



Prerequisites for installing Workflow Automation

OnCommand Workflow Automation 5.1

NetApp
June 11, 2024

Table of Contents

- Prerequisites for installing Workflow Automation 1
 - Required configuration information 1
 - Install Perl modules on CentOS and RHEL 2

Prerequisites for installing Workflow Automation

Before installing OnCommand Workflow Automation (WFA), you must ensure that you have the required information and you have completed certain tasks.

Before you install WFA on a system, you must have completed the following tasks:

- Downloading the WFA installation file from the NetApp Support Site and copying the file to the server on which you want to install WFA



You must have valid credentials to log in to the NetApp Support Site. If you do not have valid credentials, you can register on the NetApp Support Site to obtain the credentials.


- Verifying that the system has access to the following, as applicable:
 - Storage controllers
 - Active IQ Unified Manager




If your environment requires Secure Shell (SSH) accessibility, you must ensure that SSH is enabled on the target controllers.

- Verifying that Perl v5.10.1 is installed

Required configuration information

Unit or system	Details	Purpose
Arrays	<ul style="list-style-type: none">• IP address• User name and password	Perform operations on storage systems  Root or admin account credentials are required for storage (arrays).
External repositories such as OnCommand Balance and custom databases	<ul style="list-style-type: none">• IP address• User name and password of a read-only user account	Acquire dataYou must create the relevant WFA content, such as dictionary entries and cache queries for the external repositories, in order to acquire data from the external repositories.

Unit or system	Details	Purpose
Mail server	<ul style="list-style-type: none"> • IP address • User name and password <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  <p>User name and password are required if your mail server requires authentication.</p> </div>	Receive WFA notifications through email
AutoSupport server	<ul style="list-style-type: none"> • Mail host 	Send AutoSupport messages through SMTP. If you do not have a mail host configured, you can use HTTP or HTTPS to send AutoSupport messages.
Microsoft Active Directory (AD) LDAP server	<ul style="list-style-type: none"> • IP address • User name and password • Group name 	Authenticate and authorize using AD LDAP or AD LDAPS
SNMP management application	<ul style="list-style-type: none"> • IP address • Port 	Receive WFA SNMP notifications
Syslog server	<ul style="list-style-type: none"> • IP address 	Send log data

Related information

[NetApp Support](#)

Install Perl modules on CentOS and RHEL

Some Perl modules are not included by default with the Perl package for Linux.

During WFA installation, the WFA installer verifies that all of the Perl modules are available in the system, and then proceeds when this requirement is met. You must install the Perl modules before installing OnCommand Workflow Automation (WFA).



The WFA installer attempts to install the Perl modules automatically if the perl-modules are available in the yum repositories configured on the system. If the Perl modules are not available, the installer prompts the user to install the Perl modules manually. The one exception is the "perl-core" module. This module is not installed on the system automatically even if it is available in the yum repositories configured on the system. This is a known issue.

Perl Module	RPM Package Name
Perl core modules	perl-core

Perl Module	RPM Package Name
DBI	perl-DBI
XML::DOM	perl-XML-DOM
Term::ReadKey	perl-TermReadKey
HTTP::Request	perl-libwww-perl
XML::LibXML perl-XML-LibXML	perl-XML-LibXML
DBD::mysql	perl-DBD-MySQL
URI::URL	perl-URI
HTTP::Response	perl-libwww-perl
HTTP::Headers	perl-libwww-perl
Net::SSLeay	perl-Net-SSLeay
URI::Escape	perl-URI
LWP::Protocol::https perl-LWP-Protocol-https	perl-LWP-Protocol-https
XML::Parser	perl-XML-Parser
LWP::UserAgent	perl-libwww-perl
Net::LDAP	perl-LDAP
Date::Calc	perl-Date-CalcXML

Steps

1. Log in to the Linux server as a `root` user.
2. Verify that all of the Perl modules required for WFA are installed on the system:

```
./WFA-4.2.0.0.0.bin -l
```
3. If any Perl modules are not detected, check whether they are available in the configured repository:

```
yum search Perl-module-name
```

If the `DBD::mysql` module is not detected:

```
yum search perl-DBD-MySQL
```

4. If any Perl modules are not in the repository, configure the repository that contains the Perl module, or download the Perl module from the Internet.
5. Install any missing Perl modules from the configured repository:

```
yum -y install Perl-module-name
```

Install the DBD::mysql module from the configured repository:

```
yum -y install perl-DBD-MySQL
```

Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.