Ice Transport Properties

On this page:

Ice.IPv4

Synopsis

`Ice.IPv4=num`

Description

Specifies whether Ice uses IPv4. If `num` is a value greater than zero, IPv4 is enabled. If not specified, the default value is 1.

Ice.IPv6

Synopsis

`Ice.IPv6=num`

Description

Specifies whether Ice uses IPv6. If `num` is a value greater than zero, IPv6 is enabled. If not specified, the default value is zero.

Ice.TCP.Backlog

Synopsis

`Ice.TCP.Backlog=num`

Description

Specifies the size of the listen queue for each TCP or SSL server endpoint. If not defined, the default value for C++ programs uses the value of `SOMAX CONN` if present, or `511` otherwise. In Java and .NET, the default value is 511.

Ice.TCP.RcvSize

Synopsis

`Ice.TCP.RcvSize=num`

Description

This property sets the TCP receive buffer size to the specified value in bytes. The default value depends on the configuration of the local TCP stack. (A common default values is 65535 bytes.)

The OS may impose lower and upper limits on the receive buffer size or otherwise adjust the buffer size. If a limit is requested that is lower than the OS-imposed minimum, the value is silently adjusted to the OS-imposed minimum. If a limit is requested that is larger than the OS-imposed maximum, the value is adjusted to the OS-imposed maximum; in addition, Ice logs a warning showing the requested size and the adjusted size.

Ice.TCP.SndSize

Synopsis

`Ice.TCP.SndSize=`*num*

Description

This property sets the TCP send buffer size to the specified value in bytes. The default value depends on the configuration of the local TCP stack. (A common default values is 65535 bytes.)

The OS may impose lower and upper limits on the send buffer size or otherwise adjust the buffer size. If a limit is requested that is lower than the OS-imposed minimum, the value is silently adjusted to the OS-imposed minimum. If a limit is requested that is larger than the OS-imposed maximum, the value is adjusted to the OS-imposed maximum; in addition, Ice logs a warning showing the requested size and the adjusted size.

Ice.UDP.RcvSize

Synopsis

`Ice.UDP.RcvSize=`*num*

Description

This property sets the UDP receive buffer size to the specified value in bytes. Ice messages larger than *num* `- 28` bytes cause a `DatagramLimitException`. The default value depends on the configuration of the local UDP stack. (Common default values are 65535 and 8192 bytes.)

The OS may impose lower and upper limits on the receive buffer size or otherwise adjust the buffer size. If a limit is requested that is lower than the OS-imposed minimum, the value is silently adjusted to the OS-imposed minimum. If a limit is requested that is larger than the OS-imposed maximum, the value is adjusted to the OS-imposed maximum; in addition, Ice logs a warning showing the requested size and the adjusted size.

Values less than 28 are ignored.

Note that, on many operating systems, it is possible to set a buffer size greater than 65535. Such settings do not change the hard limit of 65507 bytes for the payload of a UDP packet, but merely affect how much data can be buffered by the kernel.

Settings less than 65535 limit the size of Ice datagrams as well as adjust the kernel buffer sizes.

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Synopsis

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