CHAPTER 25

Remote Source-Route Bridging Commands

Use the commands in this chapter to configure and remote source-route bridging networks. For remote source-route bridging configuration information and examples, refer to the "Configuring Remote Source-Route Bridging" chapter in the *Router Products Configuration Guide*.

locaddr-priority

Use the **locaddr-priority** interface configuration command to assign a remote source-route bridging (RSRB) priority group to an input interface. Use the **no** form of this command to remove the RSRB priority group assignment from the interface.

locaddr-priority *list-number*
no locaddr-priority *list-number*

Syntax Description

list-number	Priority list number of the input interface.

Default

No RSRB priority group is assigned.

Command Mode

Interface configuration

Usage Guidelines

You must use the **priority-list** command to assign priorities to the ports as shown in Table 25-1.

Table 25-1 Common RSRB Services and Their Port Numbers

Service	Port
RSRB high priority	1996
RSRB medium priority	1987
RSRB normal priority	1988
RSRB low priority	1989

Example

In the following example, Token Ring interface 0 is assigned the RSRB priority group 1:

```
source-bridge ring-group 2624
source-bridge remote-peer 2624 tcp 1.0.0.1
source-bridge remote-peer 2624 tcp 1.0.0.2 local-ack priority
!
interface TokenRing 0
source-bridge 2576 8 2624
locaddr-priority 1
```

Related Commands

locaddr-priority-list
priority-list

locaddr-priority-list

Use the **locaddr-priority-list** global configuration command to map logical units (LUs) to queuing priorities as one of the steps to establishing queuing priorities based on LU addresses. Use the **no** form of this command to remove that RSRB priority queuing assignment. You use this command in conjunction with the **priority list** command.

locaddr-priority-list *list-number address-number queue-keyword* [**dsap** *ds*] [**dmac** *dm*] [**ssap** *ss*] [**smac** *sm*]
no locaddr-priority-list *list-number address-number queue-keyword* [**dsap** *ds*] [**dmac** *dm*] [**ssap** *ss*] [**smac** *sm*]

Syntax Description

list-number	Arbitrary integer between 1 and 10 that identifies the LU address priority list selected by the user.
address-number	Value of the LOCADDR= parameter on the LU macro, which is a one-byte address of the LU in hex.
queue-keyword	Priority queue name; one of **high**, **medium**, **normal**, or **low**.
dsap *ds*	(Optional) Indicates that the next argument, *ds*, represents the destination service access point address. The argument *ds* is a hexadecimal value.
dmac *dm*	(Optional) Indicates that the next argument, *dm*, is the destination MAC address. The argument *dm* is a dotted triple of four-digit hexadecimal numbers.
ssap *ss*	(Optional) Indicates that the next argument, *ss*, is the source service access point address. If this is not specified, the default is all ssaps.
smac *sm*	(Optional) Indicates that the next argument, sm, is the source MAC address, written as a dotted triple of rout-digit hexadecimal number. If this is not specified, the default is all smacs.

Default

The default is no mapping.

Command Mode

Global configuration

Usage Guidelines

Use this command to map LUs to queuing priorities. Once you establish the priority for each LU, you can assign a priority to a TCP port. Hence you establish a mapping between the LUs and queuing priorities, and queuing priorities and TCP ports.

It is preferable to prioritize NetBIOS traffic below SNA traffic, but by default NetBIOS traffic is assigned the high priority on TCP port 1996.

Example

In the following example LU 01 is assigned a medium priority and maps to TCP port 1996; LU 02 has been assigned a normal priority and maps to TCP port 1987; LU 03 has been assigned a low priority and maps to TCP port 1988; LU 04 has been assigned high priority and maps to TCP port 1989.

```
locaddr-priority-list 1 01 medium
locaddr-priority-list 1 02 normal
locaddr-priority-list 1 03 low
locaddr-priority-list 1 04 high

priority-list 1 protocol ip low tcp 1996
priority-list 1 protocol ip high tcp 1987
priority-list 1 protocol ip medium tcp 1988
priority-list 1 protocol ip normal tcp 1989
```

Related Commands

locaddr-priority
priority-list

priority-group

Use the **priority-group** interface configuration command to assign a specified priority list to an interface.

priority-group *list*
no priority-group *list*

Syntax Description

list	Priority list number assigned to the interface.

Default

No priority list number is established.

Command Mode

Interface configuration

Example

The following is an example of a priority-group assignment:

```
interface Ethernet 0
ip address 1.0.0.1 255.255.255.0
priority-group 1
```

Related Commands

locaddr-priority-list
priority-list

priority-list

Use the **priority-list** global configuration command to establish queuing priorities based upon the protocol type as one of the steps to establishing queuing priorities based on logical unit (LU) addresses. Use the **no** form of this command to remove the priority list. Use this command in conjunction with the **locaddr-priority-list** command.

priority-list *list-number* **protocol** *protocol-name queue-keyword*
no priority-list *list-number address-number queue-keyword*

Syntax Description

list-number	Arbitrary integer between 1 and 10 that identifies the LU address priority list selected by the user.
protocol	Keyword indicating you want the priority list to be based on a protocol type.
protocol-name	Protocol you are using. In most cases, this will be **ip.**
queue-keyword	Priority queue name; one of **high**, **medium**, **normal**, or **low**.

Default

No queuing priorities are established.

Command Mode

Global configuration

Usage Guidelines

Use this command to assign the priority level defined to TCP segments originating from or destined to a specified TCP port. Assign priorities to the ports as shown in Table 25-2.

Table 25-2 Common RSRB Services and Their Port Numbers

Service	Port
RSRB high priority	1996
RSRB medium priority	1987
RSRB normal priority	1988
RSRB low priority	1989

Once you establish the priority for each LU using the **locaddr-priority-list** command, you can assign a priority to a TCP port using the **priority-list** command. By using both commands you establish a mapping between the LUs and queuing priorities, and between the queuing priorities and TCP ports.

It is preferable to prioritize NetBIOS traffic below SNA traffic, but by default NetBIOS traffic is assigned the high priority on TCP port 1996.

Example

In the following example LU 01 has been assigned a medium priority and maps to TCP port 1996; LU 02 has been assigned a normal priority and maps to TCP port 1987; LU 03 has been assigned a low priority and maps to TCP port 1988; LU 04 has been assigned high priority and maps to TCP port 1989.

```
locaddr-priority-list 1 01 medium
locaddr-priority-list 1 02 normal
locaddr-priority-list 1 03 low
locaddr-priority-list 1 04 high

priority-list 1 protocol ip low tcp 1996
priority-list 1 protocol ip high tcp 1987
priority-list 1 protocol ip medium tcp 1988
priority-list 1 protocol ip normal tcp 1989
```

Related Commands

locaddr-priority
locaddr-priority-list

rsrb remote-peer lsap-output-list

Use the **rsrb remote-peer lsap-output-list** global configuration command to define service access point (SAP) filters by local SAP (LSAP) address on the remote source-route bridging WAN interface.

rsrb remote-peer *ring-group* **tcp** *ip-address* **lsap-output-list** *access-list-number*
rsrb remote-peer *ring-group* **fst** *ip-address* **lsap-output-list** *access-list-number*
rsrb remote-peer *ring-group* **interface** *name* **lsap-output-list** *access-list-number*

Syntax Description

ring-group	Virtual ring number of the remote peer.
tcp	TCP encapsulation.
fst	FST encapsulation.
*ip-address*s	IP address.
interface	Direct encapsulation.
name	Interface name.
access-list-number	Number of the access list.

Default

No filters are assigned.

Command Mode

Global configuration

Example

The following example specifies SAP filters by LSAP address:

```
rsrb remote-peer 1000 tcp 131.108.2.30 lsap-output-list 201
```

Related Commands

priority-list
sap-priority
sap-priority-list

rsrb remote-peer netbios-output-list

Use the **rsrb remote-peer netbios-output-list** global configuration command to filter packets by NetBIOS station name on a remote source-route bridging WAN interface.

rsrb remote-peer *ring-group* **tcp** *ip-address* **netbios-output-list** *name*
rsrb remote-peer *ring-group* **fst** *ip-address* **netbios-output-list** *name*
rsrb remote-peer *ring-group* **interface** *name* **netbios-output-list** *host*

Syntax Description

ring-group	Virtual ring number of the remote peer.
tcp	TCP encapsulation.
fst	FST encapsulation.
ip-address	IP address.
interface	Direct encapsulation.
name	Interface name.
name	Name of a NetBIOS access filter previously defined with one or more **netbios access-list host** global configuration commands.
host	Host name.

Default

No filter is assigned.

Command Mode

Global configuration

Example

The following example filters packets by NetBIOS station name:

```
rsrb remote-peer 1000 tcp 131.108.2.30 netbios-output-list host engineering
```

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

netbios access-list host †
priority-list
sap-priority
sap-priority-list

sap-priority

Use the **sap-priority** interface configuration command to define a priority list on an interface.

sap-priority *number*

Syntax Description

number	Priority list number you specified in the **sap-priority-list** command.

Default

No priority list is defined.

Command Mode

Interface configuration

Example

The following example specifies priority list number 1:

```
sap-priority 1
```

Related Command

A dagger (†) indicates that the command is documented in another chapter.

sap-priority-list
source-bridge †

sap-priority-list

Use the **sap-priority-list** global configuration command to define a priority list.

sap-priority-list *number queue-keyword* [**dsap** *ds*] [**ssap** *ss*] [**dmac** *dm*] [**smac** *sm*]

Syntax Description

number	Arbitrary integer between 1 and 10 that identifies the priority list.
queue-keyword	Priority queue name or a remote source-route bridge TCP port name.
dsap	(Optional) Indicates that the next argument, *ds*, represents the destination service access point address. The argument *ds* is a hexadecimal number.
ssap	(Optional) Indicates that the next argument, *ss*, represents the source service access point address. The argument *ss* is a hexadecimal number.
dmac	(Optional) Indicates that the next argument, *dm*, represents the destination MAC address. The argument *dm* is written as a dotted triple of four-digit hexadecimal numbers.
smac	(Optional) Indicates that the next argument, *sm*, represents the source MAC address. The argument *sm* is written as a dotted triple of four-digit hexadecimal numbers.

Default

No priority list is defined.

Command Mode

Global configuration

Usage Guidelines

To give precedence to traffic on a particular LLC2 session, you must specify all four keywords (**dsap**, **ssap**, **dmac**, and **smac**) to uniquely identify the LLC2 session.

Example

The following example defines priority list 1 and specifies SSAP and DSAP addresses:

```
sap-priority-list 1 high dsap 04 ssap 04
```

show local-ack

Use the **show local-ack** privileged EXEC command to display the current state of any current Local Acknowledgment for both LLC2 and SDLLC connections, as well as for any configured passthrough rings.

show local-ack

Syntax Description

This command has no arguments or keywords.

Command Mode

Privileged EXEC

Sample Display

The following is sample output from the **show local-ack** command:

```
Router# show local-ack

local 1000.5a59.04f9, lsap 04, remote 4000.2222.4444, dsap 04
llc2 = 1798136, local ack state = connected
Passthrough Rings: 4 7
```

Table 25-3 describes significant fields shown in the display.

Table 25-3 Show Local-Ack Field Descriptions

Field	Description
local	MAC address of the local Token Ring station with which the route has the LLC2 session.
lsap	Local service access point (LSAP) value of the Token Ring station with which the router has the LLC2 session.
remote	MAC address of the remote Token Ring on whose behalf the router is providing acknowledgments. The remote Token Ring station is separated from the router via the TCP backbone.
dsap	Destination SAP value of the Token Ring station on whose behalf the router is providing acknowledgments.
llc2	Pointer to an internal data structure used by the manufacturer for debugging.
local ack state	State of the Local Acknowledgment for both LLC2 and SDLC connections. The possible states are as follows: • disconnected—No session between the two end nodes. • connected—Full data transfer possible between the two. • awaiting connect—Router is waiting for the other end to confirm a session establishment with the remote host.
Passthrough Rings	Ring numbers of the virtual rings that have been defined as passthroughs using the **source-bridge passthrough** command. If a ring is not a passthrough, it is locally terminated.

source-bridge cos-enable

Use the **source-bridge cos-enable** global configuration command to force the router to read the contents of the format identification (FID) frames to prioritize traffic when using TCP. Use the **no** form of this command to disable prioritizing.

source-bridge cos-enable
no source-bridge cos-enable

Syntax Description

This command has no arguments or keywords.

Default

Enabled

Command Mode

Global configuration

Usage Guidelines

Use this command to prioritize your SNA traffic across the backbone network. All your important FEP traffic can flow on high-priority queues. This is useful only between FEP-to-FEP (PU4-to-PU4) communications (across the non-SNA backbone.)

Note LLC2 local acknowledgment must be turned on for the class of service (COS) feature to take effect, and the **source-bridge remote-peer tcp** command with the **priority** keyword must be issued.

Example

The following example enables class-of-service for prioritization of SNA traffic across a network:

```
source-bridge cos-enable
```

Related Command

source-bridge remote-peer tcp

source-bridge fst-peername

Use the **source-bridge fst-peername** global configuration command to set up a Fast-Sequenced Transport (FST) peer name. Use the **no** form of this command to disable the IP address assignment.

source-bridge fst-peername *local-interface-address*
no source-bridge fst-peername *local-interface-address*

Syntax Description

local-interface-address	IP address to assign to the local router.

Default

Disabled

Command Mode

Global configuration

Usage Guidelines

This command is the first step to configuring a remote source-route bridge to use FST.

Example

The following example shows the use of the **source-bridge fst-peername** command:

```
source-bridge fst-peername 150.136.64.98
```

Related Command

source-bridge remote-peer fst

source-bridge keepalive

Use the **source-bridge keepalive** interface configuration command to assign the keepalive interval of the remote source-bridging peer. Use the **no** form of this command to cancel previous assignments.

source-bridge keepalive *seconds*
no source-bridge keepalive

Syntax Description

seconds	Keepalive interval in seconds. The valid range is 10 through 300.

Default

30 seconds

Command Mode

Interface configuration

Example

The following example sets the keepalive interval to 60 seconds:

```
source-bridge keepalive 60
```

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

show interface †
source-bridge †
source-bridge remote-peer fst
source-bridge remote-peer tcp

source-bridge largest-frame

Use the **source-bridge largest-frame** global configuration command to configure the largest frame size that is used to communicate with any peers in the ring group. Use the **no** form of this command to cancel previous assignments.

source-bridge largest-frame *ring-group size*
no source-bridge largest-frame *ring-group*

Syntax Description

ring-group	Ring group number. This ring group number must match the number you have specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.
size	Maximum frame size.

Default

No frame size is assigned.

Command Mode

Global configuration

Usage Guidelines

The router negotiates all transit routes down to the specified size or lower. Use the *size* argument with this command to prevent timeouts in end hosts by reducing the amount of data they have to transmit in a fixed interval. For example, in some networks containing slow links, it would be impossible to transmit an 8K frame and receive a response within a few seconds. These are fairly standard defaults for an application on a 16-Mb Token Ring. If the frame size is lowered to 516 bytes, then only 516 bytes must be transmitted and a response received in 2 seconds. This feature is most effective in a network with slow links. The legal values for this argument are 516, 1500, 2052, 4472, 8144, 11407, and 17800 bytes.

Example

The following example sets the largest frame that can be transmitted through a ring group to 1500 bytes:

```
! the largest frame for peers in ring group 8 is 1500 bytes
source-bridge largest-frame 8 1500
```

Related Command

A dagger (†) indicates that the command is documented in another chapter.

source-bridge ring-group†

source-bridge passthrough

Use the **source-bridge passthrough** global configuration command to configure some sessions on a few rings to be locally acknowledged and the remaining to passthrough. Use the **no** form of this command to disable passthrough on all the rings and allow the session to be locally acknowledged.

source-bridge passthrough *ring-group*
no source-bridge passthrough *ring-group*

Syntax Description

ring-group	Ring group number. This ring is either the start ring or destination ring of the two IBM end machines for which the passthrough feature is to be configured. This ring group number must match the number you specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.

Default

Disabled

Command Mode

Global configuration

Usage Guidelines

Use this command in conjunction with the **source-bridge remote-peer tcp** command that has the **local-ack** keyword specified, which causes every new LLC2 session to be locally terminated. If a machine on the Token Ring attempts to start an LLC2 session to an end host that exists on the *ring-number* specified in the **source-bridge passthrough** command, the session will "pass through" and not use Local Acknowledgment for LLC2.

If you specify passthrough for a ring, LLC2 sessions will never be locally acknowledged on that ring. This is true even if a remote peer accessing the ring has set the **local-ack** keyword in the **source-bridge remote-peer tcp** command. The **source-bridge passthrough** command overrides any setting in the **source-bridge remote-peer tcp** command.

You can define more than one **source-bridge passthrough** command in a router configuration.

Example

The following example configures the router/bridge to use Local Acknowledgment on remote peer at 1.1.1.2 but passthrough on rings 9 and 4:

```
source-bridge ring-group 100
source-bridge remote-peer 100 tcp 1.1.1.1
source-bridge remote-peer 100 tcp 1.1.1.2 local-ack
source-bridge passthrough 9
source-bridge passthrough 4
```

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

source-bridge remote-peer tcp†
source-bridge ring-group†

source-bridge remote-peer fst

Use the **source-bridge remote-peer fst** global configuration command to specify a Fast Sequenced Transport (FST) encapsulation connection. Use the **no** form of this command to disable the previous assignments.

source-bridge remote-peer *ring-group* **fst** *ip-address* [**lf** *size*]
no source-bridge remote-peer *ring-group* **fst** *ip-address*

Syntax Description

ring-group	Ring group number. This ring group number must match the number you specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.
ip-address	IP address of the remote peer with which the router will communicate.
lf *size*	(Optional) Maximum-sized frame to be sent to this remote peer. The router negotiates all transit routes down to this size or lower. Use this argument to prevent timeouts in end hosts by reducing the amount of data they have to transmit in a fixed interval. The legal values for this argument are 516, 1500, 2052, 4472, 8144, 11407, and 17800 bytes.

Default

No FST encapsulation connection is specified.

Command Mode

Global configuration

Usage Guidelines

The two peers using the serial-transport method will only function correctly if there are routers/bridges at the end of the serial line that have been configured to use the serial transport. The peers must also belong to the same ring group.

You must specify one **source-bridge remote-peer** command for each peer router that is part of the virtual ring. You must also specify one **source-bridge remote-peer** command to identify the IP address of the local router.

Example

In the following example the **source-bridge-fst-peername** command specifies an IP address of 150.136.64.98 for the local router. The **source-bridge ring-group** command assigns the router to a ring group. The **source-bridge remote-peer fst** command specifies ring group number 100 for the remote peer at IP address 150.136.64.97.

```
source-bridge fst-peername 150.136.64.98
source-bridge ring-group 100
source-bridge remote-peer 100 fst 150.136.64.97
```

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

source-bridge †
source-bridge fst-peername †
source-bridge remote-peer interface
source-bridge remote-peer tcp

source-bridge remote-peer ftcp

Use the **source-bridge remote-peer ftcp** global configuration command to enable fast switching of Token Ring frames over TCP/IP. Use the **no** form of this command to remove a remote peer from the specified ring group.

source-bridge remote-peer *ring-group* **ftcp** *ip-address* [**lf** *size*] [**tcp-receive-windo**w *wsize*] [**local-ack**]
no source-bridge remote-peer *ring-group* **ftcp** *ip-address*

Syntax Description

ring-group	Ring-group number. This ring-group number must match the number you have specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.
ip-address	IP address of the remote peer with which the router will communicate.
lf *size*	(Optional) Maximum-sized frame to be sent to this remote peer. The router negotiates all transit routes down to this size or lower.
tcp-receive-window *wsize*	(Optional) The TCP receive window size in bytes. The range is 10240 to 65535 bytes. The default window size is 10240 bytes.
local-ack	(Optional) LLC2 sessions destined for a specific remote peer are locally terminated and acknowledged. Use local acknowledgment for LLC2 sessions going to this remote peer.

Default

No IP address is identified. The default window size is 10240 bytes.

Command Mode

Global configuration

Usage Guidelines

Use this argument to prevent timeouts in end hosts by reducing the amount of data they have to transmit in a fixed interval. The default value for this argument is 516 bytes.

If you change the default TCP receive window size on one peer, you must also change the receive window size on the other peer. Both sides of the connection should have the same window size.

If you configure one peer for LLC2 local acknowledgment, you need to configure both peers for LLC2 local acknowledgment. If only one peer is so configured, unpredictable (and undesirable) results will occur.

Two peers using the serial-transport method will only function correctly if there are routers/bridges at the end of the serial line that have been configured to use the serial transport. The peers must also belong to the same ring group.

Examples

In the following example, the remote peer with IP address 131.108.2.291 belongs to ring group 5. It also uses LLC2 local acknowledgment and enables prioritization over a TCP network:

```
source-bridge ring-group 5
source-bridge remote-peer 5 ftcp 131.108.2.291 local-ack priority
```

The following example shows how to locally administer and acknowledge LLC2 sessions destined for a specific remote peer:

```
! identify the ring group as 100
source-bridge ring-group 100
! remote peer at IP address 1.1.1.1 does not use local acknowledgment
source-bridge remote-peer 100 ftcp 1.1.1.1
! remote peer at IP address 1.1.1.2 uses local acknowledgment
source-bridge remote-peer 100 ftcp 1.1.1.2 local-ack
!
interface tokenring 0
source-bridge 1 1 100
```

Sessions between a device on Token Ring 0 that must go through remote peer 1.1.1.2 use local acknowledgment for LLC2, but sessions that go through remote peer 1.1.1.1 do *not* use local acknowledgment (that is, they "pass through").

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

source-bridge †
source-bridge remote-peer fst
source-bridge remote-peer interface

source-bridge remote-peer interface

Use the **source-bridge remote-peer interface** global configuration command when specifying a point-to-point direct encapsulation connection. Use the **no** form of this command to disable previous interface assignments.

source-bridge remote-peer *ring-group* **interface** *name* [*mac-address*] [**lf** *size*]
no source-bridge remote-peer *ring-group* **interface** *name*

Syntax Description

ring-group	Ring group number. This ring group number must match the number you specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.
name	Name of the router's interface over which to send source-route bridged traffic.
mac-address	(Optional) MAC address for the interface on the other side of the virtual ring. This argument is required for nonserial interfaces. You can obtain the value of this MAC address by using the **show interface** command, and then scanning the display for the interface specified by *name*.
lf *size*	(Optional) Maximum-sized frame to be sent to this remote peer. The router negotiates all transit routes down to this size or lower. This argument is useful in preventing timeouts in end hosts by reducing the amount of data they have to transmit in a fixed interval. The legal values for this argument are 516, 1500, 2052, 4472, 8144, 11407, and 17800 bytes.

Default

No point-to-point direct encapsulation connection is specified.

Command Mode

Global configuration

Usage Guidelines

Use this command to identify the interface over which to send source-route bridged traffic to another router/bridge in the ring group. A serial interface does not require that you include a MAC-level address; all other types of interfaces do require MAC addresses.

You must specify one **source-bridge remote-peer** command for each peer router that is part of the virtual ring. You must also specify one **source-bridge remote-peer** command to identify the IP address of the local router.

It is possible to mix all types of transport methods within the same ring group.

Note The two peers using the serial-transport method will only function correctly if there are routers/bridges at the end of the serial line that have been configured to use the serial transport. The peers must also belong to the same ring group.

Example

The following example sends source-route bridged traffic over serial interface 0 and Ethernet interface 0:

```
! send source-route bridged traffic over serial 0
source-bridge remote-peer 5 interface serial 0
! specify MAC address for source-route bridged traffic on Ethernet 0
source-bridge remote-peer 5 interface Ethernet 0 0000.0c00.1234
```

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

show interface †
source-bridge †
source-bridge remote-peer fst
source-bridge remote-peer tcp

source-bridge remote-peer tcp

Use th**e source-bridge remote-peer tcp** global configuration command to identify the IP address of a peer in the ring group with which to exchange source-bridge traffic using TCP. Use the **no** form of this command to remove a remote peer for the specified ring group.

source-bridge remote-peer *ring-group* **tcp** *ip-address* [**lf** *size*] [**tcp-receive-window** *wsize*] [**local-ack**] [**priority**]
no source-bridge remote-peer *ring-group* **tcp** *ip-address*

Syntax Description

ring-group	Ring group number. This ring group number must match the number you specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.
ip-address	IP address of the remote peer with which the router will communicate.
lf *size*	(Optional) Maximum-sized frame to be sent to this remote peer. The router negotiates all transit routes down to this size or lower. Use this argument to prevent timeouts in end hosts by reducing the amount of data they have to transmit in a fixed interval. The valid values for this argument are 516, 1500, 2052, 4472, 8144, 11407, and 17800 bytes.
tcp-receive-window *wsize*	(Optional) The TCP receive window size in bytes. The range is 10240 to 65535 bytes. The default window size is 10240 bytes.
local-ack	(Optional) LLC2 sessions destined for a specific remote peer are locally terminated and acknowledged. Use local acknowledgment for LLC2 sessions going to this remote peer.
priority	(Optional) Enables prioritization over a TCP network. You must specify the keyword **local-ack** earlier in the same **source-bridge remote-peer** command. The keyword **priority** is a prerequisite for features such as System Network Architecture (SNA) class of service and SNA LU address prioritization over a TCP network.

Default

No IP address is identified. The default window size is 10240 bytes.

Command Mode

Global configuration

Usage Guidelines

If you change the default TCP receive window size on one peer, you must also change the receive window size on the other peer. Both sides of the connection should have the same window size.

If you configure one peer for LLC2 Local Acknowledgment, you need to configure both peers for LLC2 Local Acknowledgment. If only one peer is so configured, unpredictable (and undesirable) results will occur.

You must specify one **source-bridge remote-peer** command for each peer router that is part of the virtual ring. You must also specify one **source-bridge remote-peer** command to identify the IP address of the local router.

The two peers using the serial-transport method will only function correctly if there are routers/bridges at the end of the serial line that have been configured to use the serial transport. The peers must also belong to the same ring group.

Example

In the following example, the remote peer with IP address 131.108.2.291 belongs to ring group 5. It also uses LLC2 Local Acknowledgment, priority, and RSRB protocol version 2:

```
! identify the ring group as 5
source-bridge ring-group 5
! remote peer at IP address 131.108.2.291 belongs to ring group 5, uses
! tcp as the transport, is set up for local acknowledgment, and uses priority
source-bridge remote-peer 5 tcp 131.108.2.291 local-ack priority
```

The following example shows how to locally administer and acknowledge LLC2 sessions destined for a specific remote peer:

```
! identify the ring group as 100
source-bridge ring-group 100
! remote peer at IP address 1.1.1.1 does not use local acknowledgment
source-bridge remote-peer 100 tcp 1.1.1.1
! remote peer at IP address 1.1.1.2 uses local acknowledgment
source-bridge remote-peer 100 tcp 1.1.1.2 local-ack
!
interface tokenring 0
source-bridge 1 1 100
```

Sessions between a device on Token Ring 0 that must go through remote peer 1.1.1.2 use Local Acknowledgment for LLC2, but sessions that go through remote peer 1.1.1.1 do *not* use Local Acknowledgment (that is, they “pass through”).

Related Commands

A dagger (†) indicates that the command is documented in another chapter.

source-bridge †
source-bridge remote-peer fst
source-bridge remote-peer interface

source-bridge tcp-queue-max

Use the **source-bridge tcp-queue-max** global configuration command to modify the size of the backup queue for remote source-route bridging. This backup queue determines the number of packets that can wait for transmission to a remote ring before packets start being thrown away. Use the **no** form of this command to return to the default value.

source-bridge tcp-queue-max *number*
no source-bridge tcp-queue-max

Syntax Description

number	Number of packets to hold in any single outgoing TCP queue to a remote router. The default is 100 packets.

Default

The default number of packets is 100.

Command Mode

Global configuration

Example

If, for example, your network experiences temporary bursts of traffic using the default packet queue length, the following command raises the limit from 100 to 150 packets:

```
source-bridge tcp-queue-max 150
```