



# OnCommand Workflow Automation (WFA) E-Series Package

Version 2.1.1

April 2015

## Overview

The WFA E-Series Package will assist customers with provisioning and configuration of NetApp® E-Series platform environments in conjunction with the E-Series Web Services Proxy and SANtricity PowerShell Toolkit.

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## System Requirements

The following items must exist in the environment in order to use WFA E-Series package:

- SANtricity® 11.10 or later
- SANtricity Web Services Proxy 1.1 or later
- SANtricity PowerShell Toolkit 1.0 or later
- WFA E-Series Package 2.0 or later
- PowerShell 3.0

The first three prerequisites are on the NetApp Support website (<http://support.netapp.com/>), and the E-Series WFA package is on the NetApp Community website (<http://community.netapp.com/>).

## Package Installation

Follow the steps in this section to download, install, and configure the WFA E-Series package.

1. Install the SANtricity Web Services Proxy on a server, as well as the SANtricity PowerShell Toolkit on the WFA server. Follow the installation and configuration guidelines for each package. Credentials and addition of storage arrays into the Web Services Proxy should be completed before using the WFA E-Series package. **NOTE: Do not install the Web Services Proxy on the same server as the WFA server due to internal conflicts with ports and cmdlets.**
2. Create a new Web Services Proxy user in the users.properties file following the SANtricity Web Services documentation located at [https://library.netapp.com/ecm/ecm\\_download\\_file/ECMP1651685](https://library.netapp.com/ecm/ecm_download_file/ECMP1651685). Set the new username to eseries, and define a new password based on the WFA password rules (one uppercase letter, one lowercase letter, one special character, one number). The new username and password line will look similar to the following:

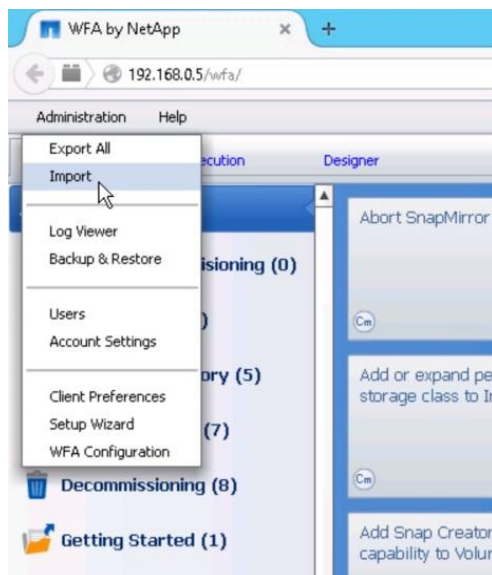
```
eseries=<password>,storage.rw
```

Run the `securepassword` command above the working directory to encrypt the password, and test the password by using the URL

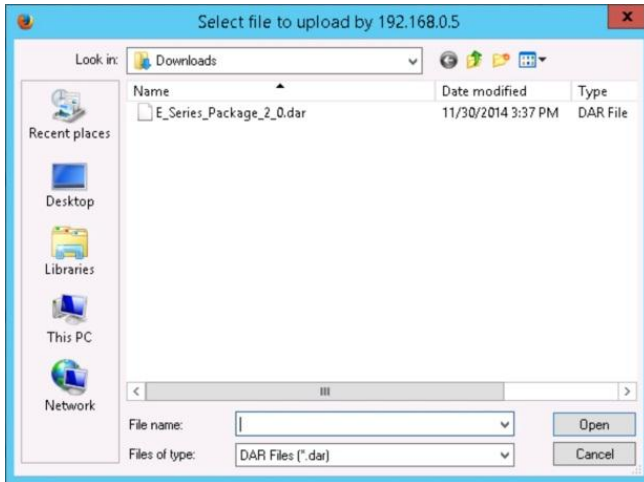
<http://<webservicesproxyserver>:8080/devmgr/utis/login?uid=eseries&password=<yourpassword>>. If the username and password work properly, you can continue to the next step. The users.properties file will update the username and password line to now contain an encrypted password similar to the format:

```
eseries=MD5:82fac38274abce24ff1380476281adefab,storage.rw
```

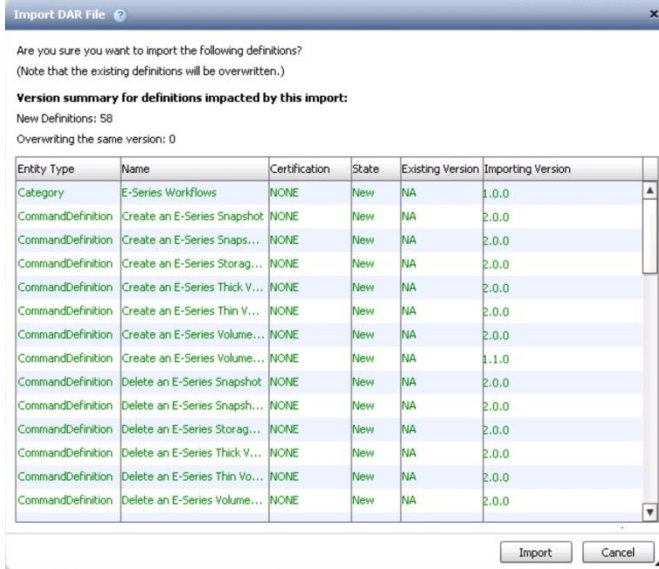
3. Visit the NetApp Community website at <http://community.netapp.com/> and download the WFA E-Series 2.1.1 package.
4. Import the WFA E-Series package into your WFA server using the Import option.



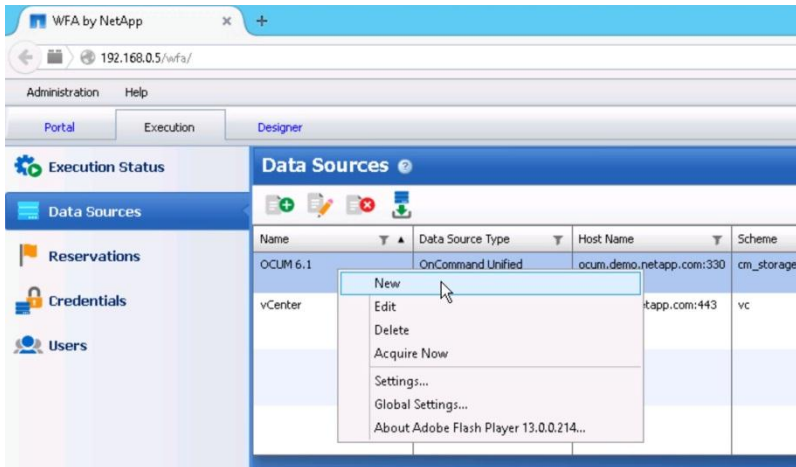
5. Select the WFA E-Series package, in the format of a DAR file, to import.



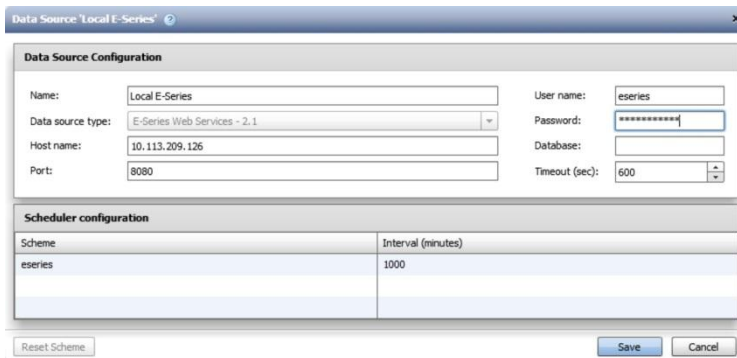
- WFA will review the set of definitions found in the DAR file. After reviewing the definitions, click the Import button to continue.



- Configure a new data source. Under Execution > Data Sources, right-click over the Data Sources window and select New.



- In the New Data Source dialog box, select E-Series Web Services as the data source type. Enter the name of the data source, the IP address of the Web Services Proxy, and the read-write credentials on the SANtricity Web Services Proxy. Click the Save button when finished.



- Verify the data source is properly acquiring E-Series information in the History window.

History - Local E-Series (eseries)						
Id	Start Time	Duration (seconds)	Planned Acquisition	Scheduling Type	Status	Message
19840			11/30/14 1:26:41 PM	Recurring	Scheduled	
19845	11/30/14 1:16:07 PM	33	11/30/14 1:16:04 PM	Recurring	Completed	
19843	11/30/14 1:05:31 PM	33	11/30/14 1:05:30 PM	Recurring	Completed	
19841	11/30/14 12:53:37 PM	113	11/30/14 12:53:34 PM	Recurring	Completed	
19838	11/30/14 12:43:01 PM	33	11/30/14 12:42:59 PM	Recurring	Completed	
19836	11/30/14 12:32:25 PM	33	11/30/14 12:32:25 PM	Recurring	Completed	
19834	11/30/14 12:17:01 PM	33	11/30/14 12:17:01 PM	Immediate	Completed	
19832	11/30/14 12:21:52 PM	32	11/30/14 12:21:49 PM	Recurring	Completed	

- Add a WFA user name and password to the Execution > Users section to match the user name and password entered in the Data Sources window from step 7. Click the Save button when finished.

**New User** ✕

Username:

Role:

E-mail:

Password:

Confirm:

Notify on:

Workflow execution started

Workflow execution failed

Workflow execution completed successfully

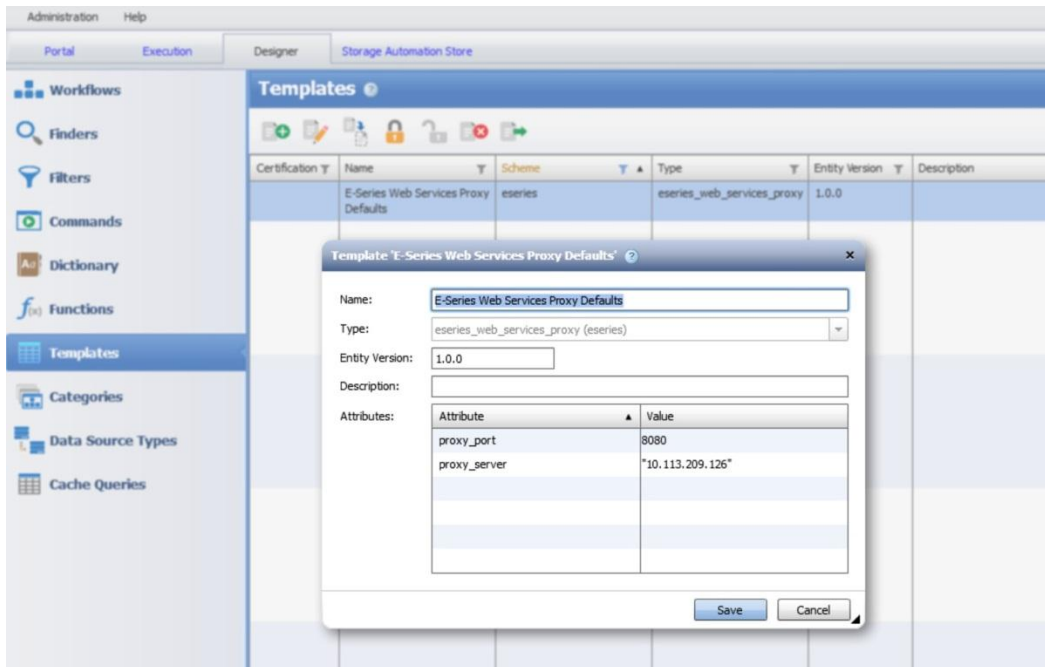
Workflow execution waiting for approval

Acquisition failure

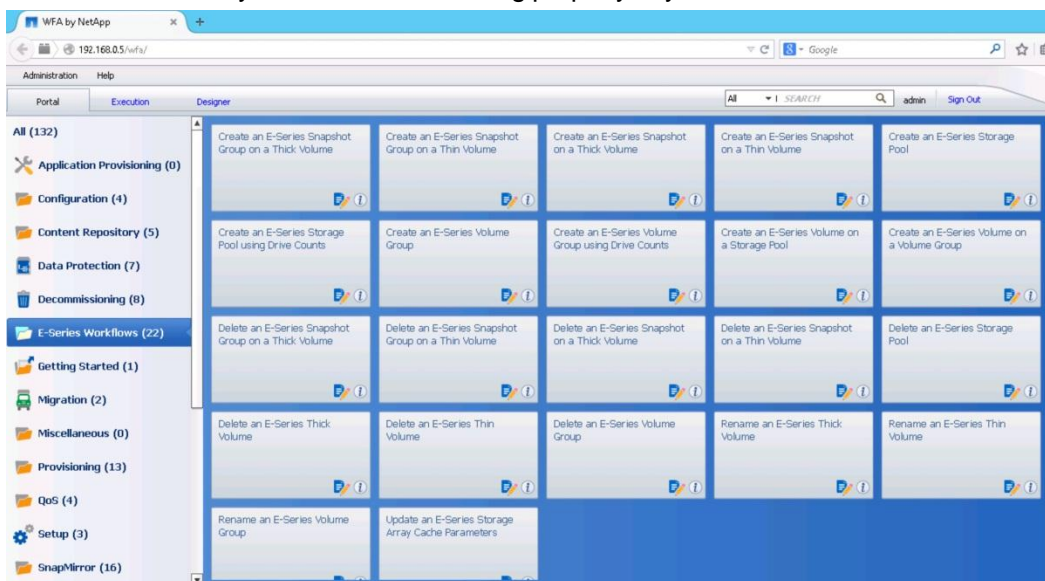
- Add SANtricity Web Services Proxy server and WFA server credentials to the WFA database in the Execution > Credentials window as type Other. Make sure the login and password match the user name and password entered in the Data Sources window from step 7. When completed, the Credentials window should have entries similar to the bottom two rows. Note in this example, the IP address of the Web Services Proxy is 10.113.209.126, but should match your IP address instead.

Administration Help				
Execution Designer Storage Automation Store				
Credentials				
Type	Name/IP Address	Host Name	Login	Match
ONTAP	.		admin	Pattern
Other	10.113.209.126		eseries	Exact
Other	127.0.0.1		eseries	Exact

- Update the Web Services Proxy template in Designer > Templates under E-Series Web Services Proxy Defaults, and change the IP address and port to match your Web Services Proxy configuration:



- Test the WFA workflows under Portal > E-Series Workflows against your test and development environment to verify automation is working properly in your E-Series environment.



## References

More information about OnCommand Workflow Automation can be found from the following websites:

- OnCommand Workflow Automation download webpage:  
<http://mysupport.netapp.com/NOW/cgi-bin/software/?product=OnCommand+Workflow+Automation&platform=Windows>



- NetApp Community webpage for OnCommand storage management software articles and resources, including the Storage Services Pack:  
[http://community.netapp.com/t5/OnCommand-Storage-Management-Software-Articles-and-Resources/tkb-p/oncommand-storage-management-software-articles-and-resources/label-name/workflow%20automation%20\(wfa\)?labels=workflow+automation+%28wfa%29](http://community.netapp.com/t5/OnCommand-Storage-Management-Software-Articles-and-Resources/tkb-p/oncommand-storage-management-software-articles-and-resources/label-name/workflow%20automation%20(wfa)?labels=workflow+automation+%28wfa%29)
- NetApp Community webpage for OnCommand storage management software discussions:  
[http://community.netapp.com/t5/forums/filteredbylabelpage/board-id/oncommand-storage-management-software-discussions/label-name/workflow%20automation%20\(wfa\)](http://community.netapp.com/t5/forums/filteredbylabelpage/board-id/oncommand-storage-management-software-discussions/label-name/workflow%20automation%20(wfa))

## Version History

Version	Date	Document Version History
Version 1.0	December 2014	Initial documentation release.

Refer to the [Interoperability Matrix Tool \(IMT\)](#) on the NetApp Support site to validate that the exact product and feature versions described in this document are supported for your specific environment. The NetApp IMT defines the product components and versions that can be used to construct configurations that are supported by NetApp. Specific results depend on each customer's installation in accordance with published specifications.

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