Server Descriptor Element

A `server` element defines a server to be deployed on a node. It typically contains at least one `adapter` element, and may supply additional information such as command-line options, environment variables, configuration properties, and a server distribution.

This element may only appear as a child of a `node` element or a `server-template` element.

The following attributes are supported:

Attribute	Description	Required
`activation`	Specifies whether the server's activation mode. Legal values are `manual`, `on-demand`, `always` and `session`. If not specified, manual activation is used by default.	No
`activation-timeout`	Defines the number of seconds a node will wait for the server to activate. If the timeout expires, a client waiting to receive the endpoints of an object adapter in this server will receive an empty set of endpoints. If not defined, the default timeout is the value of the `IceGrid.Node.WaitTime` property configured for the server's node.	No
`allocatable`	Specifies whether the server can be allocated. A server is allocated implicitly when one of its allocatable objects is allocated. The value of this attribute is ignored if the server activation mode is `session`; a server with this activation mode is always allocatable. Otherwise, if not specified and the server activation mode is not `session`, the server is not allocatable.	No
`application-distrib`	Specifies whether this server's distribution is dependent on the application's distribution. If the value is `true`, the server cannot be patched until the application has been patched. If not defined, the default value is `true`.	No
`deactivation-timeout`	Defines the number of seconds a node will wait for the server to deactivate. If the timeout expires, the node terminates the server process. If not defined, the default timeout is the value of the node's configuration property `IceGrid.Node.WaitTime`.	No
`exe`	The pathname of the server executable. On Windows, if a relative path is specified, the executable is searched in the system path. On Linux, it's searched in the user path specified by the PATH environment variable from the environment where the `icegridnode` is started.	Yes
`ice-version`	Specifies the Ice version in use by this server. If not defined, IceGrid assumes the server uses the same version that IceGrid itself uses. A server that uses an Ice version prior to 3.3 must define this attribute if its adapters use the `register-process` attribute. For example, a server using Ice 3.2.x should use `3.2` as the value of this attribute.	No
`id`	Specifies the identifier for this server. The identifier must be unique among all servers in the registry. Within the server, child elements can refer to its identifier using the reserved variable `${server}`.	Yes
`pwd`	The default working directory for the server. If not defined, the server is started in the node's current working directory.	No
`user`	Specifies the name of the user account under which the server is activated and run. If a user account mapper is configured for the node, the value of this attribute is used to find the corresponding account in the map. On Unix, the node must be running as root to be able to run servers under a different user account. On Windows, or if the node is not running as root on Unix, the only permissible value for this attribute is an empty string or the name of the user account under which the node is running. On Unix, if the node is running as root and this attribute is not specified, the server is run under the user `${session.id}` if the server activation mode is `session` or under the user `nobody` if the activation mode is `manual`, `on-demand` or `always`.	No

An optional nested `description` element provides free-form descriptive text.

Here is an example to demonstrate the use of this element:

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XML

```
<server id="MyServer"
        activation="on-demand"
        activation-timeout="60"
        application-distrib="false"
        deactivation-timeout="60"
        exe="/opt/app/bin/myserver"
        pwd="/">
    <option>--Ice.Trace.Network=1</option>
    <env>PATH=/opt/Ice/bin:$PATH</env>
    <property name="ServerId" value="${server}"/>
    <adapter name="Adapter1" .../>
</server>
```

See Also

- Adapter Descriptor Element
- Properties Descriptor Element
- Node Descriptor Element
- Server-Template Descriptor Element
- Description Descriptor Element
- Using Command Line Options in Descriptors
- Setting Environment Variables in Descriptors
- Application Distribution
- IceGrid Server Activation
- Using Descriptor Variables and Parameters

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