



# OpenStack data collector

## Cloud Insights

Tony Lavoie

February 27, 2020

This PDF was generated from [https://docs.netapp.com/us-en/cloudinsights/task\\_dc\\_openstack.html](https://docs.netapp.com/us-en/cloudinsights/task_dc_openstack.html) on April 21, 2020. Always check docs.netapp.com for the latest.

# Table of Contents

- OpenStack data collector ..... 1
  - Requirements ..... 1
  - Configuration ..... 2
  - Advanced configuration ..... 2
  - Troubleshooting ..... 2

# OpenStack data collector

The OpenStack (REST API / KVM) data collector acquires inventory data for all OpenStack instances, and optionally, VM performance data.

## Requirements

- IP address of the OpenStack controller
  - OpenStack admin role credential and sudo access to the Linux KVM hypervisor. If you are not using the admin account or admin equivalent privileges, you will need to use trial and error to identify the default policies to relax for your data collector userid.
  - The OpenStack Ceilometer module must be installed and configured for performance collection. Configuring the Ceilometer is done by editing the nova.conf file for each hypervisor and then restarting the Nova Compute service on each hypervisor. The option name changes for different releases of OpenStack:
    - Icehouse
    - Juno
    - Kilo
    - Liberty
    - Mitaka
    - Newton
    - Ocata
  - For CPU stats, “compute\_monitors=ComputeDriverCPUMonitor” needs to be turned on in /etc/nova/nova.conf on compute nodes.
  - Port requirements:
    - 5000 for http and 13000 for https, for the Keystone service
    - 22 for KVM SSH
    - 8774 for Nova Compute Service
    - 8776 for Cinder Block Service
    - 8777 for Ceilometer Performance Service
    - 9292 for Glance Image Service
- Note** The port binds to the specific service, and the service may run on the controller or another host in larger environments.

# Configuration

Field	Description
OpenStack Controller IP Address	IP address or fully-qualified domain name of the OpenStack Controller
OpenStack Administrator	User name for an OpenStack Admin
OpenStack Password	Password used for the OpenStack Admin
OpenStack Administrator Tenant	OpenStack Administrator Tenant name
KVM Sudo User	KVM Sudo User name
Choose 'Password' or 'OpenSSH Key File' to specify credential type	Credential type used to connect to the device via SSH
Full Path to Inventory Private Key	Full Path to Inventory Private Key
KVM Sudo Password	KVM Sudo Password

## Advanced configuration

Field	Description
Enable hypervisor inventory discovery through SSH	Check this to enable hypervisor inventory discovery through SSH
OpenStack Admin URL port	OpenStack Admin URL port
Use HTTPS	Check to use secure HTTP
SSH Port	Port used for SSH
SSH Process Retries	Number of inventory retry attempts
Inventory Poll Interval (min)	Interval between inventory polls. The default is 20 minutes.

## Troubleshooting

Some things to try if you encounter problems with this data collector:

### Inventory

Problem:	Try this:
"Configuration error" with error messages start with "Policy doesn't allow" or "You are not authorized"	<ul style="list-style-type: none"><li>* Check ip address</li><li>* Check User name and password</li></ul>

Additional information may be found from the [Support](#) page or in the [Data Collector Support Matrix](#).

## Copyright Information

Copyright © 2019–2020 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## 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.