



## 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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## 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

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### Command Modes

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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### 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

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### 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
```

## do show

Executes all **show** commands while in Configuration mode.

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### Product

All

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### Privilege

Security Administrator, Administrator

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### Syntax Description

```
do show
```

**Usage Guidelines**

Use this command to run all Exec mode **show** commands while in Configuration mode. It is not necessary to exit the Config mode to run a **show** command.

The pipe character | is only available if the command is valid in the Exec mode.

**Caution**

There are some Exec mode **show** commands which are too resource intensive to run from Config mode. These include: **do show support collection**, **do show support details**, **do show support record** and **do show support summary**. If there is a restriction on a specific **show** command, the following error message is displayed:

```
Failure: Cannot execute 'do show support' command from Config mode.
```

## encapsulation aal5

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

**Product**

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

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)#
```

**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
```

## end

Exits the PVC configuration mode and returns to the Exec mode.

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>end</b>
<b>Usage Guidelines</b>	Change the mode back to the Exec mode.

## exit

Exits the PVC configuration mode and returns to the ATM port configuration mode.

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>exit</b>
<b>Usage Guidelines</b>	Return to the port configuration mode.

## shaping

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

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > ATM Port Configuration > PVC Configuration <b>configure &gt; port atm slot_number/port_number &gt; pvc vpi vpi_number vci vci_number</b> Entering the above command sequence results in the following prompt: <pre>[local]host_name(config-port-slot_number/port_number-pvc-pvc_number/vci_number)#</pre>
<b>Syntax Description</b>	<b>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 }</b>  <b>cbr</b> Constant bit rate pcr - peak cell rate = cells per second <i>pcr_num</i> : Must be an integer from 75 to 1412830  <b>ubr</b> 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**

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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**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`