

## Configuring T1 BERT Properties

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This section discusses BERT properties for the T1 interface specifically. For general information about the JUNOS implementation of the BERT procedure, see Interface Diagnostics.

You can configure a T1 interface or partitioned CT1 or T1 channel to execute a bit error rate test (BERT) when the interface receives a request to run this test. You specify the duration of the test and the error rate to include in the bit stream by including the `bert-period` and `bert-error-rate` statements at the `[edit interfaces interface-name t1-options]` hierarchy level:

```
[edit interfaces interface-name t1-options]
bert-algorithm algorithm;
bert-error-rate rate;
bert-period seconds;
```

*seconds* is the duration of the BERT procedure. The test can last from 1 through 239 seconds; the default is 10 seconds. Standard CT1, standard T1, T1 IQ, and T1 IQE interfaces, and PICs partitioned to CT1 and T1 channels, support an extended BERT period range, up to 86,400 seconds (24 hours), and have a default BERT period value of 240 seconds.



**NOTE:** When configuring T1 and CT1 interfaces on 10-port Channelized E1/T1 IQE PICs, `bert-period` must be set at the `[edit interface ct1-fpc/pic/port]` hierarchy level.

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*rate* is the bit error rate. This can be an integer from 0 through 7, which corresponds to a bit error rate from  $10^{-0}$  (1 error per bit) to  $10^{-7}$  (1 error per 10 million bits).

*algorithm* is the pattern to send in the bit stream. On T1 interfaces, you can also select the pattern to send in the bit stream by including the `bert-algorithm` statement at the `[edit interfaces interface-name interface-options]` hierarchy level:

```
[edit interfaces interface-name interface-options]
bert-algorithm algorithm;
```

For a list of supported algorithms, enter a ? after the `bert-algorithm` statement; for example:

```
[edit interfaces t1-0/0/0 t1-options]
user@host# set bert-algorithm ?
Possible completions:
pseudo-2e11-o152 Pattern is 2^11 - 1 (per O.152 standard)
pseudo-2e15-o151 Pattern is 2^15 - 1 (per O.152 standard)
pseudo-2e20-o151 Pattern is 2^20 - 1 (per O.151 standard)
pseudo-2e20-o153 Pattern is 2^20 - 1 (per O.153 standard)
```

For specific hierarchy information, see individual interface types. For information about running the BERT procedure, see the *JUNOS System Basics and Services Command Reference*.

