Working with the Export Utility

System administrators need the ability to move large numbers of phone records to another Cisco CallManager database due to department moves, reorganizations, or equipment upgrades.The export utility in BAT gives you the ability to export large numbers of phone, user, and user device profile records from a Cisco CallManager database to a data file in CSV format. Then you can import the records into a different Cisco CallManager database. You can edit the CSV data file with a text editor, but you must use care because the file is very complex.

When BAT exports phones from the Cisco CallManager database, the phone model and number of lines on the models are the basis for organizing the data. Keep in mind that a BAT data file must contain records for one phone model only. When you are using the Export Specific Details option, BAT generates separate data files for a phone model with one line and another data input file for the same model phone with two lines.

To assist the administrator with the export function, a Device Summary Report provides a snapshot view of all phone models and configured lines in the Cisco CallManager database.

Additional Information

See the "Related Topics" section on page 10-19.

Moving Records from one Cisco CallManager Server to Another

You can use the export utility to merge records from multiple Cisco CallManager servers onto one Cisco CallManager server. Use this procedure to move records from one Cisco CallManager server to another. Only export the records that you are interested in moving. Perform the following procedures:

1. Exporting User Records, page 10-11
2. Exporting Phone Records, page 10-7
3. Exporting User Device Profile Records, page 10-17
4. (Optional) Edit the CSV file with a text editor. The record format must follow the format that is specified for that file format. For example, records for phones need to follow the phone file format.

Caution Use extreme care when editing the CSV file. Phones might not work if you insert records that are in the wrong format.

5. Copy the CSV file to the appropriate folder on the publisher database server:
   - Phone files to the C:\BATFiles\Phones\ Insert\ folder.
   - User files to the C:\BATFiles\Users\Insert Users\ folder
   - User device profile files to the C:\BATFiles\User Device Profiles\ folder.

Caution Because the order in which the records are inserted is important, you must insert user records first. This ensures that devices properly associate with existing users.

6. Insert User Records. Configure attributes that were not exported.
   - Enable authentication proxy rights
   - Enable CTI Application usage
   - Call Park Retrieval allowed
   - Enable Calling Party Number modification
7. Insert Phone Records.

8. Insert User Device Profile Records.
9. Check the log files for errors. See the "Viewing Export Log Files" section on page 10-18.

Additional Information

See the "Related Topics" section on page 10-19.

Using Phone Export

You can choose between two file format options when you are exporting phone records:

Default Phone—For phones that have similar configurations.

All Phone Details—For phones that have different line configurations, such as multiple partitions or calling search spaces.

Default Phone File Format

Choosing Default phone file format allows you to export records by using a defined query. You can only export phone records for specific phone type with a fixed number of lines when you choose to export by using a defined query. For example, if you want to export some records for a Cisco IP Phone model 7960 with one line and some records for a Cisco IP Phone model 7960 with two lines, you will need to use two different queries, and you will get two different CSV files.

Table 10-1 lists the fields that are exported when you choose the Default Phone file format.

Table 10-1 Exported Fields in the Default Phone File Format

Field Types	Exported Fields
Device Fields	MAC Address, Description, Location
Line Fields	Directory Number, Display, Line Text Label, Forward Busy External, Forward Busy Internal, Forward No Answer Internal, Forward No Answer External, Forward No Coverage Internal, Forward No Coverage External, Call Pickup Group

Table 10-1 Exported Fields in the Default Phone File Format (continued)

Field Types	Exported Fields
User Fields	User ID
Speed Dials	Speed Dials

All Phone Details File Format

When you export phone records by using All Phone Details option, you export phone records for a particular model of phone along with all the device field information, different line attributes, and services that are associated with the phone. You cannot use the query to limit the number of records.

Table 10-2 lists the fields that are exported when you choose the All Phone Details file format.

Note The device name, not the MAC Address, gets saved when you choose to export by using the All Phone Details file format.

Table 10-2 Exported Fields in the All Phone Details File Format

Field Types	Exported Fields
Device Fields	Device Name, Description, Owner User ID, Device Pool, CSS, AAR CSS, Media Resource Group List, User Hold Audio Source, Network Hold Audio Source, Location, User Locale, Network Locale, Phone Button Template, Expansion Module type I, Expansion Module type II, Softkey Template, Phone Load Name, Module 1 Load Name, Module 2 Load Name, Login user ID, Built in Bridge, MLPP Indication, MLPP Preemption, MLPP Domain, Retry Video call as Audio, Privacy, Security Mode, Ignore Presentation Indicators, Single Packet Capture mode, Packet Capture Duration, Certificate Operation, Authentication Mode, Authentication String, Key Size (bits), Operation Completes By, CommonProfile, DeviceMobilityMode, AAR Neighborhood, Logged to Hunt Group.

Table 10-2 Exported Fields in the All Phone Details File Format (continued)

Field Types	Exported Fields
Model Specific Device Fields	Information, Directory, Messages, Services, Authentication Server, Proxy Server, Idle, Idle Timer, Enable Extension Mobility, Logout Profile, Login User ID, Login Time, Logout Time, Product Specific XML

Table 10-2 Exported Fields in the All Phone Details File Format (continued)

Field Types	Exported Fields
Line Fields	Directory Number, Partition, Voice Mail Profile, Line CSS, AAR Group, Line User Hold Audio Source, Line Network Hold Audio Source, Auto Answer, Forward All to Voice Mail, Forward All Destination, Forward All CSS, Forward Busy External to Voice Mail, Forward Busy External Destination, Forward Busy External CSS, Forward No Answer External to Voice Mail, Forward No Answer External Destination, Forward No Answer External CSS, Forward On Failure to Voice Mail, Forward On Failure Destination, Forward on Failure CSS, Call pickup group, Forward Busy Internal to Voice Mail, Forward Busy Internal Destination, Forward Busy Internal CSS, Forward No Answer Internal to Voice Mail, Forward No Answer Internal Destination, Forward No Answer Internal CSS, Forward No Call Coverage External to Voice Mail, Forward No Call Coverage External Destination, Forward No Call Coverage External CSS, Forward No Call Coverage Internal to Voice Mail, Forward No Call Coverage Internal Destination, Forward No Call Coverage Internal CSS, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting When Idle, Line Text Label, Ring Setting When Active, No Answer Ring Duration, MLPP Target Destination, MLPP Calling Search Space, MLPP No Answer Ring Duration, Max Num Calls, Busy Trigger, Call Info Display Mask, Alerting Name, AARVoiceMailEnabled, AARDestinationMask, AARKeepCallHistory, Call forward Unregistered Internal Voice Mail Enabled, Call forward Unregistered Internal Destination, Call forward Unregistered Internal CallingSearchSpace, Call forward Unregistered External VoiceMailEnabled, Call forward Unregistered External Destination, Call forward Unregistered External CallingSearchSpace, Call Pickup Group Audio Alert Setting(Phone Idle), Call Pickup Group Audio Alert Setting(Phone Active).

Table 10-2 Exported Fields in the All Phone Details File Format (continued)

Field Types	Exported Fields
User Fields	User ID
Speed Dials	Speed Dial Number, Speed Dial Label
Services	Service Name, Subscribed Service Name, Parameter Name, Parameter Value

Additional Information

See the "Related Topics" section on page 10-19.

Exporting Phone Records

To export phone records from Cisco CallManager, use this procedure.

Procedure

Step 1 Choose **Configure > Phones**. The Phones Options window displays.

Step 2 Click the **Export Phones** radio button and click **Next**. The Export Phones window displays.

Step 3 In the Export file name field, enter your file name.

Step 4 In the File Format Name field, choose either the Default Phone or All Phone Details file format. Your choice determines the export option and sets the appropriate export option radio button.

- For **All Phone Details** file format, choose the type of device or specific model in the Model list box under the **All Details** radio button. See Table 10-1 for the list of exported fields in this format. Skip to Step 6.
- For **Default Phone** file format, choose the type of device or specific model in the Model list box under the **Specific Details** radio button. See Table 10-2 for the list of exported fields in the default phone format.

Step 5 You can customize the export file by choosing which set of phones to export, but the phone details are not configurable. Choose from the following fields:

a. Enter the number of lines for this phone model.

b. In the first drop-down list box, choose the field to query such as Device Name or Location.

c. In the second drop-down list box, choose the search criteria such as begins with, contains, or is empty.

d. In the search field/list box, either choose or enter the value that you want to locate, such as a device name.

e. To add the defined filter to the query, click **Add To Query**. You can click **AND** or **OR** to add multiple filters and repeat Substep b. through Substep d. to further define your query.

f. If you make a mistake, click the **Clear Query** button to remove the query; then, return to Substep b. and restart.

g. To verify that the exported records are correct, click **View Query Result**.

Step 6 To export the records, click **Export**, at the top left of the page.

Step 7 A message advises you of approximately how long it will take to export the records from the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

When the transaction completes, BAT displays either an Export Completed or Export Failed status. If BAT failed to export all the records, BAT displays an Export Failed message.

Step 8 To display the log file that was generated by BAT, click on the **View Latest Log File** link. The log file indicates the number of phone records that were exported, the number of phone records that failed to export, including the error code, the number of export files that were created, and the location of the files.

You can also view or download the exported file by choosing the **View/Download Exported File** link. The link does not display if BAT creates more than one export file.

Additional Information

See the "Related Topics" section on page 10-19.

Locating the Exported Phone Records

BAT saves the exported file at C:\BatFiles\Export\Phones\ on the publisher server.

Use the file name to guide you in reconfiguring the lines when you are inserting phones. When you export files by using the specific detail option, the export utility appends a numerical suffix _n to the export file name to indicate the number of lines that are configured on a phone. For example, if you entered the export file name as "sales," and you have two-line phones with lines 1 and 3 configured, the name of the file will be *sales_1_3.txt*.

When you export phones with dummy MAC addresses, the export utility appends "bat" and a numerical suffix _n to the export file name. For example, if you entered "newsales" as the export file name for phones with dummy MAC addresses, the name of the file will be *newsales_bat_1.txt*.

Additional Information

See the "Related Topics" section on page 10-19.

Exporting and Importing Phones with More Than One User

When you export phone records that have multiple users who control a phone, the export utility generates a unique phone record for each user. The phone information remains the same, but each record has a different user ID.

When you import the exported file that has phones with multiple users, the first phone record inserts with the associated user. Be aware that subsequent phone records fail to insert, but BAT attempts to insert all records and does accept the user association to the phone.

The log file for the import transaction will show that the phone insertions failed for all users except the first user that is associated with the phone.

Additional Information

See the "Related Topics" section on page 10-19.

Using User Export

When you use BAT to export user records, the export utility sorts users according to the organizational hierarchy in the directory. The export utility examines the value that was entered in the manager user ID field and puts users that are on the same reporting level into the same file. The Export utility modifies the file name by appending the suffix "_user" or "_MgrLevel#," where # represents a number 1 through 20.

The user ID for a manager must exist in the directory prior to its use in the manager user ID field in the user record. Insert the files in descending order based on the manager level numeral suffix. Insert the file with the user suffix last to ensure that the user records for managers exist prior to using them.

For Active Directory users, passwords do not get exported. PINs get exported in cleartext. You must use Active Directory to set passwords for users after importing the records.

The export utility only exports the default user device profile that is associated with a user. You must insert the other user device profiles for that user separately by using Cisco CallManager Administrator.

Export puts the following settings in the same file:

- CTI application use
- Call park retrieval allowed
- Enable authentication proxy rights
- Calling party number modification

The export utility appends the suffix _t (enabled) or _f (disabled) for each different setting to the file name. The order of the suffix flags in the file name specifies authentication proxy rights, CTI application use, call park retrieval, and Calling party number modification.

For example, you create an export file Test.txt by using the export utility. Cisco CallManager database has user TomT with manager MarieA, and Marie A has manager JamesM. If TomT has Proxy Authentication rights enabled, CTI application use and Call Park Retrieval disabled, and MarieA and JamesM have Proxy Authentication rights and CTI application usage enabled call park retrieval disabled, and calling party number modification enabled, the Export utility saves the user information in three different files. You will find TomT in the CSV

fileTest_user_t_f_f_t.txt, MarieA in the CSV file test_MgrLevel1_t_t_f_t, and JamesM in the CSV file Test_MgrLevel2_t_t_f_t. Table 10-3 illustrates this example.

Table 10-3 Example

Initial File Name						Test
User ID	**Manager**	**Proxy Authentication Rights**	**CTI Application**	**Call Park Retrieval**	**Calling Party Number Modification**	**Resulting File Name**
TomT	MariaA	Enable	Disable	Disable	Enable	Test_user_t_f_f_t.txt
MariaA	JamesM	Enable	Enable	Disable	Enable	Test_MgrLevel1_t_t_f_t.txt
JamesM		Enable	Enable	Disable	Enable	Test_MgrLevel2_t_t_f_t.txt

Use the suffix to guide you in choosing the correct settings for Proxy Authentication rights, CTI application use, Call Park Retrieval, and Calling Party Number Modification when you insert users.

Additional Information

See the "Related Topics" section on page 10-19.

Exporting User Records

When you export user records, some users might have a blank PIN because these user records were created prior to Cisco CallManager 3.1. If this is the case, you must specify a default PIN before reinserting the user records in the BAT user interface.

Use this procedure to export User records from Cisco CallManager.

Procedure

Step 1 Choose **Configure > Users**. The User Options windows displays.

Step 2 Click the **Export Users** radio button and click **Next**.

The Export Users window displays.

Step 3 In the Export file name field, enter your file name for the export file.

Step 4 In the File Format Name field, choose the file format. The current default specifies Default Users.

Step 5 In the first drop-down list box, choose a field to query such as User ID, Department, First Name, or Last Name.

Step 6 In the second drop-down list box, choose contains or is exactly.

Step 7 In the third box, which is the search field/list box, enter the value that you want to locate, such as a specific name or User ID.

Note To choose users from more than one department, enter multiple departments in this field. For example, to choose users from departments 12 and 34, enter 12, 34 in the third box instead of performing two operations.

Step 8 To add the defined filter to the query, click **Add To Query** button.

If you make a mistake, click the **Clear Query** button to remove the query; then, return to Step 5 and start over.

Step 9 To display the records that are going to be exported, click **View Query Result**.

Step 10 To export the chosen user records, click **Export**.

A message displays that advises you of approximately how long it will take to export the records from the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

When the transaction completes, BAT displays either an Export Completed or Export Failed status. If BAT failed to export all the records, BAT displays an Export Failed message.

Step 11 To display the log file that was generated by BAT, click on the **View Latest Log File** link. The log file indicates the number of phone records that were exported, the number of phone records that failed to export, including the error code, the number of export files that were created, and the location of the files.

Step 12 You can view or download the exported file by choosing the **View/Download Exported File** link. The link does not display if BAT creates more than one export file.

BAT saves the exported file at C:\BatFiles\Export\Users\ on the publisher server.

Additional Information

See the "Related Topics" section on page 10-19.

Using User Device Profile Export

You can choose between two file format names when you are exporting user device profile records:

- All User Device Profile Details
- Default User Device Profile Details

All User Device Profile Details Format

For phones that have different line configurations, such as multiple partitions or calling search spaces, use the All User Device Profile Details format.

Table 10-4 lists the fields that are exported when you choose the All User Device Profile Details file format.

Table 10-4 Exported Fields in the All User Device Profile Details File Format

Field Types	Exported Fields
Device Fields	User Device Profile Name, Description, Device Pool, Calling Search Space, AAR Calling Search Space, Media Resource Group List, User Hold Audio Service, Network Hold Audio Source, Login User ID, User Locale, Network Locale, Phone Button Template, Expansion Module Type I, Expansion Module Type II, Softkey Template, Phone Load Name, Module 1 Load Name, Module 2 Load Name, MLPP Indication, MLPP Preemption, MLPP Domain
Model Specific Device Fields	Information, Directory, Messages, Services, Authentication Server, Proxy Server, Idle, Idle Timer, Enable Extension Mobility, Logout Profile, Login User ID, Login Time, Logout Time

Table 10-4 Exported Fields in the All User Device Profile Details File Format

Field Types	Exported Fields
Line Fields	Directory Number, Partition, Voice Mail Profile, Line CSS, AAR Group, Line User Hold Audio Source, Line Network Hold Audio Source, Auto Answer, Forward All to Voice Mail, Forward All Destination, Forward All CSS, Forward Busy External to Voice Mail, Forward Busy External Destination, Forward Busy External CSS, Forward No Answer External to Voice Mail, Forward No Answer External Destination, Forward No Answer External CSS, Forward On Failure to Voice Mail, Forward On Failure Destination, Forward on Failure CSS, Call pickup group, Forward Busy Internal to Voice Mail, Forward Busy Internal Destination, Forward Busy Internal CSS, Forward No Answer Internal to Voice Mail, Forward No Answer Internal Destination, Forward No Answer Internal CSS, Forward No Call Coverage External to Voice Mail, Forward No Call Coverage External Destination, Forward No Call Coverage External CSS, Forward No Call Coverage Internal to Voice Mail, Forward No Call Coverage Internal Destination, Forward No Call Coverage Internal CSS, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting When Idle, Line Text Label, Ring Setting When Active, No Answer Ring Duration, MLPP Target Destination, MLPP Calling Search Space, MLPP No Answer Ring Duration, Max Num Calls, Busy Trigger, Call Info Display Mask, Alerting Name, AARVoiceMailEnabled, AARDestinationMask, AARKeepCallHistory, Call forward Unregistered Internal Voice Mail Enabled, Call forward Unregistered Internal Destination, Call forward Unregistered Internal CallingSearchSpace, Call forward Unregistered External VoiceMailEnabled, Call forward Unregistered External Destination, Call forward Unregistered External CallingSearchSpace, Call Pickup Group Audio Alert Setting(Phone Idle), Call Pickup Group Audio Alert Setting(Phone Active).

Table 10-4 Exported Fields in the All User Device Profile Details File Format

Field Types	Exported Fields
User Fields	User ID
Speed Dials	Speed Dial Number, Speed Dial Label
Services	Service Name, Subscribed Service Name, Parameter Name, Parameter Value

Default User Device Profile Format

To export a limited set of details that are associated with the user device profile, use the Default User Device Profile format. You can choose specific query options to customize the export file.

Table 10-5 lists the fields that can be exported when you choose the Default User Device Profile format.

Table 10-5 Exported Fields in the Default User Device Profile File Format

Field Types	Exported Fields
Device Fields	MAC Address, Description, Login User ID
Line Fields	Directory Number,Display,Line Text Label,Forward Busy External,Forward Busy Internal,Forward No Answer External,Forward No Answer Internal,Forward No Coverage External,Forward No Coverage Internal,Call pickup group
Speed Dials	Speed Dials

Additional Information

See the "Related Topics" section on page 10-19.

Exporting User Device Profile Records

To export user device profiles from Cisco CallManager, use this procedure.

Procedure

Step 1 From BAT, choose **Configure > User Device Profiles**. The User Device Profile Options window displays.

Step 2 Choose **Export User Device Profiles**. The Export User Device Profiles window displays.

Step 3 In the Export File Name field, enter the file name that you want to use.

Step 4 In the File Format Name field, choose one of these options. Your file format selection sets the appropriate export option radio button.

All User Device Profiles Details—To export all the line attributes, services and User IDs that are associated with the user device profile, you must complete the following fields:

- Choose the type of device or specific model in the Model list box under the **All Details** radio button.
- Specify the number of lines and click **Add to Query**.
- Skip to Step 5.

Default User Device Profile Details—To export a limited set of details that are associated with the user device profile, use this option.

To customize the export file, you can set any of the following detail options or choose None.

- In the first drop-down list box, choose one of the query options: Device Name, Description, or Directory Number.
- In the second drop-down list box, choose one of the query conditions: contains, is exactly, not equal to, begins with, ends with, is empty, or is not empty.
- In the third box, which is the search field/list box, enter the value that you want to locate, such as a specific directory number.
- To add the defined filter to the query, click **Add To Query**.

- To display the records that are going to be exported, click **View Query Result**.
- If you make a mistake, click the **Clear Query** button to remove the query and start over.

Step 5 After making choices for the Export Options, click **Export**, at the top of the window, to export the chosen user device profile records.

A message advises you of approximately how long it will take to export the records in the Cisco CallManager database.

Step 6 You can cancel the transaction or click **OK** to continue.

BAT displays either an Export Completed or Export Failed in the Status area above the Export button.

Step 7 To display the log file that indicates the number of user device profile records that were exported and the number of user device profile records that failed to export, including the error code, click the **View Latest Log File** link.

Step 8 View or download the exported file by choosing the **View/Download Exported File** link.

BAT saves the exported file at C:\BatFiles\Export\User Device Profiles\ on the publisher server.

Additional Information

See the "Related Topics" section on page 10-19.

Viewing Export Log Files

BAT generates log files for each export transaction and stores them on the publisher database server in the following location: C:\Program Files\Cisco\Trace\BAT\Export directory.

Clicking **View Latest Log File** link displays the summary view for the export transaction as well as the detail view for the failures.

To view the log file for the export operation, click **View Latest Log File** link in the export window or go to the following location:

C:\Program Files\Cisco\Trace\BAT\Export directory

The log file name uses the following format:

<Type of Record export>_<The chosen file name>#timestamp

The timestamp format for the log file name specifies *mmddyyyyhhmmss*.

Additional Information

See the "Related Topics" section on page 10-19.

Related Topics

- Moving Records from one Cisco CallManager Server to Another, page 10-2
- Using Phone Export, page 10-3
- Using User Export, page 10-10
- Using User Device Profile Export, page 10-13
- Viewing Export Log Files, page 10-18
- Inserting Phones into Cisco CallManager, page 3-56
- Inserting Users to Cisco CallManager, page 4-6
- Inserting User Device Profiles, page 6-27
- BAT Log Files, page 13-1