| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ActivationSystem.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/java/rmi/activation/ActivationMonitor.html)   [**NEXT CLASS**](http://docs.google.com/java/rmi/activation/Activator.html) | [**FRAMES**](http://docs.google.com/index.html?java/rmi/activation/ActivationSystem.html)    [**NO FRAMES**](http://docs.google.com/ActivationSystem.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#tyjcwt) | CONSTR | [METHOD](#1t3h5sf) |

## **java.rmi.activation**

Interface ActivationSystem

**All Superinterfaces:** [Remote](http://docs.google.com/java/rmi/Remote.html)

public interface **ActivationSystem**extends [Remote](http://docs.google.com/java/rmi/Remote.html)

The ActivationSystem provides a means for registering groups and "activatable" objects to be activated within those groups. The ActivationSystem works closely with the Activator, which activates objects registered via the ActivationSystem, and the ActivationMonitor, which obtains information about active and inactive objects, and inactive groups.

**Since:** 1.2 **See Also:**[Activator](http://docs.google.com/java/rmi/activation/Activator.html), [ActivationMonitor](http://docs.google.com/java/rmi/activation/ActivationMonitor.html)

| **Field Summary** | |
| --- | --- |
| static int | [**SYSTEM\_PORT**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#SYSTEM_PORT)            The port to lookup the activation system. |

| **Method Summary** | |
| --- | --- |
| [ActivationMonitor](http://docs.google.com/java/rmi/activation/ActivationMonitor.html) | [**activeGroup**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#activeGroup(java.rmi.activation.ActivationGroupID,%20java.rmi.activation.ActivationInstantiator,%20long))([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id, [ActivationInstantiator](http://docs.google.com/java/rmi/activation/ActivationInstantiator.html) group, long incarnation)            Callback to inform activation system that group is now active. |
| [ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) | [**getActivationDesc**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#getActivationDesc(java.rmi.activation.ActivationID))([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id)            Returns the activation descriptor, for the object with the activation identifier, id. |
| [ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) | [**getActivationGroupDesc**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#getActivationGroupDesc(java.rmi.activation.ActivationGroupID))([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id)            Returns the activation group descriptor, for the group with the activation group identifier, id. |
| [ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) | [**registerGroup**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#registerGroup(java.rmi.activation.ActivationGroupDesc))([ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) desc)            Register the activation group. |
| [ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) | [**registerObject**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#registerObject(java.rmi.activation.ActivationDesc))([ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) desc)            The registerObject method is used to register an activation descriptor, desc, and obtain an activation identifier for a activatable remote object. |
| [ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) | [**setActivationDesc**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#setActivationDesc(java.rmi.activation.ActivationID,%20java.rmi.activation.ActivationDesc))([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id, [ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) desc)            Set the activation descriptor, desc for the object with the activation identifier, id. |
| [ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) | [**setActivationGroupDesc**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#setActivationGroupDesc(java.rmi.activation.ActivationGroupID,%20java.rmi.activation.ActivationGroupDesc))([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id, [ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) desc)            Set the activation group descriptor, desc for the object with the activation group identifier, id. |
| void | [**shutdown**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#shutdown())()            Shutdown the activation system. |
| void | [**unregisterGroup**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#unregisterGroup(java.rmi.activation.ActivationGroupID))([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id)            Remove the activation group. |
| void | [**unregisterObject**](http://docs.google.com/java/rmi/activation/ActivationSystem.html#unregisterObject(java.rmi.activation.ActivationID))([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id)            Remove the activation id and associated descriptor previously registered with the ActivationSystem; the object can no longer be activated via the object's activation id. |

| **Field Detail** |
| --- |

### SYSTEM\_PORT

static final int **SYSTEM\_PORT**

The port to lookup the activation system.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.rmi.activation.ActivationSystem.SYSTEM_PORT)

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

### registerObject

[ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) **registerObject**([ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) desc)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

The registerObject method is used to register an activation descriptor, desc, and obtain an activation identifier for a activatable remote object. The ActivationSystem creates an ActivationID (a activation identifier) for the object specified by the descriptor, desc, and records, in stable storage, the activation descriptor and its associated identifier for later use. When the Activator receives an activate request for a specific identifier, it looks up the activation descriptor (registered previously) for the specified identifier and uses that information to activate the object.

**Parameters:**desc - the object's activation descriptor **Returns:**the activation id that can be used to activate the object **Throws:** [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - if registration fails (e.g., database update failure, etc). [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - if group referred to in desc is not registered with this system [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2

### unregisterObject

void **unregisterObject**([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Remove the activation id and associated descriptor previously registered with the ActivationSystem; the object can no longer be activated via the object's activation id.

**Parameters:**id - the object's activation id (from previous registration) **Throws:** [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - if unregister fails (e.g., database update failure, etc). [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html) - if object is unknown (not registered) [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2

### registerGroup

[ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) **registerGroup**([ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) desc)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Register the activation group. An activation group must be registered with the ActivationSystem before objects can be registered within that group.

**Parameters:**desc - the group's descriptor **Returns:**an identifier for the group **Throws:** [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - if group registration fails [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2

### activeGroup

[ActivationMonitor](http://docs.google.com/java/rmi/activation/ActivationMonitor.html) **activeGroup**([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id,  
 [ActivationInstantiator](http://docs.google.com/java/rmi/activation/ActivationInstantiator.html) group,  
 long incarnation)  
 throws [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Callback to inform activation system that group is now active. This call is made internally by the ActivationGroup.createGroup method to inform the ActivationSystem that the group is now active.

**Parameters:**id - the activation group's identifiergroup - the group's instantiatorincarnation - the group's incarnation number **Returns:**monitor for activation group **Throws:** [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - if group is not registered [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - if a group for the specified id is already active and that group is not equal to the specified group or that group has a different incarnation than the specified group [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2

### unregisterGroup

void **unregisterGroup**([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Remove the activation group. An activation group makes this call back to inform the activator that the group should be removed (destroyed). If this call completes successfully, objects can no longer be registered or activated within the group. All information of the group and its associated objects is removed from the system.

**Parameters:**id - the activation group's identifier **Throws:** [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - if unregister fails (e.g., database update failure, etc). [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - if group is not registered [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2

### shutdown

void **shutdown**()  
 throws [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Shutdown the activation system. Destroys all groups spawned by the activation daemon and exits the activation daemon.

**Throws:** [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if failed to contact/shutdown the activation daemon**Since:** 1.2

### setActivationDesc

[ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) **setActivationDesc**([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id,  
 [ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) desc)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html),  
 [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Set the activation descriptor, desc for the object with the activation identifier, id. The change will take effect upon subsequent activation of the object.

**Parameters:**id - the activation identifier for the activatable objectdesc - the activation descriptor for the activatable object **Returns:**the previous value of the activation descriptor **Throws:** [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - the group associated with desc is not a registered group [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html) - the activation id is not registered [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - for general failure (e.g., unable to update log) [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2 **See Also:**[getActivationDesc(java.rmi.activation.ActivationID)](http://docs.google.com/java/rmi/activation/ActivationSystem.html#getActivationDesc(java.rmi.activation.ActivationID))

### setActivationGroupDesc

[ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) **setActivationGroupDesc**([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id,  
 [ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) desc)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Set the activation group descriptor, desc for the object with the activation group identifier, id. The change will take effect upon subsequent activation of the group.

**Parameters:**id - the activation group identifier for the activation groupdesc - the activation group descriptor for the activation group **Returns:**the previous value of the activation group descriptor **Throws:** [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - the group associated with id is not a registered group [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - for general failure (e.g., unable to update log) [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2 **See Also:**[getActivationGroupDesc(java.rmi.activation.ActivationGroupID)](http://docs.google.com/java/rmi/activation/ActivationSystem.html#getActivationGroupDesc(java.rmi.activation.ActivationGroupID))

### getActivationDesc

[ActivationDesc](http://docs.google.com/java/rmi/activation/ActivationDesc.html) **getActivationDesc**([ActivationID](http://docs.google.com/java/rmi/activation/ActivationID.html) id)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Returns the activation descriptor, for the object with the activation identifier, id.

**Parameters:**id - the activation identifier for the activatable object **Returns:**the activation descriptor **Throws:** [UnknownObjectException](http://docs.google.com/java/rmi/activation/UnknownObjectException.html) - if id is not registered [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - for general failure [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2 **See Also:**[setActivationDesc(java.rmi.activation.ActivationID, java.rmi.activation.ActivationDesc)](http://docs.google.com/java/rmi/activation/ActivationSystem.html#setActivationDesc(java.rmi.activation.ActivationID,%20java.rmi.activation.ActivationDesc))

### getActivationGroupDesc

[ActivationGroupDesc](http://docs.google.com/java/rmi/activation/ActivationGroupDesc.html) **getActivationGroupDesc**([ActivationGroupID](http://docs.google.com/java/rmi/activation/ActivationGroupID.html) id)  
 throws [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html),  
 [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html),  
 [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Returns the activation group descriptor, for the group with the activation group identifier, id.

**Parameters:**id - the activation group identifier for the group **Returns:**the activation group descriptor **Throws:** [UnknownGroupException](http://docs.google.com/java/rmi/activation/UnknownGroupException.html) - if id is not registered [ActivationException](http://docs.google.com/java/rmi/activation/ActivationException.html) - for general failure [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if remote call fails**Since:** 1.2 **See Also:**[setActivationGroupDesc(java.rmi.activation.ActivationGroupID, java.rmi.activation.ActivationGroupDesc)](http://docs.google.com/java/rmi/activation/ActivationSystem.html#setActivationGroupDesc(java.rmi.activation.ActivationGroupID,%20java.rmi.activation.ActivationGroupDesc))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ActivationSystem.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/java/rmi/activation/ActivationMonitor.html)   [**NEXT CLASS**](http://docs.google.com/java/rmi/activation/Activator.html) | [**FRAMES**](http://docs.google.com/index.html?java/rmi/activation/ActivationSystem.html)    [**NO FRAMES**](http://docs.google.com/ActivationSystem.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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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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