This sequence diagram shows an IMS user creating a conference by using a conference-factory URI. The conference is created at a MRFC-AS of the user's home network. The steps involved in the conference scenario covered here are:

1. The conference initiator UE uses the conference factory URI to initiate a conference with the MRFC-AS (Multimedia Resource Function Control/Application Server).
2. The MRFC-AS assigns a conference URI to the conference and configures the MRFP (Multimedia Resource Function Processor).
3. The conference call is setup and the RTP data begins flowing between the conference initiating UE and the MRFP.
4. The conference initiator then uses the refer procedure to add more users to the conference. The new users establish a call to the conference URI passed in the refer message.
5. When the conference is in progress, RTP media streams are being mixed and propagated to all the participants.
6. The conference user drops out of the conference. All users are notified for this exit from the conference.

Initiating an IMS conference using the Conference Factory URI

INVITE

INVITE Request URI: conf-factory1@mrfc1.home1.net

To: conf-factory1@mrfc1.home1.net SIP/2.0,
From: <sip:user1_public1@home1.net>, P-Preferred-Identity: <caller@hims1.net>,
Via: <Calling UE IP> :Port,
Route: <P-CSCF address>, <S-CSCF address>,
Contact: <Calling UE IP> :Port,
SDP: <Caller Supported Codec List>

100 Trying

INVITE

Max: <Calling UE IP> :Port, <Orig P-CSCF>, <Orig S-CSCF>, Record-Route: <P-CSCF address>, <S-CSCF address>,
Contact: <Calling UE IP> :Port, SDP: <Caller Supported Codec List>

100 Trying

183 Session Prog

183 Session Prog

PRACK

PRACK

200 CK (PRACK)

200 CK (PRACK)

UPDATE

UPDATE

200 CK (UPDATE)

200 CK (UPDATE)

200 CK (INVITE)

200 CK (INVITE)
header content as the conference URI.
The Conference Initiator starts the media flow for this session. The RTP
data stream is started towards the MRFP.
The conference initiator responds to the "200 OK" with an ACK towards
MRFC-AS.

User inviting another user to a conference by sending a REFER request

Conference Caller creates a conference and then sends REFER message
with Refer-To containing the conference URI as learned during the
conference establishment. Additionally the "method" uri parameter
indicates that the other user is requested to send an INVITE request to
this conference URI.

The originating S-CSCF performs an analysis of the destination address,
edetermines the terminating I-CSCF and forwards the REFER message to
it.

The terminating I-CSCF performs a location query to the HSS to find out
the terminating S-CSCF and forwards the REFER request to that S-CSCF.
The Called Conference Participant accepts the REFER request by sending
a 202 (Accepted) response.
The NOTIFY message is sent to inform that the REFER message is being
processed.
The "200 OK" Acknowledges the NOTIFY message.

Called Conference Participant enters Conference

Called Conference UE is aware of a conference-factory URI from REFER.
The S-CSCF forwards the INVITE request to the MRFC-AS that is
indicated in the message.
**Processor Interfaces (IMS Conference Call)**

<table>
<thead>
<tr>
<th>Calling UE</th>
<th>IMS Network</th>
<th>Called UE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller User Equipment</td>
<td>IMS 1</td>
<td>IMS 1 MRF</td>
</tr>
</tbody>
</table>

### Notify Conference Initiator that the user has successfully entered the conference

![Diagram](Image)

### Conference in progress

The conference is now in progress. The MRFP is merging and distributing the media stream for the conference.

### Conference Caller leaving the Conference

The Called Conference Participant wants to leave the conference. For this purpose it sends a BYE message to the P-CSCF with the Conference-URI as the Request-URI.

![Diagram](Image)

The MRFC-AS generates a NOTIFY request to indicate that Called Conference Participant has left the conference and automatically unsubscribes it from its subscription to the conference event package.

![Diagram](Image)

The conference initiator is also notified about a user dropping out of the conference.