



# Multiple Device Messaging

---

- [Multiple Device Messaging Overview, on page 1](#)
- [Enable Multiple Device Messaging , on page 3](#)
- [Counters for Multiple Device Messaging, on page 3](#)
- [Multiple Device Messaging Interactions and Restrictions, on page 4](#)

## Multiple Device Messaging Overview

With Multiple Device Messaging (MDM), you can have your one-to-one instant message (IM) conversations tracked across all devices on which you are currently signed in. If you are using a desktop client and a mobile device, which are both MDM enabled, messages are sent, or carbon copied, to both devices. Read notifications are also synchronized on both devices as you participate in a conversation.

For example, if you start an IM conversation on your desktop computer, you can continue the conversation on your mobile device after moving away from your desk. See [Multiple Device Messaging Flow, on page 2](#).

MDM supports quiet mode, which helps to conserve battery power on your mobile devices. The Jabber client turns quiet mode on automatically when the mobile client is not being used. Quiet mode is turned off when the client becomes active again.

MDM maintains compatibility with the Cisco XCP Message Archiver service and other third-party clients which do not support MDM.

MDM is supported by all Jabber clients from version 11.7 and higher.

The following limitations apply:

- Clients must be signed-in - Signed-out clients do not display sent or received IMs or notifications.
- File transfer is only available on the active device which sent or received the file.
- Group chat is only available on the device which joined the chat room.
- MDM is not supported on clients which connect to IM and Presence Service from the cloud through Cisco Expressway, on Expressway versions prior X8.8.

For further information on how MDM operates, see the following two flows:

## Multiple Device Messaging Flow

This flow describes how messages and notifications are handled when a user, Alice, has MDM enabled on her laptop and mobile device.

1. Alice has a Jabber client open on her laptop, and is also using Jabber on her mobile device.
2. Alice receives an instant message (IM) from Bob.

Her laptop receives a notification and displays a new message indicator. Her mobile device receives a new message with no notification.



---

**Note** IMs are always sent to all MDM-enabled clients. Notifications are displayed either on the active Jabber client only or, if no Jabber client is active, notifications are sent to all Jabber clients.

---

3. Alice chats with Bob for 20 minutes.  
Alice uses her laptop as normal to do this, while on her mobile device new messages are received and are marked as read. No notifications are sent to her mobile device.
4. When Alice receives three chat messages from a third user, Colin, Alice's devices behave as they did in step 2.
5. Alice does not respond, and closes the lid on her laptop. While on the bus home Alice receives another message from Bob.  
In this case, both her laptop and mobile device receive a new message with notifications.
6. Alice opens her mobile device, where she finds the new messages sent from Bob and Colin. These messages have also been sent to her laptop.
7. Alice reads through her messages on her mobile device, and as she does so, messages are marked as read on both her laptop and on her mobile device.

## Multiple Device Messaging Quiet Mode Flow

This flow describes the steps Multiple Device Messaging uses to enable quiet mode on a mobile device.

1. Alice is using Jabber on her laptop and also on her mobile device. She reads a message from Bob and sends a response message using Jabber on her laptop.
2. Alice starts using another application on her mobile device. Jabber on her mobile device continues working in the background.
3. Because Jabber on her mobile device is now running in the background, quiet mode is automatically enabled.
4. Bob sends another message to Alice. Because Alice's Jabber on her mobile device is in quiet mode, messages are not delivered. Bob's response message to Alice is buffered.
5. Message buffering continues until one of these triggering events occur:
  - An `<iq>` stanza is received.

- A `<message>` stanza is received when Alice has no other active clients currently operating on any other device.




---

**Note** An active client is the last client that sent either an Available presence status or an instant message in the previous five minutes.

---

- The buffering limit is reached.
6. When Alice returns to Jabber on her mobile device, it becomes active again. Bob's message, which had been buffered is delivered, and Alice is able to view it.

## Enable Multiple Device Messaging

Multiple Device Messaging is enabled by default. You can use this procedure to disable or enable the feature.

### Procedure

- 
- Step 1** In **Cisco Unified CM IM and Presence Administration**, choose **System > Service Parameters**.
  - Step 2** From the **Server** drop-down list, choose the IM and Presence Service Publisher node.
  - Step 3** From the **Service** drop-down list, choose **Cisco XCP Router (Active)**.
  - Step 4** Choose Enabled or Disabled, from the **Enable Multi-Device Messaging** drop-down list.
  - Step 5** Click **Save**.
  - Step 6** Restart the Cisco XCP Router service.
- 

## Counters for Multiple Device Messaging

Multiple Device Messaging (MDM) uses the following counters from the Cisco XCP MDM Counters Group:

*Table 1: Counter Group: Cisco XCP MDM Counters*

Counter Name	Description
MDMSessions	The current number of MDM enabled sessions.
MDMSilentModeSessions	The current number of sessions in silent mode.
MDMQuietModeSessions	The current number of sessions in quiet mode.
MDMBufferFlushes	The total number of MDM buffer flushes.
MDMBufferFlushesLimitReached	The total number of MDM buffer flushes due to reaching the overall buffer size limit.

Counter Name	Description
MDMBufferFlushPacketCount	The number of packets flushed in the last timeslice.
MDMBufferAvgQueuedTime	The average time in seconds before the MDM buffer is flushed.

## Multiple Device Messaging Interactions and Restrictions

Feature	Interaction
Server Recovery Manager	The Multiple Device Messaging feature causes a delay with server recovery on the IM and Presence Service if failover occurs. If server failover occurs on a system where Multiple Device Messaging is configured, the failover times generally are twice as long as the times specified with the <b>Cisco Server Recovery Manager</b> service parameters.