

IceGrid Slice API

IceGrid

Overview

module IceGrid

IceGrid is a server activation and deployment tool. IceGrid, simplifies the complex task of deploying applications in a heterogeneous computer network.

Class Index

[AdaptiveLoadBalancingPolicy](#) — Adaptive load balancing policy.
[BoxedDistributionDescriptor](#) — A "boxed" distribution descriptor.
[BoxedString](#) — A "boxed" string.
[CommunicatorDescriptor](#) — A communicator descriptor.
[IceBoxDescriptor](#) — An IceBox server descriptor.
[LoadBalancingPolicy](#) — A base class for load balancing policies.
[OrderedLoadBalancingPolicy](#) — Ordered load balancing policy.
[RandomLoadBalancingPolicy](#) — Random load balancing policy.
[RoundRobinLoadBalancingPolicy](#) — Round robin load balancing policy.
[ServerDescriptor](#) — An Ice server descriptor.
[ServiceDescriptor](#) — An IceBox service descriptor.

Interface Index

[AdapterObserver](#) — This interface allows applications to monitor the state of object adapters that are registered with IceGrid.
[Admin](#) — The IceGrid administrative interface.
[AdminSession](#) — Used by administrative clients to view, update, and receive observer updates from the IceGrid registry.
[ApplicationObserver](#) — The database observer interface.
[FileIterator](#) — This interface provides access to IceGrid log file contents.
[FileParser](#) — `icegridadmin` provides a [FileParser](#) object to transform XML files into [ApplicationDescriptor](#) objects.
[Locator](#) — The IceGrid locator interface provides access to the [Query](#) and [Registry](#) object of the IceGrid registry.
[NodeObserver](#) — The node observer interface.
[ObjectObserver](#) — This interface allows applications to monitor IceGrid well-known objects.
[Query](#) — The IceGrid query interface.
[Registry](#) — The IceGrid registry allows clients create sessions directly with the registry.
[RegistryObserver](#) — This interface allows applications to monitor changes the state of the registry.
[Session](#) — A session object is used by IceGrid clients to allocate and release objects.
[UserAccountMapper](#) — A user account mapper object is used by IceGrid nodes to map session identifiers to user accounts.

Exception Index

[AccessDeniedException](#) — This exception is raised if a registry lock wasn't acquired or is already held by a session.

[AdapterNotExistException](#) — This exception is raised if an adapter does not exist.

[AllocationException](#) — This exception is raised if the allocation of an object failed.

[AllocationTimeoutException](#) — This exception is raised if the request to allocate an object times out.

[ApplicationNotExistException](#) — This exception is raised if an application does not exist.

[BadSignalException](#) — This exception is raised if an unknown signal was sent to a server.

[DeploymentException](#) — An exception for deployment errors.

[FileNotAvailableException](#) — This exception is raised if a file is not available.

[NodeNotExistException](#) — This exception is raised if a node does not exist.

[NodeUnreachableException](#) — This exception is raised if a node could not be reached.

[ObjectExistsException](#) — This exception is raised if an object already exists.

[ObjectNotRegisteredException](#) — This exception is raised if an object is not registered.

[ObserverAlreadyRegisteredException](#) — This exception is raised if an observer is already registered with the registry.

[ParseException](#) — This exception is raised if an error occurs during parsing.

[PatchException](#) — This exception is raised if a patch failed.

[PermissionDeniedException](#) — This exception is raised if a client is denied the ability to create a session with IceGrid.

[RegistryNotExistException](#) — This exception is raised if a registry does not exist.

[RegistryUnreachableException](#) — This exception is raised if a registry could not be reached.

[ServerNotExistException](#) — This exception is raised if a server does not exist.

[ServerStartException](#) — This exception is raised if a server failed to start.

[ServerStopException](#) — This exception is raised if a server failed to stop.

[ServerUnreachableException](#) — This exception is raised if a server could not be reached.

[UserAccountNotFoundException](#) — This exception is raised if a user account for a given session identifier can't be found.

Structure Index

[AdapterDescriptor](#) — An Ice object adapter descriptor.

[AdapterDynamicInfo](#) — Dynamic information about the state of an adapter.

[AdapterInfo](#) — Information about an adapter registered with the IceGrid registry.

[ApplicationDescriptor](#) — An application descriptor.

[ApplicationInfo](#) — Information about an IceGrid application.

[ApplicationUpdateDescriptor](#) — An application update descriptor to describe the updates to apply to a deployed application.

[ApplicationUpdateInfo](#) — Information about updates to an IceGrid application.

[DbEnvDescriptor](#) — A Freeze database environment descriptor.

[DistributionDescriptor](#) — A distribution descriptor defines an IcePatch2 server and the directories to retrieve from the patch server.

[LoadInfo](#) — Information about the load of a node.

[NodeDescriptor](#) — A node descriptor.

[NodeDynamicInfo](#) — Dynamic information about the state of a node.

[NodeInfo](#) — Information about an IceGrid node.

[NodeUpdateDescriptor](#) — A node update descriptor to describe the updates to apply to a node of a deployed application.

[ObjectDescriptor](#) — An Ice object descriptor.

[ObjectInfo](#) — Information about an Ice object.

[PropertyDescriptor](#) — Property descriptor.

[PropertySetDescriptor](#) — A property set descriptor.

[RegistryInfo](#) — Information about an IceGrid registry replica.

[ReplicaGroupDescriptor](#) — A replica group descriptor.

[ServerDynamicInfo](#) — Dynamic information about the state of a server.

[ServerInfo](#) — Information about a server managed by an IceGrid node.

[ServerInstanceDescriptor](#) — A server template instance descriptor.

[ServiceInstanceDescriptor](#) — A service template instance descriptor.

[TemplateDescriptor](#) — A template descriptor for server or service templates.

Sequence Index

[AdapterDescriptorSeq](#) — A sequence of adapter descriptors.

[AdapterDynamicInfoSeq](#) — A sequence of adapter dynamic information structures.

[AdapterInfoSeq](#) — A sequence of adapter information structures.

[ApplicationDescriptorSeq](#) — A sequence of application descriptors.

[ApplicationInfoSeq](#) — A sequence of [ApplicationInfo](#) structures.

[DbEnvDescriptorSeq](#) — A sequence of database environment descriptors.

[NodeDynamicInfoSeq](#) — A sequence of node dynamic information structures.

[NodeUpdateDescriptorSeq](#) — A sequence of node update descriptors.

[ObjectDescriptorSeq](#) — A sequence of object descriptors.

[ObjectInfoSeq](#) — A sequence of object information structures.

[PropertyDescriptorSeq](#) — A sequence of property descriptors.

[RegistryInfoSeq](#) — A sequence of [RegistryInfo](#) structures.

[ReplicaGroupDescriptorSeq](#) — A sequence of replica groups.

[ServerDescriptorSeq](#) — A sequence of server descriptors.

[ServerDynamicInfoSeq](#) — A sequence of server dynamic information structures.

[ServerInstanceDescriptorSeq](#) — A sequence of server instance descriptors.

[ServiceDescriptorSeq](#) — A sequence of service descriptors.

[ServiceInstanceDescriptorSeq](#) — A sequence of service instance descriptors.

Dictionary Index

[NodeDescriptorDict](#) — Mapping of node name to node descriptor.
[PropertySetDescriptorDict](#) — A mapping of property set name to property set descriptor.
[StringObjectProxyDict](#) — A dictionary of proxies.
[StringStringDict](#) — A mapping of string to string.
[TemplateDescriptorDict](#) — A mapping of template identifier to template descriptor.

Enumeration Index

[LoadSample](#) — Determines which load sampling interval to use.
[ServerState](#) — An enumeration representing the state of the server.

Sequences

["java:type:java.util.LinkedList<AdapterDescriptor>"] sequence<[AdapterDescriptor](#)> AdapterDescriptorSeq

A sequence of adapter descriptors.

Used By

- [CommunicatorDescriptor::adapters](#)

["java:type:java.util.LinkedList<AdapterDynamicInfo>"] sequence<[AdapterDynamicInfo](#)> AdapterDynamicInfoSeq

A sequence of adapter dynamic information structures.

Used By

- [NodeDynamicInfo::adapters](#)

sequence<[AdapterInfo](#)> AdapterInfoSeq

A sequence of adapter information structures.

Used By

- [AdapterObserver::adapterInit](#)
- [Admin::getAdapterInfo](#)

["java:type:java.util.LinkedList<ApplicationDescriptor>"] sequence<[ApplicationDescriptor](#)> ApplicationDescriptorSeq

A sequence of application descriptors.

["java:type:java.util.LinkedList<ApplicationInfo>"] sequence<[ApplicationInfo](#)> ApplicationInfoSeq

A sequence of [ApplicationInfo](#) structures.

Used By

- [ApplicationObserver::applicationInit](#)

["java:type:java.util.LinkedList<DbEnvDescriptor>"] sequence<[DbEnvDescriptor](#)> DbEnvDescriptorSeq

A sequence of database environment descriptors.

Used By

- [CommunicatorDescriptor::dbEnvs](#)

sequence<NodeDynamicInfo> NodeDynamicInfoSeq

A sequence of node dynamic information structures.

Used By

- [NodeObserver::nodeInit](#)

["java:type:java.util.LinkedList<NodeUpdateDescriptor>"] sequence<NodeUpdateDescriptor> NodeUpdateDescriptorSeq

A sequence of node update descriptors.

Used By

- [ApplicationUpdateDescriptor::nodes](#)

["java:type:java.util.LinkedList<ObjectDescriptor>"] sequence<ObjectDescriptor> ObjectDescriptorSeq

A sequence of object descriptors.

Used By

- [AdapterDescriptor::allocatables](#)
- [AdapterDescriptor::objects](#)
- [ReplicaGroupDescriptor::objects](#)

sequence<ObjectInfo> ObjectInfoSeq

A sequence of object information structures.

Used By

- [Admin::getAllObjectInfos](#)
- [Admin::getObjectInfosByType](#)
- [ObjectObserver::objectInit](#)

["java:type:java.util.LinkedList<PropertyDescriptor>"] sequence<PropertyDescriptor> PropertyDescriptorSeq

A sequence of property descriptors.

Used By

- [DbEnvDescriptor::properties](#)
- [PropertySetDescriptor::properties](#)

sequence<RegistryInfo> RegistryInfoSeq

A sequence of [RegistryInfo](#) structures.

Used By

- [RegistryObserver::registryInit](#)

["java:type:java.util.LinkedList<ReplicaGroupDescriptor>"] sequence<ReplicaGroupDescriptor> ReplicaGroupDescriptorSeq

A sequence of replica groups.

Used By

- [ApplicationDescriptor::replicaGroups](#)
- [ApplicationUpdateDescriptor::replicaGroups](#)

["java:type:java.util.LinkedList<ServerDescriptor>"] sequence<ServerDescriptor> ServerDescriptorSeq

A sequence of server descriptors.

Used By

- [NodeDescriptor::servers](#)
- [NodeUpdateDescriptor::servers](#)

["java:type:java.util.LinkedList<ServerDynamicInfo>"] sequence<ServerDynamicInfo> ServerDynamicInfoSeq

A sequence of server dynamic information structures.

Used By

- [NodeDynamicInfo::servers](#)

["java:type:java.util.LinkedList<ServerInstanceDescriptor>"] sequence<ServerInstanceDescriptor> ServerInstanceDescriptorSeq

A sequence of server instance descriptors.

Used By

- [NodeDescriptor::serverInstances](#)
- [NodeUpdateDescriptor::serverInstances](#)

["java:type:java.util.LinkedList<ServiceDescriptor>"] sequence<ServiceDescriptor> ServiceDescriptorSeq

A sequence of service descriptors.

["java:type:java.util.LinkedList<ServiceInstanceDescriptor>"] sequence<ServiceInstanceDescriptor> ServiceInstanceDescriptorSeq

A sequence of service instance descriptors.

Used By

- [IceBoxDescriptor::services](#)

Dictionaries

dictionary<string, NodeDescriptor> NodeDescriptorDict

Mapping of node name to node descriptor.

Used By

- [ApplicationDescriptor::nodes](#)

dictionary<string, PropertySetDescriptor> PropertySetDescriptorDict

A mapping of property set name to property set descriptor.

Used By

- [ApplicationDescriptor::propertySets](#)
- [ApplicationUpdateDescriptor::propertySets](#)
- [NodeDescriptor::propertySets](#)
- [NodeUpdateDescriptor::propertySets](#)
- [ServerInstanceDescriptor::servicePropertySets](#)

dictionary<string, Object*> StringObjectProxyDict

A dictionary of proxies.

dictionary<string, string> StringStringDict

A mapping of string to string.

Used By

- [ApplicationDescriptor::variables](#)
- [ApplicationUpdateDescriptor::variables](#)
- [NodeDescriptor::variables](#)
- [NodeUpdateDescriptor::variables](#)
- [ServerInstanceDescriptor::parameterValues](#)
- [ServiceInstanceDescriptor::parameterValues](#)
- [TemplateDescriptor::parameterDefaults](#)

dictionary<string, [TemplateDescriptor](#)> TemplateDescriptorDict

A mapping of template identifier to template descriptor.

Used By

- [ApplicationDescriptor::serverTemplates](#)
 - [ApplicationDescriptor::serviceTemplates](#)
 - [ApplicationUpdateDescriptor::serverTemplates](#)
 - [ApplicationUpdateDescriptor::serviceTemplates](#)
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