# Ice Default and Override Properties

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## Ice.Default.CollocationOptimized

### Synopsis

`Ice.Default.CollocationOptimized=num`

### Description

Specifies whether proxy invocations use collocation optimization by default. When enabled, proxy invocations on a collocated servant (i.e., a servant whose object adapter was created by the same communicator as the proxy) are made as a direct method call if possible. Collocated invocations are more efficient because they avoid the overhead of marshaling parameters and sending requests over the network.

Collocation optimization is not supported for asynchronous or Dynamic Ice invocations, nor is it supported in Ice for Python.

If not specified, the default value is 1. Set the property to 0 to disable collocation optimization by default.

## Ice.Default.EndpointSelection

### Synopsis

`Ice.Default.EndpointSelection=policy`

### Description

This property controls the default endpoint selection policy for proxies with multiple endpoints. Permissible values are `Ordered` and `Random`. The default value of this property is `Random`.

## Ice.Default.Host

### Synopsis

`Ice.Default.Host=host`

### Description

If an endpoint does not specify a host name (i.e., without a `-h host` option), the `host` value from this property is used instead. The property has no default value.

## Ice.Default.Locator

### Synopsis

`Ice.Default.Locator=locator`

**Description**

Specifies a default locator for all proxies and object adapters. The value is a stringified proxy for the IceGrid locator object. The default locator can be overridden on a proxy using the `ice_locator` proxy method. The default value is no locator.

The default identity of the IceGrid locator object is `IceGrid/Locator`, but this identity is influenced by the `IceGrid.InstanceName` property. The locator object is available on the IceGrid client endpoints. For example, suppose `IceGrid.Registry.Client.Endpoints` is set as follows:

```
IceGrid.Registry.Client.Endpoints=tcp -p 12000 -h localhost
```

In this case, the stringified proxy for the IceGrid locator is:

```
Ice.Default.Locator=IceGrid/Locator:tcp -p 12000 -h localhost
```

As a proxy property, you can configure additional aspects of the proxy using properties.

# Ice.Default.LocatorCacheTimeout

**Synopsis**

`Ice.Default.LocatorCacheTimeout=`*num*

**Description**

Specifies the default locator cache timeout for indirect proxies. If *num* is set to a value larger than zero, locator cache entries older than *num* seconds are ignored. If set to 0, the locator cache is not used. If set to $-1$, locator cache entries do not expire.

Once a cache entry has expired, the Ice run time performs a new locate request to refresh the cache before sending the next invocation; therefore, the invocation is delayed until the run time has refreshed the entry. If you set `Ice.BackgroundLocatorCacheUpdates` to a non-zero value, the lookup to refresh the cache is still performed but happens in the background; this avoids the delay for the first invocation that follows expiry of a cache entry.

# Ice.Default.Package

**Synopsis**

`Ice.Default.Package=`*package*

**Description**

Ice for Java allows you to customize the packaging of generated code. If you use this feature, the Ice run time requires additional configuration in order to successfully unmarshal exceptions and concrete class types. This property specifies a default package to use if other attempts by the Ice run time to dynamically load a generated class have failed. Also see `Ice.Package.`*module*.

# Ice.Default.PreferSecure

**Synopsis**

`Ice.Default.PreferSecure=`*num*

**Description**

Specifies whether secure endpoints are given precedence in proxies by default. The default value of *num* is zero, meaning that insecure endpoints are given preference.

Setting this property to a non-zero value is the equivalent of invoking the proxy method `ice_preferSecure(true)` on proxies created by the Ice run time, such as those returned by `stringToProxy` or received as the result of an invocation. Proxies created by methods such as `ice_oneway` inherit the setting of the original proxy. If you want to force all proxies to use only secure endpoints, use `Ice.Override.Secure` instead.

See Configuring Secure Proxies for a discussion of secure proxies.

# Ice.Default.Protocol

**Synopsis**

`Ice.Default.Protocol=`*protocol*

**Description**

Sets the protocol that is being used if an endpoint uses default as the protocol specification. The default value is `tcp`.

# Ice.Default.Router

**Synopsis**

`Ice.Default.Router=`*router*

**Description**

Specifies the default router for all proxies. The value is a stringified proxy for the Glacier2 router control interface. The default router can be overridden on a proxy using the `ice_router` proxy method. The default value is no router.

As a proxy property, you can configure additional aspects of the proxy using properties.

# Ice.Override.Compress

**Synopsis**

`Ice.Override.Compress=`*num*

**Description**

If set, this property overrides compression settings in all proxies. If *num* is set to a value larger than zero, compression is enabled. If zero, compression is disabled.

The setting of this property is ignored in the server role.

Note that, if a client sets `Ice.Override.Compress=1` and sends a compressed request to a server that does not support compression, the server will close the connection and the client will receive `ConnectionLostException`.

If a client does not support compression and `Ice.Override.Compress=1`, the setting is ignored and a warning message is printed on `stderr`.

Regardless of the setting of this property, requests smaller than 100 bytes are never compressed.

# Ice.Override.CloseTimeout

**Synopsis**

`Ice.Override.CloseTimeout=`*num*

**Description**

This property overrides timeout settings used to close connections. *num* is the timeout value in milliseconds, or `-1` for no timeout. If this property is not defined, then `Ice.Override.Timeout` is used. If `Ice.Override.Timeout` is not defined, the endpoint timeout is used.

# Ice.Override.ConnectTimeout

**Synopsis**

`Ice.Override.ConnectTimeout=`*num*

**Description**

This property overrides timeout settings used to establish connections. *num* is the timeout value in milliseconds, or `-1` for no timeout. If this property is not defined, then `Ice.Override.Timeout` is used. If `Ice.Override.Timeout` is not defined, the endpoint timeout is used.

# Ice.Override.Secure

**Synopsis**

```
Ice.Override.Secure=num
```

**Description**

If set to a value larger than zero, this property overrides security settings in all proxies by allowing only secure endpoints. Defining this property is equivalent to invoking the `ice_secure(true)` proxy method on every proxy. If you wish to give priority to secure endpoints without precluding the use of non-secure endpoints, use `Ice.Default.PreferSecure`. Refer to Configuring Secure Proxies for more information on secure proxies.

# Ice.Override.Timeout

**Synopsis**

```
Ice.Override.Timeout=num
```

**Description**

If set, this property overrides timeout settings in all endpoints. *num* is the timeout value in milliseconds, or `-1` for no timeout.