Module Interfaces (IMS Presence Subscription, Publication and Notification)				
Watcher UE	Watcher IMS Network	Presentity IMS Network	Presentity UE	**EventStudio System Designer 4.0**

Register for Presence Information

SUBSCRIBE →

Event = presence,
Request URI = Presentity URI,
Expires = 7200,
Route = <Watcher P-CSCF>, <Watcher S-CSCF>,
From = Watcher URI
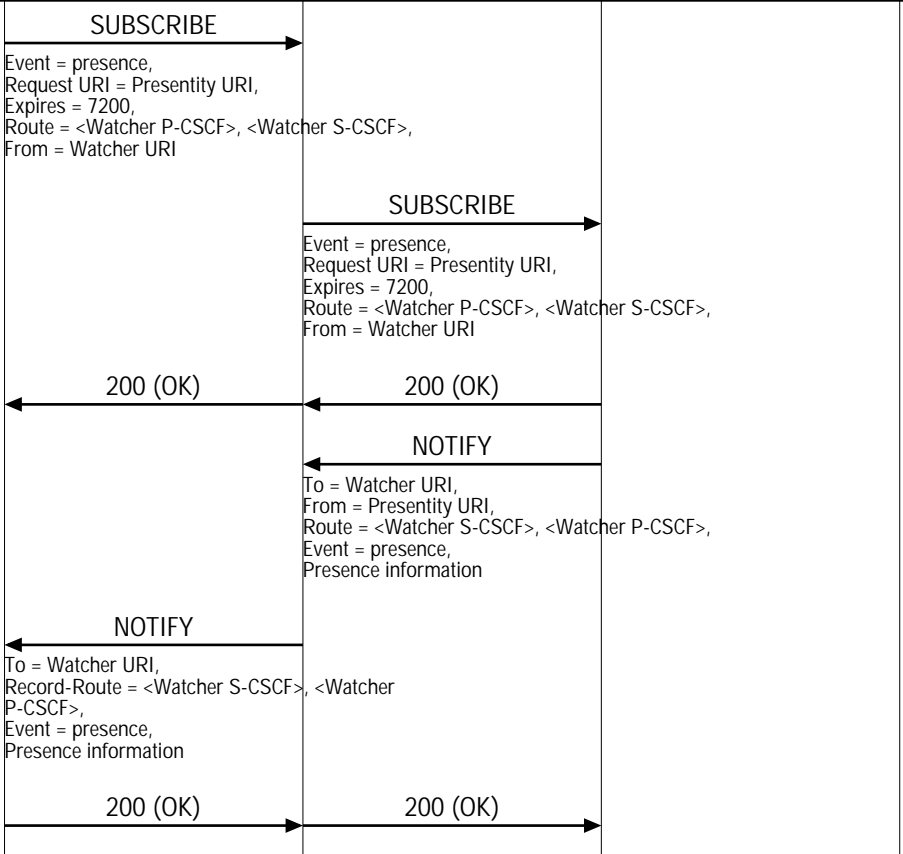
To initiate a subscription, the Watcher UE generates a SUBSCRIBE request containing the "presence" event that it wishes to be notified of. The message also includes the subscription duration.

SUBSCRIBE →

Event = presence,
Request URI = Presentity URI,
Expires = 7200,
Route = <Watcher P-CSCF>, <Watcher S-CSCF>,
From = Watcher URI

Watcher S-CSCF performs an analysis of the Presentity URI and forwards the SUBSCRIBE request directly to the Presence PUA's home network's CSCF i.e. I-CSCF in the destination network.

← 200 (OK)   ← 200 (OK)

If all privacy conditions are met, PS sends a 200 (OK) response to the S-CSCF. 200 (OK) is passed all the way to Watcher.

← NOTIFY

To = Watcher URI,
From = Presentity URI,
Route = <Watcher S-CSCF>, <Watcher P-CSCF>,
Event = presence,
Presence information

PS sends a NOTIFY request with the current state of the presentity's presence information that the watcher has subscribed and been authorized to.

← NOTIFY

To = Watcher URI,
Record-Route = <Watcher S-CSCF>, <Watcher P-CSCF>,
Event = presence,
Presence information

Watcher P-CSCF forwards NOTIFY to Watcher.

200 (OK) →   200 (OK) →

The UE generates a 200 (OK) response to the NOTIFY request. The message is passed to PS as shown.

Presence State Changes for the Watched User

← PUBLISH

Event = presence,
Request URI = Presentity URI,
Presence information
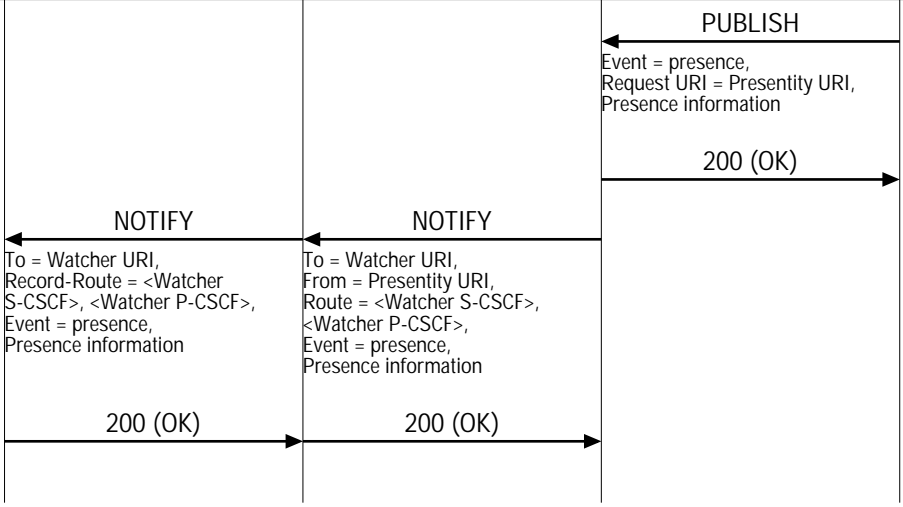
To initiate the publication, the PUA in UE generates a PUBLISH request containing the presence information that it wishes to publish.

200 (OK) →

When all privacy conditions are met, PS generates 200 (OK) response towards Presentity PUA.

← NOTIFY   ← NOTIFY

To = Watcher URI,
Record-Route = <Watcher S-CSCF>, <Watcher P-CSCF>,
Event = presence,
Presence information

To = Watcher URI,
From = Presentity URI,
Route = <Watcher S-CSCF>, <Watcher P-CSCF>,
Event = presence,
Presence information

200 (OK) →   200 (OK) →

The UE generates a 200 (OK) response to the NOTIFY request. The message is passed to PS as shown.