



## **Genesys Voice Platform 7.6**

# Troubleshooting Guide

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## Preface

Welcome to the *Genesys Voice Platform 7.6 Troubleshooting Guide*. This guide provides trap and troubleshooting information for the Genesys Voice Platform. This document is valid only for the 7.6 release(s) of this product.

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Note: For versions of this document created for other releases of this product, please visit the Genesys Technical Support website, or request the Documentation Library DVD, which you can order by e-mail from Genesys Order Management at [orderman@genesyslab.com](mailto:orderman@genesyslab.com).

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This preface provides an overview of this document, identifies the primary audience, introduces document conventions, and lists related reference information:

- [Intended Audience, page 9](#)
- [Chapter Summaries, page 10](#)
- [Document Conventions, page 10](#)
- [Related Resources, page 12](#)
- [Making Comments on This Document, page 14](#)
- [Document Change History, page 14](#)

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## Intended Audience

This document, primarily intended for system administrators, technical support, partners, and customers who are deploying and troubleshooting small, medium, or large single-tenant GVP environments. This document assumes that you have moderate experience with GVP by either having attended a Genesys University course (GVP Installation or GVP Troubleshooting) or that you have worked with Genesys Professional Services on the GVP system.

This document also assumes that you have a basic understanding of:

- Computer-telephony integration (CTI) concepts, processes, terminology, and applications.
- Network design and operation.
- Your own network configurations.

- GVP basic operations.
- SNMP traps.

You should also be familiar with Genesys Framework architecture and functions.

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## Chapter Summaries

In addition to this opening chapter, this guide contains these chapters and appendix:

- Chapter 1, “Troubleshooting Methodology,” on [page 15](#), describes ways to troubleshoot issues that you may encounter with your GVP solution.
- Chapter 2, “Items to Check First,” on [page 19](#), describes the first steps to take when troubleshooting GVP issues.
- Chapter 3, “Troubleshooting Call Failures,” on [page 23](#), describes customer-reported errors.
- Chapter 4, “Troubleshooting and Maintenance,” on [page 27](#), describes how to troubleshoot nontrapped errors.
- Chapter 5, “SNMP Traps,” on [page 35](#), describes how to monitor Simple Network Management Protocol (SNMP) traps. It also describes the MIB Management Information Base (MIB) files created by SNMP traps.
- Chapter 6, “Trap Descriptions,” on [page 39](#), documents the traps that may occur during GVP operation.
- Appendix A, “Troubleshooting Tools,” on [page 85](#), describes some third-party tools that may be useful in assisting you with troubleshooting GVP issues.
- Appendix B, “Trap Filtering,” on [page 89](#), describes how to configure trap filtering.
- Appendix C, “Trap Object IDs,” on [page 93](#), lists traps and their associated OIDs (object IDs).

---

## Document Conventions

This document uses certain stylistic and typographical conventions—introduced here—that serve as shorthands for particular kinds of information.

### Document Version Number

A version number appears at the bottom of the inside front cover of this document. Version numbers change as new information is added to this document. Here is a sample version number:

72fr\_ref\_09-2005\_v7.2.000.00

You will need this number when you are talking with Genesys Technical Support about this product.

## Type Styles

### Italic

In this document, italic is used for emphasis, for documents' titles, for definitions of (or first references to) unfamiliar terms, and for mathematical variables.

- Examples:**
- Please consult the *Genesys Migration Guide* for more information.
  - *A customary and usual practice* is one that is widely accepted and used within a particular industry or profession.
  - Do *not* use this value for this option.
  - The formula,  $x + 1 = 7$  where  $x$  stands for . . .

### Monospace Font

A monospace font, which looks like teletype or typewriter text, is used for all programming identifiers and GUI elements.

This convention includes the *names* of directories, files, folders, configuration objects, paths, scripts, dialog boxes, options, fields, text and list boxes, operational modes, all buttons (including radio buttons), check boxes, commands, tabs, CTI events, and error messages; the values of options; logical arguments and command syntax; and code samples.

- Examples:**
- Select the Show variables on screen check box.
  - Click the Summation button.
  - In the Properties dialog box, enter the value for the host server in your environment.
  - In the Operand text box, enter your formula.
  - Click OK to exit the Properties dialog box.
  - The following table presents the complete set of error messages T-Server® distributes in EventError events.
  - If you select true for the inbound-bsns-calls option, all established inbound calls on a local agent are considered business calls.

Monospace is also used for any text that users must manually enter during a configuration or installation procedure, or on a command line:

- Example:**
- Enter exit on the command line.

## Screen Captures Used in This Document

Screen captures from the product GUI (graphical user interface), as used in this document, may sometimes contain a minor spelling, capitalization, or grammatical error. The text accompanying and explaining the screen captures corrects such errors *except* when such a correction would prevent you from installing, configuring, or successfully using the product. For example, if the name of an option contains a usage error, the name would be presented exactly as it appears in the product GUI; the error would not be corrected in any accompanying text.

## Square Brackets

Square brackets indicate that a particular parameter or value is optional within a logical argument, a command, or some programming syntax. That is, the parameter's or value's presence is not required to resolve the argument, command, or block of code. The user decides whether to include this optional information. Here is a sample:

```
smcp_server -host [/flags]
```

## Angle Brackets

Angle brackets indicate a placeholder for a value that the user must specify. This might be a DN or port number specific to your enterprise. Here is a sample:

```
smcp_server -host <confighost>
```

---

## Related Resources

Consult these additional resources as necessary:

- *Genesys Voice Platform 7.6 Deployment Guide*, which provides detailed installation and configuration instructions for GVP and associated third-party software.
- *Genesys Voice Platform 7.6 Reference Manual*, which provides instructions for the administration, provisioning, and configuring of GVP and its components.
- *Genesys Voice Platform 7.6 VoiceXML 2.1 Reference Manual*, which provides information on developing VoiceXML 2.1 applications on GVP. It presents VoiceXML 2.1 concepts and provides examples that focus on the GVP implementation of Voice Extensible Markup Language (VoiceXML).

- *Voice Extensible Markup Language (VoiceXML) Version 2.1, W3C Candidate Recommendation 13 June 2005*. The World Wide Web Consortium (W3C) publishes a technical report as a *Candidate Recommendation* to indicate that the document is believed to be stable, and to encourage its implementation by the developer community.
- *Genesys Voice Platform 7.6 Studio Deployment Guide*, which provides installation instructions for Genesys Studio.
- *Genesys Studio Help*, which provides online information about Genesys Studio, a GUI for the development of applications based on the Voice Extensible Markup Language (VoiceXML).
- *Genesys Voice Platform 7.6 Voice Application Reporter Deployment and Reference Manual*, which provides installation instructions for the Voice Application Reporter. It also describes its interface and how to use it.
- *Genesys Voice Platform 7.6 Voice Application Reporter SDK Developer's Guide*, which provides examples on how to develop VoiceXML applications that interface with the Voice Application Reporter (VAR) database and generate application reports.
- *Genesys 7.6 Proactive Contact Solution Guide*, which consolidates information about the Genesys Proactive Contact solution. The Genesys Proactive Contact solution integrates Outbound Contact with GVP, and provides the ability to proactively initiate and handle outbound campaign calls using GVP.
- *Genesys Technical Support Troubleshooting Guide*, which includes information about the GVP log files.
- *Genesys Technical Publications Glossary*, which ships on the Genesys Documentation Library DVD and which provides a comprehensive list of the Genesys and CTI terminology and acronyms used in this document.
- *Genesys Migration Guide*, also on the Genesys Documentation Library DVD, which provides a documented migration strategy from Genesys product releases 5.1 and later to all Genesys 7.x releases. Contact Genesys Technical Support for additional information.
- The Release Notes and Product Advisories for this product, which are available on the Genesys Technical Support website at <http://genesyslab.com/support>.

Information about supported hardware and third-party software is available on the Genesys Technical Support website in the following documents:

- [Genesys Supported Operating Environment Reference Manual](#)
- [Genesys Supported Media Interfaces Reference Manual](#)
- [Genesys Hardware Sizing Guide](#)

Genesys product documentation is available on the:

- Genesys Technical Support website at <http://genesyslab.com/support>.
- Genesys Documentation Library DVD, which you can order by e-mail from Genesys Order Management at [orderman@genesyslab.com](mailto:orderman@genesyslab.com).

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You can comment on what you regard as specific errors or omissions, and on the accuracy, organization, subject matter, or completeness of this document. Please limit your comments to the information in this document only and to the way in which the information is presented. Speak to Genesys Technical Support if you have suggestions about the product itself.

When you send us comments, you grant Genesys a nonexclusive right to use or distribute your comments in any way it believes appropriate, without incurring any obligation to you.

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## Document Change History

This section lists topics that are new or that have changed significantly since the first release of this document.

### Release 7.6.4

- [Chapter 6, Trap Descriptions](#):
  - A new trap description has been added, see “cnTelephonyError” on [page 47](#).
- [Appendix C, Trap Object IDs](#):
  - The table in section, “popctrl .1.3.6.1.4.1.3814.2” on [page 94](#), has been updated with an additional trap OID.



## Chapter

# 1

## Troubleshooting Methodology

When troubleshooting an issue with your Genesys Voice Platform (GVP) solution, it is important to take a methodical approach in order to quickly identify and resolve the cause of the issue. Drawing conclusions too quickly and making undocumented changes to the system(s) can result in making the issue worse.

This chapter outlines a brief methodology that you can follow in order to troubleshoot issues that you might encounter with your GVP solution. This chapter contains the following sections:

- [Describe the Problem, page 15](#)
- [Gather Relevant Information, page 16](#)
- [Create an Action Plan, page 16](#)
- [Verify the Resolution, page 17](#)

---

## Describe the Problem

The first and most important step in troubleshooting any issue is to clearly define the problem. Your problem description should be as detailed as possible and include the following information:

1. A clear indication of the symptom that you are experiencing.
2. How you were alerted to the issue. For example, did you receive an alarm from the system? Did a caller identify the issue(s)?
3. When did the symptom first start to occur?
4. How often does the symptom occur? For example, does it occur on every call or intermittently?

5. Can the symptom be isolated to a particular site, system, voice application, and so on?
6. Possible causes of the symptom.

---

## Gather Relevant Information

Once you have a clear description of the issue, you can start to gather relevant information that can be used to isolate and identify the cause of the issue. This might include the following information:

1. Recent changes that might have been made to the system or environment. This can include OS updates or patches, system or network configuration changes, or voice application changes.
2. More detailed description of the symptom. If callers are experiencing the symptom, can more specific information be gathered? For example, a caller might report that their call was dropped. In this case, it would be useful to know which voice application they were calling, where in the voice application they were dropped, and where they were calling from.
3. Steps to reproduce the issue. If the symptom is reproducible, what are the detailed steps you can follow to make it occur?
4. If a symptom can be isolated to a particular site, system, or voice application, you should review the particulars of that site, system, or voice application and compare them to that of ones that are not experiencing the issue.
5. Various log files may need to be captured for later analysis.

---

## Create an Action Plan

You can now create an action plan to further isolate the issue based on the information that you have gathered.

Document the steps that you are going to follow, and then check them off as you complete them.

Keep a record of any changes that you make to the system as you go, as well as any observations you make. It is very difficult to remember what you did after the fact and this information might be critical in preventing future issues.

Implement any changes one at a time, because you may not know which change corrected the issue if more than one change is implemented at a time.



---

## Verify the Resolution

Once you have taken measures to correct the problem, you must properly test the system to ensure that the symptoms are no longer occurring.

Document what you expect to happen and then compare that to your written observations with the system during your tests.

If the symptoms continue to occur, restart this process from the initial problem description. Describe what is occurring now as it may not be the same as the initial problem, especially if you have made changes.





## Chapter

# 2

## Items to Check First

This chapter discusses some basic first steps in troubleshooting a Genesys Voice Platform (GVP) problem. Many of the steps in this chapter require familiarity with the GVP Element Management System (EMS) GUI.

---

Note: For more information about using the EMS GUI, refer to the *Genesys Voice Platform 7.6 Reference Manual*.

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This chapter contains the following sections:

- [Telephony—TDM, page 19](#)
- [Telephony—VoIP, page 20](#)
- [Data Network, page 20](#)
- [GVP, page 21](#)
- [Web Application Server and Applications, page 21](#)

---

## Telephony—TDM

This section provides basic first steps for troubleshooting a telephony TDM issue.

1. Check the back of the Dialogic board for any red or yellow LED lights. This might point to a Dialogic/Trunk issue.
2. Use the EMS GUI on the Voice Communication Server (VCS). Browse to `http://<VCS Server Host>:9810`.
  - a. Check the Board Status for any alarms. In the left pane, browse to `VCS > Popgateway > Board Status`. Note any Alarms or Errors that might be displayed.

---

Note: The D-Channel status always shows an error unless using ISDN.

---

- b.** Check the Port Status. Browse to VCS > Popgateway > Port Status. Check for Out-of-Service ports.
  - c.** Check the Call Volume. Browse to VCS > Popgateway > Call Volume. Check the Answered and Rejected Calls counter for any abnormalities.

---

## Telephony—VoIP

This section provides basic first steps for troubleshooting a telephony VoIP issue.

- 1.** Use the EMS GUI on the IP Communication Server (IPCS). Browse to `http://<IPCS Server Host>:9810`.
  - a.** Check the Call Status Summary. On the left pane, browse to IPCS. Note the active, answered, and rejected calls.
- 2.** Use the EMS GUI on the IP Call Manager (IPCM). Browse to `http://<IPCM Server Host>:9810`.
  - b.** Use the Resource Manager Summary to check for active IPCSs and Media Gateways.
  - c.** Use the SIP/H323 Session Manager Summary to check for active sessions and to view call statistics that might point to a problem.

---

## Data Network

This section provides basic first steps for troubleshooting a data network issue.

- 1.** Check whether all of the servers are accessible.
  - a.** Can they be pinged?
  - b.** Can you telnet to a listening port?
  - c.** Can you reach the servers by Host name?
  - d.** Can you reach the servers by IP?
- 2.** Check the GVP Network Monitor.
  - a.** Are all of the servers shown as reachable?

---

Note: For more information about using the Network Monitor, refer to the *Genesys Voice Platform 7.6 Reference Manual*.

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- 3.** Use the EMS GUI for Page Collector Statistics.
  - a.** On the left pane, select System Info > Page Collector. This displays detailed page fetch statistics. Check for any extended fetch times.

---

## GVP

This section provides basic first steps for troubleshooting a GVP issue.

- 1.** Check whether all of the processes are running on all of the GVP hosts.
  - a.** Use the EMS GUI for process information. On the left pane, go to the System Info > Processes. This page displays the status of the GVP component processes. The processes can also be started or stopped from this page.
  - b.** If Watchdog is not started, this page notifies you upon access.
- 2.** Check whether your application is provisioned properly in the Element Management Provisioning System (EMPS).
  - a.** Check whether ASR and TTS are provisioned correctly.

---

## Web Application Server and Applications

This section provides basic first steps for troubleshooting web application server and application issues.

- 1.** Check whether your web server is running and accessible.
  - a.** Use a web browser to test connectivity. Try browsing to the web server's default page; `http://<hostname>:<port>`. IIS and Tomcat will display a default page if the service is running and accessible.
  - b.** Test your application pages with an internet browser.
  - c.** Check whether all of the application files are accessible (asp, jsp, vxml, xml, vox, and so on).
  - d.** Check whether your dynamic asp/jsp pages return the expected VoiceXML.





Chapter

# 3

## Troubleshooting Call Failures

This chapter provides troubleshooting procedures that you can follow in the event of a call failure.

This chapter contains the following sections:

- [Determining Source of Problem, page 23](#)
- [Busy Signal, page 24](#)
- [Dead Air, page 24](#)
- [Call Dropped or Transferred, page 25](#)
- [Vox File Delay, page 25](#)

---

### Determining Source of Problem

When a call failure is reported, you must consider several factors as you troubleshoot the problem:

- Is the problem sporadic or does it occur every time you call the number?
- When did you first notice the problem?
- What are the symptoms of the failure?
- What do you hear after dialing the number?
  - Busy signal
  - Dead air
  - The call being dropped
  - A delay in the .vox (voice-operated exchange) file

The remainder of this chapter explains appropriate steps to take for each of those items.

---

# Busy Signal

This section applies to the VCS only.

There are two types of busy signal:

- Slow busy
- Fast busy

## Slow Busy

A slow busy signal indicates a failure to connect to the Voice Communication Server (VCS).

When this occurs:

1. Determine which VCS the call should be landing on and check the voice circuits on that server.
2. Check the voice circuits on the server. All of the D and B channels should appear. If either is down, try to restart the Dialogic services. If the channels still do not come up, work with the carrier to determine if the problem is a circuit issue.
3. If you cannot determine the VCS, refer the problem to the engineer in charge of provisioning phone numbers.

## Fast Busy

A fast busy signal indicates a carrier failure—the call is dropping somewhere in the Network Service Provider (NSP) network. To solve this problem:

1. Try to duplicate the error.
2. Open a ticket with the NSP asking them to trace the call based on time of call, ANI, number dialed, and the trunk the call is configured to land on.

---

# Dead Air

Dead air (the lack of any dial tone or busy signal) suggests that a call landed successfully on the platform, but the call failed before connecting to the voice application.

If dead air is occurring or a call returns dead air:

1. Make a test call.
2. Monitor for a trap. Possible traps are:
  - Network Timeout.
  - XML Page Not Found.
  - All Ports Busy.



If none of these traps occur, refer to Chapter 4, “Troubleshooting and Maintenance,” on [page 27](#), for information about troubleshooting nontrapped errors.

---

## Call Dropped or Transferred

If a call is being dropped or transferred to an agent in the middle of a call, this indicates that a failure is occurring in the call path after the voice application has started. To solve this problem:

1. Make a test call.
2. Monitor for a trap. The possible traps are:
  - Network Timeout.
  - XML Page Not Found.
  - Call Transferred.
  - Call Dropped.

If none of these traps occur, refer to Chapter 4, “Troubleshooting and Maintenance,” on [page 27](#), for information about troubleshooting nontrapped errors.

---

## Vox File Delay

If there is a delay in the .vox file:

1. Purge the cache or, if possible, purge the .vox file in question.
2. Check the Web Server setting for .vox file expiration. If the expiration time is too short, .vox files are transferred from the Web Server more frequently. This can cause delays in playback.
3. If the above steps do not work, the problem is probably a VCS/IPCS problem: the server could be running low on memory, or the CPU could be running too high.





Chapter

# 4

## Troubleshooting and Maintenance

This chapter provides general troubleshooting and maintenance information.

This chapter contains the following sections:

- [Non-Trapped Call Failures, page 27](#)
- [PopGateway Restart, page 28](#)
- [Element Management System, page 29](#)
- [Element Management Provisioning System, page 30](#)
- [Cisco AS5300 Media Gateway Troubleshooting, page 30](#)
- [Power Outage, page 33](#)
- [Oracle Server, page 33](#)
- [Checking GVP Installation Version, page 34](#)
- [Checking Dispenser Installation Version, page 34](#)
- [Recovery from OpenLDAP Data Corruption, page 34](#)

---

### Non-Trapped Call Failures

Ports that are up/down or inservice/out are VCS specific. The following call failures do not generate traps:

- The inbound port is down, and the call cannot land on the platform.
- The PopGateway is hung up and cannot accept calls.
- A port is in a disconnect state, so calls fail to land on the port.

When one of these failures occurs, the customer experiences dead air or receives a busy signal. To determine the source of this problem, make a test call and note whether or not the call lands on any VCS/IPCS.

### Action

To solve these call failures:

1. Determine the VCS/IPCS on which the calls should be landing.
2. If the failures are intermittent, isolate the servers on which the calls are failing. Make multiple calls and note the servers on which the calls land on correctly and the servers on which they do not land.
3. After you have isolated the server or servers that are not operating correctly, determine whether all the ports on the server have the status `In Service`.
4. If a port is `Out Of Service` try to bring it into service by resetting the port. If the port does not come into service, stop and restart WatchDog gracefully—that is, so that it waits for all the active calls to complete. If that does not work, restart the server.
5. If a port is in a `Disconnect` state (VCS only):
  - a. Stop WatchDog gracefully. Note, however, that if ports are in a `Disconnect` state, WatchDog will not exit, because the disconnected ports prevent its `popgateway.exe` process from exiting.
  - b. After all of the active calls have been completed, stop the hung `popgateway.exe` process, to allow WatchDog to exit.
  - c. Restart WatchDog.
6. If the port is `In Service` make a test call to the maintenance number of the port in question and determine whether the maintenance number is going through.
7. If the maintenance number is going through, there is probably a routing problem with the carrier on this number. Open a ticket with the carrier and obtain information about where the number is routing.
8. If the maintenance number is not going through, reset the port (VCS only) and re-attempt the maintenance call.
9. If the maintenance number is routing correctly and the maintenance call is still not going through, open a ticket with the carrier and report that the channel is not working.

---

Note: A slow busy signal indicates a problem with the server, whereas a fast busy signal usually indicates a routing problem with the carrier.

---

---

## PopGateway Restart

On the VCS, in certain scenarios, if there is an unexpected shutdown in one of the PopGateway processes, the WatchDog restarts the failed process.

However, it is possible that the Dialogic firmware could get into an inconsistent state, thereby affecting further calls not only on the failed/restarted PopGateway, but also on the other PopGateway processes.

To recover from this situation:

1. Shut down WatchDog.
2. Shut down the Dialogic services using DCM.
3. Restart the Dialogic services using DCM.
4. Start WatchDog.

It is possible that the crash/restart of the PopGateway process might go unnoticed by the administrator, therefore delaying the shut down of the WatchDog process. Calls might be affected during this time. To eliminate this delay, you can add the following attribute through EMPS in the WatchDog node:

Attribute: ShutdownOnFailure

Value: 1

Adding this attribute and setting its value to 1 causes the WatchDog to shut down itself in case of any PopGateway termination. Since the VCS is down at this point, calls will be automatically diverted to other VCSs by the switch.

---

## Element Management System

The following Element Management System (EMS) components do not generate traps (except for the one trap described in “EventC Traps” on [page 69](#)):

- EventC
- Reporter

It is important to monitor these components at regular intervals, in order to ensure that they are functioning correctly.

### EventC and Reporter Monitoring

Check frequently to see whether all of the EventC processes run cycles every three minutes. This is configurable through the EMPS; check the exact configuration.

Run test calls periodically and ensure that they show up in Reporter after 15–30 minutes.

### EventC and Reporter Troubleshooting

The Reporter and the Call Status Monitor do not generate traps. Information about errors displays on the screen when you use the Reporter. The screen

error message is not explicit for system errors. The log file under <cn directory>/Log/Reporter or <cn directory>/Log/Call Status Monitor provides detailed error messages and possible solutions.

---

## Element Management Provisioning System

### Error

The following message appears in the sps log even when the database connectivity is fine.

```
2005/12/14 22:06:33.276] 36C ConfigInfo.cpp:833 C=51:L=1:U=0
getConfigParam >> Failed to get named parameter [DBPassword] value
```

### Reason

You have the option of keeping the database password blank. In this case, EMPS cannot distinguish between a missing password and a blank password. When the password is not found, EMPS prints an error.

---

## Cisco AS5300 Media Gateway Troubleshooting

Troubleshooting the Cisco AS5300 Media Gateway with the Genesys VoIP (Voice over IP) platform involves ISDN and VoIP call legs. The following sections summarize useful troubleshooting commands in the AS5300.

### Troubleshooting ISDN Call Legs

#### **show isdn status serial <interface number:23>**

This command displays the status of the ISDN line in the AS5300, from Layer 1 through Layer 3, as shown in the following example. Note that before the ISDN PRI can receive calls, its Layer 2 status must have the state = MULTIPLE\_FRAME\_ESTABLISHED.

```
rtr-voip#show isdn status serial 0:23
Global ISDN Switchtype = primary-5ess
ISDN Serial0:23 interface
    dsl 0, interface ISDN Switchtype = primary-5ess
Layer 1 Status:
    ACTIVE
Layer 2 Status:
```

```

        TEI = 0, Ces = 1, SAPI = 0, State =
MULTIPLE_FRAME_ESTABLISHED
        I_Queue_Len 0, UI_Queue_Len 0
Layer 3 Status:
        0 Active Layer 3 Call(s)
Active dsl 0 CCBs = 0
The Free Channel Mask: 0x807FFFFF
Number of L2 Discards = 184, L2 Session ID = 134

```

### **show isdn active <interface number:23>**

This command displays active calls, as shown in the following example:

```

rtr-voip#show isdn active serial 0:23
-----
                          ISDN ACTIVE CALLS
-----
Call    Calling    Called    Remote    Seconds  Seconds  Seconds  Charges
Type    Number     Number    Name      Used     Left     Idle     Units/Currency
-----
In      1234567890 6262172             92 Unavail -
-----

```

### **show isdn service <interface number:23>**

This command displays the channel and service statistics of a PRI, as shown in the following example:

```

rtr-voip#sh isdn service serial 0:23
PRI Channel Statistics:
ISDN Se0:23, Channel [1-24]
  Configured Isdn Interface (dsl) 0
  Channel State (0=Idle 1=Proposed 2=Busy 3=Reserved 4=Restart 5=Maint_Pend)
  Channel : 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4
  State   : 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3
  Service State (0=Inservice 1=Maint 2=Outofservice)
  Channel : 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4
  State   : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2

```

### **debug isdn events interface <interface number:0-23>**

This debug command displays important ISDN events as calls are received and processed.

**Example**

```
debug isdn events interface serial 0 (entire serial 0, from channel 0 through 23)
```

**Example**

```
debug isdn events interface serial 0:0 (only channel 0 on serial 0)
```

**Example**

```
debug isdn events interface serial 0:23 (only D-channel on serial 0)
```

**debug isdn q931 interface <interface number:0-23>**

This debug command displays ISDN Layer 3 events as calls are received and processed.

**Example**

```
debug isdn q931 interface serial 0 (entire serial 0, from channel 0 through 23)
```

## Troubleshooting VoIP Call Legs

**debug voip ccapi inout**

This command outputs VoIP Call Control's enter and exit events.

**debug h225 <asn1 | events | q931>**

This command displays events, ASN1 library routines, or Q931 IE used in the H.225 part (signaling) of H.323.

---

Warning! Use ASN1 debug with caution, because its intense output can overwhelm the CPU.

---

**debug h245 <asn1 | events>**

This command displays the events and ASN1 library routines used in the H.245 part of H.323.

---

Warning! Use ASN1 debug with caution, because its intense output can overwhelm the CPU.

---



### **debug ccsip <messages | info | all>**

This debug command displays SIP related trace information. There are several options to this command. The all option can be verbose.

- messages** Displays the SIP messaging exchanged between the Gateway and the SIP Session Manager.
- info** Displays general SIP related trace information.
- all** Displays all related trace information.

### **show dial-peer voice <summary>**

This command displays information about the dial-peer configuration used for routing voice calls. The summary option provides a compact view that is useful to verify the basic dial plan.

### **show dialplan number <number>**

This command displays the detailed dial-peer information (including number expansions), for the specified number.

### **debug voip ivr callsetup**

This command displays a debug of the call setup from the perspective of the Cisco TCL application managing the call flow, including which dial peers have been selected and the call progress information.

---

## Power Outage

If the VCS/IPCS experiences a power outage, the following procedure is required:

1. Restart the system.
2. After the VCS/IPCS server restarts, ensure that it is in working condition.
3. Verify that WatchDog has started. Restart it manually if necessary.
4. Place a call that lands on this VCS/IPCS.

---

## Oracle Server

This section applies to GVP Solaris. If the Oracle server is shut down for any reason, you must restart Apache and GVP services before restarting the Oracle server.

1. Start Apache by typing `/etc/init.d/gvpapache start`.
2. Start GVP by typing `/etc/init.d/gvp start`.
3. Restart the Oracle server.

---

## Checking GVP Installation Version

A list of all installed Genesys Voice Platform components and the component's associated release build for each server is available. To retrieve this information complete the following steps:

1. Go to the Element Management System GUI
2. Under **System Info**, select the **MIB Browser** option. A **MIB Tree** is presented inside the GUI.
3. From the **MIB Tree**, select the **popwd** option.
4. Select the **wdAPTable**. A listing of all installed Genesys Voice Platform components and the component's associated release build version are presented.

---

## Checking Dispenser Installation Version

You can retrieve the Dispenser installation version from the `ip_description.xml` file or the `read_me.html` file that appear in the installation directory when the Dispenser is installed.

For example, on a Windows host, if the Dispenser is installed in the `C:\CN` directory, both files will appear in this directory.

---

## Recovery from OpenLDAP Data Corruption

In the previous release of GVP, if OpenLDAP was used by EMPS, the LDAP database could corrupt if the EMPS machine shut down unexpectedly. This has been fixed in GVP 7.6. For information on this feature, see the **Element Management Provisioning System** chapter in the *Genesys Voice Platform 7.6 Reference Manual*.



Chapter

# 5

## SNMP Traps

This chapter describes how you monitor for Simple Network Management Protocol (SNMP) traps. It also describes the Management Information Base (MIB) files created by SNMP traps.

This chapter contains the following sections:

- [Monitoring GVP, page 35](#)
- [Management Information Base, page 36](#)

---

### Monitoring GVP

A Genesys Voice Platform (GVP) installation requires an SNMP service that can send SNMP traps to a configured SNMP Console, such as HP OpenView. For detailed troubleshooting, you can monitor and review these traps individually. For trap descriptions, see Chapter 6, “Trap Descriptions,” on [page 39](#). GVP does not send errors or traps to Configuration Manager or any other Genesys Framework component. You can also view the traps using Genesys Solution Control Interface (SCI). Refer to the *Genesys Voice Platform 7.6 Reference Manual* for more information.

In addition, GVP components maintain status information and statistics in SNMP MIB tables. You can query these MIBs with an SNMP Management Console. This query could be interpreted as bi-directional; however, at this time, these MIB tables entries are not configurable (that is, they cannot be written to) by an SNMP Management Console.

---

Note: The GVP Element Management GUIs (graphical user interfaces) also provide the statistics listed in the variable definition MIB files. For more information about these statistics, refer to the *Genesys Voice Platform 7.6 Reference Manual*.

---

# Management Information Base

Management Information Base (MIB) files define traps and variables. You can load a MIB file using an SNMP Console application such as HP OpenView.

After loading the trap definition MIB files, you can configure your SNMP Console to handle traps as they are received.

After loading the variable definitions MIB files, you can configure your SNMP Console software to query these parameters from the appropriate machines, for example, the IP Communication Server (IPCS).

**Note:** Some MIB tables only show current data, especially those tables that may have more than one row. For example, the table of active calls will be empty if there are no calls.

**Table 1** lists the MIB files that can be generated by GVP components.

**Table 1: MIB Files**

MIB File Name	Description
ARBTrap	Contains Arbitrator trap definitions
ASRTrap	ASR component
BWM	Bandwidth Manager (BWM) component
BWMTrap	Contains Bandwidth Manager (BWM) trap definitions
CallNet	Common components (WatchDog, Page Collector, Network Management, Scheduler)
CallNetTrap	Contains the trap definitions for the common components
CallStats	Policy Manager component
CallStatsTrap	Contains the trap definitions for the Policy Manager component, which generate traps based on port usage
CCM	Call Control Manager component
CFC	CFA (Call Flow Assistant) component, which runs on each VCS/IPCS server
CFCTrap	Contains CFA trap definitions
CQA	Cisco Queue Adapter (CQA) component
CQATrap	Contains Cisco Queue Adapter (CQA) trap definitions
EventCTrap	Contains Event Collector (EventC) trap definitions

**Table 1: MIB Files (Continued)**

MIB File Name	Description
H323SessionMgr	H.323 Session Manager component
H323Trap	Contains H.323 Session Manager trap definitions
HLMTrap	Contains Hunt List Manager trap definitions
IQA	IVR (Interactive Voice Response) Server Client component
IQATrap	Contains IVR Server Client trap definitions
OBN	Outbound Notification (OBN) Manager component
OBNTrap	Contains Outbound Notification (OBN) Manager traps
PMTrap	Contains trap definitions for Policy Manager (PM) process state change
POPCtrl	Point-of-Presence Control
POPCtrlTrap	Contains Point-of-Presence trap definitions
RM	Resource Manager component, which is part of IP Call Manager
RMTrap	Contains Resource Manager trap definitions
SSM	SIP (Session Initiation Protocol) Session Manager component
SSMTrap	Contains SSM (SIP Session Manager) trap definitions
TeleMgr	Dialogic Manager
TeleMgrTrap	Contains Dialogic Manager trap definitions
TTS	Text-to-speech (TTS) component
TTSTrap	Contains text-to-speech (TTS) trap definitions
VoipTeleMgr	IP Communication Server (currently only Media Server MIBs)
VWPS	Element Management Provisioning System
VWPSTrap	Contains EMPS (Element Management Provisioning System) trap definitions.

When the MIB files listed in [Table 1](#) are loaded, the system generates a trap configuration file that includes categories of Enterprise IDs. Each category of Enterprise ID has a variety of MIBs. Appendix C, “Trap Object IDs,” on [page 93](#), lists traps by category and also lists events for each category.





Chapter

# 6

## Trap Descriptions

This chapter describes the traps that you might encounter during Genesys Voice Platform (GVP) operation. It outlines the cause of each trap, provides sample scenarios in which the trap might occur, and suggests actions you can take in order to fix the problem indicated by the trap.

This chapter contains the following sections:

- [GVP Traps, page 40](#)
- [Generic Traps, page 40](#)
- [IVR Traps, page 41](#)
- [Policy Manager Traps, page 52](#)
- [Bandwidth Manager Traps, page 55](#)
- [WatchDog Traps, page 58](#)
- [Text-to-Speech Traps, page 60](#)
- [Cisco Queue Adapter Traps, page 64](#)
- [IVR Server Client Traps, page 68](#)
- [EventC Traps, page 69](#)
- [H323 Traps, page 70](#)
- [Resource Manager Traps, page 71](#)
- [SIP Session Manager Traps, page 72](#)
- [EMPS Traps, page 73](#)
- [Call Flow Assistant Traps, page 76](#)
- [Arbitrator Traps, page 76](#)
- [Voice Circuit Traps, page 77](#)
- [Outbound Notification Manager Traps, page 79](#)
- [Hunt List Manager Traps, page 81](#)
- [ASR Traps, page 81](#)
- [ASR Log Manager Traps, page 83](#)

---

# GVP Traps

Traps handle unexpected or unallowable conditions in GVP; for example, an error in the XML (Extensible Markup Language) code of a voice application. GVP includes a set of pre-defined traps that identify the problem and that are displayed in the Simple Network Management Protocol (SNMP) platform monitoring systems. Traps can be organized into the following general categories.

- Generic Traps (traps that do not come from one specific component)
- IVR (interactive voice response) Traps
- Call Statistics Traps
- Platform Traps
- TTS (text-to-speech) Traps
- Queue Adapter Traps
- Reporter Subsystem Traps
- Voice Circuit Traps

---

## Generic Traps

The following generic traps can be generated by several different components:

- cnGenericTrap (OID: .1.3.6.1.4.1.3814.1000)
- cnInternalError (OID: .1.3.6.1.4.1.3814.1001)
- cnInvaildParameter (OID: .1.3.1.4.1.3814.1002)
- cnOutofMemory (OID: .1.3.6.1.4.1.3814.1003)

### cnGenericTrap

The generic trap is rarely used. It is provided in case a component generates a trap that does not fall into any other category. If you receive this trap, carefully read the information provided by the trap: you then should have sufficient information to troubleshoot the problem.

### cnInternalError

This trap indicates an internal error on any server. The most common cause is a C++ Exception Error.

#### Action

This error, which is the most common, means that the POP (Point-of-Presence) Gateway on the server has stopped responding.



1. Connect to the server.
2. Check services.
3. Restart any services that are down but that should be running (for example, Watchdog, SNMP, IIS).
4. If this fails, restart the server.

## cnInvalidParameter

This trap indicates that an invalid parameter has been passed to GVP.

## cnOutOfMemory

This trap indicates an out-of-memory error.

---

# IVR Traps

IVR traps indicate call-processing problems with a voice application. The following example illustrates the typical structure of an IVR trap:

### Example

VCS/IPCS - TrapName (Process) RESELLER Customer App (SessionID) URL Description

Where:

VCS/IPCS is the server on which the call landed.

TrapName is the name of the trap.

Process is the process on the VCS/IPCS that encountered the problem and generated the trap.

RESELLER Customer App are defined on the provisioning system by the voice application.

SessionID is the unique identifier for each call.

URL is the URL that the VCS/IPCS was trying to run when the error occurred.

Description is extra information about the error.

The remainder of this section lists the IVR trap names, their object IDs (OIDs), and a list of the possible description arguments generated under each individual category of trap.

- cnCFCErrortrap (OID: .1.3.6.1.4.1.3814.2.0.1000)
- cnIVRErrortrap (OID: .1.3.6.1.4.1.3814.2.0.1001)
- cnNetworkTimeout (OID: .1.3.6.1.4.1.3814.2.0.1012)
  - XMLPAGE\_TIMEOUT
  - RESOURCE\_TIMEOUT

- cnResourceNotFound (OID: .1.3.6.1.4.1.3814.2.0.1010)
  - XMLPAGE\_NOTFOUND
  - RESOURCE\_NOTFOUND
- cnBadXMLPage (OID: .1.3.6.1.4.1.3814.2.0.1011)
- cnNetworkError (OID: .1.3.6.1.4.1.3814.2.0.1013)
- cnTelephonyError (OID: .1.3.6.1.4.1.3814.2.0.1014)
- cnCallDropped (OID: .1.3.6.1.4.1.3814.2.0.1008)
- cnCallTransferred (OID: .1.3.6.1.4.1.3814.2.0.1015)
- cnAbnormalCallTermination (OID: .1.3.6.1.4.1.3814.2.0.1009)
- cnDialError (OID: .1.3.6.1.4.1.3814.2.0.1007)
- cnBillingDataSendFailed (OID: .1.3.6.1.4.1.3814.2.0.1002)
- cnBillingDataDiskIOFailed (OID: .1.3.6.1.4.1.3814.2.0.1004)

## cnCFCErrorTrap

This trap indicates a CFC error. The error could be the result of a malformed XML page from CFC, a communication failure, an invalid response, and so on.

## cnIVRErrorTrap

This trap indicates a generic IVR error not covered by any of the other IVR traps.

### Example

```
ps3-brbn06.brbn06-pop.genesys.net- IVR Error (PopGateway1) Reseller MyCustomer MyApp {CAE5CEF5-5B8C-11D6-BDEC-DFAF66AFA560} 1020213948 : IVR application exception handler not defined for error -No match
ps2-chcg01.chcg01-pop.callnetcomm.net- IVR Error (PopGateway2) Reseller MyCustomer MyApp {0F431997-5701-11D6-96A4-C1AC992D8478} 1020219559 CONSTRUCTCREATELEGANDDIALPAGE CALL_NOTANSWERED : Call was not answered.Conversation Object not created
```

### Action

Read the error provided in this trap to determine why the trap was generated. The first half of the preceding example shows a voice application-related trap message. The second half of the example shows a call-related trap message.

## cnNetworkTimeout

This trap indicates a timeout between the VCS/IPCS and another web server. This trap is typically caused by a destination server network failure along the patch between the two servers. There are two types of Network Timeouts:

- XMLPAGE\_TIMEOUT

- RESOURCE\_TIMEOUT

## XMLPAGE\_TIMEOUT

This trap indicates a timeout between the VCS/IPCS and the destination web server when retrieving a web page.

### Example

```
ps2-hstn04.hstn04-pop.genesys.net - Network Timeout(PopGateway1) GENESYS MyCustomer MyApp {01290C5E-66D5-11D6-BE07-A79D3AE8FF9A} http://vrui-main-synapse3.synapse3-cust.genesys.net/prod65/start.asp?NEXTACTION=START&ANI=7327651045&DID=8009279212&SESSIONID={01290C5E-66D5-11D6-BE07-A79D3AE8FF9A} XMLPAGE_TIMEOUT: Could not connect within the specified time of 6 seconds
```

In the preceding example, a timeout occurred when GVP was trying to run the start IVR\_URL page. The VCS/IPCS server has six seconds to run the primary start page or else it times out and tries to run the backup IVR\_URL, if one is available.

### Example

```
ps1-atln01.atln01-pop.callnetcomm.net - Network Timeout(PopGateway1) GENESYS MyCustomer MyApp {01290DGF-6755-11D6-BE07-A79D3AE8FF9A} http://was-cust.genesys.net/InputOrderNum.jsp?NEXTACTION=VLDT_INPUT&RETRY_COUNT=2&INSTANCE_NAME=INPUTXMLPAGE_TIMEOUT: The request has timed out
```

In the preceding example, a timeout occurred in the middle of a call to the customer's web server.

### Example

```
ps1-chcg05.chcg05-pop.genesys.net - Network Timeout(PageCollector) http://didurl-snv12.snv12-ncs.callnetcomm.net/did_url_mappings /Synapse_008.xml  
Could not fetch in 3000 milliseconds
```

In the preceding example, a timeout occurred when GVP was trying to retrieve the app.xml file from the dispenser. Because GVP was not able to start the call, the trap provided no information about the reseller, customer, voice application, and session ID. A call must start before the system makes those variables available.

### Action

1. Dial the toll-free number that appears in the XMLPAGE\_TIMEOUT trap in question.
2. Determine whether the problem is intermittent or occurs on every call.

- Intermittent: This probably indicates an intermittent network issue. Run extended pings and traceroutes to the destination server and network.
- Every call: This probably indicates an outage at the destination server. Try to ping the server and if it responds, open a web browser from the VCS/IPCS that generated the trap and run the URL request in the trap. If it does not respond, IIS may be down.

## RESOURCE\_TIMEOUT

This trap indicates that the VCS/IPCS could not pull a requested file (that is, a resource, such as a .vox file) before a timeout occurred.

### Example

```
ps4-chcg04.chcg04-pop.genesys.net - Network Timeout
(PopGateway2) GENESYS MyCustomer MyApp {CCBBD0C4-1C31-11D6-BDDE-94FEA52F7098} RESOURCE_TIMEOUT:
  http://custwas.genesys.net/VoxFiles/15004.vox:The URL of the xmlpagewhere this voxfile is
  referenced is
  http://custwas.genesys.net/Order.ASP?APPLICATIONVERSION=1.0&NEXTACTION=START&ANI=7403925364&DID=80
  05823455&SESSIONID={CCBBD0C4-1C31-11D6-BDDE-94FEA52F7098} &APPLICATIONVERSION=1.0&
gv_greeting_vox=15000.vox The request has timed out
```

### Action

1. Check connectivity between the GVP and the customer's web server.
2. Connect to the VCS/IPCS and attempt to go to the web page identified in the trap.

## cnResourceNotFound

The VCS/IPCS generates this trap when it cannot find a file that it needs to access. The file can be either an XML page or a .vox file, which, in turn, generates either a descriptive trap of XMLPAGE\_NOTFOUND or RESOURCE\_NOTFOUND.

## XMLPAGE\_NOTFOUND

This trap indicates that the VCS/IPCS could not find an XML page.

### Example

```
ps1-chcg04.chcg04-pop.genesys.net - Resource Not Found (PopGateway1) MyCustomer MyApp {7FDCCD60-36CF-
11D4-BA93- 9CE0698E226B} http://cust-as.genesys.net/code/
CheckInfo.asp?NEXTACTION=START&ANI=408&DID=8883145387&SES SIONID={7FDCCD60-36CF-11D4-BA93-
9CE0698E226B}
```

### Action

Inform the application developer about the trap(s). Only the application developer can fix this problem by moving the page to the right location or by changing the XML code to reference the file's actual location.

## RESOURCE\_NOTFOUND

This trap is generated when the caller attempts to access a resource (for example, a .vox file) that the VCS/IPCS cannot find. It usually indicates that a menu option is not working.

### Syntax

```
ps5-chcg02.chcg02-pop.callnetcomm.net -
RESOURCE_NOTFOUND (PopGateway2) GENESYS MyCustomer MyApp{CCBBD0C4-1C31-11D6-BDDE-94FEA52F7098}
  http://10.192.45.8/IVR_Apps/SharedVox/II1.vox:The URL of the xmlpage where this voxfile is
  referenced is http://custwas.genesys.net/Order.ASP?
APPLICATIONVERSION=1.0&NEXTACTION=START&ANI=7403925364&DID=8005823455&SESSIONID={CCBBD0C4-1C31-11D6-
BDDE-94FEA52F7098}&APPLICATIONVERSION=1.0&gv_greeting_vox=15000.vox: File was not found
```

### Action

Provide the application developer with the trap exactly as it appears on the browser, so that the developer can see where the error occurs.

## cnBadXMLPage

This trap normally indicates a syntax error in the application code. A `BAD_XMLPAGE` can also occur when the GVP server receives a corrupt page from the web server due to transmission errors.

### Example

```
ps2-atln03.atln03-pop.callnetcomm.net - BAD_XMLPAGE
(PopGateway1) GENESYS MyCustomer MyApp {CCBBD0C4-1C31-11D6-BDDE-94FEA52F7098}: URL http://cust-
was.genesys.net/App/run_app.asp?NEXTACTION=REDIRECT&SUBACTION=FIND_MATCHED_SSN_D
OB&SESSIONID={227DE7D2-7F22-11D4-BAA8-C85EB7886055} BAD_XMLPAGE: not well-formed
at Line 2
```

### Action

Provide the application developer with the trap, including the URL and the error message.

## cnNetworkError

This trap can indicate the following types of network errors:

- The connection to the server was reset.
- The server is down or it is too busy to take the call.
- There is a DNS problem.
- The cache is missing application XML information.

### Example

```
ps1-chcg04.chcg04-pop.genesys.net Network Error (CFA) GENESYS MyCustomer MyApp {32B963BE-66C6-11D6-
BE04-B330C38C2A6B} Could not send NEW_SESSION to Policy Manager:
http://pm1ncs2.ncs2.genesys.net:9810/pmnotify.asp?notifyprocess=Synapse&NEXTACTION=NEW_SESSION&cus
tomerName=Synapse&appName=Synapse_015&SESSIONID={32B963BE-66C6-11D6-BE04-B330C38C2A6B} &ANI=
8175559943&DID=8005559869&LATANAME=NUL&STARTTIME =1021382447&TFN=8005559869&LEGID=CC34260326015
&LEGTYP=IN&POP_SVR=http://ps1-chcg04.chcg04pop.genesys.net/WebNotify.asp&POP_GW=PopGateway2:
Error Code [0x80048009]ps4-atln02.atln02-pop.callnetcomm.net - NETWORK_ERROR(PopGateway1) GENESYS
MyCustomer MyApp =(EE9ED081-1275-11D5-9690-EFCA84BB0264) http://ps2-atln01.ATLN01-pop.genesys.net/
Upload/8665557519/{B92F91AA-126F-11D5-9692-CDCB64CF4964}.vox:The URL of the xmlpage where this voxfile
is referenced is http://cust-
was.genesys.net/MenuNode.ASP?tfn=8003433434&NEXTACTION=START&ANI=2135550258&DID=7855557518&TFN=866
5557518&SESSIONID: Error Code [0x800401F7]ps1-atln02.atln02-pop.callnetcomm.net - NETWORK_ERROR
(PopGateway1) GENESYS MyCustomer MyApp =(BE5BA9B5-1279-11D5-9690-B88949ED7A64) http://was-
cust.genesys.net/App/VoxFiles/en/1045.vox:The URL of the xmlpage where this voxfile is referenced
is http://was-
cust.genesys.net/App/AM_mainMenu.ASP?APPLICATIONVERSION=1.0&NC_Menu=1&MM_ToneMap=#&ANI=0&DID=0&SES
SIONID=0&NEXTACTION=START&ANI=3365557092&DID=8775550186&SESSIONID:The connection with the server
has been
reset
```

### Action

1. Find the specific network error that caused the trap (either the IIS error code or the error code conversion text). In the preceding example, the first trap is error code 100401F7, and the second trap is The connection with server has been reset.
2. Make test calls to determine whether the error occurs on every call, or if it is just a random error.
3. If the error is affecting multiple calls, try to find a common factor among the traps—for example, the same VCS/IPCS, the same VCS/IPCS rack, the same ASP (Active Server Page).

4. If you discover a common factor, troubleshoot from that perspective. For example, if:
  - All traps are from the same server, restart the server.
  - All traps are from the same rack, restart the cache and/or the L4 switch (after taking calls off that rack).
  - All traps are from the same site, troubleshoot the ISP network between the VCS/IPCS rack and the customer's web server by using pings and traceroutes.
  - All traps are on the same ASP, contact the customer.

## cnTelephonyError

This trap indicates the Dialogic card detected an error.

For example:

1. The expected signal from the far end that confirms a good transfer and call connected is not received.
2. The vox file is too large to play; it may cut the last bits.
3. An unexpected entry from a user that the application is not meant to handle.

### Example

```
ps2-mcIn02.mcIn02-pop.telera.net - Telephony Error (PopGateway1) TELERA MyCustomer
MyApplication {AC20D1EF-4627-11D5-9699-AD265E624D70} http://cust-was.telera.net/
runapp.ASP?APPLICATIONVERSION=1.0 TELEPHONYERROR:Telephony error:could not transfer connect
ps1-hstn02.hstn02-pop.telera.net - Telephony Error (PopGateway2) TELERA MyCustomer2 MyApp
{E6249664-4480-11D5-9684-E35F4F444E44} http://cust-was.telera.net/ListenMenu.asp?Visit=1
TELEPHONYERROR: IVR applicationexception handler not defined for error -
Telephonyerror:Invalid digits from the user ps1-hstn01.hstn01-pop.telera.net - Telephony
Error (PopGateway1) TELERA MyCust MyApp {551BC5D2-4483-11D5-9686-D97E3A765144} http://
10.192.120.8/ telera/runproc.asp?PAGEID=C11_CPA_PROCESS TELEPHONYERROR: IVR
application exception handler not defined for error -Telephony error:could not play the file
```

### Action

To analyze this trap, request a call trace from the circuit provider and get a treatment code for the call termination event. Provide the following information to the carrier:

- Call ANI
- DID
- Circuit ID of origination (for example, ps1-hstn02 popgateway2 circuitID)
- Timestamp

## cnCallDropped/cnCallTransferred

These traps indicate that a call failed on the VCS/IPCS because of an unrecoverable failure in the call-routing process. Typically, another trap relating to the failure precedes this trap but does not indicate that the call has been dropped. The earlier trap can help determine the cause of the call drop.

The difference between a `CALL_DROPPED` trap and a `CALL_TRANSFERRED` trap is that, in the case of a `CALL_DROPPED` trap, no fail-over number is provisioned. (Otherwise, the VCS/IPCS would route the call to the fail-over number instead of dropping the call.) By contrast, a `CALL_TRANSFERRED` trap is generated when a fail-over number *is* available.

The possible reasons for these traps are:

1. **DID\_XML Failure.** Both the cache box and the DID URL server were unable to resolve the phone number dialed to be connected to a voice application. This error can result only in a `CALL_DROPPED` trap because, at this point, the application is started and the platform does not have the fail-over number.
2. **Web Server Failure.** The primary `IVR_URL` web request failed and no backup web server is configured; the backup `IVR_URL` failed; or a midcall timeout occurred.
3. **Outbound XML Failure.** The call attempted to make an outbound call but no `AppOutbound.xml` file is provisioned.

### Reason: DID\_XML Failure

This `CALL_DROPPED` trap indicates that both the cache box and the DID URL server were unable to resolve the phone number dialed to be connected to a voice application.

#### Example

```
ps3-hstn03.hstn03-pop.genesys.net - CALL_DROPPED (PopGateway1) Reason=XML FAILURE. ANI=6145556000
  DID=4085550000 TOLL-FREE-NUM=$toll-free-num$
CUSTOMER=$customer-name $ APPLICATION=$application-name$
```

#### Action

---

Note: Customer, Voice Application Name, and SessionID parameters are not provided in this trap because this information is not available to VCS/IPCS at this point in the call.

---

If the DID in the trap is a valid number for a voice application, this is a *critical* trap that indicates both a failure in the local cache box and a failure in communication between the VCS/IPCS and the DID dispenser.



The steps for recovery are:

1. Find the trap that precedes the CALL\_DROPPED trap and that indicates a failure to retrieve the did.xml file from the dispenser.
2. Connect to the POP server that generated the trap and attempt to open the URL in the trap.

Several results could occur:

- The did.xml file is returned. This indicates that the problem was probably a very temporary. Make test calls to ensure that calls are going through to the number.
- The web browser returns Page Not Found. This indicates that the number has not been provisioned correctly. Work with the provisioner to build a valid did.xml file for the number.
- The web browser returns Timeout or Connection Cannot Be Established. This indicates that a connectivity failure has occurred between the POP server and the dispenser. Check network connectivity on the dispenser.

## Reason: WAS Server Failure

This CALL\_DROPPED trap indicates that the call was dropped because the primary web server failed and no backup web server is configured, the backup web server failed, or a midcall timeout occurred.

### Example

```
ps1-atln02.atln02-pop.genesys.net - CALL_DROPPED(PopGateway1) GENESYS MyCustomer MyApp {5991C209-0F6A-11D5-9692-B22FF6516366} :BACKUP WASSERVER FAILURE ANI=4075553337 DID=7855553224 TOLL-FREE-NUM=8005553224 CUSTOMER=MyCustomer APPLICATION=MyApplication
ps5-chcg04.chcg04-pop.genesys.net - Call Transferred(PopGateway2) GENESYS Synapse SYN_8778130001 {418A1090-66D4-11D6-BDFE-EBFE6D92756F} CALL_TRANSFERRED: REASON: WAS Failure.
Error number = 8777370607. ANI=8605559149 DID=8775550001 TollFreeNum=8775550001 Reseller=GENESYS Customer=Synapse Application=SYN_8775550001SessionID={418A1090-66D4-11D6-BDFE-EBFE6D92756F}LastError=XMLPAGE_TIMEOUT LastErrorString= connect to page timed out
```

### Action

Find the trap(s) that preceded this trap and troubleshoot that error.

## Reason: Outbound XML Failure

This CALL\_DROPPED trap indicates that the call attempted to make an outbound call but no AppOutbound.xml file is provisioned.

### Example

```
ps4-hstn07.hstn07-pop.genesys.net - CALL_DROPPED(PopGateway1) GENESYS MyCustomer MyApp {5991C209-0F6A-11D5-9692-B22FF6516366} Reason:OUTBOUND XML FAILURE. ANI=DID= TOLL-FREE-NUM=$toll-free-num$ CUSTOMER=$customername$APPLICATION=TrafficStnNotify
```

### Action

The steps for recovery are:

1. Find the earlier trap from the same VCS/IPCS that contains more information about the outbound call failure. This trap should indicate where the failure occurred and for which number.
2. Use ISDiag to try calling the outbound number with the VCS/IPCS that reported the failure.

---

Note: ISDiag is Dialogic specific and only for JCT boards using ISDN.

---

3. If you cannot reach the outbound number, notify the service provider.

## cnAbnormalCallTermination

This trap indicates that the call was suddenly terminated because of some error condition. An IVR ERROR/CFC ERROR typically precedes this trap. Depending on availability, the description includes ANI, DID, TFN, CUSTOMER, APPL, ERROR/REASON CODE/DESC, CFC URL, and IVR URL.

## cnDialError

This trap indicates that the VCS/IPCS failed to connect the user to the voice application's outbound number. There are multiple possible causes for this trap. The trap itself provides more details about the cause of failure.

### Example

```
ps4-atln03.atln03-pop.callnetcomm.net - Dial Out Failed
dtiB2T12: Outbound call ended by far end before call is answered: CallState=Proceeding DiscReason=No
circuit available DialedNum=18005559162 CustInfo=AppInfo=Life4678
ps4-atln02.atln02-pop.callnetcomm.net - Dial Out Failed
dtiB2T7: Outbound call ended by far end before call is answered:
CallState=Proceeding DiscReason=NORMAL_CLEARING[0x10]
DialedNum=18005551111 CustInfo= AppInfo=SearsCCAs5-atln02.atln02-pop.callnetcomm.net - Dial Out
Failed dtiB4T22 : Outbound call ended by far end before call is answered: CallState=Proceeding
DiscReason=USER_BUSY[0x11] DialedNum=17035553202 CustInfo= AppInfo=CallingCards4-chcg02.chcg02-
pop.callnetcomm.net - Dial Out Failed
dtiB2T10 : Outbound call ended by far end before call is answered: CallState=Proceeding
DiscReason=UNSPECIFIED_CAUSE[0x1f] DialedNum=18005551111CustInfo= AppInfo= SearsCCA
```

```

ps4-atln03.atln03-pop.callnetcomm.net - Dial Out Failed dtiB2T23 : Outbound call ended by far end
before call is answered: CallState=ProceedingDiscReason=NO_USER_RESPONDING[0x12]
DialedNum=17205552321CustInfo= AppInfo=CenterofExcellenceps2-brbn03.brbn03-pop.genesys.net - Dial
Out Failed dtiB5T1 :Outbound call ended by far end before call is answered:CallState=Dialing
DiscReason=REQ_CHANNEL_NOT_AVAIL[0x2c]DialedNum=14085551389 CustInfo= AppInfo= HeyAnita2ps5-
brbn05.brbn05-pop.genesys.net - Dial Out Failed dtiB5T1 :
Outbound call ended by far end before call is answered:CallState=Dialing
DiscReason=TEMPORARY_FAILURE[0x29]DialedNum=14085551389 CustInfo= AppInfo= HeyAnita2
ps5-brbn05.brbn05-pop.genesys.net - Dial Out Failed DIALERROR :dial: (dtiB6T1) WaitForMultipleObjects
Timeout: Dial failed - Port: 121 CRN:214748369614085551389.

```

### Action

Check what caused the dial-out failure.

If the reason is:

1. 0x2f—Call the carrier; provide the time, phone number, and location of this error; and request a treatment code for this call. When you receive the treatment code, escalate the problem to your network engineering department for further troubleshooting.
2. USER\_BUSY—The caller encountered a busy signal. This could mean that the call center is sending out a busy signal, or that the carrier is generating a busy signal at the switch. Call the dialed number directly, and if you get a busy signal, escalate the problem to the customer.
3. NO\_USER\_RESPONDING—The call timed out on the ring or an agent failed to pick up the call. Call the dialed number directly, and if the call is not answered escalate the problem to the customer.
4. No Circuit Available—Not enough circuits are available at the phone network to fulfill the request.
5. For any other reason, monitor the application for Dial Out traps. If the trap is duplicated, ask the phone provider to trace the call and locate the failure point. Escalate the problem to the customer if more than five traps occur every 30 minutes.

## cnBillingDataSendFailed

This trap is sent when the VCS/IPCS is unable to post billing data to the EventC server.

### Example

```
ps3-chcg02.chcg02-pop.callnetcomm.net- Billing Data Send Failed (POPGateway)http://eventc-
cust.cust.net:9811/billing/events.asp: timeout
```

### Action

Read the error in the trap. In the preceding example, the error is timeout. Try to reproduce the problem by connecting to the VCS/IPCS and running a query to the events.asp page using a web browser. If you can reproduce the error, most likely there is either a problem on the EMS server or a network connection issue between the VCS/IPCS and the EMS server.

## cnBillingDataDiskIOFailed

This trap is sent when disk IO with billing data is unable to be performed.

### Example

```
ps1-hstn04.hstn04-pop.genesys.net- Billing Data DiskI/O Failed (POPGateway1) Failed to copy billing
file [D:\CN\data\PopGateway2Billing.dat] to rollover file
[D:\CN\data\PopGateway2Bill_1009999566.dat]: 0x70
```

### Action

Check the EMS server to determine why the billing data file could not be built; for example, the EMS server might be out of disk space.

---

## Policy Manager Traps

The following Policy Manager traps apply to the Element Management System (EMS):

- cnAppOUTAllPortsBusy (OID: .1.3.6.1.4.1.3814.12.1002)
- cnAppOUTAllPortsNotBusy (OID: .1.3.6.1.4.1.3814.12.1003)
- cnCustSessionAllPortsBusy (OID: .1.3.6.1.4.1.3814.12.1004)
- cnCustSessionAllPortsNotBusy (OID: .1.3.6.1.4.1.3814.12.1005)
- cnAppSessionAllPortsBusy (OID: .1.3.6.1.4.1.3814.12.1006)
- cnAppSessionAllPortsNotBusy (OID: .1.3.6.1.4.1.3814.12.1007)
- cnPMStarted (OID: .1.3.6.1.4.1.3814.33.1000)
- cnPMDown (OID: .1.3.6.1.4.1.3814.33.1001)

- cnPMAAppAdded (OID: .1.3.6.1.4.1.3814.33.1002)
- cnPMAAppRemoved (OID: .1.3.6.1.4.1.3814.33.1003)

## cnAppOUTAllPortsBusy

The Policy Manager module generates this trap when it detects that the current number of active outbound calls for a voice application has exceeded the csAppOUTAllPortsBusyTrapThresh value.

### Action

Consider the following questions:

- Does this voice application often reach its threshold?
- Does the voice application have bursting?

Inform the customer that they are reaching or exceeding their port limit. Advise them to increase their limit in order to prevent calls from failing.

## cnAppOUTAllPortsNotBusy

The Policy Manager module generates this trap when it detects that the current number of active outbound calls for a voice application has fallen below the csAppOUTAllPortsNotBusyTrapThresh value.

## cnCustSessionAllPortsBusy

The Policy Manager module generates this trap when it detects that the current number of active sessions for a customer has exceeded the cnCustSessionAllPortsBusyTrapThresh value.

### Action

Consider the following questions:

- Does this customer often reach its threshold?
- Does the customer have bursting?

Inform the customer that they are reaching or exceeding their port limit. Advise them to increase their limit in order to prevent calls from failing.

## cnCustSessionAllPortsNotBusy

The Policy Manager module generates this trap when it detects that the current number of active sessions for a customer has fallen below the csCustSessionAllPortsNotBusyTrapThresh value.

## cnAppSessionAllPortsBusy

The Policy Manager module generates this trap when it detects that the current number of active sessions for a voice application has exceeded the `csAppSessionAllPortsBusyTrapThresh` value.

### Action

Consider the following questions:

- Does this voice application often reach its threshold?
- Does the voice application have bursting?

Inform the customer that they are reaching or exceeding their port limit. Advise them to increase their limit in order to prevent calls from failing.

## cnAppSessionAllPortsNotBusy

The Policy Manager module generates this trap when it detects that the current number of active sessions for a voice application has fallen below the `csAppSessionAllPortsNotBusyTrapThresh` value.

## cnPMStarted

The Policy Manager generates this trap when it is started.

## cnPMDown

The Policy Manager generates this trap when it is down.

## cnPMAppAdded

The Policy Manager generates this trap when an application is added to a customer.

## cnPMAppRemoved

The Policy Manager generates this trap when an application is removed from a customer.

# Bandwidth Manager Traps

The following traps are associated with the Bandwidth Manager (BWM) and apply to the Element Management System (EMS):

- cnBWMXFerFailed (OID: .1.3.6.1.4.1.3814.6.0.1000)
- cnBWMBadNotification (OID: .1.3.6.1.4.1.3814.6.0.1001)
- cnBWMServerDown (OID: .1.3.6.1.4.1.3814.6.0.1002)
- cnStartNotifyTrap (OID: .1.3.6.1.4.1.3814.6.0.1003)
- cnStopNotifyTrap (OID: .1.3.6.1.4.1.3814.6.0.1004)
- cnBWMQUnlockTrap (OID: .1.3.6.1.4.1.3814.6.0.1005)
- cnBWMXferDelayed (OID: .1.3.6.1.4.1.3814.6.0.1006)

## cnBWMXFerFailed

This trap indicates that the Bandwidth Manager (BWM) gave up after attempting to transfer a file the maximum amount of times and encountering errors on each attempt. The default value for the number of attempts is 6, but you can change this value.

### Example

```
bwm.genesys.net - BWM Transfer Failed Could not transfer after 6 Attempts for item [SessionID =
{18B2A527-88F0-11D4-BAA7-F594AD196955}, Field = RECORDING_FIELD,
Src=D:\CN\web\Upload\8776316950\{18B2A529-88F0-11D4-BAA7-F594AD196955}.vox, Dest=http://cust-
```

```
was.genesys.net/Record.asp?NEXTACTION =ASYNC_POST_CAPTURE
&FIELD_NAME=&&VALIDACTION=&INVALID_ACTION=&VoxFileName =&RECORD_COUNTER=0, >
NotifyHref=http://ps3-atln03.atln03-pop.genesys.net/
WebNotify.asp?notifyprocess=pagecollector&action=xfer, RetryLimit=5
```

### Action

In the preceding example, the file is still present at the location specified in `Src=` on the machine specified in `NotifyHref=`. To manually transfer this file to the destination:

1. Connect to the machine specified in `NotifyHref=`.
2. Change the directory to `<directory server>/cn/bin`.
3. Post the file to the customer using the following command:

```
pcclient -p "$src$" "$dest$"
```

where `$src$` specifies the `Src=` value in the trap and `$dest$` specifies the `Dest=` value in the trap.

4. If the `pcclient` command fails, the trap was caused by a connectivity failure between the VCS/IPCS and the web server. Ping the web server. If it responds, browse to the URL shown in the `Dest=` portion of the trap.
5. If the `pcclient` command succeeds, the trap was caused by a communication failure between the BWM server and the VCS/IPCS. Connect to the BWM server and attempt to browse the URL shown in the `NotifyHref=` portion of the trap.

## cnBWMBadNotification

This trap indicates an error in the transfer request notification that the VCS/IPCS sends to the BWM.

### Action

Read the trap, which details what is missing from the notification, and fix the error. Also, you must perform a manual transfer of the file that failed to transfer because of this error.

## cnBWMServerDown

This trap indicates that the VCS/IPCS cannot connect to the Web Application Server (WAS) because it is either down or inaccessible.

### Example

```
dns-snv12.snv12-ncs.genesys.net - BWM: Server Down Server [name = ps4-brbn05.brbn05-
pop.genesys.net, IP = 10.6.4.38] has been down since Wed Aug 23 23:47:10 2000. Items from this
server could not be transferred Severity-Major
dns-snv12.snv12-ncs.genesys.net - BWM: Server Down Server [name = ps4-brbn05.brbn05-
pop.genesys.net, IP = 10.6.4.38] has been down since Wed Aug 23 23:47:10 2000. Items from this
server could not be transferred Severity-Major;
```

### Action

1. Try to ping the VCS/IPCS.
2. If you can ping it:
  - a. Connect to the server.
  - b. Verify that all processes are running, for example, WatchDog and the BWM.
  - c. If necessary, restart the server.
3. If you cannot ping the server, either it is down, or the network between the BWM and the VCS/IPCS is down.

Once the server is restored, the BWM will contact it, and the transfer will proceed as expected.



## cnStopNotifyTrap

This trap indicates that the process has stopped accepting web notifications. The trap includes the reason that the process has stopped.

### Example

```
ems1.ncs.genesys.net - Process bwm1 has Stopped taking Web Notifications: Pol Eng thrd has not responded for 10 secs, stop accepting new notifications.
```

### Action

1. Verify that a StartNotify trap follows this trap.
2. If you do not receive a StartNotify trap, restart the process manually.

## cnStartNotifyTrap

This trap indicates that the BWM is coming back up and will once again be able to process requests.

### Example

```
ems1.ncs.genesys.net - Process bwm1 has Started taking Web Notifications: Action
```

### Action

None, if you intended to bring the BWM back up.

## cnBWMQUnlockTrap

This trap indicates that access to the BWM was forcibly unblocked.

## cnBWMXferDelayed

This trap indicates that the .vox file transfer request failed during six consecutive attempts. The severity of the trap is set to Warning.

### Example

```
WARNING! Xfer delayed [reason = Workitem already tried six times]for [sessionId = e5320564-adeb-4c67-95d9-015531c2fdf9, field = , src = $CN_ASR_LOG$, dest = ftp://rajarshi:l0genz@10.10.10.110/dev-andes.dev.genesys.com, NotifyHref = http://dev-andes.dev.genesys.com:9801/webnotify.php?notifyprocess=PageCollector&action=xfer&deleteonsuccess=true, Transfer delayed as workitem already tried six times]
```

**Action**

This trap usually indicates that there is an HTTP connectivity issue between the Element Management System (EMS) and the VCS/IPCS, or that there is a connectivity issue between the VCS/IPCS and the customer's web server.

---

## WatchDog Traps

The following traps are associated with the network and server, and apply to the VCS/IPCS, the EMS, the EMPS, the smpConverter, and the TTS:

- cnServerStarted (OID: .1.3.6.1.4.1.3814.1.1000)
- cnServerShutdownInit (OID: .1.3.6.1.4.1.3814.1.1001)
- cnServerBadConfigFile (OID: .1.3.6.1.4.1.3814.1.1003)
- cnProcExited (OID: .1.3.6.1.4.1.3814.1.1004)
- cnProcRestarted (OID: .1.3.6.1.4.1.3814.1.1006)
- cnSystemCheckAlert (OID: .1.3.6.1.4.1.3814.1.1008)
- cnPartialStart (OID: .1.3.6.1.4.1.3814.1.1009)

### cnServerStarted

This trap indicates that a process was started.

**Action**

None.

### cnServerShutdownInit

This trap indicates a VCS/IPCS shutdown. The shutdown can be graceful or ungraceful.

**Example**

```
ps3-chcg03.chcg03-pop.callnetcomm.net - Sever Shutdown
Initiated (Watchdog) (type = UNGRACEFUL)
ps4-chcg03.chcg03-pop.callnetcomm.net - Sever Shutdown
Initiated (PopGateway1) (type = GRACEFUL)
```

**Action**

1. Determine who performed the shutdown and why.
2. Verify that the server comes back up accordingly.

## cnServerBadConfigFile

This trap indicates that the application cannot use the configuration INI file generated by provisioning. The trap contains the file name and information about who received the bad configuration file.

### Example

```
ps1-atln01.atln01-pop.genesys.net- Downloaded remote config INI file is nonusable and the Product has
to fallback on the last known good config file. Process [ini = MyApp] failed to start from config
[<directory server>\CN\temp\vb18.tmp]: 0x80040490
```

### Action

1. Verify that the dispenser is storing a valid configuration file that the server can use.
2. Check for connectivity issues between the server and the dispenser that contains the INI file.
3. Look through the configuration INI file and try to determine the cause of the failure.
4. If you cannot determine the cause, escalate the problem to Genesys Technical Support.

## cnProcExited

This trap indicates that WatchDog cannot restart a particular process and that the process is no longer running.

### Example

```
pm1.genesys.net- Process Exited! Watchdog cannot restart
Process [name = MyCustomer, INI section = MyCustomer] has exited
ps5-brbn04.brbn04-pop.genesys.net - Process Exited!
Watchdog cannot restart PopGateway1
```

### Action

1. Determine whether this process should be running and whether it is a production application. If it should be running:
  - Try to restart the process manually from the server GUI (graphical user interface) or push the application back out using provisioning.
  - Escalate this issue for further troubleshooting.

## cnProcRestarted

This trap indicates that a process was restarted.

Action

None.

## cnSystemCheckAlert

WatchDog monitors CPU usage and the memory usage of each process, and it issues an alert if they reach an unacceptable level.

To get a `cnSystemCheckAlert` trap, make sure that the available physical system memory falls below 16MB.

Example

```
ps5-hstn05.hstn05-pop.genesys.net System Alert,  
PopGateway1 exceeded memory threshold (520,000K)
```

Action

1. Restart the server after gracefully shutting down WatchDog.
2. Log all work in order to capture trends in servers that have chronic problems.

## cnPartialStart

This trap is sent by the WatchDog process when WatchDog is not able to start all of the processes in the startup list, but it does not terminate the already started processes or go down itself.

Action

Check the WatchDog logs to debug processes that did not start.

---

## Text-to-Speech Traps

These text-to-speech (TTS) traps apply to the TTS component. These traps are dependent upon the MRCP server.

- `cnTTSTrap` (OID: .1.3.6.1.4.1.3814.19.0.1000)
- `cnTTSRequestAbandoned` (OID:.1.3.6.1.4.3814.19.0.1001)
- `cnTTSRequestRejected` (OID:.1.3.6.1.4.3814.19.0.1002)
- `cnTTSMaxSizeExceeded` (OID: .1.3.6.1.4.1.3814.19.0.1003)
- `cnTTSNoLangSupport` (OID: .1.3.6.1.4.1.3814.19.0.1004)

- cnTTSTRequestInvalid (OID:.1.3.6.1.4.1.3814.19.0.1005)
- cnTTSTConversionError (OID: .1.3.6.1.4.1.3814.19.0.1006)
- cnTTSTInitializationError (OID: .1.3.6.1.4.1.3814.19.0.1007)
- cnTTSTWriteError (OID:.1.3.6.1.4.1.3814.19.0.1008)
- cnTTSTServerError (OID: .1.3.6.1.4.1.3814.19.0.1009)
- cnTTSTRequestTimeout (OID:.1.3.6.1.4.1.3814.19.0.1010)
- cnTTSTRequestConnFailure (OID:.1.3.6.1.4.1.3814.19.0.1011)
- cnTTSTErrorResponse (OID:.1.3.6.1.4.1.3814.19.0.1012)
- cnTTSTErrorEvent (OID:.1.3.6.1.4.1.3814.19.0.1013)

## cnTTSTrap

This trap indicates an error in TTS conversion.

## cnTTSTRequestAbandoned

This trap indicates that a TTS request was abandoned because it timed out.

## cnTTSTRequestRejected

This trap indicates that a TTS request was rejected because all engines were busy.

### Action

The TTS server is overutilized. Divert some TTS traffic to other TTS servers.

## cnTTSTMaxSizeExceeded

This trap indicates that the TTS request was rejected because the maximum text size was exceeded.

### Action

Limit the TTS text to the `MaxTextSize` for this process in the application.

## cnTTSNoLangSupport

This trap indicates that a TTS request was rejected because the specified language is not supported by the TTS server.

---

Note: MRCP specifies a completion-cause of 005 to indicate language unsupported. GVP support of the cnTTSNoLangSupport trap is dependent on the MRCP TTS server sending this code.

---

### Action

Determine whether there is another server that supports this language, and divert the TTS traffic for this voice application accordingly.

## cnTTSRequestInvalid

This trap indicates that a TTS request was rejected because not all of the required information for TTS conversion was supplied.

### Action

Check the provisioning for this voice application and make sure that the TTS URL is valid.

## cnTTSConversionError

This trap indicates that a TTS request was rejected because there was a conversion error.

---

Note: MRCP specifies a completion-cause of 002 to indicate parse failure. GVP support of the cnTTSConversionError trap is dependent on the MRCP TTS server sending this code.

---

### Action

Check the trap description for more information.

## cnTTSInitializationError

This trap indicates that an error occurred while initializing the TTS engine.

### Action

Check the TTS configuration file for invalid information.

## **cnTTSTWriteError**

This trap indicates a failure when writing voice data back to the TTS server.

## **cnTTSServerError**

This trap indicates that an error occurred with the MRCP TTS server.

### **Action**

Check the MRCP server; it might not be working properly. Refer to the RTSP Specification (RFC 2326) for the Status Code and Reason Phrase section. For additional assistance, consult with your third-party MRCP TTS server vendor.

## **cnTTSTRequestTimeout**

This trap indicates that the TTS request sent to the MRCP server timed-out.

### **Action**

Check the status of the MRCP server. The MRCP server waiting for the response might be overloaded or might need to be restarted. For additional assistance, consult your third-party MRCP server vendor.

## **cnTTSTRequestConnFailure**

This trap indicates that the TTS request was not sent to the MRCP server because of a connection failure.

### **Action**

Check the status of the MRCP server. Make sure that the MRCP server is running and that the machine can be pinged.

## **cnTTSTErrorResponse**

This trap indicates that the MRCP server returned an error response.

### **Action**

Check the status of the MRCP server and the error code that was received. Refer to the MRCP v1 (RFC 4463) for the MRCP status codes and their corresponding description. For additional assistance, consult with your third-party MRCP server vendor.

## cnTTSErrorEvent

This trap indicates that the MRCP server returned an error event.

### Action

Check the status of the MRCP server and the completion-cause that was received for the SPEAK-COMPLETE MRCP event. Refer to the MRCP v1 (RFC 4463) for the completion cause codes and their corresponding descriptions. For additional assistance, consult your third-party MRCP server vendor.

---

## Cisco Queue Adapter Traps

The Cisco Queue Adapter sends the following traps:

- cnQAdapterStartedTrap (OID: .1.3.6.1.4.1.3814.9.0.1000)
- cnQAdapterDownTrap (OID: .1.3.6.1.4.1.3814.9.0.1001)
- cnQAdapterNetworkFailureTrap (OID: .1.3.6.1.4.1.3814.9.0.1002)
- cnQAdapterHeartbeatFailureTrap (OID: .1.3.6.1.4.1.3814.9.0.1003)
- cnQAdapterFailureEventTrap (OID: .1.3.6.1.4.1.3814.9.0.1004)
- cnQAdapterNetworkUpTrap (OID: .1.3.6.1.4.1.3814.9.0.1005)
- cnQAdapterPGTimeout (OID: .1.3.6.1.4.1.3814.9.0.1006)
- cnQAdapterPGNotAvail (OID: .1.3.6.1.4.1.3814.9.0.1007)
- cnQAdapterInvalidRemoteAddress (OID: .1.3.6.1.4.1.3814.9.0.1008)
- cnQAdapterInvalidECCVariable (OID: .1.3.6.1.4.1.3814.9.0.1009)

## cnQAdapterStartedTrap

This trap indicates that the Queue Adapter process has started.

## cnQAdapterDownTrap

This trap indicates that the Queue Adapter process has gone down.



## cnQAdapterNetworkFailureTrap

This trap indicates that the Queue Adapter has lost its connection to the Peripheral Gateway (PG) at the customer site. If this is a temporary failure, the Queue Adapter Network Up trap should immediately follow this trap. Depending on the call flow type of the voice application, Genesys's call handling can be affected in the following ways:

- Voice Application–Controlled Voice Application—Call Routing to the ACD will be affected.
- ICM-Controlled Voice Application—Voice Application handling will be affected.

### Action

If the customer has not already informed the Network Operations Center (NOC) about scheduled maintenance:

1. Find the customer name from the trap description.
2. Note the IP address of the Queue Adapter machine. (This is useful for testing IP connectivity.)
3. Escalate the problem to Genesys Technical Support.
4. Ping the PG machine and establish connectivity.
5. In the Queue Adapter GUI, make sure that the connection status is Connected.
6. Identify one voice application to route the call through the same Queue Adapter machine.

## cnQAdapterHeartbeatFailureTrap

This trap indicates that the Queue Adapter has lost connectivity with the Voice Response Unit PG and the connection can not be reestablished.

### Action

1. Escalate the problem to Genesys Technical Support.
2. If necessary, inform the customer.
3. Ping the PG machine and establish connectivity.
4. In the Queue Adapter GUI, make sure the connection status is Connected.
5. Identify one voice application to route the call through the same Queue Adapter machine.
6. To resolve the issue, involve the voice application developers and the ICM script developers.

## cnQAdapterFailureEventTrap

This trap indicates that the ICM has rejected Genesys's call routing request, which indicates that the ICM is not configured to have an application. This trap also indicates that IP/Voice Response Unit PG connectivity is fine.

### Action

1. Note the voice application name, toll-free number, and event ID.
2. Escalate the problem to Genesys Technical Support.
3. Inform the customer.

## cnQAdapterNetworkUpTrap

This trap indicates that the Voice Response Unit PG at the customer site has reestablished the connection with the Queue Adapter. Unless this is the first time that the connection has been brought up, this trap should be preceded by a cnQAdapterNetworkFailure trap.

### Action

1. Ping the machine and make sure that it is active.
2. In the Queue Adapter GUI, make sure that the connection status is Connected.
3. Identify one voice application to route the call through the same Queue Adapter machine.
4. Check with the customer to learn whether they were contacted for the QAdapterNetworkFailure.

## cnQAdapterPGTimeout

This trap indicates that the Queue Adapter timed out when trying to send a NEW\_CALL request to the customer's PG.

### Example

```
ga2-ncs.ncs.genesys.net- QAdapater PG Timeout (GeoTel_Cust) GENESYS  
ga2-ncs2.ncs2.genesys.net - QAdapater PG Timeout (GeoTel_Cust) GENESYS
```

### Action

1. Open the Queue Adapter GUI for both the primary and the backup Queue Adapters.
2. Make sure that the connection status is Connected.

3. If the status is Not Connected, contact the customer. They may have to reset their PGs.
4. If the status is Connected, check the network for delays, and if delays are occurring, ping and trace them.

## cnQAdapterPGNotAvail

This trap is sent if the PG is down, or when the Queue Adapter receives a new call indication from the CFA before the PG establishes a connection with the Queue Adapter.

### Example

```
ga2-ncs2.ncs2.genesys.net - QAdapater PG NotAvailabLe GeoTel_EXPO:GENESYS
```

### Action

The PG is responsible for making the connection to the Queue Adapter. If this trap occurs, notify the customer so that they can either configure the PG to establish connectivity to the Queue Adapter, or power up the PG if it is down.

## cnQAdapterInvalidRemoteAddress

This trap is sent when the generic Queue Adapter receives a message from an invalid remote address.

## cnQAdapterInvalidECCVariable

GVP generates this trap when the Queue Adapter receives an invalid extended control variable from the customer's voice application because the voice application is not configured to accept the variable.

Exchange Carrier Code (ECC) variables are configured in three places:

- ICM configuration
- Queue Adapter
- Voice application

This trap indicates that the variable name is mismatched in one of these configurations.

### Example

```
ga1-adn.ncs.adn.genesys.net QAdapter Invalid ECC Variable GeoTel_Cust genesys CustApp {EFF8E3D9-B77C-11D5-BDDF-FF9B40343496} application: CustApp ECC variable: VOXFILEDIR - Notify App Dev
```

### Action

1. Note the ECC variable name.
2. Check the accuracy of the variable name in the provisioning system.
3. If the variable name is inaccurate, inform the voice application developer, the ICM script developer and provisioning, and correct the name where necessary.
4. If the provisioning system is changed, you may have to restart the Queue Adapter process for the particular customer in order for these changes to take effect.

---

## IVR Server Client Traps

The IVR Server Client sends the following traps:

- cnIQAStratedTrap (OID: .1.3.6.1.4.1.3814.32.1000)
- cnIQADownTrap (OID: .1.3.6.1.4.1.3814.32.1001)
- cnIQANetworkFailureTrap (OID: .1.3.6.1.4.1.3814.32.1002)
- cnIQAStratedTrap (OID: .1.3.6.1.4.1.3814.32.1003)
- cnIQAFailureEventTrap (OID: .1.3.6.1.4.1.3814.32.1004)
- cnIQANetworkUpTrap (OID: .1.3.6.1.4.1.3814.32.1005)
- cnIQASVRTimeout (OID: .1.3.6.1.4.1.3814.32.1006)
- cnIQASVRNotAvail (OID: .1.3.6.1.4.1.3814.32.1007)
- cnIQANetworkUpTrap (OID: .1.3.6.1.4.1.3814.1008)

### cnIQAStratedTrap

This trap is sent when an IVR Server Client starts.

### cnIQADownTrap

This trap is sent when an IVR Server Client gracefully shuts down.

### cnIQANetworkFailureTrap

This trap indicates that a network connection error has occurred and an IVR Server Client has closed the connection.

### Action

Check whether the IVR Server is up and running, and that there is connectivity between IVR Server Client and IVR Server.

## **cnIQAHeartbeatFailureTrap**

This trap is sent when the IVR Server Client fails to receive the heartbeat message for the specified interval from the IVR Server.

## **cnIQAFailureEventTrap**

This trap is reserved for future use.

## **cnIQANetworkUpTrap**

This trap is sent when an IVR Server Client establishes a new connection to an IVR Server.

## **cnQAISVRTimeout**

This trap is reserved for future use.

## **cnQAISVRNotAvail**

This trap is reserved for future use.

## **cnQAInvalidRemoteAddress**

This trap is reserved for future use.

---

# EventC Traps

The EventC generates only one trap:

- CnEventCTrap (OID: .1.3.6.1.4.1.3814.25.0.1000)

## **CnEventCTrap**

This trap indicates a problem with the Events Collector.

### Action

The trap generated by the EventC indicates the process generating the error and the error text. Go to <cn directory>/Log/<EventCProcess> and check the latest log file for the process. Usually that file provides a detailed error message and possible causes and solutions for the problem. It also mentions the action taken by the EventC (cycle aborting/proceeding).

The Element Management System GUIs of EventC will also help troubleshoot the issue.

---

Note: It is important to monitor the EventC at regular intervals to ensure that it is functioning correctly.

---

---

## H323 Traps

The following traps indicate problems with the H.323 Session Manager:

- cnH323ResourceNotAvail (OID: .1.3.6.1.4.1.3814.30.1000)
- cnH323CommFailure (OID: .1.3.6.1.4.1.3814.30.1001)
- cnH323DIDXMLERror (OID: .1.3.6.1.4.1.3814.30.1002)
- cnH323CallTransferred (OID: .1.3.6.1.4.1.3814.30.1003)
- cnH323EndpointUnreachable (OID: .1.3.6.1.4.1.3814.30.1004)

### cnH323ResourceNotAvail

This trap is sent when the H.323 Session Manager fails to reserve a resource to route the call.

#### Action

1. Determine whether the Resource Manager is running.
2. Determine whether the request resource is configured in the database.
3. Determine whether all resources are used up.

### cnH323CommFailure

This trap is sent when the H.323 Session Manager fails to contact the Resource Manager.

#### Action

Determine whether the Resource Manager is running.

## cnH323DIDXMLError

This trap is sent when the H.323 Session Manager fails to fetch the DID.XML page.

### Action

1. Determine whether the DID XML URL is configured correctly.
2. Determine whether the server where the DID XML page resided is running.

## cnH323CallTransferred

This trap is sent when the H.323 Session Manager dials out to the CCErrTelNum.

### Action

Check the previously received trap(s) in order to diagnose the problem.

## cnH323EndpointUnreachable

This trap is sent when the H.323 Session Manager fails to contact the remote endpoint (Gatekeeper, Media Gateway, the IPCS, and so on).

### Action

1. Determine whether the remote endpoint is running.
2. Determine whether the remote address and port are configured correctly.

---

# Resource Manager Traps

The following trap indicates problems with the Resource Manager:

- cnRMDatabaseError (OID: .1.3.6.1.4.1.3814.26.1000)

## cnRMDatabaseError

This trap is sent when the Resource Manager encounters a database error.

### Action

Determine whether the database server is running.

---

# SIP Session Manager Traps

The following traps indicate problems with the SIP Session Manager:

- cnSSMResourceNotAvail (OID: .1.3.6.1.4.1.3814.23.1000)
- cnSSMCommFailure (OID: .1.3.6.1.4.1.3814.23.1001)
- cnSSMDatabaseError (OID: .1.3.6.1.4.1.3814.23.1002)
- cnSSMDIDXMLERror (OID: .1.3.6.1.4.1.3814.23.1003)
- cnSSMCallTransferred (OID: .1.3.6.1.4.1.3814.23.1004)
- cnNetworkError (OID: .1.3.6.1.4.1.3814.2.0.1013)

## cnSSMResourceNotAvail

This trap is sent when the SIP Session Manager fails to reserve a resource to route the call.

### Action

1. Determine whether the Resource Manager is running.
2. Determine whether the request resource is configured in the database.
3. Determine whether all resources are used up.

## cnSSMCommFailure

This trap is sent when the SIP Session Manager fails to contact the Resource Manager.

### Action

Determine whether the Resource Manager is running.

## cnSSMDatabaseError

This trap is sent when the SIP Session Manager encounters a database error.

### Action

Determine whether the database server is running.



## cnSSMDIDXMLError

This trap is sent when the SIP Session Manager fails to fetch the DID.XML page.

### Action

1. Determine whether the DID XML URL is configured correctly.
2. Determine whether the server where the DID XML page resided is running.

## cnSSMCallTransferred

This trap is sent when the SIP Session Manager dials out to the CCErrTelNum.

### Action

Check the previously received trap(s) in order to diagnose the problem.

## cnNetworkError

This trap is sent when the HTTP request from the SIP Session Manager to the recipient process via Page Collector fails.

### Action

1. Check whether the Page Collector process is running.
2. Check whether the Web Server is running.

---

## EMPS Traps

The following traps indicate problems with the Element Management Provisioning System (EMPS):

- cnVWPSDBConnectError (OID: .1.3.6.1.4.1.3814.28.0.1000)
- cnVWPServerNotReachableError (OID: .1.3.6.1.4.1.3814.28.0.1001)
- cnVWPSLDAPConnectError (OID: .1.3.6.1.4.1.3814.28.0.1002)
- cnVWPSAppXMLDeploymentError (OID: .1.3.6.1.4.1.3814.28.0.1003)
- cnVWPSDIDXMLDeploymentError (OID: .1.3.6.1.4.1.3814.28.0.1004)
- cnSPSDBConnectError (OID: .1.3.6.1.4.1.3814.28.0.1005)
- cnSPSserverNotReachableError (OID: .1.3.6.1.4.1.3814.28.0.1006)
- cnSPSDataStoreConnectError (OID: .1.3.6.1.4.1.3814.28.0.1007)

- cnSPSAppXMLDeploymentError (OID: .1.3.6.1.4.1.3814.28.0.1008)
- cnSPSDIDXMLDeploymentError (OID: .1.3.6.1.4.1.3814.28.0.1009)

## cnVWPSDBConnectError

The EMPS sends this trap when it fails to connect to the server database.

### Action

1. Check the EMPS configuration. Try connecting to the specified database using the specified parameters.
2. Determine whether the specified database has the correct table structure.

## cnVWPSSEServerNotReachableError

The EMPS sends this trap when it is unable to contact a server.

### Action

1. Check the network connection to the server from the EMPS machine.
2. Make sure that WatchDog is running on the remote server.
3. Make sure that IIS service is running on the remote server.

## cnVWPSLDAPConnectError

The EMPS sends this trap when it cannot connect to the backend directory server.

### Action

Determine whether the directory information in GVP.ini and the information supplied by the user are accurate.

## cnVWPSAppXMLDeploymentError

The EMPS sends this trap when it cannot deploy APP.XML files to the dispenser.

### Action

1. Determine whether the dispenser machine is running the FTP service.
2. Determine whether the FTP information in the EMPS is correct.
3. Check if the FTP service is running on the dispenser.

## cnVWPSDIDXMLDeploymentError

The EMPS sends this trap when it fails to deploy DID.XML files.

### Action

1. Determine whether the dispenser machine is running the FTP service.
2. Determine whether the FTP information in the EMPS is correct.
3. Check if the FTP service is running on the dispenser.

## cnSPSDBConnectError

The SPS sends this trap when it fails to connect to its SQL Server or Oracle database.

### Action

1. Check the SPS configuration. Try to connect to the database manually by using parameters specified in the SPS.
2. Check whether the database server is down or whether the machine is inaccessible.
3. Check whether the specified database has the correct table structure.

## cnSPSServerNotReachableError

The SPS sends this trap when it is unable to contact to the WatchDog process on a GVP server.

### Action

1. Check the network connection to the GVP server from the SPS machine.
2. Make sure that WatchDog is running on the remote server.

## cnSPSDataStoreConnectError

The SPS sends this trap when it is unable to connect to the backend datastore server.

### Action

Check for the datastore information in the SPS section of the `gvp.ini` file to determine the details of the datastore that is being used by the SPS. Try to manually connect to the datastore using the information that is present in the `gvp.ini` file.

## cnSPSAppXMLDeploymentError

The SPS sends this trap when it is unable to deploy `app.xml` files to the Dispenser.

### Action

1. Check if the Dispenser machine is running.
2. Check if the Dispenser machine has a virtual directory created for the Dispenser folder location.

## cnSPSDIDXMLDeploymentError

The SPS sends this trap when it fails to deploy `dtd.xml` files to the Dispenser.

### Action

1. Check whether the Dispenser machine is running.
2. Check whether the Dispenser machine has a virtual directory created for the Dispenser folder location.

---

## Call Flow Assistant Traps

The following trap indicates a problem with the Call Flow Assistant (CFA):

- `cnCCMQATimeOutTrap` (OID: `.1.3.6.1.4.1.3814.14.0.1007`)

## cnCCMQATimeOutTrap

The CFC Manager generates this trap when the Queue Adapter times out.

---

## Arbitrator Traps

The following trap indicates problems with the Arbitrator:

- `cnArbitratorError` (OID: `.1.3.6.1.4.1.3814.37.1000`)

## cnArbitratorError

This trap is sent when the Arbitrator encounters a critical error.

**Action**

- Check the Resource Manager database configuration.
- Verify that the Arbitrator ports are not used by another process. The ports used by the Arbitrator can be found in the `gvp.ini` file.

---

## Voice Circuit Traps

These Voice Circuit and Data traps apply to the VCS.

- `cnDChannelDown` (OID: .1.3.6.1.4.1.3814.4.0.1000)
- `cnDChannelUp` (OID: .1.3.6.1.4.1.3814.4.0.1001)
- `cnBChannelDown` (OID: .1.3.6.1.4.1.3814.4.0.1002)
- `cnBChannelUp` (OID: .1.3.6.1.4.1.3814.4.0.1003)
- `cnPortStatusChanged` (OID: .1.3.6.1.4.1.3814.4.0.1004)
- `cnLinkErrorTrap` (OID: .1.3.6.1.4.1.3814.4.0.1005)
- `cnLinkErrorOKTrap` (OID: .1.3.6.1.4.1.3814.4.0.1006)

### **cnDChannel Up/cnDChannelDown**

This trap indicates that the WatchDog has determined that the D-Channel on the voice circuit has come up or down. When the D-Channel is down, the server cannot accept calls on that circuit.

**Example**

```
vwcs1.genesys.com - DChannel Down (popgateway1) :N_dtiB1:P_isdn :N_dtiB1:P_
isdn: ISDN D-Channel DOWN
```

```
vwcs2.genesys.com - DChannel Up (popgateway1) :N_dtiB1:P_isdn :N_dtiB1:P_isdn: ISDN D-Channel UP
```

**Action**

- Determine if this D-Channel has been down more than once in the previous six hours.
- To stop calls routing to this gateway, gracefully shut down the corresponding `PopGateway1` or `PopGateway2`.
- Report the problem to the circuit provider for further troubleshooting.

## cnBChannel Up/cnBChannelDown

B-Channel Up/Down traps usually come in sets of 23 (that is, 23 B-Channels per T1).

### Example

```
vwcs1.genesys.com - BChannel Down (popgateway1) :N_dtiB1T7:P_isdn Port [:N_dtiB1T7:P_isdn] state
change: OutOfService
```

```
vwcs1.genesys.com - BChannel Up (popgateway1) :N_dtiB1T4:P_isdn Port [:N_dtiB1T4:P_isdn] state
change: InService
```

### Action

Restore service either by restarting Dialogic or working with the carrier to solve the problem.

## cnPortStatusChanged

This trap is sent when the port status changed.

### Action

None.

## cnLinkErrorTrap/cnLinkErrorOKTrap

This is a T1/E1 trap indicating a T1/E1 is down or back up.

### Example

```
vwcs1.genesys.com - LinkError (popgateway1) :N_dtiB1:P_isdn:N_dtiB1:P_isdn: T1/E1 Loss Of Sync
```

```
vwcs2.genesys.com - LinkError OK (popgateway1) :N_dtiB1:P_isdn Board UNBLOCKED:Operator intercept
detected
```

```
vwcs2.genesys.com - LinkError OK (popgateway1) :N_dtiB1:P_isdn Board UNBLOCKED:Event caused by call
control library specific failure
```

### Action

- Determine if the same D-Channel has been down more than once in the previous six hours.
- If the circuit appears to be bouncing frequently, shutdown the corresponding PopGateway1 or PopGateway2 to prevent calls from landing on the circuit.
- Report the problem to the carrier for further troubleshooting. When reporting the problem, quote the circuit ID.

---

# Outbound Notification Manager Traps

The following traps indicate problems with the Outbound Notification (OBN) Manager:

- **cnOBNCFAMachineNotReachable** (OID: .1.3.6.1.4.1.3814.38.0.1000)
- **cnOBNInvalidFailureURL** (OID: .1.3.6.1.4.1.3814.38.0.1001)
- **cnOBNDbConnDown** (OID: .1.3.6.1.4.1.3814.38.0.1002)
- **cnOBNOCSEventProcessingFailed** (OID: .1.3.6.1.4.1.3814.38.0.1003)
- **cnOBNOCSEventProcessedFailed** (OID: .1.3.6.1.4.1.3814.38.0.1004)
- **cnOBNOCSEventAddRecordFailed** (OID: .1.3.6.1.4.1.3814.38.0.1005)
- **cnOBNOCSConnectionDown** (OID: .1.3.6.1.4.1.3814.38.0.1006)

## **cnOBNCFAMachineNotReachable**

This trap is sent when the OBN Manager process fails to contact the Call Flow Assistant (CFA) machine.

### **Action**

Check the network connection and the PopGateway process that is running on that CFA machine.

## **cnOBNInvalidFailureURL**

This trap is sent when the OBN Manager process fails to contact the Failure URL of the trigger application.

### **Action**

Validate the Failure URL of the application and make sure that the trigger application has the correct URL sent in the request or in provisioning.

## **cnOBNDbConnDown**

This trap is sent when the OBN Manager process fails to connect to the database where all the requests are stored.

### **Action**

- Check the .ini file and verify that the database configuration parameters are correct.
- Verify that the database is configured and the service is started.

## cnOBNOCSSEventProcessingFailed

This trap is sent when the OBN Manager process fails to send the intermediate response to OCS, and both the primary and secondary OCS instances are down.

### Action

Verify that the primary and secondary OCS servers are configured correctly, and that they are started.

## cnOBNOCSSEventProcessedFailed

This trap is sent when the OBN Manager process fails to send the Call Processed response to OCS, and both the primary and secondary OCS instances are down.

### Action

Verify that the primary and secondary OCS servers are configured correctly, and that they are started.

## cnOBNOCSSEventAddRecordFailed

This trap is sent when the OBN Manager process fails to send the Add Record response to OCS, and both the primary and secondary OCS instances are down.

### Action

Verify that the primary and secondary OCS server are configured correctly, and that they are started.

## cnOBNOCSConnectionDown

This trap is sent when the connection between the OBN Manager and OCS is dropped.

### Action

- Check for network connectivity.
- Restart OCS.



---

## Hunt List Manager Traps

The following traps indicate problems with the Hunt List Manager:

- cnHLMOutOfService (OID: .1.3.6.1.4.1.3814.39.0.1000)
- cnHLMInService (OID: .1.3.6.1.4.1.3814.39.0.1001)
- cnHLMBadConfiguration (OID: .1.3.6.1.4.1.3814.39.0.1002)

### **cnHLMOutOfService**

This trap is sent when a resource server is marked out-of-service.

#### **Action**

Check if this resource server is operational.

### **cnHLMInService**

This trap is sent when an out-of-service resource server is marked back as in service.

### **cnHLMBadConfiguration**

This trap is sent when the primary resource group is empty.

#### **Action**

Check the configuration of the primary resource group of this server.

---

## ASR Traps

The following traps indicate problems with the MRCP ASR Server:

- cnASRServerError (OID: .1.3.6.1.4.1.3814.40.0.1000)
- cnASRRequestTimeout (OID:.1.3.6.1.4.1.3814.40.0.1001)
- cnASRRequestConnFailure (OID:.1.3.6.1.4.1.3814.40.0.1002)
- cnASRErrorResponse (OID:.1.3.6.1.4.1.3814.40.0.1003)
- cnASRErrorEvent (OID:.1.3.6.1.4.1.3814.40.0.1004)

## cnASRServerError

This trap indicates that an error has occurred with the MRCP ASR server.

### Action

Check the MRCP server; it might not be working properly. Refer to the RTSP Specification (RFC 2326) for the Status Code and Reason Phrase section. For additional assistance, consult with your third-party MRCP server vendor.

## cnASRRequestTimeout

This trap indicates that the ASR request sent to the MRCP server timed-out.

### Action

Check the status of the MRCP server. The MRCP server waiting for the response might be overloaded or might need to be restarted. For additional assistance, consult with your third-party MRCP server vendor.

## cnASRRequestConnFailure

This trap indicates that the ASR request was not sent to the MRCP server because of a connection failure.

### Action

Check that status of the MRCP server. Make sure that the MRCP server is running and that the machine can be pinged.

## cnASRErrorResponse

This trap indicates that the MRCP server returned an error response.

### Action

Check the status of the MRCP server and the error code that was received. Refer to the MRCP v1 (RFC 4463) for the MRCP status codes and their corresponding descriptions. For additional assistance, consult your third-party MRCP server vendor.

## cnASRErrorEvent

This trap indicates that the MRCP server returned an error event.

### Action

Check the status of the MRCP server and the completion-cause that was received for the RECOGNITION-COMPLETE MRCP event. Refer to the MRCP v1 (RFC 4463) for the completion cause codes and their corresponding descriptions. For additional assistance, consult with your third-party MRCP server vendor.

---

## ASR Log Manager Traps

The following traps indicate problems with the ASR Log Manager:

- cnFailedToContactBWM (OID: .1.3.6.1.4.1.3814.43.1000)

## cnFailedToContactBWM

This trap occurs when the ASR Log Manager fails to contact the Bandwidth Manager.

### Action

Check the connectivity of ASR Log Manager to BWM.





## Appendix

# A

## Troubleshooting Tools

This appendix provides information about third-party tools that might be useful in assisting you with troubleshooting Genesys Voice Platform issues.

This appendix contains the following sections:

- [Ethereal, page 85](#)
- [System Tools, page 85](#)
- [Nuance, page 86](#)
- [Softphone, page 86](#)
- [PCClient.exe—Page Collector Client Tool, page 86](#)
- [Curl, page 86](#)
- [Dialogic Diagnostic Tools, page 87](#)

---

### Ethereal

Ethereal is a network protocol analyzer that captures packets from a number of different devices. For GVP troubleshooting, packets are captured most frequently on the Network Interface Card (NIC) of the host servers for IP Call Manager (IPCM) and IP Communication Server (IPCS). Although Ethereal supports over 700 protocols, for call flow analysis only, SIP, H.323 and RTP are typically investigated. Ethereal is freeware and you can obtain it from the Ethereal web site at [www.ethereal.com](http://www.ethereal.com).

---

### System Tools

The two Windows built-in tools available to monitor the system performance are Perfmon and Task Manager. You can use these tools for GVP troubleshooting by monitoring CPU usage, memory usage, and network traffic.

---

## Nuance

You can test the SpeechWorks Media Server install by using the included `mrpcClient`. Install the client on a Windows server and run the sample application from the command line. This generates an `mrpc` log output file, which you can compare to the log in the appendix of the Nuance installation manual.

---

## Softphone

Approximately 50 different softphones are available on the internet. A commonly used variation is SJphone, which is available from SJ Labs web site; [www.sjlabs.com](http://www.sjlabs.com). SJphone supports SIP and H.323 messaging. You must have a sound card, microphone, and speakers to use in conjunction with a softphone. You can use SJphone to generate calls to the GVP IP environment to ensure correct call flow.

---

## PCClient.exe—Page Collector Client Tool

PC Client is a simple HTTP client that uses GVP's Page Collector for performing page fetches. It is useful for testing dynamically generated VoiceXML application code, and performs both HTTP POSTS and GETS. It is included in the GVP core installation (for example, in the `CN\bin` directory).

### Basic Usage:

```
PCClient [-p <file>] <URL>
```

### Example:

To perform an HTTP GET:

```
pcclient http://localhost/SampleApp/test.asp
```

To perform an HTTP POST:

```
pcclient -p sample.txt http://localhost/SampleApp/test.asp
```

---

## Curl

Curl is a command line tool for transferring files with URL syntax. It supports FTP, FTPS, HTTP, HTTPS, GOPHER, and TELNET. It is useful for checking HTTP cache headers. You can find this tool on the Curl website; <http://curl.haxx.se/>.

Example for returning only the HTTP Header:

```
C:\> curl -I http://localhost/SampleApp/TestGrammar.grxml
```

---

Note: The -I is an upper case letter i.

---

---

## Dialogic Diagnostic Tools

Dialogic SR 6.0 includes several useful diagnostic tools. Most of the tools run only on the DM3 series boards. All Dialogic tools are located in the `\Dialogic\bin` directory.

- **PSTNDiag**—This is a GUI tool used for checking board, trunk, and channel status.
- **CASTrace**—This is a CMD line tool used to trace CAS signaling bits.
- **ISDNTrace**—This is a CMD line tool used to trace the ISDN D-Channel.

More information on the tools can be found in the following documents provided by Intel:

- *Intel Dialogic System Software for DM3 Architecture Products on Windows*
- *Dialogic Universal Hardware Diagnostics Guide*







## Appendix

# B Trap Filtering

This appendix describes how to configure the trap filtering option in Genesys Voice Platform (GVP).

This appendix contains the following sections:

- [Overview, page 89](#)
- [Configuring Trap Filters, page 89](#)
- [Example INI File, page 90](#)

---

## Overview

The trap filtering option controls the trap volume so that flooding of traps does not occur. The filter is .ini based and is attached to the NetMgt process to examine each trap that passes through it. Based on some configurable filters, it can filter out specific traps.

---

## Configuring Trap Filters

1. In the Element Management Provisioning System (EMPS), go to Servers > Core Services <hostname>, click NetMgt, and then click Edit Node.
2. In the Trap Filter Config URL text box, provide the URL of the .ini file that contains the trap filter details.

---

Note: If the Trap Filter Config URL is present, GVP downloads the file, and then reads the filters from that file. If the Trap Filter Config URL is not present, GVP reads the filters from the local .ini file. In either case, the filters must be present in the NetMgt section of the .ini file.

---

3. Click **Submit** to save the configuration.

---

## Example INI File

```
[NetMgt]
...
...
TrapFilterConfigURL=http://noc-ncs.ncs.genesys.net/INI/TrapFilter.ini
TrapFilter1 = TrapName=*&RatePerSec=2/3&
                LevelUpTraps=5&LevelDownSecs=30&SkipCount=15
TrapFilter2 = TrapName=cnIVRErrorTrap&RatePerSec=5/2&
                LevelUpTraps=5&LevelDownSecs=30&SkipCount=20
TrapFilter3 = TrapName=cnIVRErrorTrap&FieldName1=cnCustName&
                FieldValue1=Sears&RatePerSec=3&
                LevelUpTraps=5&LevelDownSecs=30&SkipCount=30
TrapFilter4 = TrapName=cnIVRErrorTrap&FieldName1=cnCustName&
                FieldValue1=Sears&FieldName2=cnAppName&
                FieldValue2=DieHard&RatePerSec=0&
                LevelUpTraps=5&LevelDownSecs=30&SkipCount=15
...
```

## Trap Filter Parameters

Each trap filter has two components: a match criteria and an action. The `TrapName` and `FieldValue` constitute the match criteria. The `RatePerSec`, `LevelUpTraps`, `LevelDownSecs` and `SkipCount` dictate the action.

---

Note: `TrapName` is the only parameter that accepts a wildcard.

---

The filters behave as OR filters. When a trap arrives, it is matched from the most specific to the most generic, or until a match is found, whichever occurs first. A filter that contains two `FieldValue` parameters is more specific than a filter with one `FieldValue` (with the same `TrapName`).

Table 2 on [page 91](#) lists the trap filter parameters and descriptions.

**Table 2: Trap Filter Parameters in the INI File**

Parameter	Description
TrapName	Applies the filter to this trap. A wildcard implies that all traps will be tested against this filter (if they do not already have a more specific match).
FieldName <i>N</i>	The name of one of the parameters that comes with the trap.
FieldValue <i>N</i>	The corresponding value of the parameter to check for.
RatePerSec = 0, n, m/n	If the trap rate goes beyond this, then the traps start getting dropped. A value of 0 implies drop everything. A value of n implies n/1, that is, n traps per second. A value of m/n implies m traps in n seconds.
LevelUpTraps = N	The filters are treated as level filters (as opposed to edge filters). The level in this case is the RatePerSec. If the trap rate exceeds the specified RatePerSec for <i>N</i> consecutive traps, subsequent traps are dropped. <b>Note:</b> A number of traps is better than a time because a large number of traps could potentially be thrown in that time.
LevelDownSecs = N	When the level (trap rate) drops below the specified limit and stays below for <i>N</i> continuous seconds, the filter state is reset and subsequent traps are allowed through. Any bobbing up and down around the rate limit will keep the filter active. <b>Note:</b> A time is better than a number of traps because it could take a long time for those traps to come through and get the filter reset.
SkipCount = N	When traps start getting dropped, send every <i>N</i> th trap. That way, NOC knows that the error is still happening and has not gone away. The <i>N</i> th trap will have its description altered to say that the last <i>N</i> traps have been skipped. If 0, then all dropped traps are skipped.





## Appendix

# C

## Trap Object IDs

This appendix lists traps and their associated Object IDs (OIDs).

This appendix includes the following sections:

- [popwd .1.3.6.1.4.1.3814.1, page 94](#)
- [popctrl .1.3.6.1.4.1.3814.2, page 94](#)
- [telemgr .1.3.6.1.4.1.3814.4, page 95](#)
- [BWM .1.3.6.1.4.1.3814.6, page 95](#)
- [Cisco Queue Adapter .1.3.6.1.4.3814.9, page 95](#)
- [Callstats .1.3.6.1.4.1.3814.12, page 96](#)
- [CFC .1.3.6.1.4.1.3814.14, page 96](#)
- [TTS .1.3.6.1.4.1.3814.19, page 97](#)
- [SSM .1.3.6.1.4.1.3814.23, page 97](#)
- [EventC .1.3.6.1.4.1.3814.25, page 98](#)
- [RM .1.3.6.1.4.1.3814.26, page 98](#)
- [VWPS \(EMPS\) .1.3.6.1.4.1.3814.28, page 98](#)
- [H323 .1.3.6.1.4.1.3814.30, page 98](#)
- [IVR Server Client .1.3.6.1.4.1.3814.32, page 99](#)
- [PM .1.3.6.1.4.1.3814.33, page 99](#)
- [Arbitrator .1.3.6.1.4.1.3814.37, page 99](#)
- [OBN Manager .1.3.6.1.4.1.3814.38, page 100](#)
- [Hunter List Manager .1.3.6.1.4.1.3814.39, page 100](#)
- [ASR .1.3.6.1.4.1.3814.40, page 100](#)
- [ASR Log Manager .1.3.6.1.4.1.3814.43, page 100](#)

---

## popwd .1.3.6.1.4.1.3814.1

cnServerStarted, <a href="#">page 58</a>	.1.3.6.1.4.1.3814.1000
cnServerShutdownInit, <a href="#">page 58</a>	.1.3.6.1.4.1.3814.1.1001
cnInvalidParameter, <a href="#">page 41</a>	.1.3.6.1.4.1.3814.1.1002
cnServerBadConfigFile, <a href="#">page 59</a>	.1.3.6.1.4.1.3814.1.1003
cnProcExited, <a href="#">page 59</a>	.1.3.6.1.4.1.3814.1.1004
cnProcRestarted, <a href="#">page 60</a>	.1.3.6.1.4.1.3814.1.1006
cnSystemCheckAlert, <a href="#">page 60</a>	.1.3.6.1.4.1.3814.1.1008
cnPartialStart, <a href="#">page 60</a>	.1.3.6.1.4.1.3814.1.1009

---

## popctrl .1.3.6.1.4.1.3814.2

cnCFCErrorTrap, <a href="#">page 42</a>	.1.3.6.1.4.1.3814.2.0.1000
cnIVRErrorTrap, <a href="#">page 42</a>	.1.3.6.1.4.1.3814.2.0.1001
cnBillingDataSendFailed, <a href="#">page 52</a>	.1.3.6.1.4.1.3814.2.0.1002
cnBillingDataDiskIOFailed, <a href="#">page 52</a>	.1.3.6.1.4.1.3814.2.0.1004
cnDialError, <a href="#">page 50</a>	.1.3.6.1.4.1.3814.2.0.1007
cnCallDropped, <a href="#">page 48</a>	.1.3.6.1.4.1.3814.2.0.1008
cnAbnormalCallTermination, <a href="#">page 50</a>	.1.3.6.1.4.1.3814.2.0.1009
cnResourceNotFound, <a href="#">page 44</a>	.1.3.6.1.4.1.3814.2.0.1010
cnBadXMLPage, <a href="#">page 45</a>	.1.3.6.1.4.1.3814.2.0.1011
cnNetworkTimeout, <a href="#">page 42</a>	.1.3.6.1.4.1.3814.2.0.1012
cnNetworkError, <a href="#">page 46</a>	.1.3.6.1.4.1.3814.2.0.1013
cnTelephonyError, <a href="#">page 47</a>	.1.3.6.1.4.1.3814.2.0.1014
cnCallTransferred, <a href="#">page 48</a>	.1.3.6.1.4.1.3814.2.0.1015

---

## telemgr .1.3.6.1.4.1.3814.4

cnDChannelDown, <a href="#">page 77</a>	.1.3.6.1.4.1.3814.4.0.1000
cnDChannelUp, <a href="#">page 77</a>	.1.3.6.1.4.1.3814.4.0.1001
cnBChannelDown, <a href="#">page 78</a>	.1.3.6.1.4.1.3814.4.0.1002
cnBChannelUp, <a href="#">page 78</a>	.1.3.6.1.4.1.3814.4.0.1003
cnPortStatusChanged, <a href="#">page 78</a>	.1.3.6.1.4.1.3814.4.0.1004
cnLinkErrorTrap, <a href="#">page 78</a>	.1.3.6.1.4.1.3814.4.0.1005
cnLinkErrorOkTrap, <a href="#">page 78</a>	.1.3.6.1.4.1.3814.4.0.1006

---

## BWM .1.3.6.1.4.1.3814.6

cnBWMXferFailed, <a href="#">page 55</a>	.1.3.6.1.4.1.3814.6.0.1000
cnBWMBadNotification, <a href="#">page 56</a>	.1.3.6.1.4.1.3814.6.0.1001
cnBWMServerDown, <a href="#">page 56</a>	.1.3.6.1.4.1.3814.6.0.1002
cnStartNotifyTrap, <a href="#">page 57</a>	.1.3.6.1.4.1.3814.6.0.1003
cnStopNotifyTrap, <a href="#">page 57</a>	.1.3.6.1.4.1.3814.6.0.1004
cnBWMQUnlockTrap, <a href="#">page 57</a>	.1.3.6.1.4.1.3814.6.0.1005
cnBWMXferDelayed, <a href="#">page 57</a>	.1.3.6.1.4.1.3814.6.0.1006

---

## Cisco Queue Adapter .1.3.6.1.4.3814.9

cnQAdapterStartedTrap, <a href="#">page 64</a>	.1.3.6.1.4.1.3814.9.0.1000
cnQAdapterDownTrap, <a href="#">page 64</a>	.1.3.6.1.4.1.3814.9.0.1001
cnQAdapterNetworkFailureTrap, <a href="#">page 65</a>	.1.3.6.1.4.1.3814.9.0.1002
cnQAdapterHeartbeatFailureTrap, <a href="#">page 65</a>	.1.3.6.1.4.1.3814.9.0.1003
cnQAdapterFailureEventTrap, <a href="#">page 66</a>	.1.3.6.1.4.1.3814.9.0.1004
cnQAdapterNetworkUpTrap, <a href="#">page 65</a>	.1.3.6.1.4.1.3814.9.0.1005
cnQAdapterPGTimeout, <a href="#">page 66</a>	.1.3.6.1.4.1.3814.9.0.1006
cnQAdapterPGNotAvail, <a href="#">page 67</a>	.1.3.6.1.4.1.3814.9.0.1007

cnQAdapterInvalidRemoteAddress, <a href="#">page 67</a>	.1.3.6.1.4.1.3814.9.0.1008
cnQAdapterInvalidECCVariable, <a href="#">page 67</a>	.1.3.6.1.4.1.3814.9.0.1009

---

## Callstats .1.3.6.1.4.1.3814.12

cnAppOUTAllPortsBusy, <a href="#">page 53</a>	.1.3.6.1.4.1.3814.12.1002
cnAppOUTAllPortsNotBusy, <a href="#">page 53</a>	.1.3.6.1.4.1.3814.12.1003
cnCustSessionAllPortsBusy, <a href="#">page 53</a>	.1.3.6.1.4.1.3814.12.1004
cnCustSessionAllPortsNotBusy, <a href="#">page 53</a>	.1.3.6.1.4.1.3814.12.1005
cnAppSessionAllPortsBusy, <a href="#">page 54</a>	.1.3.6.1.4.1.3814.12.1006
cnAppSessionAllPortsNotBusy, <a href="#">page 54</a>	.1.3.6.1.4.1.3814.12.1007

---

## CFC .1.3.6.1.4.1.3814.14

Note: Currently, only one of the traps in this category (CnCCMQATimeOutTrap) is still being generated.

---

cnCCMStarted	.1.3.6.1.4.1.3814.14.0.1000 - reserved for future use
CnCCMDown	.1.3.6.1.4.1.3814.14.0.1001 - reserved for future use
CnVRUStarted	.1.3.6.1.4.1.3814.14.0.1002 - obsolete
CnVRUDown	.1.3.6.1.4.1.3814.14.0.1003 - obsolete
CnPremisesNotResp	.1.3.6.1.4.1.3814.14.0.1004 - obsolete
CnAllPortsBusy	.1.3.6.1.4.1.3814.14.0.1005 - obsolete
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cnTTSTServerError, <a href="#">page 63</a>	.1.3.6.1.4.1.3814.19.0.1009
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