

# Properties Overview

Ice and its various subsystems are configured by properties. A property is a name-value pair, for example:

```
Ice.UDP.SndSize=65535
```

In this example, the *property name* is `Ice.UDP.SndSize`, and the *property value* is `65535`.

You can find a complete list of the properties used to configure Ice in the [property reference](#).

Note that Ice reads properties that control the Ice run time and its services (that is, properties that start with one of the reserved prefixes, such as `Ice`, `Glacier2`, etc.) only once on start-up, when you create a communicator. This means that you must set Ice-related properties to their correct values *before* you create a communicator. If you change the value of an Ice-related property after that point, it is likely that the new setting will simply be ignored.

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## Property Categories

By convention, Ice properties use the following naming scheme:

```
<application>.<category>[.<sub-category>]
```

Note that the sub-category is optional and not used by all Ice properties.

This two- or three-part naming scheme is by convention only — if you use properties to configure your own applications, you can use property names with any number of categories.

## Reserved Prefixes for Properties

Ice reserves properties with the following prefixes:

- `Ice`
- `IceBox`
- `IceGrid`
- `IcePatch2`
- `IceSSL`
- `IceStorm`
- `Freeze`
- `Glacier2`

You cannot use a property beginning with one of these prefixes to configure your own application.

## Property Name Syntax

A property name consists of any number of characters. For example, the following are valid property names:

```
foo
Foo
foo.bar
foo bar    White space is allowed
foo=bar    Special characters are allowed
.
```

Note that there is no special significance to a period in a property name. (Periods are used to make property names more readable and are not treated specially by the property parser.)

Property names cannot contain leading or trailing white space. (If you create a property name with leading or trailing white space, that white space is silently stripped.)

## Property Value Syntax

A property value consists of any number of characters. The following are examples of property values:

```
65535
yes
This is a = property value.
../../config
```

## Unused Properties

During the destruction of a communicator, the Ice run time can optionally emit a warning for properties that were set but never read. To enable this warning, set `Ice.Warn.UnusedProperties` to a non-zero value. This property is useful for detecting mis-spelled properties, such as `Filesystem.MaxFileSize`. By default, the warning is disabled.

See Also

- [Property Reference](#)