



Cisco Insight Installation Guide

Version 1.1

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Preface

This preface describes who should read the *Cisco Insight Installation Guide*, how it is organized, its document conventions, and how to obtain documentation and technical assistance.

This guide assumes a basic familiarity with the concepts of Cisco Service Control solution, the Service Control Engine (SCE) platforms, and related components. It is also suitable the reader has basic Linux installation and administration skills.

Document Revision History

CISCO Service Center Release	Part Number	Publication Date
Release 1.0	OL-09050222	10/10/2009
Release 1.1		4/27/2010

Audience

This guide provides information about the installation and first configuration steps of the Cisco Insight software. The document is intended for:

- Technicians responsible for system's installation
- Administrators responsible for system's provisioning and setup

Before proceeding, you should have experience working with the Linux operational system, MySQL, Apache-Tomcat and network configuration

Organization

This guide contains the following topics:

Title	Description
Chapter 1 Prepare for Installation (on page 1-1)	Details the HW and SW requirements
Chapter 2 Installation (on page 2-1)	Provides a description of the installation process
Chapter 3 Configuration (on page 3-1)	Details the minimal required steps for the set up and some guidelines to help troubleshooting

Related Documentation

This Quick Start Guide should be used in conjunction with the following Cisco documentation:

- *Cisco Insight User Guide*
- *Cisco Service Control Management Suite Collection Manager Quick Start Guide*
- *Cisco Service Control Management Suite Collection Manager User Guide*

Conventions

This document uses the following conventions:

Convention	Indication
bold font	Commands and keywords and user-entered text appear in bold font.
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.
[]	Elements in square brackets are optional.
{ x y z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<code>courier font</code>	Terminal sessions and information the system displays appear in <code>courier</code> font.
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Reader additional information

Note	Means <i>reader take note</i> .
Tip	Means <i>the following information will help you solve a problem</i> .
Caution	Means <i>reader be careful</i> . In this situation, you might perform an action that could result in equipment damage or loss of data.
Timesaver	Means <i>the described action saves time</i> . You can save time by performing the action described in the paragraph.
Warning	Means <i>reader be warned</i>. In this situation, you might perform an action that could result in bodily injury

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.CISCO.com>
- <http://www-china.CISCO.com>
- <http://www-europe.CISCO.com>

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the networking Products Marketplace:
http://www.CISCO.com/cgi-bin/order/order_root.pl
- Registered CISCO.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.CISCO.com/cgi-bin/marketplace/welcome.pl>
- Nonregistered CISCO.com users can order documentation through a local account representative by calling CISCO corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

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You can email your comments to bug-doc@CISCO.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Attn Document Resource Connection

Cisco Systems, Inc.

170 West Tasman Drive

San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides CISCO.com (on page [vii](#)) as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For CISCO.com registered users, additional troubleshooting tools are available from the TAC website.

CISCO.com

CISCO.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

CISCO.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through CISCO.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on CISCO.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access CISCO.com, go to the following website:

<http://www.CISCO.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.CISCO.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for [CISCO.com](http://www.CISCO.com) (on page vii), go to the following website:

<http://tools.CISCO.com/RPF/register/register.do>

If you cannot resolve your technical issue by using the TAC online resources, CISCO.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.CISCO.com/tac/caseopen>

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.CISCO.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



Prepare for Installation

The Cisco Insight is a software application requiring installation on appropriate hardware, as well as an initial setup to make it operational and generate data traffic reports.

This chapter contains the following sections:

- [HW Requirements 1-1](#)
- [SW Requirements 1-3](#)
- [Service Control SW Requirements 1-3](#)Service Control SW components requirements
-
- Since the Cisco Insight software works with all the Service Control Management Suite, the following software versions are required:

SCSM Subscriber Manager	3.5.5
SCSM Collection Manager	3.5.5
SCE	3.5.5

- Deployment Scenario [1-33](#)

HW Requirements

Server-side requirements

The Cisco Insight can be installed on any Linux-based workstation with at least the following specifications:

CPU	Single 2.0 GHz or greater Intel x86/64 processor or equivalent
RAM	2 GB or greater

Free Disk Space	10 GB + free space for data retention. Recommended value: > 80 GB
Network interface	Single 100BASE-T Ethernet or greater
CD-ROM drive	Recommended

For large deployments additional disk capacity, RAM and CPU processing could be required, depending on parameters such as the number of SCEs and Subscribers in the network, the SCE's RDR-rate, the number of concurrent users producing reports, the retention period of historical data.

Client-side requirements

PC Clients connecting to the Cisco Insight server should have enough RAM and CPU capacity to support report visualization, especially when running interactive reports which are based on Java Applets technology.

As best practice, it is advisable to use a workstation with:

- 2 GHz x86 CPU or greater
- 1 GB RAM or greater

SW Requirements

Server-side requirements

The CISCO Insight has been optimized to run on Red Hat-based Linux workstations with the following requirements:

OS	Red Hat Enterprise ES 4.0 or 5.0 – 32 bit version only
System Package	Red Hat Core installation



Note

It is strongly recommended to update the operating system with the latest security patches

Client-side requirements

On the client side, the following browsers are supported:

Operating System	Any
Internet Browsers	<ul style="list-style-type: none"> • Mozilla Firefox 2 or greater • Internet Explorer 6 or greater • Opera • Google Chrome
Additional Software	<ul style="list-style-type: none"> • JRE 6 or greater to run interactive reports (based on Java Applets) • Adobe Acrobat Reader v6 or any compatible software – to run PDF-based reports • Microsoft Excel 2003 or equivalent – to run XLS-based reports

Service Control SW components requirements

Since the Cisco Insight software works with all the Service Control Management Suite, the following software versions are required:

SCSM Subscriber Manager	3.5.5
SCSM Collection Manager	3.5.5
SCE	3.5.5

Deployment Scenario

The following figure shows an overview of the Cisco Insight platform and the integration with CISCO Service Control Application components.

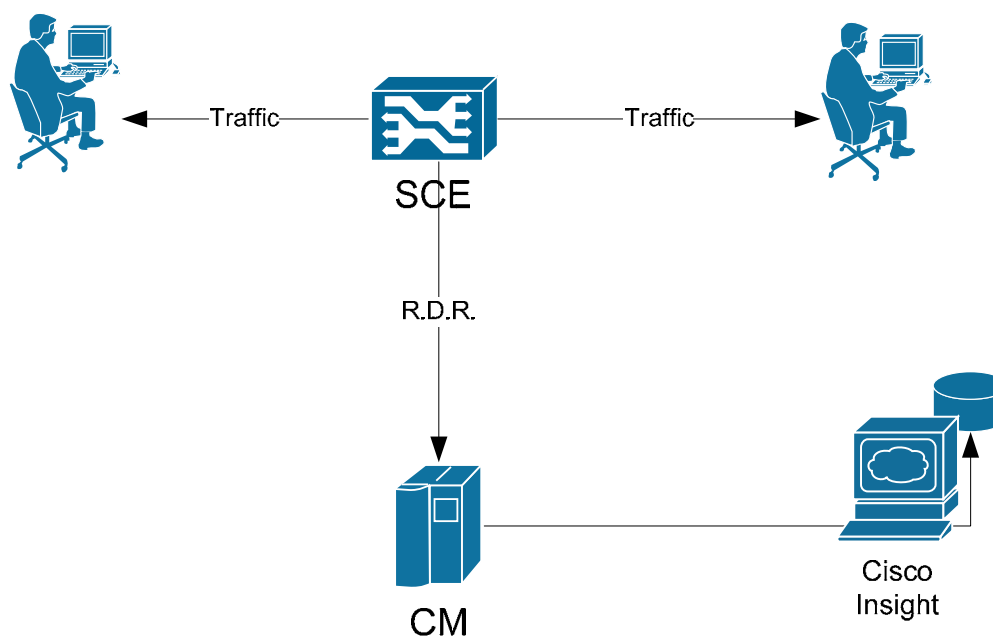


Figure 1 - Cisco Insight deployment



Installation

The Cisco Insight software is distributed as an archive file available at <http://www.cisco.com>.

This chapter covers the following operations:

- [Download the Installation Package](#)
- [Installing Cisco Insight](#)
- [Post-installation procedures](#)
- [Procedure to enable BI on SCMS components](#)
- [Check the installation](#)
- [Uninstalling Cisco Insight](#)
- [Reinstalling Cisco Insight](#)

Download the Installation Package

This section describes how to download and copy Cisco Insight software.

Procedure

Step 1 Connect to CISCO.com and download the software package

Step 2 Copy the file on the file system of the destination server

Step 3 Connect as *root* on the server and extract the downloaded .tar.gz file with the following command:

```
Shell> tar -zxvf CiscoInsight_Installer-x.y.z.tar.gz
```

Where x.y.z is the version of the downloaded package

**Note**

Don't remove the extracted folder of the downloaded .tar.gz file, because the uninstall script file will be created there after the installation

Installing Cisco Insight

During the installation process, the wizard checks if all the required software components are available and if they are compliant.

The wizard handles the following two main scenarios:

- New Installation: The server is compliant with the HW and SW requirements, but it is missing all Cisco Insight software components: the MySQL database server, the Apache-Tomcat web server, and the Java Runtime Environment
- Installation on a host with MySQL DB already used by Cisco SCMS Collector Manager: The database was previously installed and is being populated by one or more Cisco SCMS Collector Managers with RDR information collected by SCE devices. The destination host may also have Apache Tomcat and JRE already installed: the wizard will recognize existing installations of those packages

In the first scenario a full installation will be performed and at the end of the process Cisco Insight will be ready to run.

In the second scenario, it is possible to install only the Insight web application and update the database schema by answering "NO" to all other installation requests.

However, if the host is missing either the Apache Tomcat or the JRE, the wizard will handle the situation and will prompt the operator for installing these packages

Full installation on a new server

The wizard checks the server requirements and installs Apache-Tomcat, MySQL DB server, the JRE and the Cisco Insight software.

Procedure

Step 1 Install Cisco Insight with automatic script::

```
Shell> cd CiscoInsight_Installer
Shell> ./install.sh
Start.....

Free Space :xxxx MB
architecture i386 correct
```



```
Verifying Tomcat...
```

```
No existing Tomcat version was found
```

```
Do you want to install Apache Tomcat? (Y/N):
```

Step 2 Press “Y” then ENTER:

```
Installing Tomcat in /usr/local/CiscoInsight/
```

```
Do you want to choose a new path for Apache Tomcat? (Y/N):
```

Step 3 Press “N” then ENTER:

```
Installing Tomcat in /usr/local/CiscoInsight/
```

```
Done!
```

```
Verifying MySQL...
```

```
No existing MySQL version was found
```

```
Do you want to install MySQL server? (Y/N):
```

Step 4 Press “Y” then ENTER:

```
Installing MySQL in /usr/local/CiscoInsight/
```

```
Do you want to choose a new path for MySQL server? (Y/N):
```

Step 5 Press “N” then ENTER:

```
Installing MySQL in /usr/local/CiscoInsight/
```

```
Done!
```

```
Verifying Java...
```

```
Your Java version:
```

Step 6 Java version was not found:

```
Java is not installed
```

```
Do you want to install JRE6? (Y/N):
```

Step 7 Press “Y” then ENTER:

```
Done!
```

```
Installing Web Application...
```

```
End Procedure.
```

Installation on host with a running database

As the MySQL database is already installed, the script needs to know the MySQL’s root account credentials.

To install the Cisco Insight software follow these steps:

Procedure

Step 1 Install Cisco Insight with automatic script::

```
Shell> cd CiscoInsight_Installer
```

```
Shell> ./install.sh
```

```
Start.....
```

```
Free Space :xxxx MB
```

```
architecture i386 correct
```

```
Verifying Tomcat...
```

```
An existing Tomcat version was found
```

```
Tomcat version is OK
```

```
Do you want to install the Apache-Tomcat? (Y/N):
```

Step 2 Press “N” then ENTER:

```
Verifying MySQL...
```

```
An existing MySQL version was found
```

```
MySQL version is OK
```

```
Do you want to install MySQL server? (Y/N):
```

Step 3 Press “N” then ENTER:

```
Insert the root password for MySQL:
```

Step 4 Insert the password for MySQL’s *root* account, then ENTER:

```
Done!
```

```
Verifying the Java Runtime Environment
```

```
Your Java version:
```

Step 5 Java version prints out on the screen:

```
Java is already installed
```

```
Current Java version is supported
```

```
Do you want to install JRE6? (Y/N):
```

Step 6 Press “N” then ENTER:

```
Done!
```

```
Installing Web Application.....
```

```
End Procedure.
```

**Note**

At the first installation, the environment variables will be effective only after rebooting the server or executing: `'source /etc/profile'` command

Post-installation procedures

This section describes the required actions to execute after installing the Cisco Insight software.

Configuring Databases

Once Cisco Insight is installed, the Cisco Collection Manager should be configured to work with the Insight's database. On Cisco CM, use the `dbconf.sh` script to configure the correct MySQL database

If this is the first installation, the Cisco Collection Manager software also needs to be installed.

Refer to the SCE and Cisco SCMS Collection Manager User Guide for further details.

**Note**

Database maintenance, high availability and backup should be performed by a MySQL DB Administrator

Apply the Service Configuration on SCE

In order to generate reports from the Cisco Insight, it is necessary to apply the service configuration on the SCE whose RDRs are being collected. This is required to align the SCE's service configuration with the Cisco Insight's.

The operation is executed through Cisco SCA BB Console. Please refer to the appropriate documentation for further details.

**Note**

If you do not apply the service configuration on the SCE and try to run reports using the Insight application, you may get a "No Data Found" message or you could be working with an old configuration showing wrong results

Procedure to enable BI on SCMS components

Cisco Insight leverages all the new Business Intelligence features provided by version 3.5.5 of the SCMS components. In order to activate all features in the deployment, there is a list of configuration tasks that need to be executed, as described by the following sections.

Enabling BI Video and HTTP reports

To enable the BI Video and HTTP reports, perform the following two procedures, the first on Cisco CM's command line, where the other needs to be executed through the SCA BB console.

Procedure for configuring SCMS Collection Manager

- Step 1** Enable the RAG adapter, uncomment the below line in `~/cm/config/cm.conf` file:
- ```
adapter.4=com.cisco.scmscm.adapters.rag.RAGAdapter
```
- Step 2** Configure with sufficient heap size the RAG adapter, increasing the below property in `~/cm/config/cm.conf` file: according to sizing considerations:
- ```
com.cisco.scmscm.adapters.rag.RAGAdapter=-Xmx2048M
```
- Choose the GB according to sizing considerations.
- Step 3** Configure the categorizer to route HTTP and Video TURS to RAG adapter.
- The `tags` property under RAG Adapter should include the RDR tags 4042323004 and 4042323072 in `~/cm/config/queue.conf`
- Step 4** Configure the RAG adapter to perform the aggregations.
- Copy `~/cm/config/ragadapter/repository/http_TURs.xml`
and/or `~/cm/config/ragadapter/repository/video_TURs.xml`
to `~/cm/config/ragadapter/`
- Step 5** Enable data retention on RPT_TOP_HTTP_DOMAINS, RPT_TOP_HTTP_HOSTS, RPT_TOP_VIDEO_DOMAINS, RPT_TOP_VIDEO_HOSTS, using the db maintenance script.
-

Procedure for configuring SCA BB Console

Step 1 Divide ClickStream into 2 services (“new page” and “new site”), and assign counters to these services, as illustrated below:



Step 2 Enable Video TURs:

Reporting	
Extract Full User Agent details	false
Flow Accounting RDRs enabled	false
Flow Accounting RDRs interval	60
Flow Accounting RDRs limit per s	100
Media Flow RDRs enabled	true
Minimal volume for generating Vi	1048576
Video Transaction Usage RDRs e	true

Subscriber Real-Time activity monitoring

To enable the subscriber real-time activity monitoring, follow the procedure described below to configure the SCMS Collection Manager

Procedure

Step 1 Install Cisco Insight through the wizard

Step 2 On Cisco CM: configure the categorizer to route FURs to the JDBC adapter. The *tags* property under JDBC Adapter should include the RDR tag 4042321927 in `~/cm/config/queue.conf`

Step 3 Under `~/cm/config/apps/scasbb/3.5.5/dbtables.xml`, uncomment the definition of FUR table

Step 4 Enable data retention on RPT_FUR, using the db maintenance script

Offline CM DB Aggregation

The DB scripts are provided in the distribution package under `install-scripts/Aggregation`. They should be run on MySQL server, e.g. by means of MySQL Query Browser.

Procedure

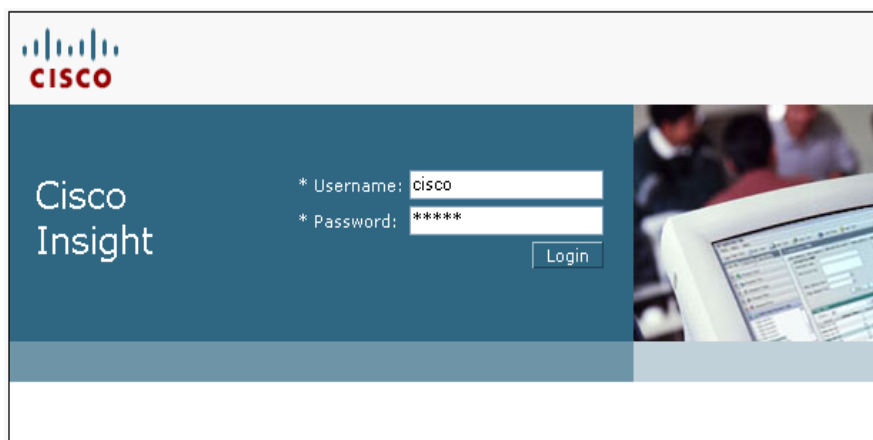
-
- Step 1** Create the general parameters table, running the content of *CREATE_PARAMETERS_TABLE.txt*
 - Step 2** Create the aggregation stored procedures for xUR tables, running the contents of *P_RPT_LUR_AGGREGATE.txt*, *P_RPT_VLUR_AGGREGATE.txt*, *P_RPT_PUR_AGGREGATE.txt*, *P_RPT_MALUR_AGGREGATE.txt*
 - Step 3** Create the aggregation stored procedures for BI RAG tables, running the contents of *P_RPT_TOP_HTTP_HOSTS_AGGREGATE.txt*, *P_RPT_TOP_HTTP_DOMAINS_AGGREGATE.txt*, *P_RPT_TOP_VIDEO_HOSTS_AGGREGATE.txt*, *P_RPT_TOP_VIDEO_DOMAINS_AGGREGATE.txt*
 - Step 4** Create the scheduled runs for stored procedures, running the corresponding commands from *all_events_create.txt* for tables with aggregation enabled
-

Checking the installation

This section describes how to check if the installation was completed successfully.

Procedure

- Step 1** Open a browser at `http://<server_ip_address>` where `<server_ip_address>` is the actual IP address assigned to the Server where Cisco Insight is installed.



- Step 2** Authenticate with the default Service Admin account:

User: cisco

Password: cisco

- Step 3** In the left frame, use the navigation tree and expand the “Application Management” node, then select “Database monitoring”

- Step 4** Look for tables whose names start by “RPT_”. These are Cisco’s data traffic tables. When traffic of Subscribers flows through the SCE, at least the *RPT_LUR*, *RPT_PUR* and *RPT_TR* tables should get populated. Verify the second column of this page: it reports the number of rows contained in each table. After a few minutes (depending on the RDR frequency configured on the SCE), the numbers corresponding to the mentioned tables should have increased, when refreshing the page.

rpt_dvlink	0	0	274877906943	1	29/04/2009 09:14:07
rpt_fur	0	88	274877906943	14	05/05/2009 15:12:37
rpt_lur	21467	1336	15942918602751	460	22/05/2009 11:54:45
rpt_malur	0	0	274877906943	1	29/04/2009 09:26:53
rpt_media	9	1	274877906943	2	21/05/2009 07:00:04
rpt_pur	21436	1355	16217796509695	470	22/05/2009 11:54:46
rpt_sur	1928	287	274877906943	78	22/05/2009 11:56:09
rpt_top_http_domains	0	1692	274877906943	342	21/05/2009 07:00:17
rpt_top_http_hosts	0	2969	274877906943	487	21/05/2009 07:00:19
rpt_top_video_domains	0	15	274877906943	6	21/05/2009 07:00:19
rpt_top_video_hosts	0	34	274877906943	8	21/05/2009 07:00:19
rpt_tops_period0	14331	1298	274877906943	626	22/05/2009 11:08:20
rpt_tops_period0_cumulative	8776	7041	13469017440255	2211	22/05/2009 11:08:20
rpt_tops_period1	1869	119	274877906943	58	22/05/2009 07:00:55
rpt_tops_period1_cumulative	1766	405	13743895347199	128	22/05/2009 02:48:54
rpt_tr	4585	2797	274877906943	203	22/05/2009 11:55:59
rpt_uvlink	0	0	274877906943	1	29/04/2009 09:33:53
rpt_vlur	0	12561		2172	21/05/2009 07:00:12

- Step 5** After you apply the SCE's configuration through CISCO SCA BB Console, you should also check if the *INI_VALUES* table is populated. Again, use the second column to obtain the number of rows contained in the table.
- Step 6** Check if the *SCE_CONFIG* table is also populated: in case of single SCE deployments, the *SCE_CONFIG* table should have the same number of rows as the *INI_VALUES* table.

Uninstalling the Cisco Insight

This section describes the procedure to uninstall the Cisco Insight's software packages.

Procedure

- Step 7** As *root*, stop the application with the following commands:

```
Shell>/etc/init.d/mysql stop
Shell>/etc/init.d/tomcat stop
Shell>/etc/init.d/MaintenanceScheduler stop
```

- Step 8** As *root*, go in the directory where you expanded the installation archive file and run the following command:

```
Shell> ./uninstall.sh
```

- Step 9** Remove the init scripts and the environment's variables:

```
Shell> rm -f /etc/init.d/tomcat
Shell> rm -f /etc/init.d/mysql
Shell> rm -f /etc/init.d/MaintenanceScheduler
```

```
Shell> edit /etc/environment and remove the environment variables
```

Reinstalling the Cisco Insight

This section describes the procedure to reinstall the Cisco Insight's software packages.

Procedure

-
- Step 1** Uninstall Cisco Insight's software following the instructions reported in the Uninstall section
 - Step 2** Reboot the server
 - Step 3** Run the Cisco Insight's installation wizard following the instructions reported in the Install section
-



Configuration

This chapter describes the procedures for configuring the Cisco Insight platform before generating first reports. There is also a troubleshooting section describing a list of checks to perform in case of issues.

This chapter contains the following sections:

- [Configure Accounts](#) 1-1
- [Configure Network Topology](#) 1-34
- [Service Control SW components requirements](#)
-
- Since the Cisco Insight software works with all the Service Control Management Suite, the following software versions are required:

SCSM Subscriber Manager	3.5.5
SCSM Collection Manager	3.5.5
SCE	3.5.5

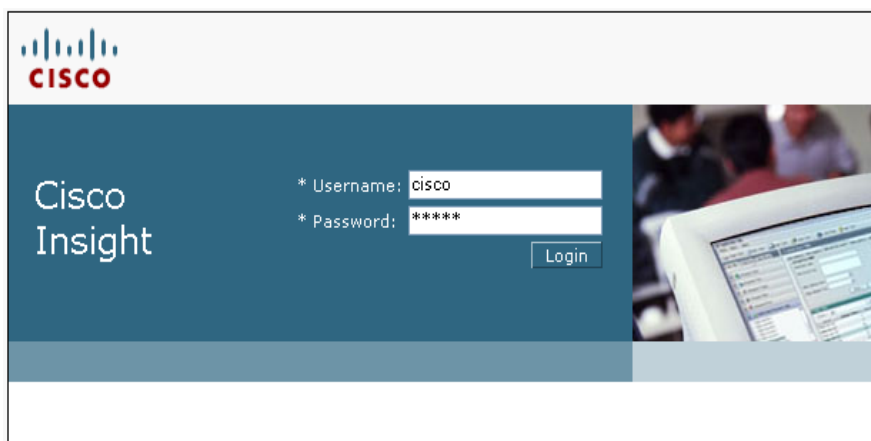
- Deployment Scenario [Troubleshooting](#) 3-11

Configure Accounts

This section describes the creation of new accounts.

Procedure

Step 1 Open a web browser at the following URL: http://<server_ipaddress>



Step 2 Login on the application with the Service Admin privileges:

User: cisco

Password: cisco

Step 3 Navigate in the tree-menu, expand the “Account Management” and select “Accounts”.



Step 4 On the right frame, click on the Create button

Account Management

Accounts Rows per Page: 10 [Go](#)

Customer: All Profile: All First Name: Last name: [Search](#) [Clear Filter](#)

<input type="checkbox"/>	Username	Customer	Role	First Name	Last Name	Email	Phone
<input type="checkbox"/>	cisco	Cisco Systems	Service Admin			nomail@cisco.com	
<input type="checkbox"/>	Operator_A	Cisco Systems	IT Technician			namail@cisco.com	
<input type="checkbox"/>	Telco_Admin	Cisco Systems	IT Admin			admin@telco.com	
<input type="checkbox"/>	Telco_Manager	Cisco Systems	IT Manager			nomail@cisco.com	

[Create](#) [Edit](#) [Delete](#) Page 1 of 1

Step 5 Fill the form with all account's details and enable all the required report groups for this user (use the check boxes to enable groups)

Step 6 Click on the Save button, then log out

Step 7 On the log in page, try to authenticate using the credentials of the new created account

Configure the Network Topology

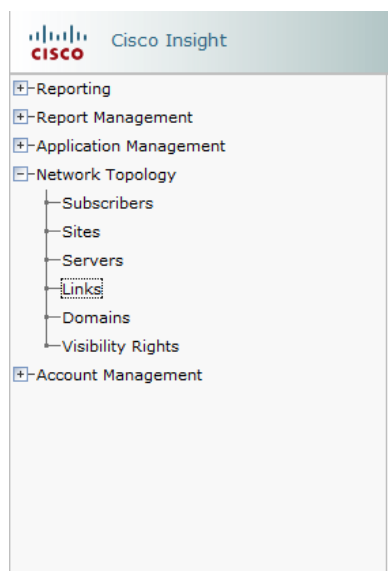
This section describes how to configure the network topology on Cisco Insight.

For single SCE deployments, the application requires the configuration of at least the SCE link-pair and the corresponding SCE Domain.

For multiple SCE deployments, the administrator can follow the same procedure to configure all SCE Link-pairs and additional Domains.

Procedure

Step 1 Navigate in the tree-menu, expand the “Network Topology” and select “Links”.



Step 2 On the right frame, the application will show an existing SCE Link-pair: select the check box of the first Link and click on the “Edit” button



Step 3 Update the existing IP address with the real SCE's IP address, then click on "Save"

Step 4 Repeat the procedure for the other SCE Link(s)

Step 5 Navigate in the tree-menu, expand the "Network Topology" and select "Domains"

Step 6 On the right frame, the application will show a "DefaultDomain" element: select the check box next to the Domain and click on the "Edit" button

Network Topology

Domains

Name: Search Clear Filter

Rows per Page: 10 Go

	Name	Description
<input checked="" type="checkbox"/>	DefaultDomain	

Create Edit Delete

Page 1 of 1

Step 7 You may rename the Domain, if you wish, otherwise click "Cancel" to abort the operation and leave the default name unchanged

Step 8 Navigate in the tree-menu, expand the "Network Topology" and select "Visibility Rights".

Step 9 Assign grants for Domain elements to new created accounts:

- Select "Domains" object type in the Visibility Rights frame, then click "Go"
- On the next screen, in the Network Objects frame, flag the check box corresponding to the Domain(s) for which you want to assign the visibility grants
- In the Accounts frame, flag the R/W or R check box of the appropriate Account(s).
 - R/W means "read and write" grants: the account can transfer them to additional created accounts
 - R means "read only" grants: the account cannot transfer the grants to other created accounts
- Click on the "Grant" button to confirm the operation

Network Topology

Visibility Rights

Object Type: ☐ Sites ☐ Servers ☐ Subscribers ☐ Links ☒ Domains Go

Network Objects

	Name	Description
<input checked="" type="checkbox"/>	DefaultDomain	

Accounts

Rows per Page: 10 Go

R/W	R	Username	First Name	Last Name	Role	Email	Phone
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Telco_Admin			IT Admin	admin@telco.com	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Telco_Manager			IT Manager	nomail@cisco.com	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operator_A			IT Technician	namail@cisco.com	

Grant

Page 1 of 1

Step 10 Assign grants for Link elements to new created accounts:

- As for the previous step, select "Links" object type in the Visibility Rights frame, then click "Go"

- On the next screen, in the Network Objects frame, flag the check box corresponding to the SCE Link(s) for which you want to assign the visibility grants. You need to select both Links of a given SCE.
- In the Accounts frame, flag the R/W or R check box of the appropriate Account(s).
- Click on the “Grant” button to confirm the operation

Network Topology

Visibility Rights

Object Type: ☐ Sites ☐ Servers ☐ Subscribers ☒ Links ☐ Domains [Go](#)

Network Objects

<input checked="" type="checkbox"/>	Device IP	Description	Bandwidth	Phy. Layer	Site	Domain
<input checked="" type="checkbox"/>	192.168.250.43	SCE Link0	0		DefaultSite	DefaultDomain
<input checked="" type="checkbox"/>	192.168.250.43	SCE Link1	0		DefaultSite	DefaultDomain

Accounts

Rows per Page: 10 [Go](#)

R/W	R	Username	First Name	Last Name	Role	Email	Phone
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Telco_Admin			IT Admin	admin@telco.com	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Telco_Manager			IT Manager	nomail@cisco.com	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operator_A			IT Technician	namail@cisco.com	

Page 1 of 1 [1](#) [2](#) [3](#) [4](#) [5](#)

[Grant](#)

Set the Application Properties

Once you have completed creating additional accounts and configuring the network topology, there is a series of parameters to set before operating the platform.

Set the public IP address that Java Applets, running on client workstations, will use for connectivity to the web server

Procedure

- Step 1** In the Application Management menu, select Properties Settings
 - Step 2** Correct the IP address configured under the *Connection string for Java applets*, with the IP address that the client workstations will refer to when connecting to the Cisco Insight's web server
 - Step 3** Save the configuration
-

Set the public IP address for Subscriber Manager

Procedure

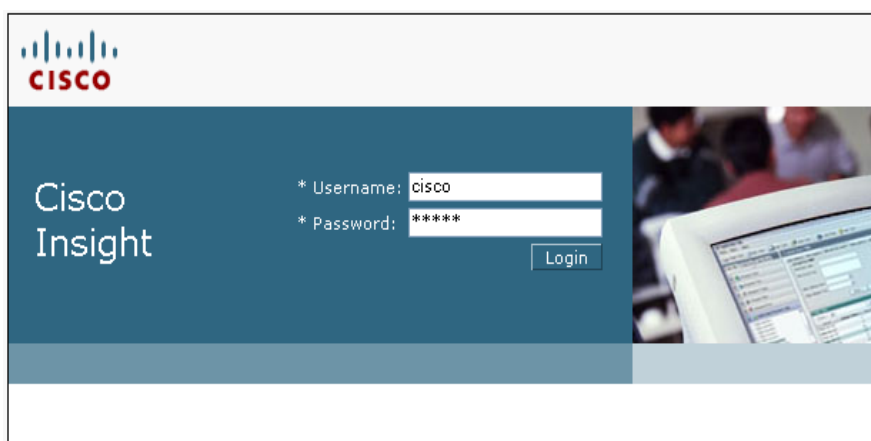
- Step 1** In the Application Management menu, select Properties Settings
 - Step 2** Replace the IP address listed under *Cisco Subscriber Manager IP* with the correct value
 - Step 3** Click on the *connection test* button to check if the SM is reachable and running
 - Step 4** Save the configuration
-

Run the First Report

This section describes how a new created account can run the first reports through the Cisco Insight application.

Procedure

Step 1 Open a browser to the Cisco Insight login page: http://ipaddress_server

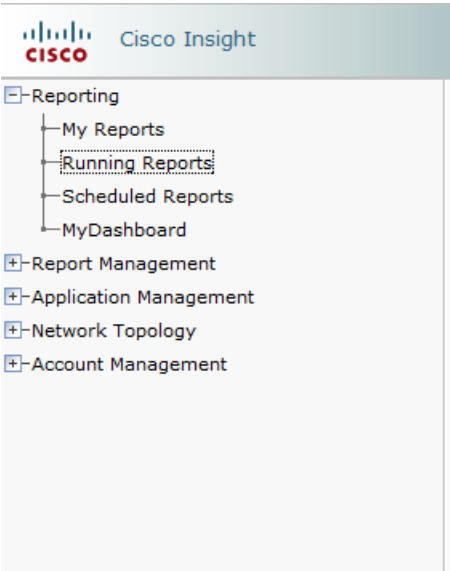


Step 2 Log-in using your credentials:

User: <your_account>

Password: <your_password>

Step 3 Use the navigation panel on the left and expand the “Reporting” menu. Then select “Running Reports”



Step 4 On the right frame, select a group of reports (i.e. Global Monitoring)

Reporting

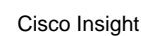
Running Reports		Rows per Page 25	Go
Name	Description		
Global Monitoring	Shows statistics about the traffic bandwidth, volume or sessions, displayed per service, flowed through SCE Links		
Package Monitoring	Shows statistics about the traffic bandwidth, volume or sessions, displayed per service, consumed by predefined System Packages		
Virtual Links Monitoring	Shows statistics about the traffic bandwidth, volume or sessions, displayed per service, flowed through predefined system Vlinks		
Subscriber Monitoring	Shows statistics about the traffic bandwidth, volume or sessions, displayed per service, consumed by Subscribers		
Traffic Discovery - Statistics	Shows statistics compiled from the source and destination IP addresses and ports of the total traffic		
Demographic Data and Service Popularity	Shows statistics about demographic usage of the network, like distributions and trends		
Web and Streaming	Shows statistics about the most popular servers or hosts for Web and Streaming traffic		
Mail and News	Shows statistics about the most popular servers or hosts for Mail and News traffic		
P2P	Shows statistics about the most popular servers or hosts for P2P traffic		
VoIP	Shows statistics of the VoIP traffic in terms of bandwidth, volume, sessions, duration and quality-of-service metrics		
Video Monitoring	Shows statistics about the most popular hosts and providers for Video traffic		
Web Monitoring	Shows statistics about the most popular hosts and providers for Web traffic		
Malicious Traffic	Shows statistics of malicious events occurred on the system and top attacked or scanned hosts		
IPv6	Shows statistics about IPv6 traffic		
Trend Analysis	Reports based on multi-charts layout displaying traffic trends across different time periods		

Page 1 of 1

Step 5 Now select a specific report (i.e. Global Bandwidth per Service)

Step 6 Fill in all required parameters in the form, choose the desired output format and click on the “Run” button

Step 7 The report will display on a new window or tag (depending on the browser)



Troubleshooting

This section provides a list of best practices to help operators in troubleshooting problems while installing and configuring the Cisco Insight application.

Troubleshooting “No data found” message when running reports

If the output of a report gives a “no data found” message, several conditions should be checked.

One of the reasons could be the database tables are not being populated. You should check the following:

- Ensure that the database configuration on Cisco CM is correct
- Ensure that the SCE is generating that type of RDR toward the correct CM

If you think the database tables are being populated, then you should check the following:

- Ensure the selected time span matches some data in the database tables
- Ensure you have wisely selected the report parameters so that the report query matches some information on the database
- Ensure the data aging mechanism, configured on the CM, is configured as expected. In case, change the setting accordingly with the data sizing suggested.

Troubleshooting services or packages lists empty

If the form of report generation has some services or packages lists empty, check the following

- Ensure the SCE’s service configuration has been applied at least once after the Cisco Insight installation, as this operation is needed to align the internal state of the application.
 - As an additional check, you should make sure the INI_VALUES table is not empty after re-applying the SCE service configuration through the SCA BB Console
 - You should also check the SCE_CONFIG table in not empty and has the same number of rows as the INI_VALUES table (this is only valid for single SCE deployments)
 - If after applying the SCE’s service configuration, you see a non-empty INI_VALUES table but an empty SCE_CONFIG table, you should truncate all data from the INI_VALUES table and repeat the apply operation of the SCE’s service configuration through the SCA BB Console.

Note: you can use MySQL command line or MySQL GUI tools to perform the mentioned checks on the database. You need to authenticate with the default *pqb_admin* / *pqb_admin* credentials and select the *apricot* database schema

Troubleshooting Subscribers Flows not found

If the Subscriber Flows report is not working, check the following:

- Ensure the FUR table is populated by the SCE
- Ensure the IP address of the Subscriber Manager is correct and is reachable by the Cisco Insight application
- Ensure that the selected subscriber is already provisioned on the Subscriber Manager using the SCA BB Console



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