



# PVC Configuration Mode Commands

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## Command Modes

The Permanent Virtual Connection (PVC) configuration mode commands bind IP interfaces or SS7-Frame Relay links a PVC as well as configure PVC operational parameters for a specific port.

Exec > Global Configuration > ATM Port Configuration > PVC Configuration

**configure > port atm slot\_number/port\_number > pvc vpi vpi\_number vci vci\_number**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#
```



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### Important

The commands or keywords/variables that are available are dependent on platform type, version, and installed license(s).



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### Important

For information on common commands available in this configuration mode, refer to the [Common Commands](#) chapter.

- [bind](#), on page 1
- [encapsulation aal5](#), on page 2
- [shaping](#), on page 3
- [shutdown](#), on page 4

## bind

This command binds an IP interface or an SS7 link to the PVC.



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### Important

Prior to attempting the binding, the interface and context or the SS7 routing information and link must have been configured.

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### Product

SGSN

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### Privilege

Security Administrator, Administrator

**Command Modes**

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**configure** > **port atm** *slot\_number/port\_number* > **pvc vpi** *vpi\_number* **vci** *vci\_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#
```

**Syntax Description**

```
[ no ] bind { interface interface_name context_name | link ss7-routing-domain
rd_id linkset-id id link-id id }
```

**no**

Removes the binding from the configuration.

**interface\_name**

Defines the name of the virtual interface to be bound to the PVC. *interface\_name*: Must be a unique string consisting of 1 to 79 alphanumeric characters.

**context\_name**

Specifies the name of the context to be bound to the virtual interface. *context\_name*: Must be a unique string consisting of 1 to 79 alphanumeric characters.

**ss7-routing-domain rd\_id**

Identifies a specific SS7 routing domain. *rd\_id* must be an integer from 1 to 12

**linkset-id id**

Identifies a specific linkset within the routing domain. *id*: must be an integer from 1 to 33

**link-id id**

Identifies a specific link within the linkset. *id*: must be an integer value 1 - 16

**Usage Guidelines**

Use this command to bind the PVC to an interface or a specific link.

**Example**

Use a command similar to the following to bind a PVC to a link ID #2:

```
bind ss7-routing-domain 1 linkset-id 23 link-id 2
```

## encapsulation aal5

Specify the data encapsulation type for the ATM adaptation layer 5 (AAL5) frames for the PVC.

**Product**

SGSN

**Privilege**

Security Administrator, Administrator

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Entering the above command sequence results in the following prompt:

```
[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#
```

**Syntax Description**

**encapsulation aal5 { llc-snap | vc-mux }**

**llc-snap**

Frames protocol is identified in the AAL5 using logical link control (LLC) encapsulation.

**vc-mux**

Frames are not encapsulated and use virtual circuit multiplexing (VC-MUX) to identify the protocols used for the AAL5 frames.

**Usage Guidelines**

Use this command to identify the protocol type for the circuit.

**Example**

```
encapsulation aal5 vc-mux
```

# shaping

Specify the type of traffic shaping (rates) for this PVC.

**Product**

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

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**configure > port atm slot\_number/port\_number > pvc vpi vpi\_number vci vci\_number**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#
```

**Syntax Description**

**shaping { cbr pcr pcr\_num | ubr pcr pcr\_num | ubr+ pcr pcr\_num mrc mrc\_num | vbr pcr pcr\_num scr src\_num mbs mbs\_num }**

**cbr**

Constant bit rate

pcr - peak cell rate = cells per second

pcr\_num: Must be an integer from 75 to 1412830

**ubr**

Unspecified Bit Rate

*pcr* - peak cell rate = cells per second

*prc\_num*: Must be an integer from 75 to 1412830

**ubr+**

Unspecified Bit Rate with Minimum Cell Rate.

The PCR and MCR values should be set to maintain the following relationship:  $PCR \geq (MCR + \text{minRate})$ , where the current recommend minRate is 75.

*pcr* - peak cell rate = cells per second

*prc\_num*: Must be an integer from 75 to 1412830

*mcr* - minimum cell rate

*mrc\_num*: Must be an integer from 75 to 1412830

**vbr**

Variable Bit Rate, NRT (not real time) type.

The PCR and MCR values should be set to maintain the following relationship:  $PCR \geq (MCR + \text{minRate})$ , where the current recommend minRate is 75.

*pcr* - peak cell rate = cells per second

*prc\_num* must be an integer from 75 to 1412830

*scr* - sustained cell rate

*src\_num* must be an integer from 75 to 1412830

*mbs* - maximum burst size

*mbs\_num* must be an integer from 75 to 1412830

**Usage Guidelines**

Use this command to configure the shaping for egress traffic on this PVC.

**Example**

```
shaping cbr pcr 56000
```

# shutdown

Disables/enables traffic over the current VLAN.

**Product**

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

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**configure** > **port atm** *slot\_number/port\_number* > **pvc vpi** *vpi\_number* **vci** *vci\_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#
```

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**Syntax Description**

**shutdown**  
**no shutdown**

**no**

Enables the VLAN. When omitted the VLAN is non-functional.

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**Usage Guidelines**

Enables/ Disables specified VLAN.

This command is necessary to bring a VLAN into service by enabling it via the **no** keyword.

**Example**

To disable a VLAN from sending or receiving network traffic use the following command:

**shutdown**

To enable a VLAN use the following command:

**no shutdown**

shutdown