libvoiceQoS Reference

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Datatypes

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SceVoiceQoSAttributeId

Attribute identifiers.

Definition

```
#include <voice_qos.h>
typedef enum SceVoiceQoSAttributeId {
    SCE_VOICE_QOS_ATTR_MIC_VOLUME,
    SCE_VOICE_QOS_ATTR_MIC_MUTE,
    SCE_VOICE_QOS_ATTR_SPEAKER_VOLUME,
    SCE_VOICE_QOS_ATTR_SPEAKER_MUTE,
    SCE_VOICE_QOS_ATTR_DESIRED_OUT_BIT_RATE,
    SCE_VOICE_QOS_ATTR_MIC_ACTIVE
} SceVoiceQoSAttributeId;
```

Enumeration Values

Macro	Value	Description
SCE_VOICE_QOS_ATTR_MIC_VOLUME	N/A	Local endpoint attribute for microphone volume. Type float with value from 0 and up.
SCE_VOICE_QOS_ATTR_MIC_MUTE	N/A	Local endpoint attribute for microphone mute. Type uint16_t with true to enable mute, false (0) to disable mute.
SCE_VOICE_QOS_ATTR_SPEAKER_VOLUME	N/A	Local endpoint attribute for speaker volume. Type float with value from 0 and up.
SCE_VOICE_QOS_ATTR_SPEAKER_MUTE	N/A	Local endpoint attribute for speaker mute. Type uint16_t with true to enable mute, false (0) to disable mute.
SCE_VOICE_QOS_ATTR_DESIRED_OUT_BIT_RATE	N/A	Connection attribute out-going bit rate desired by a game. Type int with value from 0 and up. For better voice quality, set this value to a number larger than 3850.
SCE_VOICE_QOS_ATTR_MIC_ACTIVE	N/A	Local endpoint attribute for determining whether the microphone is active. This is a get-only attribute. Type uint32_t with 1 indicating that the microphone is active and 0 indicating that it is not.

Description

Attribute identifiers.

SceVoiceQoSConnectionId

Connection identifier.

Definition

```
#include <voice_qos.h>
typedef int SceVoiceQoSConnectionId;
```

Description

Connection identifier.

SceVoiceQoSError

Error code.

Definition

```
#include <voice_qos.h>
typedef int SceVoiceQoSError;
```

Description

Error code.

SceVoiceQoSLocalId

Local endpoint identifier.

Definition

```
#include <voice_qos.h>
typedef int SceVoiceQoSLocalId;
```

Description

Local endpoint identifier.

SceVoiceQoSRemoteId

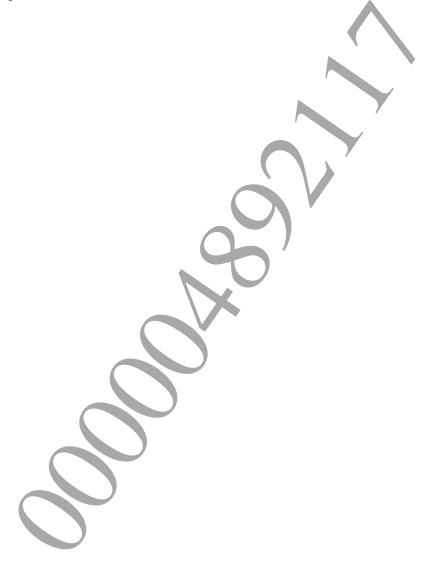Remote endpoint identifier.

Definition

```
#include <voice_qos.h>
typedef int SceVoiceQoSRemoteId;
```

Description

Remote endpoint identifier.

SceVoiceQoSStatusId

Status attribute identifier.

Definition

```
#include <voice_qos.h>
typedef enum SceVoiceQoSStatusId {
    SCE_VOICE_QOS_IN_BITRATE,
    SCE_VOICE_QOS_OUT_BITRATE,
    SCE_VOICE_QOS_OUT_READ_BITRATE,
    SCE_VOICE_QOS_IN_FRAME_RECEIVED_RATIO,
    SCE_VOICE_QOS_HEARTBEAT_FLAG
} SceVoiceQoSStatusId;
```

Enumeration Values

Macro	Value	Description
SCE_VOICE_QOS_IN_BITRATE	N/A	Current QoS (Quality of Service) voice-in codec rate per connection.
SCE_VOICE_QOS_OUT_BITRATE	N/A	Current QoS voice-out codec rate per connection.
SCE_VOICE_QOS_OUT_READ_BITRATE	N/A	Current QoS voice-out read bit rate by a game per connection.
SCE_VOICE_QOS_IN_FRAME_RECEIVED_RATIO	N/A	Ratio of frames received to total frames per connection, as a percentage (float).
SCE_VOICE_QOS_HEARTBEAT_FLAG	N/A	Whether or not there is a heartbeat between the connecting points.

Description

Status attribute identifier.

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Functions

sceVoiceQoSConnect

Creates a connection between a local and remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSConnect(
    SceVoiceQoSConnectionId *pConnectionId,
    SceVoiceQoSLocalId localId,
    SceVoiceQoSRemoteId remoteId
);
```

Arguments

pConnectionId	[out] The returned connection identifier.
localId	[in] The local endpoint identifier.
remoteId	[in] The remote endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICEQOS_INTERNAL_UNRECOVERABLE	libvoiceQoS encountered an unrecoverable error.
SCE_VOICE_ERROR_LIBVOICEQOS_RESOURCE_USED	libvoiceQoS reached its resource limit.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Creates a connection between a local and remote endpoint. Only one connection may be made to each remote endpoint. Multiple connections may be made to each local endpoint.

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sceVoiceQoSCreateLocalEndpoint

Creates a local endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSCreateLocalEndpoint(
    SceVoiceQoSLocalId *pLocalId
);
```

Arguments

pLocalId   [out] The returned local endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICEQOS_RESOURCE_USED	libvoiceQoS reached its resource limit.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Creates a local endpoint.

sceVoiceQoSCreateRemoteEndpoint

Creates a remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSCreateRemoteEndpoint(
    SceVoiceQoSRemoteId *pRemoteId
);
```

Arguments

pRemoteId   [out] The returned remote endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICEQOS_RESOURCE_USED	libvoiceQoS reached its resource limit.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Creates a remote endpoint.

sceVoiceQoSDeleteLocalEndpoint

Deletes a local endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSDeleteLocalEndpoint(
    SceVoiceQoSLocalId localId
);
```

Arguments

localId   [in] The local endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Deletes a local endpoint.

sceVoiceQoSDeleteRemoteEndpoint

Deletes a remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSDeleteRemoteEndpoint(
    SceVoiceQoSRemoteId remoteId
);
```

Arguments

remoteId   [in] The remote endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Deletes a remote endpoint.

sceVoiceQoSDisconnect

Deletes a connection between a local and remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSDisconnect(
    SceVoiceQoSConnectionId connectionId
);
```

Arguments

connectionId   [in] The connection identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Deletes a connection between a local and remote endpoint.

sceVoiceQoSEnd

Terminates libvoiceQoS.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSEnd(void);
```

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Terminates libvoiceQoS.

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sceVoiceQoSGetConnectionAttribute

Retrieves an attribute of the connection.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSGetConnectionAttribute(
    SceVoiceQoSConnectionId connectionId,
    SceVoiceQoSAttributeId attributeId,
    void *pAttributeValue,
    int attributeSize
);
```

Arguments

connectionId	[in] The connection identifier.
attributeId	[in] The attribute identifier.
pAttributeValue	[out] The returned attribute value data.
attributeSize	[in] The expected size of the returned attribute value data.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Retrieves an attribute of the connection.

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sceVoiceQoSGetLocalEndpoint

Retrieves the local endpoint of the connection.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSGetLocalEndpoint(
    SceVoiceQoSConnectionId connectionId,
    SceVoiceQoSLocalId *pLocalId
);
```

Arguments

connectionId   [in] The connection identifier.
pLocalId   [out] The returned local endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Retrieves the local endpoint of the connection.

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sceVoiceQoSGetLocalEndpointAttribute

Retrieves an attribute of the local endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSGetLocalEndpointAttribute(
    SceVoiceQoSLocalId localId,
    SceVoiceQoSAttributeId attributeId,
    void *pAttributeValue,
    int attributeSize
);
```

Arguments

localId	[in] The local endpoint identifier.
attributeId	[in] The attribute identifier.
pAttributeValue	[out] The returned attribute value data.
attributeSize	[in] The size of the attribute value data.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Retrieves an attribute of the local endpoint.

sceVoiceQoSGetRemoteEndpoint

Retrieves the remote endpoint of the connection.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSGetRemoteEndpoint(
    SceVoiceQoSConnectionId connectionId,
    SceVoiceQoSRemoteId *pRemoteId
);
```

Arguments

connectionId	[in] The connection identifier.
pRemoteId	[out] The returned remote endpoint identifier.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Retrieves the remote endpoint of the connection.

sceVoiceQoSGetStatus

Retrieves a status value for the connection.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSGetStatus(
    SceVoiceQoSConnectionId connectionId,
    SceVoiceQoSStatusId statusId,
    void *pStatusValue,
    int statusSize
);
```

Arguments

connectionId	[in] The connection identifier.
statusId	[in] The status identifier.
pStatusValue	[out] The returned status value data.
statusSize	[in] The expected size of the returned status value data.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Retrieves a status value for the connection.

sceVoiceQoSInit

Initializes libvoiceQoS.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSInit(void);
```

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_INITIALIZED	libvoiceQoS has already been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_SYSTEM	libvoiceQoS has system error.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Initializes libvoiceQoS.

sceVoiceQoSReadPacket

Retrieves a data packet to send to a remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSReadPacket(
    SceVoiceQoSConnectionId connectionId,
    void *pData,
    unsigned int *pSize
);
```

Arguments

connectionId	[in] The connection identifier.
pData	[in] Data to be sent from the local endpoint.
pSize	[in/out] The size of the data to be sent from the local endpoint. Returns the size read.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Retrieves a data packet to send to a remote endpoint.

sceVoiceQoSSetConnectionAttribute

Sets an attribute of the connection.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSSetConnectionAttribute(
    SceVoiceQoSConnectionId connectionId,
    SceVoiceQoSAttributeId attributeId,
    const void *pAttributeValue,
    int attributeSize
);
```

Arguments

connectionId	[in] The connection identifier.
attributeId	[in] The attribute identifier.
pAttributeValue	[in] The attribute value data.
attributeSize	[in] The size of the attribute value data.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Sets an attribute of the connection.

sceVoiceQoSSetLocalEndpointAttribute

Sets an attribute of the local endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSSetLocalEndpointAttribute(
    SceVoiceQoSLocalId localId,
    SceVoiceQoSAttributeId attributeId,
    const void *pAttributeValue,
    int attributeSize
);
```

Arguments

localId	[in] The local endpoint identifier.
attributeId	[in] The attribute identifier.
pAttributeValue	[in] The attribute value data.
attributeSize	[in] The size of the attribute value data.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.

Description

Sets an attribute of the local endpoint.

sceVoiceQoSWritePacket

Delivers a data packet received from a remote endpoint.

Definition

```
#include <voice_qos.h>
SceVoiceQoSError sceVoiceQoSWritePacket(
    SceVoiceQoSConnectionId connectionId,
    const void *pData,
    unsigned int *pSize
);
```

Arguments

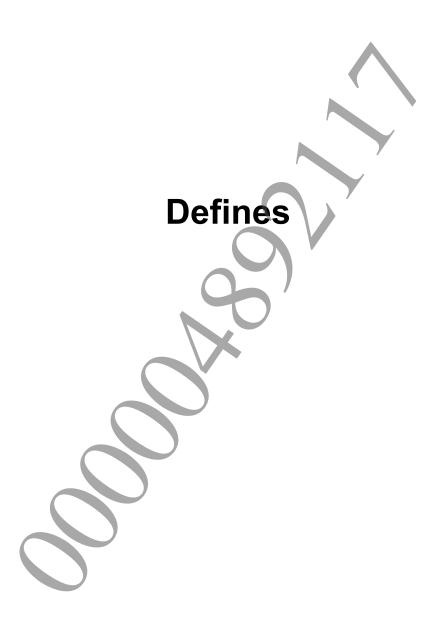|	
connectionId	[in] The connection identifier.
pData	[in] Data received from the remote endpoint.
pSize	[in/out] The size of the data received from the remote endpoint. Returns the size written.

Return Values

Value	Description
SCE_OK	Successful completion.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICEQOS_PACKET_INVALID	libvoiceQoS received an invalid packet to write.
SCE_VOICE_ERROR_LIBVOICE_XXX	Related errors from libvoice.

Description

Delivers a data packet received from a remote endpoint.

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Defines

Define Summary

Define	Value	Description
SCE_VOICE_ERROR_LIBVOICEQOS_ARGUMENT_INVALID	(0x804e0902)	libvoiceQoS received an invalid argument.
SCE_VOICE_ERROR_LIBVOICEQOS_INITIALIZED	(0x804e0905)	libvoiceQoS has already been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_INTERNAL_UNRECOVERABLE	(0x804e0904)	libvoiceQoS encountered an unrecoverable internal error.
SCE_VOICE_ERROR_LIBVOICEQOS_NOT_INIT	(0x804e0901)	libvoiceQoS has not been initialized.
SCE_VOICE_ERROR_LIBVOICEQOS_PACKET_INVALID	(0x804e0903)	libvoiceQoS received an invalid packet.
SCE_VOICE_ERROR_LIBVOICEQOS_RESOURCE_USED	(0x804e0907)	libvoiceQoS resource limit error.
SCE_VOICE_ERROR_LIBVOICEQOS_SYSTEM	(0x804e0906)	libvoiceQoS has system error.
SCE_VOICE_QOS_INVALID_CONNECTION_ID	(-1)	Invalid connection ID.
SCE_VOICE_QOS_INVALID_LOCAL_ID	(-1)	Invalid local ID.
SCE_VOICE_QOS_INVALID_REMOTE_ID	(-1)	Invalid remote ID.
SCE_VOICE_QOS_MAX_CONNECTIONS	7	Maximum number of connections when running on the PlayStation®Vita platform. See "Resource Limitations" in the *libvoiceQoS Overview*.
SCE_VOICE_QOS_MAX_LOCAL_ENDPOINTS	1	Maximum number of local endpoints when running on the PlayStation®Vita platform.
SCE_VOICE_QOS_MAX_REMOTE_ENDPOINTS	7	Maximum number of remote endpoints when running on the PlayStation®Vita platform. See "Resource Limitations" in the *libvoiceQoS Overview*.