

## Routing Engine Connectivity in a Routing Matrix with a TX Matrix Plus Router

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The TX Matrix Plus router contains two Connector Interface Panels (CIPs)—one for each Routing Engine—that are referred to as TXP-CIP-0 and TXP-CIP-1. In a routing matrix with a TX Matrix Plus router, all Routing Engines are connected to their respective Control Boards, which in turn are connected to ports on the two CIPs on the TX Matrix Plus router:

- On a TX Matrix Plus router, the Routing Engine (RE-TXP-SFC) and Control Board (TXP-CB) function as a unit, or host subsystem. For each of the two host subsystems in the router, the JUNOS Software automatically creates two internal Ethernet interfaces, `ixgbe0` and `ixgbe1`, for the two 10-Gigabit Ethernet ports on the Routing Engine. The port at `ixgbe0` connects the TX Matrix Plus Routing Engine to the Routing Engines of every T1600 router configured in the routing matrix.
- On a T1600 router configured in a routing matrix, the Routing Engine (RE-TXP-LCC) and Control Board (LCC-CB) function as a unit, or host subsystem. For each of the two host subsystems in the router, the JUNOS Software automatically creates two internal Ethernet interfaces, `bcm0` and `em1`, for the two Gigabit Ethernet ports on the Routing Engine. The port at `bcm0` connects the LCC Routing Engine to the Routing Engines of every other T1600 router configured in the routing matrix.



**NOTE:** The Routing Engines in the TX Matrix Plus router and in the T1600 routers configured in a routing matrix do not support the management Ethernet interface `fxp0` or the internal Ethernet interfaces `fxp1` or `fxp2`.

Configurations and automated scripts that have been developed for standalone T1600 routers (T1600 routers not configured in a routing matrix) might contain references to the `fxp0`, `fxp1`, or `fxp2` interfaces.

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Before reusing the configurations or scripts on T1600 routers in a routing matrix, update the files as appropriate:

- Edit any command lines that reference the T1600 router management Ethernet interface `fxp0` by replacing “`fxp0`” with “`em0`.”
- Ensure that any `show interfaces` commands that are intended to list the T1600 router internal Ethernet interfaces refer to the `bcm0` or `em1` interfaces.

For more detailed information, see the *JUNOS Network Interfaces Configuration Guide* and the *JUNOS Interfaces Command Reference*.

- Related Topics**
- [Routing Matrix with a TX Matrix Plus Router Solutions Page](#)
  - [Overview of a Routing Matrix with a TX Matrix Plus Router](#)
  - [Roadmap for Configuring the Routing Matrix](#)

- Example Configuration for the Routing Matrix
- Upgrading the JUNOS Software on the Routing Matrix

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