



## Resource Library

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### Using the Resource Library

This tab includes resources to help you learn more about Cisco Unified Communications.

- [Cisco Unified Communications System Description](#)
- [Cisco Unified Communications System Release Notes](#)
- [Network Topology Resources](#)
- [Ordering Guides](#)
- [Troubleshooting Individual Components](#)
- [Component Resources](#)
- [Configuration Command Files](#)
- [System Test Results](#)
- [Cisco Sales Demos](#)

#### Cisco Unified Communications System Description

[Cisco Unified Communications System Description](#) (right-click to download PDF)

#### Cisco Unified Communications System Release Notes

[System Release Notes for Contact Center: Cisco Unified Communications Release 5.0\(2\)](#)

[System Release Notes for IP Telephony: Cisco Unified Communications Release 5.0\(2\)](#)

### Network Topology Resources

This topic provides topology resources you can use to document network plans. Specifically, it includes:

- [Microsoft Visio Contact Center Topology Diagrams](#) as individual Microsoft Visio files
- [How to Use Microsoft Visio Drawings Efficiently](#)—Guidelines for best practices in using Microsoft Visio files

## Microsoft Visio Contact Center Topology Diagrams

You can download zip files containing Visio drawings of the logical and physical topologies for the contact center that are documented on the [Prepare and Plan](#) tab. [Table 7-1](#) identifies the Visio drawings in each zip file.

If you need to create new Visio drawings, you can use the Cisco Visio stencils located at:

[http://www.cisco.com/en/US/products/prod\\_visio\\_icon\\_list.html](http://www.cisco.com/en/US/products/prod_visio_icon_list.html)

**Table 7-1** *Microsoft Visio Logical and Physical Topology Diagrams*

| Description   | Filename   |
|---|--|
| Zip file includes logical and physical drawings in Test Bed 1 as listed below | <a href="#">TestBed1_Topologies.zip</a> (right-click to download zip)<br>6.4 MB<br><br><b>Note</b> If you click the link rather than right-click, the zip file may open in the secondary window but also replace the contents of this window. Use your Back button to return to this window. |
| Unified IP IVR Sites in Test Bed 1  | Col_IPCC_CCM_Logical_ALL.vsd   |
| Parent and Child Sites in Test Bed 1  | Col_IPCC_CCM_Logical_P&C.vsd   |
| Site 1 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site1.vsd   |
| Site 2 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site2.vsd   |
| Site 3 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site3.vsd   |
| Site 4 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site4.vsd   |
| Site 5 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site5.vsd   |
| Site 6 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site6.vsd   |
| Site 8 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site8.vsd   |
| Site 9 IP IVR Logical Topology  | Col_IPCC_CCM_Logical_Site9.vsd   |
| Site 1 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site1.vsd  |
| Site 2 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site2.vsd  |
| Site 3 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site3.vsd  |
| Site 4 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site4.vsd  |
| Site 5 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site5.vsd  |
| Site 6 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site6.vsd  |
| Site 8 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site8.vsd  |
| Site 9 IP IVR Physical Topology   | Col_IPCC_CCM_Physical_Site9.vsd  |
| Zip file includes logical and physical drawings in Test Bed 2 as listed below | <a href="#">TestBed2_Topologies.zip</a> (right-click to download zip)<br>7.4 MB<br><br><b>Note</b> If you click the link rather than right-click, the zip file may open in the secondary window but also replace the contents of this window. Use your Back button to return to this window. |
| Unified CVP Sites in Test Bed 2   | Col_IPCC_CVP_Logical_ALL.vsd   |

**Table 7-1** *Microsoft Visio Logical and Physical Topology Diagrams (continued)*

| Description                  | Filename                        |
|------------------------------|---------------------------------|
| Site 1 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site1.vsd  |
| Site 3 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site3.vsd  |
| Site 5 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site5.vsd  |
| Site 6 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site6.vsd  |
| Site 7 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site7.vsd  |
| Site 8 CVP Logical Topology  | Col_IPCC_CVP_Logical_Site8.vsd  |
| Site 1 CVP Physical Topology | Col_IPCC_CVP_Physical_Site1.vsd |
| Site 3 CVP Physical Topology | Col_IPCC_CVP_Physical_Site3.vsd |
| Site 5 CVP Physical Topology | Col_IPCC_CVP_Physical_Site5.vsd |
| Site 6 CVP Physical Topology | Col_IPCC_CVP_Physical_Site6.vsd |
| Site 7 CVP Physical Topology | Col_IPCC_CVP_Physical_Site7.vsd |
| Site 8 CVP Physical Topology | Col_IPCC_CVP_Physical_Site8.vsd |

## How to Use Microsoft Visio Drawings Efficiently

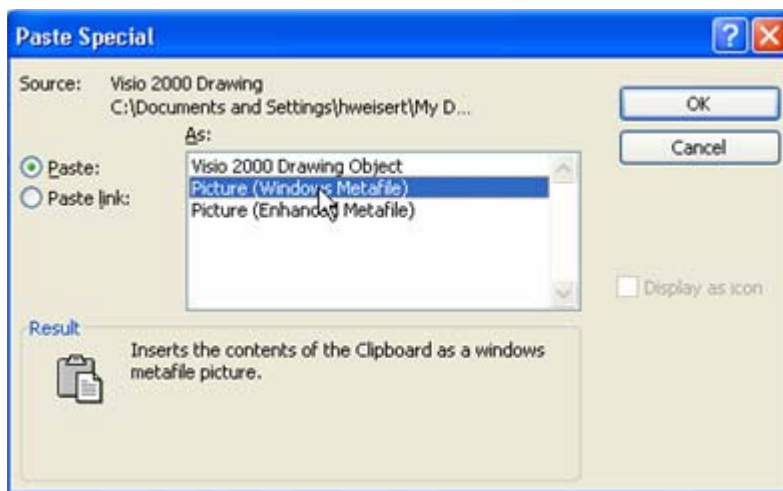
Microsoft Visio allows you to bring drawings into several applications (for example, Microsoft Word, PowerPoint). Unfortunately, the default method is to insert the whole “Visio object” into a file. This can cause problems.

When you copy and paste a Visio drawing into another application, the Visio object includes all the application data with the drawing. This object information is needed if you want to be able to double-click the drawing from Word or PowerPoint and have it open in Visio for editing. But pasting as an object adds many megabytes to the size of your file. With only a few such drawings, a Word document can bloat from 300 KB to 12 MB, making it troublesome to share among authors or reviewers and a trial for partners or customers to download. (They might even give up before it is done.) In addition, very large documents are more problem-prone.

### Bringing a Visio Drawing into a Document

Unless you really need the live editing capability, avoid unnecessary file bloating by performing an extra step when you paste.

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- Step 1** In Visio, copy the drawing as you normally do. Tip: **Ctrl-C** copies the whole drawing.
- Step 2** At the desired location in the destination document, choose **Edit > Paste Special**. In the Paste Special dialog box, choose **Picture (Windows Metafile)**.



**Step 3** Click **OK**. The drawing pastes as an ordinary picture. If it is not positioned properly, choose **Format > Picture**, click the **Layout** tab and select **In line with text**. This is generally the most reliable layout option.

**The Bottom Line**

Do not use the paste default (**Edit > Paste** or **Ctrl-V**) to paste Visio drawings. Always use **Paste Special**.

**Downsizing Existing Drawings**

If a document is larger than it should be, you can check to see if the Visio drawings are the reason and, if so, fix the problem.

**Step 1** With the drawing selected in the Word or PowerPoint document, choose **Edit**. At the bottom of the Edit menu, you will see one of the following:

- Edit Object, if the drawing was inserted by simple pasting. It is a Visio object and taking up much more file space than it needs to. Go on to [Step 2](#).
- Edit Picture, if the drawing was inserted properly, as a picture. It is not the source of the large file size.

**Step 2** If the drawing is an object, cut it (**Ctrl-X**), and then repaste as in [Bringing a Visio Drawing into a Document](#).



**Tip**

You can easily click through the document to check each picture by using Word's handy Go To feature: Where you want to start searching, press **Ctrl-G**. In the Go To What list, select **Graphic** and click **Next**. You go to the next graphic. Click it to select and then check as in Step 1. If needed, repaste as in Step 2. Click **Next** and continue these steps for other graphics.



# Ordering Guides

Ordering guides for most Cisco Unified Communications products are available for partners and Cisco employees.

## Software Bundles

- [Unified Communications Solution Bundle](#)

## Call Control, End Points, and Call Control Applications

- [Cisco Unified CallManager 5.0](#)
- [Cisco Unified IP Phones](#)
- Cisco Emergency Responder (this will be available in a future release)
- Cisco Unified MobilityManager (this will be available in a future release)
- [Cisco CallManager Express](#) 
- [Cisco Unified Survivable Remote Site Telephony \(SRST\)](#) 

## Contact Center



- [Cisco Customer Contact Center Business Unit Price List](#)  (right-click to download PDF)

This list addresses pricing and packaging structure for all Contact Center products.

## Conferencing

- [Cisco Unified MeetingPlace](#) (right-click to download PDF)
- [Cisco Unified MeetingPlace Express](#)  (right-click to download PDF)

## Messaging

- [Cisco Unity](#)  (right-click to download PDF)
- [Cisco Unity Connection](#)  (right-click to download PDF)

## Network Management

- Operations Manager (this will be available in a future release)
- Service Monitor (this will be available in a future release)

# Troubleshooting Individual Components

For a list of the diagnostic tools and supporting troubleshooting documentation available for most components in a contact center network, see [Contact Center Component Troubleshooting Tools and Documentation](#) on the Implement tab.

# Component Resources

The following list provides links to the main page for documentation on various Cisco Unified Communications components, from which you can navigate to individual documents. For documentation on specific tasks, see the relevant topic, such as [Component Installation and Configuration Guides](#) on the Implement tab.

**Cisco Unified Communications**

<http://www.cisco.com/go/unified-techinfo>

Links to this Technical Information Site and the Technical Information Site for IP telephony.

**Voice Documentation**

[http://www.cisco.com/en/US/products/sw/voicew/tsd\\_products\\_support\\_category\\_home.html](http://www.cisco.com/en/US/products/sw/voicew/tsd_products_support_category_home.html)

Main page for documentation on all Cisco voice products.

**Cisco Unified CallManager**

[http://www.cisco.com/en/US/products/sw/voicew/ps556/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/voicew/ps556/tsd_products_support_series_home.html)

**Cisco Unified IP Phone**

[http://www.cisco.com/en/US/products/sw/voicew/tsd\\_products\\_support\\_category\\_home.html](http://www.cisco.com/en/US/products/sw/voicew/tsd_products_support_category_home.html)

**Cisco Unified Intelligent Contact Management/Unified Contact Center Enterprise Edition**

[http://www.cisco.com/en/US/products/sw/custcosw/ps1001/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps1001/tsd_products_support_series_home.html)

**Cisco Unified Contact Center Enterprise**

[http://www.cisco.com/en/US/products/sw/custcosw/ps1844/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps1844/tsd_products_support_series_home.html)

**Cisco Unified Operations Manager**

[http://www.cisco.com/en/US/products/ps6535/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6535/tsd_products_support_series_home.html)

**Cisco Unity Connection**

[http://www.cisco.com/en/US/products/ps6509/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6509/tsd_products_support_series_home.html)

**Customer Response Solutions**

[http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html)

**Cisco Unified Customer Voice Portal**

[http://www.cisco.com/en/US/products/sw/custcosw/ps1006/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps1006/tsd_products_support_series_home.html)

**Cisco Telephony Integration Object Server**

[http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd_products_support_series_home.html)

**Cisco Agent Desktop**

[http://www.cisco.com/en/US/products/sw/custcosw/ps427/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps427/tsd_products_support_series_home.html)

**Cisco Security Agents**

[http://www.cisco.com/en/US/products/sw/secursw/ps5057/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/secursw/ps5057/tsd_products_support_series_home.html)

**CiscoWorks Management Center for Cisco Security Agents**

[http://www.cisco.com/en/US/products/sw/cscowork/ps5212/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/cscowork/ps5212/tsd_products_support_series_home.html)

**Cisco Catalyst 3550 Series Switches**

[http://www.cisco.com/en/US/products/hw/switches/ps646/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/switches/ps646/tsd_products_support_series_home.html)

**Cisco Catalyst 6500 Series Switches Install and Upgrade Guides**[http://www.cisco.com/en/US/products/hw/switches/ps708/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/switches/ps708/tsd_products_support_series_home.html)**Cisco CSS 11000 Series Content Services Switches**[http://www.cisco.com/en/US/products/hw/contnetw/ps789/tsd\\_products\\_support\\_eol\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/contnetw/ps789/tsd_products_support_eol_series_home.html)**Cisco 7800 Series Media Convergence Servers Guides**[http://www.cisco.com/en/US/products/hw/voiceapp/ps378/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/voiceapp/ps378/tsd_products_support_series_home.html)**Cisco AS5400 Series Universal Gateways**[http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd_products_support_series_home.html)**Cisco AS5800 Series Universal Gateways**[http://www.cisco.com/en/US/products/hw/univgate/ps509/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/univgate/ps509/tsd_products_support_series_home.html)**Cisco 3600 Series Multiservice Platforms**[http://www.cisco.com/en/US/products/hw/routers/ps274/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/routers/ps274/tsd_products_support_series_home.html)**Cisco 3700 Series Multiservice Access Routers**[http://www.cisco.com/en/US/products/hw/routers/ps282/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html)**Cisco 3800 Series Integrated Services Routers**[http://www.cisco.com/en/US/products/ps5855/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps5855/tsd_products_support_series_home.html)**Cisco IOS Software Release 12.4 T**[http://www.cisco.com/en/US/products/ps6350/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6350/tsd_products_support_series_home.html)

## Configuration Command Files

You can download sample configuration files for the call flow components described in [Tested Call Flows](#).

**Table 7-2** Sample Call Flow Component Configuration Files

| Description   | Filename   |
|---|--|
| Test Bed 1 Call Flows: Cisco Unified CallManager Post-Routed Call Flow Components | <a href="#">TestBed1_Config.zip</a> (right-click to download zip) includes the files below.<br><br><b>Note</b> If you click the link rather than right-click, the zip file may open in the secondary window but also replace the contents of this window. Use your Back button to return to this window. |
| Site1 Cisco 3660 Gatekeeper1  | cs1-3660-gk1-config  |
| Site1 Cisco 3660 Gatekeeper2  | cs1-3660-gk2-config  |
| Site1 Cisco 3660 Gatekeeper3  | cs1-3660-gk3-config  |

**Table 7-2 Sample Call Flow Component Configuration Files (continued)**

| Description  | Filename  |
|--|---|
| Site1 Cisco 3745 Gateway1  | cs1-3745-gw1-config   |
| Site1 Cisco CMM Gateway1   | cs1-cmm-gw1-config  |
| Site2 Cisco 3825 Gateway1  | cs2-3825-gw1-config   |
| Site3 Cisco 3725 Gateway1  | cs3-3725-gw1-config   |
| Site4 Cisco 3660 Gatekeeper1   | cs4-3660-gk1-config   |
| Site4 Cisco 3660 Gatekeeper2   | cs4-3660-gk2-config   |
| Site4 Cisco 3660 Gatekeeper3   | cs4-3660-gk3-config   |
| Site4 Cisco 3745 Gateway1  | cs4-3745-gw1-config   |
| Site4 Cisco 5850 Gateway1  | cs4-5850-gw1-config   |
| Site5 Cisco CMM Gateway1   | cs5-cmm-gw1-config  |
| Site6 Cisco 3745 Gateway1  | cs6-3745-gw1-config   |
| Site6 Cisco 3745 Gateway2  | cs6-3745-gw2-config   |
| Site9 Cisco 3660 Gatekeeper1   | cs9-3660-gk1-config   |
| Site9 Cisco CMM Gateway1   | cs9-cmm-gw1-config  |
| <b>Test Bed 2 Call Flows: Cisco Unified Customer Voice Portal Post-Routed Call Flow Components</b> | <p><a href="#">TestBed2_Config.zip</a> (right-click to download zip) includes the files below.</p> <p><b>Note</b> If you click the link rather than right-click, the zip file may open in the secondary window but also replace the contents of this window. Use your Back button to return to this window.</p> |
| Site1 Cisco 3660 Gatekeeper1   | ps1-3660-gk1-config   |
| Site1 Cisco 3660 Gatekeeper2   | ps1-3660-gk2-config   |
| Site1 Cisco 3745 Gateway1  | ps1-3745-gw1-config   |
| Site1 Cisco 6509 MSFC Switch   | ps1-6509-msfc-config  |
| Site1 Cisco 6509 Switch1   | ps1-6509-SW1-config   |
| Site1 Cisco 7206VXR Router   | ps1-7206-config   |
| Site1 Cisco Content Services Switch1   | ps1-css1-config   |
| Site3 Cisco 3825 Gateway1  | ps3-3825-gw1-config   |
| Site3 Cisco 3825 Gateway2  | ps3-3825-gw2-config   |
| Site3 Cisco AS5400HPX Gateway1   | ps3-5400-gw1-config   |
| Site3 Cisco AS5400HPX Gateway2   | ps3-5400-gw2-config   |
| Site3 Cisco 6506 MSFC Switch   | ps3-6506-msfc-config  |
| Site3 Cisco 6506 Switch1   | ps3-6506-SW1-config   |
| Site3 Cisco 7206VXR Router   | ps3-7206-config   |
| Site5 Cisco 3660 Gatekeeper1   | ps5-3660-gk1-config   |
| Site5 Cisco 3660 Gatekeeper2   | ps5-3660-gk2-config   |

**Table 7-2 Sample Call Flow Component Configuration Files (continued)**

| Description                          | Filename             |
|--------------------------------------|----------------------|
| Site5 Cisco 3745 Gateway1            | ps5-3745-gw1-config  |
| Site5 Cisco 6509 MSFC Switch         | ps5-6509-msfc-config |
| Site5 Cisco 6509 Switch1             | ps5-6509-SW1-config  |
| Site5 Cisco 7206VXR Router           | ps5-7206-config      |
| Site5 Cisco Content Services Switch2 | ps5-css2-config      |
| Site6 Cisco 3725 Gateway1            | ps6-3725-gw1-config  |
| Site6 Cisco 3725 Gateway2            | ps6-3725-gw2-config  |
| Site6 Cisco 3745 Gateway1            | ps6-3745-gw1-config  |
| Site6 Cisco AS5400HPX Gateway1       | ps6-5400-gw1-config  |
| Site6 Cisco AS5400HPX Gateway2       | ps6-5400-gw2-config  |
| Site6 Cisco AS5400HPX Gateway3       | ps6-5400-gw3-config  |
| Site6 Cisco AS5400HPX Gateway4       | ps6-5400-gw4-config  |
| Site6 Cisco AS5400HPX Gateway5       | ps6-5400-gw5-config  |
| Site6 Cisco AS5400HPX Gateway6       | ps6-5400-gw6-config  |

## System Test Results

This topic summarizes the results of Cisco Unified Communications Release 5.0(2) system testing for contact center environments. This topic contains the following sections:

- [Testing Objectives](#)
- [Tested Deployment Models and Sites](#)
- [Test Results](#)

## Testing Objectives

Cisco Systems validates Cisco Unified Communications systems by designing, installing, configuring, and testing hardware and software to achieve a predictable, effective, and reliable system. The intent of system testing is to validate the seamless interoperability and stability of the components that make up a complete and optimized Cisco Unified Communications system.

Testing performed for Cisco Unified Communications includes (but is not limited to) the following:

- Installation, Upgrade, and Usability Testing—To verify software installation and upgrades at the system level and usability for system components
- End-to-End Functionality Testing—To verify the end-to-end functionality of system components
- Basic Functionality and Feature Testing—To verify basic call flows and component features
- Customer Assurance Program (CAP) Scenario Testing—To re-create and test CAP scenarios based on TAC input
- Interoperability Testing—To verify the interoperability among system components
- Scalability Testing—To verify system functionality during scalability tests

- Performance, Load, and Stress Testing—To verify system functionality during performance, load, and stress tests
- Failover, Recovery, and Redundancy Testing—To verify system behavior during failover and recovery, and behavior in redundant configurations

## Tested Deployment Models and Sites

The *System Test Architecture Reference Manual* provides information about the components and configurations that have been tested and verified as part of a given Cisco Unified Communications release. For information about the components, configurations, and environment tested in Cisco Unified Communications Release 5.0(2), see [Test Deployment Models and Sites](#).

## Test Results

The results of the system tests performed for contact center during Cisco Unified Communications Release 5.0(2) are shown in the [System Test Results](#).

The test results contain the following information:

- Title—Title of the test.
- ID—Identifier for the test.
- Description—Description of the purpose of the test.
- Features Tested—Component feature tested.
- Status—Result of the test and any defects related to the test case. Possible values are:
  - Passed—Test case passed as described in the table.
  - Failed—Test case failed and the reason is described in the listed defect.
  - Passed with exception—Test case as described passed but an anomaly occurred that was not directly related to the functionality being tested. Possible anomalies are as follows:
    - The test *steps* were modified based on the actual feature implementation.
    - The test *setup* was modified based on the actual feature implementation.
    - The test results did not exactly match what was expected although the feature performed as required.
- Defects—Identifier for any defect that was opened against the test. If you have an account with Cisco.com, you can use the Bug Toolkit to view information about defects.

To access the Bug Toolkit, go to this URL:

[http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl) 

## Cisco Sales Demos

The Cisco Sales Demo document describes the various methods that are available for use by Cisco sales teams to demonstrate the Cisco Unified Communications system.

[Cisco Unified Communications System Demonstration Programs](#) 