Nimsoft Monitoring Installer for the Vblock Infrastructure Platform - User Guide

Version 1.0
Legal Notices

Copyright © 2012, Nimsoft Corporation

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Nimsoft Corporation disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Nimsoft Corporation shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Nimsoft Corporation and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Nimsoft Corporation as governed by United States and international copyright laws.

Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Nimsoft Corporation's standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Trademarks

Adobe®, Acrobat®, Acrobat Reader®, and Acrobat Exchange® are registered trademarks of Adobe Systems Incorporated.

Intel® and Pentium® are U.S. registered trademarks of Intel Corporation.

Java(TM) is a U.S. trademark of Sun Microsystems, Inc.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Netscape(TM) is a U.S. trademark of Netscape Communications Corporation.

Oracle® is a U.S. registered trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of the Open Group.
Contact Nimsoft

For your convenience, Nimsoft provides a single site where you can access information about Nimsoft products.

At http://support.nimsoft.com/, you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- Nimsoft Support policies and guidelines
- Other helpful resources appropriate for your product

Provide Feedback

If you have comments or questions about Nimsoft product documentation, you can send a message to support@nimsoft.com.
# Contents

Chapter 1: Introduction  
Chapter 2: Prerequisites  
Chapter 3: General Considerations  
Chapter 4: Using the Installer for a Type 0 Vblock Infrastructure Platform  
Chapter 5: Using the Installer for a Type 1 Vblock Infrastructure Platform  
Chapter 6: Using the Installer for a Type 2 Vblock Infrastructure Platform  
Chapter 7: Using the Installer for a Custom Vblock Infrastructure Platform

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Prerequisites</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Environment for Using the Installer</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Storage System Command Line Interfaces</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Supported Vblock Infrastructure Platforms</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>General Considerations</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Initial State of Robot</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Robot Origin</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Running the Installer Multiple Times</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Using the Installer for a Type 0 Vblock Infrastructure Platform</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Using the Installer Wizard</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Using the Installer for a Type 1 Vblock Infrastructure Platform</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Using the Installer Wizard</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>Using the Installer for a Type 2 Vblock Infrastructure Platform</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Using the Installer Wizard</td>
<td>27</td>
</tr>
<tr>
<td>7</td>
<td>Using the Installer for a Custom Vblock Infrastructure Platform</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Using the Installer Wizard</td>
<td>33</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Organizations that want secure, flexible, integrated and scalable solutions for cloud computing increasingly place Vblock Infrastructure Platforms in a pivotal role. Ensuring the reliability of the Vblock Infrastructure Platforms in your organization requires that they be constantly monitored, and that you be alerted at the first signs of sub-optimal performance.

A variety of Nimsoft probes provide all the tools you need to perform round-the-clock monitoring of your Vblock Infrastructure Platforms. It would be possible to configure them individually to achieve that goal.

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform, however, consolidates the configuration and deployment of the various probes into a single wizard. The wizard collects all necessary information, and then distributes and configures the appropriate Nimsoft probes to the robot that will perform the monitoring. This assures you that you are monitoring Vblock Infrastructure Platforms in a consistent and integrated way.

Whether you are a beginner or an experienced Nimsoft administrator, the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform can help you enable monitoring for Vblock environments with minimal effort.

It not only installs, deploys, and configures the relevant probes, but also sets up out-of-the-box monitoring according to templates designed by industry experts.

Note: For brevity, this document frequently refers to the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform as simply "the Installer".

You can run the Installer as often as necessary to configure additional Vblock Infrastructure Platforms. See the Running the Installer Multiple Times (see page 14) section for details.

Important: The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform does not attempt to validate your inputs. It is possible to enter invalid values. Probe(s) receiving an invalid parameter will log the error. In some cases, the Installer logs an error also.

This document separates the procedures used for each type of Vblock Infrastructure Platform (Type 0, Type 1, Type 2, and Custom) into separate sections. Refer to the section that applies to your specific type of Vblock Infrastructure Platform for details.
Chapter 2: Prerequisites

This section describes the required environment to run the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform.

This section contains the following topics:

- Environment for Using the Installer (see page 9)
- Storage System Command Line Interfaces (see page 9)
- Supported Vblock Infrastructure Platforms (see page 10)

Environment for Using the Installer

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform depends on the following environment to be in place and fully functional:

- Nimsoft Monitoring Server 5.1 or later
- Unified Monitoring Portal 2.1 or later
- The Vblock Infrastructure Platform(s) in your environment must be fully configured and operational.
- The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform executable must be downloaded to the Nimsoft program folder on the computer running the Primary Hub.

Storage System Command Line Interfaces

If your Vblock Infrastructure Platform uses the EMC CLARiiON or VMAX storage systems, the appropriate Command Line Interface (CLI) must be installed on the same system and configured for remote connections.

CLARiiON systems

CLARiiON systems use the Navisphere CLI. The default location on Windows servers is as follows:

C:\Program Files\EMC\Navisphere CLI\navisecl.exe

VMAX systems

VMAX systems use the SYMCLI instead. The default location on Windows servers is as follows:

C:\Program Files (x86)\EMC\SYMCLI\bin
**Supported Vblock Infrastructure Platforms**

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform can configure monitoring for the following types of Vblock Infrastructure Platforms:

- Vblock Infrastructure Platform Type 0
- Vblock Infrastructure Platform Type 1
- Vblock Infrastructure Platform Type 2
- Vblock Infrastructure Platform Type Custom

All Vblock Infrastructure Platform Types have the following components in common:

**Computing:**
Cisco UCS chassis

**Networking:**
Cisco Nexus 1000 switch

**Virtualization:**
VMware virtualization software

The following storage components vary by the Type of Vblock Infrastructure Platform:

**Vblock 0 storage:**
Cisco 5010 primary and secondary switch
EMC Celerra storage

**Vblock 1 storage:**
Cisco 5010 primary and secondary switch
EMC CLARiiON storage
(optional) EMC Celerra storage

**Vblock 1 (SAN) storage:**
Cisco 5010 or Cisco MDS primary and secondary switch
EMC CLARiiON storage

**Vblock 2 storage:**
Cisco MDS switch
EMC VMAX storage
(optional) EMC Celerra storage
Custom:

A custom Vblock Infrastructure Platform can include either of these storage switches (in various models):

- Cisco 5010 switch
- Cisco MDS switch

A custom Vblock Infrastructure Platform also includes at least one of these storage systems:

- EMC Celerra storage
- EMC CLARiiON storage
- EMC VMAX storage
Chapter 3: General Considerations

This section contains information you should consider before you run the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform.

This section contains the following topics:

Initial State of Robot (see page 13)
Robot Origin (see page 13)
Running the Installer Multiple Times (see page 14)

Initial State of Robot

Preferably, the robot used to monitor a Vblock Infrastructure Platform should have none of the following probes present on it prior to running the Installer:

- VMware probe (vmware)
- Cisco UCS probe (cisco_ucs)
- SNMP-Get probe (snmpget)
- EMC Celerra probe (celerra)
- EMC CLARiiON probe (clariion)
- EMC VMAX probe (vmax)

If any of those probes are present when the Installer runs, the configuration parameters from the Installer are merged with the probe's existing configuration if there is no conflict. However, if the existing configuration conflicts with the parameters specified in the Installer, the Installer overwrites the existing configuration.

Robot Origin

The Installer obtains the Origin name from the robot and creates a group in Unified Service Manager filtered on that Origin.

By default this is the Origin set for the hub. You can change the robot Origin if you want a different group name in USM for the Vblock Infrastructure Platform data.

Note that the robot's Origin is of special interest if you monitor more than one Vblock Infrastructure Platform. By setting the Origin of the robot to a non-default name, data from the different Vblock Infrastructure Platforms will appear in different Groups in the Unified Service Monitor.
Running the Installer Multiple Times

If your environment uses multiple Vblock Infrastructure Platforms, you can run the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform as often as necessary to configure each of them. This section describes a minor change in the process when the Installer runs more than once.

Remember that each Vblock Infrastructure Platform requires a separate Nimsoft robot to monitor it. The Installer distributes and configures all necessary Nimsoft probes to that robot.

If you want to start monitoring a new Vblock Infrastructure Platform, refer to the section that describes how to use the Installer for the applicable Vblock Infrastructure Platform type (Type 0, Type 1, or Type 2). Note, however, that after the first run of the Installer, one additional dialog becomes available during the process. It offers the following two choices:

**Install a New Instance**

Choose this option when you want to run the Installer against a different robot, to begin monitoring a different Vblock Infrastructure Platform.

**Note:** Before running the Installer against a new robot, you may want to configure the robot with a non-default Nimsoft "Origin". This assures that data from the different Vblock Infrastructure Platforms will appear in different Groups in the Unified Service Monitor. If all robots monitoring Vblock Infrastructure Platforms use the same Origin, all data is consolidated under that single name in the USM, a confusing situation. Choose a meaningful name for the non-default Origin.

**Modify an Existing Instance**

Choose this option only if you want to remove the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform software. On the next "Maintenance Mode" screen, choose the "Uninstall Product" option. No other options in that screen are currently supported.

**Note:** This will not uninstall or deactivate any of the existing probes. If you need to remove, modify or customize the monitoring of a Vblock Infrastructure Platform, you can reconfigure any of the specific probe(s)—listed in the **Initial State of Robot** (see page 13) section—in whatever way you like using normal tools in the Infrastructure Manager.

If you want to stop monitoring a Vblock Infrastructure Platform, use the normal tools in Infrastructure Manager to deactivate or remove the probes from the robot doing the monitoring.
Chapter 4: Using the Installer for a Type 0 Vblock Infrastructure Platform

This section describes using the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform to begin monitoring a Type 0 Vblock Infrastructure Platform.

See the Prerequisites (see page 9) section for details about this Type. Also see the General Considerations (see page 13) section for other important preliminary details.

Using the Installer Wizard

**Important:** The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform does not attempt to validate your inputs. It is possible to enter invalid values. Probe(s) receiving an invalid parameter will log the error. In some cases, the Installer logs an error also.

When the target Vblock Infrastructure Platform is of Type 0, proceed as follows:

1. Log in to the computer running the Nimsoft Primary Hub.
2. Locate the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform executable (icon) in the Nimsoft program folder.
3. Launch the Installer by double-clicking its icon in the Nimsoft program folder.
4. Read the introductory information, as it may contain information not present in this document.
   
   **Note:** Hereafter, each step assumes you have clicked the "Next" button after completing the previous step.
5. Specify the location of the Nimsoft installation. The default entry is generally correct, but it is wise to make sure.
6. Enter the Username and Password of the Nimsoft administrator.
7. Identify the robot that you want to use for monitoring the Vblock Infrastructure Platform. At the end of the wizard, this robot receives the probes and their configurations, and begins monitoring.
8. Select the type of Vblock Infrastructure Platform the robot should be configured to monitor. For details about the various types of Vblock Infrastructure Platforms, see the Prerequisites (see page 9) section.
9. Enter configuration parameters for VMware on the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the vCenter server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**

Specifies the hostname or IP address of the vCenter server within the Vblock Infrastructure Platform.

**Port**

Specifies the SOAP connector port for administration. The default is 443, which ensures a secure connection (all communication will be encrypted).

**Username**

A valid user name to be used by the probe to log on the vCenter server.

**Password**

The password for the user log on.

**Polling Interval (minutes)**

Specifies the interval for polling the vCenter; the default value of 5 minutes is generally acceptable.

10. Enter configuration parameters for the Cisco UCS chassis on the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the Cisco USC chassis within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**

Specifies the machine name or IP address of the UCS Manager within the Vblock Infrastructure Platform.

**Port**

Specifies the port used to communicate with the Cisco UCS Manager identified by the above. The default is generally acceptable.

**Username**

Specifies a valid user name to log in to the Cisco UCS Manager.

**Password**

Specifies the password for the user identified in the previous field.
11. Enter configuration parameters for the network switch on the Vblock Infrastructure Platform (typically a Cisco Nexus switch):

**Name (Configuration Label)**

Specifies the name of the network switch within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the switch.

**Series**

Selects the series of switch that matches the network switch present in the Vblock Infrastructure Platform.

**Hostname/IP Address**

Specifies the hostname or IP address of the network switch present in the Vblock Infrastructure Platform.

**Port**

Specifies the port used to communicate with the network switch identified by the above. The default is generally acceptable.

**Version**

Selects the version of SNMP that is enabled on the network switch. If you select SNMPv3, there are additional options, as follows:

**Authentication**

Applies only for SNMPv3: Selects the type of SNMP authentication used by the network switch.

**Username**

Applies only for SNMPv3: Specifies a valid user name to log in to the network switch.

**Security**

Applies only for SNMPv3: Selects the security descriptor to be used for communication with the switch.

**Protocol**

Applies only when SNMPv3 security is in use: Selects the privacy protocol to be used for communication with the switch.

**Privileged Passphrase**

Applies only when SNMPv3 security is in use: Specifies the privacy passphrase to be used for communication with the switch.

**Community/Password**

Specifies the SNMP community name (password).
Using the Installer Wizard

Polling Interval (minutes)

Specifies the interval for polling the network switch; the default value of 5 minutes is generally acceptable.

12. Enter configuration parameters for the primary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the network switch in the previous step, but may have different values depending on the switch configuration.

13. Enter configuration parameters for the secondary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the primary storage switch in the previous step, but may have different values depending on the switch configuration.

14. Enter configuration parameters for the EMC Celerra storage system in your Vblock Infrastructure Platform:

   Name (Configuration Label)

   Specifies the name of the EMC Celerra server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

   Hostname/IP Address

   Specifies the hostname or IP address of the EMC Celerra server within the Vblock Infrastructure Platform.

   Port

   Specifies the port used to communicate with the EMC Celerra server identified by the above. The default is generally acceptable.

   Username

   This is the username created at the time the Celerra Network Control Station was created. It is usually “nasadmin”.

   Password

   A valid password to be used by the probe to access the Celerra system.

   Polling Interval (minutes)

   Specifies the interval for polling the Celerra server; the default value of 5 minutes is generally acceptable.
15. Confirm all parameters from the previous steps. If you are satisfied that all configuration parameter for all components of the target Vblock Infrastructure Platform are correct, click "Install".

You have finished using the Installer for this Vblock Infrastructure Platform.

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform distributes the necessary probes to the robot you identified early in this procedure. It then uses the configuration information you provided to conf Nimsoft probes and begin monitoring the Vblock Infrastructure Platform.

If you want to run the Installer again to configure monitoring on another Vblock Infrastructure Platform, see the Running the Installer Multiple Times (see page 14) section for details.
Chapter 5: Using the Installer for a Type 1 Vblock Infrastructure Platform

This section describes using the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform to begin monitoring a Type 1 Vblock Infrastructure Platform.

See the Prerequisites (see page 9) section for details about this Type. Also see the General Considerations (see page 13) section for other important preliminary details.

Using the Installer Wizard

**Important:** The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform does not attempt to validate your inputs. It is possible to enter invalid values. Probe(s) receiving an invalid parameter will log the error. In some cases, the Installer logs an error also.

When the target Vblock Infrastructure Platform is of Type 1 proceed as follows:

1. Log in to the computer running the Nimsoft Primary Hub.
2. Locate the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform executable (icon) in the Nimsoft program folder.
3. Launch the Installer by double-clicking its icon in the Nimsoft program folder.
4. Read the introductory information, as it may contain information not present in this document.
   **Note:** Hereafter, each step assumes you have clicked the "Next" button after completing the previous step.
5. Specify the location of the Nimsoft installation. The default entry is generally correct, but it is wise to make sure.
6. Enter the Username and Password of the Nimsoft administrator.
7. Identify the robot that you want to use for monitoring the Vblock Infrastructure Platform. At the end of the wizard, this robot receives the probes and their configurations, and begins monitoring.
8. Select the type of Vblock Infrastructure Platform the robot should be configured to monitor. For details about the various types of Vblock Infrastructure Platforms, see the Prerequisites (see page 9) section.
9. Enter configuration parameters for VMware on the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the vCenter server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**

Specifies the hostname or IP address of the vCenter server within the Vblock Infrastructure Platform.

**Port**

Specifies the SOAP connector port for administration. The default is 443, which ensures a secure connection (all communication will be encrypted).

**Username**

A valid user name to be used by the probe to log on the vCenter server.

**Password**

The password for the user log on.

**Polling Interval (minutes)**

Specifies the interval for polling the vCenter; the default value of 5 minutes is generally acceptable.

10. Enter configuration parameters for the Cisco UCS chassis on the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the Cisco UCS chassis within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**

Specifies the machine name or IP address of the UCS Manager within the Vblock Infrastructure Platform.

**Port**

Specifies the port used to communicate with the Cisco UCS Manager identified by the above. The default is generally acceptable.

**Username**

Specifies a valid user name to log in to the Cisco UCS Manager.

**Password**

Specifies the password for the user identified in the previous field.
11. Enter configuration parameters for the network switch on the Vblock Infrastructure Platform (typically a Cisco Nexus switch):

   **Name (Configuration Label)**
   Specifies the name of the network switch within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the switch.

   **Series**
   Selects the series of switch that matches the network switch present in the Vblock Infrastructure Platform.

   **Hostname/IP Address**
   Specifies the hostname or IP address of the network switch present in the Vblock Infrastructure Platform.

   **Port**
   Specifies the port used to communicate with the network switch identified by the above. The default is generally acceptable.

   **Version**
   Selects the version of SNMP that is enabled on the network switch. If you select SNMPv3, there are additional options, as follows:

   **Authentication**
   Applies only for SNMPv3: Selects the type of SNMP authentication used by the network switch.

   **Username**
   Applies only for SNMPv3: Specifies a valid user name to log in to the network switch.

   **Security**
   Applies only for SNMPv3: Selects the security descriptor to be used for communication with the switch.

   **Protocol**
   Applies only when SNMPv3 security is in use: Selects the privacy protocol to be used for communication with the switch.

   **Privileged Passphrase**
   Applies only when SNMPv3 security is in use: Specifies the privacy passphrase to be used for communication with the switch.

   **Community/Password**
   Specifies the SNMP community name (password).
Polling Interval (minutes)

Specifies the interval for polling the network switch; the default value of 5 minutes is generally acceptable.

12. Enter configuration parameters for the primary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the network switch in the previous step, but may have different values depending on the switch configuration.

13. Enter configuration parameters for the secondary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the primary storage switch in the previous step, but may have different values depending on the switch configuration.

14. Click "Yes" if EMC Celerra storage is present in your Vblock Infrastructure Platform; otherwise click "No".

Note: If you clicked "No", skip the next step.

15. Enter configuration parameters for the EMC Celerra storage system in your Vblock Infrastructure Platform:

Name (Configuration Label)

Specifies the name of the EMC Celerra server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

Hostname/IP Address

Specifies the hostname or IP address of the EMC Celerra server within the Vblock Infrastructure Platform.

Port

Specifies the port used to communicate with the EMC Celerra server identified by the above. The default is generally acceptable.

Username

This is the username created at the time the Celerra Network Control Station was created. It is usually “nasadmin”.

Password

A valid password to be used by the probe to access the Celerra system.

Polling Interval (minutes)

Specifies the interval for polling the Celerra server; the default value of 5 minutes is generally acceptable.
16. Enter configuration parameters for the EMC CLARiiON storage system in the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the EMC CLARiiON storage system in the Vblock Infrastructure Platform.

**Client Tools Location**

Specifies the location of the client tools. See the Prerequisites (see page 9) section for details.

**Source**

Specifies the source to be used for QoS metrics and Alarms. This is typically the IP address of Storage Processor A.

**Storage Processor A**

Specifies the IP address of Storage Processor A.

**Storage Processor B**

Specifies the IP address of Storage Processor B.

**Username**

Specifies a valid system user name to log on to the CLARiiON system.

**Password**

Specifies the password for the user identified in the previous field.

**Scope**

Specifies the login scope for the CLARiiON system user. Nimsoft recommends you use Global or Local users for monitoring a CLARiiON system; this removes any dependency on an LDAP server.

**Polling Interval (minutes)**

The default interval is generally acceptable.
17. Confirm all parameters from the previous steps. If you are satisfied that all configuration parameter for all components of the target Vblock Infrastructure Platform are correct, click "Install".

You have finished using the Installer for this Vblock Infrastructure Platform.

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform distributes the necessary probes to the robot you identified early in this procedure. It then uses the configuration information you provided to config Nimsoft probes and begin monitoring the Vblock Infrastructure Platform.

If you want to run the Installer again to configure monitoring on another Vblock Infrastructure Platform, see the Running the Installer Multiple Times (see page 14) section for details.
Chapter 6: Using the Installer for a Type 2 Vblock Infrastructure Platform

This section describes using the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform to begin monitoring a Type 2 Vblock Infrastructure Platform.

See the Prerequisites (see page 9) section for details about this Type. Also see the General Considerations (see page 13) section for other important preliminary details.

Using the Installer Wizard

**Important:** The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform does not attempt to validate your inputs. It is possible to enter invalid values. Probe(s) receiving an invalid parameter will log the error. In some cases, the Installer logs an error also.

When the target Vblock Infrastructure Platform is of Type 2, proceed as follows:

1. Log in to the computer running the Nimsoft Primary Hub.
2. Locate the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform executable (icon) in the Nimsoft program folder.
3. Launch the Installer by double-clicking its icon in the Nimsoft program folder.
4. Read the introductory information, as it may contain information not present in this document.
   
   **Note:** Hereafter, each step assumes you have clicked the "Next" button after completing the previous step.
5. Specify the location of the Nimsoft installation. The default entry is generally correct, but it is wise to make sure.
6. Enter the Username and Password of the Nimsoft administrator.
7. Identify the robot that you want to use for monitoring the Vblock Infrastructure Platform. At the end of the wizard, this robot receives the probes and their configurations, and begins monitoring.
8. Select the type of Vblock Infrastructure Platform the robot should be configured to monitor. For details about the various types of Vblock Infrastructure Platforms, see the Prerequisites (see page 9) section.
9. Enter configuration parameters for VMware on the Vblock Infrastructure Platform:

**Name (Configuration Label)**
Specifies the name of the vCenter server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**
Specifies the hostname or IP address of the vCenter server within the Vblock Infrastructure Platform.

**Port**
Specifies the SOAP connector port for administration. The default is 443, which ensures a secure connection (all communication will be encrypted).

**Username**
A valid user name to be used by the probe to log on the vCenter server.

**Password**
The password for the user log on.

**Polling Interval (minutes)**
Specifies the interval for polling the vCenter; the default value of 5 minutes is generally acceptable.

10. Enter configuration parameters for the Cisco UCS chassis on the Vblock Infrastructure Platform:

**Name (Configuration Label)**
Specifies the name of the Cisco USC chassis within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**
Specifies the machine name or IP address of the UCS Manager within the Vblock Infrastructure Platform.

**Port**
Specifies the port used to communicate with the Cisco UCS Manager identified by the above. The default is generally acceptable.

**Username**
Specifies a valid user name to log in to the Cisco UCS Manager.

**Password**
 Specifies the password for the user identified in the previous field.
11. Enter configuration parameters for the network switch on the Vblock Infrastructure Platform (typically a Cisco Nexus switch):

**Name (Configuration Label)**

Specifies the name of the network switch within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the switch.

**Series**

Selects the series of switch that matches the network switch present in the Vblock Infrastructure Platform.

**Hostname/IP Address**

Specifies the hostname or IP address of the network switch present in the Vblock Infrastructure Platform.

**Port**

Specifies the port used to communicate with the network switch identified by the above. The default is generally acceptable.

**Version**

Selects the version of SNMP that is enabled on the network switch. If you select SNMPv3, there are additional options, as follows:

**Authentication**

Applies only for SNMPv3: Selects the type of SNMP authentication used by the network switch.

**Username**

Applies only for SNMPv3: Specifies a valid user name to log in to the network switch.

**Security**

Applies only for SNMPv3: Selects the security descriptor to be used for communication with the switch.

**Protocol**

Applies only when SNMPv3 security is in use: Selects the privacy protocol to be used for communication with the switch.

**Privileged Passphrase**

Applies only when SNMPv3 security is in use: Specifies the privacy passphrase to be used for communication with the switch.

**Community/Password**

Specifies the SNMP community name (password).
Using the Installer Wizard

Polling Interval (minutes)

Specifies the interval for polling the network switch; the default value of 5 minutes is generally acceptable.

12. Enter configuration parameters for the primary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the network switch in the previous step, but may have different values depending on the switch configuration.

13. Enter configuration parameters for the secondary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the primary storage switch in the previous step, but may have different values depending on the switch configuration.

14. Click "Yes" if EMC Celerra storage is present in your Vblock Infrastructure Platform; otherwise click "No".

Note: If you clicked "No", skip the next step.

15. Enter configuration parameters for the EMC Celerra storage system in your Vblock Infrastructure Platform:

   Name (Configuration Label)
   Specifies the name of the EMC Celerra server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

   Hostname/IP Address
   Specifies the hostname or IP address of the EMC Celerra server within the Vblock Infrastructure Platform.

   Port
   Specifies the port used to communicate with the EMC Celerra server identified by the above. The default is generally acceptable.

   Username
   This is the username created at the time the Celerra Network Control Station was created. It is usually "nasadmin".

   Password
   A valid password to be used by the probe to access the Celerra system.

Polling Interval (minutes)

Specifies the interval for polling the Celerra server; the default value of 5 minutes is generally acceptable.
16. Enter configuration parameters for the EMC VMAX storage system in the Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the EMC VMAX storage system in the Vblock Infrastructure Platform.

**Client Tools Location**

Specifies the location of the client tools. See the [Prerequisites](#) (see page 9) section for details.

**Solutions Enabler Service Name**

Specifies the name of the Solutions Enabler Service Name. Enter localhost for locally connected VMAX systems.

**Arrays: (Separate multiple Components by commas.)**

Specifies the arrays in the VMAX storage system. Separate array identifiers with commas.

**Polling Interval (minutes: 20 at minimum)**

The default interval is generally acceptable.

17. Confirm all parameters from the previous steps. If you are satisfied that all configuration parameter for all components of the target Vblock Infrastructure Platform are correct, click "Install".

You have finished using the Installer for this Vblock Infrastructure Platform.

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform distributes the necessary probes to the robot you identified early in this procedure. It then uses the configuration information you provided to configure Nimsoft probes and begin monitoring the Vblock Infrastructure Platform.

If you want to run the Installer again to configure monitoring on another Vblock Infrastructure Platform, see the [Running the Installer Multiple Times](#) (see page 14) section for details.
Chapter 7: Using the Installer for a Custom Vblock Infrastructure Platform

This section describes using the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform to begin monitoring a Custom Vblock Infrastructure Platform.

See the Prerequisites (see page 9) section for details about this Type. Also see the General Considerations (see page 13) section for other important preliminary details.

Using the Installer Wizard

Important: The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform does not attempt to validate your inputs. It is possible to enter invalid values. Probe(s) receiving an invalid parameter will log the error. In some cases, the Installer logs an error also.

When the target Vblock Infrastructure Platform is a Custom Type, proceed as follows:

1. Log in to the computer running the Nimsoft Primary Hub.
2. Locate the Nimsoft Monitoring Installer for the Vblock Infrastructure Platform executable (icon) in the Nimsoft program folder.
3. Launch the Installer by double-clicking its icon in the Nimsoft program folder.
4. Read the introductory information, as it may contain information not present in this document.
   Note: Hereafter, each step assumes you have clicked the "Next" button after completing the previous step.
5. Specify the location of the Nimsoft installation. The default entry is generally correct, but it is wise to make sure.
6. Enter the Username and Password of the Nimsoft administrator.
7. Identify the robot that you want to use for monitoring the Vblock Infrastructure Platform. At the end of the wizard, this robot receives the probes and their configurations, and begins monitoring.
8. Select the type of Vblock Infrastructure Platform the robot should be configured to monitor. For details about the various types of Vblock Infrastructure Platforms, see the Prerequisites (see page 9) section.
9. Check the boxes that denote the type(s) of storage in your Vblock Infrastructure Platform. Available choices include the following:
   - EMC Celerra
   - EMC CLARiiON
   - EMC VMAX

10. Enter configuration parameters for VMware on the Vblock Infrastructure Platform:
    
    **Name (Configuration Label)**
    Specifies the name of the vCenter server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

    **Hostname/IP Address**
    Specifies the hostname or IP address of the vCenter server within the Vblock Infrastructure Platform.

    **Port**
    Specifies the SOAP connector port for administration. The default is 443, which ensures a secure connection (all communication will be encrypted).

    **Username**
    A valid user name to be used by the probe to log on the vCenter server.

    **Password**
    The password for the user log on.

    **Polling Interval (minutes)**
    Specifies the interval for polling the vCenter; the default value of 5 minutes is generally acceptable.

11. Enter configuration parameters for the Cisco UCS chassis on the Vblock Infrastructure Platform:

    **Name (Configuration Label)**
    Specifies the name of the Cisco USC chassis within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

    **Hostname/IP Address**
    Specifies the machine name or IP address of the UCS Manager within the Vblock Infrastructure Platform.

    **Port**
    Specifies the port used to communicate with the Cisco UCS Manager identified by the above. The default is generally acceptable.
Username
Specifies a valid user name to log in to the Cisco UCS Manager.

Password
Specifies the password for the user identified in the previous field.

12. Enter configuration parameters for the network switch on the Vblock Infrastructure Platform (typically a Cisco Nexus switch):

Name (Configuration Label)
Specifies the name of the network switch within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the switch.

Series
Selects the series of switch that matches the network switch present in the Vblock Infrastructure Platform.

Hostname/IP Address
Specifies the hostname or IP address of the network switch present in the Vblock Infrastructure Platform.

Port
Specifies the port used to communicate with the network switch identified by the above. The default is generally acceptable.

Version
Selects the version of SNMP that is enabled on the network switch. If you select SNMPv3, there are additional options, as follows:

Authentication
Applies only for SNMPv3: Selects the type of SNMP authentication used by the network switch.

Username
Applies only for SNMPv3: Specifies a valid user name to log in to the network switch.

Security
Applies only for SNMPv3: Selects the security descriptor to be used for communication with the switch.

Protocol
Applies only when SNMPv3 security is in use: Selects the privacy protocol to be used for communication with the switch.
**Privileged Passphrase**

Applies only when SNMPv3 security is in use: Specifies the privacy passphrase to be used for communication with the switch.

**Community/Password**

Specifies the SNMP community name (password).

**Polling Interval (minutes)**

Specifies the interval for polling the network switch; the default value of 5 minutes is generally acceptable.

13. Enter configuration parameters for the primary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the network switch in the previous step, but may have different values depending on the switch configuration.

14. Enter configuration parameters for the secondary storage switch on the Vblock Infrastructure Platform. The parameter choices are the same as for the primary storage switch in the previous step, but may have different values depending on the switch configuration.

**Note:** Depending on the storage system(s) present in your Custom Vblock Infrastructure Platform, you must perform one or more of the following three steps:

15. Enter configuration parameters for the EMC Celerra storage system in your Vblock Infrastructure Platform:

**Name (Configuration Label)**

Specifies the name of the EMC Celerra server within the Vblock Infrastructure Platform. Use a meaningful name, or alternatively simply repeat the host name or IP address of the server.

**Hostname/IP Address**

Specifies the hostname or IP address of the EMC Celerra server within the Vblock Infrastructure Platform.

**Port**

Specifies the port used to communicate with the EMC Celerra server identified by the above. The default is generally acceptable.

**Username**

This is the username created at the time the Celerra Network Control Station was created. It is usually “nasadmin”.

**Password**

A valid password to be used by the probe to access the Celerra system.
Polling Interval (minutes)

Specifies the interval for polling the Celerra server; the default value of 5 minutes is generally acceptable.

16. Enter configuration parameters for the EMC CLARiiON storage system in the Vblock Infrastructure Platform:

Name (Configuration Label)

Specifies the name of the EMC CLARiiON storage system in the Vblock Infrastructure Platform.

Client Tools Location

Specifies the location of the client tools. See the Prerequisites (see page 9) section for details.

Source

Specifies the source to be used for QoS metrics and Alarms. This is typically the IP address of Storage Processor A.

Storage Processor A

Specifies the IP address of Storage Processor A.

Storage Processor B

Specifies the IP address of Storage Processor B.

Username

Specifies a valid system user name to log on to the CLARiiON system.

Password

Specifies the password for the user identified in the previous field.

Scope

Specifies the login scope for the CLARiiON system user. Nimsoft recommends you use Global or Local users for monitoring a CLARiiON system; this removes any dependency on an LDAP server.

Polling Interval (minutes)

The default interval is generally acceptable.

17. Enter configuration parameters for the EMC VMAX storage system in the Vblock Infrastructure Platform:

Name (Configuration Label)

Specifies the name of the EMC VMAX storage system in the Vblock Infrastructure Platform.
Client Tools Location

Specifies the location of the client tools. See the Prerequisites (see page 9) section for details.

Solutions Enabler Service Name

Specifies the name of the Solutions Enabler Service Name. Enter localhost for locally connected VMAX systems.

Arrays: (Separate multiple Components by commas.)

Specifies the arrays in the VMAX storage system. Separate array identifiers with commas.

Polling Interval (minutes: 20 at minimum)

The default interval is generally acceptable.

18. Confirm all parameters from the previous steps. If you are satisfied that all configuration parameter for all components of the target Vblock Infrastructure Platform are correct, click "Install".

You have finished using the Installer for this Vblock Infrastructure Platform.

The Nimsoft Monitoring Installer for the Vblock Infrastructure Platform distributes the necessary probes to the robot you identified early in this procedure. It then uses the configuration information you provided to conf Nimsoft probes and begin monitoring the Vblock Infrastructure Platform.

If you want to run the Installer again to configure monitoring on another Vblock Infrastructure Platform, see the Running the Installer Multiple Times (see page 14) section for details.