



Configuration and Supported Devices

Cloud Insights

Dave Grace , Tony Lavoie

April 23, 2020

This PDF was generated from <https://docs.netapp.com/us-en/cloudinsights/faq-config-support.html> on April 24, 2020. Always check docs.netapp.com for the latest.

Table of Contents

- Configuration and Supported Devices 1
 - Does Cloud Insights make changes to my environment? 1
 - What permission-level access does Cloud Insights need to my devices? 1
 - How often does Cloud Insights collect information? 1
 - What is Cloud Insights’s impact to my Environment? 1
 - How can I list all the hosts/VM’s in Cloud Insights? 1
 - Does Cloud Insights provide the same type of support for related non-hypervisor hosts (i.e. physical servers)? 2
 - Does Cloud Insights provide the same device metric depth (parity) across heterogenous environments? 2
 - Does Cloud Insights support Fibre Channel switches? 2

Configuration and Supported Devices

This FAQ answers common questions about Cloud Insights configuration and supported devices.

Does Cloud Insights make changes to my environment?

No. Cloud Insights is a read-only tool that gathers information about your environment. Cloud Insights never makes any changes to your assets or configurations.

What permission-level access does Cloud Insights need to my devices?

In most cases where the device supports it, a read-only access is all that is required. There are some solutions that do not permit read-only access and thus would require the appropriate elevated permissions.

How often does Cloud Insights collect information?

Cloud Insights typically collects performance data every 5 minutes and discovery of logical and physical constructs every ½ hr. Cloud Insights sets the default polling intervals according to suggested best practices and scalability but does permit the user complete control over these intervals.

What is Cloud Insights's impact to my Environment?

Cloud Insights's agentless, out-of-band and passive IP communications help minimize setup, maintenance and impact to the data center ecosystem. Cloud Insights's performance development team takes great measures to minimize any impact to the Data center's performance in activities of monitoring performance itself. Impact is considered negligible in normal operating environments and can be relaxed or tightened in highly utilized or underperforming technology platforms. See the Cloud Insights Installation Guide for more information.

How can I list all the hosts/VM's in Cloud Insights?

Cloud Insights's compliment of widgets and query-listing possibilities can be used to provide inventory style listings for Data Center assets. Listings of Virtual Machines down to the spindles and numerous constructs in between can all be made available to queries, widgets, dashboards, and data warehouse reporting, and are accessible through the RESTful API.

Does Cloud Insights provide the same type of support for related non-hypervisor hosts (i.e. physical servers)?

Hypervisors such as VMware provide detailed information on the ESXI hosts and their virtual machines (VMs). For physical servers, Cloud Insights collects metrics up to the host HBA. Cloud Insights employs a unique method in which it discovers physical servers using a patent-pending technology. Once storage and/or switches are discovered, host names for physical servers are contained within the fabric alias information. Cloud Insights selects these host names, matches them in DNS, and automatically brings the hosts into Cloud Insights. This technique greatly minimizes the need for manual entry updates and tool inventory maintenance.

Does Cloud Insights provide the same device metric depth (parity) across heterogeneous environments?

There are varying degrees of standardizing, commonality and nomenclature across 3rd party platforms and vendor technologies. Cloud Insights attempts to normalize capacity and performance information into a consistent framework. Some capacity and performance metrics are provided natively from the device's counters, such as IOPs, latency and raw capacity. When counters are not provided, Cloud Insights can attempt to summarize the values (for example, by totaling the IOPs or capacities of underlying volumes), and in cases where neither is available, Cloud Insights will attempt to derive the metric values through various computational algorithms. Cloud Insights provides a generic SNMP integration capability to incorporate additional metrics not currently collected by Cloud Insights today.

Does Cloud Insights support Fibre Channel switches?

Yes, In addition to gathering data from your storage assets, Cloud Insights also acquires Inventory and Performance data from Cisco, Brocade and QLogic switches in your environment.

==Are topology views of the whole infrastructure available? Does Cloud Insights show “end-to-end visibility”?

Yes, Cloud Insights dynamically discovers and maps the logical and physical constructs, providing an interactive end-to-end topology view of Compute, Fabrics, Virtualizers and back-end Storage. Topology icons allow quick launch navigation to impacted resources and aid in identification of workloads & violations in shared storage environments.

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.