Remote Source-Route Bridging Commands

This chapter describes the function and displays the syntax of each remote source-route bridging command. For more information about defaults and usage guidelines, see the corresponding chapter of the *Router Products Command Reference* publication.

[**no**] **locaddr-priority** *list-number*

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.

list-number	Priority list number of the input interface.

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

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.

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 hexadecimal.

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.

[**no**] **priority-group** *list*

Use the **priority-group** interface configuration command to assign a specified priority list to an interface. Use the **no** form of this command to cancel the assignment.

list	Priority list number assigned to the interface.

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

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.

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 is **ip**.
queue-keyword	Priority queue name; one of **high**, **medium**, **normal**, or **low**.

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*

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

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

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** *interface-name* **netbios-output-list** *host*

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.

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

interface-name	Interface name.
host	Host name.

sap priority *number*

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

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

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

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

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 *ds*	(Optional) Indicates that the next argument, *ds*, represents the destination service access point address. The argument *ds* is a hexadecimal number.
ssap *ss*	(Optional) Indicates that the next argument, *ss*, represents the source service access point address. The argument *ss* is a hexadecimal number.
dmac *dm*	(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 *sm*	(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.

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.

[**no**] **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 four (FID 4) frames to prioritize traffic when using TCP. Use the **no** form of this command to disable prioritizing.

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

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.

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

[**no**] **source-bridge keepalive** *seconds*

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.

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

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

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.

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.
size	Maximum frame size.

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

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

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 have specified with the **source-bridge ring-group** command. The valid range is 1 through 4095.

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

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.

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.

source-bridge remote-peer *ring-group* **ftcp** *ip-address*
[**lf** *size*] [**local-ack**]
no source-bridge remote-peer *ring-group* **ftcp** *ip-address*

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.

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 size frame to be sent to this remote peer. The router negotiates all transit routes down to this size or lower.

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.

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

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.

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.

name Name of the router's interface over which to send source-route bridged traffic.

mac-address (Optional) MAC address for the interface you specify using the *name* argument. 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.

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

Use the **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.

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 pair 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 pair are 516, 1500, 2052, 4472, 8144, 11407, and 17800 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.

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

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.

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