



Call Admission Control Based on CPU Utilization

Feature History

Release	Modification
12.1(5)XM	This feature was introduced on the Cisco AS5300, Cisco AS5400 and Cisco AS5800.
12.2(2)XA	Commands in this document that have been replaced by new commands continue to perform their normal function but are no longer documented. Support for these commands will cease in a future release.

This feature module describes the Call Admission Control Based on CPU Utilization feature and provides an overview including the benefits, the prerequisites, the supported platforms, the configuration tasks, and a command reference of new and changed commands.

This document includes the following sections:

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Feature Overview

The Call Admission Control Based on CPU Utilization feature permits the Cisco AS5300 and AS5800 access servers to deny incoming calls exceeding a preconfigured threshold, permitting the selection of a system CPU load level value. This feature helps ensure the quality of service of existing calls and reliability of system processes by preventing system overload caused by excessive incoming calls. The feature rejects new digital calls (PRI, CAS, and ISDN), with minor disruption to system users.

Benefits

The Call Denial feature allows the Cisco AS5300 and AS5800 access servers to keep CPU for performing other tasks such as SNMP in addition to helping to ensure reliability of existing PRI, CAS, and ISDN digital calls.

Restrictions

Maximum call capacity of the supported Cisco universal access servers may be reduced by use of this feature.

Related Documents

- *Voice over IP for the Cisco AS5300*
- *Cisco AS5400 Universal Gateway Software Configuration Guide*
- *Voice Over IP for the Cisco AS5800*

Supported Platforms

- Cisco AS5300 universal access server
- Cisco AS5400 universal gateway
- Cisco AS5800 universal access server

Supported Standards, MIBs, and RFCs

Standards

None.

MIBs

To obtain lists of MIBs supported by platform and Cisco IOS release and to download MIB modules, go to the Cisco MIB web site on Cisco Connection Online (CCO) at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

RFCs

None.

Prerequisites

- Minimal product configuration of the Cisco AS5300 or Cisco AS5800
- Cisco IOS Release 12.1(5) XM or higher image is required

Configuration Tasks

See the following section for configuration task for the Call Admission Control Based on CPU Utilization feature.

- Configuring Call Denial(Required)

Configuring the Call Denial Feature

To configure call denial, perform the following steps.

:

	Command	Purpose
Step 1	Router # configure terminal	Enters global configuration mode.
Step 2	Router(config) # call-denial <i>CPU load threshold</i>	Enters the Call Denial feature and sets a threshold at which denial of new calls occurs. This CPU load threshold can be set anywhere from 20 to 85%.
Step 3	Router # exit	Exits configuration mode.

Verifying the Call Denial Feature

To verify the successful configuration of the Call Denial feature, enter the **show proc c** command. In the following example, the CPU threshold is set at 70% for the activation of Call Denial.

```
Router(config)# call-denial 70
Router (config)# exit
Router# show running-config
!
!
!
resource-pool disable
!
modem-pool Default
  pool-range 1/2/0-1/2/143
!
clock timezone CST -6
clock summer-time CST recurring
calltracker enable

call-denial 70
```

Configuration Example

In the following example, the CPU threshold is set at 70% for the activation of Call Denial.

```
Router(config)# call-denial 70
Router (config)# exit
Router# show running-config
!
!
!
resource-pool disable
!
modem-pool Default
  pool-range 1/2/0-1/2/143
!
clock timezone CST -6
clock summer-time CST recurring
calltracker enable

call-denial 70
```

Command Reference

This section documents new or modified commands. All other commands used with this feature are documented in the Cisco IOS Release 12.2 command reference publications.

- **call-denial**

call-denial

To set the threshold CPU load level at which incoming calls are denied, use the **call-denial EXEC** command. To disable the Call Admission Control Based on CPU Utilization feature, use the **no** form of this command.

call-denial threshold

no call-denial

Syntax Description	threshold	The CPU load percentage threshold at which denial of new calls is activated. Range is 20 to 85%.
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Defaults	No default behavior or values.
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Command Modes	EXEC
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Command History	Release	Modification
	12.1(5)XM	
12.2(2)XA		The call-denial command is replaced by the call threshold global command. See the call threshold global command for more information.

Examples In the following example, the CPU threshold is set at 70% for the activation of call denial.

```
Router# show call call-denial
Call-denial details :
  Call-denial is configured to 70% CPU usage
  ISDN (and Digital) Call Denial is NOT in progress
  CAS Call Denial is NOT in progress

# of times ISDN call denial kicked in = 2
# of times CAS call denial kicked in = 0
```

Glossary

CAS—channel-associated signaling

CPU—central processing unit

ISDN—Integrated Services Digital Network

PRI—Primary Rate Interface

