

## LAN Emulation Commands

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This chapter describes the function and displays the syntax of each LAN Emulation (LANE) command. For more information about defaults and usage guidelines, see the corresponding chapter of the *Router Products Command Reference* publication.

**[no] atm pvc** *vcd vpi vci aal5lane pvc-type*

To create a permanent virtual circuit (PVC) for LANE components on a specified subinterface, use the **atm pvc** interface configuration command. The **no** form of this command removes the specified PVC.

<i>vcd</i>	Virtual circuit descriptor, in the range from 1 to the value set with the <b>atm maxvc</b> command.
<i>vpi</i>	Virtual path identifier of this PVC on the ATM network. Valid values range from 0 through 255. The VPI value is unique only on a single interface.  Both <i>vpi</i> and <i>vci</i> cannot be specified as 0; if one is 0, the other cannot be 0.
<i>vci</i>	Virtual channel identifier of this PVC on the ATM network. Valid values range from 0 through 65535. The VCI value is unique only on a single interface.  Both <i>vpi</i> and <i>vci</i> cannot be specified as 0; if one is 0, the other cannot be 0.
<i>pvc-type</i>	Keyword specifying the type of PVC. See this command in the <i>Router Products Command Reference</i> publication for a list of supported values.

**clear atm vc** *vcd*

To release a specified switched virtual circuit (SVC), use the **clear atm vc EXEC** command.

<i>vcd</i>	Virtual channel descriptor of the channel to be released.
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**clear lane le-arp** [**interface** *slot/port[.subinterface-number]* [*mac-address*] | **name** *elan-name* [*mac-address*]]

To clear the dynamic LE ARP table or a single LE ARP entry of the LANE client configured on the specified subinterface or emulated LAN, use the **clear lane le-arp** EXEC command.

<b>interface</b> <i>slot/port[.subinterface-number]</i>	(Optional) Interface or subinterface for the LANE client whose LE ARP table or entry is to be cleared.
<b>mac-address</b> <i>mac-address</i>	(Optional) Media Access Control (MAC) address of the entry to be cleared from the LE ARP table.
<b>name</b> <i>elan-name</i>	(Optional) Name of the emulated LAN for the LANE client whose LE ARP table or entry is to be cleared.

**clear lane server** {**interface** *slot/port[.subinterface-number]* | **name** *elan-name* } [**mac-address** *mac-address* | **client-atm-address** *atm-address* | **lecid** *lecid*]

After changing the bindings on a LANE configuration server, to force a LANE server on a specified subinterface or emulated LAN to drop the Control Direct and Control Distribute VCCs to a given LANE client and thus to force the client to rejoin subject to the new bindings, use the **clear lane server** EXEC command.

<b>interface</b> <i>slot/port[.subinterface-number]</i>	Interface or subinterface on which the LANE server is configured.
<b>name</b> <i>elan-name</i>	Name of the emulated LAN on which the LANE server is configured.

<b>mac-address</b> <i>mac-address</i>	(Optional) Keyword and LANE client's MAC address.
<b>client-atm-address</b> <i>atm-address</i>	(Optional) Keyword and LANE client's ATM address.
<b>lecid</b> <i>lecid</i>	(Optional) Keyword and LANE client ID.

**client-atm-address** *atm-address-template* **name** *elan-name*  
**no client-atm-address** *atm-address-template*

To add a LANE client address entry to the configuration server's configuration database, use the **client-atm-address** database configuration command. To remove a client address entry from the table, use the **no** form on this command.

<i>atm-address-template</i>	<p>Template that explicitly specifies an ATM address or a specific part of an ATM address and uses wildcard characters for other parts of the ATM address, making it easy and convenient to specify multiple addresses matching the explicitly specified part.</p> <p>Wildcard characters can replace any nibble or group of nibbles in the prefix, the end-system identifier (ESI), or the selector fields of the ATM address.</p>
<b>name</b> <i>elan-name</i>	Name of the emulated LAN.

**default-name** *elan-name*

**no default-name**

To provide an emulated LAN name in the configuration server's database for those client MAC addresses and client ATM addresses that do not have explicit emulated LAN name bindings, use the **default-name** database configuration command. To remove the default name, use the **no** form of this command.

<i>elan-name</i>	Default emulated LAN name for any LANE client MAC address or LANE client ATM address not explicitly bound to any emulated LAN name.
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**[no] lane auto-config-atm-address**

To specify that the configuration server ATM address is computed by our automatic method, use the **lane auto-config-atm-address** interface configuration command. To remove the previously assigned ATM address, use the **no** form of this command.

**lane bus-atm-address** *atm-address-template*

**no lane bus-atm-address** [*atm-address-template*]

To specify an ATM address—and thus override the automatic ATM address assignment—for the broadcast-and-unknown server on the specified subinterface, use the **lane bus-atm-address** interface configuration command. To remove the ATM address previously specified for the broadcast-and-unknown server on the specified subinterface and thus revert to the automatic address assignment, use the **no** form of this command.

<i>atm-address-template</i>	ATM address or a template in which wildcard characters are replaced by any nibble or group of nibbles of the prefix bytes, the end-system identifier (ESI) bytes, or the selector byte of the automatically assigned ATM address.
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**lane client ethernet** [*elan-name*]

**no lane client** [**ethernet** [*elan-name*]]

To activate a LANE client on the specified subinterface, use the **lane client** interface configuration command. To remove a previously activated LANE client on the subinterface, use the **no** form of this command.

<b>ethernet</b>	Identifies the type of emulated LAN attached to this subinterface.
<i>elan-name</i>	(Optional) Name of the emulated LAN. This is argument optional because the client obtains its emulated LAN name from the configuration server.

**lane client-atm-address** *atm-address-template*

**no client-atm-address** [*atm-address-template*]

To specify an ATM address—and thus override the automatic ATM address assignment—for the LANE client on the specified subinterface, use the **lane client-atm-address** interface configuration command. To remove the ATM address previously specified for the LANE client on the specified subinterface and thus revert to the automatic address assignment, use the **no** form of this command.

<i>atm-address-template</i>	ATM address or a template in which wildcard characters are replaced by any nibble or group of nibbles of the prefix bytes, the ESI bytes, or the selector byte of the automatically assigned ATM address.
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**lane config** *elan-config-table-name*

**no lane config**

To associate a named configuration table (database) with the configuration server on the selected ATM interface, use the **lane config** interface configuration command. To remove the association between a named database and the configuration server on the specified interface, use the **no** form of this command.

*elan-config-table-name*      Name of the LANE database.

**lane config-atm-address** *atm-address-template*

**no lane config-atm-address** [*atm-address-template*]

To specify a given configuration server's ATM address, use the **lane config-atm-address** interface configuration command. To remove an assigned ATM address, use the **no** form of this command.

*atm-address-template*      ATM address or a template in which wildcard characters are replaced by any nibble or group of nibbles of the prefix bytes, the ESI bytes, or the selector byte of the automatically assigned ATM address.

**[no] lane database** *database-name*

To create a named configuration database that can be associated with a configuration server when one is configured, use the **lane database** global configuration command.

*database-name*      Database name (32 characters maximum).

**[no] lane fixed-config-atm-address**

To specify that the fixed configuration server ATM address assigned by the ATM Forum will be used, use the **lane fixed-config-atm-address** interface configuration command.

**[no] lane le-arp** *mac-address atm-address*

To add a static entry to the LE ARP table of the LANE client configured on the specified subinterface, use the **lane le-arp** interface configuration command. To remove a static entry from the LE ARP table of the LANE client on the specified subinterface, use the **no** form of this command.

<i>mac-address</i>	MAC address to bind to the specified ATM address.
<i>atm-address</i>	ATM address.

**lane pvc** *vcd atm-address* (for LANE client configuration)

**lane pvc** *vcd atm-address lec-id* (for LANE server configuration)

**no lane pvc** *vcd [atm-address [lec-id]]*

To associate an ATM address, and optionally a LANE client ID, with a PVC previously created on the specified subinterface, use the **lane pvc** interface configuration command. To remove a prior entry, use the **no** form of this command.

<i>vcd</i>	Virtual channel descriptor that identifies the PVC.
<i>atm-address</i>	ATM address of the LANE component at the other end of the PVC,
<i>lec-id</i>	(Not used when the command is used to configure a LANE client; required when the command is used to configure a LANE server) Number in the range 1 to 65279 that uniquely identifies the LANE client connected to this PVC.

**lane register** *vcd mac-address atm-address*  
**no lane register** *vcd [mac-address atm-address]*

To register a LANE client that is connected by PVC to the LANE server on the specified subinterface, use the **lane register** interface configuration command. To remove a prior entry, use the **no** form of this command.

<i>vcd</i>	Virtual channel descriptor of the Server Direct PVC through which the LANE client is connected to the LANE server.
<i>mac-address</i>	MAC address of the LANE client.
<i>atm-address</i>	ATM address of the LANE client.

**lane server-atm-address** *atm-address-template*  
**no server-atm-address** [*atm-address-template*]

To specify an ATM address—and thus override the automatic ATM address assignment—for the LANE server on the specified subinterface, use the **lane server-atm-address** interface configuration command. To remove the ATM address previously specified for the LANE server on the specified subinterface and thus revert to the automatic address assignment, use the **no** form of this command.

<i>atm-address-template</i>	ATM address or a template in which wildcard characters are replaced by any nibble or group of nibbles of the prefix bytes, the ESI bytes, or the selector byte of the automatically assigned ATM address.
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**lane server-bus ethernet** *elan-name*

**no lane server-bus** [**ethernet** *elan-name*]

To enable a LANE server and a broadcast-and-unknown server on the specified subinterface, use the **lane server-bus** interface configuration command. To disable a LANE server and broadcast-and-unknown server on the specified subinterface, use the **no** form of this command.

**ethernet** Identifies the type of emulated LAN attached to this subinterface.

*elan-name* Name of the emulated LAN.

**name** *elan-name* **server-atm-address** *atm-address*

**no name** *elan-name*

To bind the name of the emulated LAN to the ATM address of the LANE server for the emulated LAN in the configuration server's configuration database, use the **name server-atm-address** global configuration command. To remove the binding from the database, use the **no** form of this command.

*elan-name* Name of the emulated LAN.

*atm-address* LANE server's ATM address.

**show lane** [**interface atm** *slot/port* [, *subinterface-number*] |

**name** *elan-name*] [**brief**]

To display global and per-VCC LANE information for all the LANE components configured on an interface or any of its subinterfaces, on a specified subinterface, or on an emulated LAN, use the **show lane** EXEC command.

**interface atm** *slot/port* (Optional) ATM interface slot and port.

*.subinterface-number* (Optional) Subinterface number.

**name** *elan-name* (Optional) Name of emulated LAN.

**brief** (Optional) Keyword used to display the global information, but not the per-VCC information.

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**show lane bus** [**interface atm** *slot/port*[*.subinterface-number*] |  
**name** *elan-name*] [**brief**]

To display global and per-VCC LANE information for the broadcast-and-unknown server configured on an interface or any of its subinterfaces, on a specified subinterface, or on an emulated LAN, use the **show lane bus** EXEC command.

<b>interface atm</b> <i>slot/port</i>	(Optional) ATM interface slot and port.
<i>.subinterface-number</i>	(Optional) Subinterface number.
<b>name</b> <i>elan-name</i>	(Optional) Name of the emulated LAN.
<b>brief</b>	(Optional) Keyword used to display the global information, but not the per-VCC information.

**show lane client** [**interface atm** *slot/port*[*.subinterface-number*] |  
**name** *elan-name*] [**brief**]

To display global and per-VCC LANE information for all the LANE clients configured on an interface or any of its subinterfaces, on a specified subinterface, or on an emulated LAN, use the **show lane client** EXEC command.

<b>interface atm</b> <i>slot/port</i>	(Optional) ATM interface slot and port.
<i>.subinterface-number</i>	(Optional) Subinterface number.
<b>name</b> <i>elan-name</i>	(Optional) Name of the emulated LAN.
<b>brief</b>	(Optional) Keyword used to display the global information, but not the per-VCC information.

### **show lane config** [**interface atm** *slot*[/*port*]]

To display global and per-VCC LANE information for the configuration server configured on an interface, use the **show lane config** EXEC command.

**interface atm** *slot*      (Optional) ATM interface slot number.  
*/port*                      (Optional) ATM interface port number.

### **show lane database** [*database-name*]

To display the configuration server's database, use the **show lane database** EXEC command.

*database-name*      (Optional) Specific database name.

### **show lane le-arp** [**interface atm** *slot/port*[*.subinterface-number*] | **name** *elan-name*]

To display the LANE ARP table of the LANE client configured on an interface or any of its subinterfaces, on a specified subinterface, or on an emulated LAN, use the **show lane le-arp** EXEC command.

**interface atm** *slot/port*      (Optional) ATM interface slot and port.  
*.subinterface-number*      Subinterface number.  
**name** *elan-name*              (Optional) Specifies the name of the emulated LAN.

**show lane server** [**interface atm** *slot/port*[*.subinterface-number*] |  
**name** *elan-name*] [**brief**]

To display global and per-VCC information for the LANE server configured on an interface or any of its subinterfaces, on a specified subinterface, or on an emulated LAN, use the **show lane server EXEC** command.

<b>interface atm</b> <i>slot/port</i>	(Optional) ATM interface slot and port.
<i>.subinterface-number</i>	(Optional) Subinterface number.
<b>name</b> <i>elan-name</i>	(Optional) Name of the emulated LAN.
<b>brief</b>	(Optional) Keyword used to display the global information, but not the per-VCC information.