Object Adapter Properties

On this page:

- adapter.ACM.Close
- adapter.ACM.Heartbeat
- adapter.ACM.Timeout
- adapter.AdapterId
- adapter.Endpoints
- adapter.Locator
- adapter.MessageSizeMax
- adapter.ProxyOptions
- adapter.PublishedEndpoints
- adapter.ReplicaGroupId
- adapter.Router
- adapter.ThreadPool.Serialize
- adapter.ThreadPool.Size
- adapter.ThreadPool.SizeMax
- adapter.ThreadPool.SizeWarn
- adapter.ThreadPool.StackSize
- adapter.ThreadPool.ThreadIdleTime
- adapter.ThreadPool.ThreadPriority

adapter.ACM.Close

Synopsis

adapter.ACM.Close=num

Description

Overrides the value of Ice.ACM.Server.Close for incoming connections to the named object adapter.

Note that ACM can cause incoming oneway requests to be silently discarded.

Back to Top ^

adapter.ACM.Heartbeat

Synopsis

adapter.ACM.Heartbeat=num

Description

Overrides the value of Ice.ACM. Server. Heartbeat for incoming connections to the named object adapter.

Back to Top ^

adapter.ACM.Timeout

Synopsis

adapter.ACM.Timeout=num

Description

Overrides the value of Ice.ACM. Server. Timeout for incoming connections to the named object adapter.

Back to Top ^

adapter.AdapterId

Synopsis

adapter.AdapterId=id

Description

Specifies an identifier for the object adapter with the name <code>adapter</code>. This identifier must be unique among all object adapters using the same locator instance. If a locator proxy is defined using <code>adapter.Locator</code> or <code>Ice.Default.Locator</code>, this object adapter sets its endpoints with the locator registry upon activation.

Back to Top ^

adapter. Endpoints

Synopsis

adapter.Endpoints=endpoints

Description

Sets the endpoints for the object adapter adapter to endpoints. These endpoints specify the network interfaces on which the object adapter receives requests. Proxies created by the object adapter contain these endpoints, unless the adapter.PublishedEndpoints property is also specified.

Back to Top ^

adapter.Locator

Synopsis

adapter.Locator=locator

Description

Specifies a locator for the object adapter with the name adapter. The value is a stringified proxy to the lce locator interface.

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

Back to Top ^

adapter.MessageSizeMax

Synopsis

adapter.MessageSizeMax=num

Description

Overrides the setting of Ice.MessageSizeMax to limit the size of messages that can be received by this object adapter. If not defined, the adapter uses the value of Ice.MessageSizeMax.

Back to Top ^

adapter.ProxyOptions

Synopsis

adapter.ProxyOptions=options

Description

Specifies the proxy options for proxies created by the object adapter. The value is a string representing the proxy options as they would be specified in a stringified proxy. The default value is "-t", that is, proxies created by the object adapter are configured to use twoway invocations by default.

adapter.PublishedEndpoints

Synopsis

adapter.PublishedEndpoints=endpoints

Description

When creating a proxy, the object adapter adapter normally includes the endpoints defined by adapter. Endpoints. If adapter.

PublishedEndpoints is defined, the object adapter publishes these endpoints instead. This is useful in many situations, such as when a server resides behind a port-forwarding firewall, in which case the object adapter's public endpoints must specify the address and port of the firewall. The adapter.

ProxyOptions property also influences the proxies created by an object adapter.

Back to Top ^

adapter.ReplicaGroupId

Synopsis

adapter.ReplicaGroupId=id

Description

Identifies the group of replicated object adapters to which this adapter belongs. The replica group is treated as a virtual object adapter, so that an indirect proxy of the form identity@id refers to the object adapters in the group. During binding, a client will attempt to establish a connection to an endpoint of one of the participating object adapters, and automatically try others until a connection is successfully established or all attempts have failed. Similarly, an outstanding request will, when permitted, automatically fail over to another object adapter of the replica group upon connection failure. The set of endpoints actually used by the client during binding is determined by the locator's configuration policies.

Defining a value for this property has no effect unless <code>adapter.AdapterId</code> is also defined. Furthermore, the locator registry may require replica groups to be defined in advance (see <code>IceGrid.Registry.DynamicRegistration</code>), otherwise <code>Ice.NotRegisteredException</code> is raised upon adapter activation. Regardless of whether an object adapter is replicated, it can always be addressed individually in an indirect proxy if it defines a value for <code>adapte.AdapterId</code>.

Back to Top ^

adapter.Router

Synopsis

adapter.Router=router

Description

Specifies a router for the object adapter with the name <code>adapter</code>. The value is a stringified proxy to the lce router control interface. Defining a router allows the object adapter to receive callbacks from the router over a bidirectional connection, thereby avoiding the need for the router to establish a connection back to the object adapter.

A router can only be assigned to one object adapter. Specifying the same router for more than one object adapter results in undefined behavior. The default value is no router.

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

Back to Top ^

adapter.ThreadPool.Serialize

Synopsis

adapter.ThreadPool.Serialize=num

Description

If num is a value greater than 0, the adapter's thread pool serializes all messages from each connection. It is not necessary to enable this feature in a thread pool whose maximum size is 1 thread. When a thread pool dispatches requests implemented with AMD, it serializes the dispatching of requests from each connection, but it does not wait for a request to complete before it dispatches the next request.

In a multi-threaded pool, enabling serialization allows requests from different connections to be dispatched concurrently while preserving the order of messages on each connection. Note that serialization can have a significant impact on latency and throughput. If not defined, the default value is 0.

Back to Top ^

adapter.ThreadPool.Size

Synopsis

adapter.ThreadPool.Size=num

Description

A communicator creates a default server thread pool that dispatches requests to its object adapters. An object adapter can also be configured with its own thread pool. This is useful in avoiding deadlocks due to thread starvation by ensuring that a minimum number of threads is available for dispatching requests to certain Ice objects.

num is the initial number of threads in the thread pool. The default value is 0, meaning that an object adapter by default uses the communicator's server thread pool. See Ice. ThreadPool.name.Size for more information.

Back to Top ^

adapter.ThreadPool.SizeMax

Synopsis

adapter.ThreadPool.SizeMax=num

Description

num is the maximum number of threads for the thread pool. See Ice. ThreadPool. name. SizeMax for more information.

 $The \ default \ value \ is \ the \ value \ of \ \ \underline{adapter.ThreadPool.Size}, \ meaning \ the \ thread \ pool \ can \ never \ grow \ larger \ than \ its \ initial \ size.$

Back to Top ^

adapter.ThreadPool.SizeWarn

Synopsis

 $adapter. {\tt ThreadPool.SizeWarn} = num$

Description

Whenever num threads are active in a thread pool, a "low on threads" warning is printed. The default value is 0, which disables the warning.

Back to Top ^

adapter.ThreadPool.StackSize

Synopsis

adapter.ThreadPool.StackSize=num

Description

num is the stack size (in bytes) of threads in the thread pool. The default value is 0, meaning the operating system's default is used.

Back to Top ^

adapter.ThreadPool.ThreadIdleTime

Synopsis

adapter.ThreadPool.ThreadIdleTime=num

Description

In a dynamically-sized thread pool, Ice reaps a thread after it is idle for num seconds. Setting this property to 0 disables idle thread reaping. If not specified, the default value is 60 seconds. See Ice.ThreadPool.name.ThreadIdleTime for more information.

Back to Top ^

adapter.ThreadPool.ThreadPriority

Synopsis

adapter.ThreadPool.ThreadPriority=num

Description

num specifes a thread priority for the object adapter's thread pool. The object adapter creates its threads with the specified priority. Leaving this property unset causes the adapter to create threads with the priority specified by Ice. ThreadPriority or, if that property is unset, the priority specified by Ice. ThreadPriority.

Back to Top ^