

Cisco ATA 186 Fails to Place a Call in a Gatekeeper Based Network

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Introduction

Prerequisites

Requirements

Components Used

Conventions

Problem

Solution

Related Information

Introduction

This document describes a problem that often happens in gatekeeper-based networks where the Cisco Analog Telephone Adapter (ATA) 186 is used as an H.323 terminal. The document includes some background technical information to describe the problem, solution, and some basic verification and troubleshooting strategies. It is important to note that in the configuration here, the router and Cisco ATA 186 are located on the same LAN. However, in a real implementation, all devices can be in different parts of your network.

Prerequisites

Requirements

Readers of this document should have knowledge of these topics:

- Cisco ATA 186 Basic Configuration
- Configuring Basic Gatekeeper Call Admission Control

Components Used

This document is not restricted to specific software and hardware versions.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Problem

The problem can often occur on gatekeeper networks that successfully run with gateways. The administrator tries to add the Cisco ATA 186 as a new device. However, calls from the ATA 186 are rejected by the gatekeeper.

- This problem can occur with any Cisco IOS® based gatekeeper and Cisco ATA 186.
- All Cisco IOS Software releases behave the same way.

To verify if you have this problem, check for these conditions:

1. Cisco ATA 186 needs to be registered to the gatekeeper. To check this, use the **show gatekeeper endpoints** command.
2. The gatekeeper needs to reject the incoming call from Cisco ATA 186. To check this, use the **debug ras** and **debug h225 asn1** commands on the gatekeeper.

Solution

A default configuration for local zone does not allow the H.323 terminals to put calls through directly to the destination. All terminals need to place calls through an H.323 proxy. As the Cisco ATA 186 is a terminal, it does not place a call to the default gatekeeper configuration. To change the default behavior of gatekeeper to terminals, alter the configuration with the help of these commands:

```
no use-proxy gk-zone1.test.com default inbound-to terminal
no use-proxy gk-zone1.test.com default outbound-from terminal
```

For a description of the **use-proxy** command, refer to Cisco IOS Voice, Video, and Fax Commands: Si Through Z.

Default Gatekeeper ECV-2600-15 – Configuration For Work With Gateways

```
!
hostname ECV-2610-15
!
interface Ethernet0/0
 ip address 10.52.218.47 255.255.255.0
!
gatekeeper
 zone local gk-zone1.test.com test.com
10.52.218.47

!--- This command defines the local zone. The
!--- GK name and zone name have the same meaning.

zone remote gk-zone2.test.com test.com 10.52.218.46 1719

!--- This command defines the name of the remote GK (zone).

 zone prefix gk-zone2.test.com 16..

!--- This command explicitly defines the number length
!--- with the number of dots.

 zone prefix gk-zone1.test.com 17.. gw-priority 10 gw_1

!--- This command explicitly defines which GW handles
!--- calls for 17.. numbers.
!--- This is done for the local zones only.

gw-type-prefix 1#* default-technology

!--- This command defines the default technology prefix
!--- that is necessary for routing decisions.

no shutdown

!--- This command turns the service up.

!
end
```

Gatekeeper ECV-2600-15 – Configuration For Work With Gateways and H323 Terminals Without Proxy

```

!
hostname ECV-2610-15
!
interface Ethernet0/0
 ip address 10.52.218.47 255.255.255.0
!
gatekeeper
 zone local gk-zone1.test.com test.com 10.52.218.47
 zone remote gk-zone2.test.com test.com 10.52.218.46 1719
 zone prefix gk-zone2.test.com 16..
 zone prefix gk-zone1.test.com 17.. gw-priority 10 gw_1
 gw-type-prefix 1#* default-technology
 no use-proxy gk-zone1.test.com default inbound-to terminal
 no use-proxy gk-zone1.test.com default outbound-from terminal

!--- These two commands define the default terminal's behavior
!--- in the zone.

 no shutdown
!
end

```

This output shows the zone status before and after adding changes to the configuration.

```

ECV-2610-15#show gatekeeper zone status

!--- The first step is to check the zone status.

                                GATEKEEPER ZONES
                                =====
GK name      Domain Name    RAS Address      PORT  FLAGS
-----
gk-zone1.test.com  test.com      10.52.218.47    1719  LS
BANDWIDTH INFORMATION (kbps) :
  Maximum total bandwidth : unlimited
  Current total bandwidth : 0
  Maximum interzone bandwidth : unlimited
  Current interzone bandwidth : 0
  Maximum session bandwidth : unlimited
SUBNET ATTRIBUTES :
  All Other Subnets : (Enabled)
PROXY USAGE CONFIGURATION :
  Inbound Calls from all other zones :

!--- As the output here shows, terminals work only
!--- through proxy by default.

  to terminals in local zone gk-zone1.test.com :
  use proxy
  to gateways in local zone gk-zone1.test.com :
  do not use proxy
  to MCUs in local zone gk-zone1.test.com :
  do not use proxy
Outbound Calls to all other zones :
  from terminals in local zone gk-zone1.test.com :
  use proxy
  from gateways in local zone gk-zone1.test.com :
  do not use proxy
  from MCUs in local zone gk-zone1.test.com :
  do not use proxy

```

```

ECV-2610-15#configure terminal

!--- The second step is to change the configuration.
!--- Enter configuration commands, one per line. End with
!--- CNTL/Z.

ECV-2610-15(config)#gatekeeper
ECV-2610-15(config-gk)#no use-proxy ?
    WORD Local gatekeeper name this proxy usage applies to

ECV-2610-15(config-gk)#no use-proxy gk-zone1.test.com ?
    default Proxy usage definition applies to connections
              made to or from all other remote zones
    remote-zone Proxy usage definition applies to connections
                 made to or from the specified remote-zone

ECV-2610-15(config-gk)#no use-proxy gk-zone1.test.com
default ?
    inbound-to For all incoming calls
    outbound-from For all outgoing calls

ECV-2610-15(config-gk)#no use-proxy gk-zone1.test.com default
inbound-to ?
    gateway For all incoming calls to gateway(s)
    mcu For all incoming calls to H.323 MCU device(s)
    terminal For all incoming calls to H.323 terminal(s)

ECV-2610-15(config-gk)#y gk-zone1.test.com default inbound-to
terminal ?
    <cr>

ECV-2610-15(config-gk)#no use-proxy gk-zone1.test.com default
out terminal
ECV-2610-15(config-gk)^Z
ECV-2610-15#
*Mar 3 10:30:21.522: %SYS-5-CONFIG_I: Configured from console
by console

ECV-2610-15#
ECV-2610-15#show running-config | begin gatekeeper

!--- Checkup of the new gatekeeper configuration.

gatekeeper
zone local gk-zone1.test.com test.com 0.52.218.47
zone remote gk-zone2.test.com test.com 10.52.218.46 1719
zone prefix gk-zone2.test.com 16..
zone prefix gk-zone1.test.com 17.. gw-priority 10 gw_1
gw-type-prefix 1#* default-technology
no use-proxy gk-zone1.test.com default inbound-to terminal
no use-proxy gk-zone1.test.com default outbound-from terminal
no shutdown
!

ECV-2610-15#show gatekeeper zone status

!-- The third step is to check the zone status again.

                                GATEKEEPER ZONES
                                =====
GK name      Domain Name  RAS Address  PORT  FLAGS
-----
gk-zone1.tes test.com    10.52.218.47 1719  LS
BANDWIDTH INFORMATION (kbps) :
```

```
Maximum total bandwidth : unlimited
Current total bandwidth : 0
Maximum interzone bandwidth : 0
Current interzone bandwidth : unlimited
Maximum session bandwidth : unlimited
SUBNET ATTRIBUTES :
All Other Subnets : (Enabled)
PROXY USAGE CONFIGURATION :
Inbound Calls from all other zones :

!--- As the output here shows, now terminals can work without
!--- proxy.

to terminals in local zone gk-zone1.test.com : do not
use proxy
to gateways in local zone gk-zone1.test.com : do not
use proxy
to MCUs in local zone gk-zone1.test.com : do not use
proxy
Outbound Calls to all other zones :
from terminals in local zone gk-zone1.test.com : do
not use proxy
from gateways in local zone gk-zone1.test.com : do not
use proxy
from MCUs in local zone gk-zone1.test.com : do not use
proxy
```

Related Information

- [Cisco ATA 186 Basic Configuration](#)
- [Configuring the Cisco ATA for H.323](#)
- [Cisco High-Performance Gatekeeper](#)
- [Configuring H.323 Gateways](#)
- [Configuring H.323 Gatekeepers and Proxies](#)
- [Configuring H.323 Support for Virtual Interfaces](#)
- [Voice Technology Support](#)
- [Voice and Unified Communications Product Support](#)
- [Recommended Reading: Troubleshooting Cisco IP Telephony](#)
- [Technical Support – Cisco Systems](#)

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