| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ServerRequest.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/CORBA/Request.html)   [**NEXT CLASS**](http://docs.google.com/org/omg/CORBA/ServiceDetail.html) | [**FRAMES**](http://docs.google.com/index.html?org/omg/CORBA/ServerRequest.html)    [**NO FRAMES**](http://docs.google.com/ServerRequest.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **org.omg.CORBA**

Class ServerRequest

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **org.omg.CORBA.ServerRequest**

public abstract class **ServerRequest**extends [Object](http://docs.google.com/java/lang/Object.html)

An object that captures the explicit state of a request for the Dynamic Skeleton Interface (DSI). This class, the cornerstone of the DSI, is analogous to the Request object in the DII.

The ORB is responsible for creating this embodiment of a request, and delivering it to a Dynamic Implementation Routine (DIR). A dynamic servant (a DIR) is created by implementing the DynamicImplementation class, which has a single invoke method. This method accepts a ServerRequest object. The abstract class ServerRequest defines methods for accessing the method name, the arguments and the context of the request, as well as methods for setting the result of the request either as a return value or an exception.

A subtlety with accessing the arguments of the request is that the DIR needs to provide type information about the expected arguments, since there is no compiled information about these. This information is provided through an NVList, which is a list of NamedValue objects. Each NamedValue object contains an Any object, which in turn has a TypeCode object representing the type of the argument.

Similarly, type information needs to be provided for the response, for either the expected result or for an exception, so the methods result and except take an Any object as a parameter.

**See Also:**[DynamicImplementation](http://docs.google.com/org/omg/CORBA/DynamicImplementation.html), [NVList](http://docs.google.com/org/omg/CORBA/NVList.html), [NamedValue](http://docs.google.com/org/omg/CORBA/NamedValue.html)

| **Constructor Summary** | |
| --- | --- |
| [**ServerRequest**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#ServerRequest())() |

| **Method Summary** | |
| --- | --- |
| void | [**arguments**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#arguments(org.omg.CORBA.NVList))([NVList](http://docs.google.com/org/omg/CORBA/NVList.html) args)            Specifies method parameter types and retrieves "in" and "inout" argument values. |
| abstract  [Context](http://docs.google.com/org/omg/CORBA/Context.html) | [**ctx**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#ctx())()            Returns the context information specified in IDL for the operation when the operation is not an attribute access and the operation's IDL definition contains a context expression; otherwise it returns a nil Context reference. |
| void | [**except**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#except(org.omg.CORBA.Any))([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)  **Deprecated.** *use set\_exception()* |
| [String](http://docs.google.com/java/lang/String.html) | [**op\_name**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#op_name())()  **Deprecated.** *use operation()* |
| [String](http://docs.google.com/java/lang/String.html) | [**operation**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#operation())()            Throws an org.omg.CORBA.NO\_IMPLEMENT exception. |
| void | [**params**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#params(org.omg.CORBA.NVList))([NVList](http://docs.google.com/org/omg/CORBA/NVList.html) params)  **Deprecated.** *use the method arguments* |
| void | [**result**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#result(org.omg.CORBA.Any))([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)  **Deprecated.** *use the method set\_result* |
| void | [**set\_exception**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#set_exception(org.omg.CORBA.Any))([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)            Throws an org.omg.CORBA.NO\_IMPLEMENT exception. |
| void | [**set\_result**](http://docs.google.com/org/omg/CORBA/ServerRequest.html#set_result(org.omg.CORBA.Any))([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)            Throws an org.omg.CORBA.NO\_IMPLEMENT exception. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### ServerRequest

public **ServerRequest**()

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

### op\_name

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public [String](http://docs.google.com/java/lang/String.html) **op\_name**()

**Deprecated.** *use operation()*

Retrieves the name of the operation being invoked. According to OMG IDL's rules, these names must be unique among all operations supported by this object's "most-derived" interface. Note that the operation names for getting and setting attributes are \_get\_<attribute\_name> and \_set\_<attribute\_name>, respectively.

**Returns:**the name of the operation to be invoked

### operation

public [String](http://docs.google.com/java/lang/String.html) **operation**()

Throws an org.omg.CORBA.NO\_IMPLEMENT exception.

Retrieves the name of the operation being invoked. According to OMG IDL's rules, these names must be unique among all operations supported by this object's "most-derived" interface. Note that the operation names for getting and setting attributes are \_get\_<attribute\_name> and \_set\_<attribute\_name>, respectively.

**Returns:**the name of the operation to be invoked**See Also:**[CORBA package comments for unimplemented features](http://docs.google.com/package-summary.html#unimpl)

### params

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public void **params**([NVList](http://docs.google.com/org/omg/CORBA/NVList.html) params)

**Deprecated.** *use the method arguments*

Specifies method parameter types and retrieves "in" and "inout" argument values.

Note that this method is deprecated; use the method arguments in its place.

Unless it calls the method set\_exception, the DIR must call this method exactly once, even if the method signature contains no parameters. Once the method arguments or set\_exception has been called, calling arguments on the same ServerRequest object will result in a BAD\_INV\_ORDER system exception. The DIR must pass in to the method arguments an NVList initialized with TypeCodes and Flags describing the parameter types for the operation, in the order in which they appear in the IDL specification (left to right). A potentially-different NVList will be returned from arguments, with the "in" and "inout" argument values supplied. If it does not call the method set\_exception, the DIR must supply the returned NVList with return values for any "out" arguments before returning, and may also change the return values for any "inout" arguments.

**Parameters:**params - the arguments of the method, in the form of an NVList object

### arguments

public void **arguments**([NVList](http://docs.google.com/org/omg/CORBA/NVList.html) args)

Specifies method parameter types and retrieves "in" and "inout" argument values. Unless it calls the method set\_exception, the DIR must call this method exactly once, even if the method signature contains no parameters. Once the method arguments or set\_exception has been called, calling arguments on the same ServerRequest object will result in a BAD\_INV\_ORDER system exception. The DIR must pass in to the method arguments an NVList initialized with TypeCodes and Flags describing the parameter types for the operation, in the order in which they appear in the IDL specification (left to right). A potentially-different NVList will be returned from arguments, with the "in" and "inout" argument values supplied. If it does not call the method set\_exception, the DIR must supply the returned NVList with return values for any "out" arguments before returning, and it may also change the return values for any "inout" arguments.

**Parameters:**args - the arguments of the method, in the form of an NVList**See Also:**[CORBA package comments for unimplemented features](http://docs.google.com/package-summary.html#unimpl)

### result

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public void **result**([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)

**Deprecated.** *use the method set\_result*

Specifies any return value for the call.

Note that this method is deprecated; use the method set\_result in its place.

Unless the method set\_exception is called, if the invoked method has a non-void result type, the method set\_result must be called exactly once before the DIR returns. If the operation has a void result type, the method set\_result may optionally be called once with an Any object whose type is tk\_void. Calling the method set\_result before the method arguments has been called or after the method set\_result or set\_exception has been called will result in a BAD\_INV\_ORDER exception. Calling the method set\_result without having previously called the method ctx when the IDL operation contains a context expression, or when the NVList passed to arguments did not describe all parameters passed by the client, may result in a MARSHAL system exception.

**Parameters:**any - an Any object containing the return value to be set

### set\_result

public void **set\_result**([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)

Throws an org.omg.CORBA.NO\_IMPLEMENT exception.

Specifies any return value for the call. Unless the method set\_exception is called, if the invoked method has a non-void result type, the method set\_result must be called exactly once before the DIR returns. If the operation has a void result type, the method set\_result may optionally be called once with an Any object whose type is tk\_void. Calling the method set\_result before the method arguments has been called or after the method set\_result or set\_exception has been called will result in a BAD\_INV\_ORDER exception. Calling the method set\_result without having previously called the method ctx when the IDL operation contains a context expression, or when the NVList passed to arguments did not describe all parameters passed by the client, may result in a MARSHAL system exception.

**Parameters:**any - an Any object containing the return value to be set**See Also:**[CORBA package comments for unimplemented features](http://docs.google.com/package-summary.html#unimpl)

### except

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public void **except**([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)

**Deprecated.** *use set\_exception()*

The DIR may call set\_exception at any time to return an exception to the client. The Any passed to set\_exception must contain either a system exception or a user exception specified in the raises expression of the invoked operation's IDL definition. Passing in an Any that does not contain an exception will result in a BAD\_PARAM system exception. Passing in an unlisted user exception will result in either the DIR receiving a BAD\_PARAM system exception or in the client receiving an UNKNOWN\_EXCEPTION system exception.

**Parameters:**any - the Any object containing the exception

### set\_exception

public void **set\_exception**([Any](http://docs.google.com/org/omg/CORBA/Any.html) any)

Throws an org.omg.CORBA.NO\_IMPLEMENT exception.

Returns the given exception to the client. This method is invoked by the DIR, which may call it at any time. The Any object passed to this method must contain either a system exception or one of the user exceptions specified in the invoked operation's IDL definition. Passing in an Any object that does not contain an exception will cause a BAD\_PARAM system exception to be thrown. Passing in an unlisted user exception will result in either the DIR receiving a BAD\_PARAM system exception or in the client receiving an UNKNOWN\_EXCEPTION system exception.

**Parameters:**any - the Any object containing the exception **Throws:** [BAD\_PARAM](http://docs.google.com/org/omg/CORBA/BAD_PARAM.html) - if the given Any object does not contain an exception or the exception is an unlisted user exception UNKNOWN\_EXCEPTION - if the given exception is an unlisted user exception and the DIR did not receive a BAD\_PARAM exception**See Also:**[CORBA package comments for unimplemented features](http://docs.google.com/package-summary.html#unimpl)

### ctx

public abstract [Context](http://docs.google.com/org/omg/CORBA/Context.html) **ctx**()

Returns the context information specified in IDL for the operation when the operation is not an attribute access and the operation's IDL definition contains a context expression; otherwise it returns a nil Context reference. Calling the method ctx before the method arguments has been called or after the method ctx, set\_result, or set\_exception has been called will result in a BAD\_INV\_ORDER system exception.

**Returns:**the context object that is to be used to resolve any context strings whose values need to be sent with the invocation. **Throws:** [BAD\_INV\_ORDER](http://docs.google.com/org/omg/CORBA/BAD_INV_ORDER.html) - if (1) the method ctx is called before the method arguments or (2) the method ctx is called after calling set\_result or set\_exception

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ServerRequest.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/CORBA/Request.html)   [**NEXT CLASS**](http://docs.google.com/org/omg/CORBA/ServiceDetail.html) | [**FRAMES**](http://docs.google.com/index.html?org/omg/CORBA/ServerRequest.html)    [**NO FRAMES**](http://docs.google.com/ServerRequest.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).