

Grouper loader configure via web service

This is run against the demo server, v2.3.0

```
# url of web service, should include everything up to the first resource to
access
# e.g. http://groups.school.edu:8090/grouperWs
/servicesRest
# e.g. https://groups.school.edu/grouperWs
/servicesRest
grouperClient.webService.url = https://grouperdemo.internet2.edu/grouper-ws_v2_3
/servicesRest

# kerberos principal used to connect to web
service
# e.g. name/server.whatever.upenn.
edu
grouperClient.webService.login = test

# password for shared secret authentication to web
service
# or you can put a filename with an encrypted
password
grouperClient.webService.password = XXXXXXXXXXXX
```

Assign loader marker attribute

```
[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:attribute:
legacyGroupType_grouperLoader --ownerGroupNames=test:testLoaderFromWebService --debug=true
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: ef137d, failoverClient grouperWsReadOnly cache hash: 1e87719, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: e32802, failoverClient grouperWsReadWrite cache hash: 157c2bd,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 472
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignType>group</attributeAssignType>
  <wsAttributeDefNameLookups>
    <wsAttributeDefNameLookup>
      <name>etc:legacy:attribute:legacyGroupType_grouperLoader</name>
    </wsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
  <wsOwnerGroupLookups>
    <wsGroupLookup>
      <groupName>test:testLoaderFromWebService</groupName>
    </wsGroupLookup>
```

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</wsOwnerGroupLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK
Date: Tue, 07 Jun 2016 15:28:44 GMT
Set-Cookie: JSESSIONID=xxxxxxxxxxx; Secure
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE
Content-Type: text/xml;charset=UTF-8
Connection: close
Transfer-Encoding: chunked
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <idIndex>10065</idIndex>
      <extension>legacyGroupTypeDef_grouperLoader</extension>
      <name>etc:legacy:attribute:legacyGroupTypeDef_grouperLoader</name>
      <uuid>90223a60b73f4aa5bdd5acb5fa1de934</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>marker</valueType>
      <assignToAttributeDef>F</assignToAttributeDef>
      <assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>
      <assignToEffectiveMembership>F</assignToEffectiveMembership>
      <assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>
      <assignToGroup>F</assignToGroup>
      <assignToGroupAssignment>F</assignToGroupAssignment>
      <assignToImmediateMembership>F</assignToImmediateMembership>
      <assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>
      <assignToMember>F</assignToMember>
      <assignToMemberAssignment>F</assignToMemberAssignment>
      <assignToStem>F</assignToStem>
      <assignToStemAssignment>F</assignToStemAssignment>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <idIndex>10197</idIndex>
      <extension>legacyGroupType_grouperLoader</extension>
      <displayExtension>legacyGroupType_grouperLoader</displayExtension>
      <displayName>Grouper Administration:legacy:attribute:legacyGroupType_grouperLoader</displayName>
      <name>etc:legacy:attribute:legacyGroupType_grouperLoader</name>
      <uuid>2552021347f143aca16610f1244cb620</uuid>
      <attributeDefId>90223a60b73f4aa5bdd5acb5fa1de934</attributeDefId>
      <attributeDefName>etc:legacy:attribute:legacyGroupTypeDef_grouperLoader</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssigns>
        <WsAttributeAssign>
          <disallowed>F</disallowed>
          <attributeAssignActionType>immediate</attributeAssignActionType>
          <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
          <attributeAssignActionId>9461dbb31a5e431d924c8d4d1f484c33</attributeAssignActionId>
          <attributeAssignActionName>assign</attributeAssignActionName>
          <attributeAssignType>group</attributeAssignType>
          <attributeDefNameId>2552021347f143aca16610f1244cb620</attributeDefNameId>
          <attributeDefNameName>etc:legacy:attribute:legacyGroupType_grouperLoader</attributeDefNameName>
          <attributeDefId>90223a60b73f4aa5bdd5acb5fa1de934</attributeDefId>
          <attributeDefName>etc:legacy:attribute:legacyGroupTypeDef_grouperLoader</attributeDefName>
          <createdOn>2016/06/07 15:28:44.689</createdOn>
          <enabled>T</enabled>
          <id>fca574eb763c412394bbf0916cc98e3f</id>
          <lastUpdated>2016/06/07 15:28:44.689</lastUpdated>
          <ownerGroupId>4f0733faecf5409690cb58acff8e26ff</ownerGroupId>
          <ownerGroupName>test:testLoaderFromWebService</ownerGroupName>
        </WsAttributeAssign>
      </wsAttributeAssigns>
    </WsAssignAttributeResult>
  </wsAttributeAssignResults>
</WsAssignAttributesResults>
```

```

        </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>748</millis>
    <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups>
    <WsGroup>
        <extension>testLoaderFromWebService</extension>
        <typeOfGroup>group</typeOfGroup>
        <displayExtension>testLoaderFromWebService</displayExtension>
        <displayName>test:testLoaderFromWebService</displayName>
        <name>test:testLoaderFromWebService</name>
        <uuid>4f0733faecf5409690cb58acff8e26ff</uuid>
        <idIndex>11352</idIndex>
    </WsGroup>
</wsGroups>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</WsAssignAttributesResults>
##### RESPONSE END #####

```

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load
balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3
/servicesRest
DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin
DEBUG: Output template: Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}, available variables:
wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment
DEBUG: Substituting EL: 'Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}
', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName,
valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject,
wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group, owner: test:
testLoaderFromWebService, attributeDefNameName: etc:legacy:attribute:legacyGroupType_grouperLoader, action:
assign, values: none, enabled: T, id: fca574eb763c412394bbf0916cc98e3f, changed: T, deleted: F, valuesChanged: F
',
Index: 0: attributeAssignType: group, owner: test:testLoaderFromWebService, attributeDefNameName: etc:legacy:
attribute:legacyGroupType_grouperLoader, action: assign, values: none, enabled: T, id:
fca574eb763c412394bbf0916cc98e3f, changed: T, deleted: F, valuesChanged: F
DEBUG: Elapsed time: 2181ms
[mchyzer@flash pennGroupsClient-test-2.3.0]$ mkdir newclient
[mchyzer@flash pennGroupsClient-test-2.3.0]$ cd newclient/
[mchyzer@flash newclient]$ wget http://software.internet2.edu/grouper/release/2.3.0/grouper.clientBinary-2.3.0.
tar.gz
--2016-06-07 11:34:50-- http://software.internet2.edu/grouper/release/2.3.0/grouper.clientBinary-2.3.0.tar.gz
Resolving software.internet2.edu... 207.75.164.52, 2001:48a8:68fe::52
Connecting to software.internet2.edu|207.75.164.52|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3888869 (3.7M) [application/x-gzip]
Saving to: "grouper.clientBinary-2.3.0.tar.gz"
100%[=====] 3,888,869
13.1M/s in 0.3s

```

2016-06-07 11:34:50 (13.1 MB/s) - "grouper.clientBinary-2.3.0.tar.gz" saved [3888869/3888869]
[mchyzer@flash newclient]\$

Assign grouper loader type

```
[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:legacyAttribute_grouperLoaderType --ownerAttributeAssignUuids=fca574eb763c412394bbf0916cc98e3f --
debug=true --attributeAssignValueOperation=assign_value --values0System=SQL_SIMPLE
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: 6ac461, failoverClient grouperWsReadOnly cache hash: 182da3d, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: 1c5f743, failoverClient grouperWsReadWrite cache hash: 1ec8909,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 692
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>fca574eb763c412394bbf0916cc98e3f</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>SQL_SIMPLE</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:legacy:attribute_grouperLoaderType</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK
Date: Tue, 07 Jun 2016 16:04:57 GMT
Set-Cookie: JSESSIONID=xxxxxxxxxxxx; Secure
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE
Content-Type: text/xml; charset=UTF-8
Connection: close
Transfer-Encoding: chunked
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <idIndex>10068</idIndex>
```

```

<extension>legacyAttributeDef_grouperLoader</extension>
<name>etc:legacy:attribute:legacyAttributeDef_grouperLoader</name>
<uuid>3c1c4ff502d94681a0fa3eaa7ae679c2</uuid>
<attributeDefType>attr</attributeDefType>
<multiAssignable>F</multiAssignable>
<multiValued>F</multiValued>
<valueType>string</valueType>
<assignToAttributeDef>F</assignToAttributeDef>
<assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>
<assignToEffectiveMembership>F</assignToEffectiveMembership>
<assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>
<assignToGroup>F</assignToGroup>
<assignToGroupAssignment>F</assignToGroupAssignment>
<assignToImmediateMembership>F</assignToImmediateMembership>
<assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>
<assignToMember>F</assignToMember>
<assignToMemberAssignment>F</assignToMemberAssignment>
<assignToStem>F</assignToStem>
<assignToStemAssignment>F</assignToStemAssignment>
</WsAttributeDef>
</wsAttributeDefs>
<wsAttributeDefNames>
  <WsAttributeDefName>
    <idIndex>10207</idIndex>
    <extension>legacyAttribute_grouperLoaderType</extension>
    <displayExtension>legacyAttribute_grouperLoaderType</displayExtension>
    <displayName>Grouper Administration:legacy:attribute:legacyAttribute_grouperLoaderType</displayName>
    <name>etc:legacy:attribute:legacyAttribute_grouperLoaderType</name>
    <uuid>d4352926f066467294fc489ab41c01a0</uuid>
    <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
    <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
  </WsAttributeDefName>
</wsAttributeDefNames>
<wsAttributeAssignResults>
  <WsAttributeAssignResult>
    <wsAttributeAssignValueResults>
      <WsAttributeAssignValueResult>
        <changed>T</changed>
        <deleted>F</deleted>
        <wsAttributeAssignValue>
          <id>350e4490355f40e39a429355dec1c680</id>
          <valueSystem>SQL_SIMPLE</valueSystem>
        </wsAttributeAssignValue>
      </WsAttributeAssignValueResult>
    </wsAttributeAssignValueResults>
  </wsAttributeAssign>
  <WsAttributeAssign>
    <disallowed>F</disallowed>
    <attributeAssignActionType>immediate</attributeAssignActionType>
    <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
    <attributeAssignActionId>dfda323e43ec48af8b0bd4be460d0af9</attributeAssignActionId>
    <attributeAssignActionName>assign</attributeAssignActionName>
    <attributeAssignType>group_asgn</attributeAssignType>
    <attributeDefNameId>d4352926f066467294fc489ab41c01a0</attributeDefNameId>
    <attributeDefNameName>etc:legacy:attribute:legacyAttribute_grouperLoaderType</attributeDefNameName>
    <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
    <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
    <wsAttributeAssignValues>
      <WsAttributeAssignValue>
        <id>350e4490355f40e39a429355dec1c680</id>
        <valueSystem>SQL_SIMPLE</valueSystem>
      </WsAttributeAssignValue>
    </wsAttributeAssignValues>
    <createdOn>2016/06/07 16:04:58.012</createdOn>
    <enabled>T</enabled>
    <id>d5242f9711dc4cebb4e2093141ddb6b2</id>
    <lastUpdated>2016/06/07 16:04:58.012</lastUpdated>
    <ownerAttributeAssignId>fca574eb763c412394bbf0916cc98e3f</ownerAttributeAssignId>
  </WsAttributeAssign>
</wsAttributeAssigns>
<changed>T</changed>

```

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        <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>1077</millis>
    <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups/>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</WsAssignAttributesResults>
##### RESPONSE END #####

```

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load
balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3
/servicesRest
DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin
DEBUG: Output template: Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}, available variables:
wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment
DEBUG: Substituting EL: 'Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}
', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName,
valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject,
wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group_asgn, owner:
fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:legacy:attribute_legacyAttribute_grouperLoaderType,
action: assign, values: SQL_SIMPLE, enabled: T, id: d5242f9711dc4cebb4e2093141ddb6b2, changed: T, deleted: F,
valuesChanged: T
'
Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:
legacy:attribute_legacyAttribute_grouperLoaderType, action: assign, values: SQL_SIMPLE, enabled: T, id:
d5242f9711dc4cebb4e2093141ddb6b2, changed: T, deleted: F, valuesChanged: T
DEBUG: Elapsed time: 2291ms
[mchyzer@flash pennGroupsClient-test-2.3.0]$

```

Assign db name

```

[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute_legacyAttribute_grouperLoaderDbName --ownerAttributeAssignUids=fca574eb763c412394bbf0916cc98e3f --
debug=true --attributeAssignValueOperation=assign_value --values0System=grouper
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: 182da3d, failoverClient grouperWsReadOnly cache hash: 1c5f743, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: 1ec8909, failoverClient grouperWsReadWrite cache hash: 18c56d,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured

```

```
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 691
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>fca574eb763c412394bbf0916cc98e3f</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>grouper</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:legacy:attribute:legacyAttribute_grouperLoaderDbName</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK
Date: Tue, 07 Jun 2016 16:18:34 GMT
Set-Cookie: JSESSIONID=xxxxxxxxxxx; Secure
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE
Content-Type: text/xml; charset=UTF-8
Connection: close
Transfer-Encoding: chunked
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <idIndex>10068</idIndex>
      <extension>legacyAttributeDef_grouperLoader</extension>
      <name>etc:legacy:attribute:legacyAttributeDef_grouperLoader</name>
      <uuid>3c1c4ff502d94681a0fa3eaa7ae679c2</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
      <assignToAttributeDef>F</assignToAttributeDef>
      <assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>
      <assignToEffectiveMembership>F</assignToEffectiveMembership>
      <assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>
      <assignToGroup>F</assignToGroup>
      <assignToGroupAssignment>F</assignToGroupAssignment>
      <assignToImmediateMembership>F</assignToImmediateMembership>
      <assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>
      <assignToMember>F</assignToMember>
      <assignToMemberAssignment>F</assignToMemberAssignment>
      <assignToStem>F</assignToStem>
      <assignToStemAssignment>F</assignToStemAssignment>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
```

```

<idIndex>10213</idIndex>
<extension>legacyAttribute_grouperLoaderDbName</extension>
<displayExtension>legacyAttribute_grouperLoaderDbName</displayExtension>
<displayName>Grouper Administration:legacy:attribute:legacyAttribute_grouperLoaderDbName</displayName>
<name>etc:legacy:attribute:legacyAttribute_grouperLoaderDbName</name>
<uuid>5378bf83c92b4a7d88b6ea1b863a7e6e</uuid>
<attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
<attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
</WsAttributeDefName>
</wsAttributeDefNames>
<wsAttributeAssignResults>
  <wsAssignAttributeResult>
    <wsAttributeAssignValueResults>
      <wsAttributeAssignValueResult>
        <changed>T</changed>
        <deleted>F</deleted>
        <wsAttributeAssignValue>
          <id>781861c921014af8a9c121d0846dce69</id>
          <valueSystem>grouper</valueSystem>
        </wsAttributeAssignValue>
      </wsAttributeAssignValueResult>
    </wsAttributeAssignValueResults>
  <wsAttributeAssigns>
    <wsAttributeAssign>
      <disallowed>F</disallowed>
      <attributeAssignActionType>immediate</attributeAssignActionType>
      <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
      <attributeAssignActionId>dfda323e43ec48af8b0bd4be460d0af9</attributeAssignActionId>
      <attributeAssignActionName>assign</attributeAssignActionName>
      <attributeAssignType>group_asgn</attributeAssignType>
      <attributeDefNameId>5378bf83c92b4a7d88b6ea1b863a7e6e</attributeDefNameId>
      <attributeDefNameName>etc:legacy:attribute:legacyAttribute_grouperLoaderDbName</attributeDefNameName>
      <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
      <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
      <wsAttributeAssignValues>
        <wsAttributeAssignValue>
          <id>781861c921014af8a9c121d0846dce69</id>
          <valueSystem>grouper</valueSystem>
        </wsAttributeAssignValue>
      </wsAttributeAssignValues>
      <createdOn>2016/06/07 16:18:34.294</createdOn>
      <enabled>T</enabled>
      <id>0b761c4198e248beb1fd28138674aa38</id>
      <lastUpdated>2016/06/07 16:18:34.294</lastUpdated>
      <ownerAttributeAssignId>fca574eb763c412394bbf0916cc98e3f</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>427</millis>
  <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups/>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</WsAssignAttributesResults>
##### RESPONSE END #####

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3

```

/servicesRest
DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin
DEBUG: Output template: Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}, available variables:
wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment
DEBUG: Substituting EL: 'Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}
', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName,
valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject,
wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group_asgn, owner:
fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:legacy:attribute:
legacyAttribute_grouperLoaderDbName, action: assign, values: grouper, enabled: T, id:
0b761c4198e248beb1fd28138674aa38, changed: T, deleted: F, valuesChanged: T
'
Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:
legacy:attribute:legacyAttribute_grouperLoaderDbName, action: assign, values: grouper, enabled: T, id:
0b761c4198e248beb1fd28138674aa38, changed: T, deleted: F, valuesChanged: T
DEBUG: Elapsed time: 1715ms
[mchyzer@flash pennGroupsClient-test-2.3.0]$

```

Assign cron

```

[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:
BINARY-README.txt          grouperClient.jar          grouper.client.usage.example.txt
grouper.client.base.properties  grouper.client.properties  grouper.client.usage.txt
grouperClientFailoverState.bin  grouper.client.properties~  newclient/
[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:legacyAttribute_grouperLoaderQuartzCron --ownerAttributeAssignUuids=fca574eb763c412394bbf0916cc98e3f
--debug=true --attributeAssignValueOperation=assign_value --values@System="0 0 7 * * ?"
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: 1d256fa, failoverClient grouperWsReadOnly cache hash: 4c4975, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: 6ac461, failoverClient grouperWsReadWrite cache hash: 182da3d,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 699
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>fca574eb763c412394bbf0916cc98e3f</uuid>
    
```

```

    </WsAttributeAssignLookup>
</wsOwnerAttributeAssignLookups>
<values>
  <WsAttributeAssignValue>
    <valueSystem>0 0 7 * * ?</valueSystem>
  </WsAttributeAssignValue>
</values>
<attributeAssignType>group_asgn</attributeAssignType>
<wsAttributeDefNameLookups>
  <WsAttributeDefNameLookup>
    <name>etc:legacy:attribute:legacyAttribute_grouperLoaderQuartzCron</name>
  </WsAttributeDefNameLookup>
</wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK
Date: Tue, 07 Jun 2016 16:20:58 GMT
Set-Cookie: JSESSIONID=xxxxxxxxxxx; Secure
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE
Content-Type: text/xml; charset=UTF-8
Connection: close
Transfer-Encoding: chunked
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <idIndex>10068</idIndex>
      <extension>legacyAttributeDef_grouperLoader</extension>
      <name>etc:legacy:attribute:legacyAttributeDef_grouperLoader</name>
      <uuid>3c1c4ff502d94681a0fa3eaa7ae679c2</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>
      <multiValued>F</multiValued>
      <valueType>string</valueType>
      <assignToAttributeDef>F</assignToAttributeDef>
      <assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>
      <assignToEffectiveMembership>F</assignToEffectiveMembership>
      <assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>
      <assignToGroup>F</assignToGroup>
      <assignToGroupAssignment>F</assignToGroupAssignment>
      <assignToImmediateMembership>F</assignToImmediateMembership>
      <assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>
      <assignToMember>F</assignToMember>
      <assignToMemberAssignment>F</assignToMemberAssignment>
      <assignToStem>F</assignToStem>
      <assignToStemAssignment>F</assignToStemAssignment>
    </WsAttributeDef>
  </wsAttributeDefs>
  <wsAttributeDefNames>
    <WsAttributeDefName>
      <idIndex>10203</idIndex>
      <extension>legacyAttribute_grouperLoaderQuartzCron</extension>
      <displayExtension>legacyAttribute_grouperLoaderQuartzCron</displayExtension>
      <displayName>Grouper Administration:legacy:attribute:legacyAttribute_grouperLoaderQuartzCron</displayName>
      <name>etc:legacy:attribute:legacyAttribute_grouperLoaderQuartzCron</name>
      <uuid>72cca27d46ae4b26bdd2646c54c2307b</uuid>
      <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
      <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
    </WsAttributeDefName>
  </wsAttributeDefNames>
  <wsAttributeAssignResults>
    <WsAssignAttributeResult>
      <wsAttributeAssignValueResults>
        <WsAttributeAssignValueResult>
          <changed>T</changed>
          <deleted>F</deleted>
        </WsAttributeAssignValueResult>
      </wsAttributeAssignValueResults>
    </WsAssignAttributeResult>
  </wsAttributeAssignResults>
  <wsAttributeAssignValue>
    <id>35609a9841b54081a5998e98300c6047</id>
    <valueSystem>0 0 7 * * ?</valueSystem>
  </wsAttributeAssignValue>
</WsAssignAttributesResults>

```

```

        </wsAttributeAssignValue>
    </wsAttributeAssignValueResult>
</wsAttributeAssignValueResults>
<wsAttributeAssigns>
    <wsAttributeAssign>
        <disallowed>F</disallowed>
        <attributeAssignActionType>immediate</attributeAssignActionType>
        <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
        <attributeAssignActionId>dfda323e43ec48af8b0bd4be460d0af9</attributeAssignActionId>
        <attributeAssignActionName>assign</attributeAssignActionName>
        <attributeAssignType>group_asgn</attributeAssignType>
        <attributeDefNameId>72cca27d46ae4b26bdd2646c54c2307b</attributeDefNameId>
        <attributeDefNameName>etc:legacy:attribute:legacyAttribute_grouperLoaderQuartzCron<
/attributeDefNameName>
        <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
        <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
    <wsAttributeAssignValues>
        <wsAttributeAssignValue>
            <id>35609a9841b54081a5998e98300c6047</id>
            <valueSystem>0 0 7 * * ?</valueSystem>
        </wsAttributeAssignValue>
    </wsAttributeAssignValues>
    <createdOn>2016/06/07 16:20:58.995</createdOn>
    <enabled>T</enabled>
    <id>7a7a36d3ce9e448eafb5123e38fb3ac7</id>
    <lastUpdated>2016/06/07 16:20:58.995</lastUpdated>
    <ownerAttributeAssignId>fca574eb763c412394bbf0916cc98e3f</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>446</millis>
    <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups/>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</wsAssignAttributesResults>
##### RESPONSE END #####

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest

DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchzyer/grouper/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin

DEBUG: Output template: Index: \${index}: attributeAssignType: \${wsAttributeAssign.attributeAssignType}, owner: \${ownerName}, attributeDefNameName: \${wsAttributeDefName.name}, action: \${wsAttributeAssign.attributeAssignActionName}, values: \${valuesString}, enabled: \${wsAttributeAssign.enabled}, id: \${wsAttributeAssign.id}, changed: \${wsAssignAttributeResult.changed}, deleted: \${wsAssignAttributeResult.deleted}, valuesChanged: \${wsAssignAttributeResult.valuesChanged}, available variables:

wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment

DEBUG: Substituting EL: 'Index: \${index}: attributeAssignType: \${wsAttributeAssign.attributeAssignType}, owner: \${ownerName}, attributeDefNameName: \${wsAttributeDefName.name}, action: \${wsAttributeAssign.attributeAssignActionName}, values: \${valuesString}, enabled: \${wsAttributeAssign.enabled}, id: \${wsAttributeAssign.id}, changed: \${wsAssignAttributeResult.changed}, deleted: \${wsAssignAttributeResult.deleted}, valuesChanged: \${wsAssignAttributeResult.valuesChanged}

', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName, valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject, wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:legacy:attribute:

```

legacyAttribute_grouperLoaderQuartzCron, action: assign, values: 0 0 7 * * ?, enabled: T, id:
7a7a36d3ce9e448eafb5123e38fb3ac7, changed: T, deleted: F, valuesChanged: T
,
Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:
legacy:attribute:legacyAttribute_grouperLoaderQuartzCron, action: assign, values: 0 0 7 * * ?, enabled: T, id:
7a7a36d3ce9e448eafb5123e38fb3ac7, changed: T, deleted: F, valuesChanged: T
DEBUG: Elapsed time: 1708ms
[mchyzer@flash pennGroupsClient-test-2.3.0]$

```

Assign query

```

[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:
BINARY-README.txt          grouperClient.jar          grouper.client.usage.example.txt
grouper.client.base.properties  grouper.client.properties  grouper.client.usage.txt
grouperClientFailoverState.bin  grouper.client.properties~  newclient/
[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:legacyAttribute_grouperLoaderQuery --ownerAttributeAssignUuids=fca574eb763c412394bbf0916cc98e3f --
debug=true --attributeAssignValueOperation=assign_value --values0System="SELECT subjectId AS subject_id FROM
subject WHERE NAME LIKE 'Steven%'"
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: 6ac461, failoverClient grouperWsReadOnly cache hash: 182da3d, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: 1c5f743, failoverClient grouperWsReadWrite cache hash: 1ec8909,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 762
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>fca574eb763c412394bbf0916cc98e3f</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>SELECT subjectId AS subject_id FROM subject WHERE NAME LIKE &apos;Steven%&apos;</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:legacy:attribute:legacyAttribute_grouperLoaderQuery</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK

```

Date: Tue, 07 Jun 2016 16:24:16 GMT

Set-Cookie: JSESSIONID=xxxxxxxxxxxx; Secure

X-Grouper-resultCode: SUCCESS

X-Grouper-success: T

X-Grouper-resultCode2: NONE

Content-Type: text/xml; charset=UTF-8

Connection: close

Transfer-Encoding: chunked

<WsAssignAttributesResults>

<wsAttributeDefs>

<wsAttributeDef>

<idIndex>10068</idIndex>

<extension>legacyAttributeDef_grouperLoader</extension>

<name>etc:legacy:attribute:legacyAttributeDef_grouperLoader</name>

<uuid>3c1c4ff502d94681a0fa3eaa7ae679c2</uuid>

<attributeDefType>attr</attributeDefType>

<multiAssignable>F</multiAssignable>

<multiValued>F</multiValued>

<valueType>string</valueType>

<assignToAttributeDef>F</assignToAttributeDef>

<assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>

<assignToEffectiveMembership>F</assignToEffectiveMembership>

<assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>

<assignToGroup>F</assignToGroup>

<assignToGroupAssignment>F</assignToGroupAssignment>

<assignToImmediateMembership>F</assignToImmediateMembership>

<assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>

<assignToMember>F</assignToMember>

<assignToMemberAssignment>F</assignToMemberAssignment>

<assignToStem>F</assignToStem>

<assignToStemAssignment>F</assignToStemAssignment>

</wsAttributeDef>

</wsAttributeDefs>

<wsAttributeDefNames>

<wsAttributeDefName>

<idIndex>10211</idIndex>

<extension>legacyAttribute_grouperLoaderQuery</extension>

<displayExtension>legacyAttribute_grouperLoaderQuery</displayExtension>

<displayName>Grouper Administration:legacy:attribute:legacyAttribute_grouperLoaderQuery</displayName>

<name>etc:legacy:attribute:legacyAttribute_grouperLoaderQuery</name>

<uuid>b8f0bf38374349b888bf40c6b3d9bf46</uuid>

<attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>

<attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>

</wsAttributeDefName>

</wsAttributeDefNames>

<wsAttributeAssignResults>

<wsAssignAttributeResult>

<wsAttributeAssignValueResults>

<wsAttributeAssignValueResult>

<changed>T</changed>

<deleted>F</deleted>

<wsAttributeAssignValue>

<id>517cbf2e08724aa9aec2bec3ed952643</id>

<valueSystem>SELECT subjectId AS subject_id FROM subject WHERE NAME LIKE 'Steven%'<

/valueSystem>

</wsAttributeAssignValue>

</wsAttributeAssignValueResult>

</wsAttributeAssignValueResults>

<wsAttributeAssigns>

<wsAttributeAssign>

<disallowed>F</disallowed>

<attributeAssignActionType>immediate</attributeAssignActionType>

<attributeAssignDelegatable>FALSE</attributeAssignDelegatable>

<attributeAssignActionId>dfda323e43ec48af8b0bd4be460d0af9</attributeAssignActionId>

<attributeAssignActionName>assign</attributeAssignActionName>

<attributeAssignType>group_asgn</attributeAssignType>

<attributeDefNameId>b8f0bf38374349b888bf40c6b3d9bf46</attributeDefNameId>

<attributeDefNameName>etc:legacy:attribute:legacyAttribute_grouperLoaderQuery</attributeDefNameName>

<attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>

<attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>

<wsAttributeAssignValues>

```

        <WsAttributeAssignValue>
            <id>517cbf2e08724aa9aec2bec3ed952643</id>
            <valueSystem>SELECT subjectId AS subject_id FROM subject WHERE NAME LIKE &apos;Steven%&apos;<
/valueSystem>
        </WsAttributeAssignValue>
    </wsAttributeAssignValues>
    <createdOn>2016/06/07 16:24:17.078</createdOn>
    <enabled>T</enabled>
    <id>c9be8fc9811f48a19c46ece92eb7a521</id>
    <lastUpdated>2016/06/07 16:24:17.078</lastUpdated>
    <ownerAttributeAssignId>fca574eb763c412394bbf0916cc98e3f</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>219</millis>
    <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups/>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</WsAssignAttributesResults>
##### RESPONSE END #####

```

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load
balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3
/servicesRest
DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin
DEBUG: Output template: Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}, available variables:
wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment
DEBUG: Substituting EL: 'Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}
', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName,
valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject,
wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group_asgn, owner:
fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:legacy:attribute:
legacyAttribute_grouperLoaderQuery, action: assign, values: SELECT subjectId AS subject_id FROM subject WHERE
NAME LIKE 'Steven%', enabled: T, id: c9be8fc9811f48a19c46ece92eb7a521, changed: T, deleted: F, valuesChanged: T
',
Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:
legacy:attribute:legacyAttribute_grouperLoaderQuery, action: assign, values: SELECT subjectId AS subject_id
FROM subject WHERE NAME LIKE 'Steven%', enabled: T, id: c9be8fc9811f48a19c46ece92eb7a521, changed: T, deleted:
F, valuesChanged: T
DEBUG: Elapsed time: 1521ms

```

Assign schedule type

```

[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:

```

```

attribute:
BINARY-README.txt          grouperClient.jar          grouper.client.usage.example.txt
grouper.client.base.properties  grouper.client.properties  grouper.client.usage.txt
grouperClientFailoverState.bin  grouper.client.properties-  newclient/
[mchyzer@flash pennGroupsClient-test-2.3.0]$ java -jar grouperClient.jar --operation=assignAttributesWs --
attributeAssignType=group_asgn --attributeAssignOperation=assign_attr --attributeDefNameNames=etc:legacy:
attribute:legacyAttribute_grouperLoaderScheduleType --
ownerAttributeAssignUuids=fca574eb763c412394bbf0916cc98e3f --debug=true --
attributeAssignValueOperation=assign_value --values0System=CRON
DEBUG: Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-test-2.3.0
/grouper.client.properties
DEBUG: method: DiscoveryClient.retrieveFile, configuredToUseDiscovery: false
DEBUG: method: FailoverClient.instanceMapFromType, read failover state from file: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin, success: true, failoverClient grouperWsReadOnly
hash: 4c4975, failoverClient grouperWsReadOnly cache hash: 6ac461, failoverClient grouperWsReadOnly affinity:
null, failoverClient grouperWsReadWrite hash: 182da3d, failoverClient grouperWsReadWrite cache hash: 1c5f743,
failoverClient grouperWsReadWrite affinity: null
DEBUG: method: GrouperClientWs.configureFailoverClient, needsReconfigure: true, discoveryFile: not configured
to use, needsReconfigureFile: true, affinitySeconds: 28800, extraTimeoutSeconds: 30, errorsForMinutes: 3,
failoverStrategy: activeActive, preferReadWrite: true, timeoutSeconds: 60
DEBUG: WebService: connecting as user: 'test'
DEBUG: WebService: connecting to URL: 'https://grouperdemo.internet2.edu/grouper-ws_v2_3/servicesRest/v2_3_000
/attributeAssignments'
##### REQUEST START (indented) #####
POST /grouper-ws_v2_3/servicesRest/v2_3_000/attributeAssignments HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperdemo.internet2.edu:-1
Content-Length: 694
Content-Type: text/xml; charset=UTF-8
<WsRestAssignAttributesRequest>
  <attributeAssignOperation>assign_attr</attributeAssignOperation>
  <attributeAssignValueOperation>assign_value</attributeAssignValueOperation>
  <wsOwnerAttributeAssignLookups>
    <WsAttributeAssignLookup>
      <uuid>fca574eb763c412394bbf0916cc98e3f</uuid>
    </WsAttributeAssignLookup>
  </wsOwnerAttributeAssignLookups>
  <values>
    <WsAttributeAssignValue>
      <valueSystem>CRON</valueSystem>
    </WsAttributeAssignValue>
  </values>
  <attributeAssignType>group_asgn</attributeAssignType>
  <wsAttributeDefNameLookups>
    <WsAttributeDefNameLookup>
      <name>etc:legacy:attribute:legacyAttribute_grouperLoaderScheduleType</name>
    </WsAttributeDefNameLookup>
  </wsAttributeDefNameLookups>
</WsRestAssignAttributesRequest>
##### REQUEST END #####
##### RESPONSE START (indented) #####
HTTP/1.1 200 OK
Date: Tue, 07 Jun 2016 16:25:48 GMT
Set-Cookie: JSESSIONID=xxxxxxxxxxxx; Secure
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE
Content-Type: text/xml; charset=UTF-8
Connection: close
Transfer-Encoding: chunked
<WsAssignAttributesResults>
  <wsAttributeDefs>
    <WsAttributeDef>
      <idIndex>10068</idIndex>
      <extension>legacyAttributeDef_grouperLoader</extension>
      <name>etc:legacy:attribute:legacyAttributeDef_grouperLoader</name>
      <uuid>3c1c4ff502d94681a0fa3eaa7ae679c2</uuid>
      <attributeDefType>attr</attributeDefType>
      <multiAssignable>F</multiAssignable>

```

```

    <multiValued>F</multiValued>
    <valueType>string</valueType>
    <assignToAttributeDef>F</assignToAttributeDef>
    <assignToAttributeDefAssignment>F</assignToAttributeDefAssignment>
    <assignToEffectiveMembership>F</assignToEffectiveMembership>
    <assignToEffectiveMembershipAssignment>F</assignToEffectiveMembershipAssignment>
    <assignToGroup>F</assignToGroup>
    <assignToGroupAssignment>F</assignToGroupAssignment>
    <assignToImmediateMembership>F</assignToImmediateMembership>
    <assignToImmediateMembershipAssignment>F</assignToImmediateMembershipAssignment>
    <assignToMember>F</assignToMember>
    <assignToMemberAssignment>F</assignToMemberAssignment>
    <assignToStem>F</assignToStem>
    <assignToStemAssignment>F</assignToStemAssignment>
  </WsAttributeDef>
</wsAttributeDefs>
<wsAttributeDefNames>
  <wsAttributeDefName>
    <idIndex>10210</idIndex>
    <extension>legacyAttribute_grouperLoaderScheduleType</extension>
    <displayExtension>legacyAttribute_grouperLoaderScheduleType</displayExtension>
    <displayName>Grouper Administration:legacy:attribute:legacyAttribute_grouperLoaderScheduleType<
/ds:displayName>
    <name>etc:legacy:attribute:legacyAttribute_grouperLoaderScheduleType</name>
    <uuid>72b6cc19fb224e0382a715ba894a4536</uuid>
    <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
    <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
  </wsAttributeDefName>
</wsAttributeDefNames>
<wsAttributeAssignResults>
  <wsAssignAttributeResult>
    <wsAttributeAssignValueResults>
      <wsAttributeAssignValueResult>
        <changed>T</changed>
        <deleted>F</deleted>
        <wsAttributeAssignValue>
          <id>a51609495a86409abe4432f4d15ef3be</id>
          <valueSystem>CRON</valueSystem>
        </wsAttributeAssignValue>
      </wsAttributeAssignValueResult>
    </wsAttributeAssignValueResults>
  </wsAttributeAssignResults>
  <wsAttributeAssigns>
    <wsAttributeAssign>
      <disallowed>F</disallowed>
      <attributeAssignActionType>immediate</attributeAssignActionType>
      <attributeAssignDelegatable>FALSE</attributeAssignDelegatable>
      <attributeAssignActionId>dfda323e43ec48af8b0bd4be460d0af9</attributeAssignActionId>
      <attributeAssignActionName>assign</attributeAssignActionName>
      <attributeAssignType>group_asgn</attributeAssignType>
      <attributeDefNameId>72b6cc19fb224e0382a715ba894a4536</attributeDefNameId>
      <attributeDefNameName>etc:legacy:attribute:legacyAttribute_grouperLoaderScheduleType<
/ds:attributeDefNameName>
      <attributeDefId>3c1c4ff502d94681a0fa3eaa7ae679c2</attributeDefId>
      <attributeDefName>etc:legacy:attribute:legacyAttributeDef_grouperLoader</attributeDefName>
    <wsAttributeAssignValues>
      <wsAttributeAssignValue>
        <id>a51609495a86409abe4432f4d15ef3be</id>
        <valueSystem>CRON</valueSystem>
      </wsAttributeAssignValue>
    </wsAttributeAssignValues>
    <createdOn>2016/06/07 16:25:48.205</createdOn>
    <enabled>T</enabled>
    <id>1d14d027b0de4634a1c2a02df61cc4f9</id>
    <lastUpdated>2016/06/07 16:25:48.205</lastUpdated>
    <ownerAttributeAssignId>fca574eb763c412394bbf0916cc98e3f</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>291</millis>
  <serverVersion>2.3.0</serverVersion>
</responseMetadata>
<wsGroups/>
<wsStems/>
<wsMemberships/>
<wsSubjects/>
</WsAssignAttributesResults>
##### RESPONSE END #####

```

```

DEBUG: method: FailoverClient.internal_failoverLogic, type: grouperWsReadWrite, connections: 1, Not load
balancing: connection type: grouperWsReadWrite, name: https://grouperdemo.internet2.edu/grouper-ws_v2_3
/servicesRest
DEBUG: method: FailoverClient.failoverLogic, saveStateEverySeconds: 60, savingStateToFile: /home/mchyzer/grouper
/pennGroupsClient-test-2.3.0/grouperClientFailoverState.bin
DEBUG: Output template: Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}, available variables:
wsAssignAttributesResults, grouperClientUtils, index, wsAttributeAssignment
DEBUG: Substituting EL: 'Index: ${index}: attributeAssignType: ${wsAttributeAssign.attributeAssignType}, owner:
${ownerName}, attributeDefNameName: ${wsAttributeDefName.name}, action: ${wsAttributeAssign.
attributeAssignActionName}, values: ${valuesString}, enabled: ${wsAttributeAssign.enabled}, id:
${wsAttributeAssign.id}, changed: ${wsAssignAttributeResult.changed}, deleted: ${wsAssignAttributeResult.
deleted}, valuesChanged: ${wsAssignAttributeResult.valuesChanged}
', and with env vars: wsAssignAttributesResults, grouperClientUtils, wsAssignAttributeResult, index, ownerName,
valuesString, wsOwnerAttributeDef, wsAttributeAssign, wsAttributeDef, wsAttributeDefName, wsOwnerMemberSubject,
wsOwnerMembership, wsOwnerGroup, elUtils with result: 'Index: 0: attributeAssignType: group_asgn, owner:
fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:legacy:attribute:
legacyAttribute_grouperLoaderScheduleType, action: assign, values: CRON, enabled: T, id:
1d14d027b0de4634a1c2a02df61cc4f9, changed: T, deleted: F, valuesChanged: T
'
Index: 0: attributeAssignType: group_asgn, owner: fca574eb763c412394bbf0916cc98e3f, attributeDefNameName: etc:
legacy:attribute:legacyAttribute_grouperLoaderScheduleType, action: assign, values: CRON, enabled: T, id:
1d14d027b0de4634a1c2a02df61cc4f9, changed: T, deleted: F, valuesChanged: T
DEBUG: Elapsed time: 1582ms
[mchyzer@flash pennGroupsClient-test-2.3.0]$

```

This is the result



Welcome [unverifiedInfo] Chris Hyzer - Penn [externalUserID] mchzyer@upenn.edu [Log out](#)

butes ⓘ

25

ner type:

definition:

ute name:

ner group: testLoaderFromWebService

disabled:

	Owner group	Attribute name	Enabled?	Assignment values
	testLoaderFromWebService	legacyGroupType_grouperLoader	enabled	
▼		legacyAttribute_grouperLoaderDbName	enabled	grouper
▼		legacyAttribute_grouperLoaderScheduleType	enabled	CRON
▼		legacyAttribute_grouperLoaderQuartzCron	enabled	0 0 7 * * ?
▼		legacyAttribute_grouperLoaderQuery	enabled	SELECT subjectId AS subject_id FROM subject WHERE NAME LIKE 'Steven%'
▼		legacyAttribute_grouperLoaderType	enabled	SQL_SIMPLE