

cosEventDomain

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1 cosEventDomain User's Guide

The cosEventDomain application is an Erlang implementation of a CORBA Service CosEventDomainAdmin.

1.1 The cosEventDomain Application

1.1.1 Content Overview

The cosEventDomain documentation is divided into three sections:

- PART ONE The User's Guide Description of the cosEventDomain Application including services and a small tutorial demonstrating the development of a simple service.
- PART TWO Release Notes A concise history of cosEventDomain.
- PART THREE The Reference Manual A quick reference guide, including a brief description, to all the functions available in cosEventDomain.

1.1.2 Brief Description of the User's Guide

The User's Guide contains the following parts:

- CosEventDomain overview
- CosEventDomain installation and examples

1.2 Introduction to cosEventDomain

1.2.1 Overview

The cosEventDomain application is a Event Domain Service compliant with the **OMG** Service CosEventDomainAdmin.

Purpose and Dependencies

CosEventDomain is dependent on Orber, which provides CORBA functionality in an Erlang environment.

Prerequisites

To fully understand the concepts presented in the documentation, it is recommended that the user is familiar with distributed programming and CORBA.

1.3 Quality Of Service and Admin Properties

1.3.1 Quality Of Service and Admin Properties

This chapter explains the allowed properties it is possible to set for this application.

Quality Of Service

The cosEventDomain application supports the following QoS settings:

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QoS	Range	Default
CycleDetection	AuthorizeCycles/ForbidCycles	ForbidCycles
DiamondDetection	AuthorizeDiamonds/ ForbidDiamonds	ForbidDiamonds

Table 3.1: Supported QoS settings

Comments on the table 'Supported QoS Settings':

CycleDetection

If a cycle is created, the user *must* be aware of the fact that unless they set timeout on events, events that are not filtered will loop endlessly through the topology.

DiamondDetection

A Diamond in this context, means that the same event may reach a point in the graph by more than one route (i.e. transitive). Hence, it is possible that multiple copies are delivered.

Setting Quality Of Service

Assume we have a Consumer Admin object which we want to change the current Quality of Service. Typical usage:

```
QoS =
  [#'CosNotification_Property'
  {name='CosEventDomainAdmin':'DiamondDetection'(),
   value=any:create(orber_tc:short(),
   'CosEventDomainAdmin':'AuthorizeDiamonds'())},
  #'CosNotification_Property'
  {name='CosEventDomainAdmin':'CycleDetection'(),
   value=any:create(orber_tc:short(),
   'CosEventDomainAdmin':'ForbidCycles'())}],
'CosEventDomainAdmin_EventDomain':set_qos(ED, QoS),
```

If it is not possible to set the requested QoS the UnsupportedQoS exception is raised, which includes a sequence of PropertyError's describing which QoS, possible range and why is not allowed. The error codes are:

- UNSUPPORTED_PROPERTY QoS not supported for this type of target object.
- UNAVAILABLE_PROPERTY due to current QoS settings the given property is not allowed.
- UNSUPPORTED_VALUE property value out of range; valid range is returned.
- UNAVAILABLE_VALUE due to current QoS settings the given value is not allowed; valid range is returned.
- BAD_PROPERTY unrecognized property.
- BAD_TYPE type of supplied property is incorrect.
- BAD_VALUE illegal value.

The CosEventDomainAdmin_EventDomain interface also supports an operation called validate_qos/2. The purpose of this operations is to check if a QoS setting is supported by the target object and if so, the operation returns additional properties which could be optionally added as well.

Admin Properties

The OMG specification do not contain any definitions of Admin Properties. Hence, the cosEventDomain application currently does not support any Admin Properties.

1.4 Event Domain Service

1.4.1 Overview of the CosEventDomain Service

The Event Domain service allows programmers to manage a cluster of information channels.

Event Domain Service Components

There are two components in the OMG CosEventDomainAdmin service architecture:

- EventDomainFactory: a factory for creating EventDomains.
- *EventDomain:* supplies a tool, which makes it easy to create topologies of interconnected channels (i.e. a directed graph).

A Tutorial on How to Create a Simple Service

To be able to use the cosEventDomain application, the cosNotification and, possibly, the cosTime application must be installed.

How to Run Everything

Below is a short transcript on how to run cosEventDomain.

```
%% Start Mnesia and Orber
mnesia:delete schema([node()]),
mnesia:create schema([node()]),
orber:install([node()]),
mnesia:start(),
orber:start(),
% Install and start cosNotification.
cosNotificationApp:install(),
cosNotificationApp:start(),
%% Install and start cosEventDomain.
cosEventDomainApp:install(),
cosEventDomainApp:start(),
%% Start a CosEventDomainAdmin factory.
AdminFac = cosEventDomainApp:start_factory(),
%% Define the desired QoS settings:
QoS =
   [#'CosNotification Property'
    {name='CosEventDomainAdmin':'DiamondDetection'(),
     value=any:create(orber_tc:short(),
'CosEventDomainAdmin':'AuthorizeDiamonds'())},
    #'CosNotification_Property
    {name='CosEventDomainAdmin':'CycleDetection'(),
     value=any:create(orber_tc:short(),
'CosEventDomainAdmin':'ForbidCycles'())}],
%% Create a new EventDomain:
{ED, EDId} = 'CosEventDomainAdmin_EventDomainFactory':
                          create_event_domain(Fac, QoS, []),
%% Now we can add Notification Channels to the Domain. How this
%% is done, see the cosNotification documentation. Let us assume
%% that we have gained access to two Channel Objects; add them to the
%% domain:
```

%% Connect them: 'CosEventDomainAdmin_EventDomain':add_connection(ED, C1),

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The cosEventDomain application is an Erlang implementation of a CORBA Service CosEventDomainAdmin.

cosEventDomainApp

Erlang module

To get access to the record definitions for the structures use: -include_lib("cosEventDomain/include/*.hrl").

This module contains the functions for starting and stopping the application.

Exports

install() -> Return
Types:
 Return = ok | {'EXCEPTION', E} | {'EXIT', R}

This operation installs the cosEventDomain application.

uninstall() -> Return

Types:

Return = ok | {'EXCEPTION', E} | {'EXIT', R}

This operation uninstalls the cosEventDomain application.

```
start() -> Return
Types:
```

Return = ok | {error, Reason}

This operation starts the cosEventDomain application.

```
stop() -> Return
Types:
```

Return = ok | {error, Reason}

This operation stops the cosEventDomain application.

```
start_factory() -> Factory
Types:
```

```
Factory = #objref
```

This operation creates a new instance of a Event Domain Factory using the default settings.

```
start_factory(Options) -> Factory
Types:
    Options = [Option]
    Option = currently no options defined.
    Factory = #objref
```

This operation creates a new instance of a Event Domain Factory

```
start_factory_link() -> Factory
Types:
```

Factory = #objref

This operation creates a new instance of a *Event Domain Factory*, which is linked to the invoking process, using the default settings.

start_factory_link(Options) -> Factory

Types:

```
Options = [Option]
Option = currently no options defined.
Factory = #objref
```

This operation creates a new instance of a *Event Domain Factory*, which is linked to the invoking process, with settings defined by the given options. Allowed options are the same as for cosEventDomainApp:start_factory/1.

```
stop_factory(Factory) -> Reply
Types:
    Factory = #objref
    Reply = ok | {'EXCEPTION', E}
```

This operation stop the target factory.

CosEventDomainAdmin

Erlang module

To get access to all definitions include necessary hrl files by using: -include_lib("cosEventDomain/include/*.hrl").

Exports

'CycleDetection'() -> string()

This function returns the CycleDetection identifier; required when defining QoS Properties.

'AuthorizeCycles'() -> short()

This function returns the AuthorizeCycles value; required when defining QoS Properties.

```
'ForbidCycles'() -> short()
```

This function returns the ForbidCycles value; required when defining QoS Properties.

'DiamondDetection'() -> string()

This function returns the DiamondDetection identifier; required when defining QoS Properties.

'AuthorizeDiamonds'() -> short()

This function returns the AuthorizeDiamonds value; required when defining QoS Properties.

'ForbidDiamonds'() -> short()

This function returns the ForbidDiamonds value; required when defining QoS Properties.

CosEventDomainAdmin_EventDomainFactory

Erlang module

To get access to all definitions include necessary hrl files by using: -include_lib("cosEventDomain/include/*.hrl").

Exports

```
create_event_domain(Factory, QoS, Admin) -> Reply
Types:
    Factory = #objref
    QoS = CosNotification::QoSProperties
    Admin = CosNotification::AdminProperties
    Reply = {EventDomain, DomainID} | {'EXCEPTION',
    #'CosNotification_UnsupportedQoS'{}} | {'EXCEPTION',
    #'CosNotification_UnsupportedAdmin'{}}
    EventDomain = #objref
```

To create a new EventDomain this operation is used. If it is not possible to support the given QoSProperties or AdminProperties an exception is raised, which list the properties not supported. For more information see the cosNotification user's guide.

```
get_all_domains(Factory) -> DomainIDSeq
Types:
```

```
Factory = #objref
DomainIDSeq = [long()]
```

This function returns a DomainID sequence of all domains associated with the target object.

```
get_event_domain(Factory, DomainID) -> Reply
Types:
    Factory = #objref
    DomainID = long()
    Reply = EventDomain | {'EXCEPTION',
    #'CosEventDomainAdmin_DomainNotFound'{}}
    EventDomain = #objref
```

This operation returns the EventDomain object associated with the given DomainID. If no such binding exists an exception is raised.

CosEventDomainAdmin_EventDomain

Erlang module

To get access to all definitions include necessary hrl files by using: -include_lib("cosEventDomain/include/*.hrl").

This module also exports the functions described in:

- CosNotification_QoSAdmin
- CosNotification_AdminPropertiesAdmin

Exports

```
add_channel(EventDomain, Channel) -> MemberID
Types:
```

```
EventDomain = Channel = #objref
MemberID = long()
```

```
Adds the given channel to the target domain. The channel must be a CosNotifyChannelAdmin::EventChannel.
```

```
get_all_channels(EventDomain) -> MemberIDSeq
```

Types:

EventDomain = #objref
MemberIDSeq = [long()]

Returns a a sequence of all channels associated with the target object.

```
get_channel(EventDomain, MemberID) -> Reply
Types:
```

```
EventDomain = #objref
MemberID = long()
Reply = Channel | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
Channel = #objref
```

If the target domain have a CosNotifyChannelAdmin::EventChannel represented by the given id this channel is returned. Otherwise, an exception is raised.

```
remove_channel(EventDomain, MemberID) -> Reply
Types:
    EventDomain = #objref
```

```
MemberID = long()
```

```
Reply = ok | {'EXCEPTION', #'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a CosNotifyChannelAdmin::EventChannel with the MemberID exists it will removed and all its Connections terminated. Otherwise an exception is raised.

```
add connection(EventDomain, Connection) -> Reply
Types:
  EventDomain = #objref
  Connection = 'CosEventDomainAdmin_Connection'{supplier_id=MemberID,
  consumer_id=MemberID, ctype=Type, notification_style=Style}
  MemberID = long()
  Type = 'ANY_EVENT' | 'STRUCTURED_EVENT' | 'SEQUENCE_EVENT'
  Style = 'Pull' | 'Push'
  Reply = ConnectionID | {'EXCEPTION', Exc}
  ConnectionID = long()
  Exc = #'CosNotifyChannelAdmin_ChannelNotFound'{} |
  #'CosNotifyChannelAdmin_TypeError'{} |
  #'CosEventDomainAdmin_AlreadyExists'{} |
  #'CosEventDomainAdmin_DiamondCreationForbidden'{diam=RouteSeq} |
  #'CosEventDomainAdmin_CycleCreationForbidden'{cyc=MemberIDSeq}
  RouteSeq = [MemberIDSeq]
  MemberIDSeq = [long()]
```

The Connection parameter must contain valid data to enable the target domain to setup a connection between two channels. The struct members supplier_id and consumer_id determines which channel should produce and consume events. which type of events and if the supplier should push or the consumer pull events is determined by ctype and notification_style respectively.

If the target domain is not able to setup the connection the appropriate exception is raised.

```
get_all_connections(EventDomain) -> ConnectionIDSeq
Types:
```

```
EventDomain = #objref
ConnectionIDSeq = [long()]
```

This operation returns a sequence of all connections within the target domain.

```
get_connection(EventDomain, ConnectionID) -> Reply
```

Types:

```
EventDomain = #objref
ConnectionID = long()
Reply = Connection | {'EXCEPTION',
#'CosEventDomainAdmin_ConnectionNotFound'{}}
Connection = 'CosEventDomainAdmin_Connection'{supplier_id=MemberID,
consumer_id=MemberID, ctype=Type, notification_style=Style}
MemberID = long()
Type = 'ANY_EVENT' | 'STRUCTURED_EVENT' | 'SEQUENCE_EVENT'
Style = 'Pull' | 'Push'
```

given identified connection by the id exists within the domain, If а target а #'CosEventDomainAdmin_Connection'{} which describe the connection is returned. Otherwise, an exception is raised.

```
remove_connection(EventDomain, ConnectionID) -> Reply
Types:
    EventDomain = #objref
    ConnectionID = long()
    Reply = ok | {'EXCEPTION', #'CosEventDomainAdmin_ConnectionNotFound'{}}
```

If the supplied connection id exists, the connection the id represents is terminated. Otherwise, an exception is raised.

```
get_offer_channels(EventDomain, MemberID) -> Reply
Types:
    EventDomain = #objref
    MemberID = long()
    D = long()
```

```
Reply = MemberIDSeq | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

This operation returns a sequence, containing the member id's of all channels within the target domain which will supply events to the channel identified by the given id. But, if no such id exists in this domain, an exception is raised.

```
get_subscription_channels(EventDomain, MemberID) -> Reply
Types:
    EventDomain = #objref
    Boply = MemberIDSec | {LEXCEDITION!
```

```
Reply = MemberIDSeq | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

This operations behaves like get_subscription_channels; the difference is that the id's returned identifies channels which will consume events supplied by the channel associated with the given id.

destroy(EventDomain) -> ok
Types:

```
EventDomain = #objref
```

Calling this operation will terminate all connections within the target domain. The domain will terminate but all channels will not be affected.

```
get_cycles(EventDomain) -> RouteSeq
```

```
Types:
```

```
EventDomain = #objref
RouteSeq = [MemberIDSeq]
MemberIDSeq = [long()]
```

Returns a list of all cycles within the target domain.

```
get_diamonds(EventDomain) -> DiamondSeq
Types:
    EventDomain = #objref
    DiamondSeq = [RouteSeq]
    RouteSeq = [MemberIDSeq]
    MemberIDSeq = [long()]
```

Returns a list of all diamonds within the target domain

```
set_default_consumer_channel(EventDomain, MemberID) -> Reply
Types:
    EventDomain = #objref
    Reply = MemberID | {'EXCEPTION',
    #'CosNotifyChannelAdmin_ChannelNotFound'{}}
    MemberID = long()
```

If the given id represents a channel within the target domain, this channel will be used when connection a supplier client without specifying a certain channel. If no such channel exists an exceptions is raised.

```
set_default_supplier_channel(EventDomain, MemberID) -> Reply
Types:
    EventDomain = #objref
    Reply = MemberID | {'EXCEPTION',
    #'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

```
MemberID = long()
```

If the given id represents a channel within the target domain, this channel will be used when connection a consumer client without specifying a certain channel. If no such channel exists an exceptions is raised.

```
connect_push_consumer(EventDomain, Consumer) -> Reply
Types:
    EventDomain = #objref
    Consumer = CosEventComm::PushConsumer
```

```
Reply = CosNotifyChannelAdmin::ProxyPushSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given PushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_pull_consumer(EventDomain, Consumer) -> Reply
Types:
    EventDomain = #objref
    Consumer = CosEventComm::PullConsumer
    Reply = CosNotifyChannelAdmin::ProxyPullSupplier | {'EXCEPTION',
    #'CosNotifyChannelAdmin ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given PullConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_push_supplier(EventDomain, Supplier) -> Reply
Types:
    EventDomain = #objref
    Supplier = CosEventComm::PushSupplier
    Reply = CosNotifyChannelAdmin::ProxyPushConsumer | {'EXCEPTION',
    #'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given PushSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_pull_supplier(EventDomain, Supplier) -> Reply
Types:
    EventDomain = #objref
    Supplier = CosEventComm::PullSupplier
    Reply = CosNotifyChannelAdmin::ProxyPushConsumer | {'EXCEPTION',
    #'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given PullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_push_consumer(EventDomain, Consumer) -> Reply
```

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::StructuredPushConsumer
Reply = CosNotifyChannelAdmin::StructuredProxyPushSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given StructuredPushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

connect_structured_pull_consumer(EventDomain, Consumer) -> Reply

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::StructuredPullConsumer
Reply = CosNotifyChannelAdmin::StructuredProxyPullSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given StructuredPullConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_push_supplier(EventDomain, Supplier) -> Reply
Types:
```

```
EventDomain = #objref
```

```
Supplier = CosNotifyComm::StructuredPushSupplier
Reply = CosNotifyChannelAdmin::StructuredProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given StructuredPushSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_pull_supplier(EventDomain, Supplier) -> Reply
```

Types:

```
EventDomain = #objref
Supplier = CosNotifyComm::StructuredPullSupplier
Reply = CosNotifyChannelAdmin::StructuredProxyPullConsume | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given StructuredPullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_sequence_push_consumer(EventDomain, Consumer) -> Reply
Types:
    EventDomain = #objref
    Consumer = CosNotifyComm::SequencePushConsumer
    Reply = CosNotifyChannelAdmin::SequenceProxyPushSupplier | {'EXCEPTION',
    #'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given SequencePushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_sequence_pull_consumer(EventDomain, Consumer) -> Reply
```

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::SequencePullConsumer
Reply = CosNotifyChannelAdmin::SequenceProxyPullSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given SequencePullConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

connect_sequence_push_supplier(EventDomain, Supplier) -> Reply
Types:

```
EventDomain = #objref
Supplier = CosNotifyComm::SequencePushSupplier
Reply = CosNotifyChannelAdmin::SequenceProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given SequencePushSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_sequence_pull_supplier(EventDomain, Supplier) -> Reply
Types:
```

```
EventDomain = #objref
Supplier = CosNotifyComm::SequencePullSupplier
Reply = CosNotifyChannelAdmin::SequenceProxyPullConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a default Channel have been set, this operation connects the given SequencePullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_push_consumer_with_id(EventDomain, Consumer, MemberID) -> Reply
Types:
    EventDomain = #objref
    Consumer = ConFigure Commit BushConsumer
```

```
Consumer = CosEventComm::PushConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::ProxyPushSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given PushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

connect_pull_consumer_with_id(EventDomain, Consumer, MemberID) -> Reply
Types:

```
EventDomain = #objref
Consumer = CosEventComm::PullConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::ProxyPullSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given PullConsumer to it. Otherwise, the # 'CosNotifyChannelAdmin_ChannelNotFound' { } exception is raised.

```
connect_push_supplier_with_id(EventDomain, Supplier, MemberID) -> Reply
_____
```

Types:

```
EventDomain = #objref
Supplier = CosEventComm::PushSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::ProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given PushSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_pull_supplier_with_id(EventDomain, Supplier, MemberID) -> Reply
Types:
```

```
EventDomain = #objref
Supplier = CosEventComm::PullSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::ProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given PullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_push_consumer_with_id(EventDomain, Consumer, MemberID) ->
Reply
```

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::StructuredPushConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::StructuredProxyPushSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given StructuredPushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_pull_consumer_with_id(EventDomain, Consumer, MemberID) ->
Reply
```

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::StructuredPullConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::StructuredProxyPullSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given StructuredPullConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_structured_push_supplier_with_id(EventDomain, Supplier, MemberID) ->
Reply
```

Types:

```
EventDomain = #objref
Supplier = CosNotifyComm::StructuredPushSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::StructuredProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given StructuredPushSupplier to it. Otherwise, the # 'CosNotifyChannelAdmin_ChannelNotFound' { } exception is raised.

```
connect_structured_pull_supplier_with_id(EventDomain, Supplier, MemberID) ->
Reply
```

Types:

```
EventDomain = #objref
Supplier = CosNotifyComm::StructuredPullSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::StructuredProxyPullConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given StructuredPullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_sequence_push_consumer_with_id(EventDomain, Consumer, MemberID) ->
Reply
```

Types:

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EventDomain = #objref
Consumer = CosNotifyComm::SequencePushConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::SequenceProxyPushSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given SequencePushConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

connect_sequence_pull_consumer_with_id(EventDomain, Consumer, MemberID) ->
Reply

Types:

```
EventDomain = #objref
Consumer = CosNotifyComm::SequencePullConsumer
MemberID = long()
Reply = CosNotifyChannelAdmin::SequenceProxyPullSupplier | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given SequencePullConsumer to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

connect_sequence_push_supplier_with_id(EventDomain, Supplier, MemberID) ->
Reply

Types:

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EventDomain = #objref
Supplier = CosNotifyComm::SequencePushSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::SequenceProxyPushConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given SequencePushSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.

```
connect_sequence_pull_supplier_with_id(EventDomain, Supplier, MemberID) ->
Reply
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Types:

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EventDomain = #objref
Supplier = CosNotifyComm::SequencePullSupplier
MemberID = long()
Reply = CosNotifyChannelAdmin::SequenceProxyPullConsumer | {'EXCEPTION',
#'CosNotifyChannelAdmin_ChannelNotFound'{}}
```

If a Channel associated with the given MemberID exists within the target Domain, this operation connects the given SequencePullSupplier to it. Otherwise, the #'CosNotifyChannelAdmin_ChannelNotFound'{} exception is raised.