

Grouper rules setup with WS

Wiki Home	Grouper Release Announcements	Grouper Guides	Grouper Deployment Guide	Community Contributions	Internal Developer Resources
---------------------------	---	--------------------------------	--	---	--

[Grouper rules](#)

Here is an example of adding and testing a rule with WS rest (generated from grouper client). This is the [group intersection rule](#) where you have to be in one group (e.g. employees) to be in another group (e.g. app users). If you fall out of employee, you will fall out of users. A nightly daemon cleans up inconsistencies.

Note, the names of the attribute depends on where your grouper admin put them in your folder structure.

Create group A request

```
<WsRestGroupSaveRequest>
  <wsGroupToSaves>
    <wsGroupToSave>
      <wsGroupLookup>
        <groupName>stem:a</groupName>
      </wsGroupLookup>
      <wsGroup>
        <displayExtension>a</displayExtension>
        <name>stem:a</name>
      </wsGroup>
      <createParentStemsIfNotExist>T</createParentStemsIfNotExist>
    </wsGroupToSave>
  </wsGroupToSaves>
</WsRestGroupSaveRequest>
```

Create group A response

```

<WsGroupSaveResults>
  <results>
    <WsGroupSaveResult>
      <wsGroup>
        <extension>a</extension>
        <displayExtension>a</displayExtension>
        <displayName>stem:a</displayName>
        <name>stem:a</name>
        <uuid>7aa346e9d5ef42de842f490f49d08115</uuid>
      </wsGroup>
      <resultMetadata>
        <resultCode>SUCCESS_INSERTED</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsGroupSaveResult>
  </results>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupToSaves:
      Array size: 1: [0]: WsGroupToSave[
        wsGroupLookup=wsGroupLookup[groupName=stem:a],
        wsGroup=wsGroup[displayExtension=a,name=stem:a],createParentStemsIfNotExist=T]

        , actAsSubject: null, txType: NONE, paramNames:
        , params: null</resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>8752</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsGroupSaveResults>

```

Create group B request

```

<WsRestGroupSaveRequest>
  <wsGroupToSaves>
    <WsGroupToSave>
      <wsGroupLookup>
        <groupName>stem:b</groupName>
      </wsGroupLookup>
      <wsGroup>
        <displayExtension>b</displayExtension>
        <name>stem:b</name>
      </wsGroup>
      <createParentStemsIfNotExist>T</createParentStemsIfNotExist>
    </WsGroupToSave>
  </wsGroupToSaves>
</WsRestGroupSaveRequest>

```

Create group B response

```

<WsGroupSaveResults>
  <results>
    <WsGroupSaveResult>
      <wsGroup>
        <extension>b</extension>
        <displayExtension>b</displayExtension>
        <displayName>stem:b</displayName>
        <name>stem:b</name>
        <uuid>826d8f94fcff4865b4a0a51c74dfbaff</uuid>
      </wsGroup>
      <resultMetadata>
        <resultCode>SUCCESS_INSERTED</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsGroupSaveResult>
  </results>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupToSaves:
      Array size: 1: [0]: WsGroupToSave[
        wsGroupLookup=wsGroupLookup[groupName=stem:b],
        wsGroup=wsGroup[displayExtension=b,name=stem:b],createParentStemsIfNotExist=T]

        , actAsSubject: null, txType: NONE, paramNames:
        , params: null</resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>370</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsGroupSaveResults>

```

Rule assign type request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>add_attr</attributeAssignOperation>
  <attributeAssignType>group</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:rule</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
  <wsOwnerGroupLookups>
    <WsGroupLookup>
      <groupName>stem:a</groupName>
    </WsGroupLookup>
  </wsOwnerGroupLookups>
</WsRestAssignAttributesRequest>

```

Rule assign type response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesTypeDef</extension>
      <name>etc:attribute:rules:rulesTypeDef</name>
      <uuid>955c3c7f331942d7852796b9a24951aa</uuid>
      <attributeDefType>type</attributeDefType>
    </WsAttributeDef>
  </wsAttributeDefs>

```

```

        <multiAssignable>T</multiAssignable>
        <multiValued>F</multiValued>
        <valueType>marker</valueType>
    </WsAttributeDef>
</wsAttributeDefs>
<wsAttributeDefNames>
    <WsAttributeDefName>
        <extension>rule</extension>
        <displayExtension>rule</displayExtension>
        <description>is a rule</description>
        <displayName>etc:attribute:rules:rule</displayName>
        <name>etc:attribute:rules:rule</name>
        <uuid>edbfac27573049a8835144c484c31309</uuid>
        <attributeDefId>955c3c7f331942d7852796b9a24951aa</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesTypeDef</attributeDefName>
    </WsAttributeDefName>
</wsAttributeDefNames>
<wsAttributeAssignResults>
    <WsAssignAttributeResult>
        <wsAttributeAssigns>
            <WsAttributeAssign>
                <attributeAssignActionType>immediate</attributeAssignActionType>
                <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
                <attributeAssignActionId>d9da714141024e658e2784299abf337f
                </attributeAssignActionId>
                <attributeAssignActionName>assign</attributeAssignActionName>
                <attributeAssignType>group</attributeAssignType>
                <attributeDefNameId>edbfac27573049a8835144c484c31309
                </attributeDefNameId>
                <attributeDefNameName>etc:attribute:rules:rule
                </attributeDefNameName>
                <attributeDefId>955c3c7f331942d7852796b9a24951aa</attributeDefId>
                <attributeDefName>etc:attribute:rules:rulesTypeDef
                </attributeDefName>
                <createdOn>2010/09/27 02:14:46.664</createdOn>
                <enabled>T</enabled>
                <id>ac0da4c4802b43589fbcc0a888ba0d33</id>
                <lastUpdated>2010/09/27 02:14:46.664</lastUpdated>
                <ownerGroupId>7aa346e9d5ef42de842f490f49d08115</ownerGroupId>
                <ownerGroupName>stem:a</ownerGroupName>
            </WsAttributeAssign>
        </wsAttributeAssigns>
        <changed>T</changed>
        <valuesChanged>F</valuesChanged>
        <deleted>F</deleted>
    </WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 1 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>313</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups>
    <WsGroup>
        <extension>a</extension>
        <displayExtension>a</displayExtension>
        <displayName>stem:a</displayName>
        <name>stem:a</name>
        <uuid>7aa346e9d5ef42de842f490f49d08115</uuid>
    </WsGroup>
</wsGroups>
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Rule act as source request

```
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value
</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>g:isa</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleActAsSubjectSourceId</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
```

Rule act as source response

```
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleActAsSubjectSourceId</extension>
      <displayExtension>ruleActAsSubjectSourceId</displayExtension>
      <description>subject source id to act as</description>
      <displayName>etc:attribute:rules:ruleActAsSubjectSourceId
      </displayName>
      <name>etc:attribute:rules:ruleActAsSubjectSourceId</name>
      <uuid>0cfadaf18db743779e6b8b5143a7f4e6</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>0e572f7ce7e04893afc5b649185c7027</id>
            <valueSystem>g:isa</valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
      <wsAttributeAssigns>
        <WsAttributeAssign>
```

```

        <attributeAssignActionType>immediate</attributeAssignActionType>
        <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
        <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>0cfadaf18db743779e6b8b5143a7f4e6
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:ruleActAsSubjectSourceId
        </attributeDefNameName>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef
        </attributeDefName>
        <wsAttributeAssignValues>
            <wsAttributeAssignValue>
                <id>0e572f7ce7e04893afc5b649185c7027</id>
                <valueSystem>g:isa</valueSystem>
            </wsAttributeAssignValue>
        </wsAttributeAssignValues>
        <createdOn>2010/09/27 02:27:29.349</createdOn>
        <enabled>T</enabled>
        <id>cbd0b7bcd7e4fb8be6fe51286285164</id>
        <lastUpdated>2010/09/27 02:27:29.349</lastUpdated>
        <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
        </ownerAttributeAssignId>
    </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 1 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>914</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Rule act as subject id request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value
</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>GrouperSystem</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleActAsSubjectId</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>

```

Rule act as subject id response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleActAsSubjectId</extension>
      <displayExtension>ruleActAsSubjectId</displayExtension>
      <description>subject id to act as, mutually exclusive with identifier
      </description>
      <displayName>etc:attribute:rules:ruleActAsSubjectId</displayName>
      <name>etc:attribute:rules:ruleActAsSubjectId</name>
      <uuid>02647c65f2e04546bf53722d02cd1f0c</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>84c3ccd5264748c4b61878901f98d069</id>
            <valueSystem>GrouperSystem</valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
      <wsAttributeAssigns>
        <WsAttributeAssign>
          <attributeAssignActionType>immediate</attributeAssignActionType>
          <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>

```

```

        <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>02647c65f2e04546bf53722d02cd1f0c
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:ruleActAsSubjectId
        </attributeDefNameName>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef
        </attributeDefName>
        <wsAttributeAssignValues>
            <wsAttributeAssignValue>
                <id>84c3ccd5264748c4b61878901f98d069</id>
                <valueSystem>GrouperSystem</valueSystem>
            </wsAttributeAssignValue>
        </wsAttributeAssignValues>
        <createdOn>2010/09/27 02:31:16.337</createdOn>
        <enabled>T</enabled>
        <id>07566868e528408e977db37fb9e3bd0b</id>
        <lastUpdated>2010/09/27 02:31:16.337</lastUpdated>
        <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
        </ownerAttributeAssignId>
    </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 1 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>546</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Rule check owner name request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value
</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>stem:b</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleCheckOwnerName</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>

```

Rule check owner name response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleCheckOwnerName</extension>
      <displayExtension>ruleCheckOwnerName</displayExtension>
      <description>when the check should be to see if rule should fire,
        this is owner of type, mutually exclusive with id</description>
      <displayName>etc:attribute:rules:ruleCheckOwnerName</displayName>
      <name>etc:attribute:rules:ruleCheckOwnerName</name>
      <uuid>2e690ae1b3054d32b41f24adb6d35036</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>c5079562c62f4730811bc257c686ce74</id>
            <valueSystem>stem:b</valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
      <wsAttributeAssigns>
        <WsAttributeAssign>
          <attributeAssignActionType>immediate</attributeAssignActionType>
          <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
          <attributeAssignActionId>385880a5f2224f8989f2d5295834af52

```

```

        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>2e690ae1b3054d32b41f24adb6d35036
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:ruleCheckOwnerName
        </attributeDefNameName>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef
        </attributeDefName>
        <wsAttributeAssignValues>
            <wsAttributeAssignValue>
                <id>c5079562c62f4730811bc257c686ce74</id>
                <valueSystem>stem:b</valueSystem>
            </wsAttributeAssignValue>
        </wsAttributeAssignValues>
        <createdOn>2010/09/27 02:34:11.909</createdOn>
        <enabled>T</enabled>
        <id>1333885cbbf7453aa312d8472fd93268</id>
        <lastUpdated>2010/09/27 02:34:11.909</lastUpdated>
        <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
        </ownerAttributeAssignId>
    </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 1 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>480</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Rule check type request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value
</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>membershipRemove</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleCheckType</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>

```

Rule check type response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleCheckType</extension>
      <displayExtension>ruleCheckType</displayExtension>
      <description>when the check should be to see if rule should fire,
        enum: RuleCheckType</description>
      <displayName>etc:attribute:rules:ruleCheckType</displayName>
      <name>etc:attribute:rules:ruleCheckType</name>
      <uuid>48a7e42ce4d14075b5aae2d25ff86445</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>1b29367e30e44a5380c1bea2670702fb</id>
            <valueSystem>membershipRemove</valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
      <wsAttributeAssigns>
        <WsAttributeAssign>

```

```

<attributeAssignActionType>immediate</attributeAssignActionType>
<attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
<attributeAssignActionId>385880a5f2224f8989f2d5295834af52<
/attributeAssignActionId>

<attributeAssignActionName>assign</attributeAssignActionName>
<attributeAssignType>group_asgn</attributeAssignType>
<attributeDefNameId>48a7e42ce4d14075b5aae2d25ff86445<

<attributeDefNameName>etc:attribute:rules:ruleCheckType<

<attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
<attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
<wsAttributeAssignValues>
  <WsAttributeAssignValue>
    <id>1b29367e30e44a5380c1bea2670702fb</id>
    <valueSystem>membershipRemove</valueSystem>
  </WsAttributeAssignValue>
</wsAttributeAssignValues>
<createdOn>2010/09/27 02:37:07.676</createdOn>
<enabled>T</enabled>
<id>0ecf19c9b08c4554a72224eeadb60279</id>
<lastUpdated>2010/09/27 02:37:07.676</lastUpdated>
<ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33<

  </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
  <resultCode>SUCCESS</resultCode>
  <resultMessage>, Found 1 results. </resultMessage>
  <success>T</success>
</resultMetadata>
<responseMetadata>
  <resultWarnings></resultWarnings>
  <millis>466</millis>
  <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Rule if condition enum request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>thisGroupHasImmediateEnabledMembership</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleIfConditionEnum</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>

```

Rule if condition enum response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleIfConditionEnum</extension>
      <displayExtension>ruleIfConditionEnum</displayExtension>
      <description>RuleConditionEnum that sees if rule should fire, or
        blank if should run always</description>
      <displayName>etc:attribute:rules:ruleIfConditionEnum</displayName>
      <name>etc:attribute:rules:ruleIfConditionEnum</name>
      <uuid>b86358d4f54b4b1da0395deadbf5623b</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>0a5621c587484f7d992a3dad27d77831</id>
            <valueSystem>thisGroupHasImmediateEnabledMembership<
/ valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
    </wsAttributeAssignResults>
  </wsAttributeAssignResults>
  <wsAttributeAssigns>
    <WsAttributeAssign>
      <attributeAssignActionType>immediate</attributeAssignActionType>
      <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
    </WsAttributeAssign>
  </wsAttributeAssigns>
</WsAssignAttributesResults>

```

```

<attributeAssignActionId>385880a5f2224f8989f2d5295834af52<
/attributeAssignActionId>
<attributeAssignActionName>assign</attributeAssignActionName>
<attributeAssignType>group_asgn</attributeAssignType>
<attributeDefNameId>b86358d4f54b4b1da0395deadbf5623b<
/attributeDefNameId>
<attributeDefNameName>etc:attribute:rules:ruleIfConditionEnum<
/attributeDefNameName>
<attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
<attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
<wsAttributeAssignValues>
  <wsAttributeAssignValue>
    <id>0a5621c587484f7d992a3dad27d77831</id>
    <valueSystem>thisGroupHasImmediateEnabledMembership<
/attributeAssignValue>
  </wsAttributeAssignValue>
</wsAttributeAssignValues>
<createdOn>2010/09/27 02:38:47.685</createdOn>
<enabled>T</enabled>
<id>816c21a0ada040798f4ad53799effb23</id>
<lastUpdated>2010/09/27 02:38:47.685</lastUpdated>
<ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33<
/ownerAttributeAssignId>
  </wsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</wsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
  <resultCode>SUCCESS</resultCode>
  <resultMessage>, Found 1 results. </resultMessage>
  <success>T</success>
</resultMetadata>
<responseMetadata>
  <resultWarnings></resultWarnings>
  <millis>369</millis>
  <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</wsAssignAttributesResults>

```

Rule then enum request

```

<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value
</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>ac0da4c4802b43589fbcc0a888ba0d33</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>removeMemberFromOwnerGroup</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:attribute:rules:ruleThenEnum</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>

```

Rule then enum response

```

<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <extension>rulesAttrDef</extension>
      <name>etc:attribute:rules:rulesAttrDef</name>
      <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <extension>ruleThenEnum</extension>
      <displayExtension>ruleThenEnum</displayExtension>
      <description>RuleThenEnum to run when the rule fires</description>
      <displayName>etc:attribute:rules:ruleThenEnum</displayName>
      <name>etc:attribute:rules:ruleThenEnum</name>
      <uuid>fd84ef842cf04039a55b169ba3de9c68</uuid>
      <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
      <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
          <wsAttributeAssignValue>
            <id>67b2097fd446499ba8348fc15b595ee5</id>
            <valueSystem>removeMemberFromOwnerGroup</valueSystem>
          </wsAttributeAssignValue>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
      <wsAttributeAssigns>
        <WsAttributeAssign>
          <attributeAssignActionType>immediate</attributeAssignActionType>
          <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
          <attributeAssignActionId>385880a5f2224f8989f2d5295834af52<

```

```

/attributeAssignActionId>
    <attributeAssignActionName>assign</attributeAssignActionName>
    <attributeAssignType>group_asgn</attributeAssignType>
    <attributeDefNameId>fd84ef842cf04039a55b169ba3de9c68<
/attributeDefNameId>
    <attributeDefNameName>etc:attribute:rules:ruleThenEnum<
/attributeDefNameName>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    <wsAttributeAssignValues>
        <wsAttributeAssignValue>
            <id>67b2097fd446499ba8348fc15b595ee5</id>
            <valueSystem>removeMemberFromOwnerGroup</valueSystem>
        </wsAttributeAssignValue>
    </wsAttributeAssignValues>
    <createdOn>2010/09/27 02:40:38.134</createdOn>
    <enabled>T</enabled>
    <id>63331ddadd54f22b7fbe33338473f8c</id>
    <lastUpdated>2010/09/27 02:40:38.134</lastUpdated>
    <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33<
/ownerAttributeAssignId>
    </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>
<valuesChanged>T</valuesChanged>
<deleted>F</deleted>
</WsAssignAttributeResult>
</wsAttributeAssignResults>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 1 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>402</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups />
<wsStems />
<wsMemberships />
<wsSubjects />
</WsAssignAttributesResults>

```

Make sure valid request

```

<WsRestGetAttributeAssignmentsRequest>
    <attributeAssignType>group</attributeAssignType>
    <wsAttributeDefNameLookups>
        <wsAttributeDefNameLookup>
            <name>etc:attribute:rules:rule</name>
        </wsAttributeDefNameLookup>
    </wsAttributeDefNameLookups>
    <wsOwnerGroupLookups>
        <wsGroupLookup>
            <groupName>stem:a</groupName>
        </wsGroupLookup>
    </wsOwnerGroupLookups>
    <includeAssignmentsOnAssignments>T</includeAssignmentsOnAssignments>
</WsRestGetAttributeAssignmentsRequest>

```

Make sure valid response

```

<WsGetAttributeAssignmentsResults>
    <wsAttributeDefs>

```

```

<WsAttributeDef>
  <extension>rulesAttrDef</extension>
  <name>etc:attribute:rules:rulesAttrDef</name>
  <uuid>fce499cda6254a80a5a5dc5904e721d5</uuid>
  <attributeDefType>attr</attributeDefType>
  <multiAssignable>F</multiAssignable>
  <multiValued>F</multiValued>
  <valueType>string</valueType>
</WsAttributeDef>
<WsAttributeDef>
  <extension>rulesTypeDef</extension>
  <name>etc:attribute:rules:rulesTypeDef</name>
  <uuid>955c3c7f331942d7852796b9a24951aa</uuid>
  <attributeDefType>type</attributeDefType>
  <multiAssignable>T</multiAssignable>
  <multiValued>F</multiValued>
  <valueType>marker</valueType>
</WsAttributeDef>
</wsAttributeDefs>
<wsAttributeDefNames>
  <WsAttributeDefName>
    <extension>rule</extension>
    <displayExtension>rule</displayExtension>
    <description>is a rule</description>
    <displayName>etc:attribute:rules:rule</displayName>
    <name>etc:attribute:rules:rule</name>
    <uuid>edbfac27573049a8835144c484c31309</uuid>
    <attributeDefId>955c3c7f331942d7852796b9a24951aa</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesTypeDef</attributeDefName>
  </WsAttributeDefName>
  <WsAttributeDefName>
    <extension>ruleActAsSubjectId</extension>
    <displayExtension>ruleActAsSubjectId</displayExtension>
    <description>subject id to act as, mutually exclusive with identifier</description>
    <displayName>etc:attribute:rules:ruleActAsSubjectId</displayName>
    <name>etc:attribute:rules:ruleActAsSubjectId</name>
    <uuid>02647c65f2e04546bf53722d02cd1f0c</uuid>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
  </WsAttributeDefName>
  <WsAttributeDefName>
    <extension>ruleActAsSubjectSourceId</extension>
    <displayExtension>ruleActAsSubjectSourceId</displayExtension>
    <description>subject source id to act as</description>
    <displayName>etc:attribute:rules:ruleActAsSubjectSourceId</displayName>
    <name>etc:attribute:rules:ruleActAsSubjectSourceId</name>
    <uuid>0cfadaf18db743779e6b8b5143a7f4e6</uuid>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
  </WsAttributeDefName>
  <WsAttributeDefName>
    <extension>ruleCheckOwnerName</extension>
    <displayExtension>ruleCheckOwnerName</displayExtension>
    <description>when the check should be to see if rule should fire,
      this is owner of type, mutually exclusive with id</description>
    <displayName>etc:attribute:rules:ruleCheckOwnerName</displayName>
    <name>etc:attribute:rules:ruleCheckOwnerName</name>
    <uuid>2e690ae1b3054d32b41f24adb6d35036</uuid>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
  </WsAttributeDefName>
  <WsAttributeDefName>
    <extension>ruleCheckType</extension>
    <displayExtension>ruleCheckType</displayExtension>
    <description>when the check should be to see if rule should fire,
      enum: RuleCheckType</description>
    <displayName>etc:attribute:rules:ruleCheckType</displayName>
    <name>etc:attribute:rules:ruleCheckType</name>
    <uuid>48a7e42ce4d14075b5aae2d25ff86445</uuid>

```

```

        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
    <WsAttributeDefName>
        <extension>ruleIfConditionEnum</extension>
        <displayExtension>ruleIfConditionEnum</displayExtension>
        <description>RuleConditionEnum that sees if rule should fire, or
            blank if should run always</description>
        <displayName>etc:attribute:rules:ruleIfConditionEnum</displayName>
        <name>etc:attribute:rules:ruleIfConditionEnum</name>
        <uuid>b86358d4f54b4b1da0395deadb5623b</uuid>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
    <WsAttributeDefName>
        <extension>ruleThenEnum</extension>
        <displayExtension>ruleThenEnum</displayExtension>
        <description>RuleThenEnum to run when the rule fires</description>
        <displayName>etc:attribute:rules:ruleThenEnum</displayName>
        <name>etc:attribute:rules:ruleThenEnum</name>
        <uuid>fd84ef842cf04039a55b169ba3de9c68</uuid>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
    <WsAttributeDefName>
        <extension>ruleValid</extension>
        <displayExtension>ruleValid</displayExtension>
        <description>T|F for if this rule is valid, or the reason, managed by
            hook automatically</description>
        <displayName>etc:attribute:rules:ruleValid</displayName>
        <name>etc:attribute:rules:ruleValid</name>
        <uuid>e7da4d50b57c4227b265796575fc919d</uuid>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    </WsAttributeDefName>
</wsAttributeDefNames>
<wsAttributeAssigns>
    <WsAttributeAssign>
        <attributeAssignActionType>immediate</attributeAssignActionType>
        <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
        <attributeAssignActionId>d9da714141024e658e2784299abf337f
        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group</attributeAssignType>
        <attributeDefNameId>edbfac27573049a8835144c484c31309
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:rule</attributeDefNameName>
        <attributeDefId>955c3c7f331942d7852796b9a24951aa</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesTypeDef</attributeDefName>
        <createdOn>2010/09/27 02:14:46.664</createdOn>
        <enabled>T</enabled>
        <id>ac0da4c4802b43589fbcc0a888ba0d33</id>
        <lastUpdated>2010/09/27 02:14:46.664</lastUpdated>
        <ownerGroupId>7aa346e9d5ef42de842f490f49d08115</ownerGroupId>
        <ownerGroupName>stem:a</ownerGroupName>
    </WsAttributeAssign>
    <WsAttributeAssign>
        <attributeAssignActionType>immediate</attributeAssignActionType>
        <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
        <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>02647c65f2e04546bf53722d02cd1f0c
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:ruleActAsSubjectId
        </attributeDefNameName>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    <wsAttributeAssignValues>
        <WsAttributeAssignValue>

```

```

        <id>84c3ccd5264748c4b61878901f98d069</id>
        <valueSystem>GrouperSystem</valueSystem>
    </WsAttributeAssignValue>
</WsAttributeAssignValues>
<createdOn>2010/09/27 02:31:16.337</createdOn>
<enabled>T</enabled>
<id>07566868e528408e977db37fb9e3bd0b</id>
<lastUpdated>2010/09/27 02:31:16.337</lastUpdated>
<ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
</ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>
    <attributeAssignActionType>immediate</attributeAssignActionType>
    <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
    <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
    </attributeAssignActionId>
    <attributeAssignActionName>assign</attributeAssignActionName>
    <attributeAssignType>group_asgn</attributeAssignType>
    <attributeDefNameId>0cfadaf18db743779e6b8b5143a7f4e6
    </attributeDefNameId>
    <attributeDefNameName>etc:attribute:rules:ruleActAsSubjectSourceId
    </attributeDefNameName>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    <WsAttributeAssignValues>
        <WsAttributeAssignValue>
            <id>0e572f7ce7e04893afc5b649185c7027</id>
            <valueSystem>g:isa</valueSystem>
        </WsAttributeAssignValue>
    </WsAttributeAssignValues>
    <createdOn>2010/09/27 02:27:29.349</createdOn>
    <enabled>T</enabled>
    <id>cbd0b7bcdc7e4fb8be6fe51286285164</id>
    <lastUpdated>2010/09/27 02:27:29.349</lastUpdated>
    <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
    </ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>
    <attributeAssignActionType>immediate</attributeAssignActionType>
    <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
    <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
    </attributeAssignActionId>
    <attributeAssignActionName>assign</attributeAssignActionName>
    <attributeAssignType>group_asgn</attributeAssignType>
    <attributeDefNameId>2e690ae1b3054d32b41f24adb6d35036
    </attributeDefNameId>
    <attributeDefNameName>etc:attribute:rules:ruleCheckOwnerName
    </attributeDefNameName>
    <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
    <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
    <WsAttributeAssignValues>
        <WsAttributeAssignValue>
            <id>c5079562c62f4730811bc257c686ce74</id>
            <valueSystem>stem:a</valueSystem>
        </WsAttributeAssignValue>
    </WsAttributeAssignValues>
    <createdOn>2010/09/27 02:34:11.909</createdOn>
    <enabled>T</enabled>
    <id>1333885cbbf7453aa312d8472fd93268</id>
    <lastUpdated>2010/09/27 02:34:11.909</lastUpdated>
    <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
    </ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>
    <attributeAssignActionType>immediate</attributeAssignActionType>
    <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
    <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
    </attributeAssignActionId>
    <attributeAssignActionName>assign</attributeAssignActionName>
    <attributeAssignType>group_asgn</attributeAssignType>
    <attributeDefNameId>48a7e42ce4d14075b5aae2d25ff86445

```

```

</attributeDefNameId>
<attributeDefNameName>etc:attribute:rules:ruleCheckType
</attributeDefNameName>
<attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
<attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
<wsAttributeAssignValues>
  <wsAttributeAssignValue>
    <id>1b29367e30e44a5380c1bea2670702fb</id>
    <valueSystem>membershipRemove</valueSystem>
  </wsAttributeAssignValue>
</wsAttributeAssignValues>
<createdOn>2010/09/27 02:37:07.676</createdOn>
<enabled>T</enabled>
<id>0ecf19c9b08c4554a72224eeadb60279</id>
<lastUpdated>2010/09/27 02:37:07.676</lastUpdated>
<ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
</ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>
  <attributeAssignActionType>immediate</attributeAssignActionType>
  <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
  <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
  </attributeAssignActionId>
  <attributeAssignActionName>assign</attributeAssignActionName>
  <attributeAssignType>group_asgn</attributeAssignType>
  <attributeDefNameId>b86358d4f54b4b1da0395deadbf5623b
  </attributeDefNameId>
  <attributeDefNameName>etc:attribute:rules:ruleIfConditionEnum
  </attributeDefNameName>
  <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
  <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
  <wsAttributeAssignValues>
    <wsAttributeAssignValue>
      <id>0a5621c587484f7d992a3dad27d77831</id>
      <valueSystem>thisGroupHasImmediateEnabledMembership</valueSystem>
    </wsAttributeAssignValue>
  </wsAttributeAssignValues>
  <createdOn>2010/09/27 02:38:47.685</createdOn>
  <enabled>T</enabled>
  <id>816c21a0ada040798f4ad53799effb23</id>
  <lastUpdated>2010/09/27 02:38:47.685</lastUpdated>
  <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
  </ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>
  <attributeAssignActionType>immediate</attributeAssignActionType>
  <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
  <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
  </attributeAssignActionId>
  <attributeAssignActionName>assign</attributeAssignActionName>
  <attributeAssignType>group_asgn</attributeAssignType>
  <attributeDefNameId>fd84ef842cf04039a55b169ba3de9c68
  </attributeDefNameId>
  <attributeDefNameName>etc:attribute:rules:ruleThenEnum
  </attributeDefNameName>
  <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
  <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
  <wsAttributeAssignValues>
    <wsAttributeAssignValue>
      <id>67b2097fd446499ba8348fc15b595ee5</id>
      <valueSystem>removeMemberFromOwnerGroup</valueSystem>
    </wsAttributeAssignValue>
  </wsAttributeAssignValues>
  <createdOn>2010/09/27 02:40:38.134</createdOn>
  <enabled>T</enabled>
  <id>63331ddadd54f22b7fbe33338473f8c</id>
  <lastUpdated>2010/09/27 02:40:38.134</lastUpdated>
  <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
  </ownerAttributeAssignId>
</WsAttributeAssign>
<WsAttributeAssign>

```

```

        <attributeAssignActionType>immediate</attributeAssignActionType>
        <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
        <attributeAssignActionId>385880a5f2224f8989f2d5295834af52
        </attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>e7da4d50b57c4227b265796575fc919d
        </attributeDefNameId>
        <attributeDefNameName>etc:attribute:rules:ruleValid
        </attributeDefNameName>
        <attributeDefId>fce499cda6254a80a5a5dc5904e721d5</attributeDefId>
        <attributeDefName>etc:attribute:rules:rulesAttrDef</attributeDefName>
        <wsAttributeAssignValues>
            <wsAttributeAssignValue>
                <id>a945a14dd9c44c228836ccf2a5444b0d</id>
                <valueSystem>T</valueSystem>
            </wsAttributeAssignValue>
        </wsAttributeAssignValues>
        <createdOn>2010/09/27 02:27:29.755</createdOn>
        <enabled>T</enabled>
        <id>1137697e77b649789f80ec1c806cf0c3</id>
        <lastUpdated>2010/09/27 02:27:29.755</lastUpdated>
        <ownerAttributeAssignId>ac0da4c4802b43589fbcc0a888ba0d33
        </ownerAttributeAssignId>
    </wsAttributeAssign>
</wsAttributeAssigns>
<resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>, Found 8 results. </resultMessage>
    <success>T</success>
</resultMetadata>
<responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>349</millis>
    <serverVersion>2.0.0</serverVersion>
</responseMetadata>
<wsGroups>
    <WsGroup>
        <extension>a</extension>
        <displayExtension>a</displayExtension>
        <displayName>stem:a</displayName>
        <name>stem:a</name>
        <uuid>7aa346e9d5ef42de842f490f49d08115</uuid>
    </WsGroup>
</wsGroups>
<wsStems />
<wsMemberships />
<wsSubjects />
</WsGetAttributeAssignmentsResults>

```

Add to A request

```

<WsRestAddMemberRequest>
    <wsGroupLookup>
        <groupName>stem:a</groupName>
    </wsGroupLookup>
    <subjectLookups>
        <WsSubjectLookup>
            <subjectId>test.subject.0</subjectId>
        </WsSubjectLookup>
    </subjectLookups>
</WsRestAddMemberRequest>

```

Add to A response

```

<WsAddMemberResults>
  <results>
    <WsAddMemberResult>
      <wsSubject>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
        <id>test.subject.0</id>
        <name>my name is test.subject.0</name>
        <sourceId>jdbc</sourceId>
      </wsSubject>
      <resultMetadata>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsAddMemberResult>
  </results>
  <wsGroupAssigned>
    <extension>a</extension>
    <displayExtension>a</displayExtension>
    <displayName>stem:a</displayName>
    <name>stem:a</name>
    <uuid>7aa346e9d5ef42de842f490f49d08115</uuid>
  </wsGroupAssigned>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupLookup:
      WsGroupLookup[groupName=stem:a], subjectLookups: Array size: 1: [0]:
      WsSubjectLookup[subjectId=test.subject.0]

      , replaceAllExisting: false, actAsSubject: null, fieldName: null,
      txType: NONE, includeGroupDetail: false, includeSubjectDetail: false,
      subjectAttributeNames: null
      , params: null
      , disabledDate: null, enabledDate: null</resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>209</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsAddMemberResults>

```

Add to B request

```

<WsRestAddMemberRequest>
  <wsGroupLookup>
    <groupName>stem:b</groupName>
  </wsGroupLookup>
  <subjectLookups>
    <wsSubjectLookup>
      <subjectId>test.subject.0</subjectId>
    </wsSubjectLookup>
  </subjectLookups>
</WsRestAddMemberRequest>

```

Add to B response:

```

<WsAddMemberResults>
  <results>
    <WsAddMemberResult>
      <wsSubject>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
        <id>test.subject.0</id>
        <name>my name is test.subject.0</name>
        <sourceId>jdbc</sourceId>
      </wsSubject>
      <resultMetadata>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsAddMemberResult>
  </results>
  <wsGroupAssigned>
    <extension>b</extension>
    <displayExtension>b</displayExtension>
    <displayName>stem:b</displayName>
    <name>stem:b</name>
    <uuid>826d8f94fcff4865b4a0a51c74dfbaff</uuid>
  </wsGroupAssigned>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupLookup:
      WsGroupLookup[groupName=stem:b], subjectLookups: Array size: 1: [0]:
      WsSubjectLookup[subjectId=test.subject.0]

      , replaceAllExisting: false, actAsSubject: null, fieldName: null,
      txType: NONE, includeGroupDetail: false, includeSubjectDetail: false,
      subjectAttributeNames: null
      , params: null
      , disabledDate: null, enabledDate: null</resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>102</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsAddMemberResults>

```

Delete from B request

```

<WsRestDeleteMemberRequest>
  <wsGroupLookup>
    <groupName>stem:b</groupName>
  </wsGroupLookup>
  <subjectLookups>
    <wsSubjectLookup>
      <subjectId>test.subject.0</subjectId>
    </wsSubjectLookup>
  </subjectLookups>
</WsRestDeleteMemberRequest>

```

Delete from B response

```

<WsDeleteMemberResults>
  <results>
    <WsDeleteMemberResult>
      <wsSubject>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
        <id>test.subject.0</id>
        <name>my name is test.subject.0</name>
        <sourceId>jdbc</sourceId>
      </wsSubject>
      <resultMetadata>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsDeleteMemberResult>
  </results>
  <wsGroup>
    <extension>b</extension>
    <displayExtension>b</displayExtension>
    <displayName>stem:b</displayName>
    <name>stem:b</name>
    <uuid>826d8f94fcff4865b4a0a51c74dfbaff</uuid>
  </wsGroup>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupLookup:
      WsGroupLookup[groupName=stem:b], subjectLookups: Array size: 1: [0]:
      WsSubjectLookup[subjectId=test.subject.0]

      , actAsSubject: null, fieldName: null, txType: NONE
      , params: null</resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>424</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsDeleteMemberResults>

```

See removed from A request

```

<WsRestHasMemberRequest>
  <wsGroupLookup>
    <groupName>stem:a</groupName>
  </wsGroupLookup>
  <subjectLookups>
    <WsSubjectLookup>
      <subjectId>test.subject.0</subjectId>
    </WsSubjectLookup>
  </subjectLookups>
</WsRestHasMemberRequest>

```

See removed from A response

```

<WsHasMemberResults>
  <results>
    <WsHasMemberResult>
      <wsSubject>
        <resultCode>SUCCESS</resultCode>
        <success>T</success>
        <id>test.subject.0</id>
        <name>my name is test.subject.0</name>
        <sourceId>jdbc</sourceId>
      </wsSubject>
      <resultMetadata>
        <resultCode>IS_NOT_MEMBER</resultCode>
        <success>T</success>
      </resultMetadata>
    </WsHasMemberResult>
  </results>
  <wsGroup>
    <extension>a</extension>
    <displayExtension>a</displayExtension>
    <displayName>stem:a</displayName>
    <name>stem:a</name>
    <uuid>7aa346e9d5ef42de842f490f49d08115</uuid>
  </wsGroup>
  <resultMetadata>
    <resultCode>SUCCESS</resultCode>
    <resultMessage>Success for: clientVersion: 1.6.0, wsGroupLookup:
      WsGroupLookup[groupName=stem:a], subjectLookups: Array size: 1: [0]:
      WsSubjectLookup[subjectId=test.subject.0]

      memberFilter: All, actAsSubject: null, fieldName: null, includeGroupDetail: false,
      includeSubjectDetail: false, subjectAttributeNames: null
      ,params: null
    </resultMessage>
    <success>T</success>
  </resultMetadata>
  <responseMetadata>
    <resultWarnings></resultWarnings>
    <millis>38</millis>
    <serverVersion>2.0.0</serverVersion>
  </responseMetadata>
</WsHasMemberResults>

```