

Grouper rules pattern - Veto if not eligible due to group

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

Grouper rules

If a user is not an employee, do not allow to be added to application group

You should consider using [membership requirements](#) instead of this.

Add this rule to the group where the membership is being added.

Java example

```
//add a rule on stem:a saying if not in stem:b, then dont allow add to stem:a
AttributeAssign attributeAssign = ruleGroup
    .getAttributeDelegate().addAttribute(RuleUtils.ruleAttributeDefName()).getAttributeAssign();

AttributeValueDelegate attributeValueDelegate = attributeAssign.getAttributeValueDelegate();

attributeValueDelegate.assignValue(
    RuleUtils.ruleActAsSubjectSourceIdName(), "g:isa");
attributeValueDelegate.assignValue(
    RuleUtils.ruleActAsSubjectIdName(), "GrouperSystem");
attributeValueDelegate.assignValue(
    RuleUtils.ruleCheckOwnerNameName(), "stem:a");
attributeValueDelegate.assignValue(
    RuleUtils.ruleCheckTypeName(), RuleCheckType.membershipAdd.name());
attributeValueDelegate.assignValue(
    RuleUtils.ruleIfConditionEnumName(), RuleIfConditionEnum.groupHasNoImmediateEnabledMembership.name());
attributeValueDelegate.assignValue(
    RuleUtils.ruleIfOwnerNameName(), "stem:b");
attributeValueDelegate.assignValue(
    RuleUtils.ruleThenEnumName(), RuleThenEnum.veto.name());

//key which would be used in UI messages file if applicable
attributeValueDelegate.assignValue(
    RuleUtils.ruleThenEnumArg0Name(), "rule.entity.must.be.a.member.of.stem.b");

//error message (if key in UI messages file not there)
attributeValueDelegate.assignValue(
    RuleUtils.ruleThenEnumArg1Name(), "Entity cannot be a member of stem:a if not a member of stem:b");

//should be valid
String isValidString = attributeValueDelegate.retrieveValueString(
    RuleUtils.ruleValidName());

if (!StringUtil.equals("T", isValidString)) {
    throw new RuntimeException(isValidString);
}
```

GSH shorthand method

```
RuleApi.vetoMembershipIfNotInGroup(actAsSubject, ruleGroup, mustBeInGroup,
    "rule.entity.must.be.a.member.of.stem.b", "Entity cannot be a member of stem:a if not a member of stem:
b");
```

GSH test case

```

gsh 0% grouperSession = GrouperSession.startRootSession();
edu.internet2.middleware.grouper.GrouperSession: 9df8fdf1c6dd4629b6c9dacd7e0f6f4a, 'GrouperSystem', 'application'
gsh 1% groupA = new GroupSave(grouperSession).assignName("stem:a").assignCreateParentStemsIfNotExist(true).
save();
group: name='stem:a' displayName='stem:a' uuid='de3c5d56d14840ee9c9bded29f7f86b5'
gsh 2% groupB = new GroupSave(grouperSession).assignName("stem:b").assignCreateParentStemsIfNotExist(true).
save();
group: name='stem:b' displayName='stem:b' uuid='fc1a3465730a4f0e86d6b0c74dcd8fcb'
gsh 3% subjectActAs = SubjectFinder.findByIdAndSource("GrouperSystem", "g:isa", true);
subject: id='GrouperSystem' type='application' source='g:isa' name='GrouperSysAdmin'
gsh 8% RuleApi.vetoMembershipIfNotInGroup(subjectActAs, groupA, groupB, "rule.entity.must.be.a.member.of.stem.
b", "Entity cannot be a member of stem:a if not a member of stem:b");
gsh 9% addMember("stem:b", "test.subject.1");
true
gsh 10% addMember("stem:a", "test.subject.1");
true
gsh 11% addMember("stem:a", "test.subject.0");
// Error: unable to evaluate command: Sourced file: inline evaluation of: ``addMember("stem:a", "test.subject.
0");'' : Error invoking compiled command: : Error in compiled command: edu.internet2.middleware.grouper.rules.
RuleVeto: rule.entity.must.be.a.member.of.stem.b: Entity cannot be a member of stem:a if not a member of stem:b,
, group name: stem:a, subject: Subject id: test.subject.0, sourceId: jdbc, field: members
gsh 12% hasMember("stem:a", "test.subject.0");
false
gsh 13% hasMember("stem:a", "test.subject.1");
true
gsh 14%

```

GSH daemon test case

Run the above GSH code, then continue below

```

gsh 14% delMember("stem:b", "test.subject.1");
true
gsh 15% hasMember("stem:a", "test.subject.1");
true
gsh 16% status = GrouperLoader.runOnceByJobName(grouperSession, GrouperLoaderType.GROUPER_RULES);
loader ran successfully: Ran rules daemon, changed 0 records
gsh 17% hasMember("stem:a", "test.subject.1");
false
gsh 18%

```

sdfa