| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ORBInitializerOperations.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/org/omg/PortableInterceptor/ORBInitializer.html)   [**NEXT CLASS**](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html) | [**FRAMES**](http://docs.google.com/index.html?org/omg/PortableInterceptor/ORBInitializerOperations.html)    [**NO FRAMES**](http://docs.google.com/ORBInitializerOperations.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **org.omg.PortableInterceptor**

Interface ORBInitializerOperations

**All Known Subinterfaces:** [ORBInitializer](http://docs.google.com/org/omg/PortableInterceptor/ORBInitializer.html)

public interface **ORBInitializerOperations**

Facilitates interceptor registration and ORB initialization.

Interceptors are intended to be a means by which ORB services gain access to ORB processing, effectively becoming part of the ORB. Since Interceptors are part of the ORB, when ORB.init returns an ORB, the Interceptors shall have been registered. Interceptors cannot be registered on an ORB after it has been returned by a call to ORB.init.

An Interceptor is registered by registering an associated ORBInitializer object which implements the ORBInitializer interface. When an ORB is initializing, it shall call each registered ORBInitializer, passing it an ORBInitInfo object which is used to register its Interceptor.

**Registering ORB Initializers in Java**

ORBInitializers are registered via Java ORB properties.

The property names are of the form:

org.omg.PortableInterceptor.ORBInitializerClass.<Service>where <Service> is the string name of a class which implementsorg.omg.PortableInterceptor.ORBInitializerTo avoid name collisions, the reverse DNS name convention should be used. For example, if company X has three initializers, it could define the following properties:

* org.omg.PortableInterceptor.ORBInitializerClass.com.x.Init1
* org.omg.PortableInterceptor.ORBInitializerClass.com.x.Init2
* org.omg.PortableInterceptor.ORBInitializerClass.com.x.Init3

During ORB.init, these ORB properties which begin with org.omg.PortableInterceptor.ORBInitializerClass shall be collected, the <Service> portion of each property shall be extracted, an object shall be instantiated with the <Service> string as its class name, and the pre\_init and post\_init methods shall be called on that object. If there are any exceptions, the ORB shall ignore them and proceed.

***Example***

A client-side logging service written by company X, for example, may have the following ORBInitializer implementation:

package com.x.logging;  
   
 import org.omg.PortableInterceptor.Interceptor;   
 import org.omg.PortableInterceptor.ORBInitializer;   
 import org.omg.PortableInterceptor.ORBInitInfo;   
   
 public class LoggingService implements ORBInitializer {   
 void pre\_init( ORBInitInfo info ) {   
 // Instantiate the Logging Service s Interceptor.   
 Interceptor interceptor = new LoggingInterceptor();   
  
 // Register the Logging Service s Interceptor.   
 info.add\_client\_request\_interceptor( interceptor );   
 }   
   
 void post\_init( ORBInitInfo info ) {   
 // This service does not need two init points.   
 }   
 }

To run a program called MyApp using this logging service, the user could type:java -Dorg.omg.PortableInterceptor.ORBInitializerClass.com.x.Logging.LoggingService MyApp

**Notes about Registering Interceptors**

Request Interceptors are registered on a per-ORB basis.

To achieve virtual per-object Interceptors, query the policies on the target from within the interception points to determine whether they should do any work.

To achieve virtual per-POA Interceptors, instantiate each POA with a different ORB. While Interceptors may be ordered administratively, there is no concept of order with respect to the registration of Interceptors. Request Interceptors are concerned with service contexts. Service contexts have no order, so there is no purpose for request Interceptors to have an order. IOR Interceptors are concerned with tagged components. Tagged components also have no order, so there is no purpose for IOR Interceptors to have an order.

Registration code should avoid using the ORB (i.e., calling ORB.init with the provided orb\_id). Since registration occurs during ORB initialization, results of invocations on this ORB while it is in this state are undefined.

**See Also:**[ORBInitInfo](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html)

| **Method Summary** | |
| --- | --- |
| void | [**post\_init**](http://docs.google.com/org/omg/PortableInterceptor/ORBInitializerOperations.html#post_init(org.omg.PortableInterceptor.ORBInitInfo))([ORBInitInfo](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html) info)            Called during ORB initialization. |
| void | [**pre\_init**](http://docs.google.com/org/omg/PortableInterceptor/ORBInitializerOperations.html#pre_init(org.omg.PortableInterceptor.ORBInitInfo))([ORBInitInfo](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html) info)            Called during ORB initialization. |

| **Method Detail** |
| --- |

### pre\_init

void **pre\_init**([ORBInitInfo](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html) info)

Called during ORB initialization. If it is expected that initial services registered by an interceptor will be used by other interceptors, then those initial services shall be registered at this point via calls to ORBInitInfo.register\_initial\_reference.

**Parameters:**info - provides initialization attributes and operations by which Interceptors can be registered.

### post\_init

void **post\_init**([ORBInitInfo](http://docs.google.com/org/omg/PortableInterceptor/ORBInitInfo.html) info)

Called during ORB initialization. If a service must resolve initial references as part of its initialization, it can assume that all initial references will be available at this point.

Calling the post\_init operations is not the final task of ORB initialization. The final task, following the post\_init calls, is attaching the lists of registered interceptors to the ORB. Therefore, the ORB does not contain the interceptors during calls to post\_init. If an ORB-mediated call is made from within post\_init, no request interceptors will be invoked on that call. Likewise, if an operation is performed which causes an IOR to be created, no IOR interceptors will be invoked.

**Parameters:**info - provides initialization attributes and operations by which Interceptors can be registered.

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[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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