



## ALI Formatting Tool User Guide for SBC Southwestern Bell

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Text Part Number: OL-3349-01



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## **Preface v**

Purpose v

Audience vi

Related Documentation vi

Online Help and Document Conventions vi

    Using the Online Help vii

    Document Conventions vii

Obtaining Documentation viii

    World Wide Web viii

    Documentation CD-ROM viii

    Ordering Documentation ix

    Documentation Feedback ix

Obtaining Technical Assistance x

    Cisco.com x

    Technical Assistance Center x

        Cisco TAC Web Site xi

        Cisco TAC Escalation Center xii

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## CHAPTER 1

### **Overview of ALI Formatting Tool 1-1**

    Overview of Enhanced 911 1-2

    Overview of the ALI Formatting Tool 1-3

    Understanding E911 and Cisco Emergency Responder Terminology 1-4

---

CHAPTER 2

**Installing the ALI Formatting Tool 2-1**

System Requirements 2-1

Installing the ALI Formatting Tool 2-2

---

CHAPTER 3

**Using the ALI Formatting Tool 3-1**

Using the ALI Formatting Tool Interface 3-1

ALI Formatting Tool Fields 3-2

Using the Tool Bar and Icons 3-3

Using AFT to Generate a Formatted ALI File 3-7

Before You Generate Files 3-7

Generating a Formatted ALI File 3-8

---

CHAPTER 4

**Troubleshooting the ALI Formatting Tool 4-1**

Collecting Error and Trace Messages 4-1

Troubleshooting AFT Problems 4-2

Cannot Install AFT 4-2

Cannot Log In To AFT 4-3

Cannot Locate the AFT Logs 4-3

Frequently Asked Questions 4-4

---

APPENDIX A

**Using the ALI Formatting Tool for SBC Southwestern Bell A-1**

Modifying PS Code for SBC Southwestern Bell A-1

Changing the Function Code A-2



# Preface

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The preface describes who should read this publication and provides the document conventions.

The preface includes the following topics:

- Purpose, page v
- Audience, page vi
- Related Documentation, page vi
- Obtaining Documentation, page viii
- Obtaining Technical Assistance, page x

## Purpose

The Automatic Location Information Formatting Tool (AFT) enables you to modify the automatic location information (ALI) records that you create in Cisco Emergency Responder to a format that is compatible with the one used by your service provider.

*The ALI Formatting Tool User Guide* provides you with the information that you need to understand, install, use, and troubleshoot the ALI Formatting Tool (AFT).

# Audience

Network engineers, system administrators, and telecommunications engineers should review this guide to learn the steps that are required to install, use and troubleshoot AFT. You should be familiar with Cisco Emergency Responder (Cisco ER) and Cisco CallManager before deploying AFT.

## Related Documentation

For information about Cisco CallManager and additional information about Cisco Emergency Responder (Cisco ER), refer to these publications:

- These Cisco ER documents are available at:  
<http://www.cisco.com/univercd/cc/td/doc/product/voice/respond/index.htm>
  - *Release Notes for Cisco Emergency Responder*
  - *Cisco Emergency Responder Administration Guide*
  - *Cisco Emergency Responder User's Guide* (also built into the end-user interface as the Cisco ER online help system)
- Cisco CallManager documents are available at:  
[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm)

## Online Help and Document Conventions

The *ALI Formatting Tool User Guide* is built into the end-user interface as the AFT online help system. AFT's online help system provides task-oriented help that is available from the AFT window.

The help system includes an index and is organized the same way as the *ALI Formatting Tool User Guide*.

- Using the Online Help, page vii
- Document Conventions, page vii

## Using the Online Help

You can access online help in any of these ways:

- From the Help menu, access the contents of the online help system by selecting **Help > Contents and Index** or by clicking on the Help icon, a question mark.
- For a printed version of the manual associated with the application, or to view or search an Adobe Acrobat version of the help system, click the **View PDF** button in the top frame of the help system. If you have Adobe Acrobat installed (either as an independent application or as a plug-in to your browser), the document opens.

From Acrobat, you can search the entire manual, print the entire manual or selected pages, or read the manual online.

## Document Conventions

This publication uses the following conventions:

Convention	Description
<b>boldface font</b>	Commands and keywords are in <b>boldface</b> .
<i>italic font</i>	Arguments for which you supply values are in <i>italics</i> .
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in <code>screen font</code> .
<b>boldface screen font</b>	Information you must enter is in <b>boldface screen font</b> .
<i>italic screen font</i>	Arguments for which you supply values are in <i>italic screen font</i> .
<b>Action &gt; Reports</b>	Command paths in a graphical user interface (GUI).

Notes use the following convention:



**Note**

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Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

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Cautions use the following convention:



**Caution**

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Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

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## Obtaining Documentation

These sections explain how to obtain documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com>

Translated documentation is available at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped 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 through an annual subscription.

## Ordering Documentation

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](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/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

You can submit comments electronically on Cisco.com. In the Cisco Documentation home page, click the **Fax** or **Email** option in the “Leave Feedback” section at the bottom of the page.

You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Document Resource Connection  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

# Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

If you want to obtain customized information and service, you can self-register on Cisco.com. To access Cisco.com, go to this URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Cisco TAC inquiries are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

You can use the Cisco TAC Web Site to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to this URL:

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

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

<http://www.cisco.com/register/>

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC Web Site, you can open a case online by using the TAC Case Open tool at this URL:

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

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

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

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.



# Overview of ALI Formatting Tool

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The Automatic Location Information Formatting Tool (AFT) enables you to modify the automatic location information (ALI) records that you create in Cisco Emergency Responder to a format that is compatible with the one used by your service provider.

Cisco Emergency Responder (Cisco ER) helps you manage emergency calls in your telephony network. Cisco ER tracks a system's phones and locations and exports this information in ALI records that conform to National Emergency Number Association (NENA) 2.0, 2.1, and 3.0 formats. However, many service providers do not use NENA standards. You can use AFT to modify the Cisco ER-generated ALI records according to service provider-specific formats. That service provider then uses the reformatted file to update their ALI database.

The *ALI Formatting Tool User Guide* provides you with the information that you need to understand, install, use and troubleshoot AFT. Service provider-specific information is described in the appendix.

These topics provide an overview of Cisco ER and the ALI formatting tool:

- Overview of Enhanced 911, page 1-2
- Overview of the ALI Formatting Tool, page 1-3
- Understanding E911 and Cisco Emergency Responder Terminology, page 1-4

# Overview of Enhanced 911

Cisco Emergency Responder (Cisco ER) helps you manage emergency calls in your telephony network so that you can respond to these calls effectively and so that you can comply with your local ordinances concerning the handling of emergency calls. In North America, these local ordinances are called “enhanced 911,” or E911. Other countries and locales might have similar ordinances.

*Enhanced 911* (E911) extends the basic 911 emergency call standard to make it more reliable.

In basic 911 in North America, if a caller dials 911, the call is routed to a *public safety answering point* (PSAP), also called the 911 operator. The PSAP is responsible for talking to the caller and arranging the appropriate emergency response, such as sending police, fire, or ambulance teams.

E911 extends this standard with these requirements:

- The emergency call must be routed to the local PSAP based on the location of the caller. In basic 911, the call simply needs to be routed to some PSAP, not necessarily the local one.
- The caller’s location information must be displayed at the emergency operator’s terminal. This information is obtained by querying an *automatic location information* (ALI) database.

In E911, the location of the caller is determined by the *emergency location identification number* (ELIN), which is a phone number the PSAP can dial to reconnect to the emergency caller if the emergency call is cut off for any reason, or if the PSAP simply needs to talk to the caller again. The emergency call is routed to the PSAP based on the location information associated with this number. For multi-line phone systems, such as an office system, the ELIN can be associated with more than one telephone by grouping the phones in an *emergency response location* (ERL). In this case, the location the PSAP receives would be the address of an office building. For large buildings, the location would include additional information such as floor or region on a floor. Each ERL requires a unique ELIN.

## Related Topics

- Overview of the ALI Formatting Tool, page 1-3
- Understanding E911 and Cisco Emergency Responder Terminology, page 1-4

# Overview of the ALI Formatting Tool

The ALI Formatting Tool (AFT) reads the automatic location information (ALI) file generated by Cisco Emergency Responder (Cisco ER) and displays all the ELIN records in the AFT interface. You can use AFT to:

- Easily view the details of the ALI records. ALI files are difficult to read in the NENA fixed-length format. AFT reads the ALI files and presents the NENA fields in an interface that is easy to read.
- Select a record and update the value for ALI fields. AFT allows you to edit the ALI fields to customize them to meet the requirements of different service providers. Your service provider can then read the reformatted ALI files and use them to update their ELIN records.
- Perform bulk updates on multiple ALI records. Using the bulk update feature, you can apply common changes to all the records that you have selected, to one area code, or to one area code and one city code.
- Selectively export ALI records based on Area Code, City Code or a 4-digit Directory Number. By selecting to export all the ALI records in an Area Code, for example, you can quickly access all the ELIN records for each service provider allowing you to easily support multiple service providers.

## Related Topics

- Overview of Enhanced 911, page 1-2
- Understanding E911 and Cisco Emergency Responder Terminology, page 1-4
- Chapter 3, “Using the ALI Formatting Tool”

# Understanding E911 and Cisco Emergency Responder Terminology

Table 1-1 defines some of the key terminology used in this document.

**Table 1-1** *E911 and Cisco Emergency Responder Terminology*

Term	Definition
ALI	Automatic location information. Information that ties an ELIN to a location, and is used to route emergency calls from that ELIN to the correct local PSAP. Information that is presented to the PSAP to help the PSAP locate the emergency caller. In Cisco Emergency Responder, you fill in ALI data for each ERL, and submit the ALI data to your service provider for inclusion in the ALI database.
ANI	Automatic number identification. ANI is another name for ELIN.
CAMA	Centralized automated message accounting. An analog phone trunk that connects directly to an E911 selective router, bypassing the PSTN.
DID	Direct inward dial. A telephone number obtained from your service provider that can be used to dial into your telephone network. DIDs are used for ELINs.
ELIN	Emergency location identification number. A phone number that routes the emergency call to the local PSAP, and which the PSAP can use to call back the emergency caller. The PSAP might need to call the number if the emergency call is cut off, or if the PSAP needs additional information after normally ending the emergency call. See ALI.
emergency call	A call made to the local emergency number, such as 911. Cisco Emergency Responder routes the call to the service provider's network, where the call is routed to the local public safety answering point (PSAP).
emergency caller	The person who places the emergency call. The caller might require help for a personal emergency, or might be reporting a more general emergency (fire, theft, accident, and so forth).
ERL	Emergency response location. The area from which an emergency call is placed. This is not necessarily the location of the emergency. If an emergency caller is reporting a general emergency, the actual emergency might be in a different area. In Cisco Emergency Responder, you assign switch ports and phones to ERLs, and ERL definitions include ALI data.

**Table 1-1 E911 and Cisco Emergency Responder Terminology (continued)**

Term	Definition
ESZ	<p>Emergency service zone. The area covered by a given PSAP. This area usually includes several police and fire departments. For example, a city and its suburbs might be serviced by one PSAP.</p> <p>Each ESZ is assigned a unique emergency service number (ESN) to identify it.</p>
MSAG	<p>Master street address guide. A database listing of all valid street address ranges within a community, the contents of which is typically managed by a local government organization. The MSAG database service can be managed by a local government organization, an incumbent local exchange carrier, or by a database service provider (often the same as the ALI database service provider).</p>
NENA	<p>National Emergency Number Association. The organization that recommends data and file formats for ALI definitions and other emergency call requirements in the United States. Cisco Emergency Responder uses the NENA formats for ALI data export files. Your service provider might have additional restrictions on data format, so ensure that your ALI entries abide by your service provider's rules.</p>
PSAP	<p>Public safety answering point. This is the organization that receives emergency calls, for example, the 911 operator. The PSAP is staffed by people trained in handling emergency calls. The PSAP talks to the emergency caller and notifies the appropriate public service organizations (such as police, fire, or ambulance) of the emergency and its location.</p>

■ Understanding E911 and Cisco Emergency Responder Terminology



# Installing the ALI Formatting Tool

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Use these topics to install ALI Formatting Tool (AFT):

- System Requirements, page 2-1
- Installing the ALI Formatting Tool, page 2-2

## System Requirements

The ALI Formatting Tool (AFT) requires the following software components to operate:

- Cisco Emergency Responder (Cisco ER) 1.1 or later
- Microsoft Windows 2000

The ALI Formatting Tool (AFT) supports all hardware platforms supported by Cisco ER. Refer to the *Cisco Emergency Responder Administration Guide* for Cisco ER-supported Cisco Media Convergence Server (MCS) hardware platforms.



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### Note

You must install AFT on the same server with Cisco ER.

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### Related Topics

- Installing the ALI Formatting Tool, page 2-2

# Installing the ALI Formatting Tool

The ALI Formatting Tool (AFT) is downloadable from the Internet. To install AFT, perform the following steps:

## Procedure

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- Step 1** Start the Cisco MCS or Cisco certified server and log in to Windows 2000.
- Step 2** Use a web browser to access the following URL:  
`http://www.cisco.com/cgi-bin/tablebuild.pl/aft`
- Step 3** Download the AFT installation file that is specific to your service provider.  
The AFT .exe files are named as shown here:  
`CER-aft-<serviceprovider>.<mainrelease> - <minorrelease>  
-<maintrelease>.exe`  
where *serviceprovider* is the name of your Service Provider  
and *mainrelease*, *minorrelease* and *maintrelease* make up the AFT release number.  
For example, to select the SBC Southwestern Bell AFT, click on:  
**CER-aft-SBC\_Southwestern\_Bell.1-1-1.exe**
- Step 4** Double-click on the downloaded file to launch the installer.  
The Welcome to the ALI Formatting Tool (AFT) Installation Wizard screen appears.
- Step 5** At this point, the installation checks for the presence of Cisco ER 1.1 or later.  
If Cisco ER 1.1 or later is not present, you are prompted to install it. The installation of AFT will not continue until Cisco ER 1.1 or later is present.
- Step 6** Click **Next**.  
The License Agreement Screen appears.
- Step 7** Select **Accept** and click **Next**.  
The User Information Screen appears.
- Step 8** Enter the user name and organization information and click **Next**.

- Step 9** Select administrator rights by clicking on one of the following choices:
- **For me**
  - **For all who use the computer**
- Step 10** Click **Next**.  
The Ready to Install screen appears.
- Step 11** Click **Next**.
- Step 12** To test that the application successfully loaded, install the new shortcut path and launch the AFT application. Go to:
- a. **Start > Programs > Cisco Emergency Responder > AFT > <serviceprovider (NENA version)>**  
For example, for SBC Southwestern Bell, go to:  
**Start > Programs > Cisco Emergency Responder > AFT > SBC\_SouthwesternBell (NENA 2.0)**  
The AFT login screen appears.
  - b. To log in to AFT, enter your Cisco ER Main Administrator or ERL Administrator login ID and Password.
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### Related Topics

- System Requirements, page 2-1
- Chapter 3, “Using the ALI Formatting Tool”





## Using the ALI Formatting Tool

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This section provides information about how to use the ALI Formatting Tool (AFT):

- Using the ALI Formatting Tool Interface, page 3-1
- Using AFT to Generate a Formatted ALI File, page 3-7

### Using the ALI Formatting Tool Interface

To familiarize yourself with the AFT interface, select the pull-down menus from the AFT main menu to see the options. Hold your mouse over each AFT icon to view the icon description in the tool tip box.

These topics will help you become familiar with the AFT interface:

- ALI Formatting Tool Fields, page 3-2
- Using the Tool Bar and Icons, page 3-3

## ALI Formatting Tool Fields

You can edit the following fields using AFT:

- The header and trailer fields. The ALI Formatting Tool (AFT) displays all the ALI record data in the ALI tab. The ALI file consists of one header record and one trailer record only; there is not an individual header and trailer record for each ELIN record.
- The Function/Transaction Code field. Refer to Appendix A, “Using the ALI Formatting Tool for SBC Southwestern Bell” for more information.
- Service provider-specific fields. Refer to Appendix A, “Using the ALI Formatting Tool for SBC Southwestern Bell.”

You cannot edit the following fields using AFT:

- The ALI records fields that you configure and edit through Cisco Emergency Responder (Cisco ER). They are disabled (greyed out) in AFT.
- The record count field. This trailer field cannot be edited in AFT because AFT calculates this number internally based on the number of records selected to export.

### Related Topics

- Using the Tool Bar and Icons, page 3-3
- Before You Generate Files, page 3-7
- Generating a Formatted ALI File, page 3-8

## Using the Tool Bar and Icons

Use Table 3-1 to learn how you use the AFT interface to perform the main AFT tasks.

Use the “Generating a Formatted ALI File” section on page 3-8 for a step-by-step procedure about putting the tasks together and generating reformatted ALI files.

**Table 3-1** Using the AFT Interface

Task	Procedure	Notes
Give a NENA file as input to AFT	Use one of these methods: <ul style="list-style-type: none"> <li>• Click the <b>File Open</b> icon.</li> <li>• Select <b>Menu &gt; File &gt; Open (Ctrl+O)</b>.</li> </ul>	If the NENA files are on the Master Cisco Emergency Responder (Cisco ER) server and AFT is installed on the Standby Cisco ER server, you can use the Open Window Dialog box to browse to a shared Master Cisco ER folder.
Go to a specific ELIN number	<ol style="list-style-type: none"> <li>1. Select <b>Menu &gt; File &gt; Go to ELIN (Ctrl+E)</b>.</li> <li>2. Enter the ELIN number.</li> </ol>	<p>If the ELIN is present, it is selected in the tree and the ALI tab is populated with data for that record.</p> <p>If it is an invalid record number, a message displays with the valid range of numbers.</p>
Go to a specific record	<ol style="list-style-type: none"> <li>1. Select <b>Menu &gt; File &gt; Go to Record Number (Ctrl+R)</b>.</li> <li>2. Enter the record number.</li> </ol>	<p>If the record number is valid, that record is selected in the tree and the ALI tab is populated with data for that record.</p> <p>If it is an invalid record number, a message displays with the valid range of numbers.</p>

Table 3-1 Using the AFT Interface (continued)

Task	Procedure	Notes
View ALI details for an ELIN/Select an ELIN to edit its ALI fields	Click on the ELIN in the tree.	This highlights the ELIN and populates its details in the right pane of the window.  You can then edit the ALI records by entering new values in the ALI editable fields.
Undo record change/Redo record change	Use one of these methods: <ul style="list-style-type: none"> <li>• Click the <b>Undo/Redo</b> icon.</li> <li>• Select <b>Menu &gt; Edit &gt; Undo record/Redo record change (Ctrl+Z/Ctrl+Y)</b>.</li> </ul>	The Undo/Redo option remembers the last 20 record changes.
Cut/Copy/Paste record input	Use one of these methods: <ul style="list-style-type: none"> <li>• Click the <b>Cut/Copy/Paste</b> icon.</li> <li>• Select <b>Menu &gt; Edit &gt; Cut/Copy/Paste (Ctrl+X/Ctrl+C/Ctrl+V)</b>.</li> </ul>	

Table 3-1 Using the AFT Interface (continued)

Task	Procedure	Notes
Select ALI records to be exported to your service provider	<p>In the tree, click in the ELIN check box. Use one of the following options:</p> <ul style="list-style-type: none"> <li>• Select all ELINs in the tree by checking the root node of the tree.</li> <li>• Select all ELINs with a specific area code by checking the Area Code in the tree. For example, checking the 408 check box will select all the numbers in the 408 area code.</li> <li>• Select all ELINs with a specific City Code by checking the City Code in the tree. For example, clicking on 228 will also select 228-9333 and 228-5672.</li> <li>• Select an individual ELIN by checking the 4-digit directory number, for example, 9933.</li> </ul>	Check marks will indicate the ELINs that are selected.
Generate Formatted File	<p>Use one of the following methods:</p> <ul style="list-style-type: none"> <li>• Click the <b>Generate Formatted File</b> icon.</li> <li>• Go to Menu &gt; Tools and click <b>Generate Formatted File (Ctrl+G)</b>.</li> </ul>	AFT generates an ALI file in a format that your service provider can read.

Table 3-1 Using the AFT Interface (continued)

Task	Procedure	Notes
Perform a bulk update to the ALI files	<ol style="list-style-type: none"> <li>1. Use one of these methods:               <ul style="list-style-type: none"> <li>– Click the <b>Bulk Update</b> icon.</li> <li>– Select <b>Menu &gt; Tools &gt; Bulk Update (Ctrl+B)</b>.</li> </ul> <p>AFT displays the bulk update form.</p> </li> <li>2. Select one of the following options:               <ul style="list-style-type: none"> <li>– To apply the changes to all records, click the first tab, <b>Apply All</b>.</li> <li>– To apply the changes to one area code, click the second tab, <b>Apply by Area Code</b>.</li> <li>– To apply the change to one area code and one city code, click the third tab, <b>Apply by Area Code and City Code</b>.</li> </ul> </li> </ol>	The bulk update feature saves the changes automatically.
Save updates to the ALI file	Select <b>Menu &gt; Tools &gt; Save Record (Ctrl+S)</b> .	The new value is saved and displayed in the interface.  If you modify an ALI record but do not save the changes, an alert asks if you want to save the changes.
Close AFT	Select <b>Menu &gt; File &gt; Exit</b> .	If you try to close AFT without saving changes, AFT asks if you want to generate a formatted file.

**Related Topics**

- ALI Formatting Tool Fields, page 3-2
- Using AFT to Generate a Formatted ALI File, page 3-7

# Using AFT to Generate a Formatted ALI File

Use the following topics to generate a formatted ALI file:

- Before You Generate Files, page 3-7
- Generating a Formatted ALI File, page 3-8

## Before You Generate Files

Make sure you have completed the following tasks before you begin to use AFT to generate an exported file:

- You have installed, set up and used Cisco Emergency Responder (Cisco ER) to configure ERLs with the ELIN and ALI information and to generate a NENA file. For information on performing these tasks, refer to the *Cisco Emergency Responder Administration Guide*.
- You have successfully installed, launched and tested AFT. See Chapter 2, “Installing the ALI Formatting Tool.”
- You understand which specific information you modify for your service provider. For details, see Appendix A, “Using the ALI Formatting Tool for SBC Southwestern Bell.”

## Generating a Formatted ALI File

To use AFT to generate a formatted file, perform the following steps:

### Procedure

- Step 1** Provide a NENA file generated by Cisco Emergency Responder (Cisco ER) as input to AFT in one of these ways:
- Select **Menu > File > Open (Ctrl+O)** and browse to select the file name.
  - Use the File Open icon and enter the file name.



#### Tip

If the NENA files are on the Master Cisco ER server and AFT is installed on the Standby Cisco ER server, you can use the Open Window Dialog box to browse to a shared Master Cisco ER folder.

The AFT application displays all the ELINs from the NENA file in a tree box in the left side of the page by the Area Code, City Code and 4-digit directory number.

- Step 2** To view details of the ALI files, click on an ELIN in the tree.  
This highlights the ELIN and populates its details in the right pane of the window.
- Step 3** Edit the ALI fields by entering new values in the editable fields.
- Step 4** Save any changes that you made to the ALI file:  
Select **Menu > Tools > Save Record (Ctrl+S)**.
- Step 5** Select the ELINs that you want to export to the service provider by clicking in the corresponding check boxes in the tree.
- To select all ELINs in the tree, check the root node of the tree.
  - To select all ELINs with a specific area code, click in the Area Code check box in the tree. For example, clicking the 408 check box will select all the numbers in the 408 area code. All the 408 numbers display check marks.
  - To select all ELINs with a specific City Code, click in the City Code check box. For example, selecting 228 will also select 228-9333 and 228-5672.
  - To select an individual ELIN, click in the 4-digit check box, for example, 9933

Check marks will indicate the ELINs that are selected.

- Step 6** Update the service provider-fields in AFT:
- For details about the service provider-specific information required, see Appendix A, “Using the ALI Formatting Tool for SBC Southwestern Bell”
- Step 7** At this point, if the service provider-specific field is common for many ELIN records (for example, if all the ELIN records share the same Private Switch Code), you can use AFT’s Bulk Update feature:
- a. Select **Menu > Tools > Bulk Update (Ctrl+B)** or the **Bulk Update** icon. AFT displays the bulk update form.
  - b. Select one of the following options:
    - To apply the changes to all records, click the first tab: **Apply All**.
    - To apply the changes to one area code, click the second tab: **Apply by Area Code**.
    - To apply the changes to one area code and one city code, click the third tab: **Apply by Area Code and City Code**.
- Step 8** Generate a formatted file in one of these way:
- Go to **Menu > Tools** and click **Generate Formatted File (Ctrl+G)**.
  - From the Tool Bar, click the Generate Formatted File icon.
- AFT generates an ALI file in a format specific to your service provider and prompts you for a location to save it.
- Step 9** Enter a location where you want to store the formatted file.
- Step 10** Using the service provider’s preferred method of transmitting files, send the ALI file to your service provider so they can update their E911 database with the ELINs from the AFT ALI file.

**Tip**

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Be sure to keep a copy of the AFT ALI file for your records. This will be helpful if the service providers reports errors; you can make any required changes to the file without having to re-do all the AFT formatting changes.

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- Step 11** Your service provider returns the status of the ALI files.
- If your service provider reports that there are no errors, you can continue using AFT to generate more formatted records or you can quit the program.
  - If your service provider reports that there are ALI errors, perform the following steps:
    - Make corrections to the formatted file that you sent to the service provider. All the error codes for the service providers are defined in the ALI format documentation for that service provider. Refer to their documentation to determine the errors in your file and correct the errors using AFT.



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**Note** If an error occurs in fields that cannot be edited using AFT, you must use Cisco ER to correct the fields. Then use AFT to generate the file again.

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- Send the corrected file to your service provider. Again, be sure to keep a copy of your corrected file for your records.
  - Repeat this process until your service provider can read the formatted files and can use them to update their ELIN records.
- 

### Related Topics

- Using the Tool Bar and Icons, page 3-3
- Chapter 4, “Troubleshooting the ALI Formatting Tool”
- Appendix A, “Using the ALI Formatting Tool for SBC Southwestern Bell”



# Troubleshooting the ALI Formatting Tool

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These topics address problems you might encounter using the ALI Formatting Tool (AFT) and provide ways to resolve them:

- Collecting Error and Trace Messages, page 4-1
- Troubleshooting AFT Problems, page 4-2
- Frequently Asked Questions, page 4-4

## Collecting Error and Trace Messages

The ALI Formatting Tool (AFT) logs errors, warnings, record changes, and information messages using a logging device that is similar to the one that Cisco Emergency Responder (Cisco ER) uses.



### Note

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Un-installing AFT does not remove the AFT logs. This allows you to use the logs to find details about old AFT transactions.

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For bulk operations, AFT logs information related to the bulk operation, not individual record updates.

You can access the AFT logs, in one of two ways. Go to:

- the log folder at:  
C:\ProgramFiles\CiscoSystems\AFT\logs\*<providename>*
- the install folder at:  
C:\Program Files\CiscoSystems\AFT\*<providename>*  
and follow the shortcut to the AFT logs.

#### Related Topics

- Troubleshooting AFT Problems, page 4-2
- Frequently Asked Questions, page 4-4

## Troubleshooting AFT Problems

Use the following sections to resolve AFT problems:

- Cannot Install AFT, page 4-2
- Cannot Log In To AFT, page 4-3
- Cannot Locate the AFT Logs, page 4-3

## Cannot Install AFT

**Problem:** You receive an error message when you try to install AFT on a Windows 2000 system.

**Action:** Cisco Emergency Responder (Cisco ER) must be installed before you can install AFT. You must install AFT on the same server with Cisco ER.

Make sure that Cisco ER is installed, then try to install AFT again.

## Cannot Log In To AFT

**Problem:** You get an “Invalid Login” message when you try to log in to AFT.

**Action:** You must be a member of CERSystemAdmin and CERERLAdminGroup for Cisco Emergency Responder (Cisco ER). Check the group membership at:

**Start > Control Panel > Administrative Tools > Computer Management > Users and Groups > Groups**

## Cannot Locate the AFT Logs

**Problem:** You cannot find the AFT Logs.

**Action:** The ALI Formatting Tool (AFT) is installed in:

C:\Program Files\CiscoSystems\AFT\*<providername>*

Follow the shortcut in this folder to the AFT Log Folder.

All AFT logs are saved here:

C:\ProgramFiles\CiscoSystems\AFT\logs\*<providername>*

### Related Topics

- Collecting Error and Trace Messages, page 4-1
- Frequently Asked Questions, page 4-4

# Frequently Asked Questions

- Q. My Service Provider accepts NENA 2.0 files. From the Cisco Emergency Responder (Cisco ER) documentation, I see that Cisco ER itself generates NENA 2.0 files. Will I need to use AFT for sending ALI files to my service provider?
- A. Cisco ER was designed to generate ALI files in NENA 2.0, 2.1 and 3.0 format. However, many service providers have specific fields that they use for internal purposes. If their fields are missing, they might reject the ALI file you send them from Cisco ER. These ALI files need formatting for the service provider-specific fields. This might be adding, removing, or changing the position of some fields. AFT is a small application that you can download from CCO and use for formatting the ALI files which Cisco ER generates according to your service provider's requirements.
- Q. In my Cisco Emergency Responder (Cisco ER) setup, I have a set of ELINs that I bought from SBC Southwestern Bell and another set of ELINs that I bought from Sprint. I have configured these ELINs in Cisco ER. I did an ALI export and exported the ELINs to a single file. How will I send this ELIN file separately to SBC Southwestern Bell and Sprint?
- A. You can use AFT to accomplish this task. Perform the following steps:

## Procedure

- 
- Step 1** Download the AFT for SBC Southwestern Bell and download the AFT for Sprint from CCO and install them on your Cisco ER server.
- Step 2** Give the ALI file exported from Cisco ER as input to the SBC Southwestern Bell AFT.
- Step 3** Perform the necessary formatting selectively for the SBC Southwestern Bell ELINs:

- Step 4** Use the SBC Southwestern Bell Area Code which is different from the Sprint area code. Send this file of the SBC Southwestern Bell ELINs to SBC Southwestern Bell.
- Step 5** Repeat steps 2 - 4 to generate a file containing just the Sprint ELINs by using AFT for Sprint.
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#### Related Topics

- Collecting Error and Trace Messages, page 4-1
- Troubleshooting AFT Problems, page 4-2





## Using the ALI Formatting Tool for SBC Southwestern Bell

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This section provides information about how to set up the AFT fields that are specific to SBC Southwestern Bell. Use this information along with Chapter 3, “Using the ALI Formatting Tool” to generate ALI files in a format that SBC Southwestern Bell can use to update their ELIN records.

- Modifying PS Code for SBC Southwestern Bell, page A-1
- Changing the Function Code, page A-2

### Modifying PS Code for SBC Southwestern Bell

In order to make the ELIN records readable by SBC Southwestern Bell, you may need to use AFT to update the SBC Southwestern Bell-specific field, PS Code.

The PS Code is a four-digit code that the SBC Southwestern Bell system assigns whenever the system configures a new PS site. This code is associated with the PS user's login and source. The PS Code is a feature that allows only records with the correct PS Code to be processed into tables for the PS Site.

If the PS Code does not match the configurations for the Source Name that is assigned to the PS Site, the record will not process. Before you generate a formatted file using AFT, make sure that PS Code and the Source Name match.

For more information, refer to the SBC Southwestern Bell documentation.

# Changing the Function Code

Cisco Emergency Responder (Cisco ER) sets the Function Code to one of the following:

- I for Inserting a new ALI record (the default)
- C for Updating an ALI record, such as changing a street name
- D for Deleting an ALI record

If you make changes to an ALI record in Cisco ER to correct errors reported by your service provider, you may need to use AFT to change the Function Code for ELIN records. Example A-1 illustrates when you need to change the function code.

## *Example A-1 Changing the Function Code*

Cisco ER initially generates ALI records with a function code of I, for insert. After you format a file and export it to SBC Southwestern Bell using AFT, SBC Southwestern Bell may reject the file. The error may be that the street suffix is incorrect, for example. You cannot change the street suffix in AFT because this field is disabled in AFT. You must change the ALI record using Cisco ER.

When Cisco ER generates the ALI record the second time after you make the change, it sets the Function Code to C because it assumes that the first file was accepted. Use AFT to change the Function Code for ELIN records from C to I.

Then, generate the format using AFT, and send the reformatted file to SBC Southwestern Bell.



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## A

ALI (automatic location information),  
definition 1-4

---

## B

bulk updating 3-6

---

## C

cutting and pasting record input 3-4

---

## D

DID (direct inward dial), definition 1-4

---

## E

E911 terminology 1-4

ELIN (emergency location identification  
number), definition 1-4

ERL (emergency response locations),  
definition 1-4

error and trace messages 4-1

---

## F

frequently asked questions 4-4

function code  
changing A-2

---

## G

generating a formatted file 3-5

giving NENA file as input to AFT 3-3

going to a specific record 3-3

---

## I

installing AFT 2-1

---

## N

NENA (National Emergency Number  
Association), definition 1-5

---

## O

overview of ALI Formatting Tool 1-1

overview of E911 1-2

---

P

PSAP (public safety answering point),  
definition 1-5

---

S

saving updates 3-6  
selecting ALI records to be exported 3-5  
selecting an ELIN to edit its ALI fields 3-4  
system requirements 2-1

---

T

troubleshooting 4-1

---

U

undoing a record change 3-4