Cisco CISCO1841

Cisco 1841 Integrated Services Router User Manual

Model: CISCO1841

1. INTRODUCTION

The Cisco 1841 Integrated Services Router is engineered for secure, wire-speed delivery of concurrent services for small to medium-sized businesses and enterprise branch offices. This manual provides essential information for the proper setup, operation, and maintenance of your Cisco 1841 router. This product is part of the Amazon Renewed program, ensuring it has been professionally inspected and tested to function like new.

2. PACKAGE CONTENTS

Carefully unpack your Cisco 1841 router and verify that all the following items are present:

- Cisco 1841 Integrated Services Router
- Power Cable
- Console Cable (typically a light blue RJ-45 to DB-9 cable)
- HWIC-1DSU-T1 Interface Card (may be pre-installed or included separately)

Figure 2.1: Cisco 1841 Router with included power and console cables.

3. PHYSICAL OVERVIEW

Familiarize yourself with the various components and ports of the Cisco 1841 router.

3.1 Front Panel

The front panel features LED indicators that provide status information about the router's operation:

- **SYS (System) LED:** Indicates the overall system status.
- **PWR (Power) LED:** Indicates the power status.
- **ACT (Activity) LED:** Indicates activity on specific interfaces or system processes.

Figure 3.1: Front panel of the Cisco 1841 router with system LEDs.

3.2 Rear Panel

The rear panel contains all the primary connectivity ports and interface card slots.

Figure 3.2: Rear panel of the Cisco 1841 router, highlighting Fast Ethernet ports, console port, auxiliary port, WIC slots, and power input.

- **Fast Ethernet Ports:** Used for LAN and potentially WAN connections.
- **Console Port:** RJ-45 port for direct CLI access.
- **Auxiliary Port:** RJ-45 port for modem connection or remote console access.
- **WIC Slots (Slot 1, Slot 2):** Expansion slots for various interface cards, such as the HWIC-1DSU-T1.
- **Power Input:** Connector for the AC power cable.
- **Power Switch:** To turn the router on or off.

4. SETUP AND INSTALLATION

Follow these steps to properly set up your Cisco 1841 router.

1. **Unpacking and Inspection:** Carefully remove all components from the packaging. Inspect the router and accessories for any visible damage.

2. **Installing Interface Cards (if not pre-installed):** If your HWIC-1DSU-T1 card is not pre-installed, ensure the router is powered off. Carefully insert the card into an available WIC slot (e.g., Slot 1 or Slot 2) on the rear panel. Ensure the card is seated firmly and secured with any retaining screws. *Note: Do not install or remove interface cards with power applied to the router.*

3. **Power Connection:** Connect the provided power cable to the router's power input on the rear panel and then to a suitable power outlet.

4. **Initial Console Connection:** For initial configuration, connect the console cable from your computer's serial port (or a USB-to-serial adapter) to the router's console port. Configure your terminal emulation software (e.g., PuTTY, Tera Term) with the following settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.

5. **Network Connections:**
    - Connect your WAN (Wide Area Network) cable to the appropriate interface on the router (e.g., the T1 interface on the HWIC-1DSU-T1 card or one of the Fast Ethernet ports if configured for WAN).
    - Connect your LAN (Local Area Network) devices (e.g., switches, computers) to the Fast Ethernet ports.

5. OPERATING THE ROUTER

Once the router is physically set up, you can power it on and begin configuration.

1. **Powering On:** After all connections are made, press the power switch on the rear panel to the 'On' position.
2. **Observing LED Indicators:** Observe the LED indicators on the front panel. The**PWR** LED should be solid green. The **SYS** LED should eventually turn solid green, indicating normal operation. Blinking**ACT** LEDs or Link/Activity LEDs on ports indicate data transmission.
3. **Accessing Cisco IOS:** Once powered on, you can access the Cisco IOS command-line interface (CLI) via the console connection. After initial network configuration, you can also access the CLI remotely via Telnet or SSH.
4. **Basic Configuration:** The router runs Cisco IOS. Configuration involves using CLI commands for tasks such as IP addressing, routing protocols, interface settings, security, and other network services. Consult official Cisco documentation for detailed IOS configuration guides specific to your network requirements.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your router.

- **Cleaning:** Keep the router free from dust. Use a soft, dry cloth to clean the exterior. Ensure that all ventilation openings are clear and unobstructed to prevent overheating. Do not use liquid cleaners directly on the device.
- **Environmental Conditions:** Operate the router within its specified temperature and humidity ranges. Avoid placing it in direct sunlight, near heat sources, or in areas with excessive moisture.
- **Firmware Updates:** Periodically check the official Cisco support website for available IOS updates. Always follow Cisco's recommended procedures for upgrading the IOS image to ensure system stability, security, and access to new features.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter.

- **No Power:**
    - Verify the power cable is securely connected to both the router and a functional power outlet.
    - Check the power outlet with another device to ensure it is supplying power.
    - Ensure the power switch on the router's rear panel is in the 'On' position.

- **No Network Connectivity:**
    - Check the Link/Activity LEDs on the connected ports. If no link is indicated, verify the network cables and the connected devices (e.g., modem, switch, computer).
    - Confirm IP addressing and routing configurations within Cisco IOS using the CLI.
    - Test connectivity using `ping` or `traceroute` commands from the router's CLI.

- **Console Access Issues:**
    - Verify the console cable connection between your computer and the router.

- Double-check the terminal emulation software settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- Ensure the correct COM port is selected in your terminal software.
- **System LED Status:** If the SYS LED is not solid green after the router has fully booted, consult official Cisco documentation for specific error codes or LED patterns to diagnose the issue.

8. SPECIFICATIONS

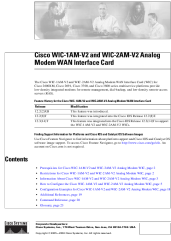Key technical specifications for the Cisco 1841 Integrated Services Router:

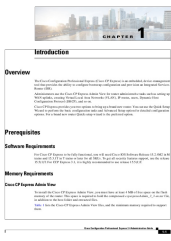| Feature	Specification
Product Dimensions	10.79 x 13.5 x 1.85 inches
Item Weight	9.25 pounds
Brand	Cisco
Model Name	CISCO1841
Operating System	Cisco IOS
Maximum Upstream Data Transfer Rate (T1)	1.544 Megabits Per Second
Date First Available on Amazon Renewed	February 19, 2020

9. WARRANTY AND SUPPORT

This Cisco 1841 router is an Amazon Renewed product. It is backed by the Amazon Renewed Guarantee, which provides for a replacement or refund if you are not satisfied with your purchase. For specific support regarding Cisco IOS configuration, advanced features, or network design, refer to official Cisco documentation and support resources available on the Cisco website.

Related Documents - CISCO1841

Cisco 1800 Series Integrated Services Routers Quick Start Guide
This guide provides essential information for installing, connecting, and initially configuring Cisco 1800 Series Integrated Services Routers. It covers hardware installation, basic setup, and accessing support resources.

Cisco 1800 Series Modular Routers: Hardware Features and Specifications
Detailed overview of Cisco 1800 Series modular routers, including the Cisco 1841 and Cisco 1861 ISR models. Covers hardware features, interfaces, memory, LED indicators, chassis details, and specifications.

[Cisco Router Guide: Integrated Services and Aggregation Routers](#)

This Cisco Router Guide offers a comprehensive overview of Cisco's extensive range of Integrated Services Routers (800, 1800, 2800, 3800 Series) and Services Aggregation Routers (7200, 7300, 7600 Series, Catalyst 6500 Series). It details features, benefits, specifications, and deployment scenarios for teleworkers, small offices, medium-sized businesses, enterprise branches, and service providers. Discover solutions for secure connectivity, high availability, and advanced services.

[Cisco WIC-1AM-V2 and WIC-2AM-V2 Analog Modem WAN Interface Card: Configuration and Features](#)

Comprehensive guide to the Cisco WIC-1AM-V2 and WIC-2AM-V2 Analog Modem WAN Interface Cards, covering installation prerequisites, features, configuration steps for asynchronous interfaces, country codes, lines, firmware upgrades, troubleshooting, and examples for Cisco multiservice platforms.

[Cisco CP Express 3.4 Administration Guide: Overview, Prerequisites, and Supported Hardware](#)

Comprehensive guide to Cisco CP Express 3.4, covering its overview, software and memory requirements, and detailed lists of supported Cisco routers and HWIC cards.

[Cisco 1800 Series Integrated Services Routers Fixed Configuration Models - Product Overview](#)

Comprehensive overview of Cisco 1800 Series Fixed Configuration Integrated Services Routers (ISRs), detailing their features, specifications, network applications, security capabilities, wireless integration, and ordering information for small to medium-sized businesses and enterprise branch offices.