Notifications, MDM & Push Gateway

The stock Android and iOS Apps will use an Element owned Push Gateway to send Notification via the Apple or Google Notifiction Services.

The URL of our push gateway is **https://matrix.org/_matrix/push/v1/notify**

The apps will on startup register with the Google or Apple Notification Services (APNs) and request a push_notification_client_identifier. If notifications need sending, the homeserver will use the configured Push Gateway to sent notification through the APNs.

What is a Notification?

A notification will not contain sensitive content. This is what notificatons actually look like :

```
▿ 5 elements
  ▿ 0 : 2 elements
    ▿ key : AnyHashable("unread_count")
      - value : "unread_count"
    - value : 1
  ▿ 1 : 2 elements
    ▿ key : AnyHashable("pusher_notification_client_identifier")
      - value : "pusher_notification_client_identifier"
    - value : ad0bd22bb90fabde45429b3b79cdbba12bd86f3dafb80ea22d2b1343995d8418
  ▿ 2 : 2 elements
    ▿ key : AnyHashable("aps")
      - value : "aps"
    ▿ value : 2 elements
      ▿ 0 : 2 elements
        - key : alert
        ▿ value : 2 elements
          ▿ 0 : 2 elements
            - key : loc-key
            - value : Notification
          ▿ 1 : 2 elements
            - key : loc-args
            - value : 0 elements
      ▿ 1 : 2 elements
```

```
        - key : mutable-content
        - value : 1
  ▿ 3 : 2 elements
    ▿ key : AnyHashable("room_id")
      - value : "room_id"
    - value : !vkibNVqwhZVOaNskRU:matrix.org
  ▿ 4 : 2 elements
    ▿ key : AnyHashable("event_id")
      - value : "event_id"
    - value : $0cTr40iZmOd3Aj0c65e_7F6NNVF_BwzEFpyXuMEp29g
```

We recommend that you use the stock Element Apps from PlayStore or Applestore together with the Push Gateway that we as Element host.

Mobile Device Management (MDM)

You can use Mobile Device Management to configure and roll out Mobil Applications. To be able to configure mobile apps this way, the app needs to implement certain interfaces in a standard way. This is called AppConfig.

The Android Element App does not support AppConfig currently. You will need to rebuild the apk to include changes like a different homeserver or a diffrent pusherURL.

The iOS Element App got enabled for AppConfig in version 1.11.2. this allows the change of the following parameters and keys without the need to recompile the app.

- im.vector.app.serverConfigDefaultHomeserverUrlString
- im.vector.app.clientPermalinkBaseUrl
- im.vector.app.serverConfigSygnalAPIUrlString

If you employ a Mobile Device Management solution like e.g. VmWare Workspace One, you will need to configure your iOS Element app with these keys as documented here in section **Publish and update Managed AppConfig for your app in Workspace ONE**.

Depending on the brand of MDM you are using, you can create the required keys manually, or enable these setting with an XML file. The XML file might look like this :

```
<managedAppConfiguration>
     <version>1</version>
     <bundleId>im.vector.app</bundleId>
     <dict>
          <string keyName="im.vector.app.serverConfigDefaultHomeserverUrlString">
               <defaultValue>
```

```
                    <value>https://matrix.BASEDOMAIN</value>
               </defaultValue>
          </string>
          <string keyName="im.vector.app.clientPermalinkBaseUrl">
               <defaultValue>
                    <value>https://messenger.BASEDOMAIN</value>
               </defaultValue>
          </string>
     </dict>
</managedAppConfiguration>
```

Using your own Push Gateway (Sygnal)

Some organization still feel uncomfortable with using our Push Gateway. You are able to use your own push gateway (e.g. Sygnal) if you want.

You can install Sygnal as an integration with the Element Server Suite.

During the App Upload process a private key is created. We as Element Company retain and use that key on our Push infrastructure. This is why you can not use the stock Element Apps, but will need to upload your own version of the Element App. This will give you access to your own private notification key that is bound to the app you uploaded.

You will need to configure your Sygnal with the private key of your Element App.

You will need to set the "im.vector.app.serverConfigSygnalAPIUrlString" for the iOS App or the equilivant in the Android App Source code.

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