



Release Notes for Cisco IOS Release 15.5(2)T

The following release notes support Cisco IOS Releases 15.5(2)T and higher releases. These releases support the Cisco 5900 Embedded Services Routers (ESR) platforms. These release notes are updated to describe new features, limitations, troubleshooting, recommended configurations, caveats, and how to obtain support and documentation.

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Image Information and Supported Platforms

**Note**

You must have a Cisco.com account to download the software.

Cisco IOS Release 15.5(2)T includes the following Cisco IOS images:

- c5915-adventerprisek9-mz.SPA
- c5915-entbase-mz.SPA
- c5921i86-universalk9-ms.SPA
- c5930-adventerprisek9-mz.SPA
- c5940-adventerprisek9-mz.SPA

Related Documentation

The following documentation is available:

- Software Configuration Guide for the Cisco 5900 Embedded Services Routers
<http://www.cisco.com/c/en/us/td/docs/solutions/GGSG-Engineering/15-4-3M/config-guide/Configuration-Guide.html>
- Cisco 5921 Embedded Services Router Integration Guide
http://www.cisco.com/c/dam/en/us/td/docs/solutions/GGSG-Engineering/Cisco_5921/Cisco_5921_ESR_Integration.pdf
- IOS Bulletins—You can find bulletins at:
<http://www.cisco.com/c/en/us/products/ios-nx-os-software/ios-software-releases-listing.html>

New Features Supported

DLEP Version 5

The 5900 series Embedded Routers support Dynamic Link Exchange Protocol (DLEP) version5 with Cisco IOS Release 15.5(2)T. Understanding and Configuring DLEP information can be found here:

<http://www.cisco.com/c/en/us/td/docs/solutions/GGSG-Engineering/15-4-3M/config-guide/Configuration-Guide/DLEP.html>

Background information about DLEP can be found here:

http://www.cisco.com/web/strategy/docs/gov/aag_dlep.pdf

End User Interface

The CLI has some differences noted below:

```
[no] ip dlep vtemplate <number> [port <nnnn>] [version <5>] [tcp port <nnnn>]
```

- The default UDP and TCP port would be 55556
- The default value for version is 0 (DLEP1.0)
- TCP port applies only for DLEPv1.5
- Interface can be configured either for DLEPv1.0 or DLEPv1.5

```
[no] ip dlep heartbeat-threshold <n>
```

- This CLI is not applicable for DLEPv1.5
- The heartbeat threshold value for DLEPv1.5 is 2

Commands common to DLEPv1 and DLEPv5:

```
[no] ip dlep neighbor-down-ack-timeout <nnnn>
```

```
[no] ip dlep neighbor-down-threshold <n>
```

```
[no] ip dlep peer-terminate-ack-timeout <nnnn>
```

```
[no] ip dlep peer-terminate-ack-threshold <n>
```

```
show dlep client [interface]
```

```
show dlep neighbor [interface]
```

```
show dlep counters [interface]
```

```
show dlep config [interface]
```

```
clear dlep client [<peer ID>]
```

```
clear dlep neighbor [<session ID>]
```

```
clear dlep counters [<Interface>]
```

Caveats

Caveats describe unexpected behavior in Cisco IOS releases. Caveats listed as open in a prior release are carried forward to the next release as either open or closed (resolved).

Cisco IOS Release 15.5(2)T

There are no caveats specific to the 5900 series for Cisco IOS Release 15.5(2)T:

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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