



# Getting Started with the ISDS Platform User Guide



# Please Read

## Important

Please read this entire guide. If this guide provides installation or operation instructions, give particular attention to all safety statements included in this guide.

# Notices

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# About This Guide

## Introduction

This guide provides information to help you get started using the IPTV Services Delivery System (ISDS) to manage the IPTV Services Delivery Platform (ISDP).

**Important:** This guide is written in conjunction with the ISDS Help system.

## Purpose

The purpose of this guide is to introduce the ISDS so that users can use it to manage their ISDP Platform. After reading this guide, users will be able to do the following:

- Understand how the ISDS fits into the ISDP and how to use the ISDS graphical user interface (GUI)
- Start up the ISDS workstation
- Understand network maps and how to maintain them
- Access the ISDS Help system to find detailed procedures for performing specific tasks on the ISDS

## Audience

This guide is intended for system operators and Cisco Services engineers who are provisioning ISDS in an ISDP environment.

## Scope

This guide provides an overview for using the ISDS software with ISDS 1.0. This guide does not describe the ISDS hardware or how to set up the ISDS hardware.

For information about features and enhancements included in your specific system release, refer to the appropriate set of release notes.

For steps on completing specific tasks, refer to the *ISDS Online Help (UNIX Version)* (part number 4021161).\*

\*The Unix version of the online help should be installed on the ISDS. The PC version of the online help *ISDS Online Help (PC Version)* (part number 4021162) is a separate CD that allows you to view the same online help on a PC separate from the ISDS workstation.

## Before You Begin

Before you begin using the ISDS, you should have your network map(s) readily available. Network maps provide detailed information about the equipment layout of a site. If you cannot locate your network map(s), contact Cisco Services.

## Document Version

This is the second formal release of this document.



# 1

## Introducing the ISDS

The ISDS provides the video application infrastructure in an ISDP. The ISDS transmits system and programming information through the ISDP to set-tops and other compatible set-top converters. By using the ISDS, you can provide digital broadcast, as well as interactive services to your subscribers.

This chapter describes the role of the ISDS within the ISDP. This chapter also discusses how to use primary ISDS graphical user interfaces (GUIs), specifically the ISDS Administrative Console Status window and the ISDS Administrative Console window. This chapter explains how to use the ISDS Help system to find additional information and detailed procedures for specific tasks.

**Note:** Depending on your system release, the illustrations and options you see in this guide may not exactly match those on your system. If you have questions about the capabilities of your system, contact the representative who handles your account.

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## What Is ISDS?

An ISDS is a server that is typically installed in a headend and is connected to the ISDP. The ISDS provides information about each element in a ISDP and allows elements to communicate with each other. By communicating with these elements, the ISDS allows operators to provide subscribers with many types of digital cable services, including the following:

- Video-on-demand (VOD)
- Internet services

## How the ISDS Fits Into the ISDP

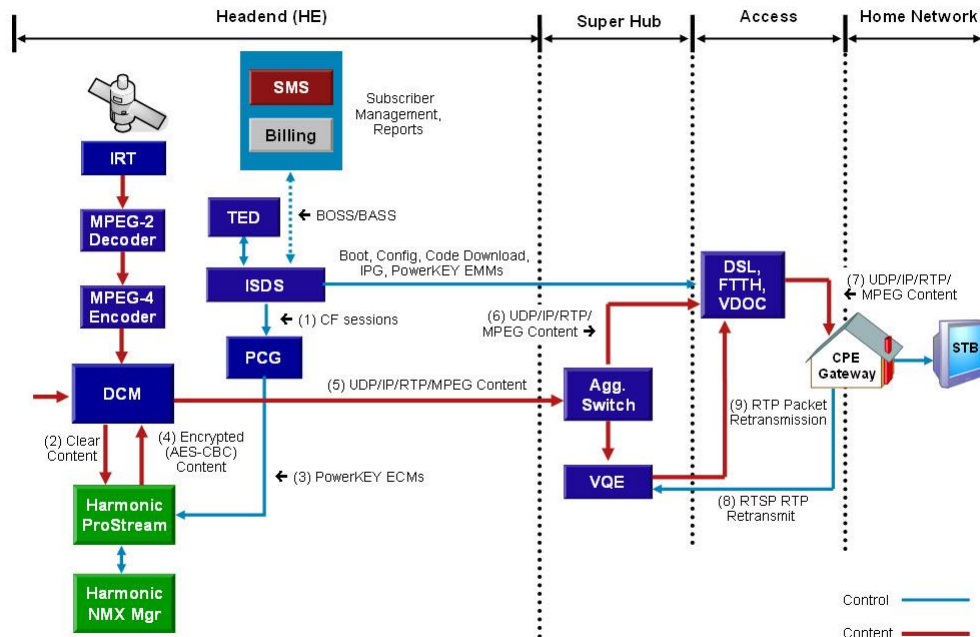
This section briefly describes the ISDS and how it fits into the ISDP.

### ISDP Components

The ISDP is a network of hardware and software elements that connect content servers to set-tops to deliver video, audio, digital data, and applications to subscribers using the TCP/IP protocol. The ISDS provides information about elements in the ISDP network.

The following diagram illustrates how various elements interconnect to form the ISDP network.

### PowerKEY IP Broadcast Architecture



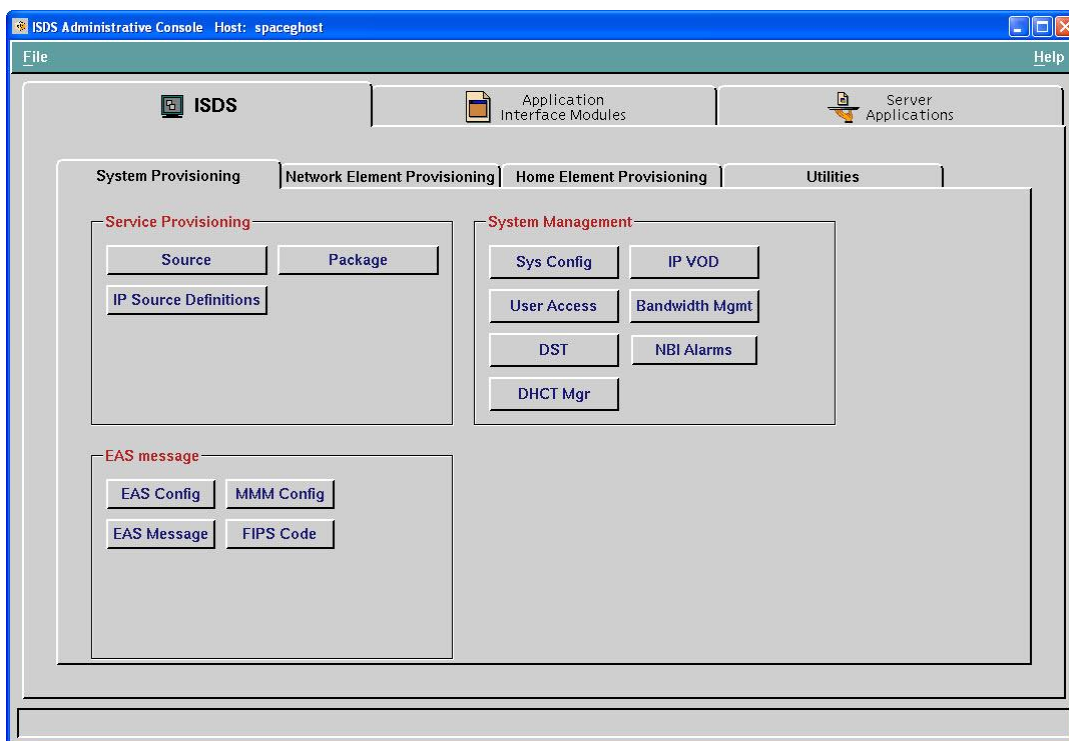
## How the ISDS Communicates with Other ISDP Elements

For the ISDS software to recognize and communicate with other ISDP elements, operators complete specific tasks from the following two ISDS user interfaces. These interfaces also allow operators to define, manage, and monitor most elements and services of an ISDP:

- **ISDS Administrative Console Status interface**



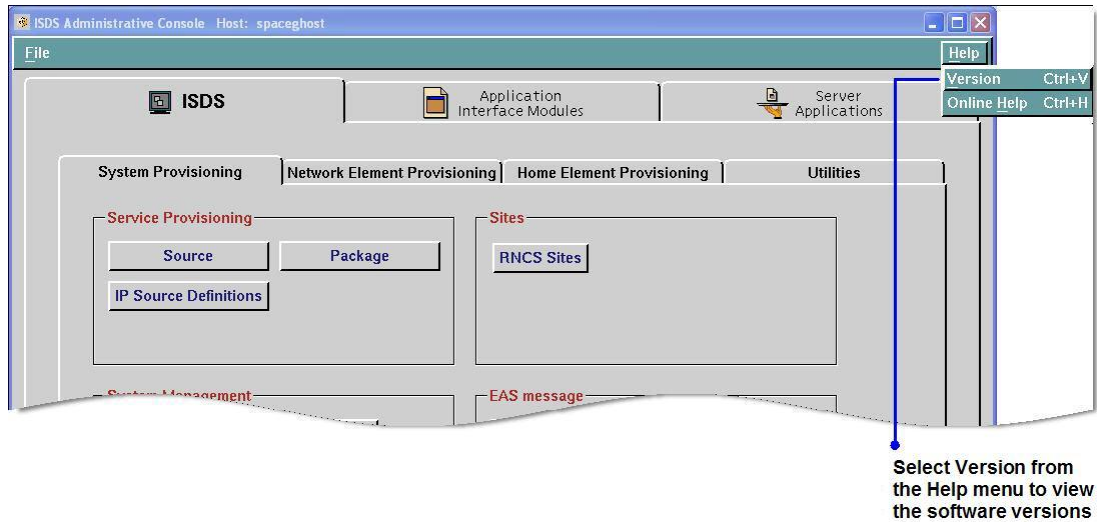
- **ISDS Administrative Console interface**



For more detailed information on these interfaces, refer to *Monitoring and Managing the ISDS* (on page 27) and to the online Help.

## Finding Your Software Versions

To find the software version for each package that is installed on your ISDS, click **Help** and **Version** on the ISDS Administrative Console window.



## Chapter 1 Introducing the ISDS

The system will take a few seconds to generate a list of the software packages and their associated versions.

Software Versions for spaceghost as of Thu Sep 3 13:50:39 EDT 2009

**DNCS Application Server 11-17-08**

PACKAGE NAME:	SAlapshr
VERSION:	AS4.0.0.6
PACKAGE DATE:	11/17/08 10:40:23
INSTALL DATE:	Mar 02 2009 12:24
INSTALL STATUS:	completely installed

FILES: installed pathnames 264  
Directories 35  
Executables 201  
Blocks Used (approx.) 126316

**cmd2000 DHCT Communications Tool 11-21-08**

PACKAGE NAME:	SAlcmd2k
VERSION:	1.0.0.3
PACKAGE DATE:	11/21/08 11:55:32
INSTALL DATE:	Feb 16 2009 16:34
INSTALL STATUS:	completely installed

FILES: installed pathnames 1  
Executables 1  
Blocks Used (approx.) 194

**Common Platform 02-16-09**

PACKAGE NAME:	SAlcomplat
VERSION:	2.0.0.4
PACKAGE DATE:	02/16/09 09:11:02
INSTALL DATE:	Feb 16 2009 15:59
INSTALL STATUS:	completely installed

FILES: installed pathnames 1991  
Directories 168  
Executables 272  
Setuid Executables 24  
Blocks Used (approx.) 647216

Identifies the version of software

## Accessing Online Help for the ISDS

The Online Help provides information about a window or task that you want to perform on the ISDS. You can access the Help for the ISDS in one of the following ways depending upon the type of window that is displayed.

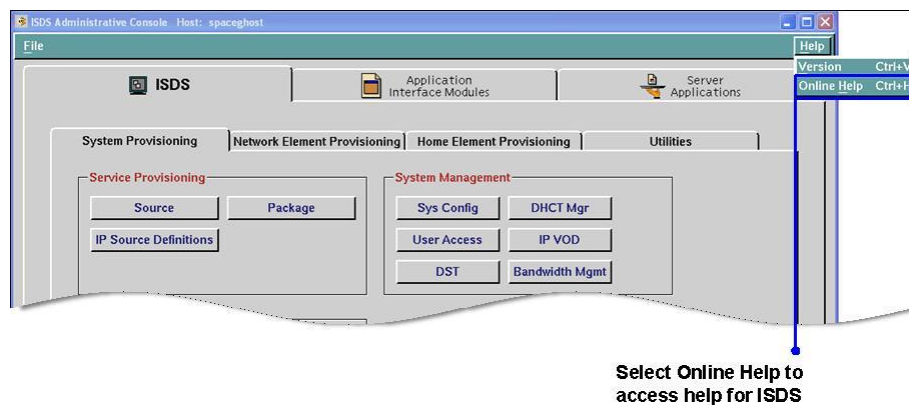
- From a drop-down menu
- From a hyperlink on a window
- From a button on a window

### Accessing Online Help From a Drop-Down Menu

Some of the windows on the ISDS are displayed as a menu-based GUI. You access the online Help for these windows from a drop-down menu.

To access the Help from a drop-down menu, complete the following steps:

- 1 From the ISDS Administrative Console window, click **Help** and select **Online Help**.



**Result:** The Welcome page for the Help opens with the Table of Contents in the forefront.

- 2 Use the books under the Contents tab or access the Index or Search feature to find the information you need.

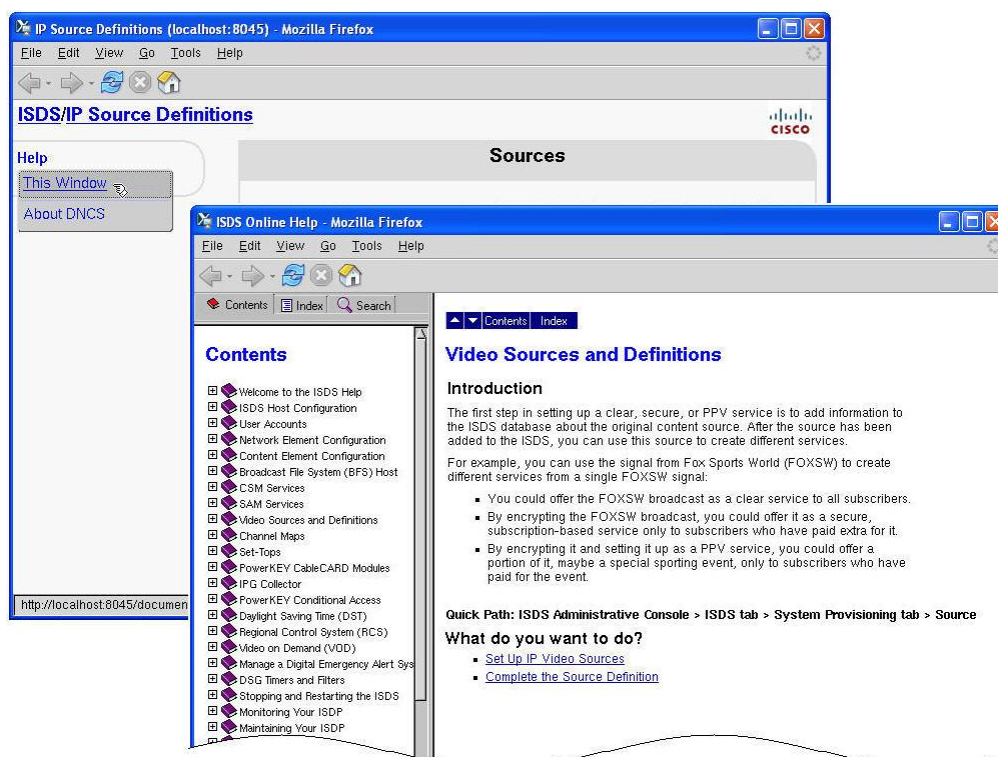
## Accessing Online Help from a Hyperlink on a Window

Some of the windows on the ISDS are displayed in a Web User Interface (WUI). Instead of menus, these WUI windows use hyperlinks to take you from one window to another.

To access online Help from a hyperlink on a WUI, click **Help > This Window** in the side pane of the window. The specific Help topic for that window opens.

To access online Help from a hyperlink on a WUI, complete the following steps:

- 1 From the ISDS Administrative Console, click the **System Provisioning** tab and then click **IP Source Definitions**. The IP Source Definitions window opens in a web browser.



- 2 Click **Help > This Window** to display specific information about this window and the tasks you can perform, such as finding out the source ID for specific IP sources.

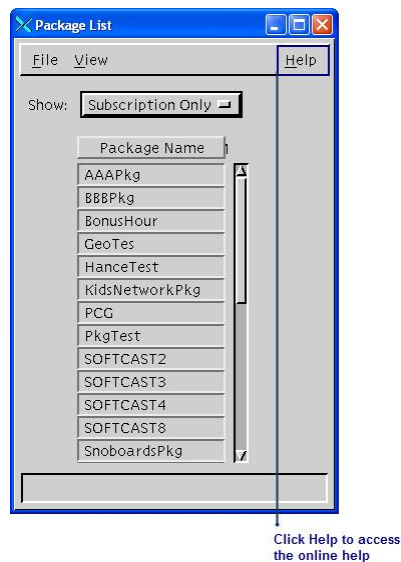


## Accessing Online Help from a Button on a Window

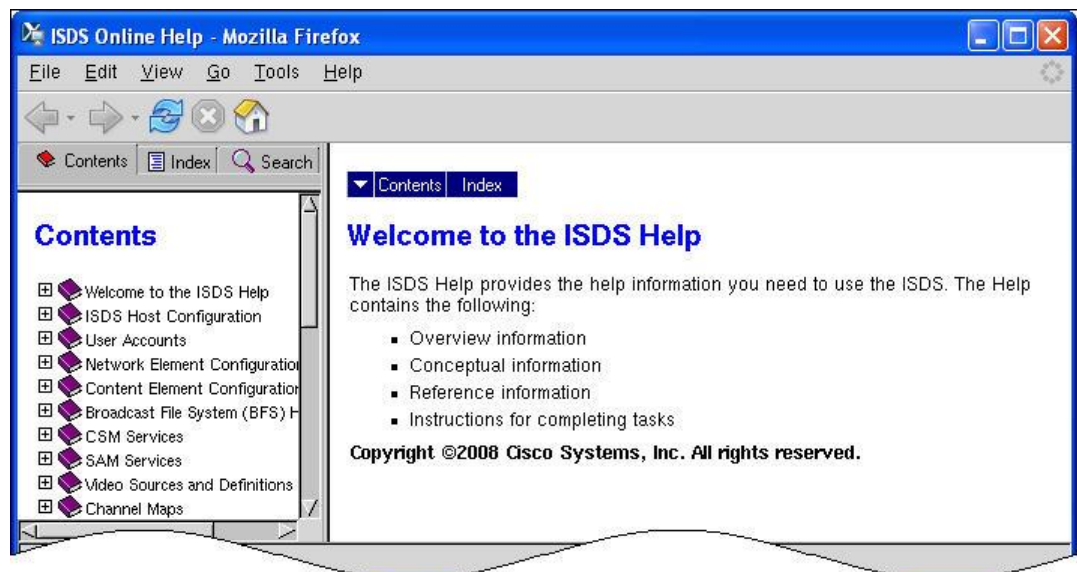
Some of the windows on the ISDS have Help buttons on the window where you are performing a task.

To access Help from a button on a window, complete the following steps:

- 1 From a specific window (for example, the Package List window), click **Help**.



**Result:** The Welcome page for the Help opens with the Table of Contents in the forefront.



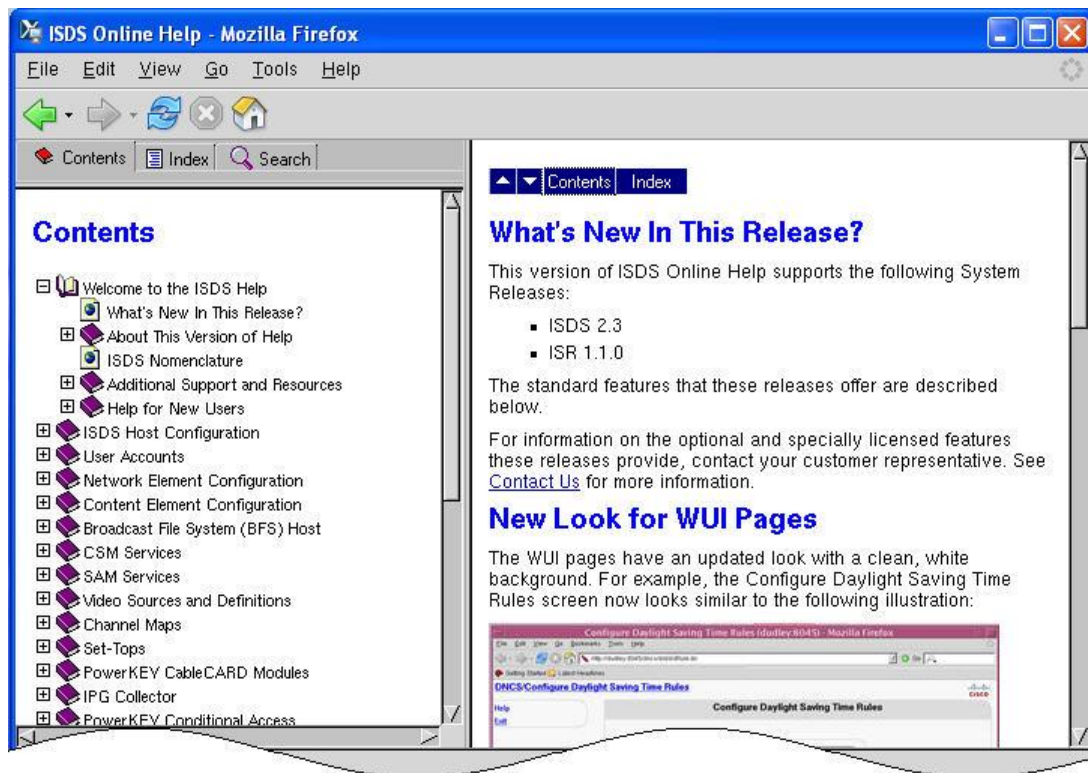
- 2 Use the books under the Contents tab or access the Index or Search feature to find the information you need.

## Using the Help to Find Information About the ISDS

The ISDS online Help provides a table of contents, index, keyword search, and a glossary that you can use to quickly find information about the ISDS.

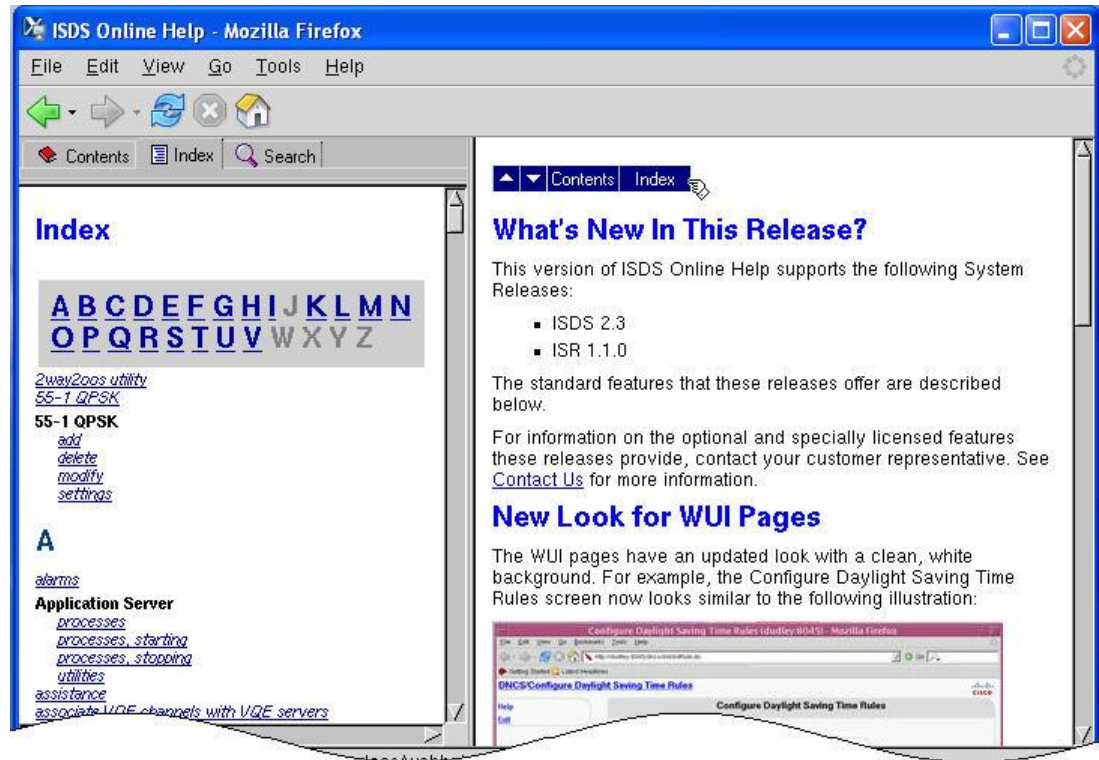
To view the table of contents, index, keyword search, and glossary, follow these steps:

- 1 Click the **Contents** tab to display a list of topics. Click a book topic to expand its contents.

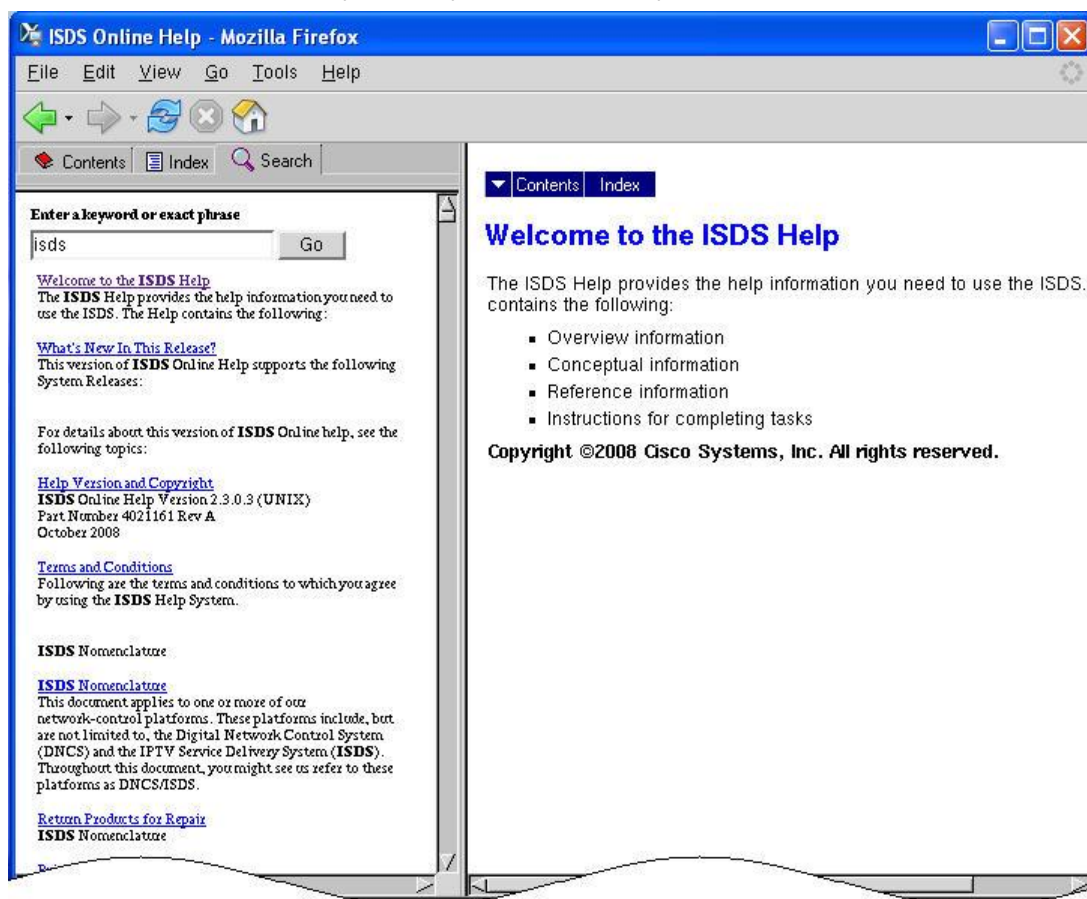


## Using the Help to Find Information About the ISDS

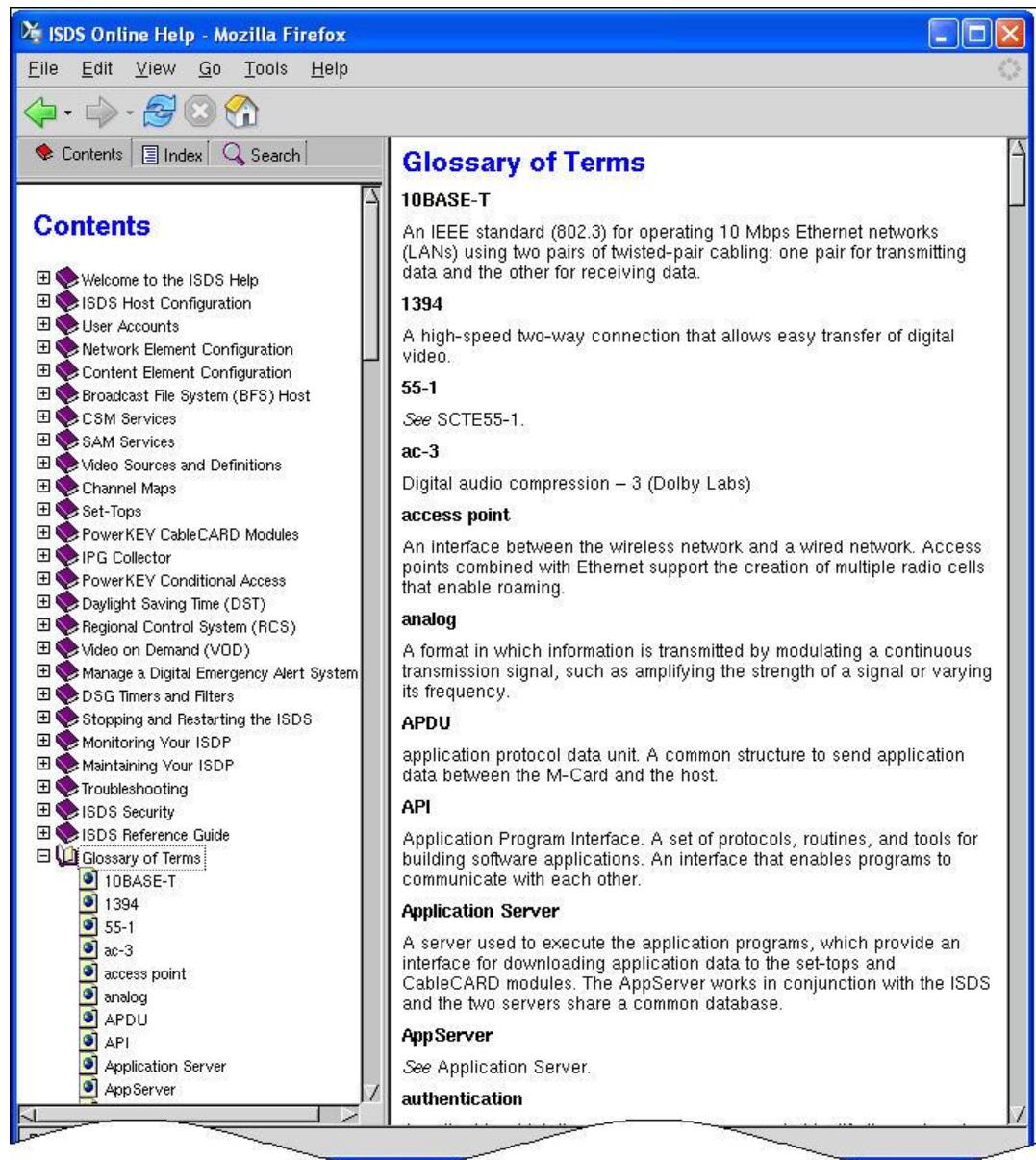
- Click the **Index** tab and type a keyword to display a list of related topics. You can also click the **Index** button at the top of a help page to display the index.



- 3 Click the **Search** tab and type a keyword to display a list of related topics.



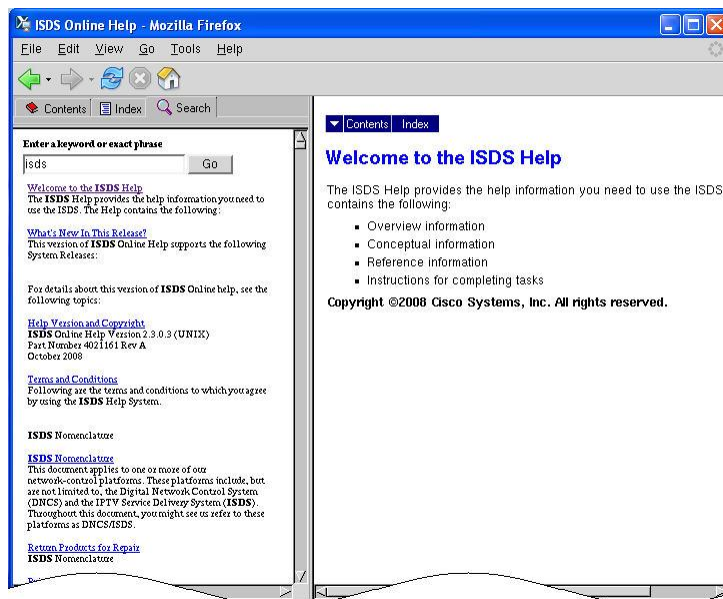
- 4 Click the **Glossary of Terms** book to display an alphabetical listing of terms and their definitions.



## Search Tips

Follow these steps to use the Search feature.

- 1 In the left pane, click the **Search** tab and enter one or more key words in the Search field.

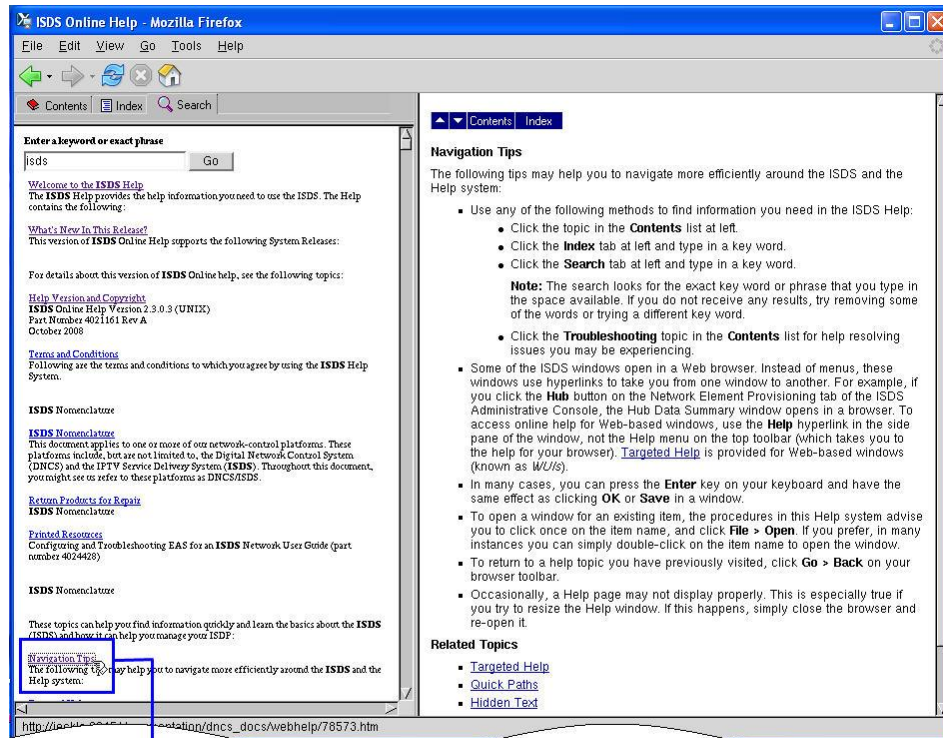


### Notes:

- Searches are not case-sensitive, so you can type your search in uppercase or lowercase characters.
  - You may search for any combination of letters (a-z) and numbers (0-9).
  - To search for an exact phrase, group the elements of your search using double quotes to set apart each element. For example, to search for information about the window Set Up ISDS BFS Host, enter "Set Up ISDS BFS Host" in the search field. This ensures that the system looks for this exact phrase. On the other hand, entering Set Up ISDS BFS Host in the search field causes the system to look for topics that contain any of these four words.
- 2 Click **Go** or press **Enter**. Help searches all topics containing the word (or words) you entered and displays the results of the search. If Help finds topics containing the word (or words) you entered, the topics are listed below the Search field.  
**Note:** This method can help you find a topic (if you know its title), or every instance of a concept or feature in the system.
  - 3 Use one of the following methods to display a topic that appears in the list:
    - Click twice on any topic in the list.



- Click on a topic and then click **Display**.



Click To Open Help Topic

## Quick Paths

A Quick Path is provided at the beginning of many Help procedures to help you get to a specific window to perform a procedure. The following example shows the Quick Path for adding a source definition.

**Quick Path:**  
ISDS Administrative Console > ISDS tab > System Provisioning tab > Source > File > New

As you become more experienced in using the ISDS, these Quick Paths may be the only reminders you need to perform certain tasks.

In this example, you would use the Quick Path to perform the following steps.

- 1 On the ISDS Administrative Console, click the **ISDS** tab.
- 2 On the ISDS tab, click the **System Provisioning** tab.
- 3 On the System Provisioning tab, click the **Source** button. The Source List window opens.
- 4 On the Source List window, click **File** and **New**. The Set Up Source window opens.
- 5 Enter a source name and source ID for the video source.

**Note:** The Source ID *must* be greater than 200. IDs that are 200 or less are reserved for BFS sources.

- 6 Enable or disable the Enable EAS Channel Suppression option, as needed.
- 7 Click **Save**.

## Window Tips

Use the following tips to help you perform tasks from the windows on the ISDS and find information in the Help:

- To return to a Help topic you have previously visited, right-click on the window and click **Back**.
- Occasionally, a Help topic may not display properly. This is especially true if you try to resize the Help window. If this happens, simply close the Internet browser and then re-open it.
- In many cases, you can press the **Enter** key on your keyboard and have the same effect as clicking **OK** or **Save** in a window.
- To open a window for an existing item, the procedures in this Help system advise you to click once on the item name and then click **File > Open**. If you prefer, in many instances you can double-click on the item name to open the window.

## xterm Windows

An xterm window lets you enter UNIX commands to manipulate, view, and edit various program files within the ISDS operating system.

To open an xterm window, complete the following steps.

- 1 On the ISDS Administrative Console, click the **Utilities** tab.
- 2 Click **xterm**. An xterm window opens and displays the prompt associated with your User ID. For example, if you are logged in as a root user, the xterm window displays a root user prompt (\$).

Enhanced security features, including role-based access control, have been implemented for ISDS. This means that you cannot log in to the system using the dncs User ID; dncs is now a role that you can assume by typing **su - dncs** at a system prompt. You can read the enhanced security section of the *Initial Installation and Upgrade Instructions for the ISDS* (part number 4028676) to learn more about ISDS security.



## Securing Your ISDS

To protect system security, a Solaris feature exists that forces the ISDS monitor to go blank if there is no activity on the ISDS for a specified length of time (default=10 minutes). When the monitor goes blank, complete the following steps to unlock your ISDS.

- 1 Move the mouse or press any key to bring up the password window.
- 2 Type the password and click **OK** to return to the ISDS desktop.

**Notes:**

- If the ISDS Administrative Console window does not open, click the middle mouse button and select **Administrative Console** from the menu that appears.
- For details about creating secure passwords, refer to the section on security in the *Initial Installation and Upgrade Instructions for the ISDS* (part number 4028676).

## Limiting Access to the ISDS

You can create other users who can access the ISDS and limit the access to what they can use. For information on creating users and setting up access, refer to the *ISDS Online Help (PC Version)* (part number 4021162)



# 2

## Getting Started

Generally, the ISDS operates continuously until you stop it manually to upgrade it or to perform maintenance activities. If you are upgrading the ISDS, do not use the procedures in this chapter to restart the ISDS after the upgrade. Instead, use the procedures provided in the upgrade installation instructions that came with the system release.

Use the procedures in this chapter if you are starting up the ISDS for the first time, or if power to the ISDS is interrupted.

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■ Powering Up the ISDS Workstation.....	21
■ Starting ISDS Processes.....	22
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## Start-Up Sequence

For the ISDS to function properly, you must start up its components in the following sequence. Each of these procedures is described in detail in this chapter.

- 1 Power up the ISDS workstation.
- 2 Start the ISDS processes.
- 3 Choose one of the following options:
  - If you are using ISDP 2.5 or later, start the Application Server and its processes as described in the *Initial Installation and Upgrade Instructions for the ISDS* (part number 4028676)
  - If you are using an application server from a vendor other than Cisco, power up the application server according to the documentation that came with it.

## Powering Up the ISDS Workstation

The first step in starting up the ISDS is to power up the ISDS workstation as described in this section.

**Important:** Before you begin this procedure, you must have your login password. If you do not have your login password, contact your system administrator.

To power up the ISDS workstation, complete these steps.

- 1 Go to the ISDS workstation and press the **Power** button. After the system finishes its start-up process, the login window opens with a welcome message.  
**Note:** Depending on your ISDS model, the power button could be on the back of the ISDS or on the front, possibly under a panel that you open. Some models have a key that you turn to the "On" position, which is indicated by a vertical line (|).
- 2 Log in as a DNCS administrator. The password prompt appears.
- 3 Type the password and press **Enter**. The ISDS desktop appears.
- 4 Using the mouse, place the cursor anywhere on the ISDS desktop and click the middle mouse button. A menu appears with a list of options.
- 5 Click **Administrative Console**. The ISDS Administrative Console and Status windows open. The ISDS workstation is now completely powered up.
- 6 Your next step is to start the ISDS processes. Go to *Starting ISDS Processes* (on page 22).

## Starting ISDS Processes

After you power up the ISDS workstation, you can start the ISDS processes that control the ISDS software. These processes are an integral part of the ISDS software. You cannot use the system until you start these processes. This section covers both ways to start ISDS processes:

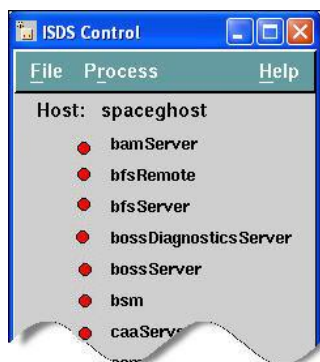
- Start all processes on the ISDS
- Start an individual process on the ISDS

### Start All Processes

- 1 On the ISDS Administrative Console Status window, click the **Control** button in the ISDS area.



**Result:** The ISDS Control window opens with a list of all the ISDS processes and their working states. A green state indicates that a process is running, and a red state indicates that a process is not running.



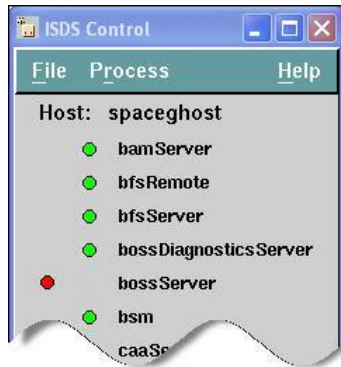
- 2 Use the mouse to place the cursor in an unoccupied area on the ISDS desktop and then click the middle mouse button. The ISDS menu opens.
- 3 Click **ISDS Start**. On the ISDS Control window, all of the processes change to a green state, which indicates that they are running.

**Note:** It may take several minutes before all processes show a green state.

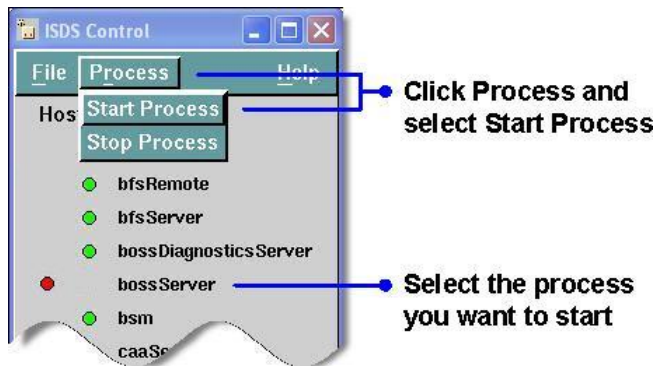
- 4 Start the application server. Choose one of the following options:
  - If you are using ISDP 2.5 or later, start the Application Server and its processes as described in the *Initial Installation and Upgrade Instructions for the ISDS* (part number 4028676).
  - If you are using an application server from a vendor other than Cisco, power up the application server according to the documentation that came with it.

## Start an Individual Process

- 1 On the ISDS Administrative Console Status window, click the **Control** button in the ISDS area. The ISDS Control window opens with a list of all the ISDS processes and their working states. A green state indicates that a process is running, and a red state indicates that a process is not running.



- 2 Select the process that you want to start. For example, bossServer is selected in the following example.



- 3 Click **Process** and select **Start Process**. The process is started.

## Stopping the ISDS Process

It is recommended that you restart the ISDS every month as a normal maintenance process to free up system memory, swap space, and so forth. Part of that maintenance process involves stopping all ISDS processes. In other cases, you may want to stop an individual process. This section covers both methods.

- Stop all processes on the ISDS
- Stop an individual process on the ISDS

**Note:** For detailed information on restarting the ISDS, refer to the ISDS online help.

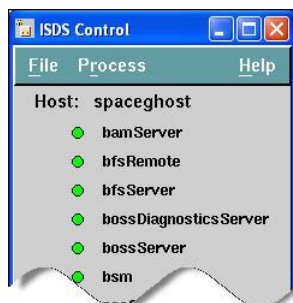
### Stop All Processes on the ISDS

**Important:** If you are restarting the ISDS, complete this procedure only after you stop the Application Server process. Restarting the ISDS in the incorrect order could cause some processes to function incorrectly. Refer to the *Initial Installation and Upgrade Instructions for the ISDS* (part number 4028676) to learn how to stop and restart the ISDS.

- 1 On the ISDS Administrative Console Status window, click the **Control** button in the ISDS area.



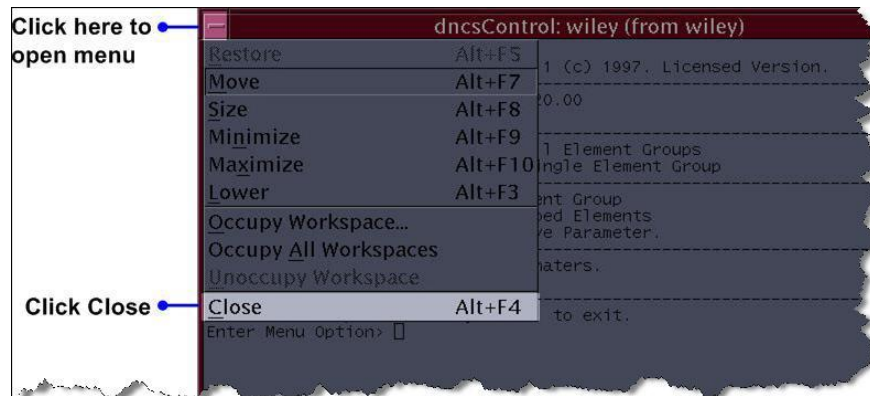
**Result:** The ISDS Control window opens with a list of all the ISDS processes and their working states. A green state indicates that a process is running and a red state indicates that a process is not running.



- 2 Use the mouse to place the cursor in an unoccupied area on the ISDS desktop and then click the middle mouse button. The ISDS Menu opens.



- 3 Click **ISDS Stop**. The ISDS begins shutting down all of its processes. This process can take from 5 minutes to an hour to complete depending on the size of your system, how many sessions are active, and so forth. When finished, all of the processes listed on the ISDS Control window should have a red working state, which indicates that they are not running. In addition, the ISDS area of the ISDS Administrative Console Status window will change to "Inactive."
- 4 Open an xterm window on the ISDS.
- 5 At the prompt, type **dncsControl** and press **Enter**. The dncsControl main menu opens in another xterm window.
- 6 Type **2** to select Startup/Shutdown Single Element Group and press **Enter**. The system displays a list of all ISDS processes, along with their current working states ("running" or "stopped").
- 7 Press **Enter** to update the working states of the ISDS processes. Continue to press **Enter** every few seconds until all processes show **Curr Stt: stop(1)**.  
**Important:** Wait until all processes are stopped before you continue with other activities on the ISDS.
- 8 Type **x** and press **Enter** to return to the dncsControl main menu.
- 9 Type **x** and press **Enter** again to close the dncsControl main menu.
- 10 Click the bar in the upper left corner of the xterm window and click **Close** to close the window.



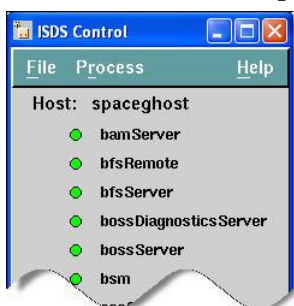
- 11 Are you in the process of restarting the ISDS?
  - If **yes**, your next step is to restart all ISDS processes. Go to *Start All Processes* (on page 22) for details on restarting all processes.
  - If **no**, you are finished with this procedure.

## Stopping an Individual Process

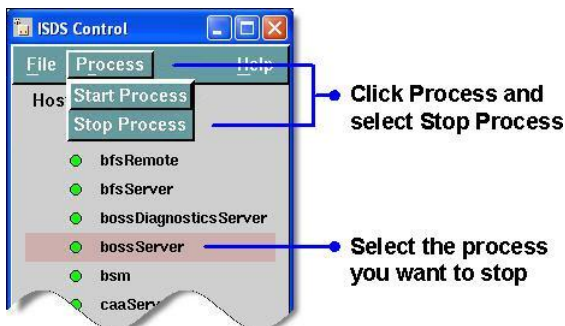
- 1 On the ISDS Administrative Console Status window, click the **Control** button in the ISDS area.



**Result:** The ISDS Control window opens with a list of all the ISDS processes and their working states. A green state indicates that a process is running and a red state indicates that a process is not running.



- 2 Select the process that you want to stop. For example, the bossServer is selected in the following example.



- 3 Click **Process** and select **Stop Process**.
- 4 When the system prompts you to stop the process, click **Yes**. This step can take several minutes to complete depending on the size of your system, how many sessions are active, and so forth. When finished, the process listed on the ISDS Control window should have a red working state, which indicates that the process is not running.

# 3

## Monitoring and Managing the ISDS

The ISDS transmits system and programming information through your ISDP to set-tops and other compatible set-top converters.

From the ISDS GUI, you can set up, change, manage, and monitor most elements and services of an ISDP. The following two windows are always present on the ISDS and allow you to monitor and manage most elements and services of the ISDP:

- ISDS Administrative Console Status
- ISDS Administrative Console

This chapter introduces you to the tools you can use to monitor and manage the ISDS.

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## Checking the Status of the ISDS

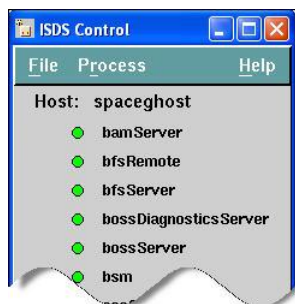
The ISDS Administrative Console Status window lets you check the status of the ISDS.



The ISDS section of the Administrative Console Status window indicates whether the ISDS software is in operation based on the following conditions:

- **Running**—the ISDS software package is present and in operation
- **Inactive**—the ISDS software package is present, but not in operation

In addition, when you click the Control button in the ISDS section, the ISDS Control window opens, which allows you to monitor all of the major ISDS processes.



### CAUTION:

**Do not attempt to start or stop an ISDS process manually unless a Cisco Services representative specifically tells you to do so. Otherwise, you could disrupt services to your subscribers.**

For detailed information on the ISDS Administrative Console Status interface, refer to the *ISDS Online Help*.

## Checking the Status of Other ISDS Elements

### Status of Application Server

The ISDS Administrative Console Status window lets you check the status of the Application Server (AppServer). If the Application Server software is operating, the ISDS Administrative Console Status window displays **Running** in the AppServer field. If your system does not use the Cisco Application Server, the AppServer area shows either a blank status or a status of *Not Installed* and the Control button is not usable.



When you click the Control button in the AppServer section, the AppServer Control window opens. Use this window to monitor all of the major application server processes.



#### CAUTION:

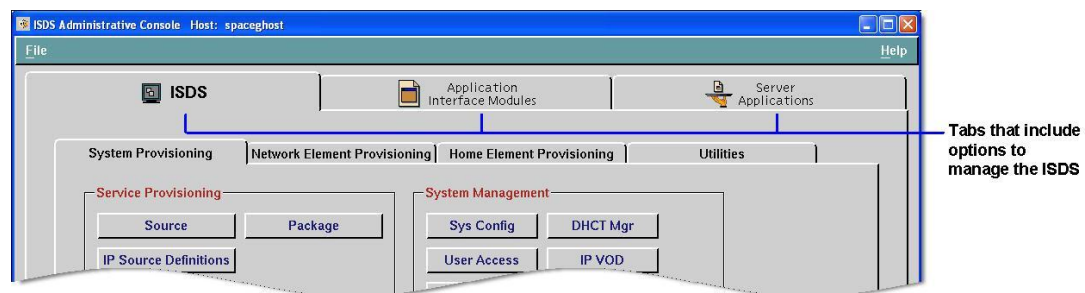
Do not attempt to start or stop an AppServer process manually unless a Cisco Services representative specifically tells you to do so. Otherwise, you could disrupt services to your subscribers.

## Managing the ISDS

The ISDS Administrative (Admin) Console window is the primary window you use to work with the ISDS. The Admin Console is divided into the following three tabs that allow you to perform activities related to various aspects of the ISDP.

- **ISDS**
- **Application Interface Modules**
- **Server Applications**

**Note:** For detailed information on the ISDS Administrative Console interface, refer to the ISDS online Help



### ISDS Tab

The ISDS tab on the ISDS Administrative Console allows you to manage the following areas of the ISDP:

- **System Provisioning** – accessing this tab allows you to manage the following areas of the ISDS:
  - **Service Provisioning:** add sources, source definitions, and packages
  - **System Management:** add users and define user access, define bandwidth management rules, and set up daylight saving time rules
- **Network Element Provisioning** – accessing this tab allows you to set up hardware elements (for example, headends, hubs, clusters) in your system (excluding set-tops)
- **Home Element Provisioning** – accessing this tab allows you to manage the devices deployed within a subscriber's home. Access to this screen should be limited to specific users.

- **Utilities** – accessing this tab allows you to perform the following tasks:
  - Monitor the performance of your system
  - Run various reports to see how the system is functioning
  - Access the Logging utility to set log levels for processes, determine how specific flow types are set up at the network level, and open an xterm window to perform troubleshooting activities

## Application Interface Modules Tab

The Application Interface Modules tab on the ISDS Administrative Console provides an interface between the server applications and the set-tops. Key features include:

- Managing BFS servers, sources, and hosts
- Managing CSM services
- Defining the configuration for communicating service operation attributes to the set-tops in the network
- Managing new servers, directories, files, and links to the BFS which allow set-tops to access application information
- Defining channel maps and how they will map to specific hubs

## Server Applications Tab

The Server Applications tab on the ISDS Administrative Console provides access to applications that reside on the Application Server. You can use the buttons on this tab to configure services associated with these applications. The options that appear on this tab vary depending on the applications available on your system (for example, the Interactive Program Guide (IPG), Virtual Channel Service (VCS), or Languages).





# 4

## Customer Information

### **If You Have Questions**

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

Access your company's extranet site to view or order additional technical publications. For accessing instructions, contact the representative who handles your account. Check your extranet site often as the information is updated frequently.







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June 2012 Printed in USA

Part Number 4021199 Rev B