

## Cisco A901-6CZ-FT-A

# Cisco ASR 901 10G Router User Manual

MODEL: A901-6CZ-FT-A

## Introduction

This manual provides essential information for the installation, operation, and maintenance of the Cisco ASR 901 10G Router. The Cisco ASR 901 10G is a rack-mountable router designed for high-performance networking environments, supporting Gigabit Ethernet, TDM, and 10 Gigabit Ethernet connectivity. Please read this manual thoroughly before operating the device to ensure proper functionality and safety.

## Product Overview



The image displays the Cisco ASR 901 10G Router, a compact, rack-mountable network device. It features multiple ports and slots for various connectivity options, designed for robust network infrastructure. The Cisco ASR 901 10G Router is engineered for service providers and enterprises requiring a robust and

scalable solution for their network infrastructure. Its design allows for flexible deployment in various environments, offering high-density Ethernet and TDM interfaces.

## Setup

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1. **Unpacking:** Carefully remove the router from its packaging. Inspect for any visible damage. Retain all packaging materials for future transport or storage.
2. **Rack Mounting:** Securely mount the router in a standard 19-inch equipment rack using the provided mounting kit. Ensure adequate ventilation around the unit.
3. **Power Connection:** Connect the power cable to the router's power input and then to a grounded electrical outlet. Do not power on the device until all other connections are made.
4. **Network Connections:** Connect Ethernet cables to the appropriate Gigabit Ethernet or 10 Gigabit Ethernet ports. For TDM connectivity, use the designated TDM ports.
5. **Console Connection:** For initial configuration, connect a console cable from your management workstation to the router's console port.
6. **Initial Power On:** Once all connections are secure, power on the router. Observe the LED indicators for boot-up status.

## Operating

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The Cisco ASR 901 10G Router operates on Cisco IOS, providing a robust command-line interface (CLI) for configuration and management. After initial setup, access the router via SSH, Telnet, or the console port.

- **Accessing the CLI:** Use a terminal emulator (e.g., PuTTY, Tera Term) to connect to the router's console or management IP address.
- **Basic Commands:** Familiarize yourself with essential Cisco IOS commands for interface configuration, routing protocols, and system monitoring. Refer to Cisco's official documentation for a comprehensive list of commands.
- **LED Indicators:** Monitor the front panel LEDs to understand the operational status of the router, including power, system status, and port activity.

## Maintenance

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Regular maintenance ensures the longevity and optimal performance of your Cisco ASR 901 10G Router.

- **Cleaning:** Periodically clean the router's exterior with a soft, dry cloth. Ensure ventilation openings are free from dust and obstructions. Do not use liquid cleaners.
- **Firmware Updates:** Regularly check the Cisco support website for the latest firmware (Cisco IOS) updates. Applying updates can improve performance, add features, and address security vulnerabilities. Follow Cisco's recommended update procedures.

- **Environmental Monitoring:** Ensure the operating environment maintains recommended temperature and humidity levels to prevent overheating and component degradation.

## 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 the power outlet.
  - Check the power outlet with another device to ensure it is functional.
- **Network Connectivity Issues:**
  - Check physical cable connections to ensure they are seated properly.
  - Verify port status LEDs. A solid green typically indicates a good link.
  - Confirm interface configurations (IP addresses, subnet masks, VLANs) are correct via the CLI.
- **System Unresponsive:**
  - Attempt to access the router via the console port.
  - If unresponsive, perform a graceful shutdown if possible, or power cycle the device as a last resort.

For more complex issues, consult the Cisco support documentation or contact technical support.

## Specifications

Feature	Detail
Brand	Cisco
Model Name	A901-6CZ-FT-A
Series	A901-6CZ-FT-A
Operating System	Cisco IOS
RAM	1 TB
Item Weight	8.16 pounds (3700 Grams)
Product Dimensions (LxWxH)	17.5 x 9.09 x 1.7 inches
Connectivity Technology	Ethernet
Compatible Devices	Personal Computer
Date First Available	July 2, 2013

## Warranty Information

This Cisco product is covered by a standard limited hardware warranty. Specific terms and conditions, including warranty period and coverage details, are available on the official Cisco website or through your authorized reseller. Please retain your proof of purchase for warranty claims.

## Support Information

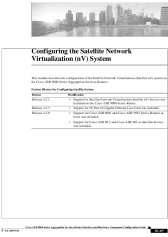

For technical assistance, product documentation, software downloads, and community forums, please visit the official Cisco Support website. You can also contact Cisco Technical Assistance Center (TAC) for direct support.





- **Cisco Support Website:** [www.cisco.com/go/support](http://www.cisco.com/go/support)
- **Contact TAC:** Refer to the Cisco website for regional contact numbers and support options.

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### Related Documents - A901-6CZ-FT-A

	<p><a href="#">Configuring the Satellite Network Virtualization (nV) System</a></p> <p>This guide provides comprehensive instructions for configuring the Satellite Network Virtualization (Satellite nV) system on Cisco ASR 9000 Series Aggregation Services Routers, detailing network topologies, features, and implementation for advanced Cisco networking infrastructures.</p>
	<p><a href="#">Cisco ASR 9000 Series Fixed-Port Routers Hardware Installation Guide</a></p> <p>Official hardware installation guide for Cisco ASR 9000 Series Fixed-Port Routers, covering preparation, unpacking, installation, and troubleshooting for models like ASR 9902, 9903, 9901, and 9001. Essential for network engineers and technicians.</p>

 <p><b>Configuring NAT for IP Address Conservation</b></p> <p>Document ID: 911877 Version: 1.0 Published: 2017-03-01 Cisco Confidential</p> <p><b>Table of Contents</b></p> <ul style="list-style-type: none"><li>Chapter 1: Introduction</li><li>Chapter 2: Prerequisites</li><li>Chapter 3: Configuration</li><li>Chapter 4: Verification</li><li>Chapter 5: Troubleshooting</li></ul> <p><b>Finding Feature Information</b></p> <p>Use the following table to learn about the new features in this document.</p> <table><thead><tr><th>Feature</th><th>Page</th></tr></thead><tbody><tr><td>Configuring NAT for IP Address Conservation</td><td>1</td></tr></tbody></table>	Feature	Page	Configuring NAT for IP Address Conservation	1	<p><a href="#">Configuring NAT for IP Address Conservation on Cisco ASR 901 Routers</a></p> <p>A comprehensive guide on configuring Network Address Translation (NAT) for IP address conservation on Cisco ASR 901 Series Routers, covering static, dynamic, and PAT configurations, along with prerequisites, restrictions, and verification steps.</p>
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 <p><b>Cisco ASR 9000 Series Ethernet Services Router Ethernet Line Card Installation Guide</b></p> <p>Document ID: 911877 Version: 1.0 Published: 2017-03-01 Cisco Confidential</p> <p><b>Table of Contents</b></p> <ul style="list-style-type: none"><li>Chapter 1: Introduction</li><li>Chapter 2: Prerequisites</li><li>Chapter 3: Configuration</li><li>Chapter 4: Verification</li><li>Chapter 5: Troubleshooting</li></ul> <p><b>Finding Feature Information</b></p> <p>Use the following table to learn about the new features in this document.</p> <table><thead><tr><th>Feature</th><th>Page</th></tr></thead><tbody><tr><td>Cisco ASR 9000 Series Ethernet Services Router Ethernet Line Card Installation Guide</td><td>1</td></tr></tbody></table>	Feature	Page	Cisco ASR 9000 Series Ethernet Services Router Ethernet Line Card Installation Guide	1	<p><a href="#">Cisco ASR 9000 Series Ethernet Line Card Installation Guide</a></p> <p>Comprehensive guide for installing and removing Cisco ASR 9000 Series Ethernet line cards and transceiver modules, covering safety, compatibility, and troubleshooting.</p>
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 <p><b>Cisco ASR 9000 Series Routers: System Setup and Software Installation Guide (IOS XR 6.6.x)</b></p> <p>Document ID: 911877 Version: 1.0 Published: 2017-03-01 Cisco Confidential</p> <p><b>Table of Contents</b></p> <ul style="list-style-type: none"><li>Chapter 1: Introduction</li><li>Chapter 2: Prerequisites</li><li>Chapter 3: Configuration</li><li>Chapter 4: Verification</li><li>Chapter 5: Troubleshooting</li></ul> <p><b>Finding Feature Information</b></p> <p>Use the following table to learn about the new features in this document.</p> <table><thead><tr><th>Feature</th><th>Page</th></tr></thead><tbody><tr><td>Cisco ASR 9000 Series Routers: System Setup and Software Installation Guide (IOS XR 6.6.x)</td><td>1</td></tr></tbody></table>	Feature	Page	Cisco ASR 9000 Series Routers: System Setup and Software Installation Guide (IOS XR 6.6.x)	1	<p><a href="#">Cisco ASR 9000 Series Routers: System Setup and Software Installation Guide (IOS XR 6.6.x)</a></p> <p>A comprehensive guide for setting up and installing Cisco ASR 9000 Series Routers with IOS XR Release 6.6.x. It details system features, initial router bring-up, preliminary checks, user management, software upgrades, and customization using Golden ISO images.</p>
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