

Veritas InfoScale™
Enterprise Cluster
Communication
Management Pack Guide
for Microsoft SCOM 2012

Last updated: 2017-04-27

Legal Notice

Copyright © 2017 Veritas Technologies LLC. All rights reserved.

Veritas and the Veritas Logo are trademarks or registered trademarks of Veritas Technologies LLC or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

This product may contain third party software for which Veritas is required to provide attribution to the third party ("Third Party Programs"). Some of the Third Party Programs are available under open source or free software licenses. The License Agreement accompanying the Software does not alter any rights or obligations you may have under those open source or free software licenses. Refer to the third party legal notices document accompanying this Veritas product or available at:

<https://www.veritas.com/about/legal/license-agreements>

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Veritas Technologies LLC and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. VERITAS TECHNOLOGIES LLC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, et seq. "Commercial Computer Software and Commercial Computer Software Documentation," as applicable, and any successor regulations, whether delivered by Veritas as on premises or hosted services. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Veritas Technologies LLC
500 E Middlefield Road
Mountain View, CA 94043

<http://www.veritas.com>

Technical Support

Technical Support maintains support centers globally. All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policies. For information about our support offerings and how to contact Technical Support, visit our website:

<https://www.veritas.com/support>

You can manage your Veritas account information at the following URL:

<https://my.veritas.com>

If you have questions regarding an existing support agreement, please email the support agreement administration team for your region as follows:

Worldwide (except Japan)

CustomerCare@veritas.com

Japan

CustomerCare_Japan@veritas.com

Documentation

Make sure that you have the current version of the documentation. Each document displays the date of the last update on page 2. The latest documentation is available on the Veritas website:

<https://sort.veritas.com/documents>

Documentation feedback

Your feedback is important to us. Suggest improvements or report errors or omissions to the documentation. Include the document title, document version, chapter title, and section title of the text on which you are reporting. Send feedback to:

doc.feedback@veritas.com

You can also see documentation information or ask a question on the Veritas community site:

<http://www.veritas.com/community/>

Veritas Services and Operations Readiness Tools (SORT)

Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT_Data_Sheet.pdf

Contents

Chapter 1	About Veritas Cluster Communication Management Pack	5
	Overview	5
	List of SCOM rules for collecting GAB / LLT events	6
Chapter 2	Deploying the Veritas Cluster Communication Management Pack	8
	Supported software	8
	Prerequisite	8
	Importing the Veritas Cluster Communication Management Pack	9
Chapter 3	Veritas Cluster Communication Management Pack monitoring alerts	10
	About monitoring alerts	10
	GAB monitoring alerts	10
	LLT monitoring alerts	11

About Veritas Cluster Communication Management Pack

This chapter includes the following topics:

- [Overview](#)
- [List of SCOM rules for collecting GAB / LLT events](#)

Overview

The Veritas Cluster Communication Management Pack is required to monitor the components which are used for cluster communication. Typically, these components are GAB, and LLT components. GAB, and LLT components are part of Veritas InfoScale Availability (VCS), however, these components are also used in few InfoScale Storage deployments, and configuration scenarios. Having the Veritas Cluster Communication Management Pack installed in the System Center Operations Manager (SCOM) environment helps administrator to identify potential issues in the cluster communications

[Table 1-1](#) lists the management pack file name and description of the Veritas Cluster Communication Management Pack for System Center Operations Manager.

Table 1-1 Veritas Cluster Communication Management Pack: file name and description

File name	Description
Veritas.Cluster.Communication.mp	This management pack contains GAB, and LLT specific rules and alerts.

The Veritas Cluster Communication Management Pack, Veritas.Cluster.Communication.mp, is a sealed management pack that contains rules to monitor the following components in a SCOM monitoring environment:

Table 1-2 Veritas Cluster Communication Management Pack: components monitored

Component name	Description
GAB	Group Membership Services/Atomic Broadcast (GAB) is responsible for cluster membership and cluster communications. The Management Pack monitors the status of the cluster memberships and communications.
LLT	Low Latency Transport (LLT) is responsible for private network communications between cluster nodes. LLT functions as a high-performance, low-latency replacement for the IP stack, and is used for all cluster communications. The Management Pack monitors the LLT status.

The Veritas Cluster Communication Management Pack contains the following components:

- Monitor for Veritas VCSComm Startup service
 This monitor represents the current state of Veritas VCSComm Startup service. While the service is running the state is displayed as healthy. However, in case of a failure the state is displayed as critical.
- One target named 'Veritas Cluster Communication Servers'
 This target represents the nodes with GAB / LLT installed.
- Rules to collect GAB / LLT specific events
 The Veritas Cluster Communication Management Pack contains the rules which collect events from GAB / LLT components, and generate alerts for critical GAB / LLT errors.

List of SCOM rules for collecting GAB / LLT events

Veritas Cluster Communication Management Pack contains the following rules to collect various events:

- GAB source with severity as “error”
- GAB source with severity as “warning”
- GAB source with severity as “information”
- LLT source with severity as “error”

- LLT source with severity as “warning”
- LLT source with severity as “information”
- VCSCComm source with severity as “error”

'GAB information events collection rule', and 'LLT information events collection rule' are disabled by default. To collect and display Information events, you need to manually enable rules using overrides for a particular event source. For information about how to enable rules using overrides, refer to Microsoft System Center Operations Manager 2012 documentation.

Note: The target for these rules is 'Veritas Cluster Communication Servers'.

Deploying the Veritas Cluster Communication Management Pack

This chapter includes the following topics:

- [Supported software](#)
- [Prerequisite](#)
- [Importing the Veritas Cluster Communication Management Pack](#)

Supported software

The Veritas Cluster Communication Management Pack is compatible with the following product versions:

- Microsoft System Center Operations Manager 2012 SP1
- Microsoft System Center Operations Manager 2012 R2

Prerequisite

Verify that Operations Manager 2012 infrastructure is set up and configured correctly. See the Microsoft System Center Operations Manager 2012 documentation for more information for setup and configuration.

Importing the Veritas Cluster Communication Management Pack

Use the following procedure to import the Veritas Cluster Communication Management Pack, `Veritas.Cluster.Communication.mp`.

To import the Veritas Cluster Communication Management Pack for SCOM

- 1 Log on to the computer with an account that is a member of the Operations Manager Administrators role for the Operations Manager management group.
- 2 In the Operations Console, click **Administration**.
- 3 Under Required Configuration Tasks: section, click **Required: Import management packs** to launch Import Management Packs wizard.
- 4 Click **Add**, and then click **Add from disk**.
- 5 The Select Management Packs to import dialog box appears. Change to the directory that holds the Veritas Cluster Communication Management Pack file, select the management pack **Veritas.Cluster.Communicaiton.mp** and then click **Open**.
- 6 On the Select Management Packs page, the management pack that you selected for import is listed. A green check mark indicates that the management pack can be imported. Click **Import**.

A red error icon indicates that the management pack is dependent on one or more management packs that are not in the Import list and are not available in the catalog. To view the missing management packs, click **Error** in the Status column. To remove the management pack with the error from the Import list, right-click the management pack, and then click **Remove**.

- 7 The Import management packs page appears and shows the progress for management pack. Each management pack is downloaded to a temporary directory, imported to Operations Manager, and then deleted from the temporary directory. If there is a problem at any stage of the import process, select the management pack in the list to view the status details. Click **Close**.

After successfully importing the Veritas Cluster Communication Management Pack, to view the alerts which are generated from Veritas Cluster Communication Servers, you may first need to create desired view in the Operations Manager console. When creating a view, specify 'Veritas Cluster Communication Servers' as a target.

Veritas Cluster Communication Management Pack monitoring alerts

This chapter includes the following topics:

- [About monitoring alerts](#)
- [GAB monitoring alerts](#)
- [LLT monitoring alerts](#)

About monitoring alerts

This chapter lists the monitoring alerts for GAB / LLT components. Depending on the alert that has been set for an event, an appropriate alert is generated. An alert notifies the administrator about the event that triggered the alert.

GAB monitoring alerts

[Table 3-1](#) lists the GAB alerts which are included in this management pack.

Table 3-1 GAB monitoring alerts

Event source	Event ID	Event message	Alert severity
GAB	20045	Incorrect protocol message	Error
GAB	20050	Protocol error: recv div_seq <sequence number>	Error

LLT monitoring alerts

Table 3-2 lists the LLT alerts which are included in this management pack.

Table 3-2 LLT monitoring alerts

Event source	Event ID	Event message	Alert severity
LLT	10085	LLT protocol is unbinding from link name	Error
LLT	10463	bad msg checksum	Error
LLT	10030	duplicate cluster <cluster id> node <node id> detected, link <link id> (<link identifier>), address <MacAddress>	Error

This management pack also generates alerts for all error type events from VCSComm source.