High Availability

Motadata Feature

Table of Contents

Copyright Notice

The information contained in this document represents the views and opinions of Mindarray Systems Pvt. Ltd. on the issue as of the date of publication. Because of the dynamic nature of the IT Industry and the technology that is behind it, Mindarray Systems Pvt. Ltd. can make no warranty as to the long-term accuracy of the assessment. These materials are confidential and proprietary to Mindarray Systems Pvt. Ltd. and no part of these materials should be reproduced, published in any form by any means, electronic or mechanical including photocopy or any information storage or retrieval system, nor should the material be disclosed to third parties without the express written authorization of Mindarray Systems Pvt. Ltd. Information in this document is subject to change without notice and does not represent a commitment on the part of Mindarray Systems Pvt. Ltd.

Notices

PLEASE READ THIS SOFTWARE LICENSE AGREEMENT CAREFULLY BEFORE DOWNLOADING OR USING THE SOFTWARE. BY CLICKING ON THE "I ACCEPT THE TERMS OF THE LICENSE AGREEMENT" BUTTON, OPENING THE PACKAGE, DOWNLOADING THE PRODUCT, OR USING THIS PRODUCT, YOU ARE CONSENTING TO BE BOUND BY THIS AGREEMENT. IF YOU DO NOT AGREE WITH ALL OF THE TERMS OF THIS AGREEMENT, CLICK THE "I DO NOT ACCEPT THE TERMS OF THE LICENSE AGREEMENT" BUTTON AND THE INSTALLATION PROCESS WILL NOT CONTINUE. RETURN THE PRODUCT TO THE PLACE OF PURCHASE FOR A FULL REFUND, OR DO NOT DOWNLOAD THE PRODUCT. YOUR GENERAL TERMS OF BUSINESS DO NOT APPLY.

General
In this software license agreement:
a) "Mindarray" means Mindarray Systems Pvt Ltd., 14/3, Magnet Corporate Park. 100 Feet Road, S.G Highway, Near Sola Bridge Opp. Grand Cambay, Thaltej, Ahmedabad, Gujarat. India.
b) "Customer" means the individual(s), organization or business entity buying a license of the software from Mindarray or its distributors or its resellers.
c) "Software" means computer programs (and their storage medium) supplied by Mindarray and known collectively as "Mindarray IP Address Manager" in which Mindarray has propriety rights for its any user manuals, example code, operating instructions, brochures and all other documentation relating to the said computer programs (the expression "software" to include all or any part or any combination of software).

License Grant
This license grants you the following rights:
  a) Software product: Mindarray grants to you an exclusive license to use the software for the sole purposes of designing, developing, and testing your software components or applications ("applications"). You may install the software on any computer in your organization.
  b) Electronic documents: Solely with respect to electronic documents included with the software, you may make an unlimited number of copies (either in hardcopy or electronic form), provided that such copies shall be used only for internal purposes and are not republished or distributed to any third party.
  c) License file: A file provided at the time of sale uniquely identifies each license. This license grant is contingent upon the purchase of a license file from Mindarray or one of Mindarray's resellers.
  d) Sample code: Mindarray grants you the right to use and modify the source code parts of the software that are listed in the "projects" and "scripts" subdirectories (if available).
  e) Redistribution: The software is made available for download solely for use by end users according to the license agreement. Any reproduction or redistribution of the software not in accordance with the license agreement is expressly prohibited.
  f) Trial software: If the software is installed without a serial number then, notwithstanding other sections of this license, you may use the software for up to 30 days after installation.
  g) Not for resale software: If the software is labeled as "not for resale " or "NFR" then, notwithstanding other sections of this license, you may not resell, or otherwise transfer the value of software, neither distribute any redistributables.
  h) Reservation of rights: Mindarray reserves all rights not expressly granted to you in this license agreement. The license is granted to the customer on a non-exclusive-basis which means that Mindarray will grant the license also to their individuals, organizations and business entities.
  i) This license agreement consists of no obligations for Mindarray to offer support (services), help (services) or maintenance (services) relating to the software. Obligations for Mindarray to offer maintenance (services) relating to the software can only arise from a maintenance agreement between Mindarray and customer. General terms of business of the customer do not apply.

Upgrades and Supplements
If the software is labeled as an upgrade, you must be properly licensed to use a product identified by Mindarray as being eligible for the upgrade in order to use the software. Software labeled as an upgrade replaces and/or supplements the product that formed the basis for your eligibility for the upgrade. You may use the resulting upgraded product only in accordance with the terms of this license unless we provide other terms along with the update or supplement. If the software is an upgrade of a component or a package or software programs that you licensed as a single product, the software may be used and transferred only as part of that single product package.

Limitation on Reverse Engineering, Decompilation, And Disassembly
Customer may not reverse engineer, decompile, or disassemble the software, except and only to the extent that it is expressly permitted by applicable law notwithstanding this limitation.

Termination
Without prejudice to any other rights, Mindarray may cancel or dissolve this license agreement if the customer does not abide by the terms and conditions of this license agreement, in which case customer must destroy all copies of the software and all of its component parts.

Limited Warranty
Mindarray warrants that for a period of ninety (90) days from the date of shipment from Mindarray. The media on which the software is furnished will be free of defects in materials and workmanship under normal use.

The software substantially conforms to its published specifications. Except for the foregoing, the software is provided as is. This limited warranty extends only to the customer as the original licensee. Customer's exclusive remedy and the entire liability of Mindarray and its suppliers under this limited warranty will be, at Mindarray or its service center's option, repair, replacement, or refund of the software if reported (or, upon request, returned) to the party supplying the software to the customer. In no event does Mindarray warrants that the software is error-free or that customer will be able to operate the software without problems or interruptions. The customer will safeguard Mindarray against any claim relating to the use of the software by the customer. This warranty does not apply if the software: (a) has been altered, except by Mindarray; (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Mindarray; (c) has been subjected to abnormal physical or electrical stress misuse, negligence, or accident; (d) is used in high-risk activities, including the operation of nuclear facilities, aircraft navigation, air traffic control, weapons systems, life support or medical applications for use in any circumstance in which the failure of the software could lead directly to death, personal injury or damage to properties or the environment.

Limitation of Liability and Remedies
NOTWITHSTANDING ANY DAMAGES THAT YOU MIGHT INCUR FOR ANY REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION ALL INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR MULTIPLE DAMAGES SUCH AS BUT NOT LIMITED TO, LOST BUSINESS OR PROFITS, LOSS OF GOODWILL, WORKS TOP PAGE AND DATA LOSS), THE ENTIRE LIABILITY OF MINDARRAY AND ANY OF ITS SUPPLIERS UNDER ANY PROVISION OF THIS LICENSE AGREEMENT AND YOUR EXCLUSIVE REMEDY FOR ALL OF THE FOREGOING (EXCEPT FOR ANY REMEDY OF REPAIR OR REPLACEMENT ELECTED BY MINDARRAY WITH RESPECT TO ANY BREACH OF THE LIMITED WARRANTY) SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE. MINDARRAY IS RELIEVED OF ANY OBLIGATION TO PAY DAMAGES IF THE CUSTOMER HAS NOT UPGRADED THE SOFTWARE WHEN POSSIBLE. THE FOREGOING LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS (INCLUDING SECTIONS 4, 5 AND 6 ABOVE) SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL PURPOSE.

Entire Agreement
This license agreement (including any addendum or amendment to this license agreement which is included with the software) is the entire agreement between you and Mindarray relating to the software and the support services (if any) and they supersede all prior or contemporaneous oral or written communications, proposals and representations with respect to the software or any other subject matter covered by this license agreement. To the extent the terms of any Mindarray policies or programs for support services conflict with the terms of this license agreement, the terms of this license agreement shall control.
The customer is not allowed to alienate or transfer any rights relating to this license agreement without the written approval of Mindarray.
THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE INDIAN GOVERNMENT AND THE INDIAN COURTS SHALL HAVE SOLE JURISDICTION IN ANY DISPUTE RELATING TO THESE CONDITIONS. ALL DISPUTES HEREUNDER SHALL BE RESOLVED EXCLUSIVELY IN THE APPROPRIATE COURT IN THE CITY OF AHMEDABAD, INDIA. If any part of these conditions shall be or become invalid or unenforceable in any way and to any extent by any existing or future rule of law, order, statute or regulation applicable thereto, then the other conditions shall remain in full force and effect as all other provisions.
The conditions of this license agreement remain applicable after the termination of this license agreement if this results from the nature of the condition.

Copyright
The software is protected by copyright and other intellectual property laws and treaties. Mindarray or its suppliers own the title, copyright, and other intellectual property rights in the software. The granting of a license does not constitute a transfer of any intellectual property right. The software is licensed, not sold.

1 Overview

Motadata network monitoring system (NMS) can be configured in master-slave High Availability modes for uninterrupted services. With this arrangement, your network is always monitored by NMS even in unforeseen scenarios and system failures. The whole HA setup is managed through physical connectivity to prevent any data loss or communication failure.

In master-slave mode, all your network is monitored through one NMS server (master server, master RPE and master Report DB). The master server also updates the slave NMS server (Slave server, slave RPE and slave Report DB) in real time. The slave NMS is always in standby mode for any unfortunate scenario. When the master NMS goes down, the slave NMS takes charge immediately.

The observer unit monitors the connectivity of master and slave servers. The observer decides who and when should be treated as a master. When the master server doesn't respond, observer changes the slave server into master server.

1.1 HA Terminology

Master Server: The Config DB and GUI components are stored in same server. The Config DB stores the configuration data. Based on its own and RPE inputs, Master server updates the master report DB and slave report DB. The server keeps an updated copy of its data into the slave server.

Slave Server: It is the clone of master server. The server is constantly updated by master server. When master goes down, observer unit makes this as master server.

Master RPE: The RPE unit facilitates faster monitor polling. It takes monitor information from Config DB and polls them. It forwards the information back into Master server.

Slave RPE: It is the clone of master RPE. When master RPE fails, the slave RPE works as master RPE.

Master Report DB: Report DB is the main reporting server. It talks to Master server for information sharing.
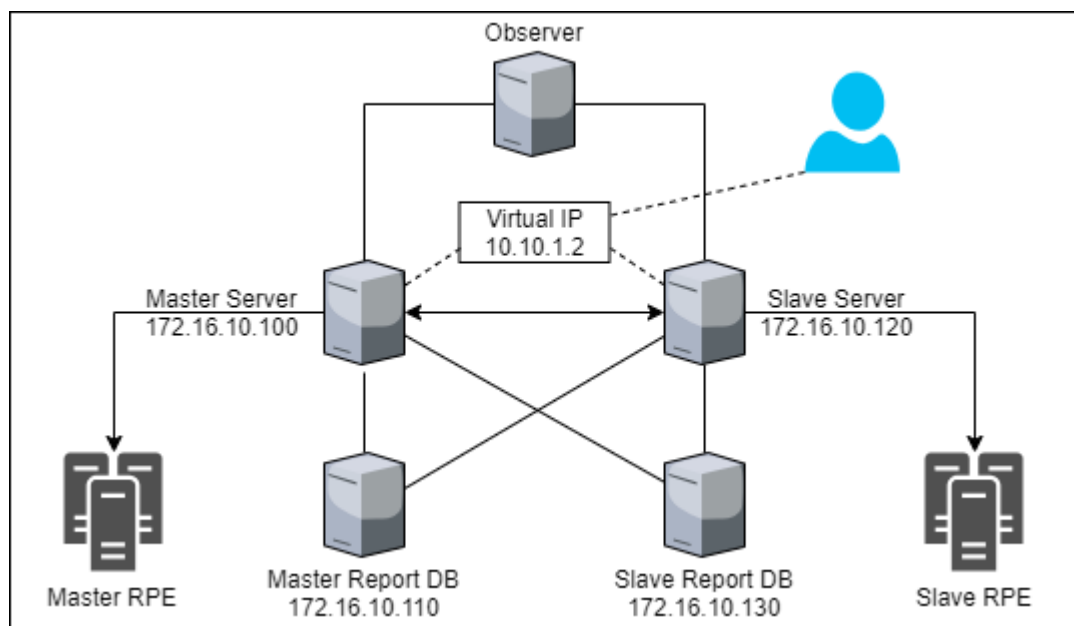
Slave Report DB: It is the clone of master report DB. It is used in case of failure.

Observer Utility: It monitors the connectivity of servers and takes decision based on it. When master server is down it configures the slave server to act as master server.

2 HA Mode

2.1 Active – Passive Mode

One NMS actively monitors your network and synchronize the information with Slave server. The slave server thus is always ready for action till the master is down. Both the servers share same configuration to communicate with master Report DB and slave Report DB. When the observer utility finds that master server is down, it redirect all the load to the slave. The slave being the clone of master acts exactly as master server and communicates with slave RPE and slave Report DB.

2.2 HA Functionality

2.2.1 Master Server is down

- The observer utility identifies that master server (172.16.10.100) is down.
- Observer makes the slave server (172.16.10.120) as new master server.
- The slave Report DB (172.16.10.130) becomes the master Report DB
- The slave RPE will be considered as master RPE.

Thus all master servers are replaced with the slave servers.

Case when Master Server Comes Up

- The observer utility doesn't take interest in making previous master (172.16.10.100) again a master.
- That means your current master server (172.16.10.120) will continue to be master until it goes down.
- Previous master (172.16.10.100) and previous master Report DB (172.16.10.110) will be new slave and gets updated by new master (172.16.10.120).

2.2.2 Master Report DB is down

- Slave Report DB (172.16.10.130) is used instead of the master Report DB.
- The master server (172.16.10.100) will continue to be the master server.
- The slave server (172.16.10.120) will experience no change and continue to act as slave server.
- Master RPE and slave RPE will function as it is.

Case when Master Report DB Comes Up

- Current master Report DB (172.16.10.130) continues to be master Report DB.
- Previous master Report DB (172.16.10.110) continues to be the slave Report DB.
- The master server (172.16.10.100) will continue to be the master server.
- Master RPE and slave RPE will function as it is.

2.2.3 When Master RPE is down

- The slave RPE is used as the new master RPE.
- The master server (172.16.10.100) will continue to be the master server.
- The master Report DB (172.16.10.110) will continue to be the master Report DB.
- The slave server (172.16.10.120) will continue to be the slave server.
- The slave Report DB (172.16.10.130) will continue to be the slave Report DB.

Case when Master RPE Comes Up

- The new master RPE will continue to be the master RPE.
- The old master RPE will become the slave RPE.
- The master server (172.16.10.100) will continue to be the master server.
- The master Report DB (172.16.10.110) will continue to be the master Report DB.
- The slave server (172.16.10.120) will continue to be the slave server.
- The slave Report DB (172.16.10.130) will continue to be the slave Report DB.

www.motadata.com | info@motadata.com

Keep in touch

www.motadata.com, sales@motadata.com,

India: +91 79-2680-0900, USA: +1 408-418-5229

About Motadata

Mindarray Systems Pvt. Ltd. a global IT product company, offers state of the art affordable yet powerful product suite - Motadata consisting of Network Management & Monitoring, Log & Flow Management, and IT Service Management Platforms. The platform empowers both IT administrators and CXOs to analyze, track & resolve IT operational issues by effectively monitoring various systems and devices from multiple vendors through a unified and centralized dashboard.

Motadata is industry's first IT ops solution that truly correlates the metric, flow and log events and turns them into actionable insights. Our global customers from Telecom, Government and Enterprise domain, rely on Motadata for proactively monitor their network infrastructure.

For more information, visit www.motadata.com.

motadata