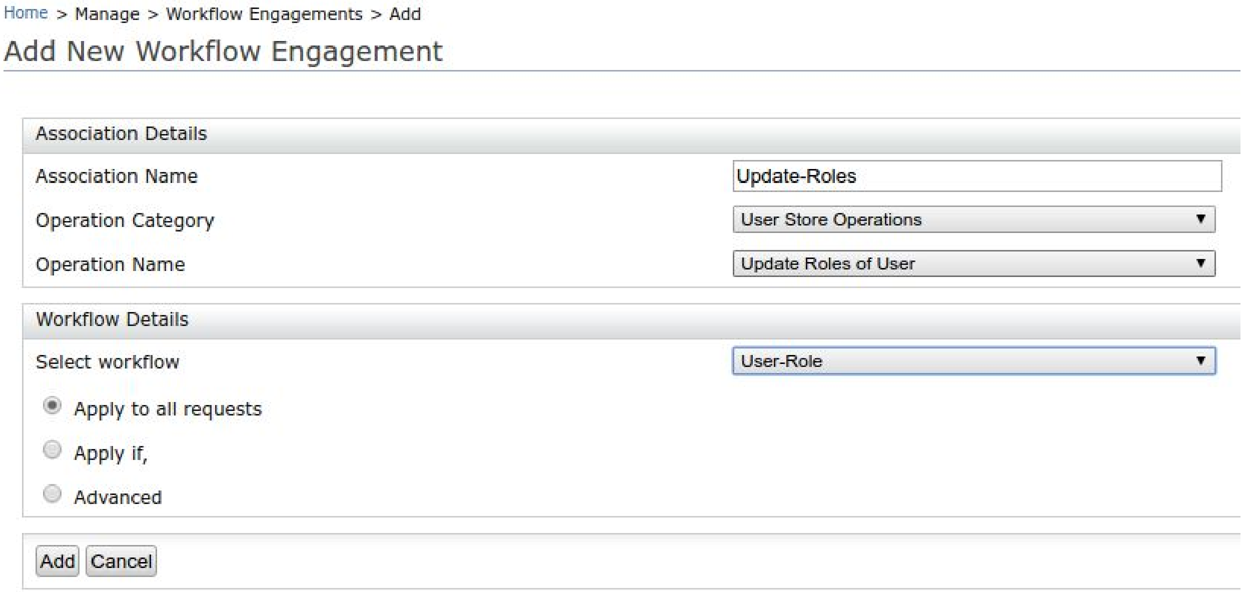
- Use the source code from here. Use Maven 3 and Java 7 to build the source code and copy custom-identity-mgt/components/custom-identity-mgt/target/custom-identity-mgt-1.0.0.jar to <CARBON_HOME>/repository/components/dropins/ directory.
- Add secondary userstore with domain name ACME.COM and create two roles with names admin and travelocity.com

UC1: Add external users through JIT

- Add workflow definition as described here
- Add workflow engagement like below.



Home > Manage > Workflow Engagements > Add

Add New Workflow Engagement

Association Details

Association Name	Update-Roles
Operation Category	User Store Operations
Operation Name	Update Roles of User

Workflow Details

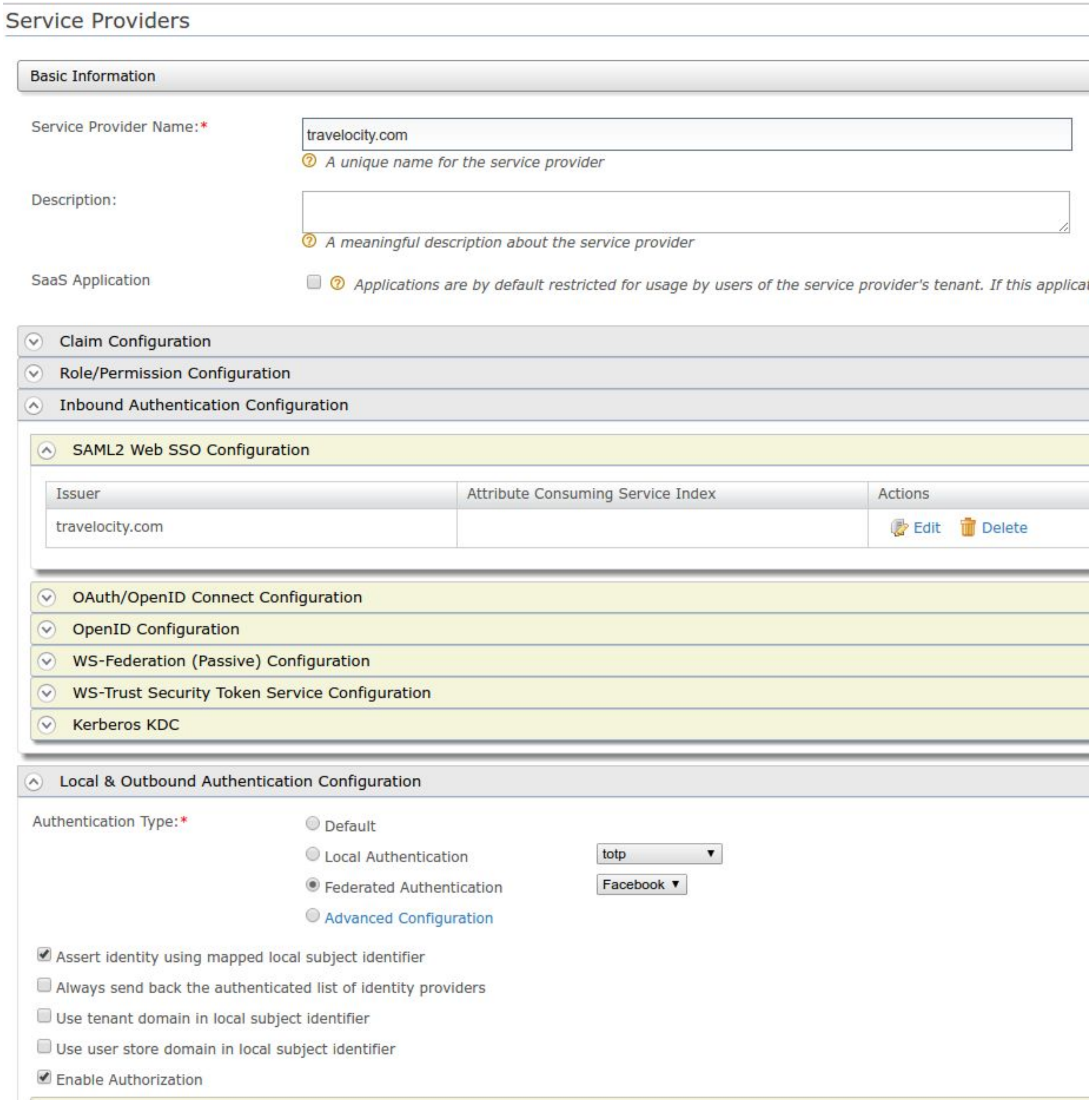
Select workflow	User-Role

● Apply to all requests

○ Apply if,

○ Advanced

- Add facebook Identity provider as described here or any other identity provider as described here
- Add service provider with name travelocity.com. Enable authorization and Enable Assert identity using mapped local subject identifier



Service Providers

Basic Information

Service Provider Name:* travelocity.com

A unique name for the service provider

Description:

A meaningful description about the service provider

SaaS Application □ Applications are by default restricted for usage by users of the service provider's tenant. If this applica

Claim Configuration
Role/Permission Configuration
Inbound Authentication Configuration
SAML2 Web SSO Configuration

Issuer	Attribute Consuming Service Index	Actions
travelocity.com		Edit Delete

OAuth/OpenID Connect Configuration
OpenID Configuration
WS-Federation (Passive) Configuration
WS-Trust Security Token Service Configuration
Kerberos KDC
Local & Outbound Authentication Configuration

Authentication Type:*

○ Default

○ Local Authentication totp

● Federated Authentication Facebook

○ Advanced Configuration

☑ Assert identity using mapped local subject identifier

□ Always send back the authenticated list of identity providers

□ Use tenant domain in local subject identifier

□ Use user store domain in local subject identifier

☑ Enable Authorization

- Go to *Entitlement -> PAP -> Policy Administration -> Add New Entitlement Policy -> Write Policy in XML* to add new XACML policy. Use below XACML policy.

```
  <Policy xmlns="urn:oasis:names:tc:xacml:3.0:core:schema:wd-17"
PolicyId="travelocity.com-auth-by-application-role-policy"
RuleCombiningAlgId="urn:oasis:names:tc:xacml:1.0:rule-combining-algorithm:first-applicable"
Version="1.0">
```

```
    <Description>This is a reference policy for service provider authorization by role. This will
only allow users in ACME.COM/travelocity.com role to login to travelocity.com SP and anyone
else will be denied.</Description>
    <Target>
      <AnyOf>
        <AllOf>
          <Match MatchId="urn:oasis:names:tc:xacml:1.0:function:string-equal">
            <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">travelocity.com</AttributeValue>
            <AttributeDesignator AttributeId="http://wso2.org/identity/sp/sp-name"
Category="http://wso2.org/identity/sp" DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
          </Match>
          <Match MatchId="urn:oasis:names:tc:xacml:1.0:function:string-equal">
            <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">authenticate</AttributeValue>
            <AttributeDesignator AttributeId="http://wso2.org/identity/identity-action/action-name"
Category="http://wso2.org/identity/identity-action"
DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
          </Match>
        </AllOf>
      </AnyOf>
    </Target>
    <Rule Effect="Permit" RuleId="allow-if-in-admin">
      <Condition>
        <Apply FunctionId="urn:oasis:names:tc:xacml:1.0:function:string-is-in">
          <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">ACME.COM/travelocity.com</Attribut
eValue>
          <AttributeDesignator AttributeId="http://wso2.org/claims/role"
Category="urn:oasis:names:tc:xacml:1.0:subject-category:access-subject"
```

```
DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
        </Apply>
      </Condition>
    </Rule>
    <Rule Effect="Deny" RuleId="deny-all-others"></Rule>
  </Policy>
```

- Publish the created policy to PDP
- Change *StepBasedSequenceHandler* in *<CARBON_HOME>/repository/conf/identity/application-authentication.xml* to *com.custom.listener.handler.provisioning.ExtendedStepBasedSequenceHandler* and *ProvisioningHandler* to *com.custom.listener.handler.provisioning.ExtendedProvisioningHandler*

UC2: Restricted ability to change user details

- Add below XACML policy as described above

```
<Policy xmlns="urn:oasis:names:tc:xacml:3.0:core:schema:wd-17"
PolicyId="update-claims-auth-by-role-policy"
RuleCombiningAlgId="urn:oasis:names:tc:xacml:1.0:rule-combining-algorithm:first-applicable"
Version="1.0">
     <Description>This is a reference policy for authorization to update user profile by role. This
will only allow users in admin role of the userstore to update the user profiles in that particular
user store and anyone else will be denied.</Description>
  <Target>
    <AnyOf>
      <AllOf>
        <Match MatchId="urn:oasis:names:tc:xacml:1.0:function:string-equal">
          <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">ACME.COM</AttributeValue>
          <AttributeDesignator AttributeId="http://wso2.org/identity/user/user-store-domain"
Category="http://wso2.org/identity/user"
```

```
DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
        </Match>
        <Match MatchId="urn:oasis:names:tc:xacml:1.0:function:string-equal">
          <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">update-claims</AttributeValue>
          <AttributeDesignator AttributeId="http://wso2.org/identity/identity-action/action-name"
Category="http://wso2.org/identity/identity-action"
DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
        </Match>
      </AllOf>
    </AnyOf>
  </Target>
  <Rule Effect="Permit" RuleId="allow-if-in-admin">
    <Condition>
      <Apply FunctionId="urn:oasis:names:tc:xacml:1.0:function:string-is-in">
        <AttributeValue
DataType="http://www.w3.org/2001/XMLSchema#string">ACME.COM/admin</AttributeValue>
        <AttributeDesignator AttributeId="http://wso2.org/claims/role"
Category="urn:oasis:names:tc:xacml:1.0:subject-category:access-subject"
DataType="http://www.w3.org/2001/XMLSchema#string"
MustBePresent="true"></AttributeDesignator>
      </Apply>
    </Condition>
  </Rule>
  <Rule Effect="Deny" RuleId="deny-all-others"></Rule>
</Policy>
```

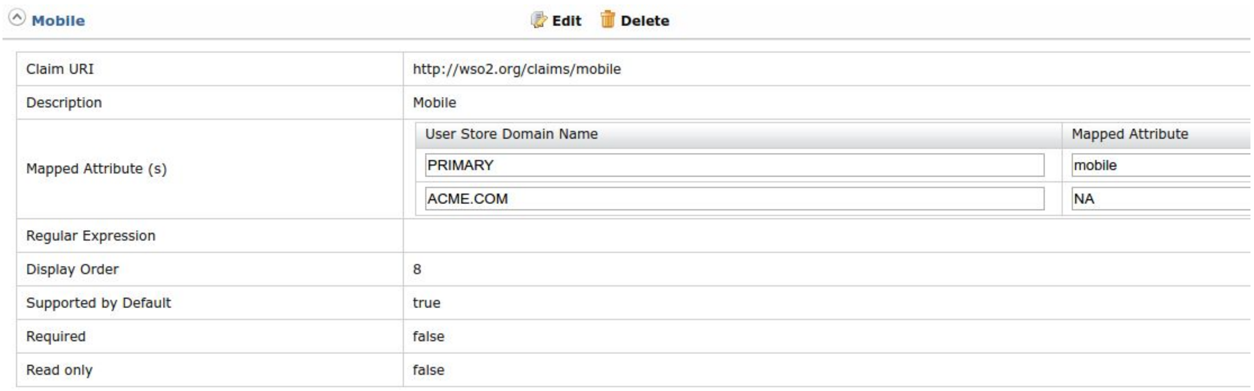
UC4: Audit Trail

- To disable the default user operation audit logger add below configuration inside *<EventListeners>* to *<CARBON_HOME>/repository/conf/identity/identity.xml*

```
<EventListener type="org.wso2.carbon.user.core.listener.UserOperationEventListener"
               name="org.wso2.carbon.user.mgt.listeners.UserMgtAuditLogger"
               orderId="9" enable="false"/>
```

UC5: Show / Hide claim details

- Edit the claim needed to hide in http://wso2.org/claims dialect and add mapped attribute as NA for ACME.COM user store domain.



Claim URI	http://wso2.org/claims/mobile	
Description	Mobile	
Mapped Attribute (s)	User Store Domain Name	Mapped Attribute
	PRIMARY	mobile
	ACME.COM	NA
Regular Expression		
Display Order	8	
Supported by Default	true	
Required	false	
Read only	false	