CallManager CallerID Feature Issues

Document ID: 44102

Contents

Introduction

There is currently a rapid conversion of infrastructure among PBX systems, and more importantly, the public switched telephone network (PSTN) as a whole, into a purely digital world. The result has been the emergence of enhanced features, for example, Caller ID and Calling Name Delivery. Calling Name Delivery simply refers to alphanumeric text that passes from the calling party to the called party (in preference, or in addition, to the number of the calling party). Calling Name Delivery is available only by way of PRI circuits.

Cisco CallManager has also evolved each step of the way. With the advent of Cisco CallManager 3.3(3), there are three methods through which CallManager and the associated gateways can exchange Calling Name information with the PSTN or a PBX:

- Calling Party Name through the Display Information Element (IE)
- ISO−based Q.SIG
- National ISDN 3 Calling Name Identification Delivery (NI3 CNID Bellcore GR−1367)

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Understanding Voice Gateways

Components Used

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

- Cisco CallManager 3.1(x), 3.2(x) and 3.3(x) and 4.x

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.

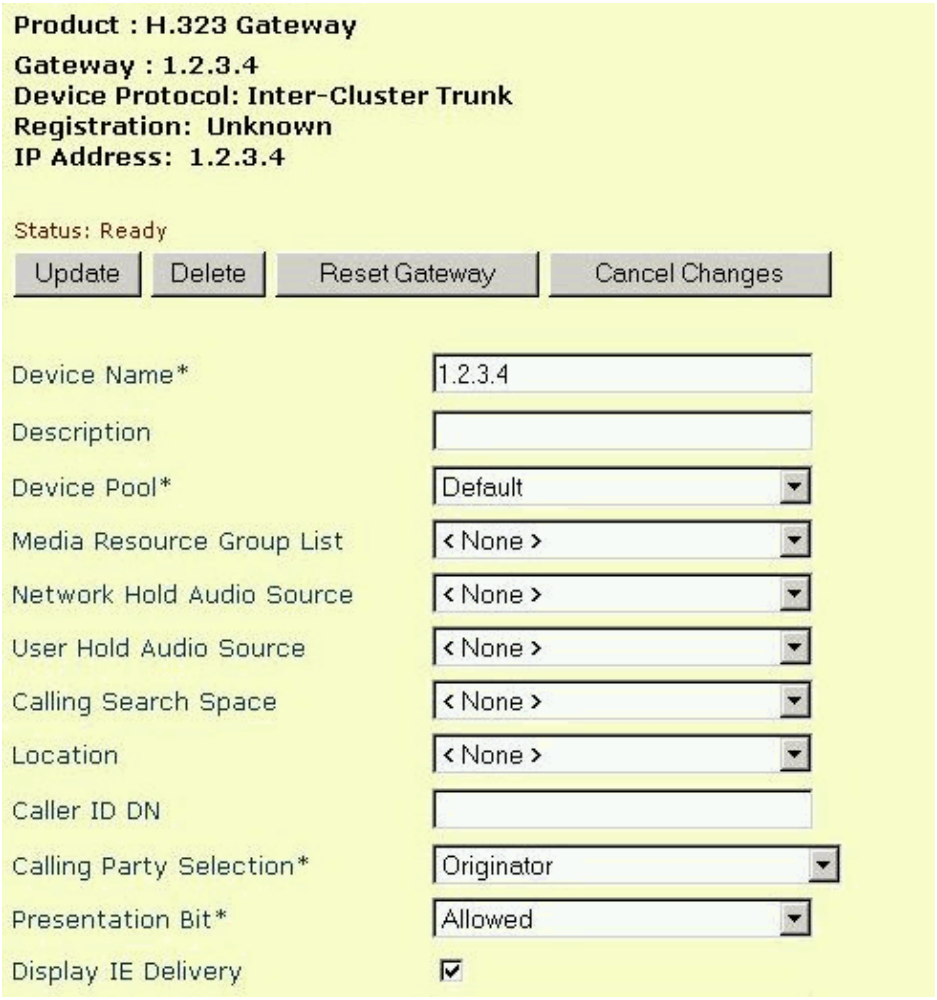
CallManager and Calling Party Name

This section explains each of the three methods through which Cisco CallManager and the associated gateways can exchange Calling Name information.

Display IE

Cisco CallManager versions 3.1(x) and 3.2(x) support Calling Name Delivery through the Display IE of the Q.931 PRI protocol. This option is available provided that the PBX or PSTN link understands and processes text messages within the Display IE, and is connected by way of H.323 inter−cluster trunks or Media Gateway Control Protocol (MGCP) gateways. Figure 1 shows the Display IE check box selected on an inter−cluster trunk.

Figure 1 Display IE Delivery Option is Selected



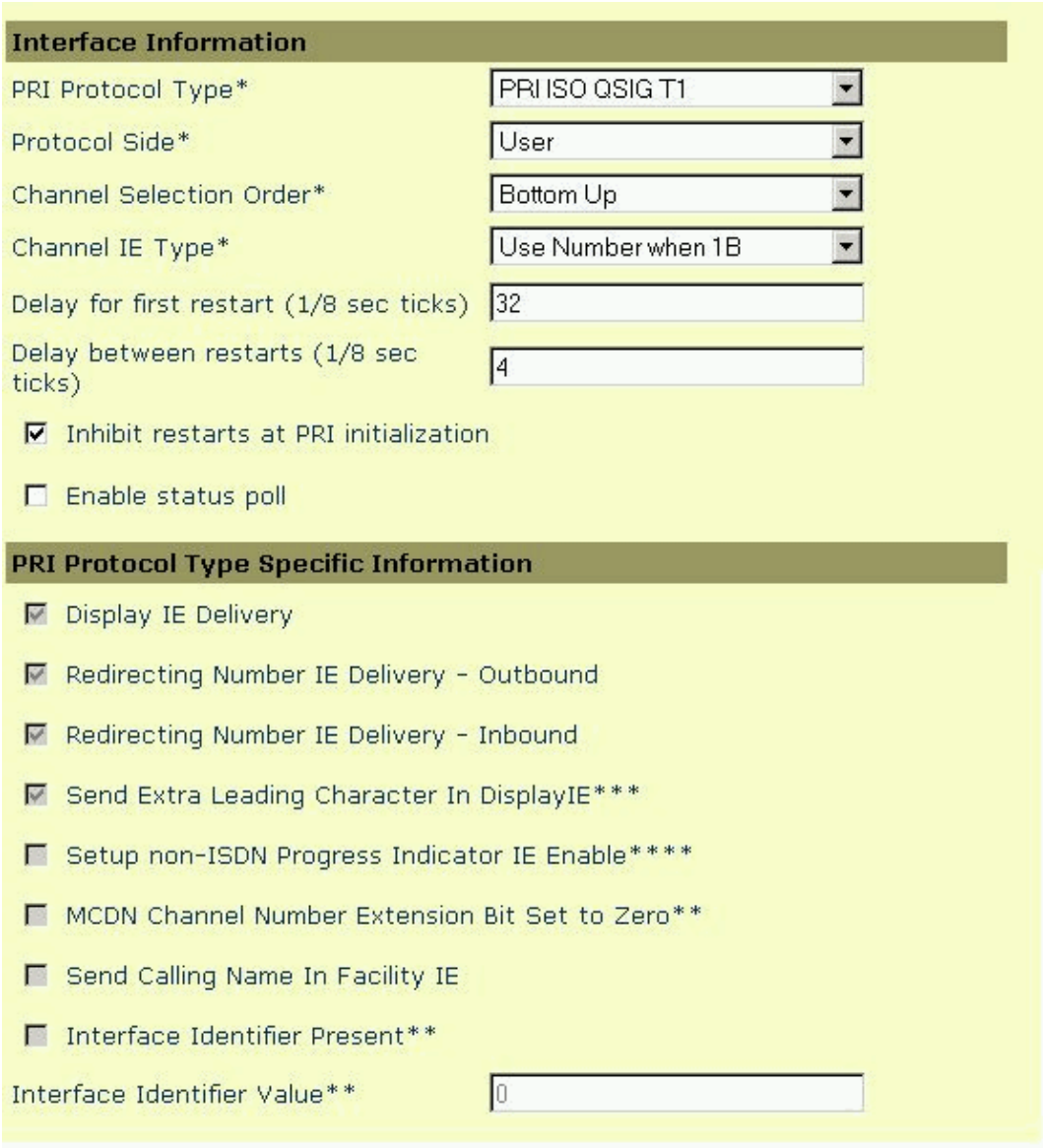
ISO−based Q.SIG

Cisco CallManager version 3.3(2) introduced basic voice call support and some supplementary features for the ISO−based Q.SIG protocol that allow for CallerID and Calling Party Name:

- Calling Line ID Presentation (CLIP)
- Calling Name ID Presentation (CNIP)
- Connected Name ID Presentation (CONP)
- Calling Line ID Restriction (CLIR)

If the gateway is configured for ISO−based Q.SIG, CNIP and CONP are passed within the Q.SIG Facility IE. Figure 2 displays a Q.SIG gateway configuration with the relevant parameters set.

Figure 2 Q.SIG Gateway Configuration



Note: With ISO−based Q.SIG configured, all Calling Name information uses the Q.SIG Facility IE to exchange Calling Name information. This picture shows the Send Calling Name in Facility IE option greyed out, as this option relates only to when you use the NI2/NI3 Bellcore 1367 standards that the NI2/NI3 CNID (Bellcore GR−1367) section discusses.

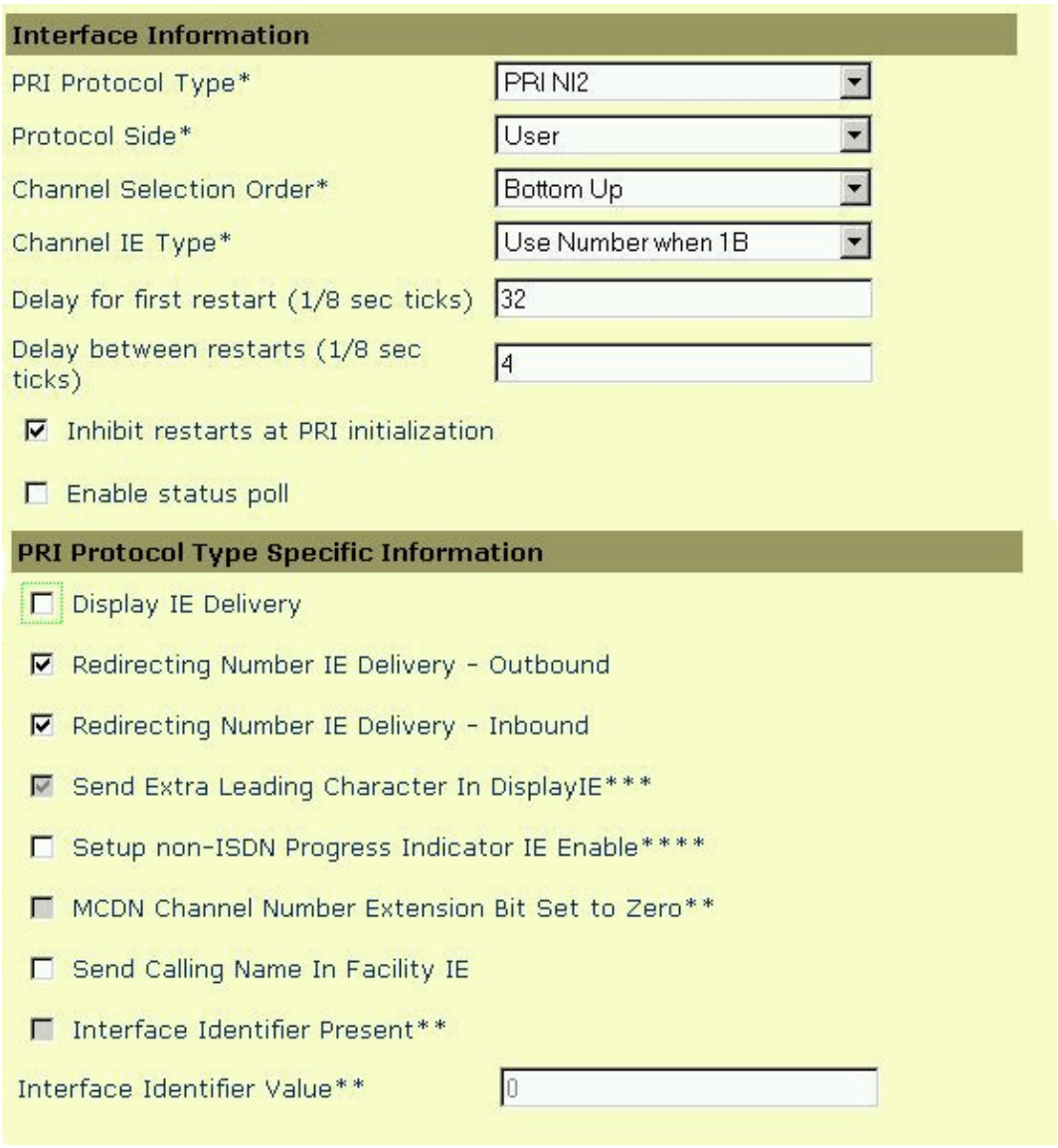
Note: Sending Calling Name through the Display IE is supported using both H.323 and MGCP Gateways whereas Sending Calling Name through the Facility IE is supported only with the MGCP Gateway.

NI2/NI3 CNID (Bellcore GR−1367)

With the advent of Cisco CallManager 3.3(3), CallManager supports Calling Party Name by way of the Q.931 Facility IE on the basis of Bellcore GR−1367−CORE specification. This is also known as the NI3 CNID service. Briefly stated, Cisco CallManager PRI gateways are able to use the Facility IE encoded with the CallingName Remote Operations Service Element.

When you select Primary NI2 as the protocol, the Send Calling Name in Facility IE check box becomes available (see Figure 3):

Figure 3 The Send Calling Name in Facility IE Option



Note: This feature does not change or interfere with the Q.SIG implementation discussed in this document. It is also independent of the delivery of Calling Name text within a Display IE. But if both Display IE and Facility IE are present, the latter precedes and is used by Cisco CallManager.

CallManager 4.x

Cisco CallManager 4.x includes a new feature called Call Display Restrictions. This feature allows you to choose the information you want to display for calling and connected lines on the basis of parties involved. These parameters are introduced in Cisco CallManager 4.x and you can configure these parameters on the Route Pattern and Translation Pattern configuration screens:

- Calling Line ID Presentation
- Calling Name Presentation
- Connected Line ID Presentation
- Connected Name Presentation

Refer to the Call Display Restrictions Configuration Guide for more information on the use of these parameters.

Note: If you forward a call to a number and the call is then transfered from there, it is not possible to forward the call information, such as caller ID, onto the last phone.

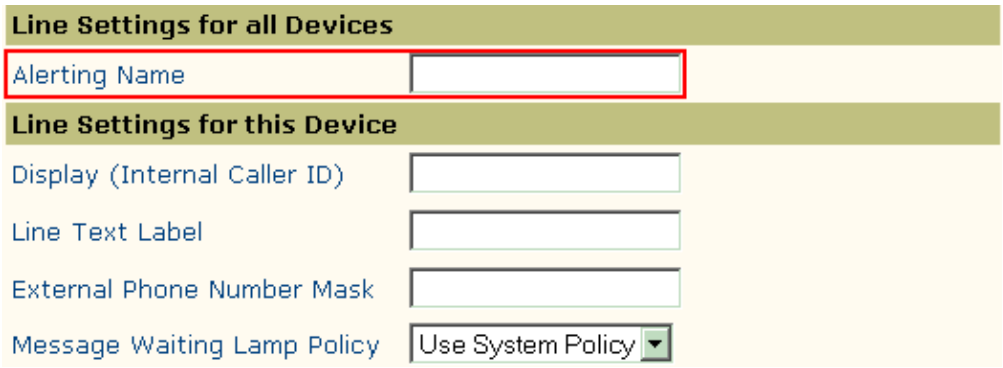
Note: If the first character of the caller name does not display on outbound external calls, make sure the Switch Type is correctly configured on the Cisco CallManager Gateway Configuration page.

Shared Lines

When a Cisco IP Phone places a call to a shared line DN, and the phone begins to ring on the remote side, the calling phone displays the 'calling−to' information. Currently, the calling phone displays the ID of the last phone configured as part of the shared line. After one of the shared line users picks up the call, the calling phone displays the Internal Caller ID of the corresponding phone.

In order to resolve this problem, from Cisco CallManager release 4.1(2) onwards, a new parameter known as **Alerting Name** is available in the **Directory Number Configuration** page. This parameter is common to the line settings of all the phones configured on the shared line DN.

Figure 4 The Alerting Name Parameter



When you configure a value for the **Alerting Name** parameter, the configured value appears at the caller's end while the shared line phones ring. When one of the shared line users picks up the call, the calling phone displays the Internal Caller ID of the corresponding phone.

For more information on use of this parameter, refer to the Identification Services section of Understanding IP Telephony Protocols − Cisco CallManager System Guide, Release 4.1(2).

Calling Name when using QSIG

The calling ID display or calling name indicates text that appears on the called party phone when a call is placed from this line. When Cisco Voice Gateways are connected with a PBX using the Q Interface Signaling Protocol (QSIG), the calling name might not display on the phones connected to that PBX when:

- The QSIG calling name presentation used is **simple**.
- The calling name used by the Cisco IP phone is **extended**.

Simple calling name presentations use only ASCII characters, so non−english characters that include tildes or accent marks are not included. In order to make the calling name sent from a Cisco IP phone to be simple, use **only** ASCII characters in the calling name or use **English United States** as the User Locale in the IP phone configuration.

First character missing in calling name display on Cisco 7942 IP phones

When a call is placed from a PSTN (external) to Cisco 7942 IP phones, the first character of the calling name does not appear in the display of the phone. For example, if the calling name is `xyz`, the IP phone shows `yz` only.

In order to resolve this issue, check the **Send Extra Leading Character in Display IE** box under the `PRI Protocol Type Specific Information` in the Cisco CallManager.

Related Information

- **Caller ID name display in Cisco IP Phones**
- **Understanding IP Telephony Protocols**
- **Voice Technology Support**
- **Voice and Unified Communications Product Support**
- **Troubleshooting Cisco IP Telephony**
- **Technical Support & Documentation − Cisco Systems**

Updated: Jan 23, 2007 Document ID: 44102