

Configuring ATM Interface Encapsulation

To configure ATM encapsulation on a physical interface, include the `encapsulation` statement at the `[edit interfaces interface-name]` hierarchy level:

```
[edit interfaces interface-name]  
[Unresolved xref] (atm-ccc-cell-relay | atm-pvc | ethernet-over-atm);
```

For ATM interfaces, the physical interface encapsulation can be one of the following:

- ATM cell-relay—This encapsulation connects two remote virtual circuits or ATM physical interfaces with an LSP. Traffic on the circuit is ATM cells.
- ATM PVC—ATM PVC encapsulation is defined in RFC 2684, *Multiprotocol Encapsulation over ATM Adaptation Layer 5*.
- Ethernet over ATM—As defined in RFC 1483 (the previous version of RFC 2684), this encapsulation type allows ATM interfaces to connect to devices that support only bridged-mode protocol data units (BPDUs). The JUNOS software does not completely support bridging, but accepts BPDU packets as a default gateway. If you use the router as an edge device, then the router acts as a default gateway. It accepts Ethernet LLC/SNAP frames with IP or ARP in the payload, and drops the rest. For packets destined to the Ethernet LAN, a route lookup is done using the destination IP address. If the route lookup yields a full address match, the packet is encapsulated with an LLC/SNAP and media access control (MAC) header, and the packet is forwarded to the ATM interface.

Generally, you configure an interface's encapsulation at the `[edit interfaces interface-name]` hierarchy level. However, for ATM encapsulations, you can also configure the encapsulation type that is used inside the ATM cell itself. To do this, include the `encapsulation` statement:

```
[Unresolved xref] (atm-ccc-cell-relay | atm-ccc-vc-mux | atm-cisco-nlpid | atm-mlppp-llc |  
atm-nlpid | atm-ppp-llc | atm-ppp-vc-mux | atm-snap | atm-tcc-snap | atm-vc-mux |  
atm-tcc-vc-mux | ether-over-atm-llc | ether-vpls-over-atm-llc);
```

You can include this statement at the following hierarchy levels:

- `[edit interfaces interface-name unit logical-unit-number]`
- `[edit logical-systems logical-system-name interfaces interface-name unit logical-unit-number]`

Table 1 shows the logical interface encapsulation types for ATM interfaces.

Table 1: ATM Logical Interface Encapsulation Types

Encapsulation Types	Comments
ATM CCC cell relay	<p>This encapsulation type connects two remote virtual circuits or ATM physical interfaces with an LSP.</p> <p>This encapsulation type carries traffic in ATM cells.</p> <p>When you use this encapsulation type, you can configure the <code>ccc</code> family only.</p>
ATM CCC VC multiplex	<p>This encapsulation type is for CCC circuits.</p> <p>When you use this encapsulation type, you can configure the <code>ccc</code> family only.</p>
ATM network layer protocol identifier (NLPID)	When you use this encapsulation type, you can configure the <code>inet</code> family only.
ATM SNAP	
ATM SNAP encapsulation on translational cross-connect (TCC) circuits	When you use this encapsulation type, you can configure the <code>tcc</code> family only.
ATM VC multiplex	When you use this encapsulation type, you can configure the <code>inet</code> family only.
ATM VC multiplex on TCC circuits	When you use this encapsulation type, you can configure the <code>tcc</code> family only.
Cell-relay accumulation mode (CAM)	<p>In this mode, the incoming 1 to 8 cells are packaged into a single packet and forwarded to the LSP. To configure CAM, include the <code>atm-cell-relay-accumulation</code> statement at the <code>[edit chassis fpc slot-number pic pic-number]</code> hierarchy level.</p> <p>This encapsulation type is for ATM1 interfaces only.</p> <p>For more information about CAM, see the <i>JUNOS System Basics Configuration Guide</i>.</p>
Cisco ATM NLPID	When you use this encapsulation type, you can configure the <code>inet</code> family only.
Ethernet over ATM	<p>This encapsulation type is for interfaces that carry IPv4 traffic.</p> <p>When you use this encapsulation type, you cannot configure point-to-multipoint interfaces.</p>
Ethernet VPLS over ATM	<p>This encapsulation type enables a VPLS instance to support bridging between Ethernet interfaces and ATM interfaces, as described in RFC 2684.</p> <p>Use this encapsulation type to support IEEE 802.1p classification binding on ATM VCs.</p> <p>This encapsulation type is for ATM2 IQ interfaces only.</p> <p>When you use this encapsulation type, you cannot configure point-to-multipoint interfaces.</p>
Multilink PPP over AAL5 LLC	<p>This encapsulation type is for ATM2 IQ interfaces only.</p> <p>When you use this encapsulation type, your routing platform must be equipped with a Link Services or Voice Services PIC.</p>

Table 1: ATM Logical Interface Encapsulation Types *(continued)*

Encapsulation Types	Comments
PPP over AAL5 LLC	This encapsulation type is for ATM2 IQ interfaces only. When you use this encapsulation type, you cannot configure point-to-multipoint interfaces.
PPP over AAL5 multiplex	This encapsulation type is for ATM2 IQ interfaces only. When you use this encapsulation type, you cannot configure point-to-multipoint interfaces.

