



# CHAPTER 10

## Adding and Updating Lines for Phones

---

To update line attributes for a specific group of devices or user device profiles, use the Update Lines option. Lines for a phone and a user device profile get updated at the same time when both are part of the query result.



### Note

---

When a phone is deleted from the Cisco Unified Communications Manager database, the directory number remains in the database. To manage these orphan directory numbers, you can use the Update Lines option to search for unassigned directory numbers and delete or update these directory numbers.

---

You can add lines to a group of existing phones or user device profiles in the Cisco Unified Communications Manager database. When you use the template to add new lines, you cannot change phone services or speed dials. Cisco Unified Communications Manager Bulk Administration (BAT) ignores those fields on the template when you add lines to existing devices.

To update line attributes and add lines and to add lines to existing phones or user device profiles, use the following procedures:

- [Using Query to Update Lines, page 10-1](#)
- [Adding Lines to Existing Phones and UDPs, page 10-7](#)
- [Using the BAT Spreadsheet to Add Lines to Existing phones, page 10-8](#)

## Using Query to Update Lines

To update lines, use the following procedure:

### Procedure

- 
- Step 1** Choose **Bulk Administration > Phones > Add/Update Lines > Update Lines** or **Bulk Administration > User Device Profiles > Add/Update Lines > Update Lines**.

The Update Lines Query window displays.



---

**Note** You can update all lines by not specifying a query. Skip to the [“Field Descriptions for Updating Lines” section on page 10-3](#).

---

- Step 2** From the first Find Line where drop-down list box, choose one of the following criteria:

- Directory Number
- Route Pattern
- Line Description
- Calling Search Space (Phone)
- Calling Search Space (Line)
- Device Pool
- Device Description
- Line Position
- Unassigned DN
- Call Pickup Group




---

**Note** To locate and delete orphaned directory numbers, use “unassigned DN.”

---

From the second Find Line where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

**Step 3** In the search field list box, choose or enter the value that you want to locate. For example, you can choose the Line Partition from the list or enter a range of directory numbers.




---

**Tip** To find all lines that are registered in the database, click **Find** without entering any search text.

---

**Step 4** To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat Steps 2 and 3.

**Step 5** To display the records that are going to be affected, click **Find**.

A list of discovered lines displays by

- Pattern/Directory Number
- Partition
- Description

**Step 6** Click **Next**. The Update Lines window shows the type of query that you chose at the top. If you want to change the type of query, click **Back**.

**Step 7** Specify the setting that you want to update for all the records that you have defined in your query. You can choose multiple parameters to update. See the “[Field Descriptions for Updating Lines](#)” section on page 10-3 for descriptions of the parameters.

**Step 8** In the Value field for the checked parameter, enter the new value or choose a value from the list box.

**Step 9** In the Job Information area, enter the Job description.

- Step 10** To insert lines immediately, click the Run Immediately radio button. Click Run Later to insert at a later time.
- Step 11** To create a job for inserting the phone records, click **Submit**.
- Step 12** To schedule and/or activate this job, use the Job Configuration window.  
For more information on jobs, see the [Chapter 66, “Scheduling Jobs.”](#)  
For information on log files, see “[BAT Log Files](#)” section on page 66-3.

#### Additional Topics

See the “[Related Topics](#)” section on page 10-11.

## Field Descriptions for Updating Lines

[Table 10-1](#) provides the field descriptions for updating line details. For related procedures, see the “[Related Topics](#)” section on page 10-11.

Values that display in some fields display from Cisco Unified Communications Manager. You must configure these values by using Cisco Unified Communications Manager Administration.

**Table 10-1** *Field Descriptions for Updating Line Details*

Field	Description
Line Partition	Choose a partition. A partition indicates the route partition to which the directory number belongs. <b>Note</b> The directory number can appear in more than one partition.
Calling Search Space (Line)	Choose the partitions that are searched for numbers that are called from this directory number. <b>Note</b> Changes cause an update of the Pickup Group Names that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
Calling Search Space Forward All	Choose the calling search space to use when a call is forwarded to the specified destination. <b>Note</b> This setting applies to all devices that are using this directory number.
Forward All Destination	Enter the directory number to which all calls are forwarded. <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward All to Voice Mail	Check this check box to forward all calls to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward All Destination field and Calling Search Space check box not relevant.
Calling Search Space Forward Busy External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. <b>Note</b> This setting applies to all devices that are using this directory number.

Table 10-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Calling Search Space Forward Busy Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. <b>Note</b> This setting applies to all devices that are using this directory number.
Forward Busy Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box not relevant.
Forward Busy to Voice Mail Internal	Check this check box to forward calls from an internal number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box not relevant.
Calling Search Space Forward No Answer External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. <b>Note</b> This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Answer Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. <b>Note</b> This setting applies to all devices that are using this directory number.
Forward No Answer Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

**Table 10-1** Field Descriptions for Updating Line Details (continued)

Field	Description
Forward No Answer Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered.  <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer to Voice Mail External	Check this check box to forward unanswered calls from an external number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box not relevant.
Forward No Answer to Voice Mail Internal	Check this check box to forward unanswered calls from an internal number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box not relevant.
Calling Search Space Forward No Coverage External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system.  <b>Note</b> This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Coverage Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system.  <b>Note</b> This setting applies to all devices that are using this directory number.
Forward No Coverage Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage.  <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage.  <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box not relevant.
Forward No Coverage to Voice Mail Internal	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box not relevant.

**Table 10-1** Field Descriptions for Updating Line Details (continued)

Field	Description
Calling Search Space Forward on Failure External/Internal	(CTI ports only) Choose the calling search space to use when a call from an internal or external call is forwarded to the specified destination. The setting appears only if it is configured in the system.  <b>Note</b> This setting applies to all devices that are using this directory number.
Forward on Failure Destination External/Internal	(CTI ports only) Enter the directory number to which a call that is coming from an internal or an external number should be forwarded when a phone or CTI application fails.
Forward on Failure to Voice Mail External/Internal	(CTI ports only) Check this check box to forward failed calls from external or internal numbers to the number that you chose in the voice-messaging profile.
Call Forward No Answer Ring Duration	Enter the number of seconds (between 1 and 300) to allow the call to ring, before forwarding the call to the destination number that is entered in the Forward No Answer Destination field.  <b>Note</b> Leave this field blank to use the value that is set in the Cisco Unified Communications Manager service parameter, Forward No Answer Timer.
User Hold Audio Source	Choose the music on hold audio source that plays when the user presses the Hold button or softkey to put a call on hold.
Network Hold Audio Source	Choose the music on hold audio source that plays when the system places a call on hold such as when user transfers a call or initiates a conference or call park.
Auto Answer	Choose this parameter if you want all lines that are updated here to use the auto answer feature. With auto answer, Cisco Unified Communications Manager automatically answers calls when a headset is in use. A zip tone plays to alert the user that an incoming call connected.
Voice Mail Profile	Choose this parameter to make the pilot number the same as the directory number for this line. This choice proves useful if you do not have a voice-messaging server that is configured for this phone.
Ring Setting When Idle	Choose the type of ring for an incoming call on a phone.
Ring Setting when Active	Choose the type of ring for an incoming call on a phone, which is used when this phone has another active call on a different line.
Call Pickup Group Name	Choose a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this directory number by dialing the appropriate pickup group number.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth.  To prevent rerouting blocked calls, set AAR Group to <None>.

**Table 10-1** Field Descriptions for Updating Line Details (continued)

Field	Description
Target (Destination) MLPP	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call.  Values can include numeric characters, pound(#), and asterisk (*).
MLPP Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
MLPP No Answer Ring Duration	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to the alternate party for this directory number if this directory number and its call forwarding destination have not answered the precedence call.  Leave this setting blank to use the value that is set in the Cisco Unified Communications Manager enterprise parameter, Precedence Alternate Party Timeout.
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line.  You can enter a maximum of 30 numbers and “X” characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
Maximum Number of Calls	You can configure up to 184 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease.  The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2.  For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls.  Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, incoming calls do not get rejected unless all the lines are busy.  Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.

**Note**

To complete the procedure, go to the [“Using Query to Update Lines”](#) section on page 10-1.

## Adding Lines to Existing Phones and UDPs

Use the following procedure to add lines to exiting phones and UDP templates:

**Before You Begin**

- You must have a BAT template for this transaction. See the [“Adding or Updating Lines in a BAT Template”](#) section on page 3-4.
- You must have a CSV data file for this transaction. See the [“Using the BAT Spreadsheet to Add Lines to Existing phones”](#) section on page 10-8 for information.

**Procedure**

- 
- Step 1** Choose **Bulk Administration > Phones > Add/Update Lines > Add Lines**.  
The Phone Add Lines window displays.
- Step 2** In the File Name field, choose the CSV data file that you created for this bulk transaction.
- Step 3** In the Phone Template Name field, choose the BAT phone template to use for this bulk transaction.
- Step 4** If you are changing the phone settings for existing phones in the template, check the **Update the existing phone button template** check box. The user phone information also gets updated when this check box is checked.
- Step 5** In the Job Information area, enter the Job description.
- Step 6** To insert the phone records immediately, click the Run Immediately radio button. Click Run Later to insert the phone records at a later time.
- Step 7** To create a job for adding lines to existing phones and UDPs, click **Submit**.
- Step 8** To schedule and/or activate this job, use the Job Configuration window.  
For more information on jobs, see the [Chapter 66, “Scheduling Jobs.”](#)  
For information on log files, see [“BAT Log Files”](#) section on page 66-3.
- 

**Additional Topics**

See the [“Related Topics”](#) section on page 10-11.

## Using the BAT Spreadsheet to Add Lines to Existing phones

To create the CSV data file by using the BAT spreadsheet for adding lines to existing phones, use the following procedure.

For information about installing and using the BAT spreadsheet, see the [“Using the BAT Spreadsheet for Gathering Data”](#) section on page 1-8.

**Procedure**

- 
- Step 1** To open the BAT Spreadsheet, locate and double-click the **BAT.xlt** file. For more information on uploading and downloading files, see [Chapter 2, “Uploading and Downloading Files.”](#)
- Step 2** When prompted, click **Enable Macros** to use the spreadsheet capabilities.
- Step 3** To display the fields, click the **Add Lines** tab at the bottom of the spreadsheet.
- Step 4** Enter data for an individual phone on each line in the spreadsheet. Complete all mandatory fields and any relevant optional fields. Each column heading specifies the length of the field and whether it is required or optional. [Table 10-2](#) describes the fields for adding lines in the BAT spreadsheet.

**Step 5** To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles\, or you can use Browse to save your file in another existing folder on your local workstation. The filename is

<tabname>-<timestamp>.txt

where <tabname> represents the type of input file that you created, such as phones, and <timestamp> represents the precise date and time that the file was created.



**Note** If you enter a comma in one of the fields, BAT.xlt encloses that field entry in double quotes when you export to BAT format.

If you enter a blank row in the spreadsheet, the system treats the empty row as the end of the file. The system does not convert data that is entered after a blank line to the BAT format.

Upload the file to the Cisco Unified Communications Manager server. See the [“Uploading a File” section on page 2-3](#).



**Note** For information on how to read the exported CSV data file, click the link to **View Sample File** in the Insert Phones window in BAT.

#### Additional Topics

See the [“Related Topics” section on page 10-11](#).

## Field Descriptions for Adding Lines by Using the BAT Spreadsheet

[Table 10-2](#) provides the field descriptions when you are adding lines by using the BAT spreadsheet. For related procedures, see the [“Related Topics” section on page 10-11](#).

**Table 10-2** *Field Descriptions for Adding Lines by Using the BAT Spreadsheet*

Field	Description
MAC Address	Enter the MAC address for phones, VGC virtual phones, and VGC phones. Enter a unique identifier for CTI ports and H.323 clients.
Line Index	Enter a number between 1 and 34 for the line index of a phone.
Directory Number	Enter a directory number, up to 24 numerals and special characters, for this line.

**Table 10-2** Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Field	Description
Display	<p>Enter the text that you want to display on the called party's phone display, such as the user name (John Smith) or phone location (Conference Room 1).</p> <p><b>Note</b> If this field is left blank the system uses the value that is entered in the Directory Number field.</p> <p><b>Note</b> The default language specifies English.</p>
Line Text Label	<p>Enter text that identifies this directory number for a line/phone combination.</p> <p><b>Note</b> The default language specifies English</p>
Forward Busy External	<p>Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward No Answer External	<p>Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward No Coverage External	<p>Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward Busy Internal	<p>Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward No Answer Internal	<p>Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward No Coverage Internal	<p>Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Call Pickup Group	<p>Enter a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this line by dialing the appropriate pickup group number.</p>

## Related Topics

- [Using Query to Update Lines, page 10-1](#)
- [Adding Lines to Existing Phones and UDPs, page 10-7](#)
- [Using the BAT Spreadsheet to Add Lines to Existing phones, page 10-8](#)

