**G-Reg 5.0.0 : Improved Notification Support**

RM task : <https://redmine.wso2.com/issues/2342>

Milestone Plan : <https://docs.google.com/a/wso2.com/spreadsheets/d/1aHwDQPenBEQNXDHFYauwD1WzdH6dD0InhF6J13Nc4EY/edit#gid=0>

Current Progress

Research Phase:

1. Researched about the well-known roles and notification types of other registry repositories and came up with a set of Life Cycle stages and Roles associated with each stage and notifications that might be useful to those roles.

A summary of the research can be found in [Roles and Notifications](https://docs.google.com/a/wso2.com/document/d/10h5Q0ueIqvJUkGnPpLQYBNxd3gMAJOwDMzQwShMCtWs/edit).

Development Phase:

2. From the above research findings, selected 5 notification types in order to make G-Reg support for those notifications

Notifications to be added

1. New Version added

2. Tests failed/Passed

3. Service Published to the store

4. Tags

5. Bug Report/Bug fix

Enterprise Store will support the Publisher and Store side event triggering and G-Reg will have the backend support.

3. ES side

**Publisher**

There will be two levels of Subscription Managers

1. Asset type level

2. Asset instance Level

In Asset type level, following notifications will be supported

1. New Asset Added (of the asset type)

2. Asset Removed

3. Asset Updated

4. Asset LC changed

5. Asset Published to the store

6. New Version Added for existing Asset instance

In Asset instance level following notifications will be supported

Existing G-Reg notifications

1. LC state changes

2. Delete/Create LC

3. LC Approval needed/ Withdrawn

4. LC Approved

5. Check/Uncheck LC item

6. Delete / Update Resource

7. Comments/Ratings

New notifications

8. New Version Added

9. Test failed/Passed

10. Service Published to the store

11. Tags Applied

12. Bug Report /Bug Fix

**Store**

There will be two levels of Subscription Managers

1. Asset type level

2. Asset instance Level

In Asset type level, following notifications will be supported

1. New Asset Added (of the asset type)

2. Asset Removed

In Asset instance level following notifications will be supported

1. Comments / Ratings

2. Tags Applied

3. Contact Author

4. Bug Report/ Bug Fix

4. G-Reg Backend support for new notification types

**4.1. New Version Added** -do this at the end

This is same as lifecycle state change

so we can use that to send notification

**4.2. Test failed/Passed**

**4.3. Service Published to the store** -

This is life cycle state transfer notification. LifecycleStateChangedEvent is already there

**4.4. Tags Applied**

This is Resource Updated Event. RegistryEventingHandler Has an applyTag method where the notification is generated

**4.5. Bug Report /Bug Fix**

5. Other factors to consider

15/09/2014

1. Support to subscribe for an asset type

When subscription is made , topic name is created from eventName+path

eg: eventName : ResourceUpdated

path : Resource path

topic name = eventName+ “\_” + path

when an event is trigger from all subscriptions,

17/09/2014

2. Check permissions when an asset goes to a different lifecycle stage

Currently implemented a permission check at the time of notifying at

First tried doing this at InMemoryDeliveryManager.java

but all the forms of notifications go from here, mailto, digest

not good to do here

/home/heshani/GREG/G-Reg\_Repo/NewRegistry2/carbon-registry/components/registry/org.wso2.carbon.registry.eventing/src/main/java/org/wso2/carbon/registry/eventing/RegistryEventDispatcher.java

commit : <https://github.com/heshaniot/carbon-registry/commit/1105d271f707eb92ec4136d7684584cafbbee307>

Permission check

when user of a role X which does not have permission is checked, it gives true

for the same role it gives false

check this

Adding the subscription

Subscription Role for the management console is checked by infoServiceClient whether the Role for which current user is subscribing is valid by

isRoleValid()

But permission is not checked for the Role to add subscriptions or recieve notifications

Event Triggering

RegistryEventing Handler → ApplyTag()

For the UI--->

InfoAdminServiceStub.getEventTypes

For new event types

org.wso2.carbon.registry.eventing.services.EventingServiceImpl

registerBuiltInEventTypes() -->registerEventType(String typeId, String resourceEvent, String collectionEvent)

For UI

Resource.properties file of info.ui needs to be changed