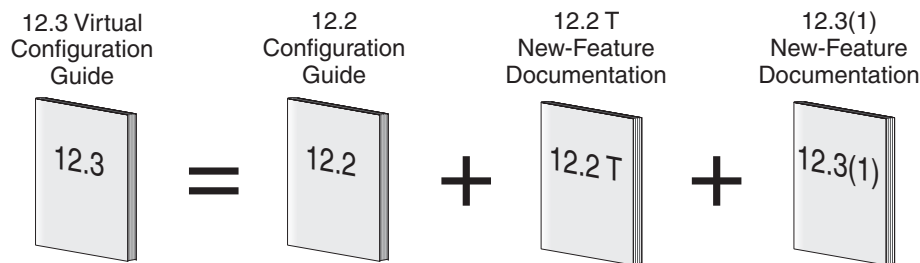


Cisco IOS Dial Technologies Configuration Guide, Release 12.2SB

The *Cisco IOS Dial Technologies Configuration Guide*, Release 12.2SB (known as a “virtual configuration guide”) consists of the Cisco IOS Release 12.2 configuration guide and new-feature documentation for Cisco IOS Releases 12.2 T and 12.3(1).



In some cases, information contained in the new-feature documentation for Cisco IOS Release 12.3(1) and early-deployment Cisco IOS releases numbered 12.2 T augments or supersedes content in the Cisco IOS Release 12.2 configuration guides. New-feature documentation in later 12.2 T releases may replace new-feature documentation in earlier 12.2 T releases.

The following outline includes links to Cisco IOS Release 12.2 chapters and Cisco IOS Release 12.2 T new-feature documentation. Use these documents to configure your Cisco IOS Release 12.3 features.

Overview

- Chapter: [About Cisco IOS Software Documentation for Release 12.3](#) (12.3 document)
- Chapter: [Using Cisco IOS Software for Release 12.3](#) (12.3 document)

Part 1: Dial Interfaces, Controllers, and Lines

- Chapter: [Overview of Dial Interfaces, Controllers, and Lines](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Asynchronous Lines and Interfaces](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Asynchronous Serial Traffic Over UDP](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Asynchronous Line Monitoring](#) (12.2(2)T document)
 - New Feature: [Asynchronous Call Queueing by Role](#) (12.2(15)T document)

Part 2: Modem Configuration and Management

- Chapter: [Overview of Modem Interfaces](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring and Managing Integrated Modems](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [1- and 2-Port V.90 Modem WICs for Cisco 2600 and Cisco 3600 Series Multiservice Platforms](#) (12.2(8)T document)
 - New Feature: [Call Tracker show Commands Extensions](#) (12.2(11)T document)

- New Feature: [MICA and NextPort Modem Tech-Support Command Additions](#) (12.2(11)T document)
- New Feature: [PIAFS Wireless Data Protocol Version 2.1 for Cisco MICA Modems](#) (12.2(11)T document)
- New Feature: [V.92 and V.44 Support for Digital Modems](#) (12.2(15)T document)
- New Feature: [V.92 Modem on Hold for Cisco AS5300 and Cisco AS5800 Universal Access Servers \(For use with Cisco MICA portware\)](#) (12.2(11)T document)
- New Feature: [V.92 Modem on Hold for Cisco AS5350, AS5400, and AS5850 Universal Gateways and Cisco AS5800 Universal Access Servers \(For use with NextPort firmware\)](#) (12.2(11)T document)
- New Feature: [V.92 Quick Connect for Cisco AS5300 and Cisco AS5800 Universal Access Servers \(For use with Cisco MICA portware\)](#) (12.2(11)T document)
- New Feature: [V.92 Quick Connect for Cisco AS5350, AS5400, AS5850 Universal Gateways, and Cisco AS5800 Universal Access Servers \(For use with NextPort firmware\)](#) (12.2(11)T document)
- New Feature: [V.92 Reporting Using RADIUS Attribute v.92-info](#) (12.3(1) document)
- Chapter: [Configuring and Managing Cisco Access Servers and Dial Shelves](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring and Managing External Modems](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Modem Signal and Line States](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Using the Cisco Modem User Interface](#) (12.3 virtual chapter)
 - New Feature: [Cisco Modem User Interface](#) (12.2(4)T document)
- Chapter: [Creating and Using Modem Chat Scripts](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Modem Script and System Script Support in Large-Scale Dial-Out](#) (12.2(2)T document)

Part 3: ISDN Configuration

- Chapter: [Configuring ISDN BRI](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Leased and Switched BRI Interface for ETSI NET3](#) (12.2(4)T document)
 - New Feature: [ISDN BCAC and Round-Robin Channel Selection Enhancements](#) (12.2(4)T document)
- Chapter: [Configuring Virtual Asynchronous Traffic over ISDN](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Modem Use over ISDN BRI](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring X.25 on ISDN](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring X.25 on ISDN Using AO/D](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring ISDN on Cisco 800 Series Routers](#) (12.2 document; also pertains to 12.3*)

Part 4: Signaling Configuration

- Chapter: [Configuring ISDN PRI](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [ISDN PRI-SLT](#) (12.2(15)T document)
- Chapter: [Configuring ISDN Special Signaling](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Network Side ISDN PRI Signaling, Trunking, and Switching](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Dialing Number Enhancement](#) (12.2(11)T document)

Part 5: Dial-on-Demand Routing Configuration

- Chapter: [Preparing to Configure DDR](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Legacy DDR Spokes](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Legacy DDR Hubs](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Peer-to-Peer DDR with Dialer Profiles](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Dialer Map VRF-Aware for an MPLS VPN](#) (12.2(8)T document)
 - New Feature: [Dialer Persistent](#) (12.2(11)T document)
 - New Feature: [Dialer Watch Connect Delay](#) (12.2(8)T document)
 - New Feature: [PPPoE Client DDR Idle-Timer](#) (12.2(13)T document)
 - New Feature: [Redial Enhancements](#) (12.2(4)T document)
 - New Feature: [Rotating Through Dial Strings](#) (12.2(8)T document)
- Chapter: Configuring Dialer CEF (12.3 virtual chapter)
 - New Feature: [Dialer CEF](#) (12.2(4)T document)
- Chapter: [Configuring Snapshot Routing](#) (12.2 document; also pertains to 12.3*)

Part 6: Dial-Backup Configuration

- Chapter: [Configuring Dial Backup for Serial Lines](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Dial Backup with Dialer Profiles](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Dial Backup Using Dialer Watch](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Dialer Watch Connect Delay](#) (12.2(8)T document)

Part 7: Dial-Related Addressing Services

- Chapter: [Configuring Cisco Easy IP](#) (12.2 document; also pertains to 12.3*)

Part 8: Virtual Templates, Profiles, and Networks

- Chapter: [Configuring Virtual Template Interfaces](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Virtual Profiles](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Virtual Private Networks](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Cisco Easy VPN Remote Feature](#) (12.2(13)T document)
 - New Feature: [Default VPDN Group Template](#) (12.2(8)T document)
 - New Feature: [L2TP Dial-Out Load Balancing and Redundancy](#) (12.2(15)T document)
 - New Feature: [L2TP Extended Failover](#) (12.2(13)T document)
 - New Feature: [L2TP Redirect](#) (12.2(13)T document)
 - New Feature: [L2TP Security](#) (12.2(11)T document)
 - New Feature: [RADIUS Attribute 82: Tunnel Assignment ID](#) (12.2(11)T document)

- New Feature: [RADIUS Tunnel Attribute Extensions](#) (12.2(15)T document)
- New Feature: [RADIUS Tunnel Preference for Load Balancing and Fail-Over](#) (12.2(11)T document)
- New Feature: [Shell-Based Authentication of VPDN Users](#) (12.2(2)T document)
- New Feature: [Timer and Retry Enhancements for L2TP and L2F](#) (12.2(11)T document)
- New Feature: [VPDN Group Session Limiting](#) (12.2.(11)T document)
- New Feature: [VPDN Multihop by DNIS](#) (12.2(13)T document)

Part 9: PPP Configuration

- Chapter: [Configuring Asynchronous SLIP and PPP](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Optimized PPP Negotiation](#) (12.2(11)T document)
- Chapter: [Configuring Media-Independent PPP and Multilink PPP](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [Customer Profile Idle Timer Enhancements for Interesting Traffic](#) (12.2(11)T document)
 - New Feature: [Multiclass Multilink PPP](#) (12.2(13)T document)
- Chapter: [Configuring Multichassis Multilink PPP](#) (12.2 document; also pertains to 12.3*)

Part 10: Callback and Bandwidth Allocation Configuration

- Chapter: [Configuring Asynchronous Callback](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring PPP Callback](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring ISDN Caller ID Callback](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring BACP](#) (12.2 document; also pertains to 12.3*)

Part 11: Dial Access Specialized Features

- Chapter: [Configuring Large-Scale Dial-Out](#) (12.2 document; also pertains to 12.3*)
 - New Feature: [L2TP Large-Scale Dial-Out](#) (12.2(11)T document)
 - New Feature: [L2TP Large-Scale Dial-Out per-User Attribute via AAA](#) (12.2(15)T document)
 - New Feature: [Large-Scale Dial-Out \(LSDO\) VRF Aware](#) (12.2(8)T document)
 - New Feature: [Modem Script and System Script Support in Large-Scale Dial-Out](#) (12.2(2)T document)
- Chapter: [Configuring per-User Configuration](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Resource Pool Management](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Configuring Wholesale Dial Performance Optimization](#) (12.2 document; also pertains to 12.3*)

Part 12: Dial Access Scenarios

- Chapter: [Dial Networking Business Applications](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Enterprise Dial Scenarios and Configurations](#) (12.2 document; also pertains to 12.3*)
- Chapter: [Telco and ISP Dial Scenarios and Configurations](#) (12.2 document; also pertains to 12.3*)

Appendix

- Appendix: [Modem Initialization Strings](#) (12.2 document; also pertains to 12.3*)

[New-Feature List and Feature Guide Book-Level PDF for Cisco IOS Dial Technologies, Release 12.3](#)

Click the above link to access an alphabetically ordered new-features list and a feature guide book-level PDF for the Dial technology areas.

[Book Index to the Cisco IOS Dial Technologies Configuration Guide, Release 12.2](#)

Click the above link to display the index of the *Cisco IOS Dial Technologies Configuration Guide*, Release 12.2. This index does not include the new-feature documentation for the releases numbered 12.2 T.

[Book-Level PDF for Cisco IOS Dial Technologies Configuration Guide, Release 12.2](#)

Click the above link to download the book-level PDF of the *Cisco IOS Dial Technologies Configuration Guide*, Release 12.2. This book-level PDF does not include the new-feature documentation for the releases numbered 12.2 T.

*Cisco IOS Release 12.2 documents are still current for Cisco IOS Release 12.3 where not superseded by Cisco IOS Release 12.2 T and 12.3(1) new-feature documentation.