChangedData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **BestUserChangedData** ([BestUserChangedData](#) other)
- [BestUserChangedData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([BestUserChangedData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([BestUserChangedData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **BestUserIdFieldNumber** = 1
Field number for the "best_user_id" field.
- const int **UserCountFieldNumber** = 2
Field number for the "user_count" field.

Properties

- static pb::MessageParser< [BestUserChangedData](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- int **BestUserId** [getset]
- int **UserCount** [getset]

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Camera.cs
- emt-sdk/obj/Release/netstandard2.0/Camera.cs

5.3 emt_sdk.Generated.ScenePackage.CanvasDimensions Class Reference

Properties

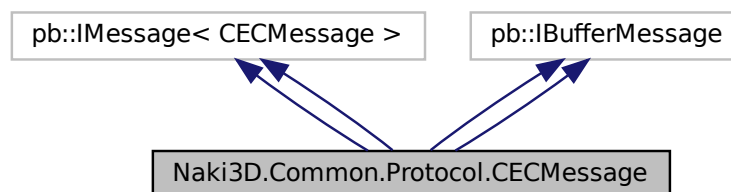
- long? **Height** [getset]
- long? **Width** [getset]

The documentation for this class was generated from the following file:

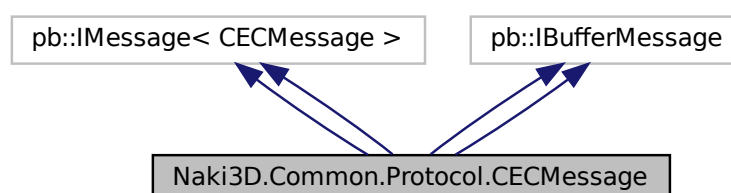
- emt-sdk/Generated/ScenePackage/Package.cs

5.4 Naki3D.Common.Protocol.CECMessage Class Reference

Inheritance diagram for Naki3D.Common.Protocol.CECMessage:



Collaboration diagram for Naki3D.Common.Protocol.CECMessage:



Public Member Functions

- **CECMessage** ([CECMessage](#) other)
- [CECMessage](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([CECMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([CECMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **CECMessage** ([CECMessage](#) other)
- [CECMessage](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([CECMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([CECMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ActionFieldNumber** = 1
Field number for the "action" field.

Properties

- static pb::MessageParser< [CECMessage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.CECAction **Action** [get set]

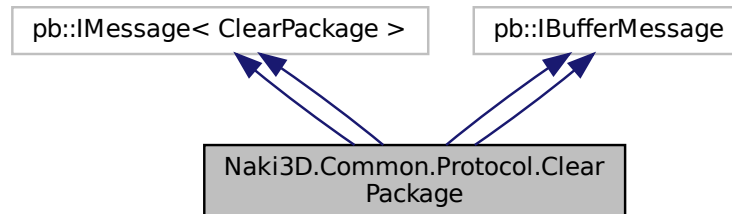
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Sensor.cs
- emt-sdk/obj/Release/netstandard2.0/Sensor.cs

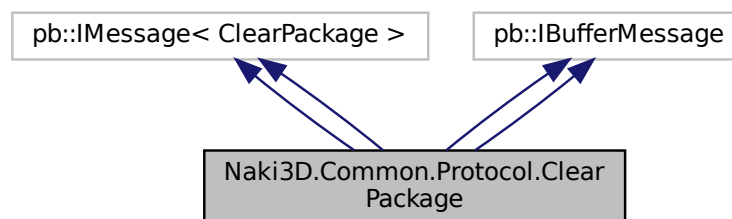
5.5 Naki3D.Common.Protocol.ClearPackage Class Reference

Instructs the device to clear/unload the loaded package, optionally deleting the package data.

Inheritance diagram for Naki3D.Common.Protocol.ClearPackage:



Collaboration diagram for Naki3D.Common.Protocol.ClearPackage:



Public Member Functions

- **ClearPackage** ([ClearPackage](#) other)
- [ClearPackage Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([ClearPackage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ClearPackage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ClearPackage** ([ClearPackage](#) other)
- [ClearPackage Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([ClearPackage](#) other)

- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ClearPackage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **PurgeDataFieldNumber** = 1
Field number for the "purge_data" field.

Properties

- static pb::MessageParser< [ClearPackage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- bool **PurgeData** [getset]

5.5.1 Detailed Description

Instructs the device to clear/unload the loaded package, optionally deleting the package data.

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Commands.cs
- emt-sdk/obj/Release/netstandard2.0/Commands.cs

5.6 emt_sdk.Settings.ColorSetting Class Reference

Properties

- float **Saturation** = 1f [getset]
Absolute saturation of image (0.0 - 1.0). Does not support HDR.
- float **Contrast** = 1f [getset]
Absolute contrast of image (0.0 - 1.0).
- float **Brightness** = 0f [getset]
Additive brightness of image (-1.0 - 1.0). Does not support HDR.

The documentation for this class was generated from the following file:

- emt-sdk/Settings/ColorSetting.cs

5.7 emt_sdk.Settings.CommunicationSettings Class Reference

Properties

- string **ContentHostname** [getset]
Hostname of the Content Manager server
- int **ContentPort** [getset]
Port of the Content Manager server
- string **SensorListenIp** [getset]
IP used by [Events.EventManager](#) for listening for incoming sensor events
- int **SensorListenPort** [getset]
Port used by [Events.EventManager](#) for listening for incoming sensor events

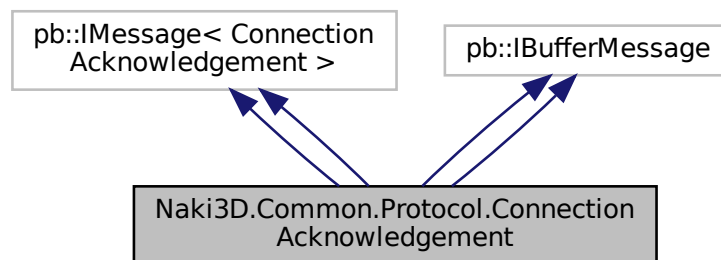
The documentation for this class was generated from the following file:

- emt-sdk/Settings/CommunicationSettings.cs

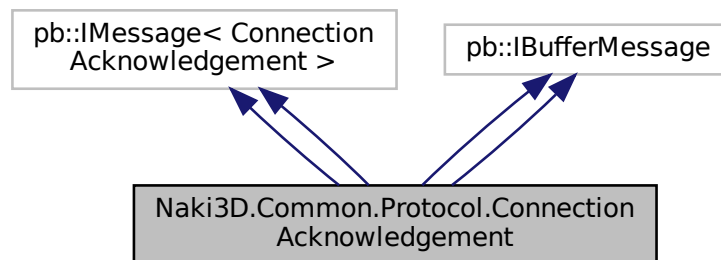
5.8 Naki3D.Common.Protocol.ConnectionAcknowledgement Class Reference

(2) Server -> Device

Inheritance diagram for Naki3D.Common.Protocol.ConnectionAcknowledgement:



Collaboration diagram for Naki3D.Common.Protocol.ConnectionAcknowledgement:



Public Member Functions

- **ConnectionAcknowledgement** ([ConnectionAcknowledgement](#) other)
- [ConnectionAcknowledgement](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ConnectionAcknowledgement](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ConnectionAcknowledgement](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ConnectionAcknowledgement** ([ConnectionAcknowledgement](#) other)
- [ConnectionAcknowledgement](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ConnectionAcknowledgement](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ConnectionAcknowledgement](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ConnectionIdFieldNumber** = 1
Field number for the "connection_id" field.
- const int **VerifiedFieldNumber** = 2
Field number for the "verified" field.

Properties

- static pb::MessageParser< [ConnectionAcknowledgement](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- string **ConnectionId** [getset]
server echoes ID back
- bool **Verified** [getset]
whether the device is already known to the server

5.8.1 Detailed Description

(2) Server -> Device

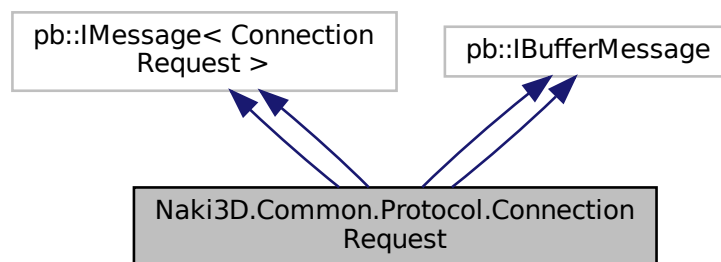
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

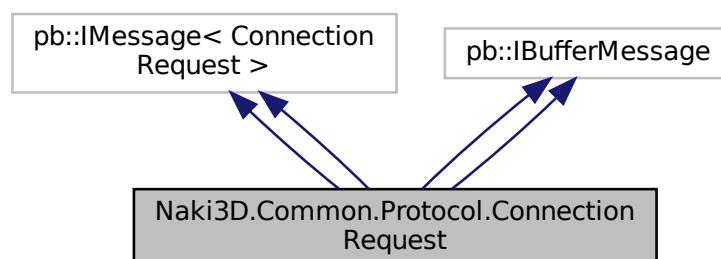
5.9 Naki3D.Common.Protocol.ConnectionRequest Class Reference

(1) Device -> Server

Inheritance diagram for Naki3D.Common.Protocol.ConnectionRequest:



Collaboration diagram for Naki3D.Common.Protocol.ConnectionRequest:



Public Member Functions

- **ConnectionRequest** ([ConnectionRequest](#) other)
- [ConnectionRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ConnectionRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ConnectionRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ConnectionRequest** ([ConnectionRequest](#) other)
- [ConnectionRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ConnectionRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ConnectionRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ConnectionIdFieldNumber** = 1
Field number for the "connection_id" field.
- const int **PublicKeyFieldNumber** = 2
Field number for the "public_key" field.

Properties

- static pb::MessageParser< [ConnectionRequest](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **ConnectionId** [getset]
unique ID of connecting PC (e.g. hostname)
- pb::ByteString **PublicKey** [getset]
Used to later generate (or renew) a certificate for the device.

5.9.1 Detailed Description

(1) Device -> Server

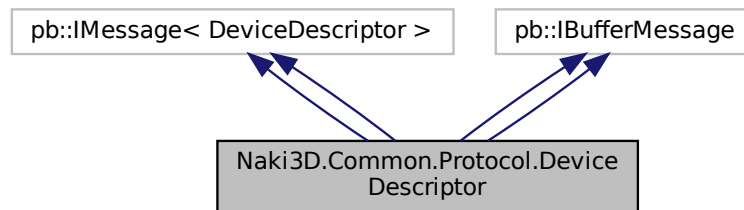
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

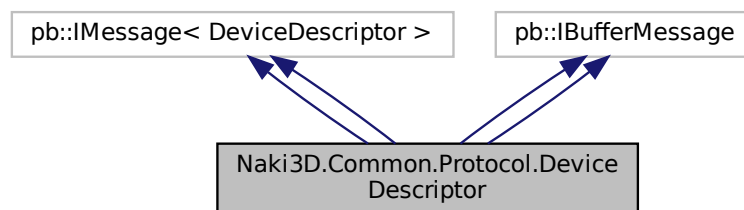
5.10 Naki3D.Common.Protocol.DeviceDescriptor Class Reference

Information for the server to filter out what content the device is capable of (interactively) displaying.

Inheritance diagram for Naki3D.Common.Protocol.DeviceDescriptor:



Collaboration diagram for Naki3D.Common.Protocol.DeviceDescriptor:



Public Member Functions

- **DeviceDescriptor** ([DeviceDescriptor](#) other)
- [DeviceDescriptor Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([DeviceDescriptor](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([DeviceDescriptor](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **DeviceDescriptor** ([DeviceDescriptor](#) other)
- [DeviceDescriptor Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([DeviceDescriptor](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([DeviceDescriptor](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **TypeFieldNumber** = 1
Field number for the "type" field.
- const int **PerformanceCapFieldNumber** = 2
Field number for the "performanceCap" field.
- const int **LocalSensorsFieldNumber** = 3
Field number for the "localSensors" field.

Properties

- static pb::MessageParser< [DeviceDescriptor](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.DeviceType **Type** [getset]
- global::Naki3D.Common.Protocol.PerformanceCap **PerformanceCap** [getset]
- pb::RepeatedField< global::Naki3D.Common.Protocol.SensorType > **LocalSensors** [get]
These sensors are expected to always be available: Time, Mobile app

5.10.1 Detailed Description

Information for the server to filter out what content the device is capable of (interactively) displaying.

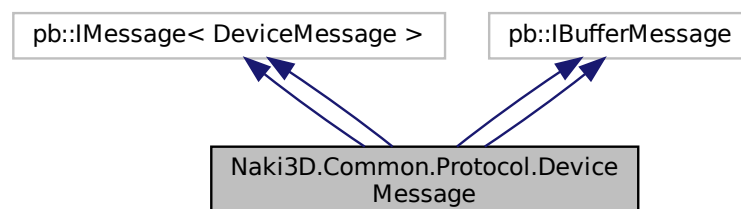
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

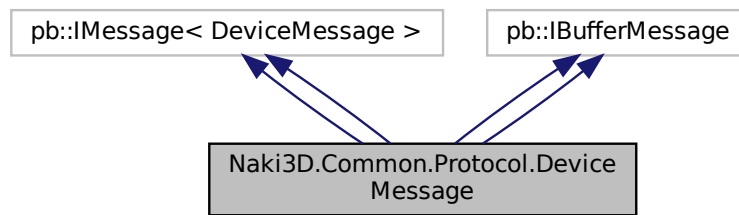
5.11 Naki3D.Common.Protocol.DeviceMessage Class Reference

Device -> Server Message wrapper, same as above.

Inheritance diagram for Naki3D.Common.Protocol.DeviceMessage:



Collaboration diagram for Naki3D.Common.Protocol.DeviceMessage:



Public Types

- enum [MessageOneofCase](#) {
None = 0 , **DeviceDescriptor** = 16 , **Ping** = 17 , **None** = 0 ,
DeviceDescriptor = 16 , **Ping** = 17 }
Enum of possible cases for the "message" oneof.
- enum [MessageOneofCase](#) {
None = 0 , **DeviceDescriptor** = 16 , **Ping** = 17 , **None** = 0 ,
DeviceDescriptor = 16 , **Ping** = 17 }
Enum of possible cases for the "message" oneof.

Public Member Functions

- **DeviceMessage** ([DeviceMessage](#) other)
- [DeviceMessage](#) **Clone** ()
- void **ClearMessage** ()
- override bool **Equals** (object other)
- bool **Equals** ([DeviceMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([DeviceMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **DeviceMessage** ([DeviceMessage](#) other)
- [DeviceMessage](#) **Clone** ()
- void **ClearMessage** ()
- override bool **Equals** (object other)
- bool **Equals** ([DeviceMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([DeviceMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ConnectionIdFieldNumber** = 1
Field number for the "connection_id" field.
- const int **DeviceDescriptorFieldNumber** = 16
Field number for the "device_descriptor" field.
- const int **PingFieldNumber** = 17
Field number for the "ping" field.

Properties

- static pb::MessageParser< [DeviceMessage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **ConnectionId** [getset]
- global::Naki3D.Common.Protocol.DeviceDescriptor?? **DeviceDescriptor** [getset]
connection.proto
- global::Naki3D.Common.Protocol.Ping?? **Ping** [getset]
- [MessageOneofCase](#) **MessageCase** [get]

5.11.1 Detailed Description

Device -> Server Message wrapper, same as above.

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Wrappers.cs
- emt-sdk/obj/Release/netstandard2.0/Wrappers.cs

5.12 emt_sdk.Settings.DisplaySetting Class Reference

Properties

- int **DisplayId** [getset]
Id of display as defined in Unity. Should match display numbers in Windows / xorg.
- [ColorSetting](#) **Color** = new [ColorSetting](#)() [getset]
Color transformation settings
- [SkewSetting](#) **Skew** = new [SkewSetting](#)() [getset]
Keystone transformation settings
- float **CrossOver** [getset]
Relative percentage of image (0.0 - 1.0) that should be overlayed in the middle. This is used for a smoother transition in the middle of the IPW.

The documentation for this class was generated from the following file:

- emt-sdk/Settings/DisplaySetting.cs

5.13 emt_sdk.Generated.ScenePackage.Element Class Reference

Properties

- string **Hostname** [getset]
- string **Role** [getset]
- string **ViewportTransform** [getset]

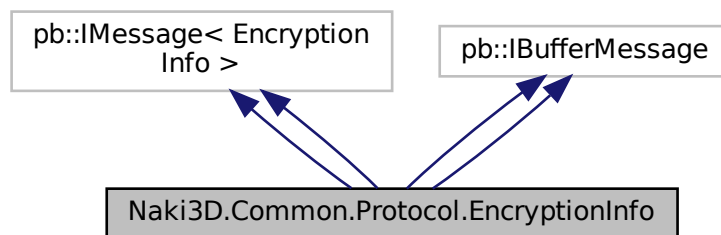
The documentation for this class was generated from the following file:

- emt-sdk/Generated/ScenePackage/Package.cs

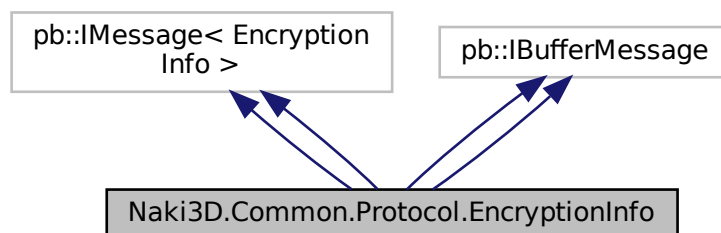
5.14 Naki3D.Common.Protocol.EncryptionInfo Class Reference

For setting up p2p encryption in case of

Inheritance diagram for Naki3D.Common.Protocol.EncryptionInfo:



Collaboration diagram for Naki3D.Common.Protocol.EncryptionInfo:



Public Member Functions

- **EncryptionInfo** ([EncryptionInfo](#) other)
- **EncryptionInfo Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([EncryptionInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([EncryptionInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **EncryptionInfo** ([EncryptionInfo](#) other)
- **EncryptionInfo Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([EncryptionInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([EncryptionInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **DeviceCertificateFieldNumber** = 1
Field number for the "deviceCertificate" field.
- const int **ManagementKeysFieldNumber** = 2
Field number for the "managementKeys" field.

Properties

- static pb::MessageParser< [EncryptionInfo](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- pb::ByteString **DeviceCertificate** [getset]
Certificate signed by the server to identify the device.
- pb::RepeatedField< pb::ByteString > **ManagementKeys** [get]
Keys for remote management (without central server) authorization.

5.14.1 Detailed Description

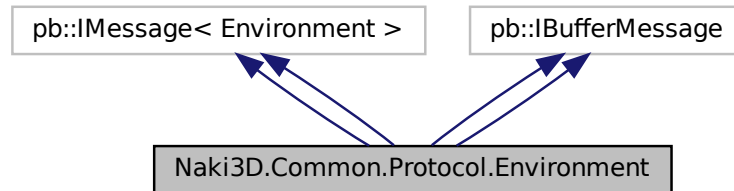
For setting up p2p encryption in case of

The documentation for this class was generated from the following files:

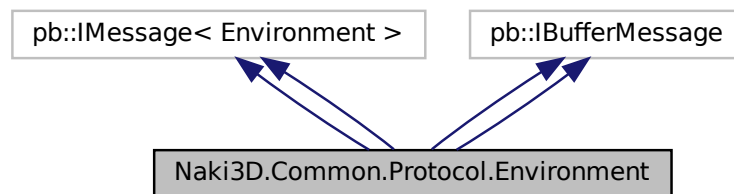
- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

5.15 Naki3D.Common.Protocol.Environment Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Environment:



Collaboration diagram for Naki3D.Common.Protocol.Environment:



Classes

- class **Types**

Container for nested types declared in the [Environment](#) message type.

Public Member Functions

- **Environment** ([Environment](#) other)
- **Environment Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Environment](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Environment](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Environment** ([Environment](#) other)

- [Environment](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Environment](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Environment](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **EngineTypeFieldNumber** = 1
Field number for the "engine_type" field.
- const int **EngineVersionFieldNumber** = 2
Field number for the "engine_version" field.

Properties

- static pb::MessageParser< [Environment](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.Environment.Types.Engine **EngineType** [getset]
- string **EngineVersion** [getset]
Following could be added later to allow windows support. We'd have to solve rebooting, running other content on win as well, etc. enum OS { LINUX = 0; WINDOWS = 1; } OS target_os = 3;

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.16 emt_sdk.Events.EventManager Class Reference

Main [emt_sdk](#) event communication server-client used for both receiving and sending events from/to other devices. Should not be used in user code.

Public Member Functions

- delegate void [SensorMessageHandler](#) (object sender, [SensorMessage](#) e)
Handler for receicing sensor events
- void [BroadcastEvent](#) ([SensorMessage](#) message)
Broadcasts an event to all connected devices and relays (if connected)
- void [Start](#) ([Sync](#) sync, [CommunicationSettings](#) settings)
Starts listening for incoming connections and connects to other available devices. Calls
See also
[Start\(Sync, string, int\)](#)
with specified CommunicationSettings.
- void [Start](#) ([Sync](#) sync, string ip=null, int port=[SENSOR_MESSAGE_PORT](#))
Starts listening for incoming connections and connects to other available devices.
- void **Stop** ()
Stops listening for new connections and closes all outgoing sockets

Static Public Attributes

- const int **SENSOR_MESSAGE_PORT** = 5000
Default event listening port and also target port for otehr devices

Properties

- static [EventManager](#) **Instance** = new [EventManager](#)() [get]
Singleton instance of [EventManager](#) for easier state management
- bool **IsListening** = false [get]
Whether the manager is currently listening for new connections
- int **Listeners** [get]
Gets the amount of currently connected listeners
- CancellationToken **Token** [get]
Token for closing all socket connections, may be closed after receiving one more event per socket

Events

- [SensorMessageHandler](#) **OnEventReceived**
Called whenever an event is received either locally, from other device or from a relay

5.16.1 Detailed Description

Main [emt_sdk](#) event communication server-client used for both receiving and sending events from/to other devices. Should not be used in user code.

5.16.2 Member Function Documentation

5.16.2.1 BroadcastEvent()

```
void emt_sdk.Events.EventManager.BroadcastEvent (
    SensorMessage message ) [inline]
```

Broadcasts an event to all connected devices and relays (if connected)

Parameters

<i>message</i>	Event to be sent
----------------	------------------

Exceptions

<i>ArgumentNullException</i>	Thrown when passed event is null
------------------------------	----------------------------------

5.16.2.2 SensorMessageHandler()

```
delegate void emt_sdk.Events.EventManager.SensorMessageHandler (
    object sender,
    SensorMessage e )
```

Handler for receicing sensor events

Parameters

<i>sender</i>	Sender of event, EventManager in most cases
<i>e</i>	Received message

5.16.2.3 Start() [1/2]

```
void emt_sdk.Events.EventManager.Start (
    Sync sync,
    CommunicationSettings settings ) [inline]
```

Starts listening for incoming connections and connects to other available devices. Calls

See also

[Start\(Sync, string, int\)](#)

with specified CommunicationSettings.

Parameters

<i>sync</i>	Sync data used for connecting to other devices
<i>settings</i>	Socket settings

5.16.2.4 Start() [2/2]

```
void emt_sdk.Events.EventManager.Start (
    Sync sync,
    string ip = null,
    int port = SENSOR_MESSAGE_PORT ) [inline]
```

Starts listening for incoming connections and connects to other available devices.

Parameters

<i>sync</i>	Sync data used for connecting to other devices
<i>ip</i>	Listening IP address
<i>port</i>	Listening and target port for both incoming and outgoing sockets

Exceptions

<i>SocketException</i>	Throw on any socket related problems
------------------------	--------------------------------------

The documentation for this class was generated from the following file:

- emt-sdk/Events/EventManager.cs

5.17 emt_sdk.Events.EventRelayClient Class Reference

Client event relaying connection for any external applications using [emt_sdk](#) events. Receives master local, remote and events sent through this client.

Public Member Functions

- void [Connect](#) (int port=[EventRelayServer.RELAY_PORT](#))
Connects to a master server for sending and receiving events, only tries the loopback interface. Blocking call, run this in a separate thread/task.
- void [BroadcastEvent](#) ([SensorMessage](#) message)
Broadcasts an event to the master relay server which will send it to all other connected devices.

Properties

- bool **IsConnected** [get]
Whether the client is currently connected to a server. Verify this before sending any events
- CancellationToken **Cancellation_token** [get]
Token for closing socket connection, may be closed after receiving one more event

Events

- [SensorMessageHandler](#) **OnEventReceived**
Called whenever a [SensorMessage](#) is received from relay server

5.17.1 Detailed Description

Client event relaying connection for any external applications using [emt_sdk](#) events. Receives master local, remote and events sent through this client.

5.17.2 Member Function Documentation

5.17.2.1 BroadcastEvent()

```
void emt_sdk.Events.EventRelayClient.BroadcastEvent (
    SensorMessage message ) [inline]
```

Broadcasts an event to the master relay server which will send it to all other connected devices.

Exceptions

<i>ArgumentNullException</i>	Thrown when passed event is null
<i>InvalidOperationException</i>	Thrown when client is not connected

Parameters

<i>message</i>	Event to be sent
----------------	------------------

5.17.2.2 Connect()

```
void emt_sdk.Events.EventRelayClient.Connect (
    int port = EventRelayServer.RELAY\_PORT ) [inline]
```

Connects to a master server for sending and receiving events, only tries the loopback interface. Blocking call, run this in a separate thread/task.

Exceptions

<i>SocketException</i>	Thrown on any socket related problem
------------------------	--------------------------------------

Parameters

<i>port</i>	Target server port
-------------	--------------------

The documentation for this class was generated from the following file:

- emt-sdk/Events/EventRelayClient.cs

5.18 emt_sdk.Events.EventRelayServer Class Reference

Server event relaying connection for any external applications using [emt_sdk](#) events. Relays local, remote and even relayed events to a connected [EventRelayClient](#).

Public Member Functions

- void [Listen](#) (int port=[RELAY_PORT](#))
Starts listening on port on the loopback interface. Blocking call, run this in a separate thread/task.
- void [RelayLocalEvent](#) ([SensorMessage](#) message)
Relays a message to the connected client that is not sent to any other device. Should be used only for debugging purposes.

Static Public Attributes

- const int **RELAY_PORT** = 49155
Default relay listening port

Properties

- bool **IsConnected** [get]
Whether the server is connected to a matching client
- CancellationToken **CancellationToken** [get]
Token for closing socket connection, may be closed after receiving one more event

5.18.1 Detailed Description

Server event relaying connection for any external applications using [emt_sdk](#) events. Relays local, remote and even relayed events to a connected [EventRelayClient](#).

This should not be used in user code and is only for the main managing application.

5.18.2 Member Function Documentation

5.18.2.1 Listen()

```
void emt_sdk.Events.EventRelayServer.Listen (
    int port = RELAY\_PORT ) [inline]
```

Starts listening on *port* on the loopback interface. Blocking call, run this in a separate thread/task.

Exceptions

<i>SocketException</i>	Thrown on any socket related problem
------------------------	--------------------------------------

Parameters

<i>port</i>	Listening port
-------------	----------------

5.18.2.2 RelayLocalEvent()

```
void emt_sdk.Events.EventRelayServer.RelayLocalEvent (
    SensorMessage message ) [inline]
```

Relays a message to the connected client that is not sent to any other device. Should be used only for debugging purposes.

Exceptions

<i>ArgumentNullException</i>	Thrown when passed event is null
<i>InvalidOperationException</i>	Thrown when server is not connected

Parameters

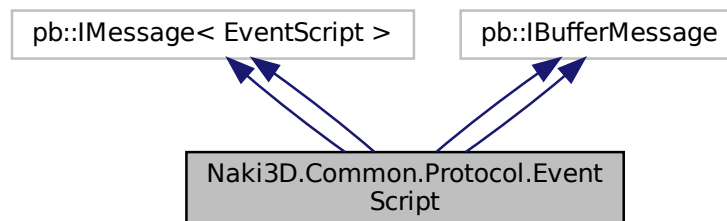
<i>message</i>	Event to be sent
----------------	------------------

The documentation for this class was generated from the following file:

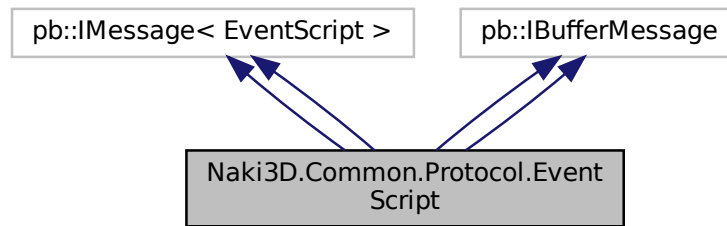
- emt-sdk/Events/EventRelayServer.cs

5.19 Naki3D.Common.Protocol.EventScript Class Reference

Inheritance diagram for Naki3D.Common.Protocol.EventScript:



Collaboration diagram for Naki3D.Common.Protocol.EventScript:



Public Member Functions

- **EventScript** ([EventScript](#) other)
- [EventScript Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([EventScript](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([EventScript](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **EventScript** ([EventScript](#) other)
- [EventScript Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([EventScript](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([EventScript](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **NameFieldNumber** = 1
Field number for the "name" field.
- const int **IdFieldNumber** = 3
Field number for the "id" field.

Properties

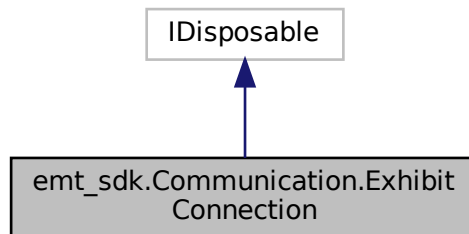
- static pb::MessageParser< [EventScript](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **Name** [getset]
- string **Id** [getset]

The documentation for this class was generated from the following files:

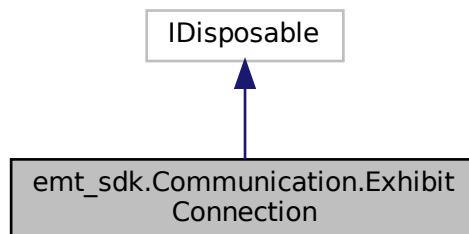
- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.20 emt_sdk.Communication.ExhibitConnection Class Reference

Inheritance diagram for emt_sdk.Communication.ExhibitConnection:



Collaboration diagram for emt_sdk.Communication.ExhibitConnection:



Public Member Functions

- **ExhibitConnection** (TcpClient client, string id=null)
- void **Connect** ()
- void **SendDescriptor** ([DeviceDescriptor](#) descriptor)
- void **Dispose** ()

Properties

- bool **IsConnected** [get]
- bool **Verified** = false [get]
- ConnectionStateEnum **ConnectionState** = ConnectionStateEnum.Disconnected [get]
- [EncryptionInfo](#) **EncryptionInfo** = null [get]
- Action< [LoadPackage](#) > **LoadPackageHandler** [getset]
- Action< [ClearPackage](#) > **ClearPackageHandler** [getset]

The documentation for this class was generated from the following file:

- emt-sdk/Communication/ExhibitConnection.cs

5.21 emt_sdk.Scene.GltfObject.Flag Class Reference

Description flag in model

Properties

- [GltfLocation](#) **Location** [getset]
Location of flag
- string **Text** [getset]
Displayed text
- string **ActivatedAction** [getset]
Action to execute on flag activation, null if no action should be performed.
- string **SelectedAction** [getset]
Action to execute on flag selection, null if no action should be performed.
- string **ForegroundColor** [getset]
- string **BackgroundColor** [getset]
- string **StalkColor** [getset]
- bool **CanSelect** [getset]
Whether this flag can be selected. Value of false disables both [ActivatedAction](#) and [SelectedAction](#).

5.21.1 Detailed Description

Description flag in model

The documentation for this class was generated from the following file:

- emt-sdk/Scene/GltfObject.cs

5.22 emt_sdk.Scene.Gallery Class Reference

Definition of gallery specific data

Classes

- class [GalleryImage](#)
Single gallery image
- class [GalleryLayout](#)
- class [GridLayout](#)
Layout where images are aligned in a grid, wrapping?
- class [ListLayout](#)
Layout where images are laid in a single line, wrapping after reaching the end of the list

Public Types

- enum [GalleryLayoutEnum](#) { **Grid** , **List** }
Layout of the gallery images

Properties

- [GalleryLayoutEnum](#) **LayoutType** [getset]
Active layout for this gallery
- [GalleryLayout](#) **Layout** [getset]
Parameters of the specific layout in [LayoutType](#)
- [Vector2](#) **Padding** [getset]
Percentage of screen space along the edges used as padding from 0.0 to 1.0 (e.g. (0.2, 0.1) would be 20% horizontally and 10% vertically).
- float **ScrollDelay** [getset]
How long should the delay between automatic scrolling steps in seconds. Value of 0 disables automatic scrolling.
- float **SlideAnimationLength** [getset]
How long the scroll animation itself should be in seconds (default is 0.3s)
- string **BackgroundColor** [getset]
Background color in hex, formatted as #RRGGBB (e.g. #A1FF12)

5.22.1 Detailed Description

Definition of gallery specific data

The documentation for this class was generated from the following file:

- emt-sdk/Scene/Gallery.cs

5.23 emt_sdk.Scene.Gallery.GalleryImage Class Reference

Single gallery image

Properties

- string **FileName** [getset]
Image file path
- string **ActivatedAction** [getset]
Executed action when image is activated (specifically interacted with)
- string **SelectedAction** [getset]
Executed action when image is selected (either through AutoScroll or through manual interacion)

5.23.1 Detailed Description

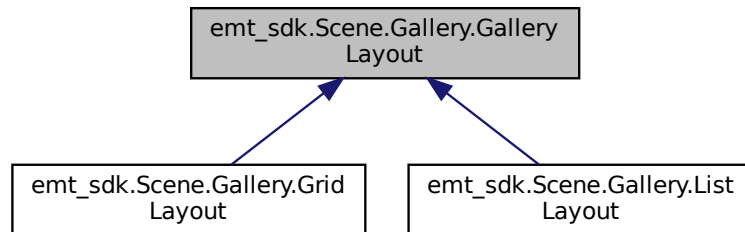
Single gallery image

The documentation for this class was generated from the following file:

- emt-sdk/Scene/Gallery.cs

5.24 emt_sdk.Scene.Gallery.GalleryLayout Class Reference

Inheritance diagram for emt_sdk.Scene.Gallery.GalleryLayout:



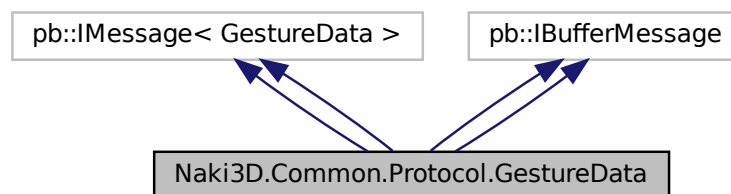
The documentation for this class was generated from the following file:

- emt-sdk/Scene/Gallery.cs

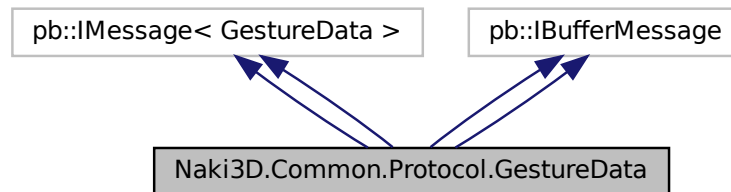
5.25 Naki3D.Common.Protocol.GestureData Class Reference

Raspi -> Device

Inheritance diagram for Naki3D.Common.Protocol.GestureData:



Collaboration diagram for Naki3D.Common.Protocol.GestureData:



Public Member Functions

- **GestureData** ([GestureData](#) other)
- [GestureData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([GestureData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([GestureData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **GestureData** ([GestureData](#) other)
- [GestureData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([GestureData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([GestureData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **TypeFieldNumber** = 1
Field number for the "type" field.
- const int **UserIdFieldNumber** = 2
Field number for the "user_id" field.

Properties

- static pb::MessageParser< [GestureData](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.GestureType **Type** [getset]
- int **UserId** [getset]

5.25.1 Detailed Description

Raspi -> Device

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Camera.cs
- emt-sdk/obj/Release/netstandard2.0/Camera.cs

5.26 emt_sdk.Scene.GltfObject.GltfLocation Class Reference

Location inside a GLTF Model

Properties

- string **ObjectName** [getset]
Name of a GLTF object to be used as a position. If null Position is used instead.
- **Vector3** **Offset** = new **Vector3**() [getset]
Offset coordinates in model space relative to [ObjectName](#) or scene root if it is `null`.

5.26.1 Detailed Description

Location inside a GLTF Model

The documentation for this class was generated from the following file:

- emt-sdk/Scene/GltfObject.cs

5.27 emt_sdk.Scene.GltfObject Class Reference

Definition of 3D scene specific data

Classes

- class **Flag**
Description flag in model
- class **GltfLocation**
Location inside a GLTF Model
- interface **ICameraAnimation**
Base interface for all animations
- class **OrbitAnimation**
Camera cylinder orbit definition

Public Types

- enum [FlagInteractionTypeEnum](#) { [Swipe](#) , [Point](#) }

Defines how the user interacts with flags

Properties

- string **FileName** [getset]
Name of the input GLTF file
- string **Skybox** [getset]
Name of the skybox cubemap file, white if no file is specified
- string **SkyboxTint** [getset]
Tint applied to the skybox, background color if no skybox is specified
- [ICameraAnimation](#) **CameraAnimation** [getset]
- [FlagInteractionTypeEnum](#) **FlagInteraction** = [FlagInteractionTypeEnum.Swipe](#) [getset]
- List< [Flag](#) > **Flags** [getset]
List of displayed flags on the model. Order of flags in this list will be used to define order of selection during interaction if FlagInteraction is equal to [FlagInteractionTypeEnum.Swipe](#).

5.27.1 Detailed Description

Definition of 3D scene specific data

5.27.2 Member Enumeration Documentation

5.27.2.1 FlagInteractionTypeEnum

```
enum emt\_sdk.Scene.GltfObject.FlagInteractionTypeEnum
```

Defines how the user interacts with flags

Enumerator

Swipe	Allows the user to swipe left and right to select previous/next flag
Point	Allows user to point at the desired flag.

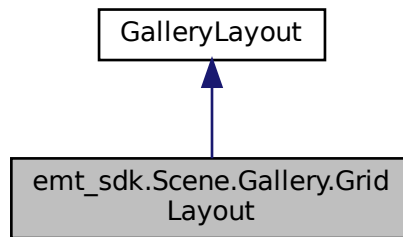
The documentation for this class was generated from the following file:

- emt-sdk/Scene/GltfObject.cs

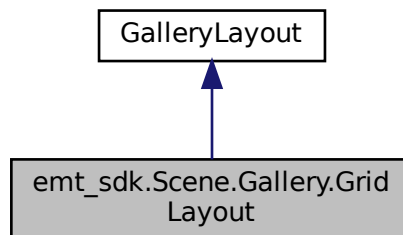
5.28 emt_sdk.Scene.Gallery.GridLayout Class Reference

Layout where images are aligned in a grid, wrapping?

Inheritance diagram for emt_sdk.Scene.Gallery.GridLayout:



Collaboration diagram for emt_sdk.Scene.Gallery.GridLayout:



Properties

- int **Width** [getset]
Width of the grid
- int **Height** [getset]
Height of the grid
- float **VerticalSpacing** [getset]
Percentage of screen space used between rows of the grid from 0.0 to 1.0
- float **HorizontalSpacing** [getset]
Percentage of screen space used between columns of the grid from 0.0 to 1.0
- [GalleryImage](#)[,] **Images** [getset]

5.28.1 Detailed Description

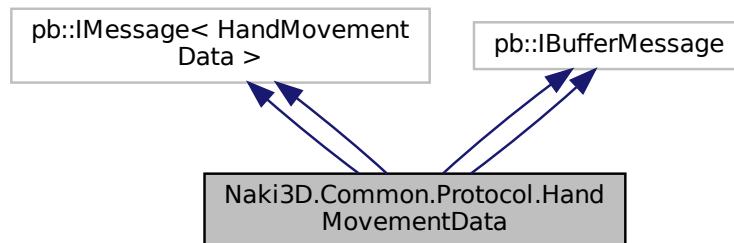
Layout where images are aligned in a grid, wrapping?

The documentation for this class was generated from the following file:

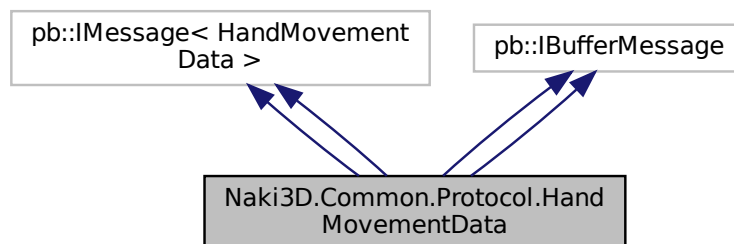
- `emt-sdk/Scene/Gallery.cs`

5.29 Naki3D.Common.Protocol.HandMovementData Class Reference

Inheritance diagram for Naki3D.Common.Protocol.HandMovementData:



Collaboration diagram for Naki3D.Common.Protocol.HandMovementData:



Public Member Functions

- **HandMovementData** ([HandMovementData](#) other)
- [HandMovementData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([HandMovementData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([HandMovementData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **HandMovementData** ([HandMovementData](#) other)
- [HandMovementData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([HandMovementData](#) other)
- override int **GetHashCode** ()

- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([HandMovementData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **HandFieldNumber** = 1
Field number for the "hand" field.
- const int **ProjPositionFieldNumber** = 2
Field number for the "proj_position" field.
- const int **OpenHandFieldNumber** = 3
Field number for the "open_hand" field.
- const int **UserIdFieldNumber** = 4
Field number for the "user_id" field.

Properties

- static pb::MessageParser< [HandMovementData](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.HandType **Hand** [getset]
- global::Naki3D.Common.Protocol.Vector3 **ProjPosition** [getset]
(x, y from 0.0 to 1.0, z is real)
- bool **OpenHand** [getset]
- int **UserId** [getset]

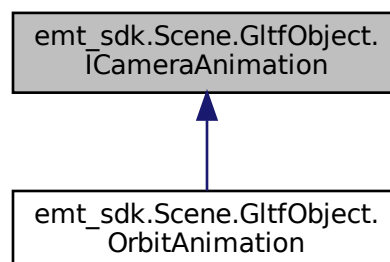
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Camera.cs
- emt-sdk/obj/Release/netstandard2.0/Camera.cs

5.30 emt_sdk.Scene.GltfObject.ICameraAnimation Interface Reference

Base interface for all animations

Inheritance diagram for emt_sdk.Scene.GltfObject.ICameraAnimation:



5.30.1 Detailed Description

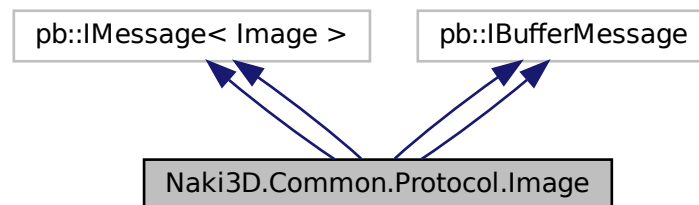
Base interface for all animations

The documentation for this interface was generated from the following file:

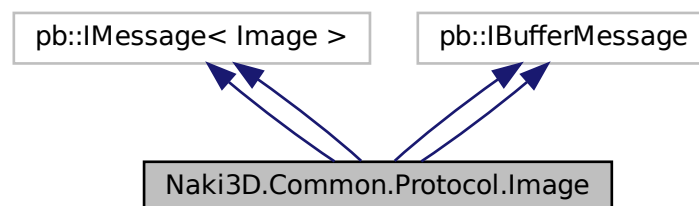
- `emt-sdk/Scene/GltfObject.cs`

5.31 Naki3D.Common.Protocol.Image Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Image:



Collaboration diagram for Naki3D.Common.Protocol.Image:



Classes

- class **Types**

Container for nested types declared in the [Image](#) message type.

Public Member Functions

- **Image** ([Image](#) other)
- **Image Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Image](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Image](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Image** ([Image](#) other)
- **Image Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Image](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Image](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ImagesFieldNumber** = 1
Field number for the "images" field.
- const int **ImagePresentationFieldNumber** = 2
Field number for the "image_presentation" field.

Properties

- static pb::MessageParser< [Image](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- pb::RepeatedField< pb::ByteString > **Images** [get]
- global::Naki3D.Common.Protocol.Image.Types.Presentation **ImagePresentation** [get set]

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.32 emt_sdk.Settings.IPWSetting Class Reference

[Settings](#) for an Interactive Projection Wall

Public Types

- enum [IPWOrientation](#) { [Vertical](#) , [Horizontal](#) , [Single](#) }

Available layouts of connected projectors

Properties

- float **LensShift** = 0.5f [getset]
Relative rendering offset (0.0 - 1.0) between projectors. Ignored in [IPWOrientation.Single](#) layout
- [IPWOrientation](#) **Orientation** = [IPWOrientation.Horizontal](#) [getset]
Currently active layout
- List< [DisplaySetting](#) > **Displays** = new List<[DisplaySetting](#)>() [getset]
Display transformations for individual displays

5.32.1 Detailed Description

[Settings](#) for an Interactive Projection Wall

5.32.2 Member Enumeration Documentation

5.32.2.1 IPWOrientation

```
enum emt\_sdk.Settings.IPWSetting.IPWOrientation
```

Available layouts of connected projectors

Enumerator

Vertical	Two projectors placed above eachother
Horizontal	Two projectors placed next to eachother
Single	Single projector spanning the entire wall

The documentation for this class was generated from the following file:

- emt-sdk/Settings/IPWSetting.cs

5.33 [emt_sdk.Communication.JsonObjectStringReader](#) Class Reference

Public Member Functions

- JsonObjectStringReader** (Stream inputStream, int bufferSize=1024)
- string **NextJsonObject** ()

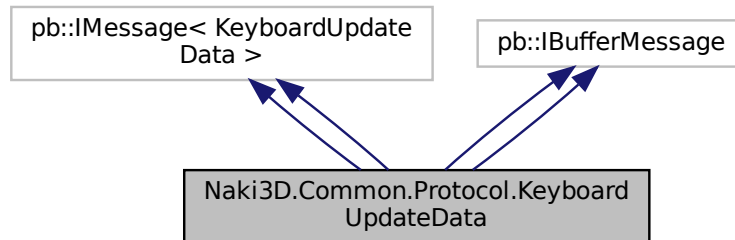
The documentation for this class was generated from the following file:

- emt-sdk/Communication/JsonObjectStringReader.cs

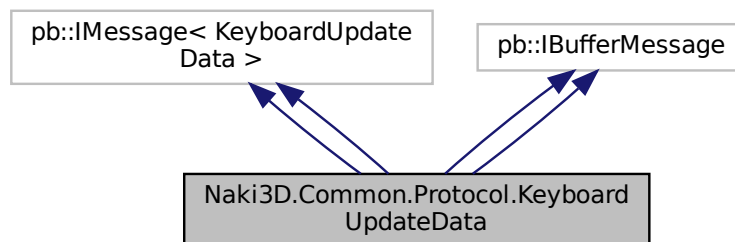
5.34 Naki3D.Common.Protocol.KeyboardUpdateData Class Reference

Raspi -> Device

Inheritance diagram for Naki3D.Common.Protocol.KeyboardUpdateData:



Collaboration diagram for Naki3D.Common.Protocol.KeyboardUpdateData:



Public Member Functions

- **KeyboardUpdateData** ([KeyboardUpdateData](#) other)
- [KeyboardUpdateData Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([KeyboardUpdateData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([KeyboardUpdateData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **KeyboardUpdateData** ([KeyboardUpdateData](#) other)
- [KeyboardUpdateData Clone](#) ()
- override bool **Equals** (object other)

- bool **Equals** ([KeyboardUpdateData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([KeyboardUpdateData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **TypeFieldNumber** = 1
Field number for the "type" field.
- const int **KeycodeFieldNumber** = 2
Field number for the "keycode" field.

Properties

- static pb::MessageParser< [KeyboardUpdateData](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.KeyActionType **Type** [getset]
- int **Keycode** [getset]

5.34.1 Detailed Description

Raspi -> Device

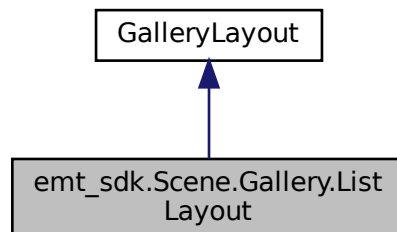
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Keyboard.cs
- emt-sdk/obj/Release/netstandard2.0/Keyboard.cs

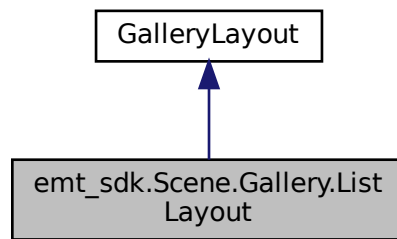
5.35 emt_sdk.Scene.Gallery.ListLayout Class Reference

Layout where images are laid in a single line, wrapping after reaching the end of the list

Inheritance diagram for emt_sdk.Scene.Gallery.ListLayout:



Collaboration diagram for `emt_sdk.Scene.Gallery.ListLayout`:



Properties

- `int VisibleImages` [getset]
Amount of images visible at any given time
- `float Spacing` [getset]
Percentage of screen space used between individual images (not on screen border) from 0.0 to 1.0
- `GalleryImage[] Images` [getset]
List of displayed images

5.35.1 Detailed Description

Layout where images are laid in a single line, wrapping after reaching the end of the list

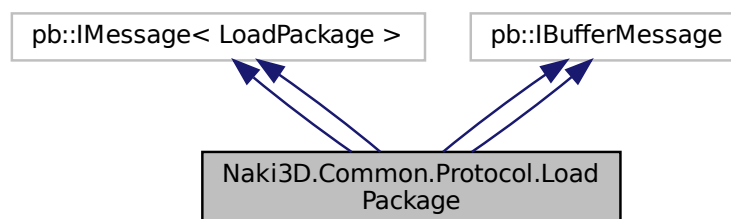
The documentation for this class was generated from the following file:

- `emt-sdk/Scene/Gallery.cs`

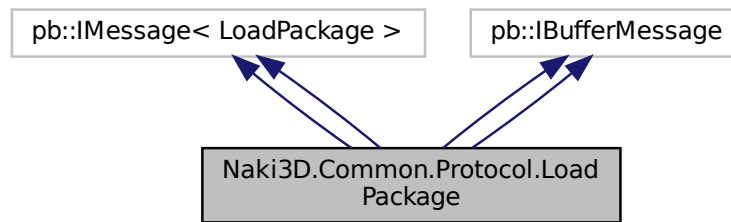
5.36 Naki3D.Common.Protocol.LoadPackage Class Reference

Instructs the device to load the specified resource and start displaying it.

Inheritance diagram for `Naki3D.Common.Protocol.LoadPackage`:



Collaboration diagram for Naki3D.Common.Protocol.LoadPackage:



Public Member Functions

- **LoadPackage** ([LoadPackage](#) other)
- **LoadPackage Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([LoadPackage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([LoadPackage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **LoadPackage** ([LoadPackage](#) other)
- **LoadPackage Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([LoadPackage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([LoadPackage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **DescriptorJsonFieldNumber** = 1
Field number for the "descriptor_json" field.
- const int **IsPreviewFieldNumber** = 2
Field number for the "is_preview" field.

Properties

- static pb::MessageParser< [LoadPackage](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- string **DescriptorJson** [getset]
- bool **IsPreview** [getset]
Loading for preview could skip dependencies for faster download.

5.36.1 Detailed Description

Instructs the device to load the specified resource and start displaying it.

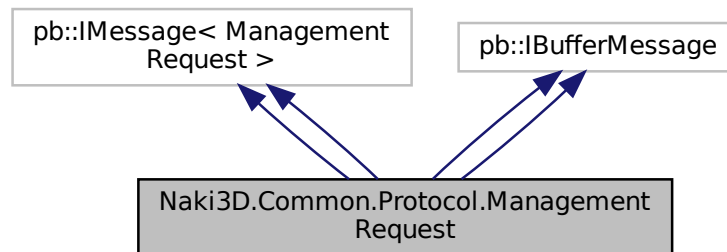
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Commands.cs
- emt-sdk/obj/Release/netstandard2.0/Commands.cs

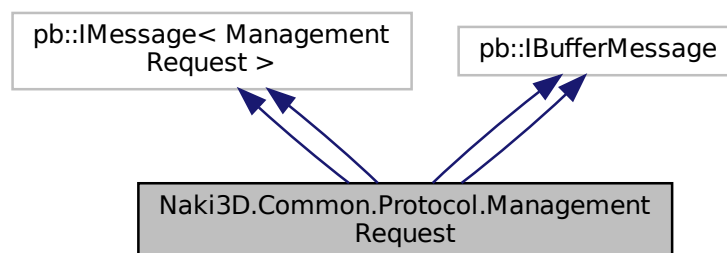
5.37 Naki3D.Common.Protocol.ManagementRequest Class Reference

We've covered there's going to be an optional management app, but not the capabilities, just a placeholder

Inheritance diagram for Naki3D.Common.Protocol.ManagementRequest:



Collaboration diagram for Naki3D.Common.Protocol.ManagementRequest:



Classes

- class **Types**

Container for nested types declared in the [ManagementRequest](#) message type.

Public Member Functions

- **ManagementRequest** ([ManagementRequest](#) other)
- [ManagementRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ManagementRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ManagementRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ManagementRequest** ([ManagementRequest](#) other)
- [ManagementRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ManagementRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ManagementRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ConnectionIdFieldNumber** = 1
Field number for the "connection_id" field.
- const int **ManagementTypeFieldNumber** = 2
Field number for the "management_type" field.

Properties

- static pb::MessageParser< [ManagementRequest](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- string **ConnectionId** [getset]
ID of target PC
- global::Naki3D.Common.Protocol.ManagementRequest.Types.ManagementType **ManagementType** [getset]

5.37.1 Detailed Description

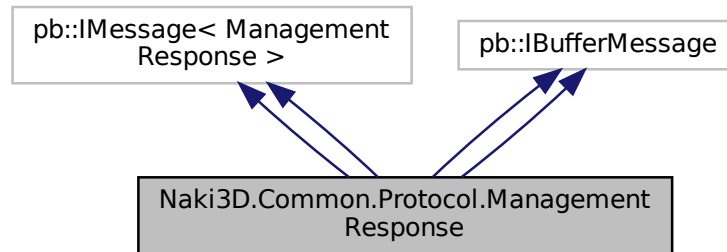
We've covered there's going to be an optional management app, but not the capabilities, just a placeholder

The documentation for this class was generated from the following files:

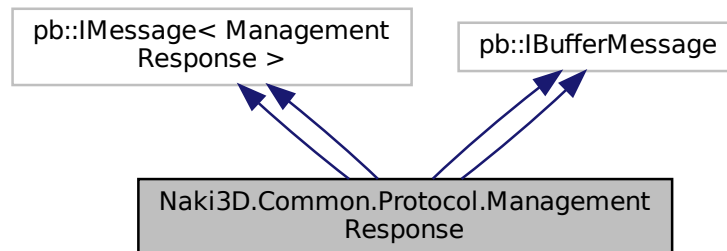
- emt-sdk/obj/Debug/netstandard2.0/Management.cs
- emt-sdk/obj/Release/netstandard2.0/Management.cs

5.38 Naki3D.Common.Protocol.ManagementResponse Class Reference

Inheritance diagram for Naki3D.Common.Protocol.ManagementResponse:



Collaboration diagram for Naki3D.Common.Protocol.ManagementResponse:



Classes

- class **Types**

Container for nested types declared in the [ManagementResponse](#) message type.

Public Member Functions

- **ManagementResponse** ([ManagementResponse](#) other)
- [ManagementResponse Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([ManagementResponse](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()

- void **MergeFrom** ([ManagementResponse](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ManagementResponse** ([ManagementResponse](#) other)
- [ManagementResponse](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([ManagementResponse](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ManagementResponse](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **DeviceStatusFieldNumber** = 1
Field number for the "device_status" field.

Properties

- static pb::MessageParser< [ManagementResponse](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.ManagementResponse.Types.DeviceStatus **DeviceStatus** [getset]

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Management.cs
- emt-sdk/obj/Release/netstandard2.0/Management.cs

5.39 emt_sdk.Generated.ScenePackage.Mapping Class Reference

Properties

- string **EventName** [getset]
- string **Source** [getset]
- string **GestureName** [getset]
- string **EndGesture** [getset]
- string **Position** [getset]
- string **StartGesture** [getset]
- Condition? **Condition** [getset]
- string **Threshold** [getset]

The documentation for this class was generated from the following file:

- emt-sdk/Generated/ScenePackage/Package.cs

5.40 emt_sdk.Generated.ScenePackage.Metadata Class Reference

Properties

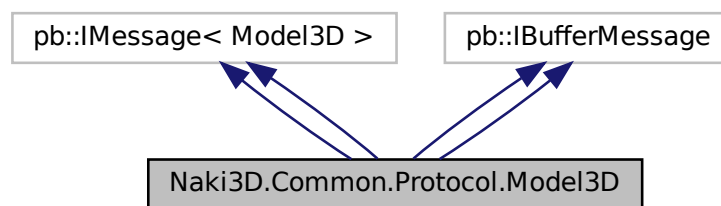
- string **Author** [getset]
- string **Exposition** [getset]
- Dictionary< string, object > **Other** [getset]

The documentation for this class was generated from the following file:

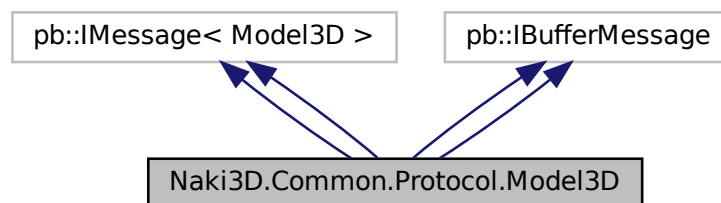
- emt-sdk/Generated/ScenePackage/Package.cs

5.41 Naki3D.Common.Protocol.Model3D Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Model3D:



Collaboration diagram for Naki3D.Common.Protocol.Model3D:



Public Member Functions

- **Model3D** ([Model3D](#) other)
- **Model3D Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Model3D](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Model3D](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Model3D** ([Model3D](#) other)
- **Model3D Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Model3D](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Model3D](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **GltfFieldNumber** = 1
Field number for the "glTF" field.

Properties

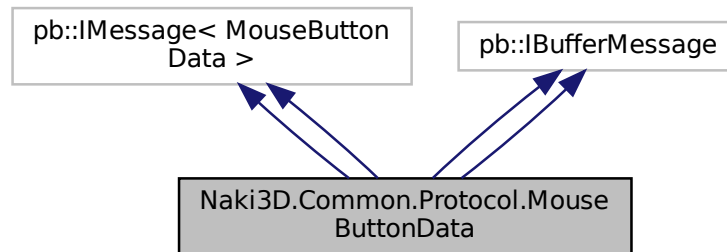
- static pb::MessageParser< [Model3D](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- pb::ByteString **Gltf** [getset]
GLTF contains models, composition, textures, everything could be contained

The documentation for this class was generated from the following files:

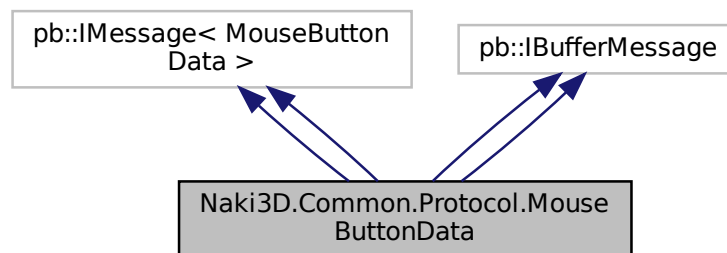
- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.42 Naki3D.Common.Protocol.MouseButtonData Class Reference

Inheritance diagram for Naki3D.Common.Protocol.MouseButtonData:



Collaboration diagram for Naki3D.Common.Protocol.MouseButtonData:



Public Member Functions

- **MouseButtonData** ([MouseButtonData](#) other)
- **MouseButtonData Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseButtonData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([MouseButtonData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **MouseButtonData** ([MouseButtonData](#) other)
- **MouseButtonData Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseButtonData](#) other)

- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** (MouseButtonData other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **TypeFieldNumber** = 1
Field number for the "type" field.
- const int **ButtonIdFieldNumber** = 2
Field number for the "button_id" field.

Properties

- static pb::MessageParser< MouseButtonData > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.MouseActionType **Type** [get;set]
- int **ButtonId** [get;set]

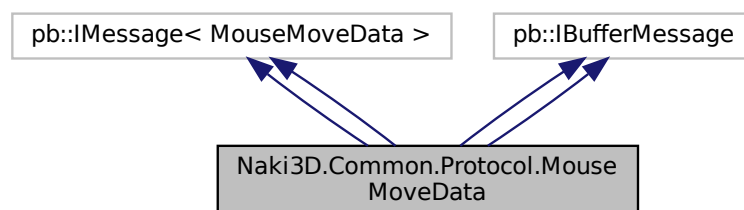
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Mouse.cs
- emt-sdk/obj/Release/netstandard2.0/Mouse.cs

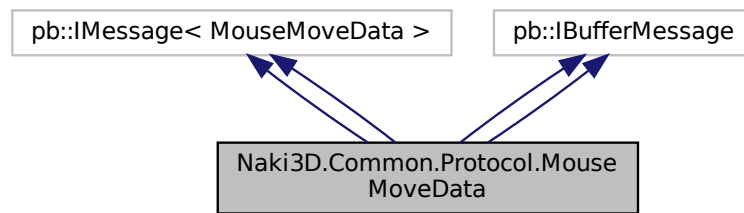
5.43 Naki3D.Common.Protocol.MouseMoveData Class Reference

Raspi -> Device

Inheritance diagram for Naki3D.Common.Protocol.MouseMoveData:



Collaboration diagram for Naki3D.Common.Protocol.MouseMoveData:



Public Member Functions

- **MouseMoveData** ([MouseMoveData](#) other)
- [MouseMoveData Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseMoveData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([MouseMoveData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **MouseMoveData** ([MouseMoveData](#) other)
- [MouseMoveData Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseMoveData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([MouseMoveData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **AbsoluteFieldNumber** = 1
Field number for the "absolute" field.
- const int **RelativeFieldNumber** = 2
Field number for the "relative" field.

Properties

- static pb::MessageParser< [MouseMoveData](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.Vector2 **Absolute** [getset]
- global::Naki3D.Common.Protocol.Vector2 **Relative** [getset]

5.43.1 Detailed Description

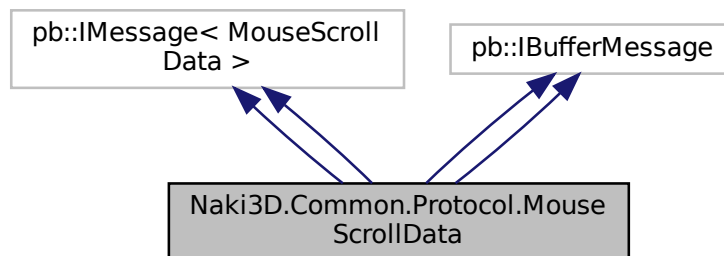
Raspi -> Device

The documentation for this class was generated from the following files:

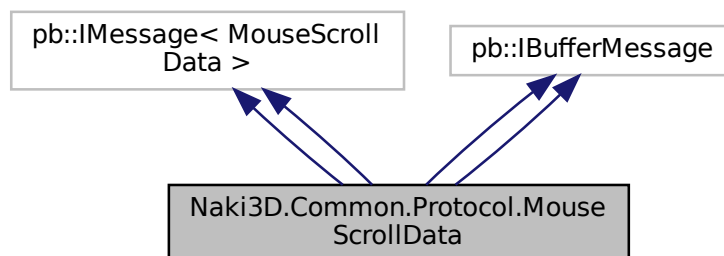
- emt-sdk/obj/Debug/netstandard2.0/Mouse.cs
- emt-sdk/obj/Release/netstandard2.0/Mouse.cs

5.44 Naki3D.Common.Protocol.MouseScrollData Class Reference

Inheritance diagram for Naki3D.Common.Protocol.MouseScrollData:



Collaboration diagram for Naki3D.Common.Protocol.MouseScrollData:



Public Member Functions

- **MouseScrollData** ([MouseScrollData](#) other)
- [MouseScrollData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseScrollData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([MouseScrollData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **MouseScrollData** ([MouseScrollData](#) other)
- [MouseScrollData](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([MouseScrollData](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([MouseScrollData](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **TypeFieldNumber** = 1
Field number for the "type" field.

Properties

- static pb::MessageParser< [MouseScrollData](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.MouseScrollType **Type** [get set]

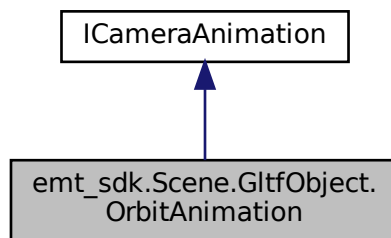
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Mouse.cs
- emt-sdk/obj/Release/netstandard2.0/Mouse.cs

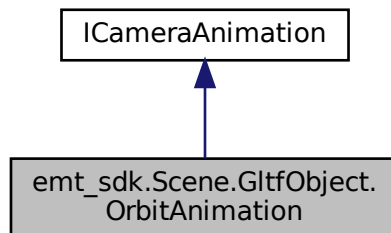
5.45 emt_sdk.Scene.GltfObject.OrbitAnimation Class Reference

Camera cylinder orbit definition

Inheritance diagram for emt_sdk.Scene.GltfObject.OrbitAnimation:



Collaboration diagram for emt_sdk.Scene.GltfObject.OrbitAnimation:



Properties

- [GltfLocation Origin](#) [getset]
Origin point around which the camera rotates
- [GltfLocation LookAt](#) [getset]
- float **Distance** [getset]
Distance of the camera from the object, radius of rotation path
- float **Height** [getset]
Height of the camera relative to the object
- float **RevolutionTime** [getset]
Time in seconds it takes to spin around the object once

5.45.1 Detailed Description

Camera cylinder orbit definition

5.45.2 Property Documentation

5.45.2.1 LookAt

`GltfLocation` emt_sdk.Scene.GltfObject.OrbitAnimation.LookAt [get], [set]

The documentation for this class was generated from the following file:

- emt-sdk/Scene/GltfObject.cs

5.46 emt_sdk.Generated.ScenePackage.Package Class Reference

Properties

- string **Schema** [getset]
- List< [Action](#) > **Inputs** [getset]
- [Metadata](#) **Metadata** [getset]
- [PackageClass](#) **PackagePackage** [getset]
- [Parameters](#) **Parameters** [getset]
- [Sync](#) **Sync** [getset]
- string **Version** [getset]

The documentation for this class was generated from the following file:

- emt-sdk/Generated/ScenePackage/Package.cs

5.47 emt_sdk.Generated.ScenePackage.PackageClass Class Reference

Properties

- string **Checksum** [getset]
- PackageType **Type** [getset]
- Uri **Url** [getset]

The documentation for this class was generated from the following file:

- emt-sdk/Generated/ScenePackage/Package.cs

5.48 emt_sdk.ScenePackage.PackageLoader Class Reference

Public Member Functions

- **PackageLoader** (string schema=SCHEMA_PATH)
- **Package LoadPackage** (TextReader reader, bool validate=true)
- **Package LoadPackage** (Stream packageStream, bool validate=true)

The documentation for this class was generated from the following file:

- emt-sdk/ScenePackage/PackageLoader.cs

5.49 emt_sdk.Generated.ScenePackage.Parameters Class Reference

Properties

- DisplayType? **DisplayType** [getset]
- List< object > **Settings** [getset]

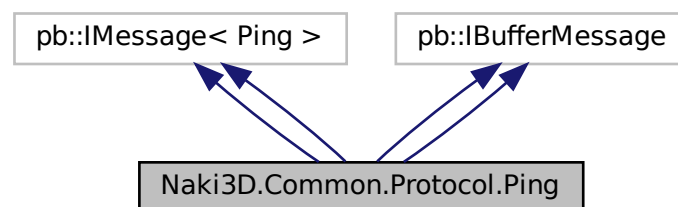
The documentation for this class was generated from the following file:

- emt-sdk/Generated/ScenePackage/Package.cs

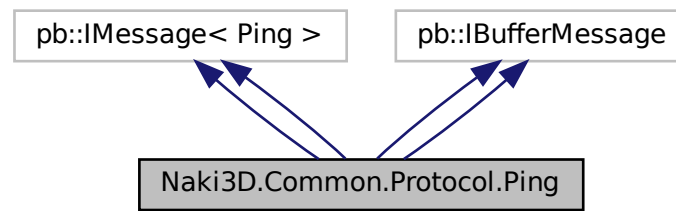
5.50 Naki3D.Common.Protocol.Ping Class Reference

Basically an empty ping message, just to maintain connection.

Inheritance diagram for Naki3D.Common.Protocol.Ping:



Collaboration diagram for Naki3D.Common.Protocol.Ping:



Public Member Functions

- **Ping** ([Ping](#) other)
- **Ping Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Ping](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Ping](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Ping** ([Ping](#) other)
- **Ping Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Ping](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Ping](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Properties

- static pb::MessageParser< [Ping](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]

5.50.1 Detailed Description

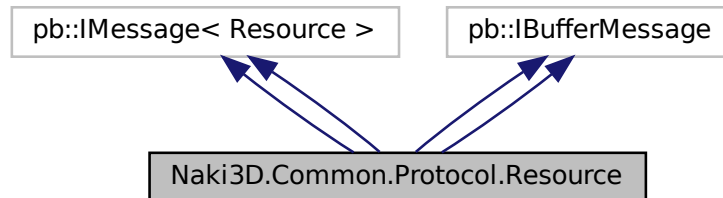
Basically an empty ping message, just to maintain connection.

The documentation for this class was generated from the following files:

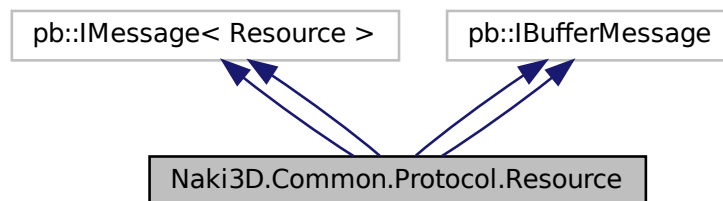
- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

5.51 Naki3D.Common.Protocol.Resource Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Resource:



Collaboration diagram for Naki3D.Common.Protocol.Resource:



Public Types

- enum [DataOneofCase](#) {
None = 0 , **Scene** = 1 , **Model** = 2 , **Image** = 3 ,
Video = 4 , **None** = 0 , **Scene** = 1 , **Model** = 2 ,
Image = 3 , **Video** = 4 }
Enum of possible cases for the "data" oneof.
- enum [DataOneofCase](#) {
None = 0 , **Scene** = 1 , **Model** = 2 , **Image** = 3 ,
Video = 4 , **None** = 0 , **Scene** = 1 , **Model** = 2 ,
Image = 3 , **Video** = 4 }
Enum of possible cases for the "data" oneof.

Public Member Functions

- **Resource** ([Resource](#) other)
- [Resource](#) Clone ()
- void **ClearData** ()

- override bool **Equals** (object other)
- bool **Equals** ([Resource](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Resource](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- [Resource](#) ([Resource](#) other)
- [Resource](#) **Clone** ()
- void **ClearData** ()
- override bool **Equals** (object other)
- bool **Equals** ([Resource](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Resource](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **SceneFieldNumber** = 1
Field number for the "scene" field.
- const int **ModelFieldNumber** = 2
Field number for the "model" field.
- const int **ImageFieldNumber** = 3
Field number for the "image" field.
- const int **VideoFieldNumber** = 4
Field number for the "video" field.
- const int **InputMappingFieldNumber** = 5
Field number for the "input_mapping" field.
- const int **AdditionalScriptsFieldNumber** = 6
Field number for the "additional_scripts" field.

Properties

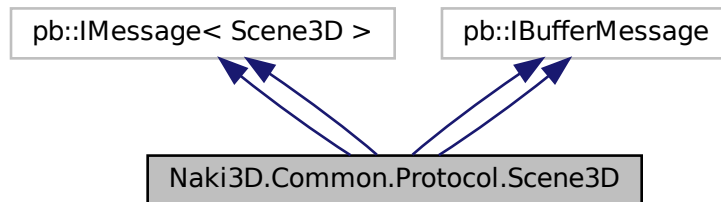
- static pb::MessageParser< [Resource](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.Scene3D?? **Scene** [getset]
- global::Naki3D.Common.Protocol.Model3D?? **Model** [getset]
- global::Naki3D.Common.Protocol.Image?? **Image** [getset]
- global::Naki3D.Common.Protocol.Video?? **Video** [getset]
- string **InputMapping** [getset]
Probably JSON, we've agreed there's no point in binding it on protobuf layer
- pb::RepeatedField< global::Naki3D.Common.Protocol.EventScript > **AdditionalScripts** [get]
- [DataOneofCase](#) **DataCase** [get]

The documentation for this class was generated from the following files:

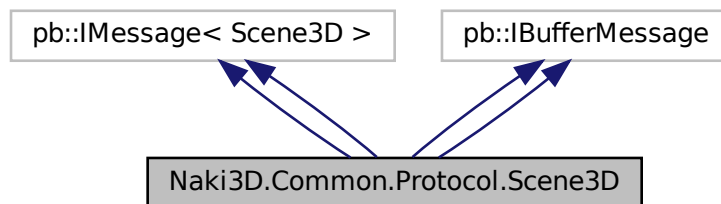
- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.52 Naki3D.Common.Protocol.Scene3D Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Scene3D:



Collaboration diagram for Naki3D.Common.Protocol.Scene3D:



Public Member Functions

- **Scene3D** ([Scene3D](#) other)
- **Scene3D Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Scene3D](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Scene3D](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Scene3D** ([Scene3D](#) other)
- **Scene3D Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Scene3D](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Scene3D](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **EnvironmentFieldNumber** = 1
Field number for the "environment" field.
- const int **DatapackIdFieldNumber** = 2
Field number for the "datapack_id" field.

Properties

- static pb::MessageParser< [Scene3D](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- global::Naki3D.Common.Protocol.Environment **Environment** [getset]
- string **DatapackId** [getset]
alternatively bytes datapack_payload = 2;

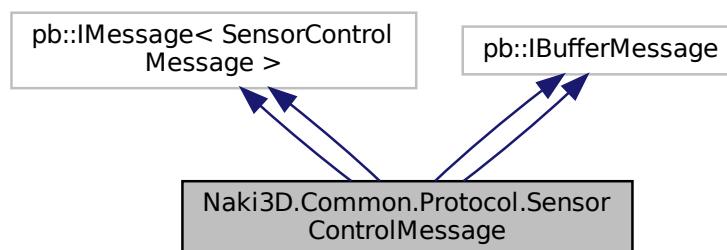
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

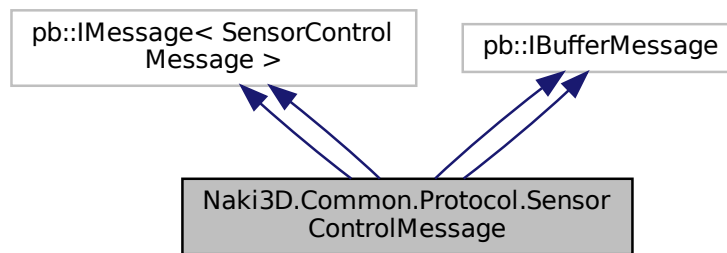
5.53 Naki3D.Common.Protocol.SensorControlMessage Class Reference

Device -> RasPi Message wrapper, same as above.

Inheritance diagram for Naki3D.Common.Protocol.SensorControlMessage:



Collaboration diagram for Naki3D.Common.Protocol.SensorControlMessage:



Public Types

- enum [MessageOneofCase](#) {
None = 0 , **SensorList** = 16 , **CecMessage** = 17 , **None** = 0 ,
SensorList = 16 , **CecMessage** = 17 }
Enum of possible cases for the "message" oneof.
- enum [MessageOneofCase](#) {
None = 0 , **SensorList** = 16 , **CecMessage** = 17 , **None** = 0 ,
SensorList = 16 , **CecMessage** = 17 }
Enum of possible cases for the "message" oneof.

Public Member Functions

- **SensorControlMessage** ([SensorControlMessage](#) other)
- [SensorControlMessage](#) **Clone** ()
- void **ClearMessage** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorControlMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorControlMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **SensorControlMessage** ([SensorControlMessage](#) other)
- [SensorControlMessage](#) **Clone** ()
- void **ClearMessage** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorControlMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorControlMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **HostnameFieldNumber** = 1
Field number for the "hostname" field.
- const int **SensorListFieldNumber** = 16
Field number for the "sensor_list" field.
- const int **CecMessageFieldNumber** = 17
Field number for the "cec_message" field.

Properties

- static pb::MessageParser< [SensorControlMessage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **Hostname** [getset]
- global::Naki3D.Common.Protocol.SensorListRequest?? **SensorList** [getset]
- global::Naki3D.Common.Protocol.CECMessage?? **CecMessage** [getset]
- [MessageOneofCase](#) **MessageCase** [get]

5.53.1 Detailed Description

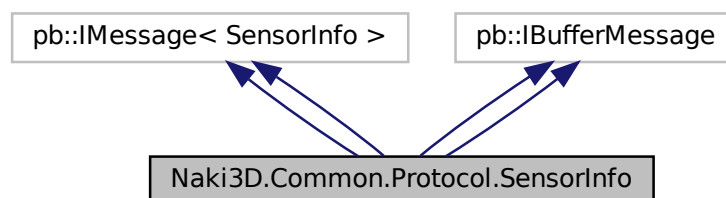
Device -> RasPi Message wrapper, same as above.

The documentation for this class was generated from the following files:

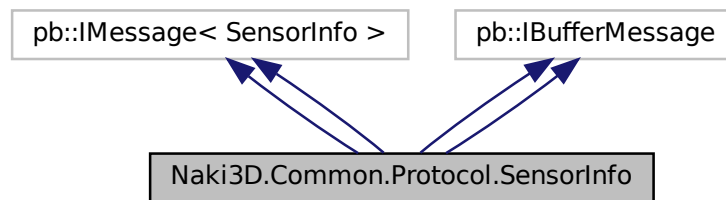
- emt-sdk/obj/Debug/netstandard2.0/Wrappers.cs
- emt-sdk/obj/Release/netstandard2.0/Wrappers.cs

5.54 Naki3D.Common.Protocol.SensorInfo Class Reference

Inheritance diagram for Naki3D.Common.Protocol.SensorInfo:



Collaboration diagram for Naki3D.Common.Protocol.SensorInfo:



Public Member Functions

- **SensorInfo** ([SensorInfo](#) other)
- [SensorInfo](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **SensorInfo** ([SensorInfo](#) other)
- [SensorInfo](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **SensorNameFieldNumber** = 1
Field number for the "sensor_name" field.
- const int **TypeFieldNumber** = 2
Field number for the "type" field.

Properties

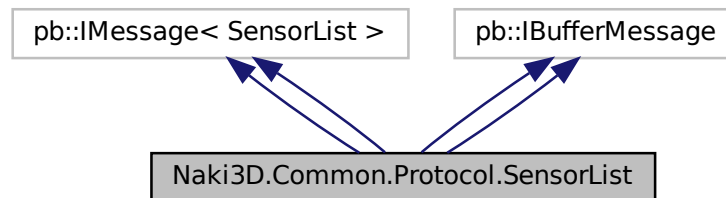
- static pb::MessageParser< [SensorInfo](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- string **SensorName** [getset]
- global::Naki3D.Common.Protocol.SensorType **Type** [getset]

The documentation for this class was generated from the following files:

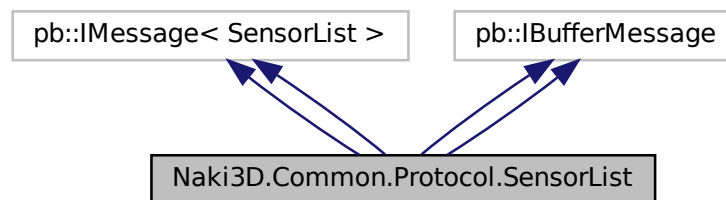
- emt-sdk/obj/Debug/netstandard2.0/Sensor.cs
- emt-sdk/obj/Release/netstandard2.0/Sensor.cs

5.55 Naki3D.Common.Protocol.SensorList Class Reference

Inheritance diagram for Naki3D.Common.Protocol.SensorList:



Collaboration diagram for Naki3D.Common.Protocol.SensorList:



Public Member Functions

- **SensorList** ([SensorList](#) other)
- **SensorList Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorList](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorList](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **SensorList** ([SensorList](#) other)
- **SensorList Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorList](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorList](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **SensorsFieldNumber** = 1
Field number for the "sensors" field.

Properties

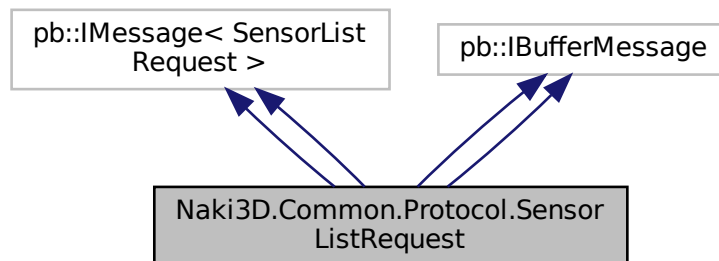
- static pb::MessageParser< [SensorList](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- pbc::RepeatedField< global::Naki3D.Common.Protocol.SensorInfo > **Sensors** [get]

The documentation for this class was generated from the following files:

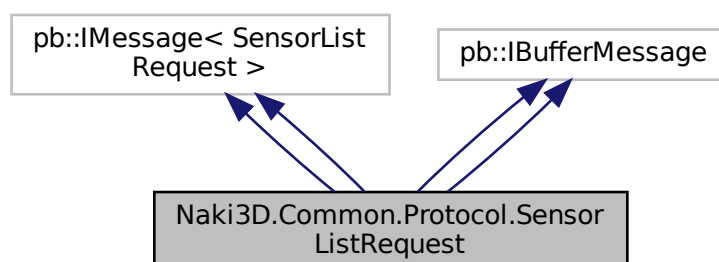
- emt-sdk/obj/Debug/netstandard2.0/Sensor.cs
- emt-sdk/obj/Release/netstandard2.0/Sensor.cs

5.56 Naki3D.Common.Protocol.SensorListRequest Class Reference

Inheritance diagram for Naki3D.Common.Protocol.SensorListRequest:



Collaboration diagram for Naki3D.Common.Protocol.SensorListRequest:



Public Member Functions

- **SensorListRequest** ([SensorListRequest](#) other)
- [SensorListRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorListRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorListRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **SensorListRequest** ([SensorListRequest](#) other)
- [SensorListRequest](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorListRequest](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorListRequest](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Properties

- static pb::MessageParser< [SensorListRequest](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]

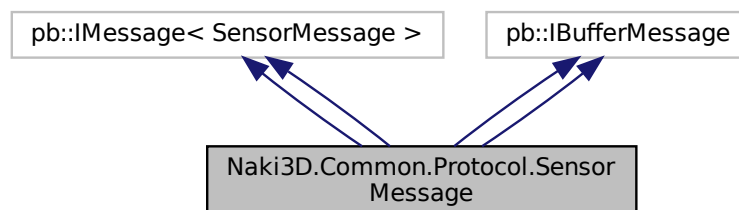
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Sensor.cs
- emt-sdk/obj/Release/netstandard2.0/Sensor.cs

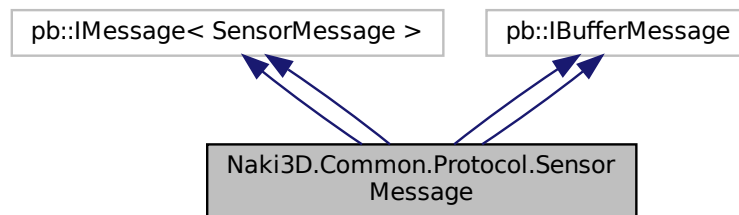
5.57 Naki3D.Common.Protocol.SensorMessage Class Reference

RasPi -> Device Message wrapper, same as above.

Inheritance diagram for Naki3D.Common.Protocol.SensorMessage:



Collaboration diagram for Naki3D.Common.Protocol.SensorMessage:



Public Types

- enum [DataOneofCase](#) {
None = 0 , **Gesture** = 16 , **HandMovement** = 17 , **BestUserChanged** = 18 ,
KeyboardUpdate = 19 , **MouseMove** = 20 , **MouseButton** = 21 , **MouseScroll** = 22 ,
None = 0 , **Gesture** = 16 , **HandMovement** = 17 , **BestUserChanged** = 18 ,
KeyboardUpdate = 19 , **MouseMove** = 20 , **MouseButton** = 21 , **MouseScroll** = 22 }
Enum of possible cases for the "data" oneof.
- enum [DataOneofCase](#) {
None = 0 , **Gesture** = 16 , **HandMovement** = 17 , **BestUserChanged** = 18 ,
KeyboardUpdate = 19 , **MouseMove** = 20 , **MouseButton** = 21 , **MouseScroll** = 22 ,
None = 0 , **Gesture** = 16 , **HandMovement** = 17 , **BestUserChanged** = 18 ,
KeyboardUpdate = 19 , **MouseMove** = 20 , **MouseButton** = 21 , **MouseScroll** = 22 }
Enum of possible cases for the "data" oneof.

Public Member Functions

- **SensorMessage** ([SensorMessage](#) other)
- [SensorMessage Clone](#) ()
- void **ClearData** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **SensorMessage** ([SensorMessage](#) other)
- [SensorMessage Clone](#) ()
- void **ClearData** ()
- override bool **Equals** (object other)
- bool **Equals** ([SensorMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([SensorMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **SensorIdFieldNumber** = 1
Field number for the "sensor_id" field.
- const int **TimestampFieldNumber** = 2
Field number for the "timestamp" field.
- const int **GestureFieldNumber** = 16
Field number for the "gesture" field.
- const int **HandMovementFieldNumber** = 17
Field number for the "hand_movement" field.
- const int **BestUserChangedFieldNumber** = 18
Field number for the "best_user_changed" field.
- const int **KeyboardUpdateFieldNumber** = 19
Field number for the "keyboard_update" field.
- const int **MouseMoveFieldNumber** = 20
Field number for the "mouse_move" field.
- const int **MouseButtonFieldNumber** = 21
Field number for the "mouse_button" field.
- const int **MouseScrollFieldNumber** = 22
Field number for the "mouse_scroll" field.

Properties

- static pb::MessageParser< [SensorMessage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **SensorId** [getset]
- ulong **Timestamp** [getset]
Microseconds since startup (Camera timing is in microseconds, may as well keep it)
- global::Naki3D.Common.Protocol.GestureData?? **Gesture** [getset]
Keeping some space for extra info
- global::Naki3D.Common.Protocol.HandMovementData?? **HandMovement** [getset]
- global::Naki3D.Common.Protocol.BestUserChangedData?? **BestUserChanged** [getset]
- global::Naki3D.Common.Protocol.KeyboardUpdateData?? **KeyboardUpdate** [getset]
- global::Naki3D.Common.Protocol.MouseMoveData?? **MouseMove** [getset]
- global::Naki3D.Common.Protocol.MouseButtonData?? **MouseButton** [getset]
- global::Naki3D.Common.Protocol.MouseScrollData?? **MouseScroll** [getset]
- [DataOneofCase](#) **DataCase** [get]

5.57.1 Detailed Description

RasPi -> Device Message wrapper, same as above.

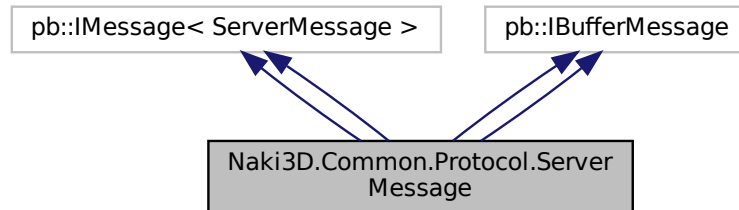
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Wrappers.cs
- emt-sdk/obj/Release/netstandard2.0/Wrappers.cs

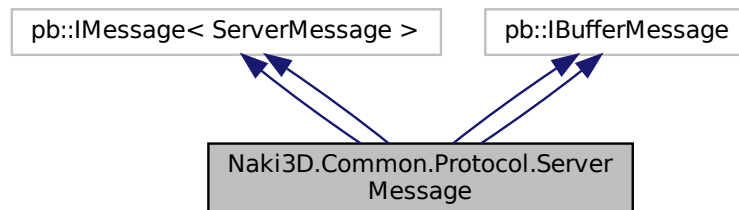
5.58 Naki3D.Common.Protocol.ServerMessage Class Reference

Server -> Device Message wrapper to allow identifying which message was sent using protobuf.

Inheritance diagram for Naki3D.Common.Protocol.ServerMessage:



Collaboration diagram for Naki3D.Common.Protocol.ServerMessage:



Public Types

- enum `MessageOneofCase` {
None = 0 , **EncryptionInfo** = 16 , **LoadPackage** = 17 , **ClearPackage** = 18 ,
None = 0 , **EncryptionInfo** = 16 , **LoadPackage** = 17 , **ClearPackage** = 18 }
Enum of possible cases for the "message" oneof.
- enum `MessageOneofCase` {
None = 0 , **EncryptionInfo** = 16 , **LoadPackage** = 17 , **ClearPackage** = 18 ,
None = 0 , **EncryptionInfo** = 16 , **LoadPackage** = 17 , **ClearPackage** = 18 }
Enum of possible cases for the "message" oneof.

Public Member Functions

- `ServerMessage` (`ServerMessage` other)
- `ServerMessage Clone` ()
- `void ClearMessage` ()

- override bool **Equals** (object other)
- bool **Equals** ([ServerMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ServerMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **ServerMessage** ([ServerMessage](#) other)
- [ServerMessage](#) **Clone** ()
- void **ClearMessage** ()
- override bool **Equals** (object other)
- bool **Equals** ([ServerMessage](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([ServerMessage](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **ConnectionIdFieldNumber** = 1
Field number for the "connection_id" field.
- const int **EncryptionInfoFieldNumber** = 16
Field number for the "encryption_info" field.
- const int **LoadPackageFieldNumber** = 17
Field number for the "load_package" field.
- const int **ClearPackageFieldNumber** = 18
Field number for the "clear_package" field.

Properties

- static pb::MessageParser< [ServerMessage](#) > **Parser** [get]
- static pb::MessageDescriptor **Descriptor** [get]
- string **ConnectionId** [getset]
- global::Naki3D.Common.Protocol.EncryptionInfo?? **EncryptionInfo** [getset]
connection.proto
- global::Naki3D.Common.Protocol.LoadPackage?? **LoadPackage** [getset]
commands.proto
- global::Naki3D.Common.Protocol.ClearPackage?? **ClearPackage** [getset]
- [MessageOneofCase](#) **MessageCase** [get]

5.58.1 Detailed Description

Server -> Device Message wrapper to allow identifying which message was sent using protobuf.

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Wrappers.cs
- emt-sdk/obj/Release/netstandard2.0/Wrappers.cs

5.59 emt_sdk.Settings.SkewSetting Class Reference

Describes screen keystone transformation quad Coordinate space starts at -1, -1 for the bottom left corner And ends at 1, 1 for the rop right corner

Public Member Functions

- [SkewSetting AlignSides](#) ()

Vertically aligns (sets the X coordinate to the same value) pairs of TopRight/BottomRight and TopLeft/BottomLeft. Always uses the top coordinates as source data.

Properties

- [Vector2 TopLeft](#) [getset]
- [Vector2 TopRight](#) [getset]
- [Vector2 BottomLeft](#) [getset]
- [Vector2 BottomRight](#) [getset]

5.59.1 Detailed Description

Describes screen keystone transformation quad Coordinate space starts at -1, -1 for the bottom left corner And ends at 1, 1 for the rop right corner

5.59.2 Member Function Documentation

5.59.2.1 AlignSides()

```
SkewSetting emt_sdk.Settings.SkewSetting.AlignSides ( ) [inline]
```

Vertically aligns (sets the X coordinate to the same value) pairs of TopRight/BottomRight and TopLeft/BottomLeft. Always uses the top coordinates as source data.

Returns

5.59.3 Property Documentation

5.59.3.1 BottomLeft

`Vector2` emt_sdk.Settings.SkewSetting.BottomLeft [get], [set]

Initial value:

```
= new Vector2
{
    X = -1,
    Y = -1,
}
```

5.59.3.2 BottomRight

`Vector2` emt_sdk.Settings.SkewSetting.BottomRight [get], [set]

Initial value:

```
= new Vector2
{
    X = 1,
    Y = -1,
}
```

5.59.3.3 TopLeft

`Vector2` emt_sdk.Settings.SkewSetting.TopLeft [get], [set]

Initial value:

```
= new Vector2
{
    X = -1,
    Y = 1,
}
```

5.59.3.4 TopRight

`Vector2` emt_sdk.Settings.SkewSetting.TopRight [get], [set]

Initial value:

```
= new Vector2
{
    X = 1,
    Y = 1,
}
```

The documentation for this class was generated from the following file:

- emt-sdk/Settings/SkewSetting.cs

5.60 emt_sdk.Generated.ScenePackage.Sync Class Reference

Properties

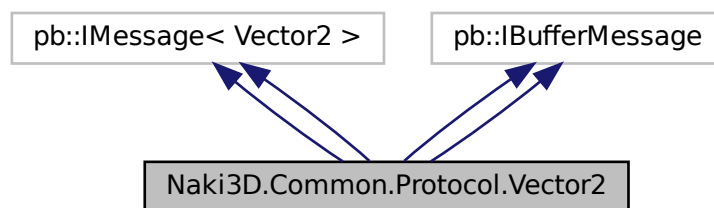
- [CanvasDimensions](#) **CanvasDimensions** [getset]
- List< [Element](#) > **Elements** [getset]
- long **SelfIndex** [getset]

The documentation for this class was generated from the following file:

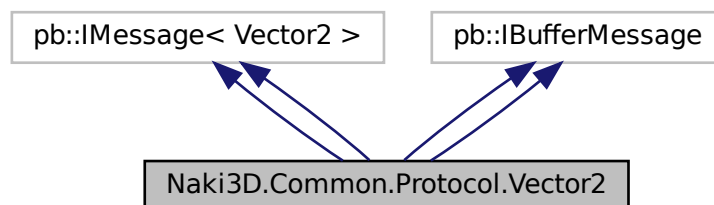
- emt-sdk/Generated/ScenePackage/Package.cs

5.61 Naki3D.Common.Protocol.Vector2 Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Vector2:



Collaboration diagram for Naki3D.Common.Protocol.Vector2:



Public Member Functions

- **Vector2** ([Vector2](#) other)
- **Vector2 Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Vector2](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Vector2](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Vector2** ([Vector2](#) other)
- **Vector2 Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Vector2](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Vector2](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **XFieldNumber** = 1
Field number for the "x" field.
- const int **YFieldNumber** = 2
Field number for the "y" field.

Properties

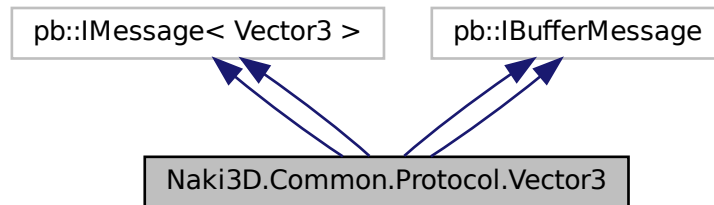
- static pb::MessageParser< [Vector2](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- float **X** [get;set]
- float **Y** [get;set]

The documentation for this class was generated from the following files:

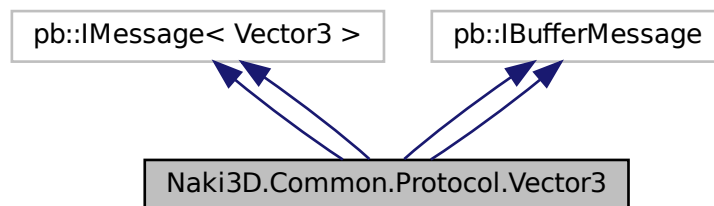
- emt-sdk/obj/Debug/netstandard2.0/Types.cs
- emt-sdk/obj/Release/netstandard2.0/Types.cs

5.62 Naki3D.Common.Protocol.Vector3 Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Vector3:



Collaboration diagram for Naki3D.Common.Protocol.Vector3:



Public Member Functions

- **Vector3** ([Vector3](#) other)
- [Vector3 Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([Vector3](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Vector3](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **Vector3** ([Vector3](#) other)
- [Vector3 Clone](#) ()
- override bool **Equals** (object other)
- bool **Equals** ([Vector3](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Vector3](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **XFieldNumber** = 1
Field number for the "x" field.
- const int **YFieldNumber** = 2
Field number for the "y" field.
- const int **ZFieldNumber** = 3
Field number for the "z" field.

Properties

- static pb::MessageParser< [Vector3](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- float **X** [getset]
- float **Y** [getset]
- float **Z** [getset]

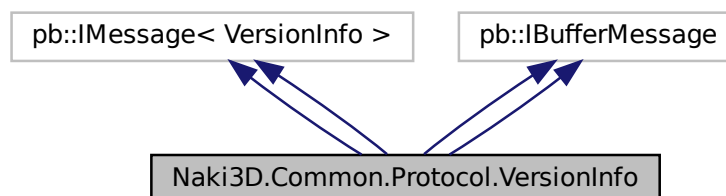
The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Types.cs
- emt-sdk/obj/Release/netstandard2.0/Types.cs

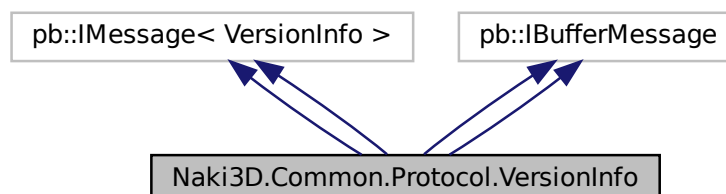
5.63 Naki3D.Common.Protocol.VersionInfo Class Reference

Same for both peers, version for compatibility checks. Probably SEMVER?

Inheritance diagram for Naki3D.Common.Protocol.VersionInfo:



Collaboration diagram for Naki3D.Common.Protocol.VersionInfo:



Public Member Functions

- **VersionInfo** ([VersionInfo](#) other)
- [VersionInfo](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([VersionInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([VersionInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)
- **VersionInfo** ([VersionInfo](#) other)
- [VersionInfo](#) **Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([VersionInfo](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([VersionInfo](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **MajorFieldNumber** = 1
Field number for the "major" field.
- const int **MinorFieldNumber** = 2
Field number for the "minor" field.
- const int **PatchFieldNumber** = 3
Field number for the "patch" field.
- const int **BuildFieldNumber** = 4
Field number for the "build" field.

Properties

- static pb::MessageParser< [VersionInfo](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- uint **Major** [getset]
- uint **Minor** [getset]
- uint **Patch** [getset]
- string **Build** [getset]

5.63.1 Detailed Description

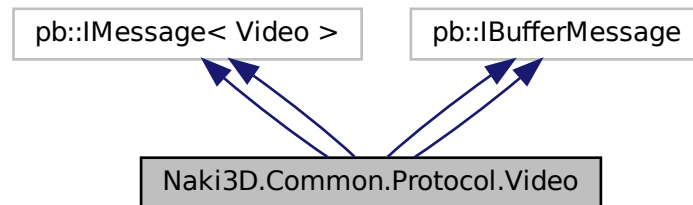
Same for both peers, version for compatibility checks. Probably SEMVER?

The documentation for this class was generated from the following files:

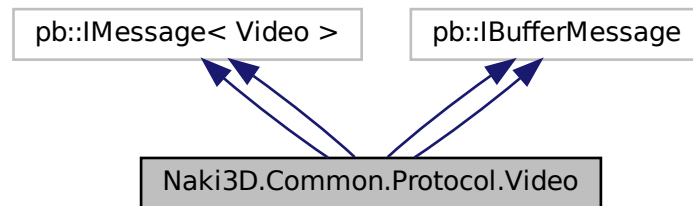
- emt-sdk/obj/Debug/netstandard2.0/Connection.cs
- emt-sdk/obj/Release/netstandard2.0/Connection.cs

5.64 Naki3D.Common.Protocol.Video Class Reference

Inheritance diagram for Naki3D.Common.Protocol.Video:



Collaboration diagram for Naki3D.Common.Protocol.Video:



Classes

- class **Types**

Container for nested types declared in the [Video](#) message type.

Public Member Functions

- **Video** ([Video](#) other)
- **Video Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Video](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Video](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

- **Video** ([Video](#) other)
- **Video Clone** ()
- override bool **Equals** (object other)
- bool **Equals** ([Video](#) other)
- override int **GetHashCode** ()
- override string **ToString** ()
- void **WriteTo** (pb::CodedOutputStream output)
- int **CalculateSize** ()
- void **MergeFrom** ([Video](#) other)
- void **MergeFrom** (pb::CodedInputStream input)

Static Public Attributes

- const int **DataFieldNumber** = 1
Field number for the "data" field.
- const int **VideoCodecFieldNumber** = 2
Field number for the "video_codec" field.
- const int **AudioCodecFieldNumber** = 3
Field number for the "audio_codec" field.

Properties

- static pb::MessageParser< [Video](#) > **Parser** [get]
- static pbr::MessageDescriptor **Descriptor** [get]
- pb::ByteString **Data** [getset]
Separate audio/video streams maybe?
- global::Naki3D.Common.Protocol.Video.Types.VideoCodec **VideoCodec** [getset]
- global::Naki3D.Common.Protocol.Video.Types.AudioCodec **AudioCodec** [getset]

The documentation for this class was generated from the following files:

- emt-sdk/obj/Debug/netstandard2.0/Resource.cs
- emt-sdk/obj/Release/netstandard2.0/Resource.cs

5.65 emt_sdk.Scene.VideoScene.VideoEvent Class Reference

Properties

- float **Timestamp** [getset]
Point in time when the event should be raised in seconds
- string **EventName** [getset]

The documentation for this class was generated from the following file:

- emt-sdk/Scene/VideoScene.cs

5.66 emt_sdk.Scene.VideoScene Class Reference

Definition of video scene specific data

Classes

- class [VideoEvent](#)

Public Types

- enum [VideoAspectRatioEnum](#) { [FitInside](#) , [FitOutside](#) , [Stretch](#) }
Defines how the video should be scaled

Properties

- string **FileName** [getset]
Gets or sets the filename of the video file to be played
- bool **Loop** [getset]
Whether the video should automatically loop
- bool **AutoStart** [getset]
Whether the video should start playing as soon as the scene loads
- [VideoAspectRatioEnum](#) **AspectRatio** [getset]
Determines how the video content will be rescaled to fit the screen
- string **BackgroundColor** [getset]
Background color in hex, formatted as #RRGGBB (e.g. #A1FF12)
- [VideoEvent](#)[] **VideoEvents** [getset]

5.66.1 Detailed Description

Definition of video scene specific data

5.66.2 Member Enumeration Documentation

5.66.2.1 VideoAspectRatioEnum

enum [emt_sdk.Scene.VideoScene.VideoAspectRatioEnum](#)

Defines how the video should be scaled

Enumerator

FitInside	Fits video into the viewport, adding black bars - Fit larger side
FitOutside	Fits the video into the viewport, cropping parts that don't fit - Fit smaller side
Stretch	Stretches the video across the entire viewport (distorts image)

The documentation for this class was generated from the following file:

- `emt-sdk/Scene/VideoScene.cs`

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