

What Happens When a Peripheral Goes Off-line?

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Introduction

In a Cisco Intelligent Contact Management (ICM) environment, there have been some questions about what happens when a peripheral goes off-line. The term "dim routing" is applied when the ICM loses visibility to an Automatic Call Distributor (ACD) or Voice Response Unit (VRU).

This document discusses what happens when the peripheral goes off-line and possible contingency plans to avoid poor routing decisions.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco ICM basic scripting
- **Regedt32**

Components Used

The information in this document is based on all Cisco ICM releases.

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.

What is Happening?

If the Peripheral Gateway (PG) goes off-line from the Central Controller due to a LAN/WAN fault, or if you enter **NodeManagerStop** (NMSTOP) on the PG, the CallRouter waits 60 seconds before it declares the PG's

peripheral(s) off-line. The assumption is that PGs should never go off-line, and so it comes right back.

Regardless of when the router finds the peripheral off-line, if there are no contingencies in your routing scripts to deal with this, the CallRouter continues to route based on the last information. This is particularly important if you are doing Longest Available Agent (LAA) routing.

If you have an agent available for 60 seconds when the peripheral goes off-line, and it stays off-line for five minutes, the router assumes the agent has been available for six minutes. The longer a peripheral stays off-line, it is possible the site can receive more calls than the site is able to handle.

If a PG loses its connection to the ACD (due to failure of the PIM, the LAN, or the peripheral itself), it declares the peripheral off-line, and tells the CallRouter, which immediately sets the Peripheral_Real_Time. The online value is set to '0'.

Workaround

Customers should have contingencies in routing scripts to deal with this potential outage. A script contingency could be something as simple as an *IF* node with the formula '*Peripheral.<peripheralname> Online*'. If the peripheral is online, the *IF* node passes, and script execution continues as normal. If the peripheral is not online, the script should route away from that site (or if pre-routing, perhaps you can send a percentage of calls, while intelligently load balancing among online peripherals). If you perform simple pre-routing, it may be possible to route for a short time (based on stale data).

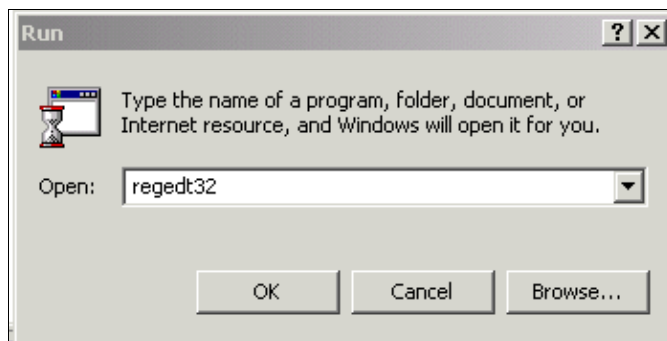
Note: Do not attempt to do translation routes to off-line peripherals.

Alternate Workaround

For customers who do not want to use this method, there is an alternative. There are two registry values that can be set to control the CallRouter's behavior. On one of the Call Routers, use the Registry Editor to change these values.

1. Select **Start > Run** from the task bar.
2. Enter **regedt32** in the Run dialog box.

Figure 1: regedt32



3. Drill-down to this key:

- ◆ ICM version 4.6.x and earlier:

```
HKEY_LOCAL_MACHINE/Software/GeoTel/ICR/<cust_inst>/RouterA/Router/  
CurrentVersion/Configuration/Offline
```

- ◆ ICM version 5..x and later:

Note: These keys are displayed over two lines due to space limitations.

4. Double-click on the value **IgnoreAll**, the DWORD Editor displays.

Figure 2: IgnoreAll Value



5. Change the default value of 0 to **1**.

Note: Setting this bit to "1" tells the routers NOT to route to off-line peripherals for any reason (MED or %alloc).

6. Click **OK**.
7. Double-click on the value **IgnoreLAA**, the DWORD Editor opens.
8. Change the default value of 0 to **1**.

Note: Setting this bit to "1" tells the routers NOT to LAA route to off-line peripherals.

9. Click **OK**.
10. Close **regedt32**.

This is in the synchronized portion of the registry. If you use **rtsetting**, or manually set the bit with the registry editor only on side A, it is also synchronized to the B side. This is also a dynamic setting. The Router immediately changes its routing logic based on these registry settings.

Related Information

- [Technical Support & Documentation – Cisco Systems](#)