

# VG248 Port Configuration to Light the Caller ID MWI

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## Introduction

This document provides a sample configuration for a VG248 port to deliver the proper signal to light the MWI on a Caller ID box connected to an analog phone.

## Prerequisites

### Requirements

Ensure that Cisco CallManager is integrated with your voice mail system before you attempt this configuration.

### Components Used

The information in this document is based on these software and hardware versions:

- Cisco VG248 Analog Phone Gateway
- VG248 Software version 1.3
- Analog phones
- Caller ID box

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

### Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

## Background Information

The VG248 Gateway is a product enabled by Cisco AVVID (Architecture for Video, Voice, and Integrated

Data) that permits organizations to continue using their analog devices with the current IP Telephony technology. The VG248 is a gateway for using analog phones, fax machines, modems, voice mail systems, and speakerphones within an organization voice system based on Cisco CallManager.

With a system of analog phones connected inline with Caller ID boxes that have Message Waiting Indicators (MWI), it has to be assured that the Caller ID boxes receive the proper signal from the telephone company to successfully light the MWI, which indicates that there is a voice mail waiting. The two types of signals that are propagated by telephone companies are **Stutter Tones** and **Frequency–Shift Keying (FSK) Tones**. Even though the purpose of these tones is to turn the MWI on when a message is recorded, they do not work for all the Caller ID box models that are provided by telephone companies.

**Note:** The power consumed by the VG248 ranges from 50W to 160W, which depends on the status of the phones connected to it.

The VG248 supports different methods for sending MWI messages to analog phones. Because you might have different types of analog phones connected to the VG248, you can modify the MWI type on a per–port basis. So, if you have analog phones that contain MWI lamps, then you can notify users of awaiting messages using the MWI lamp. Or, you can choose to play a tone when users pick up their phones.

These are the methods supported by the VG248:

- **Lamp (90–Volt Signal)** Illuminates the lamp on the phone.
- **Caller ID (FSK Tone)** Uses the caller ID mechanism to send MWI messages to the LCD screen on the phone.
- **Stutter (Stutter Tone)** Plays tones when the user picks up the phone.
- **Lamp + Stutter** Illuminates the lamp and plays a tone.
- **Caller ID + Stutter** Sends a message to the LCD screen and plays a tone.
- **None** Does not send MWI information.

## Configure

Complete these steps in order to configure the VG248 port to support Caller ID (FSK Tone) on a Caller ID box inline with an analog phone.

1. From the Main menu, choose **Configure**.



2. Choose **Telephony**.

```

-----
Cisco UG248 <10-12-13-vg248>
-----

-----
Configure
-----
Network interface
Passwords
Telephony
Voice mail
SNMP
Suspend
Resume
Restart
-----

ERROR: DNS: No response from primary server
WARNING: OS: Ethernet has gone down

```

3. Choose Port specific parameters.

```

-----
Cisco UG248 <10-12-13-vg248>
-----

-----
Telephony
-----
CallManager TFTP server <10.89.129.164>
CallManager device name <UGC0d288cie38>
Feature codes
Country <North America>
Port enable policy <auto>
Port specific parameters
Advanced settings
-----

ERROR: DNS: No response from primary server
WARNING: OS: Ethernet has gone down

```

4. Use the arrow keys to select the port to configure and press **Enter**.

```

-----
Cisco UG248 <10-12-13-vg248>
-----

Port selection
-----
 1 Enabled      17 Disabled   33 Disabled
 2 Enabled      18 Disabled   34 Disabled
 3 Enabled      19 Disabled   35 Disabled
 4 Enabled      20 Disabled   36 Disabled
 5 Disabled     21 Enabled    37 Disabled
 6 Disabled     22 Disabled   38 Disabled
 7 Disabled     23 Disabled   39 Disabled
 8 Disabled     24 Disabled   40 Disabled
 9 Disabled     25 Disabled   41 Disabled
10 Disabled     26 Disabled   42 Disabled
11 Disabled     27 Disabled   43 Disabled
12 Disabled     28 Disabled   44 Disabled
13 Disabled     29 Disabled   45 Disabled
14 Disabled     30 Disabled   46 Disabled
15 Disabled     31 Disabled   47 Disabled
16 Disabled     32 Disabled   48 Disabled
-----
ER '*'- port in use      press 'R' to enter range
WARNING: OS: Ethernet has gone down

```

5. Choose MWI method.

```

Cisco UG248 <10-12-13-vg248>

Port selection | Port 1 parameters
-----|-----
1 Enabled | Status (enabled)
2 Enabled | Call control mode (standard)
3 Enabled | Caller ID (enabled)
4 Enabled | MWI method (lamp)
5 Disabled | UMWI variant (<<country default>>)
6 Disabled | Call supervision method (none)
7 Disabled | Input gain (0)
8 Disabled | Output gain (0)
9 Disabled | Dialing digit detection (default: use DSP)
10 Disabled | Fax relay (disabled)
11 Disabled | Fax relay ECM (disabled)
12 Disabled | Fax relay NSF (preserve value)
13 Disabled | Passthrough mode (default: automatic)
14 Disabled |
15 Disabled | 31 Disabled 47 Disabled
16 Disabled | 32 Disabled 48 Disabled

'*' - port in use press 'R' to enter range

ER
WARNING: OS: Ethernet has gone down

```

6. Choose the **caller ID** option.

```

Cisco UG248 <10-12-13-vg248>

Port selection | Port 1 parameters
-----|-----
1 Enabled | Status (enabled)
2 Enabled | Call control mode (standard)
3 Enabled | Caller ID (enabled)
4 Enabled | MWI method (lamp)
5 Disabled | UMWI variant (<<country default>>)
6 Disabled | Call supervision method (none)
7 Disabled | Input gain (0)
8 Disabled | Output gain (0)
9 Disabled | Dialing digit detection (default: use DSP)
10 Disabled | Fax relay (disabled)
11 Disabled | Fax relay ECM (disabled)
12 Disabled | Fax relay NSF (preserve value)
13 Disabled | Passthrough mode (default: automatic)
14 Disabled |
15 Disabled | 31 Disabled 47 Disabled
16 Disabled | 32 Disabled 48 Disabled

'*' - port in use press 'R' to enter range

ER
WARNING: OS: Ethernet has gone down

```

## Verify

There is currently no verification procedure available for this configuration.

## Troubleshoot

This section provides information you can use to troubleshoot your configuration.

You can set the VG248 to log much more detail (information, error, or warnings), and logging to specific ports. Complete these steps in order to set logging levels, and select ports:

1. From the Main menu, choose **Diagnostics**.

```
-----
|                               Cisco UG248 <10-12-13-vg248>                               |
-----

Main menu
-----
Configure
Display
Diagnostics

-----

ERROR: DNS: No response from primary server
WARNING: OS: Terminal inactivity timeout; removing enabled status
```

2. Choose Event log.

```
-----
|                               Cisco UG248 <10-12-13-vg248>                               |
-----

Diagnostics
-----
Event log
Show configuration
Show environment
Restore to factory configuration
CPU utilization
Ping network host
Validate SMDI configuration

-----

ERROR: DNS: No response from primary server
WARNING: OS: Terminal inactivity timeout; removing enabled status
```

3. Choose Set logging levels.

```
-----
|                               Cisco UG248 <10-12-13-vg248>                               |
-----

Event log
-----
Set logging levels
Set logged ports <>
Show key presses in log <yes>
Syslog <use specified server>
Syslog server <<none>>
Syslog facility <<local?>
View new
View recent
View all
Clear event log
Clear status line

-----
| Validate SMDI configuration |
-----

ERROR: DNS: No response from primary server
WARNING: OS: Terminal inactivity timeout; removing enabled status
```

4. In the Set Logging Levels select Voice Mail (VM) and SCCP Errors + Warnings + Info + Trace.

```

Cisco UG248 <10-12-13-vg248>
-----
E: Logging levels
-----
S: OS <Errors + warnings + info>
S: DHCP <Errors + warnings + info>
S: Ethernet <Errors + warnings + info>
S: FTP <Errors + warnings + info>
S: DNS <Errors + warnings + info>
S: TFTP <Errors + warnings + info>
U: EnoMon <Errors + warnings + info>
U: SNMP <Errors + warnings + info>
U: SLIC <Errors + warnings + info>
C: DSP <Errors + warnings + info>
C: FaxRelay <Errors + warnings + info>
--: POTS <Errors + warnings + info>
: UM <Errors + warnings + info + trace>
: SCCP <Errors + warnings + info + trace>
: HTTP <Errors + warnings + info>
-----
ERROR: DNS: No response from primary server
WARNING: OS: Terminal inactivity timeout; removing enabled status

```

5. In the Set Logged Port, select a port on UG248 on which to test.
6. Select **View New** from the **Diagnostics** menu.
7. From the selected port, make a call to the analog phone inline with the Caller ID box and record a message. The events display in the VG248 Telnet session, and the MWI should light.

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Voice & Video: IP Phone Services for End Users
Voice & Video: Unified Communications
Voice & Video: IP Phone Services for Developers
Voice & Video: General

## Related Information

- [VG248 Configuration Guide v1.3](#)
- [Voice Technology Support](#)
- [Voice and Unified Communications Product Support](#)
- [Recommended Reading: Troubleshooting Cisco IP Telephony](#)
- [Technical Support & Documentation – Cisco Systems](#)