

Configuring T1 and NxDS0 Interfaces

To configure T1 interfaces on a Channelized OC3 IQ or IQE PIC, perform the following tasks:

1. Partition the channelized OC3 interface into channelized OC1 interfaces by including the **partition**, **oc-slice**, and **interface-type** statements at the [edit interfaces *coc3-fpc/pic/port*] hierarchy level, specifying the **coc1** interface type:

```
[edit interfaces coc3-fpc/pic/port]
partition partition-number oc-slice oc-slice-range interface-type coc1;
```

2. If your network equipment uses VT mapping, partition the channelized OC1 interface into T1 interfaces by including the **partition** and **interface-type** statements at the [edit interfaces *coc1-fpc/pic/port:channel*] hierarchy level, specifying the **t1** interface type:

```
[edit interfaces coc1-fpc/pic/port:channel]
partition partition-number interface-type t1;
```

3. If your network equipment uses M13 or C-bit parity, convert the channelized OC1 interface into a channelized T3 interface by including the **no-partition** and **interface-type** statements at the [edit interfaces *coc1-fpc/pic/port:channel*] hierarchy level, specifying the **ct3** interface type:

```
[edit interfaces coc1-fpc/pic/port:channel]
[Unresolved xref] partition-number interface-type ct3;
```



NOTE: Class-of-service (CoS) rules cannot be applied to an individual channel configured on channelized IQ interfaces. You can only apply CoS rules to the aggregate bit streams.

Note that because the **no-partition** statement is included, this configuration does not create another level of channelization, as denoted by the number of colons in the resulting interface.

4. To configure T1 interfaces, partition the channelized T3 interface into T1 interfaces by specifying the **t1** interface type:

```
[edit interfaces ct3-fpc/pic/port:channel]
partition partition-number interface-type t1;
```

5. To configure NxDS0 interfaces, partition the channelized T3 interface into channelized T1 interfaces by specifying the **ct1** interface type:

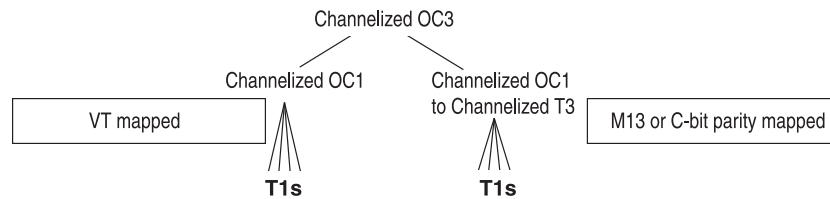
```
[edit interfaces ct3-fpc/pic/port:channel]
partition partition-number interface-type ct1;
```



NOTE: Class-of-service (CoS) rules cannot be applied to an individual channel configured on channelized IQ interfaces. You can only apply CoS rules to the aggregate bit streams.

Figure 1 shows VT-mapped and M13 or C-bit parity-mapped configurations of T1 IQ interfaces.

Figure 1: T1 Interfaces on a Channelized OC3 PIC



Bold entries correspond to actual packet channels.

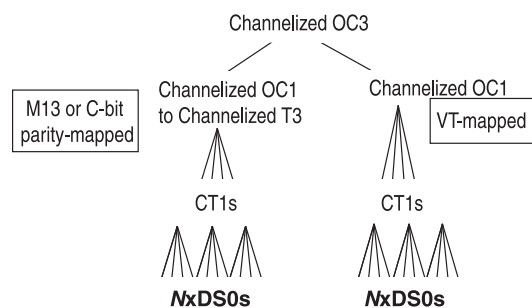
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6. Configure channelized *NxDS0* IQ interfaces on the channelized T1 IQ interface by including the **partition**, **timeslots**, and **interface-type** statements at the **[edit interfaces ct1-fpc/pic/port<:channel>]** hierarchy level, specifying the **ds** interface type:

```
[edit interfaces ct1-fpc/pic/port:channel]
partition partition-number timeslots time-slot-range interface-type ds;
```

Figure 2 shows VT-mapped and M13 or C-bit parity-mapped configurations of *NxDS0* IQ interfaces.

Figure 2: Sample Channelization of OC3 IQ or IQE PIC



Bold entries correspond to actual packet channels.

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Example: Configuring T1 and NxDS0 IQ Interfaces

Configure the following T1 interfaces:

	t1-0/0/0:1:1 t1-0/0/0:1:2 t1-0/0/0:1:3 t1-0/0/0:1:4 t1-0/0/0:1:5
VT-Mapped Configuration	[edit interfaces coc3-0/0/0] partition 1 oc-slice 1 interface-type coc1; [edit interfaces coc1-0/0/0:1] partition 1-5 interface-type t1;
M13 or C-bit Parity-Mapped Configuration	[edit interfaces coc3-0/0/0] partition 1 oc-slice 1 interface-type coc1; [edit interfaces coc1-0/0/0:1] no-partition interface-type ct3; [edit interfaces ct3-0/0/0:1] partition 1-5 interface-type t1;

Configure the following two NxDS0 interfaces with 10 time slots and 4 time slots, respectively:

	ds-0/0/0:1:2:1 ds-0/0/0:1:2:2
VT-Mapped Configuration	[edit interfaces coc3-0/0/0] partition 1 oc-slice 1 interface-type coc1; [edit interfaces coc1-0/0/0:1] partition 2 interface-type ct1; [edit interfaces ct1-0/0/0:1:2] partition 1 timeslots 1-10 interface-type ds; partition 2 timeslots 12-16 interface-type ds;
M13 or C-bit Parity-Mapped Configuration	[edit interfaces coc3-0/0/0] partition 1 oc-slice 1 interface-type coc1; [edit interfaces coc1-0/0/0:1] no-partition interface-type ct3; [edit interfaces ct3-0/0/0:1] partition 2 interface-type ct1; [edit interfaces ct1-0/0/0:1:2] partition 1 timeslots 1-10 interface-type ds; partition 2 timeslots 12-16 interface-type ds;

For a full configuration example, see the *JUNOS Feature Guide*.

Example: Setting Remote Loopback and Running BERT Tests on NxDS0 Interfaces

For Channelized OC3 IQ and IQE PICs, if you need remote loopback on a far-end NxDS0 interface, and you are running a BERT test from the local NxDS0 interface,

you must set remote loopback on the far-end router's associated channelized T1 interface (ct1). To do this, include the `loopback remote` statement at the `[edit interfaces ct1-fpc/picport t1-options]` hierarchy level. For example:

Local router:

```
[edit interfaces]
ct1-0/0/0:2:2 {
  partition 1 timeslots 1-10 interface-type ds;
  ds-0/0/0:2:2:1 {
    ds0-options {
      bert-period 30;
    }
  }
}
```

Remote router:

```
[edit interfaces]
ct1-0/0/0:2:2 {
  partition 1 timeslots 1-10 interface-type ds;
  t1-options {
    loopback remote;
  }
}
```