Lab 1: Access Tokens

* Generate access token against HA
* Verify download/upload with access token
* Verify token on standalone instances

**Environment setup**

# Replace with your sandbox IP address

export IP=

export ART\_URL=http://$IP/artifactory

export ADM\_USER=admin

# Replace with your specific sandbox admin password

export ADM\_PSWD=

# get list of access tokens

curl -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/security/token

# Artifactory ping

curl -s $ART\_URL/api/system/ping

# Mac users can optionally install JQ for JSON parsing

brew install jq

**Generate access token**

# Create an access token

curl -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_URL/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:readers" -d "expires\_in=300"

curl -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/security/token

export ACCESS\_JSON=$(curl -s -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_URL/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:readers")

export ACCESS\_TOKEN=$(echo $ACCESS\_JSON | jq -cr '.access\_token')

echo $ACCESS\_TOKEN

**Create Group**

# Create “Deploy” group

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_URL/api/security/groups/Deploy -d '{"name": "Deploy"}' -H "Content-Type: application/json"

# Create “DeployPerm” permission target with update access to generic-local repo

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_URL/api/security/permissions/DeployPerm -d '{ "name":"DeployPerm","repositories":["generic-local"],"principals":{"groups":{"Deploy":["d","w","n","r"]}}}' -H "Content-Type: application/json"

# Verify “Deploy” group

curl -s -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/security/groups/Deploy

# Verify “DeployPerm” permission

curl -s -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/security/permissions/DeployPerm

**Create read/deploy tokens**

# Create read only access token

export ACCESS\_READ\_JSON=$(curl -s -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_URL/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:readers")

export ACCESS\_READ=$(echo $ACCESS\_READ\_JSON | jq -cr '.access\_token')

# Create deploy access token

export ACCESS\_DEPLOY\_JSON=$(curl -s -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_URL/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:Deploy")

export ACCESS\_DEPLOY=$(echo $ACCESS\_DEPLOY\_JSON | jq -cr '.access\_token')

# get list of access tokens

curl -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/security/token

**Deploy to generic-local repo**

echo Hello > hello.txt

# deploy with admin credential

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_URL/generic-local/swampup/2018/hello.txt -T hello.txt

# get file content

curl -s -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/generic-local/swampup/2018/hello.txt

# get file metadata

curl -s -u$ADM\_USER:$ADM\_PSWD -XGET $ART\_URL/api/storage/generic-local/swampup/2018/hello.txt

# delete file

curl -s -u$ADM\_USER:$ADM\_PSWD -XDELETE $ART\_URL/generic-local/swampup/2018/hello.txt

# deploy with read only access token, expect 403 error

curl -s -H "Authorization: Bearer $ACCESS\_READ" -XPUT $ART\_URL/generic-local/swampup/2018/hello.txt -T hello.txt

# deploy with access token

curl -s -H "Authorization: Bearer $ACCESS\_DEPLOY" -XPUT $ART\_URL/generic-local/swampup/2018/hello.txt -T hello.txt

# get file content with read only access token

curl -s -H "Authorization: Bearer $ACCESS\_READ" -XGET $ART\_URL/generic-local/swampup/2018/hello.txt

# get file metadata

curl -s -H "Authorization: Bearer $ACCESS\_READ" -XGET $ART\_URL/api/storage/generic-local/swampup/2018/hello.txt

**Setup Bangkok, Cape Town, and DR**

# HA instance

export ART\_HA=http://$IP/artifactory

# DR standalone instance

export ART\_DR=http://$IP:8093/artifactory

# Bangkok standalone instance

export ART\_BK=http://$IP:8094/artifactory

# Cape Town standalone instance

export ART\_CT=http://$IP:8095/artifactory

# Create group in Bangkok instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_BK/api/security/groups/Deploy -d '{"name": "Deploy"}' -H "Content-Type: application/json"

# Create permission target in Bangkok instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_BK/api/security/permissions/DeployPerm -d '{ "name":"DeployPerm","repositories":["generic-local"],"principals":{"groups":{"Deploy":["d","w","n","r"]}}}' -H "Content-Type: application/json"

# Create group in Cape Town instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_CT/api/security/groups/Deploy -d '{"name": "Deploy"}' -H "Content-Type: application/json"

# Create permission target in Cape Town instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_CT/api/security/permissions/DeployPerm -d '{ "name":"DeployPerm","repositories":["generic-local"],"principals":{"groups":{"Deploy":["d","w","n","r"]}}}' -H "Content-Type: application/json"

# Create group in DR instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_DR/api/security/groups/Deploy -d '{"name": "Deploy"}' -H "Content-Type: application/json"

# Create permission target in DR instance

curl -s -u$ADM\_USER:$ADM\_PSWD -XPUT $ART\_DR/api/security/permissions/DeployPerm -d '{ "name":"DeployPerm","repositories":["generic-local"],"principals":{"groups":{"Deploy":["d","w","n","r"]}}}' -H "Content-Type: application/json"

**Cross-instance authentication - access tokens within circle of trust**

# Create deploy access token in HA

export ACCESS\_HA\_JSON=$(curl -s -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_URL/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:Deploy" -d "refreshable=true" -d "audience=\*")

export ACCESS\_HA=$(echo $ACCESS\_HA\_JSON | jq -cr '.access\_token')

# Create deploy access token in DR

export ACCESS\_DR\_JSON=$(curl -s -u$ADM\_USER:$ADM\_PSWD -XPOST $ART\_DR/api/security/token -d "username=swampup2018" -d "scope=member-of-groups:Deploy" -d "refreshable=true" -d "audience=\*")

export ACCESS\_DR=$(echo $ACCESS\_DR\_JSON | jq -cr '.access\_token')

# deploy with DR access token

curl -s -H "Authorization: Bearer $ACCESS\_DR" -XPUT $ART\_DR/generic-local/swampup/2018/hello.txt -T hello.txt

# deploy with DR access token to Bangkok

curl -s -H "Authorization: Bearer $ACCESS\_DR" -XPUT $ART\_BK/generic-local/swampup/2018/hello.txt -T hello.txt

# deploy with DR access token to Cape Town

curl -s -H "Authorization: Bearer $ACCESS\_HA" -XPUT $ART\_CT/generic-local/swampup/2018/hello.txt -T hello.txt