

Universal Task Documentation

Universal Automation Center support to add and remove user

UT-ADD-USER-CSV-LINUX

Associated Activities:

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CONFIDENTIALITY INFORMATION

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Revision	Date	Author	Changes
00	20180910	Nils Buer	Initial Document (WIP)

Abstract:

This Universal Task allows to mass add and remove users from a Universal Controller Group. The data to add and/or remove users from a group is provided by a CSV file loaded to the Universal Controller script library.

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1 Disclaimer

No support and no warranty are provided by Stonebranch GmbH for this document and the related Universal Task. The use of this document and the related Universal Task is on your own risk.

Before using this task in a production system, please perform extensive testing.

Stonebranch GmbH assumes no liability for damage caused by the performance of the Universal Tasks

2 Introduction

The here described Universal Task allows to mass add and remove users from a Universal Controller Group. The data to add and/or remove users from a group is provided by a CSV file loaded to the Universal Controller script library. The Universal Task uses the REST API of the Universal Controller to add and remove users from a group. The Rest API commands are executed using the Python requests module.

Some details about the universal task to add and remove users from a group:

- The Universal Task uses the REST API of the Controller to add and remove users
- The User to add and remove from a group are provided by CSV file loaded to the Universal Controller Script library
- The Universal Task supports both Universal Agent for Linux/Unix and Windows
- You can select different log-levels e.g. Info and debug
- All Passwords are encrypted using Controller Credentials

3 Installation

3.1 Software Requirements for Linux Agent

Universal Template name: UT-ADD-USER-CSV-LINUX

Related UAC XML Files for template and task: [1]:

- Python 2.7.x installed on a Linux server where a Universal Agent is installed.
- For Python the following modules are required:
 - *sys, for output re-direct processing*
 - *datetime, date and time stamps for messages*
 - *requests to perform the REST API calls*
 - *logging, for python loglevel support*
- Universal Controller V6.4.7.0 or higher
- Universal Agent V6.4.2.2 or higher installed on a Linux Server

3.2 Installation Steps

The following describes the installation steps:

1. Install Python 2.7.x for Linux on any Linux Server running a Universal Agent.

Official Download link: <https://www.python.org/downloads/>

Note: The check the current Python Version type in a shell: `python -V` (capital V)

2. Add the required python modules

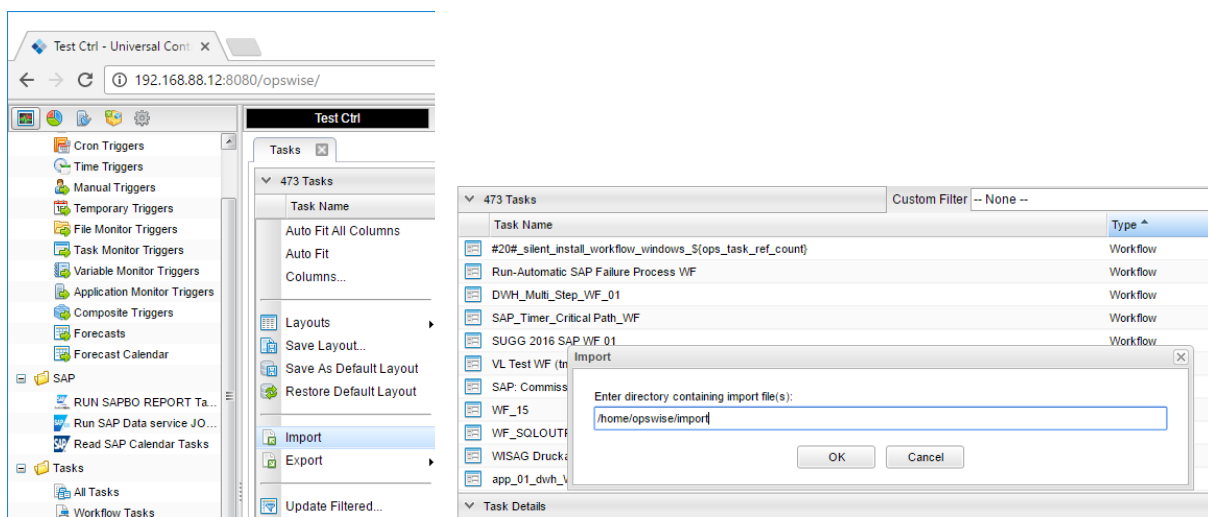
In a command shell as sudo or root:

- `pip install requests`

It is assumed that the modules logging, sys, datetime are already available. If not install them via pip.

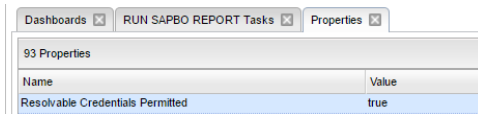
3. Import the Universal Task including the Universal Template to your Controller

Go to “All Tasks” and load via the Import functionality the Universal Task configuration into the Controller.



4 Universal Task Configuration

1. Activate: Resolvable Credentials in Universal Automation Center properties:



Name	Value
Resolvable Credentials Permitted	true

2. Create the CVS file to add an remove users

You can copy and paste the CSV to the script library or load a CSV from an external file.

The CSV file has the following structure:

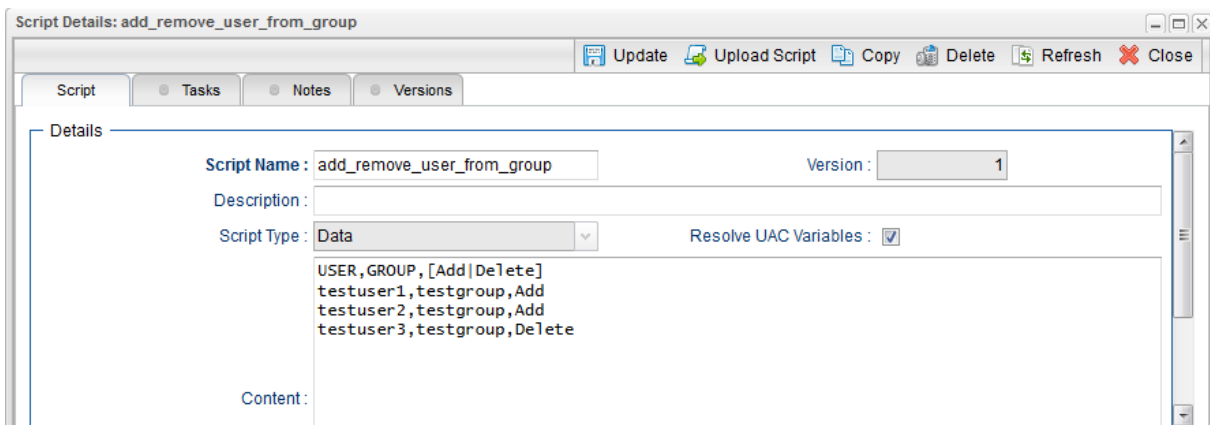
USER,GROUP,[Add|Delete]

testuser1,testgroup,Add

testuser2,testgroup,Add

testuser3,testgroup,Delete

Example:



Script Details: add_remove_user_from_group

Update Upload Script Copy Delete Refresh Close

Script Tasks Notes Versions

Details

Script Name : add_remove_user_from_group Version : 1

Description :

Script Type : Data Resolve UAC Variables : ☒

USER,GROUP, [Add|Delete]
 testuser1,testgroup,Add
 testuser2,testgroup,Add
 testuser3,testgroup,Delete

Content :

3. Fill Out the Universal Task to add and remove users from group

add_user_csv Task Details: add_remove_user_to_testgroup

Update Launch Task View Parents Copy Delete Refresh Close

add_user_csv Task Variables Actions Virtual Resources Mutually Exclusive Instances Triggers Notes Versions

General

Task Name: add_remove_user_to_testgroup Version: 2

Task Description:

Member of:

Business Services:

Resolve Name Immediately: ☐ Time Zone Preference: - System Default -

Hold on Start: ☐

Virtual Resource Priority: 10 Hold Resources on Failure: ☐

Further Info's:

System:

add_user_csv Details

Agent: \${AGNT_LINUX_with_Python} Agent Cluster:

Agent Variable: ☒ Agent Cluster Variable: ☐

Credentials: Cluster Broadcast:

Credentials Variable: ☐ Run with Highest Privileges: ☐

controllerurl: http://192.168.88.12:8080/opswise credential: REST_IF_CRED

loglevel: INFO script: add_remove_user_from_group

Credential for Universal Task:

Credential Details: REST_IF_CRED

Update Convert... Delete Refresh Close

Credential Versions

Details

Name: REST_IF_CRED Version: 3

Type: Resolvable

Runtime User: ops.admin

Runtime Password:

Description:

Task Output:

Retrieve Output - add_remove_user_to_testgroup

3 Output			
	Type	Attempt	Output
	STDERR	1	<pre> 2018-09-10 09:39:30,282 - INFO - Executing version 2.0 with the following paramaters 2018-09-10 09:39:30,282 - INFO - Controller URL: http://192.168.88.12:8080/**** 2018-09-10 09:39:30,282 - INFO - Script: add_remove_user_from_group 2018-09-10 09:39:30,282 - INFO - username: ops.admin 2018-09-10 09:39:30,282 - INFO - password: **** 2018-09-10 09:39:34,444 - INFO - user: testuser1 added to group: testgroup 2018-09-10 09:39:35,610 - INFO - user: testuser2 added to group: testgroup 2018-09-10 09:39:36,122 - INFO - user: testuser3 removed from group: testgroup </pre>

Description:

Field	Description
credential	Universal Controller REST API credentials. (User Credentials with the rights to use the REST API and to add and remove users from a group)
Loglevel	log level: DEBUG, INFO, WARNING, ERROR, CRITICAL
Agent	Need to a Linux or Windows agent, which is installed on a server with at least python 2.7. and the requests module
Controllerurl	url of the Universal Controller e.g. http://192.168.88.12:8080/opswise or for cloud controller: <a href="https://<customer>.stonebranch.cloud">https://<customer>.stonebranch.cloud

5 Test Cases

The following basic test cases has been performed:

Case#	Assumed behavior	Result
Add two users to a group <i>USER,GROUP,[Add Delete]</i> <i>testuser1,testgroup,Add</i> <i>testuser2,testgroup,Add</i>	Two users added 2018-09-10 09:51:46,042 - INFO - user: testuser1 added to group: testgroup 2018-09-10 09:51:46,686 - INFO - user: testuser2 added to group: testgroup	Correct
Remove two users from a group <i>USER,GROUP,[Add Delete]</i> <i>testuser1,testgroup,Delete</i> <i>testuser2,testgroup,Delete</i>	Two user removed 2018-09-10 09:53:03,997 - INFO - user: testuser1 removed from group: testgroup 2018-09-10 09:53:04,486 - INFO - user: testuser2 removed from group: testgroup	Correct
Add two users and remove one user from group <i>USER,GROUP,[Add Delete]</i> <i>testuser1,testgroup,Add</i> <i>testuser2,testgroup,Add</i> <i>testuser3,testgroup,Delete</i>	Two users added one removed 2018-09-10 09:39:34,444 - INFO - user: testuser1 added to group: testgroup 2018-09-10 09:39:35,610 - INFO - user: testuser2 added to group: testgroup 2018-09-10 09:39:36,122 - INFO -	Correct

Case#	Assumed behavior	Result
	user: testuser3 removed from group: testgroup	
Add a user to a group that does not exists USER,GROUP,[Add Delete] testuser1,testgroup2,Add testuser2,testgroup2,Add	Task fails: 2018-09-10 09:54:06,181 - CRITICAL - Universal Controller Groups API (READ Group) Exit Code <Response [404]> 2018-09-10 09:54:06,181 - CRITICAL - User group with name "testgroup2" does not exist.	Correct
Add a non-existing user to a group USER,GROUP,[Add Delete] testuser1,testgroup,Add testuser2,testgroup2,Add	Task fails: One user created, one fails 2018-09-10 10:03:24,087 - INFO - user: testuser1 added to group: testgroup 2018-09-10 10:03:24,100 - CRITICAL - Universal Controller Groups API (READ Group) Exit Code <Response [404]> 2018-09-10 10:03:24,101 - CRITICAL - User group with name "testgroup2" does not exist.	Correct
Wrong controllerurl		Correct
Add a user to a group, user already exists in the group USER,GROUP,[Add Delete] testuser1,testgroup2,Add testuser2,testgroup2,Add	User are created again: 2018-09-10 09:56:48,661 - INFO - user: testuser1 added to group: testgroup 2018-09-10 09:56:49,140 - INFO - user: testuser2 added to group: testgroup	Correct
Provide wrong command in csv file "remove" instead of "Delete"	Task fails: 2018-09-10 09:57:53,216 - ERROR - Action must be Add or Delete the provided action Remove does not exist	Correct
Remove non existing user from a group USER,GROUP,[Add Delete] testuser1,testgroup,Delete testuser2,testgroup,Delete testuser3,testgroup,Delete	Task goes to success. 2018-09-10 10:06:11,334 - INFO - user: testuser1 removed from group: testgroup 2018-09-10 10:06:11,904 - INFO - user: testuser2 removed from group: testgroup	To improve Note: if a non existing user is removed the task still goes to success,

Case#	Assumed behavior	Result
	2018-09-10 10:06:12,366 - INFO - user: testuser3 removed from group: testgroup	because there is currently no check implemented if the user exists in the group

6 Document References

This document references the following documents:

Ref#	Description
[1] XML extract of Universal Task	UAC XML extract of the Universal Template <ul style="list-style-type: none">ops_unv_tmplt_771f4b096eba43ce8f302662cf9a8f5c