



# Release Notes for the Cisco Voice Services Provisioning Tool, Release 2.8(1)

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## January 2009

The Cisco Voice Services Provisioning Tool (VSPT) Release 2.8(1) provides support on new features and performance improvements introduced on Cisco PGW 2200 Softswitch Release 9.8(1).

This document contains release information for the Cisco VSPT Release 2.8(1) software. For more information on the Cisco VSPT software, please visit the Cisco website at

[http://www.cisco.com/en/US/products/sw/netmgtsw/ps2272/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/netmgtsw/ps2272/tsd_products_support_series_home.html)

or

<http://www.cisco.com/cgi-bin/tablebuild.pl/vspt>

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# Introduction

Cisco VSPT helps you create configuration files across multiple devices including the Cisco PGW 2200 Softswitch and the Cisco Billing and Measurement Server (BAMS). Cisco VSPT provides a GUI for batch and interactive provisioning of the Cisco PGW 2200 Softswitch and the Cisco BAMS.

Each release of Cisco VSPT supports a specific release of the Cisco PGW 2200 Softswitch.

Cisco VSPT 2.8(1) is no longer available as a free download at Cisco.com. In order to use Cisco VSPT 2.8(1), you must purchase the Cisco MGC Node Manager 2.8(1) Media Kit which includes both Cisco VSPT 2.8(1) and Cisco MGC Node Manager (CMNM) 2.8(1).

Cisco VSPT can help you avoid common errors that might arise if devices are provisioned independently. Cisco VSPT also reduces the need to enter duplicate data and enables you to deploy configurations to and export configurations from the Cisco PGW 2200 Softswitch.

Cisco VSPT generates the configuration files you need to provision the Cisco PGW 2200 Softswitch and the Cisco BAMS. The files contain parameter for:

- Signaling
- Trunk groups
- Trunks
- Routes
- External nodes
- System
- Dial plans

## System Requirements

The following requirements are the minimum hardware and software you need to run the Cisco VSPT software:

- Sun UltraSPARC server, 440 MHz or faster
- Sun Solaris 10 operating system (Sparc/Opteron)
  - Open Windows with the Common Desktop Environment (CDE)
- 8-bit video graphics card
- 1 GB of System RAM
- 128 MB of free disk space (in installation directory)
- 1 GB of free swap space

You need approximately 6 GB of disk space in the /var partition for each configuration session.

## New Features

Cisco VSPT Release 2.8(1) added support for Cisco PGW 2200 Softswitch Release 9.8(1), Cisco H.323 Signaling Interface (HSI) Release 4.3(2), and Cisco Billing and Measurements Server (BAMS) Release 3.30.

## Cisco PGW 2200 Softswitch Release 9.8(1) Support

For more information on features of Cisco PGW 2200 Softswitch Release 9.8(1), see the *Release Notes for the Cisco PGW 2200 Softswitch Release 9.8(1)* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/pgw/9/release/note/rn981.html](http://www.cisco.com/en/US/docs/voice_ip_comm/pgw/9/release/note/rn981.html)

## Cisco HSI Release 4.3(2) Support

For more information on features of Cisco HSI 4.3(2), see the *Release Notes for Cisco H.323 Signaling Interface Release 4.3 and Related Patches* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/pgw/hsi/4.3/release/note/43p6rn.html](http://www.cisco.com/en/US/docs/voice_ip_comm/pgw/hsi/4.3/release/note/43p6rn.html)

## Cisco BAMS Release 3.30 Support

For more information on features of Cisco BAMS 3.30, see the *Release Notes for Cisco Billing and Measurements Server Software Release 3.30 and Related Patches* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/pgw/bams/3.30/release/note/330rn.html](http://www.cisco.com/en/US/docs/voice_ip_comm/pgw/bams/3.30/release/note/330rn.html)

## Software Changes

This section describes added or modified MML components, SIP/sigpath and trunk group properties, and result types and other changes on the Cisco VSPT Release 2.8(1) and Release 2.8(1) patches.

For more information on the Cisco PGW 2200 Softswitch provisioning, see the *Cisco Media Gateway Controller Software Release 9 Provisioning Guide* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/pgw/9/provisioning/guide/prvgde.html](http://www.cisco.com/en/US/docs/voice_ip_comm/pgw/9/provisioning/guide/prvgde.html)

## Release 2.8(1)

Cisco VSPT Release 2.8(1) supports Cisco PGW 2200 Softswitch Release 9.8(1) up to Release 9.8(1) SIP1.

### New MML components

- SourceBlack
- DomainString
- DRPTable
- RouteSelect
- DESTTRANS
- outsipheader
- insipheader
- Domainprofile
- SIPIVersion

- gwpool
- ipgw

#### Modified MML Components

- Added a new parameter, Domain Based RT support, to the siptrtrnkgrp component.
- Added new parameters, type, base, category, validation, and variant in profile.
- Added new profile types, sipprofile, eisupprofile, domainprofile, grprofile, commonprofile, and gwpoolprofile.
- Added a new parameter, label, to the h248path component.

#### New Profile Properties



#### Note

Old SIP and EISUP trunk group properties were moved to profile properties and deleted in trunk group properties.

- trustLevel
- topologyHidingEnabled
- useDomainProfile
- outboundDomainProfileSource
- commonProfile
- grprofile
- insipheadertable
- outsipheadertable
- LRNDigitCCPrefix
- LRNDigitCCrm
- SipIEgressHandling
- SipIConfusionHandling
- SipIFacilityRejectHandling
- SipICLICOLPreference
- SipICANCELEncapREL
- SipInsertReasonHeader
- SipIIngressVersionMAP
- SipIEgressMDO
- SipIEgressISUPVersion
- SipEgressGN2FromScreenInd
- SipEgressEarlyDialogRelType
- SipIngressLNPHandling
- SipIToiw2
- GatewayToneSupport
- GatewayAnnSupport

- GatewayCodecSupport
- GatewayDTMFSupport
- GatewaySelectionMethod
- GatewayPool
- AnchorMedia
- AnchorPolicy
- AnnouncementOption
- ToneOption
- DummyCodecString
- NATTraversalEnabled
- RestrictPresIfNoPAID

**New SIP Properties**

- sipTransportMode
- DelayedOfferToEarlyOfferInterworking

**Updated SIP Properties**

- sipMimeBodySupport
- Support183

**New Misc Properties**

- PropagateDelayCounter

**Updated Analysis Routing Properties**

- InhibitSipFromMapping

**Updated Number Properties**

- BDigitCCPrefix
- BDigitCCrm
- ADigitCCPrefix
- ADigitCCrm
- CCOrgin

**Other New Properties**

- NATTraversalMethod
- IPTermNumGroups
- IPTermNumInterfaces
- IPTerNumTerms

**New Result Types**

- DRP\_EXIT
- IP\_ROUTE\_SEL

- IP\_SET\_SOURCE\_DMN
- IP\_DEST\_TRANS
- IP\_SOURCE\_SCREEN
- SIPI\_CONTROL
- GATEWAYPOOL

#### Modified Result Types

- The new data word, Pre-analysis as the next stage, was added into the result type RETRY\_ACTION.
- The value 3 was added to the dataword 2, Analysis type, in the result type NEW\_DIALPLAN.
- The value 6 was added to the dataword 1, Type, and the values 5 and 6 were added to the dataword 2, Treatment, in the result type FACILITY.

## Release 2.8(1) Patch 1

Cisco VSPT Release 2.8(1) Patch 1 supports Cisco PGW 2200 Softswitch Release 9.8(1) up to Release 9.8(1) S2P2.

#### New Profile Properties

- InsideVrfName
- OutsideVrfName

#### Removed Profile Properties

- VrfName

## Supported Configurations

The following configurations are supported:

- Cisco MGC Node Manager and Cisco VSPT installed together on a network management server (recommended)
- Cisco MGC Node Manager installed on a network management server and Cisco VSPT installed on a Cisco PGW 2200 Softswitch host machine
- Cisco MGC Node Manager installed on a network management server and Cisco VSPT installed on a separate server
- Cisco VSPT installed on a Cisco PGW 2200 Softswitch host machine or a standalone Sun Server



#### Note

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Cisco VSPT is tested co-resident with Cisco MNM and LMS only.

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# Supported Network Elements

The following network elements have been tested and verified to work with this release of the Cisco VSPT. Cisco VSPT supports provisioning for Cisco PGW 2200 Softswitch and Cisco BAMS only. Cisco VSPT provides backup and restore functions for all the network elements which are supported by Cisco MNM.



## Note

Other network element software versions are not supported with this version.

- Cisco PGW 2200 Softswitch Release 9.8(1) with provisioning for the following components:
  - Signaling
  - Trunk groups
  - Trunks
  - Routes
  - External nodes
  - System
  - Dial plans
- Cisco HSI 4.3(2)
- Cisco BAMS 3.30
- Cisco ITP-L
  - 2611 (12.4(21))
  - 2651 (12.4(21))
  - 2811 (12.4(21))
- Cisco Integrated ITP-L (5400 & 5350) 12.4(19)a
- Cisco LAN switches
  - Cisco Catalyst 5500 (latest)
  - Cisco Catalyst 2900XL (latest)
  - Cisco Catalyst 6509

## Resolved Problems

### Release 2.8(1)

Table 1 describes problems resolved in Cisco VSPT Release 2.8(1).

**Table 1** Resolved Problems in Cisco VSPT Release 2.8(1)

Identifier	Severity	Description
CSCsq71077	3	VSPT 2.7.3 P3 fails to import the trunk group information from PGW.
CSCsr13068	3	Array index out of bound exception when adding properties in profiles.

**Table 1** *Resolved Problems in Cisco VSPT Release 2.8(1) (continued)*

Identifier	Severity	Description
CSCsr13074	3	Property name is not refreshed in profiles.
CSCsr88688	3	The key of domainprof is wrong.
CSCsr88827	4	In non-debug mode, there is still the prompt "using sftp..." in the terminal when running VSPT.
CSCsj03153	6	VSPT: Add support for PGW domain based analysis and routing.
CSCsm19500	6	Tables are not sortable in VSPT.
CSCsm82462	6	VSPT: Add support for SIP over TCP Phase 2.
CSCsm82490	6	VSPT: Add support for SIP-I.
CSCsm82496	6	VSPT: Add support for P IP gateway.
CSCsm82500	6	VSPT: Add support for SIP Profile.
CSCsm89540	6	Add a setting for SSH/non-SSH connection for PGW/BAMS.
CSCsm89556	6	Optimize the MML commands generated by VSPT.
CSCso12632	6	VSPT out of memory when loading config with large porttbl, Termtbl.
CSCsq98291	6	Add patch level information in the Help > About VSPT.
CSCsr42671	6	Add support for Finnish SIP-I support on PGW.
CSCsr64698	6	Add support for PGW features introduced from Release 9.7(3) S14P14 to S17P17.

## Release 2.8(1) Patch 1

[Table 2](#) describes problems resolved in Cisco VSPT Release 2.8(1) Patch 1.

**Table 2** *Resolved Problems in Cisco VSPT Release 2.8(1) Patch 1*

Identifier	Severity	Description
CSCsv79161	3	Trkgrp template should begin with format3 or xml for pgw to read.
CSCsw36268	3	Audit error: invalid password.
CSCsw44649	3	Copyright of the backgroup picture should be updated.
CSCsw76656	3	VSPT fails to complete a full system backup for HSI and PGW.
CSCsx08913	3	VSPT fails to perform MGC system restore because of permission deny.
CSCsx09347	3	VSPT fails to perform the HSI restore if using non-root backup ID.
CSCsw36290	4	Trunk group version should be changed to 981.
CSCsu61922	6	GUI remote shell tool window can't be closed properly.
CSCsv57570	6	VSPT supports to include egress TG vrf information in the originating side.

# Installation Notes

This section contains information and procedures you can use to install, upgrade, and uninstall Cisco VSPT Release 2.8(1). It also contains information about software patches.

## Acquiring the Software

Cisco VSPT Release 2.8(1) is provided to users on the VSPT CD included in the Cisco MGC Node Manger Media Kit. All the patches and releases prior to Release 2.8(1) are available at

<http://www.cisco.com/cgi-bin/tablebuild.pl/vspt>

## Installing and Uninstalling Cisco VSPT 2.8(1)

For detailed information on installing and uninstalling Cisco VSPT Release 2.8(1), see Chapter 2, “Installing Cisco VSPT” in the *Cisco Voice Services Provisioning Tool User’s Guide, Release 2.8(1)* at

[http://www.cisco.com/en/US/docs/net\\_mgmt/vspt/2.8/user/guide/vspt\\_ug\\_wpr.html](http://www.cisco.com/en/US/docs/net_mgmt/vspt/2.8/user/guide/vspt_ug_wpr.html)

## Software Patches

You can only install Cisco VSPT 2.8(1) patches on Cisco VSPT version available on the Cisco VSPT 2.8(1) product CD that ships with the Cisco MGC Node Manager 2.8(1) Media Kit. Perform the following procedure to install patches:

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**Step 1** Save the configuration files using the following commands:

```
mkdir -p /tmp/CSCovsp28
cp -r /var/opt/CSCovsp28/data /tmp/CSCovsp28
```

**Step 2** Check the version of Cisco VSPT 2.8(1) using the following command:

```
cat /opt/CSCovsp28/version
```

**Step 3** Download the patch file from the following website:

<http://www.cisco.com/cgi-bin/tablebuild.pl/vspt>

For example, if you are going to install Cisco VSPT 2.8(1) Patch 1, download **CSCovspt-281-P01.tar**.

**Step 4** Extract the patch file using the following command:

```
tar -xvf CSCovspt-281-P01.tar
```

**Step 5** Change to super user **root** using the following command:

```
su -root
```

**Step 6** Install the VSPT patch using the following command:

```
./patchCSCovspt
```

**Step 7** Restore the configuration files using the following command:

```
cp -r /tmp/CSCovsp28 /var/opt/CSCovsp28/data
```

# Troubleshooting

## Setting X-Windows DISPLAY Environment Variable

You must set the X-Windows DISPLAY environment variable in order to install the Cisco VSPT. If this variable is not set properly, the installation program exits with a Java error message or simply stops responding. Use the following examples to set your X-Windows DISPLAY environment variable. Replace the value <hostname> with your machine hostname.

- In csh or tcsh,  

```
setenv DISPLAY <hostname>:0
```
- In sh or ksh,  

```
DISPLAY=<hostname>:0; export $DISPLAY
```

## Deploying and Communicating with a Remote Machine

If you experience problems or errors deploying configurations to or communicating with a remote machine, check the following points:

- Ensure that the machine is active and responding to the **ping** command.
- Ensure that you have specified the correct login and password.

## Deploying Configurations to Cisco PGW 2200 Softswitch

If you experience errors when deploying configurations to the Cisco PGW 2200 Softswitch, check the following points:

- The Cisco PGW 2200 Softswitch supports only one provisioning session at a time. When deploying configurations to the Cisco PGW 2200 Softswitch, ensure that no other provisioning sessions are active.
- When you are activating a configuration on the Cisco PGW 2200 Softswitch, the Cisco PGW 2200 Softswitch might require that some signaling components be taken out of service before the configuration is activated. If you do not take the components out of service, you receive an MML error message. You can take the components out of service from MML manually, and after that you can activate the configuration.

## Verifying VSPT Directories

### Directory Where VSPT Is Installed

Enter the following command to determine where Cisco VSPT is installed:

```
/usr/bin/pkgparam _VSPT_PKG_NAME_ BASEDIR
```

If you want to determine where Cisco VSPT Release 2.8(1) is installed, use the following command:

```
/usr/bin/pkgparam CSCOVsp28 BASEDIR
```

## Directory Where VSPT Configuration Is Stored

CSCOVsp28 stores configuration files in the `/var/<install directory>/data` directory. Each configuration is stored in a separate directory with the directory name the same as the configuration name.

In the example below, it is assumed that CSCOVsp28 was installed in the directory `/opt/CSCOVsp28`. The “install directory” in this example is `/opt/CSCOVsp28`.

- To rename a configuration, simply rename the directory under `/var/opt/CSCOVsp28/data`
- To remove a configuration, remove the directory under `/var/opt/CSCOVsp28/data`

To determine where the data directory is located, use the following command to search for `DartStoreDir` in the `configEditor.properties` file:

```
/usr/bin/grep DartStoreDir
/opt/_VSPT_PKG_NAME_/classes/com/cisco/transpath/dart/editor/configEditor.properties
```

As a safety precaution, the uninstallation procedure does not remove configuration data. The data must be removed manually.

## Setting VNC Parameters to Address Font Problems

If you encounter any font problems in VSPT, use `-fb /user/openwin/lib/X11/fonts/misc/` as the command arguments to start the VNC server.

## Setting T1 or E1 As Default DS1 Type

You can set the default DS1 type in the `configEditor.properties` file, which is located at `/opt/_VSPT_PKG_NAME_/classes/com/cisco/transpath/dart/editor/`.

- To set T1 as the default DS1 type, edit the property `DEFAULT_DS1_TYPE`:

```
DEFAULT_DS1_TYPE=T1
```

- To set E1 as the default DS1 type, edit the property `DEFAULT_DS1_TYPE`:

```
DEFAULT_DS1_TYPE=E1
```

## SFTP or SSH Client Not Working in VSPT

If you get the error message, “The path, `/user/bin/ssh`, doesn’t exist” or the message “FTP Error. The path, `/user/bin/sftp`, doesn’t exist” when you are using SSH to deploy configurations in Cisco VSPT, check the SFTP and SSH clients.

Use the following procedures to troubleshoot this problem.

- Check the folder `/user/bin/` to verify that SSH and SFTP clients are installed. If they are not installed, you need to reinstall SSH and SFTP included in Solaris 10 software.

- Check the sshPath variable in the configEditor.properties file. The sshPath should be configured with the folder path where SSH and SFTP are installed. The following example gives the location of the configEditor.properties file and the default path for SSH and SFTP clients.

```
/opt/CSCOvsp28/classes/com/cisco/transpath/dart/editor/configEditor.properties
sshPath=/usr/bin
```

## SFTP or SSH Server Not Working on Cisco PGW 2200 Softswitch or Cisco BAMS

If you get the error message, “Error connecting to MGC:jump\_ssh:failed login” or “Error connecting to BAMS:jump\_ssh:failed login” when you are using SSH to deploy configurations in Cisco VSPT, check the SFTP and SSH on the Cisco PGW 2200 Softswitch or Cisco BAMS.

You can use the following MML command on both Cisco PGW 2200 Softswitch and Cisco BAMS to check if SFTP and SSH are installed on Cisco PGW 2200 Softswitch and Cisco BAMS.

```
ps -ef | grep ssh
```

Information displays that resembles the following:

```
root 240 1 Feb 22 ? 0:01 /usr/lib/ssh/sshd
mgcusr 8640 8637 0 03:17:19 ? 0:01 /usr/lib/ssh/sshd
```

If sshd is displayed, SFTP and SSH are already installed on the Cisco PGW 2200 Softswitch or Cisco BAMS. If sshd is missing, SFTP and SSH are not correctly installed on the Cisco PGW 2200 Softswitch or Cisco BAMS.

- SFTP and SSH installed on the Cisco PGW 2200 Softswitch and Cisco BAMS.  
You need to verify that the path displayed for each command is the same path configured for the sshPath variable in the configEditor.properties file in the following VSPT folder:  
/opt/CSCOvsp28/classes/com/cisco/transpath/dart/editor/configEditor.properties

The default path for SSH and SFTP for the Cisco PGW 2200 Softswitch and Cisco BAMS is /usr/bin/ on Solaris 10.

- SFTP or SSH not installed on the Cisco PGW 2200 Softswitch or Cisco BAMS.  
You need to reinstall SSH and SFTP, which are included in Solaris 10 software, on the Cisco PGW 2200 Softswitch and Cisco BAMS.

## TFTP Not Working on the Cisco PGW 2200 Softswitch or Cisco BAMS

If you get the timeout error message in Status tab when you are performing the backup and restore in VSPT, check the TFTP on the Cisco PGW 2200 Softswitch or Cisco BAMS.

Use the following MML command to check TFTP on the Cisco PGW 2200 Softswitch or Cisco BAMS.

```
grep /etc/inetd.conf tftp
```

If in.tftpd is missing, TFTP is not installed on the Cisco PGW 2200 Softswitch or Cisco BAMS. You need to download the following two packages to install the TFTP on the Cisco PGW 2200 Softswitch or Cisco BAMS:

- SUNWtftp
- SUNWtftpr

To enable the TFTP on the Cisco PGW 2200 Softswitch or Cisco BAMS, see the section, “Enable TFTP on the Backup Host” in Chapter 2, “Installing Cisco VSPT,” in *Cisco Voice Services Provisioning Tool User Guide, Release 2.8(1)* at

[http://preview.cisco.com/en/US/docs/net\\_mgmt/vspt/2.8/user/guide/vspt\\_ug\\_wpr.html](http://preview.cisco.com/en/US/docs/net_mgmt/vspt/2.8/user/guide/vspt_ug_wpr.html)

## Product Documentation

The documents that contain information related to the Cisco VSPT Release 2.8(1) are at the following URL:

[http://www.cisco.com/en/US/products/sw/netmgsw/ps2272/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/netmgsw/ps2272/tsd_products_support_series_home.html)

## Related Documentation

The documents that contain information related to the Cisco PGW 2200 Softswitch are at the following URL:

[http://www.cisco.com/en/US/products/hw/vcallcon/ps2027/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/vcallcon/ps2027/tsd_products_support_series_home.html)

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation at

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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