



Cisco VG248 Analog Phone Gateway Version 1.0(2) Release Notes

November 30, 2001

These release notes are for use with the Cisco VG248 Analog Phone Gateway with software version 1.0(2). The VG248 enables you to integrate analog telephony devices with Cisco CallManager IP telephony systems.

These release notes provide the following information:

- [Documentation Roadmap, page 2](#)
- [Resolved Caveats, page 3](#)
- [Open Caveats, page 7](#)
- [Obtaining Documentation, page 18](#)
- [Obtaining Technical Assistance, page 19](#)



Corporate Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Copyright © 2001. Cisco Systems, Inc. All rights reserved.

Documentation Roadmap

Table 1 provides summaries and locations of available documents for the Cisco VG248 Analog Phone Gateway.

Table 1 Available Documentation for the Cisco VG248

Document Title	Description	Where to Find It
<i>Cisco VG248 Analog Phone Gateway Hardware Installation Guide</i>	Provides the site preparation, safety information, and hardware installation and setup instructions to safely install the VG248.	<ul style="list-style-type: none"> In the box—A printed version of this document ships with the product Online at Cisco.com—HTML and PDF versions of this document are available from Cisco.com: http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/hard_in_s/index.htm By ordering—See the “Ordering Documentation” section on page 18 for details
<i>Cisco VG248 Analog Phone Gateway Software Configuration Guide</i>	Provides information about understanding, configuring, managing, and troubleshooting the VG248.	Online at Cisco.com—HTML and PDF versions of this document are available from Cisco.com: http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/index.htm
<i>Cisco VG248 Analog Phone Gateway Version 1.0(2) Release Notes</i>	Describes known caveats and any documentation errata for the VG248.	Online at Cisco.com—HTML and PDF versions of this document are available from Cisco.com: http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/rel_note/index.htm

Resolved Caveats

Table 2 includes the list of caveats from the VG248 1.0(1) that have been resolved with this software update (1.0(2)).

Table 2 **VG248 Resolved Caveats**

Bug ID	Summary	Explanation
CSCuk28059	Premature re-establishment of audio path in one direction.	<p>If a VG248 port is currently on a call and another call is made to that port's directory number, the VG248 user hears a call waiting tone, inviting them to hook flash and talk to the new caller.</p> <p>If the user switches to the other call and the new caller later hangs up, the VG248 user hears an error tone and can hook flash to return to the original call.</p> <p>However, when the VG248 user hears the error tone, the remote party of the original call can hear the VG248 user, even before even before hook flash is used h to re-establish bidirectional audio.</p> <p>A code change to the VG248 software corrects this behavior.</p>

Table 2 *VG248 Resolved Caveats (continued)*

Bug ID	Summary	Explanation
CSCuk28448	Outgoing call failure leaves VG248 port in inconsistent state.	<p>A VG248 user makes an outgoing call that does not complete because the user did not dial the correct digits, generating an error tone.</p> <p>After the error tone is heard, the port should be able to receive calls. However, once the VG248 port is in this state it is impossible for a new incoming call to be answered, even if the phone attached to it goes back on hook.</p> <p>The caller, however, hears the ringback tone and might be misled into thinking that the VG248 user is able to answer.</p> <p>A code change to the VG248 software corrects this behavior.</p>
CSCuk28824	Enabling disconnect supervision for a port disables call pickup.	A code change to the VG248 software corrects this behavior.
CSCuk28873	The VG248 might occasionally lock-up, requiring a power-cycle to resume normal operation.	<p>Under certain conditions, particularly with use of SNMP, the VG248 might appear to lock up, failing to respond to input and causing loss of service to the attached telephone handsets.</p> <p>This was caused by a defect in the heap management code which can corrupt the memory on the VG248.</p> <p>A code change to the VG248 software corrects this behavior.</p>

Table 2 *VG248 Resolved Caveats (continued)*

Bug ID	Summary	Explanation
CSCuk28899	Inconsistent behavior with two active calls when one is dropped.	<p>If a second call is made into the VG248 port, the VG248 user experiences different behavior if the first call or the second call is dropped.</p> <p>If the current call drops, the user might hear an error tone and be able to connect back to the other call by hook flashing. Or, the user might be automatically switched over to the other call.</p> <p>A code change to the VG248 software corrects this behavior.</p>
CSCuk28958	Inconsistency between POTS and SCCP key press trace messages.	<p>Using the event log, you can set different logging levels for the sub-systems on the VG248. The most verbose level is trace.</p> <p>If you enable trace for the SCCP module, messages are generated each time a key is pressed on a user's telephone. For security, because these key presses could correspond to users' PIN or passwords, the event log replaces the numbers with asterisks (*).</p> <p>However, this security measure is not implemented by the POTS module. If trace is enabled for this sub-system, the event log captures and displays the precise numbers entered.</p> <p>A code change to the VG248 software corrects this behavior.</p>

Table 2 *VG248 Resolved Caveats (continued)*

Bug ID	Summary	Explanation
CSCuk28989	Telephone sometimes rings back when hanging up.	<p>Under certain circumstances, when replacing the receiver to finish a call, the handset will ring again and, if answered, connect back to that call (assuming the remote party has not yet replaced their receiver).</p> <p>A code change to the VG248 software corrects this behavior.</p>
CSCuk29385	Large numbers of fax calls causes the VG248 to lock up.	<p>After making a large number of fax calls, the VG248 can enter a state in which many of its internal buffers become unavailable. This stops the VG248 processing incoming network traffic, preventing Telnet access, ping, and causing loss of connectivity to Cisco CallManager. The VG248 appears to be locked up.</p> <p>A code change to the VG248 software corrects this behavior.</p>

Open Caveats

Open caveats are unexpected behaviors or defects in the software releases for a product. [Table 3](#) contains information on known problems for the VG248.

If you have a CCO account, you can search for known problems on the Cisco bug tracking system tool, called Bug Navigator II. To access Bug Navigator II, do one of the following tasks:

- Enter <http://www.cisco.com/support/bugtools> in your web browser.
- Log in to CCO and choose **Service & Support > Technical Assistance Center > Tools > Software Bug Toolkit > Bug Navigator II**.

Table 3 VG248 Open Caveats

Bug ID	Summary	Explanation
CSCdu44880	Audio volume is reduced on extensions with a Ringer Equivalence Number (REN) of three.	<p>The VG248 supports a maximum REN of three per port. This means that as many as three devices, each with a REN of one, can be connected as extensions to a single VG248 port. The VG248 allows a maximum of two devices to be off hook at any time.</p> <p>The VG248 will not be damaged if devices with a total REN greater than two are off hook at the same time on a single port, but users on these extensions might experience quieter audio than normal, and possibly no audio at all.</p> <p>To work around this problem, ensure that no more than two extensions on a single port are off hook at the same time. One way you can do this is by restricting the total REN of all extensions on a port to two.</p> <p>For more information, refer to the section “Connecting Too Many Phones to the VG248” in the <i>Software Configuration Guide</i>:</p> <p>http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/vg248swt.htm#xtocid154706</p>

Table 3 **VG248 Open Caveats (continued)**

Bug ID	Summary	Explanation
CSCdu54384	VG248 loses audio during excess broadcast network traffic.	<p>If the VG248 is attached to a network on which a large amount of broadcast traffic occurs, this traffic might have adverse effects on the operation of the VG248. These effects include reduced audio quality and, in extreme circumstances, loss of Cisco CallManager registration for some ports. If the latter situation arises, a large number of discarded packets are reported (both for receive and transmit) on the VG248 Network Statistics screen. To get to the Network Statistics screen from the Main screen, select Display > Network statistics.</p> <p>These situations would occur only if the broadcast traffic were to exceed several Megabits per second. This is far higher than the normal rate and likely would cause other network problems.</p> <p>The workaround is to identify the source of the broadcast data and prevent it from generating excessive amounts of network traffic. The VG248 will recover and recommence normal operation once the excessive broadcast condition ceases.</p>
CSCdu57118	FTP sessions to the VG248 will be disconnected after 10 minutes of inactivity.	<p>When an FTP connection has been established to the VG248 (typically for the purposes of performing a software upgrade), and has been left idle for 10 minutes, the VG248 automatically disconnects that session.</p>

Table 3 VG248 Open Caveats (continued)

Bug ID	Summary	Explanation
CSCdu59990	Successive VG248 ports are not guaranteed to obtain sequential directory numbers when registering with Cisco CallManager in auto-registration mode.	<p>On start up, the VG248 attempts to register all its enabled ports with Cisco CallManager in numerical order. However, this numerical registration of directories is not guaranteed. One reason numerical registration might not be successful is that there might not be large enough contiguous blocks of directory numbers available.</p> <p>To work around this problem, manually create the ports in Cisco CallManager before enabling them on the VG248. You must know the device name that the VG248 will give to each port; this name is normally derived from the VG248 MAC address. You can then explicitly assign directory numbers to ports, thus following any desired pattern.</p> <p>For more information, refer to the chapter “Configuring Analog Phones Using Cisco CallManager” in the <i>Software Configuration Guide</i>:</p> <p>http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/vg248swp.htm</p>

Table 3 *VG248 Open Caveats (continued)*

Bug ID	Summary	Explanation
CSCdu60375	VG248 port status shows up as “Not Found” in Cisco CallManager.	<p>The VG248 requires Cisco CallManager versions 3.1(1) or greater. However, Cisco CallManager versions prior to 3.1(2) do not contain support for the VG248 within the Real-time Information Service, which is used to collect information for display through the Cisco CallManager web interface.</p> <p>Therefore, the current status of VG248 port registrations is not available for Cisco CallManager versions prior to 3.1(2).</p> <p>This is solely a display problem; VG248 ports are able to register successfully with version 3.1(1). Their ability to perform all required telephony operations is not affected by the lack of support by the Real-time Information Service.</p> <p>To work around this issue, upgrade to Cisco CallManager 3.1(2) or greater.</p>

Table 3 *VG248 Open Caveats (continued)*

Bug ID	Summary	Explanation
CSCdu62479	Loss of functionality due to insufficient network bandwidth.	<p data-bbox="670 297 1219 545">Cisco recommends that you connect the VG248 to a switch or router port capable of full duplex operation. In addition, Cisco recommends that this port be capable of running at 100 Mbps. If there is insufficient network bandwidth available, reduced audio quality is likely to occur. Also, some ports might lose their Cisco CallManager registrations.</p> <p data-bbox="670 565 1219 873">The bandwidth requirement does not apply only to the connection between the VG248 and the Ethernet port to which the VG248 is attached. The same capacity is potentially required at each intermediate connection in the path to remote endpoints or gateways. For example, if the route to the rest of the VoIP network involves a 1.5-Mbps T1 link, this is likely to result in losses of functionality on all but the most lightly loaded VG248.</p>

Table 3 VG248 Open Caveats (continued)

Bug ID	Summary	Explanation
CSCdu79519	Voltage might be too low for Message Waiting Indication (MWI) lamps on some phones.	<p>Some older phones that use MWI lamps might not light up, even if the VG248 port is configured to indicate Message Waiting with the Lamp setting. To check this setting, go to the following path from the Main screen:</p> <p>Telephony > Port specific parameters > MWI type</p> <p>This problem arises because MWI lamps require a line voltage greater than the maximum voltage that the VG248 can supply.</p> <p>If you suspect that your lamp MWI should be lit, check the configuration of the port and the status of the messages in your mailbox. If the configuration is correct and you have a waiting message, you should try replacing the phone with one of a similar type to confirm that your phone is not faulty. If the lamp still does not light, you probably have a phone that cannot have its MWI lamp lit by the VG248. Other phone functionality is not impaired by the lamp deficiency.</p> <p>The only workaround to this problem is to consider replacing your phone. Test the new phone before committing to a large purchase.</p>

Table 3 **VG248 Open Caveats (continued)**

Bug ID	Summary	Explanation
CSCdu84588	Interrupted FTP put operation might leave a partial file present on the VG248 filing system.	<p>If you are using an FTP put operation to write a file to the VG248 internal filing system, and the operation is interrupted, a portion of the file might remain on the VG248 system. In such a scenario, if the partial file is a software build-image file, the VG248 will probably fail when restarted.</p> <p>To work around this problem, always check the size of the file after the transfer to make sure it is the same size as the original file. If it is not the same size, re-attempt the file transfer.</p> <p>For more information, refer to the “Resolving an Incomplete Upgrade” section in the <i>Software Configuration Guide</i>:</p> <p>http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/vg248swt.htm#xtocid1547015</p>
CSCdv36727	Silence suppression is always reported as off .	<p>When a call is in progress, the VG248 per-port status screen displays the codec in use and indicates whether silence suppression is active.</p> <p>Silence suppression, which is configurable in Cisco CallManager, means that no media packets will be transmitted if these packets would contain silence. Transmission would resume once the user commences speaking.</p> <p>The VG248 does not support the silence-suppression feature; therefore this setting will always be off. However, the VG248 can communicate with parties performing silence suppression, so you can allow this feature to remain enabled in Cisco CallManager.</p>

Table 3 VG248 Open Caveats (continued)

Bug ID	Summary	Explanation
CSCdv37478	Unable to achieve modem connection speeds greater than 33.6 kbps per second.	<p>Running a modem connection through a VG248 port involves complex conversions between the VG248 and the far end-modem. Therefore, normal modem speeds might range from 28.8 to 33.6 kbps.</p> <p>Some modems might run at speeds slower than 28.8 kbps per second.</p> <p>For best performance, Cisco recommends that ports intended for use with modems are configured with Cisco CallManager to use only G.711 media.</p>
CSCdv87437	Failure to connect with Cisco CallManager in auto registration mode	<p>The VG248 should be able to connect to Cisco CallManager using auto-registration or manual registration. However, auto-registration might not work with some versions of Cisco CallManager 3.1(2c).</p> <p>To avoid this problem, configure the VG248 ports in Cisco CallManager before enabling them on the VG248 itself.</p> <p>For more information, refer to the “Configuring Analog Phones Using Cisco CallManager” section in the <i>Software Configuration Guide</i>:</p> <p>http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/vg248swp.htm</p>
CSCuk25852	FTP directory listing on VG248 does not show correct date information.	<p>When you issue a directory listing command in an FTP session, the date stamp for each file is shown as “Jan 1, 1900.” This is because the VG248 filing system does not store a date or time for its files. However, because some FTP client programs normally show such information in directory listings, the VG248 displays a fixed date value for those clients for compatibility reasons.</p>

Table 3 VG248 Open Caveats (continued)

Bug ID	Summary	Explanation
CSCuk27560	Message Waiting Indication might cause some modems connected to VG248 to erroneously detect ringing.	<p>If a VG248 port is configured to indicate Message Waiting with the Lamp setting configured, and there is a message waiting, then a modem connected to this port might falsely detect a ringing condition. If the modem is configured to auto-answer, it might also attempt to answer the call. In some cases, this situation can prevent the modem from making an outgoing call (even if auto-answer is not configured). Navigate the following path from the Main screen to see this setting:</p> <p>Telephony > Port specific parameters > MWI type</p> <p>Not all modems detect the lamp Message Waiting Indication (MWI) as ringing, and those that do are typically not prevented from making outgoing calls altogether, although some attempts might fail.</p> <p>The workaround for this problem is to disable the Lamp MWI for this port (ideally disable MWI altogether). If this is not possible or is impractical, then the problem might be cleared by retrieving the waiting message, then cancelling the MWI. Furthermore, you should disable auto-answer on modems connected to VG248 ports that have the Lamp MWI setting configured.</p>

Table 3 *VG248 Open Caveats (continued)*

Bug ID	Summary	Explanation
CSCuk27613	Fax machines connected to the VG248 might return to the on-hook condition immediately after answering an incoming call.	<p>When the VG248 receives an incoming call, Caller Identification (CID) is sent along with the signal in order for the called device to ring. In some countries, CID information is sent between the first and second rings, while in other countries it is sent just before the first ring.</p> <p>In cases where the CID information arrives before the first ring, some fax machines answer the call but immediately hang up.</p> <p>To work around this problem, disable Caller Identification for VG248 ports to which a fax machine is connected. This is done in Cisco CallManager.</p>
CSCuk28977	Inability to resume a held call from a shared line in some circumstances.	<p>You cannot perform some functions using phones with a shared directroy number.</p> <p>For example, if a call is answered on one telephone and subsequently put on hold by that handset, it is not always possible to resume that call from a phone (connected to another VG248 port) that shares the directory number.</p>

Table 3 VG248 Open Caveats (continued)

Bug ID	Summary	Explanation
CSCuk27761	Message Waiting Indication (MWI) behavior might not be as expected after a configuration change.	<p>The VG248 supports three methods of Message Waiting Indication (MWI):</p> <ul style="list-style-type: none"> • Lamp • Caller ID • stutter <p>For more information, refer to the “Choosing Message Waiting Indicator Type” section in the <i>Software Configuration Guide</i>:</p> <p>http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/apg/vg248/v1_0/soft_con/vg248swv.htm#xtocid1596413</p> <p>Configuration options allow you to select any of these three methods as well as pairings of the methods or no MWI at all.</p> <p>The display on the phone will not necessarily be updated to reflect configuration changes you make.</p> <p>The MWI Caller ID (CID) option is also affected by whether incoming call Caller Identification is configured enabled or disabled for a port.</p> <p>To work around these issues, clear all Caller Identification information before changing the MWI configuration for a given port. Then, manually check for waiting messages once the configuration is finalized.</p>

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

<http://www.cisco.com>

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco product documentation from the Networking Products Marketplace:
<http://www.cisco.com/web/ordering/root/index.html>
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems
Attn: Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages

- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain custom information and service. To access Cisco.com, go to the following URL:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

<http://www.cisco.com/register/>

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

AccessPath, AtmDirector, Browse with Me, CCIP, CCSI, CD-PAC, *CiscoLink*, the Cisco *Powered* Network logo, Cisco Systems Networking Academy, the Cisco Systems Networking Academy logo, Cisco Unity, Fast Step, Follow Me Browsing, FormShare, FrameShare, IGX, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, the iQ Logo, iQ Net Readiness Scorecard, MGX, the Networkers logo, ScriptBuilder, ScriptShare, SMARTnet, TransPath, Voice LAN, Wavelength Router, and WebViewer are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and Discover All That's Possible are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, FastHub,

FastSwitch, GigaStack, IOS, IP/TV, LightStream, MICA, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, SlideCast, StrataView Plus, Stratm, SwitchProbe, TeleRouter, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0110R)