MySQL Cluster Manager 1.1 Release Notes

Abstract

This document contains information about changes in successive versions of MySQL Cluster Manager 1.1, starting with the most recent release (MySQL Cluster Manager 1.1.6). Changes in previous MySQL Cluster Manager releases can be found afterwards, ordered from newest to oldest.

For additional MySQL Cluster Manager 1.1 documentation, see http://dev.mysql.com/doc/mysql-cluster-manager/1.1/en/.

MySQL Cluster Manager 1.1 has been superseded by MySQL Cluster Manager 1.2, which adds new features and incorporates fixes to bugs found in MySQL Cluster Manager 1.1. MySQL Cluster Manager 1.1 is now considered obsolete, and is no longer available for new installations; users of MySQL Cluster Manager 1.1 should upgrade to MySQL Cluster Manager 1.2. Documentation for the most recent MySQL Cluster Manager 1.2 release can be found at http://dev.mysql.com/doc//mysql-cluster-manager/1.2/en/. You can obtain documentation for the most recent releases of MySQL Cluster and related products at http://dev.mysql.com/doc//index-cluster.html.

For legal information, see the Legal Notices.

Document generated on: 2013-11-11 (revision: 2164)

Table of Contents

Preface and Legal Notices	. 1
Changes in MySQL Cluster Manager 1.1.6 (2012-05-30)	. 3
Changes in MySQL Cluster Manager 1.1.5 (2012-03-29)	. 3
Changes in MySQL Cluster Manager 1.1.4 (2012-02-15)	. 3
Changes in MySQL Cluster Manager 1.1.3 (Not released)	. 4
Changes in MySQL Cluster Manager 1.1.2 (2011-09-15)	. 4
Changes in MySQL Cluster Manager 1.1.1 (2011-07-11)	. 5

Preface and Legal Notices

Preface and Legal Notices

This document contains information about changes in successive versions of MySQL Cluster Manager 1.1, starting with the most recent release (MySQL Cluster Manager 1.1.6). Changes in previous MySQL Cluster Manager releases can be found afterwards, ordered from newest to oldest.

Legal Notices

Copyright © 2009, 2013, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. MySQL is a trademark of Oracle Corporation and/or its affiliates, and shall not be used without Oracle's express written authorization. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this material is subject to the terms and conditions of your Oracle Software License and Service Agreement, which has been executed and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced, or distributed to anyone outside Oracle without prior written consent of Oracle or as specifically provided below. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

This documentation is NOT distributed under a GPL license. Use of this documentation is subject to the following terms:

You may create a printed copy of this documentation solely for your own personal use. Conversion to other formats is allowed as long as the actual content is not altered or edited in any way. You shall not publish or distribute this documentation in any form or on any media, except if you distribute the documentation in a manner similar to how Oracle disseminates it (that is, electronically for download on a Web site with the software) or on a CD-ROM or similar medium, provided however that the documentation is disseminated together with the software on the same medium. Any other use, such as any dissemination of printed copies or use of this documentation, in whole or in part, in another publication, requires the prior written consent from an authorized representative of Oracle. Oracle and/or its affiliates reserve any and all rights to this documentation not expressly granted above.

For more information on the terms of this license, or for details on how the MySQL documentation is built and produced, please visit MySQL Contact & Questions.

For help with using MySQL, please visit either the MySQL Forums or MySQL Mailing Lists where you can discuss your issues with other MySQL users.

For additional documentation on MySQL products, including translations of the documentation into other languages, and downloadable versions in variety of formats, including HTML and PDF formats, see the MySQL Documentation Library.

Changes in MySQL Cluster Manager 1.1.6 (2012-05-30)

This section documents all changes and bug fixes that have been applied in MySQL Cluster Manager 1.1.6 since the release of MySQL Cluster Manager version 1.1.5.

Bugs Fixed

- **Agent:** Data nodes which failed at the same time and were later restarted together could be started wrongly with the --initial option. (Bug #14057697)
- Client: MySQL Cluster Manager did not handle the allowed_values attribute in the output of ndb_config --configinfo --xml from MySQL Cluster NDB 7.2.6 and later correctly. (Bug #14047248)
- Client: In some cases the start process command reported success without actually starting the process. Subsequently, it was still necessary to use an explicit stop process command before it was possible to issue start process successfully. (Bug #13974168)
- Packaging: The 32-bit MySQL Cluster Manager 1.1.5 plus MySQL Cluster package for Oracle Linux 5 and 6 embedded the 64-bit version of MySQL Cluster. (Bug #14005113)

Changes in MySQL Cluster Manager 1.1.5 (2012-03-29)

This section documents all changes and bug fixes that have been applied in MySQL Cluster Manager 1.1.5 since the release of MySQL Cluster Manager version 1.1.4.

Bugs Fixed

- Client: After stopping and restarting the MySQL Cluster Manager Agent with a stopped cluster, all cluster nodes were shown as having added for their status rather than stopped. When the cluster was started subsequent to this, This caused MySQL Cluster Manager to perform an initial start of the data nodes, resulting in the loss of the cluster's data. (Bug #13854142, Bug #13823551)
- Client: Changes in some node configuration attributes require data nodes to be restarted with the -initial option, but do not require a system restart. Setting any of these attributes while the cluster was
 stopped caused all data nodes to be started with the --initial option, resulting in the loss of MySQL
 Cluster data.

Now in such cases, the set command used to make the change is rejected with an error. The operator can then wait until the cluster is running before trying to change one of these attributes; this update can then be made safely using a rolling restart of the cluster.

Changes in MySQL Cluster Manager 1.1.4 (2012-02-15)

This section documents all changes and bug fixes that have been applied in MySQL Cluster Manager 1.1.4 since the release of MySQL Cluster Manager version 1.1.2.

Functionality Added or Changed

• Client: Added the --verbose option for create cluster and add process to provide more detailed output from these commands. Using this option causes the command to return a list of affected MySQL Cluster processes, including their node IDs, process types, and the hosts on which they reside.

Bugs Fixed

• The links provided in the distribution README file for online documentation and support were out of date, and have been corrected. (Bug #12999855, Bug #13030054)

Changes in MySQL Cluster Manager 1.1.3 (Not released)

MySQL Cluster Manager 1.1.3 was not released. Users of MySQL Cluster Manager 1.1.2 should upgrade to the latest release (MySQL Cluster Manager 1.1.6).

Changes in MySQL Cluster Manager 1.1.2 (2011-09-15)

This section documents all changes and bug fixes that have been applied in MySQL Cluster Manager 1.1.2 since the release of MySQL Cluster Manager version 1.1.1.

Quick Test Setup of MySQL Cluster

• Agent; Important Change: Added the --bootstrap option for mcmd. Starting the agent with this option causes it to create and start a single-machine MySQL Cluster on the current host. This cluster —named mycluster—has a default configuration suitable for simple testing. mycluster consists of 1 management node, 2 data nodes (both using ndbd), and 2 SQL nodes, with an open connection slot available for an additional API node. The data nodes are configured by default to use 75 MB for data memory and 15 MB for index memory.

For more information, see Starting and Stopping the MySQL Cluster Manager Agent.

Bundled MySQL Cluster

• Important Change; Packaging: It is no longer necessary to download and install MySQL Cluster Manager and MySQL Cluster separately; all MySQL Cluster Manager 1.1.6 packages include the MySQL Cluster NDB 7.1.15a binary distribution. Following installation, the MySQL Cluster distribution may be found in the cluster directory, under the MySQL Cluster Manager installation directory.

mcm Command-Line Client

• Important Change: The MySQL Cluster Manager distribution now includes its own command-line client mcm, which can be found in the installation bin directory. mcm can be used in place of the mysql client, and reduces the number of options required to connect to the MySQL Cluster Manager agent.

An mcm (or mcm.exe) binary on a given host can connect to mcmd (or mcmd.exe) running on a host that uses a different operating system or hardware; the communication protocol used by MySQL Cluster Manager is platform-agnostic.

It is still possible for a standard mysql client to connect to a MySQL Cluster Manager agent; this can be used to administer clusters from hosts where the mcm client is unavailable.

For more information, see Starting the MySQL Cluster Manager Client.

Bugs Fixed

• Agent: If DNS lookup fails while mcmd is attempting to connect to a cluster mysqld process by host name, mcmd retries the connection using IP address 127.0.0.1. However, the retry failed because the MySQL client library treated it as an attempt to connect using a socket, rather than by TCP. Now in such cases, the client library's behavior is overridden so that the retry is always made using TCP and IP address 127.0.0.1. (Bug #12915751)

 Although MySQL Cluster data nodes must use node IDs in the range 1-48 inclusive (see Limits and Differences of MySQL Cluster from Standard MySQL Limits), it was possible for data nodes to be assigned IDs outside this range. Now MySQL Cluster Manager reserves this range of node IDs for data nodes. (Bug #11766629, Bug #59778)

Changes in MySQL Cluster Manager 1.1.1 (2011-07-11)

This section documents all changes and bug fixes that have been applied in MySQL Cluster Manager 1.1.1 since the release of MySQL Cluster Manager version 1.1.0.

Functionality Added or Changed

- Agent; Incompatible Change: The identifiers mysql-cluster-manager and mysql-proxy have been replaced with mcmd. This has the following effects:
 - The script bin/mysql-cluster-manager used to start the MySQL Cluster Manager agent is now bin/mcmd.
 - 2. The name of the default agent configuration file etc/mysql-cluster-manager.ini has been changed to etc/mcmd.ini.
 - 3. The default agent log file mysql-cluster-manager.log is now named mcmd.log.
 - 4. The default PID file mysql-cluster-manager.pid, if used, is now named mcmd.pid.
 - 5. Within the agent configuration file, the [mysql-proxy] section heading has been replaced with the heading [mcmd].

These changes are not compatible with previous versions of MySQL Cluster Manager. In particular, the old configuration file section heading [mysql-cluster-manager] is not recongized by MySQL Cluster Manager 1.1.1 and later; you must use [mcmd] instead.

- Agent; Important Change: When starting the MySQL Cluster Manager agent, the --defaults-file option is no longer required. The agent now tries by default to find and use the configuration file etc/mcmd.ini (in the MySQL Cluster Manager installation directory). The default can still be overridden using this option. See Starting and Stopping the MySQL Cluster Manager Agent, for more information.
- Client; Important Change: Formerly, the show status client command required the use of one of the options --cluster (short form: -c), --operation (-o), or --process (-r). Now, if none of these options is specified, --cluster is assumed. For more information, see The show status Command.
- Client; Important Change: Added the stop agents client command, which can be used to stop one, some, or all of the MySQL Cluster Manager agents in a given management site.

For more information, see The stop agents Command.

• Important Change: MySQL Cluster Manager now supports multiple clusters. Each process-host used by a cluster, as specified in the --processhosts (-R) option of the create cluster command used to create that cluster, must not be used in any other cluster.

See The create cluster Command.

Bugs Fixed

 Agent: The MySQL Cluster Manager Agent failed to start when the agent configuration file had the wrong Unix permissions. (Bug #11766449) References: See also Bug #11907655.

- **Agent:** The MySQL Cluster Manager agent failed to start when the same path was used for log-file and manager-directory. (Bug #11756597)
- **Agent:** Trying to start a cluster whose management server used a port already in use by a management server in a different cluster timed out instead of failing with an error. (Bug #11759740, Bug #52073)

References: See also Bug #11760416, Bug #52827.

• Agent: Trying to start a cluster with an SQL node using a socket file already in use by an SQL node in a different cluster timed out instead of failing with an error. (Bug #11760416, Bug #52827)

References: See also Bug #11759740, Bug #52073.

• Client: When a site was created specifying a hostname, and IP to hostname lookup later failed, the Hosts column in the output of the list hosts command showed Unknown for that host. (Bug #11765645)