

# Compatible Systems Tech Notes: SMDS Heartbeat

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## Introduction

Watch out for the SMDS Heartbeat or you might lose your link.

## Prerequisites

### Requirements

There are no specific requirements for this document.

## Affected Products

1200i, 1220i, 1250i, 1270i, 2600i, 2200R, 2220R, 2250R, 2270R, 3500R, VSR-2, and VSR-8

## Affected Versions

All versions

## More Information

The Heartbeat or polling of an SMDS link is similar to an echo packet. It checks with the far end of the link to ensure it is still there. If the device receives too many missed replies, the link is considered down and starts to drop packets designated for that interface.

Set the polling frequency to 0 in order to keep the link "always up" and not send any polling packets out.

This output shows how to determine whether you should set your PollingFrequency to 0 or not:

```
SMDSTest>show smds statistics
      Stats                Wan0          Wan1
      in                   51686          0
      out                   34106          0
      heartbeat in          0              0
      heartbeat out        805            0
      discard                255            0
      BA err                  0              0
      HE err                  0              0
      tag err                 0              0
```

```
IN addr err          0          0
Out Lngth err        0          0
Out Addr err         255         0
Out WAN err          0          0
Ctrl/Data err        0          0
RSRV err             0          0
Encap. err           0          0
Unkwn pkt err        0          0
SMDSTest> config smds wan 0
[ SMDS Wan 0 ]# list
[ SMDS Wan 0 ]
PollingFrequency     = 5
IPmulticast          = e186.4403.1273
StationAddress       = c186.4403.2108
```

You can see in this example that the "heartbeat in" is zero. This means that the far end does not send any heartbeat. This example SMDS link has been plagued with intermittent link loss. The culprit is the lack of heartbeat sent from the far end. If you set the PollingFrequency of this router to 0, then it does not care whether the far side sends a heartbeat or not. Be sure that the far side does not depend on your heartbeat because setting it to 0 ceases your sending a heartbeat to the far end.

In this case, you can also check with the far end and have them turn their heartbeat, or polling, on instead of turning this one off.

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## Related Information

- [Technical Support & Documentation – Cisco Systems](#)

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