

## **Oracle® Enterprise Manager**

Plug-in for Oracle Unified Directory User's Guide

12c Release 1 (12.1.0.2)

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# Preface

The Enterprise Manager Plug-in for Oracle Unified Directory extends Oracle Enterprise Manager Cloud Control 12 c to add support for monitoring Oracle Unified Directory(ODU) instances.

This guide includes installation, configuration and uninstallation information, and a detailed analysis of the metrics that can be monitored using the Enterprise Manager Plug-in for OUD.

## Audience

This document is intended for enterprise architects and system administrators.

## Documentation Accessibility

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## Related Documentation

For more information, see the following documentation libraries on the Oracle Technology Network (OTN) Documentation Index page at <http://www.oracle.com/technetwork/indexes/documentation/index.html>.

- Oracle Enterprise Manager Cloud Control Documentation  
[http://docs.oracle.com/cd/E24628\\_01/index.htm](http://docs.oracle.com/cd/E24628_01/index.htm)
- Oracle Unified Directory Documentation Library  
[http://docs.oracle.com/cd/E49437\\_01/index.htm](http://docs.oracle.com/cd/E49437_01/index.htm)

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.



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# Installing and Using the Oracle Enterprise Manager Plug-in for OUD

The Enterprise Manager Plug-in for Oracle Unified Directory extends Oracle Enterprise Manager Cloud Control 12c to add support for monitoring Oracle Unified Directory (OUD) instances.

This chapter contains the following sections:

- [Before You Install](#)
- [Deploying the Enterprise Manager Plug-in for OUD](#)
- [Viewing Performance Metrics for an OUD Instance](#)
- [Uninstalling the Enterprise Manager Plug-in for OUD](#)
- [Limitations of this Release](#)

## 1.1 Before You Install

OUD can function in one of the following three modes:

- As an LDAP directory server instance, used to contain data
- As an LDAP proxy server instance, where the server acts as an interface between the client and the directory server or servers that contain the data
- As a replication gateway instance between OUD and Oracle Directory Server Enterprise Edition (ODSEE)

The Enterprise Manager Plug-in for OUD is provided as an archive that includes three target types, one for each OUD installation mode or type. (See "[Deploying the Plug-in](#)" for download information.) Install the plug-in that corresponds to the type of OUD instance that you want to monitor.

### 1.1.1 Release Information

This 12.1.0.2 version of the Enterprise Manager Plug-in for OUD enables you to monitor the following:

- Oracle Unified Directory 11.1.2.2.0 and later for Directory target instances
- Oracle Unified Directory 11.1.2.2.0 and later for Proxy target instances
- Oracle Unified Directory 11.1.2.2.0 and later for Replication Gateway target instances

Version 11g Release 2 (11.1.2.1.0) of the Enterprise Manager Plug-in for OUD, formerly named the Oracle System Monitoring Plug-in for OUD for Enterprise Manager 11g Grid Control, is available at

<http://www.oracle.com/technetwork/oem/downloads/unified-directory-514420.html>.

## 1.1.2 Installation Prerequisites

- See the Enterprise Manager Plug-In for Oracle Unified Directory Certification Matrix available on [My Oracle Support](#).

The certification matrix contains information about supported installation types, platforms, operating systems, databases, JDKs, and third-party products.

- Install Enterprise Manager Cloud Control 12c (12.1.0.4) or later with the latest bundle patch. Be sure Oracle Management Service and the Oracle Management Agent are installed. It is recommended that the Oracle Management Agent and the OUD instances be installed on the same host.

For detailed information, see the Enterprise Manager Cloud Control 12c Documentation site [http://docs.oracle.com/cd/E24628\\_01/index.htm](http://docs.oracle.com/cd/E24628_01/index.htm).

- Make sure that the Oracle Management Agent can communicate with your Oracle Enterprise Manager Server and can upload data. For example, Agent Availability must be UP, Last Load Time should show a recent date/timestamp, and Last Load Time should be Periodically updated. For information about installing and configuring the Oracle Management Agent, see the *Oracle® Enterprise Manager Basic Installation Guide*.

## 1.2 Deploying the Enterprise Manager Plug-in for OUD

This section provides the major steps required to deploy the plug-in. For many of the steps, you will be directed to use the instructions already provided in the *Oracle Enterprise Manager Cloud Control Administrator's Guide*

[http://docs.oracle.com/cd/E24628\\_01/doc.121/e24473/toc.htm](http://docs.oracle.com/cd/E24628_01/doc.121/e24473/toc.htm).

To deploy the Plug-in for OUD:

1. Import the plug-in.  
See [Section 1.2.1, "Importing the Plug-in Archive."](#)
2. Deploy the plug-in.  
See [Section 1.2.3, "Deploying the Plug-in."](#)
3. Create a target instance of the plug-in on the Oracle Management Agent.  
See [Section 1.2.4, "Adding Targets To Monitor"](#).

### 1.2.1 Importing the Plug-in Archive

For detailed instructions, see the "Downloading Plug-ins" chapter in the *Enterprise Manager Cloud Control Administrators Guide*: [http://docs.oracle.com/cd/E24628\\_01/doc.121/e24473/plugin\\_mgr.htm#CJGBEAHJ](http://docs.oracle.com/cd/E24628_01/doc.121/e24473/plugin_mgr.htm#CJGBEAHJ)

### 1.2.2 Upgrading the Plug-In

For detailed instructions to upgrade plugin version 12.1.0.1.0 to 12.1.0.2.0, see the sections "Upgrading Plug-Ins Deployed to Oracle Management Service" and "Upgrading Plug-Ins Deployed to Oracle Management Agent" in the *Oracle Enterprise Manager Cloud Control Administrator's Guide*.

### 1.2.3 Deploying the Plug-in

Deploy the plug-in on the Oracle Unified Directory instances to be monitored. For detailed instructions, see "Deploying Plug-ins to Oracle Management Service" in the *Enterprise Manager Cloud Control Administrators Guide*:

[http://docs.oracle.com/cd/E24628\\_01/doc.121/e24473/plugin\\_mgr.htm#CJGCDHFG](http://docs.oracle.com/cd/E24628_01/doc.121/e24473/plugin_mgr.htm#CJGCDHFG)

You can now create a target instance.

### 1.2.4 Adding Targets To Monitor

Create a target instance of the Enterprise Manager Plug-in for OUD on one or more agents. You must create one target instance for each OUD instance.

1. On the Setup Menu, choose **Add Target > Add Targets Manually**.
2. On the Add Target page, choose the **Add Targets Declaratively by Specifying Target Monitoring ProPerties** option.

Choose the **Target Type** and the list of agents to which you deployed the plug-in.

3. Click **Add Manually**.
4. On the Add OUD Instance proPerties page, enter the following values:

#### OUD Credentials

- In the **Directory Server Username** and **Password** fields, enter a username and password that will be used by the agent to bind to the server instance. Ensure the password is in the appropriate field.

#### ProPerties

- In the **Administration Port** field, enter the administration port of the target server instance.
- In the **Directory Server Host** field, enter the fully qualified domain name of the target server instance. For replicated servers, you must provide the same host name that was used when replication was configured.
- The **Trust All** field is set to true by default. This implies that all the certificates that are presented by the server (or servers, in the case of replication) will be accepted automatically. Change this setting if you want to specify different behavior.
- (Optional) If you have changed the default setting for the **Trust All** field, enter a path in the **Trust Store Path** field.

The agent will use the trust store located in this path to validate the certificates of the administration connector that are presented by the server(s). This path must be readable by the agent (and thus located in a file system that is accessible by the agent). The trust store must contain the public keys of the administration connector certificates. It must be in JKS format and must not be password protected.

5. Click **OK**.

## 1.3 Viewing Performance Metrics for an OUD Instance

This section contains the following topics:

- [Section 1.3.1, "Viewing an OUD Instance Home Page"](#)

- [Section 1.3.2, "Using the All Metrics Page"](#)
- [Section 1.3.3, "Setting Metric Thresholds"](#)
- [Section 1.3.4, "Summary of Directory Server Instance Monitoring Information"](#)
- [Section 1.3.5, "Summary of Proxy Server Instance Monitoring Information"](#)
- [Section 1.3.6, "Summary of Replication Gateway Monitoring Information"](#)

### 1.3.1 Viewing an OUD Instance Home Page

The Enterprise Manager Plug-in for Oracle Unified Directory collects and displays information and Performance metrics for a Oracle Unified Directory instance.

To navigate to an OUD instance Home page:

1. On the Oracle Enterprise Manager home page, select **Targets**.  
The Hosts page is displayed.
2. Click **All Targets** in the top menu bar.
3. Choose the OUD target instance name.

The target instance Home page is displayed.

The monitoring information displayed in the Enterprise Manager Cloud Control console depends upon the current Oracle Unified Directory instance type: Directory Server instance, Proxy Server instance, or Replication Gateway instance. [Table 1–1](#) summarizes the information available for the different OUD instance types.

**Table 1–1 Monitoring Data Available Through the Enterprise Manager Plug-in**

Information	Directory	Proxy	Replication GW
General Information	Yes	Yes	Yes
JVM Resources	Yes	Yes	Yes
Connections	Yes	Yes	-
Administration Connector	Yes	Yes	Yes
Connection Handlers	Yes	Yes	-
Operations	Yes	Yes	Yes
Replication Information	Yes	-	Yes
Backends / Databases	Yes	-	-
Internal Resources / Caches / Workqueues	Yes	Yes	-
Global Index Catalog	-	Yes	-
Distribution / Partitions	-	Yes	-
Data Sources / Connection Pools	-	Yes	-

Monitoring information is displayed on various pages in the Enterprise Manager Cloud Control console. You can access these pages through the OUD target instance submenu.

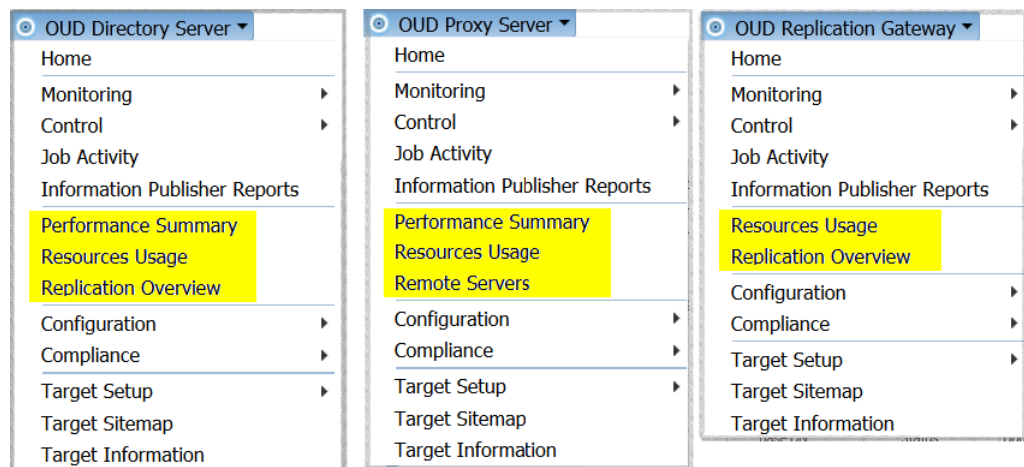
**Figure 1–1 Comparison of Target Instance Submenus**

Table 1–1 compares submenus for an OUD Directory Server instance, OUD Proxy Server instance, and OUD Replication Gateway instance. All submenus include many identical commands including: Home, Monitoring, Control >, Job Activity, Information Publisher Reports, Configuration >, Compliance >, Target Setup >, Target Sitemap, and Target Information. For each target instance, however, the Home page presents different high-level information based on the target instance type.

In Table 1–1, the following differences are highlighted:

- For a Directory Server instance, the submenu provides access to the following information: Performance Summary, Resources Usage, and Replication Overview.
- For a Proxy Server instance, the submenu provides access to the following information: Performance Summary, Resources Usage, and Remote Servers.
- For a Replication Gateway instance, the submenu provides access to the following information: Resources Usage and Replication Overview.

For all target types, the **Monitoring > All Metrics** command provides access to a complete list of the monitored metrics for the target instance. The information displayed is determined by the Oracle Unified Directory instance type.

Performance information is provided in terms of averages and rates, depending on the information type. Data is represented in both text and graphical form.

Numerical information and comparative data indicates the most recent sampled data. By default, the Oracle Management Agent gathers a new sample of data every five minutes. Line graphs are constructed by point, with each point representing a collected data.

Alerts are generated, based on specific thresholds that you can configure on the **Monitoring > Metrics and Collection Settings** page.

### 1.3.2 Using the All Metrics Page

The Oracle Unified Directory submenu pages display only a subset of the monitored metrics. The **Monitoring > All Metrics** command provides access to all the monitored metrics for the target instance.

For example, the **Performance Summary** page of a directory server page provides information on the about the add, delete, modify, modify DN, search, and bind Operations Performed on the server. The All metrics page also provides Operations

information for each LDAP connection handlers, which are not included in the Performance Summary page.

To display the **All Metrics** page:

1. On the Oracle Enterprise Manager home page, choose **Targets**.

The **Hosts** page is displayed.

2. Click **All Targets** in the top menu bar.

3. Choose the target instance name.

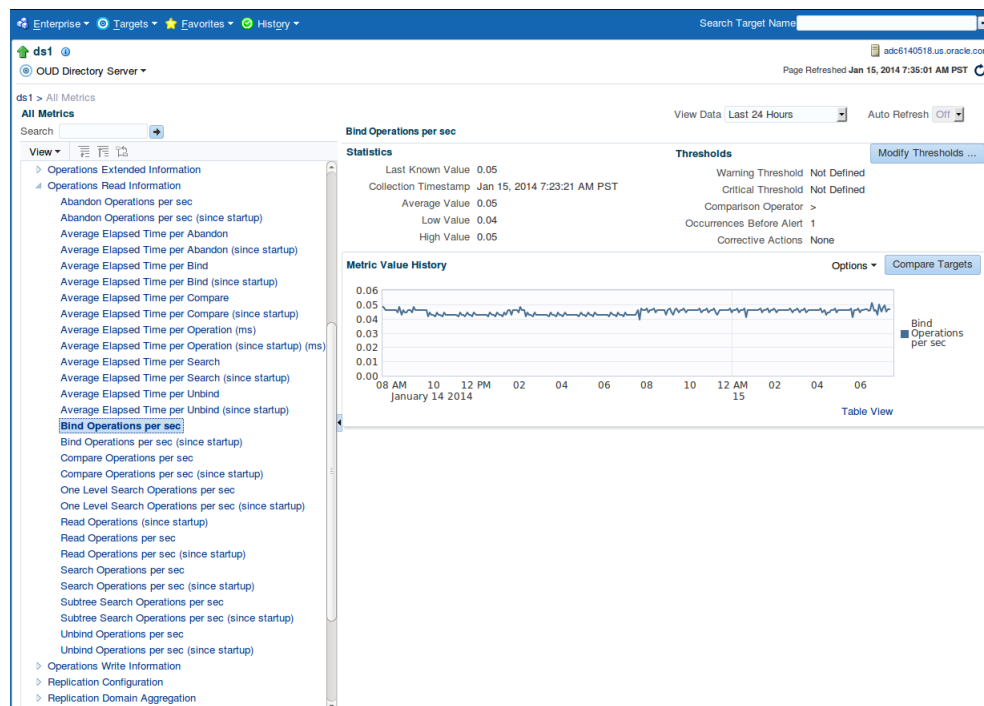
The target instance **Home** page is displayed.

4. At the bottom of the **Home** page, under the Related Links menu, click **All Metrics**.

The **All Metrics** page is displayed.

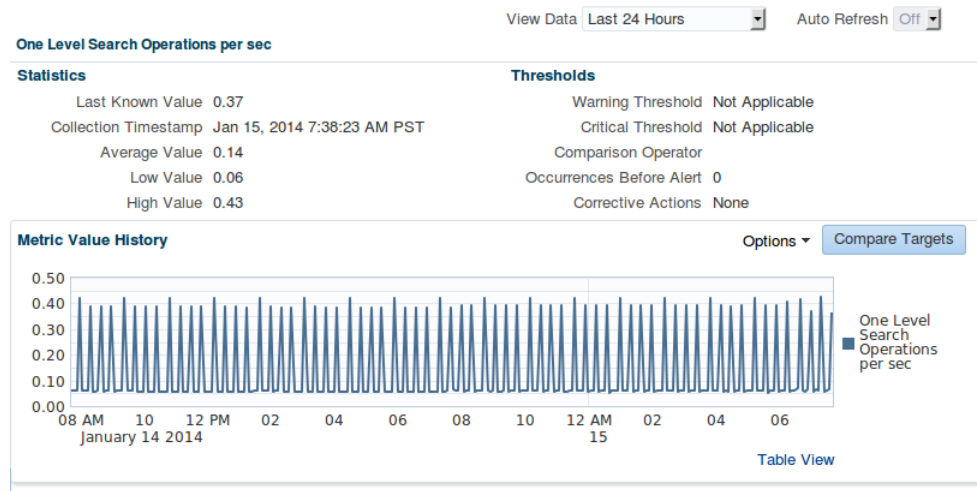
Metrics are organized in logical groups. The following figure illustrates the metrics available when the **Operations Read Information** group is expanded, and **Bind Operations Per Second** is selected.

**Figure 1–2 Operations Read Information**



To display details of the metric, click on the metric name. In [Figure 1–3](#), to display information about One Level Search Operations Per Second within the last 24 hours, the **One Level Search Operations Per Second** metric was chosen from the All Metrics page. A new page dedicated to this metric is displayed.

[Figure 1–3](#) lists the following Statistics: Last Known Value: 0.37, Average Value: 0.14, Low Value: 0.06, High Value: 0.43, Warning Threshold: Not Applicable; Critical Threshold: Not Applicable; Occurrences Before Alert: 0, and Corrective Actions: None. A graph is labeled with metric values ranging from 0.00 to 0.50, and hourly intervals spanning 24 hours. The graph data illustrates activity peaks between the hours of 08AM and 08AM the following day.

**Figure 1–3 One Level Search Operations Per Second page**

The All Metrics page enables you to specify how you want to view a particular metric. The All Metrics page also provides the ability to compare the metrics against to target instances. Use the **View Data** field to select a specific time Period for which to display the monitored data. Time Periods for seven days or more also display the minimum, maximum and average values of a metric during that Period.

### 1.3.3 Setting Metric Thresholds

Metric thresholds enable you to specify when alerts should be generated for a specific monitored metric. For example, if you want to receive an alert when the number of read operations per second exceeds a certain maximum, you can configure a threshold for this metric.

To configure a metric threshold:

1. From the Home page of the Target Instance menu, go to **Monitoring > Metric and Collection Settings**.  
By default, the list of metrics for which thresholds have been defined is displayed. See [Figure 1–4](#).
2. From the View list, select **All metrics**.
3. Scroll down to locate the metric for which you want to set a threshold.
4. Enter a value in the **Warning Threshold** column to specify the point at which you should receive a warning alert.
5. Enter a value in the **Critical Threshold** column to specify the point at which you should receive a critical alert.
6. To change the collection schedule for that metric:
  - Click the existing value in the Collection Schedule column.
  - Edit the collection settings, as required.
7. To specify any corrective behavior that should be taken if the metric reaches the warning threshold or critical threshold:
  - Click the **Edit** icon.
  - On the Monitored Objects pane, click **Edit**.



- On the Corrective Actions pane, click **Add** next to the threshold for which you want to specify the corrective action.
  - Follow the steps in the **Add Corrective Action** wizard.
8. On the Metrics and Collection Settings page, click **OK** to save your changes.

Figure 1–4 shows the **All Metrics** view for a directory server target instance. The view contains two tabs: Metrics and Other Collected Items. The Metrics tab contains a table which lists metrics collected for this directory server instance. For each metric, the following values may be reported: Comparison Operator, Warning Threshold, Critical Threshold, Corrective Actions, and Collections Schedule.

To reconfigure the settings for a metric, click the **Edit** icon the end of its row.

**Figure 1–4 The Metric and Collections Settings Page for a Directory Server Target Instance**

The screenshot shows the 'Metric and Collection Settings' page for a directory server target instance named 'ds1'. The page has a 'Metrics' tab selected, and a 'View' dropdown set to 'All metrics'. Below the table, there are 'Expand All' and 'Collapse All' links. The table lists various metrics for the 'ds1' instance, organized into two main sections: 'Administration Connector Extended Operations' and 'Administration Connector General Information'. Each metric row includes a comparison operator (all are '>'), warning and critical thresholds (input fields), corrective actions (all are 'None'), and a collection schedule (all are 'Every 5 Minutes'). An 'Edit' icon is present at the end of each row.

Metric	Comparison Operator	Warning Threshold	Critical Threshold	Corrective Actions	Collection Schedule	Edit
ds1						
Administration Connector Extended Operations					Every 5 Minutes	
Average Elapsed Time per Extended	>			None		
Average Elapsed Time per Extended (since startup)	>			None		
Extended Operations per sec	>			None		
Extended Operations per sec (since startup)	>			None		
Administration Connector General Information					Every 5 Minutes	
Average Elapsed Time per Operation	>			None		
Average Elapsed Time per Operation (since startup)	>			None		
Current Connections	>			None		
Delta Total Connections per sec	>			None		
Kb Read per sec	>			None		
Kb Read per sec (since startup)	>			None		
Kb Written per sec	>			None		
Kb Written per sec (since startup)	>			None		
Operations Completed (per sec)	>			None		
Operations Completed (per sec) (since startup)	>			None		
Operations Initiated (per sec)	>			None		
Operations Initiated (per sec) (since startup)	>			None		
Operations Unsuccessful (per sec)						
Operations Unsuccessful (per sec) (since startup)						
Returned Search Result Entries per sec	>			None		

### 1.3.4 Summary of Directory Server Instance Monitoring Information

- [Directory Server Instance Home Page Metrics](#)
- [Directory Server Instance Performance Summary Page Metrics](#)
- [Directory Server Instance Resources Usage Page Metrics](#)



- [Directory Server Instance Replication Overview Page Metrics](#)

#### 1.3.4.1 Directory Server Instance Home Page Metrics

The directory server instance Home page provides the following basic information about the server instance:

- General Information about the directory server instance and its current status including: up time, the administration port, the full version of the server, install and instance path, server role, and whether replication is enabled or disabled in the LDAP server
- Availability of the server
- Current load of the LDAP server including: the number of Operations Per Second, the average etime Per Operation, the number of Connections Per Second, the number of Current Connections, and the Connections Ceak
- List of configured suffixes and for each suffix, the DN, the entry count in the suffix, and indication of whether the suffix is replicated or not replicated
- List of configured connection handlers, and each connection handler name and type (such as LDAP, SNMP, JMX and so forth), the Listen Port Number, whether the connection handler is enabled or disabled, Average etime (ms) Per Operation on the connection handler, and the number of Operations Per Second Since the Last Collection
- Performance overview with line charts indicating the following:
  - The number of Operations Completed Per Second since the server startup, and Operations Completed Per Second Since the Last Collection
  - The eTime Per Operation Since Startup of the server, and the eTime Per Operation Since the Last Collection
  - The number of Connections Per Second Since Startup, and the number of Connections Per Second Since the Last Collection
  - CPU usage

In addition, the Home page displays any alerts that might have been generated by the monitored server instance.

#### 1.3.4.2 Directory Server Instance Performance Summary Page Metrics

The OUD Directory Server Performance Summary Page displays the following:

- Current Load of the server with the number Operations Per Second, the Average eTime, the number of Connections Per Second, the number of Current Connections, and Connections Peak
- A pie chart representing the number of Completed Operations compared to the Unsuccessful Operations Per Second
- Two bar charts representing, for each read and write operation type, the number of Operations Per Second
- For each Operation type, the number of Operations Per Second and the associated elapsed time

#### 1.3.4.3 Directory Server Instance Resources Usage Page Metrics

The OUD Directory Server Resource Summary Page displays the following:

**JVM Information**

- VM information like the Java version, Java home, Java Architecture, Max allowed Memory (MB), Total Memory (MB), Used Memory (MB) and the Free Memory (MB)
- A line chart representing the Free Memory in Heap, and the Used Memory in Heap
- A line chart representing the JVM Non Heap Usage (MB)

**Backends Information**

- Berkeley DB JE version, Number of Backends and the total number of Entry Count in the directory server
- A bar chart representing, for each backend the number of owned entries, the current size of the DB cache and the Free Disk Space

**Workqueue Information**

- Current Request in the backlog of the workqueue, the Request Backlog Peak, Rejected Requests, and Configured Capacity of the workqueue
- A line chart representing the number of requests in the queue

**Cache Information**

Entry Cache Hits, Entry Cache Tries, Cached Entries, Cache Hit Ratio, and a line chart representing the number of hits Per Second and the Number of Tries Per Second

**1.3.4.4 Directory Server Instance Replication Overview Page Metrics**

The OUD Directory Server Replication Overview Page displays the following:

**Local Replication Server**

- Administration port
- Replication Enabled Replication Port, Missing Changes, Oldest Missing Changes, Replication Delay, Received Updates Per Second, Sent Updates Per Second, and Untrusted Changes Per Second
- A line chart representing the number of Missing Changes in the local replication server
- A line chart representing the age of the Oldest Missing Changes

**Local Replication Domains**

- A bar chart representing, for each domain, the average number of Replication Updates Received Per Second for this replication domain
- A bar chart representing, for each domain, the average number of Replication Updates Sent Per Second for this replication domain

**Global Replication Report**

The Global Replication Report provides a summary of all servers in a replicated topology, as well as the overall replication status across the topology.

[Table 1–2](#) summarizes the metrics reported in the Global Replication Report for *each replication domain* in the topology:

**Table 1–2 Global Replication Report for Each Domain in the Topology**

Metric	Description
Host Name	Name of the host on which the directory server instance is running.
Admin Port	Administration port of the directory server instance.
Base DN	Base DN that is being replicated.
Entries	Number of entries in that base DN.
Replication Status	<p>Status of the replication domain on this directory server. The status can be one of the following:</p> <p><b>Replication Ongoing.</b> The connection to a replication server is established with the correct data set. Replication is working. If assured mode is used, then acknowledgements from this directory server are sent. For information about assured mode, see the Oracle® Fusion Middleware Administrator's Guide for Oracle Unified Directory 11g Release 2 (11.1.2).</p> <p><b>Degraded.</b> The connection to a replication server is established with the correct data set. Replication is working in degraded mode as the directory server has numerous changes that are pending in the replication server queue. If assured mode is used, then acknowledgements from this directory server are not expected.</p> <p><b>Being Initialized.</b> The connection to a replication server is established and a new data set is received from this connection (online import), to initialize the local back end.</p> <p><b>Requires Initialization.</b> The connection to a replication server is established with a data set that is different from the rest of the topology. Replication is not working. Either the other directory servers of the topology should be initialized with a compatible data set, or this server should be initialized with another data set that is compatible with the other servers.</p> <p><b>Not Connected.</b> The directory server is not connected to any replication server.</p>
Missing Changes	Number of changes that are still missing on this server (and that have been applied to at least one other server in the topology).
Oldest Missing Change	Age (in seconds) of the oldest missing change that has not yet arrived on this server.
Received Updates Per Second	Average number of replication updates received by this server Per Second.
Sent Updates Per Second	Average number of replication updates sent by this server Per Second.
Untrusted Changes Per Second	Average number of changes Per Second that were made on an untrusted server, and not yet replicated to the topology.

Table 1–3 summarizes the metrics reported in the Global Replication Report for each replication server in the topology.

**Table 1–3 Global Replication Report for Each Replication Server in the Topology**

Metric	Description
Host Name	Name of the host on which the replication server instance is running.
Replication Port	Replication port of the replication server instance.

**Table 1–3 (Cont.) Global Replication Report for Each Replication Server in the Topology**

Metric	Description
Base DN	Base DN that is being replicated.
Missing Changes	Number of changes that still need to be replayed on any server in the topology.
Oldest Missing Change	Age (in seconds) of the oldest missing change from any server in the topology.

[Table 1–4](#) summarizes the metrics reported in the Global Replication Report *for the entire topology*.

**Table 1–4 Global Replication Report for the Entire Topology**

Metric	Description
Missing Changes	The number of changes that still need to be replayed on any server in the topology.
Age of Oldest Missing Change	The age (in seconds) of the oldest missing change from any server in the topology.

## 1.3.5 Summary of Proxy Server Instance Monitoring Information

- [Proxy Server Instance Home Page Metrics](#)
- [Directory Server Instance Performance Summary Page Metrics](#)
- [Proxy Server Instance Resource Usage Page Metrics](#)
- [Proxy Server Instance Remote Servers Page Metrics](#)

### 1.3.5.1 Proxy Server Instance Home Page Metrics

The proxy server instance Home page provides the following basic information:

- General information about the proxy server instance and its current status including: up time, the administration port, the full version of the server, install and instance paths, and server role
- Availability of the server
- The current load of the LDAP server with the number of Operations Per Second, the Average etime Per Operation, the number of Connections Per Second, the number of Current Connections, and the Connections Peak
- List of configured suffixes with the server role, the network groups, and the associated algorithms
- List of configured connection handlers with the type, the port number, whether connection handler is enabled or disabled, Average etime (ms) Per Operation, and the number of Operations Per Second Since the Last Collection
- List of remote servers with, for each server, the name, the host name, the port number, the SSL port number, the suffix and workflow element, the status of the remote server, the last up time, and the last down time
- Performance overview with line charts representing the number of Operations Completed, the Operations eTime, the number of connections, and the CPUUsage.

In addition, the Home page displays any alerts that might have been generated by the monitored server instance.

### 1.3.5.2 Proxy Server Instance Performance Summary Page Metrics

The OUD Proxy Server Performance Summary Page displays the following:

- Current Load of the server with the number Operations Per Second, the Average eTime, the number of Connections Per Second, the number of Current Connections, and Connections Peak
- A pie chart representing with the number of completed Operations compared to the Unsuccessful Operations Per Second
- Two bar charts representing, for each read and write operation, the number of Operations Per Second
- For each operation type, the number of Operations Per Second and the associated elapsed time
- Line charts representing the number of Operations Completed, the Operations eTime, the number of connections, and the CPU usage

### 1.3.5.3 Proxy Server Instance Resource Usage Page Metrics

The OUD Proxy Server Resource Summary Page displays the following:

#### JVM Information

- JVM information like the java version, Java home, Java Architecture, Max allowed Memory (MB), Total Memory (MB), Used Memory (MB) and the free memory (MB)
- A line chart representing the Free Memory in Heap, and the Used Memory in the heap
- A line chart representing the JVM Non Heap Usage (MB)

#### Request Backlog Information

- Current Request in the backlog of the workqueue, the request backlog peak, Rejected Requests
- A line chart representing the number of requests in the queue

#### Global Index Shared Cache Space Usage Information

- Cache name, Used In, Used Space
- A line chart representing the amount of Used Space of the global index cache if configured

### 1.3.5.4 Proxy Server Instance Remote Servers Page Metrics

The OUD Proxy Server Remote Servers Page displays the following:

- List of Remote Data sources with for each remote data sources: Name, Hostname, Port number, SSL port number, Suffix/WFE, Status, Last Up time, Last Down time, Connection Pool Used, Read Operation Per Second, Writes Operations Per Second, and number of Silent Binds Per Second
- A bar chart representing, for each remote server, the number of Failed Operations, number of Aborted Operations, and the number of Completed Operations
- A bar chart representing the number of Read Operations for each remote server
- A bar chart representing the number of Write Operations Per Second for each remote server

- A bar chart representing, for each remote server, the eTime of Failed Operations, of Aborted Operations and Completed Operations
- A bar chart representing the eTime of Read Operation for each remote server
- A bar chart representing the eTime of Write Operations Per Second for each remote server

## 1.3.6 Summary of Replication Gateway Monitoring Information

- [Replication Gateway Instance Home Page Metrics](#)
- [Replication Gateway Instance Resources Usage Page Metrics](#)
- [Replication Gateway Instance Replication Overview Page Metrics](#)

### 1.3.6.1 Replication Gateway Instance Home Page Metrics

The replication gateway instance Home page provides the following basic information:

- General information about the replication gateway instance and its the current status including: up time, administration port, full version of the server, install and instance paths, server role, and whether replication is enabled or disabled
- Availability of the server
- List of configured suffixes with replication status, the Updates Sent to ODSEE Per Second, Updates Received from ODSEE Per Second, Updates Sent to OUD Per Second, and Updates Received from OUD Per Second
- Performance overview with line charts representing the number of updates sent to ODSEE Per Second, the number of Updates Received from ODSEE Per Second, the number of Updates Sent to OUD Per Second, and the number of Updates Received from OUD Per Second

In addition, the Home page displays any alerts that might have been generated by the monitored replication gateway instance.

### 1.3.6.2 Replication Gateway Instance Resources Usage Page Metrics

The OUD Replication Gateway Resource Usage Page displays the following:

#### JVM Information

- VM information: the Java version, Java home, Java Architecture, Max Allowed Memory (MB), Total Memory (MB), Used Memory (MB) and the Free Memory (MB)
- A line chart representing the Free Memory in Heap, and the Used Memory in the heap
- A line chart representing the JVM Non Heap Usage (MB)

### 1.3.6.3 Replication Gateway Instance Replication Overview Page Metrics

The OUD Replication Gateway Replication Overview Page displays the following:

#### Local Replication Server

- Administration port
- Replication Enabled Replication Port, Missing Changes, Oldest Missing Changes, Replication Delay, Received Updates Per Second, Sent Updates Per Second, Untrusted Changes Per Second

- A line chart representing the number missing changes in the local replication server
- A line chart representing the age of the Oldest Missing Changes

#### Local Replication Domains

- A bar chart representing, for each domain, the average number of Replication Updates Received Per Second for this replication domain
- A bar chart representing, for each domain, the average number of Replication Updates Sent Per Second for this replication domain

#### Global Replication Report

The Global Replication Report provides a summary of all servers in a replicated topology, as well as the overall replication status across the topology.

[Table 1–5](#) summarizes the metrics reported in the Global Replication Report *for each replication domain* in the topology:

**Table 1–5 Global Replication Report for Each Domain in the Topology**

Metric	Description
Host Name	Name of the host on which the directory server instance is running.
Admin Port	Administration port of the directory server instance.
Base DN	Base DN that is being replicated.
Entries	Number of entries in that base DN.
Replication Status	<p>Status of the replication domain on this directory server. The status can be one of the following:</p> <p><b>Replication Ongoing.</b> The connection to a replication server is established with the correct data set. Replication is working. If assured mode is used, then acknowledgements from this directory server are sent. For information about assured mode, see the Oracle® Fusion Middleware Administrator's Guide for Oracle Unified Directory 11g Release 2 (11.1.2).</p> <p><b>Degraded.</b> The connection to a replication server is established with the correct data set. Replication is working in degraded mode as the directory server has numerous changes that are pending in the replication server queue. If assured mode is used, then acknowledgements from this directory server are not expected.</p> <p><b>Being Initialized.</b> The connection to a replication server is established and a new data set is received from this connection (online import), to initialize the local back end.</p> <p><b>Requires Initialization.</b> The connection to a replication server is established with a data set that is different from the rest of the topology. Replication is not working. Either the other directory servers of the topology should be initialized with a compatible data set, or this server should be initialized with another data set that is compatible with the other servers.</p> <p><b>Not Connected.</b> The directory server is not connected to any replication server.</p>
Missing Changes	Number of changes that are still missing on this server (and that have been applied to at least one other server in the topology).
Oldest Missing Change	Age (in seconds) of the oldest missing change that has not yet arrived on this server.

**Table 1–5 (Cont.) Global Replication Report for Each Domain in the Topology**

Metric	Description
Received Updates Per Second	Average number of replication updates received by this server per second.
Sent Updates Per Second	Average number of replication updates sent by this server per second.
Untrusted Changes Per Second	Average number of changes per second that were made on an untrusted server, and not yet replicated to the topology.

[Table 1–6](#) summarizes the metrics reported in the Global Replication Report *for each replication server* in the topology.

**Table 1–6 Global Replication Report for Each Replication Server in the Topology**

Metric	Description
Host Name	Name of the host on which the replication server instance is running.
Replication Port	Replication port of the replication server instance.
Base DN	Base DN that is being replicated.
Missing Changes	Number of changes that still need to be replayed on any server in the topology.
Oldest Missing Change	Age (in seconds) of the oldest missing change from any server in the topology.

[Table 1–7](#) summarizes the metrics reported in the Global Replication Report *for the entire topology*.

**Table 1–7 Global Replication Report for the Entire Topology**

Metric	Description
Missing Changes	The number of changes that still need to be replayed on any server in the topology.
Age of Oldest Missing Change	The age (in seconds) of the oldest missing change from any server in the topology.

## 1.4 Uninstalling the Enterprise Manager Plug-in for OUD

To uninstall the Enterprise Manager Plug-in for OUD, complete the following tasks:

- Remove all target instances of the plug-in.  
See [Section 1.4.1, "To Remove Target Instances of the Plug-in."](#)
- Undeploy the plug-in.  
See [Section 1.4.2, "Undeploying the Plug-in."](#)

You must remove all target instances of the plug-in before you can undeploy the plug-in. For example, if you have three OUD instances with two instances deployed to one agent and the third instance deployed to a second agent, you must Perform the following tasks:

- Remove instance 1 (the target instance) on agent 1.
- Remove instance 2 (the second target instance) on agent 1.
- Remove instance 3 (the third target instance) on agent 2.



You can then undeploy the plug-in from the Oracle Enterprise Manager Cloud Control.

### 1.4.1 To Remove Target Instances of the Plug-in

You can remove a target instance by following this procedure. Note that when you remove a target instance, all corresponding data (monitoring data that has already been collected) is deleted.

For each target instance of the plug-in that you want to remove, complete the following steps:

1. Select **Targets** on the navigation bar from the Oracle Enterprise Manager home page.

The Hosts page is displayed.

2. Select **All Targets** on the Hosts page.

The All Targets page displays the list of all targets in the Oracle Enterprise Manager Cloud Control including hosts, agents, databases, directory servers and others.

The target instance name is displayed in the Name column.

3. Click **Target Setup > Remove Target** to select the target instance name.

4. Click **Remove**.

The following message is displayed: "You have chosen to remove *target\_instance\_name* (OUD Directory Server, OUD Proxy Server or OUD Replication Gateway). Do you wish to proceed?"

Click **Yes**. A confirmation message is displayed.

The target instance has now been removed. Repeat these steps to remove any additional target instances of the Enterprise Manager Plug-in for OUD.

When all target instances of the plug-in have been removed, you can undeploy and then delete the Plug-in from the Oracle Enterprise Manager Cloud Control, as described in the following sections.

### 1.4.2 Undeploying the Plug-in

Follow the detailed instructions in the following sections of the *Oracle Enterprise Manager Cloud Control Administrator's Guide*:

- "Undeploying the Plug-in from Oracle Management Service"

[http://docs.oracle.com/cd/E24628\\_01/doc.121/e24473/plugin\\_mgr.htm#CJGEIECI](http://docs.oracle.com/cd/E24628_01/doc.121/e24473/plugin_mgr.htm#CJGEIECI)

- "Undeploying the Plug-in from Management Agents"

[http://docs.oracle.com/cd/E24628\\_01/doc.121/e24473/plugin\\_mgr.htm#CJGEFADI](http://docs.oracle.com/cd/E24628_01/doc.121/e24473/plugin_mgr.htm#CJGEFADI)

## 1.5 Limitations of this Release

The following limitations Pertain to the JVM Resources Report that is generated for each of the three server types.

- The CPU Usage graph is available *only* if:

- The target instance is running on the same host as the Management Agent in which the instance is registered
- The target instance and the Management Agent are running with the same access rights
- The Non-Heap Usage graph is not accurate (the reported metric is incorrect).
- If Oracle Management Agent is running on an HP-UX system, then OUD instances should be installed on a path which is limited to 70 characters.

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## OOD Directory Server Instance Metrics

This Appendix contains the following sections:

- [Response Metrics](#)
- [General Information Metrics](#)
- [Server Role Metrics](#)
- [Naming Contexts Configuration Metrics](#)
- [Backend Information Metrics](#)
- [Entry Cache Metrics](#)
- [WorkQueue Metrics](#)
- [Connections Metrics](#)
- [Operations Aggregation Metrics](#)
- [Operations Read Metrics](#)
- [Operations Write Metrics](#)
- [Operations Extended Metrics](#)
- [Replication Configuration Metrics](#)
- [Replication Server Aggregation Metrics](#)
- [Replication Server Information Metrics](#)
- [Replication Domain Aggregation Metrics](#)
- [Replication Domain Information Metrics](#)
- [Replication Domain Assured Information Metrics](#)
- [Administration Connector General Information Metrics](#)
- [Administration Connector Read Operations Metrics](#)
- [Administration Connector Write Operations Metrics](#)
- [Administration Connector Extended Operations Metrics](#)
- [Connection Handlers Configuration Metrics](#)
- [Connection Handlers General Information Metrics](#)
- [Connection Handlers Read Operations Metrics](#)
- [Connection Handlers Write Operations Metrics](#)
- [Connection Handlers Extended Operations Metrics](#)

- [System Resource Information - CPU Usage Metric](#)
- [Server Resource Information Metrics](#)

## A.1 Response Metrics

- [Status](#)
- [Details](#)

### A.1.1 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 1 minute

**Upload Frequency**

After every sample

**Operator**

Not equal

**Default Critical Threshold**

0

**Alert Text**

The OUD Server is down.

### A.1.2 Details

**Target Version**

All versions

**Collection Frequency**

Every 1 minute

## A.2 General Information Metrics

- [Full Version](#)
- [Vendor Name](#)
- [Current Time](#)
- [Start Time](#)
- [Instance Path](#)
- [Install Path](#)
- [Java Version](#)
- [Java Home](#)
- [Java Architecture](#)

### A.2.1 Full Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.2 Vendor Name

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.3 Current Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.4 Start Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.5 Instance Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.6 Install Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.2.7 Java Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## A.2.8 Java Home

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## A.2.9 Java Architecture

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## A.3 Server Role Metrics

- [Directory Server](#)
- [Proxy](#)
- [Distributor](#)
- [Load Balancer](#)
- [Replication Gateway](#)
- [Role](#)

### A.3.1 Directory Server

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 24 hours

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

False

**Alert Text**

The target is not a LDAP Storage directory.

### A.3.2 Proxy

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

**A.3.3 Distributor****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**A.3.4 Load Balancer****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**A.3.5 Replication Gateway****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 24 hours

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

True

**Alert Text**

Please Select the oracle\_oud\_gateway plugin to monitor your instance.

**A.3.6 Role****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**A.4 Naming Contexts Configuration Metrics**

- [Backend Name](#)
- [Base DN](#)
- [Entries Count](#)
- [Replicated](#)

- [Oracle Integration](#)

#### A.4.1 Backend Name

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

#### A.4.2 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

#### A.4.3 Entries Count

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

#### A.4.4 Replicated

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

#### A.4.5 Oracle Integration

**Target Version**

All versions

**Collection Frequency**

Every 24 hours



## A.5 Backend Information Metrics

▪ Backend Name	▪ Number of Writes in DB Per Second Since Startup
▪ JE Version	▪ Number of Writes in DB Per Second
▪ Entries Count	▪ Total Number of Reads in DB Since Startup
▪ Free Disk (MB)	▪ Number of Reads in DB Per Second Since Startup
▪ Disk State	▪ Number of Reads in DB Per Second
▪ Disk Directory	▪ Cleaner Backlog
▪ Current Size of the DB cach (MB)	▪ Total number of Metadata Misses Since Startup
▪ Configured Max Size of the DB Cach (MB)	▪ Number of Metadata Misses Per Second Since Startup
▪ Total Number of Cache Misses Since Startup	▪ Number of Metadata Misses Per Second
▪ Cache Misses Per Second Since Startup	▪ Current Size of the Metadata (Bottom Internal Nodes)
▪ Cache Misses Per Second	
▪ Total Number of Writes in DB Since Startup	

### A.5.1 Backend Name

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.5.2 JE Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### A.5.3 Entries Count

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

The number of Entries value crossed warning threshold or critical threshold.

## A.5.4 Free Disk (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

The Free Disk Space value crossed warning threshold or critical threshold.

## A.5.5 Disk State

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Alert Text**

Disk State value crossed warning threshold or critical threshold.

## A.5.6 Disk Directory

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.5.7 Current Size of the DB cach (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Size of the DB cache value crossed warning threshold or critical threshold.

**A.5.8 Configured Max Size of the DB Cach (MB)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Size of the DB cache value crossed warning threshold or critical threshold.

**A.5.9 Total Number of Cache Misses Since Startup****Target Version**

All versions

**Collection Frequency****A.5.10 Cache Misses Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of cache Misses Per Second Since Startup value crossed warning threshold or critical threshold.

**A.5.11 Cache Misses Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of cache Misses Per Second value crossed warning threshold or critical threshold.

## A.5.12 Total Number of Writes in DB Since Startup

**Target Version**

All versions

**Collection Frequency**

## A.5.13 Number of Writes in DB Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Writes in DB Per Second value crossed warning threshold or critical threshold.

## A.5.14 Number of Writes in DB Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Writes in DB Per Second value crossed warning threshold or critical threshold.

### A.5.15 Total Number of Reads in DB Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.5.16 Number of Reads in DB Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Read in DB Per Second Since Startup value crossed warning threshold or critical threshold.

### A.5.17 Number of Reads in DB Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Number of Read in DB Per Second value crossed warning threshold or critical threshold.

### A.5.18 Cleaner Backlog

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Cleaner Backlog value crossed warning threshold or critical threshold.

### A.5.19 Total number of Metadata Misses Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.5.20 Number of Metadata Misses Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Metadata Misses Per Second Since Startup value crossed warning threshold or critical threshold.

### A.5.21 Number of Metadata Misses Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Metadata Misses Per Second value crossed warning threshold or critical threshold.

### A.5.22 Current Size of the Metadata (Bottom Internal Nodes)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Size of the Metadata (Bottom Internal Nodes) value crossed warning threshold or critical threshold.

## A.6 Entry Cache Metrics

- [Total Number of Hits Since Startup](#)
- [Total Number of Hits Per Second Since Startup](#)
- [Number of Hits Per Second](#)
- [Total Number of Tries Since Startup](#)
- [Total Number of Tries Per Second Since Startup](#)
- [Number of Tries Per Second](#)
- [Current Number of Entries in the Cache](#)
- [Entry Cache Hit Ratio](#)

### A.6.1 Total Number of Hits Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**Upload Frequency**

### A.6.2 Total Number of Hits Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Number of Hits Per Second Since Startup value crossed warning threshold or critical threshold.

### A.6.3 Number of Hits Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Number of Hits Per Second value crossed warning threshold or critical threshold.

### A.6.4 Total Number of Tries Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.6.5 Total Number of Tries Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

Greater than

**Alert Text**

Number of Tries Per Second Since Startup value crossed warning threshold or critical threshold.

### A.6.6 Number of Tries Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Tries Per Second value crossed warning threshold or critical threshold.



## A.6.7 Current Number of Entries in the Cache

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Number of entries in the Cache value crossed warning threshold or critical threshold.

## A.6.8 Entry Cache Hit Ratio

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

Greater than

**Operator**

Greater than

**Alert Text**

Entry Cache Hit Ratio value crossed warning threshold or critical threshold.

## A.7 WorkQueue Metrics

- [Max Number of Requests in the Queue](#)
- [Current Number of requests in the Queue](#)
- [Number of Rejected Requests Due to Full Queue](#)
- [Maximum Requests Allowed in the Queue](#)

### A.7.1 Max Number of Requests in the Queue

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.7.2 Current Number of requests in the Queue

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Number of requests in the Queue value crossed warning threshold or critical threshold.

## A.7.3 Number of Rejected Requests Due to Full Queue

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Rejected Requests due to Full Queue value crossed warning threshold or critical threshold.

## A.7.4 Maximum Requests Allowed in the Queue

**Target Version**

All versions

**Collection Frequency**

## A.8 Connections Metrics

- [Connections Peak](#)
- [Current Connections](#)
- [Total Connections](#)
- [Connections Per Second Since Startup](#)
- [Connections Per Second](#)

### A.8.1 Connections Peak

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.8.2 Current Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

### A.8.3 Total Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.8.4 Connections Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections Per Second Since Startup value crossed warning threshold or critical threshold.

### A.8.5 Connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections Per Second value crossed warning threshold or critical threshold.

## A.9 Operations Aggregation Metrics

▪ Operations Initiated Since Startup	▪ Average Elapsed Time (ms) Per Operation
▪ Operations Initiated Per Second Since Startup	▪ Returned Search Result Entries Since Startup
▪ Operations Initiated Per Second	▪ Returned Search Result Entries Per Second Since Startup
▪ Operations Completed Since Startup	▪ Returned Search Result Entries Per Second
▪ Operations Completed Per Second Since Startup	▪ Total MB Read
▪ Operations Completed Per Second	▪ KB Read Per Second Since Startup
▪ Operations Unsuccessful Since Startup	▪ KB Read Per Second
▪ Operations Unsuccessful Per Second Since Startup	▪ Total MB Written
▪ Operations Unsuccessful Per Second	▪ KB Written Per Second Since Startup
▪ Elapsed Time (ms) for all Operations Since Startup	▪ KB Written Per Second
▪ Average Elapsed Time (ms) Per Operation Since Startup	

### A.9.1 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.9.2 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

**A.9.3 Operations Initiated Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Initiated Per Second value crossed warning threshold or critical threshold.

**A.9.4 Operations Completed Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.9.5 Operations Completed Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

**A.9.6 Operations Completed Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Completed Per Second value crossed warning threshold or critical threshold.

## **A.9.7 Operations Unsuccessful Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.9.8 Operations Unsuccessful Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.9.9 Operations Unsuccessful Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.9.10 Elapsed Time (ms) for all Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.9.11 Average Elapsed Time (ms) Per Operation Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**A.9.12 Average Elapsed Time (ms) Per Operation****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**A.9.13 Returned Search Result Entries Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.9.14 Returned Search Result Entries Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

**A.9.15 Returned Search Result Entries Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

## A.9.16 Total MB Read

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.9.17 KB Read Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

## A.9.18 KB Read Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.



### A.9.19 Total MB Written

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.9.20 KB Written Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

### A.9.21 KB Written Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.

## A.10 Operations Read Metrics

▪ Read Operations Since Startup	▪ Abandon Operations Per Second Since Startup
▪ Read Operations Per Second Since Startup	▪ Abandon Operations Per Second
▪ Read Operations Per Second	▪ Compare Operations Since Startup
▪ Total Elapsed Time (ms) for All Read Operations Since Startup	▪ Compare Operations Per Second Since Startup
▪ Average Elapsed Time (ms) Per Operation Since Startup	▪ Compare Operations Per Second
▪ Average Elapsed Time Per Operation (ms)	▪ Elapsed Time for Bind Operations Since Startup
▪ Bind Operations Since Startup	▪ Average Elapsed Time Per Bind Since Startup
▪ Bind Operations Per Second Since Startup	▪ Average Elapsed Time Per Bind
▪ Bind Operations Per Second	▪ Elapsed Time for Search Operations Since Startup
▪ Search Operations Since Startup	▪ Average Elapsed Time Per Search Since Startup
▪ Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Search
▪ Search Operations Per Second	▪ Elapsed Time for Unbind Operations Since Startup
▪ One Level Search Operations Since Startup	▪ Average Elapsed Time Per Unbind Since Startup
▪ One Level Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Unbind
▪ One Level Search Operations Per Second	▪ Elapsed Time for Abandon Operations Since Startup
▪ Subtree Search Operations Since Startup	▪ Average Elapsed Time Per Abandon Since Startup
▪ Subtree Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Abandon
▪ Subtree Search Operations Per Second	▪ Elapsed Time for Compare Operations Since Startup
▪ Unbind Operations Since Startup	▪ Average Elapsed Time Per Compare Since Startup
▪ Unbind Operations Per Second Since Startup	▪ Average Elapsed Time Per Compare
▪ Unbind Operations Per Second	
▪ Abandon Operations Since Startup	

### A.10.1 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.2 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.10.3 Read Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

**A.10.4 Total Elapsed Time (ms) for All Read Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.5 Average Elapsed Time (ms) Per Operation Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**A.10.6 Average Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## **A.10.7 Bind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.10.8 Bind Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

## **A.10.9 Bind Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

### A.10.10 Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.11 Search Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.10.12 Search Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

### A.10.13 One Level Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.14 One Level Search Operations Per Second Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.15 One Level Search Operations Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.16 Subtree Search Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.17 Subtree Search Operations Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.18 Subtree Search Operations Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.19 Unbind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.20 Unbind Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.10.21 Unbind Operations Per Second****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.22 Abandon Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.10.23 Abandon Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.10.24 Abandon Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

## A.10.25 Compare Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.10.26 Compare Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.10.27 Compare Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.



### A.10.28 Elapsed Time for Bind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.29 Average Elapsed Time Per Bind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

### A.10.30 Average Elapsed Time Per Bind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

### A.10.31 Elapsed Time for Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.32 Average Elapsed Time Per Search Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

### A.10.33 Average Elapsed Time Per Search

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

### A.10.34 Elapsed Time for Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.35 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### A.10.36 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### A.10.37 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.10.38 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

### A.10.39 Average Elapsed Time Per Abandon

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

#### **A.10.40 Elapsed Time for Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

#### **A.10.41 Average Elapsed Time Per Compare Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

#### **A.10.42 Average Elapsed Time Per Compare**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## A.11 Operations Write Metrics

▪ Write Operations Since Startup	▪ Delete Operations Since Startup
▪ Write Operations Per Second Since Startup	▪ Delete Operations Per Second Since Startup
▪ Write Operations Per Second	▪ Delete Operations Per Second
▪ Total Elapsed Time (ms) for all Write Operations Since Startup	▪ Elapsed Time for Modify Operations Since Startup
▪ Average Elapsed Time (ms) Per Operation Since Startup	▪ Average Elapsed Time Per Modify Since Startup
▪ Average Elapsed Time Per Operation (ms)	▪ Average Elapsed Time Per Modify
▪ Modify Operations Since Startup	▪ Elapsed Time for Add Operations Since Startup
▪ Modify Operations Per Second Since Startup	▪ Average Elapsed Time Per Add Since Startup
▪ Modify Operations Per Second	▪ Average Elapsed Time Per Add
▪ Add Operations Since Startup	▪ Elapsed Time for Mod DN Operations Since Startup
▪ Add Operations Per Second Since Startup	▪ Average Elapsed Time Per Mod DN Since Startup
▪ Add Operations Per Second	▪ Average Elapsed Time Per Mod DN
▪ Mod DN Operations Since Startup	▪ Elapsed Time for Delete Operations Since Startup
▪ Mod DN Operations Per Second Since Startup	▪ Average Elapsed Time Per Delete Since Startup
▪ Mod DN Operations Per Second	▪ Average Elapsed Time Per Delete

### A.11.1 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.2 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.11.3 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

### A.11.4 Total Elapsed Time (ms) for all Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.5 Average Elapsed Time (ms) Per Operation Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### A.11.6 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**A.11.7 Modify Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.11.8 Modify Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.11.9 Modify Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

**A.11.10 Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.11 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.11.12 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

### A.11.13 Mod DN Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.14 Mod DN Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than



**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.11.15 Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**A.11.16 Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.11.17 Delete Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.11.18 Delete Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

### A.11.19 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.20 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

### A.11.21 Average Elapsed Time Per Modify

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

### A.11.22 Elapsed Time for Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.23 Average Elapsed Time Per Add Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

### A.11.24 Average Elapsed Time Per Add

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

### A.11.25 Elapsed Time for Mod DN Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.11.26 Average Elapsed Time Per Mod DN Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

## **A.11.27 Average Elapsed Time Per Mod DN**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

## **A.11.28 Elapsed Time for Delete Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.11.29 Average Elapsed Time Per Delete Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

### A.11.30 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## A.12 Operations Extended Metrics

- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)
- [Average Elapsed Time Per Extended](#)

### A.12.1 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.12.2 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.12.3 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

### A.12.4 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.12.5 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

### A.12.6 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

## A.13 Replication Configuration Metrics

- [Replication Configured](#)
- [Replication Server Configured](#)
- [Replication Domain Configured](#)
- [Server Trusted](#)

### A.13.1 Replication Configured

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.13.2 Replication Server Configured

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.13.3 Replication Domain Configured

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.13.4 Server Trusted

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.14 Replication Server Aggregation Metrics

- [Port](#)
- [Age of Oldest Missing Change \(sec\)](#)
- [Missing Changes](#)

### A.14.1 Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.14.2 Age of Oldest Missing Change (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Age of Oldest Missing Change value crossed warning threshold or critical threshold.

### A.14.3 Missing Changes

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Missing Changes value crossed warning threshold or critical threshold.

## A.15 Replication Server Information Metrics

- [Host Name](#)
- [Replication Port](#)
- [Base DN](#)
- [Administration Port](#)
- [Replication Group ID](#)
- [Age of Oldest Missing Change \(sec\)](#)
- [Missing Changes](#)
- [Generation ID](#)



### A.15.1 Host Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.15.2 Replication Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.15.3 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.15.4 Administration Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.15.5 Replication Group ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.15.6 Age of Oldest Missing Change (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Age of Oldest Missing Change value crossed warning threshold or critical threshold.

## A.15.7 Missing Changes

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Missing Changes value crossed warning threshold or critical threshold.

## A.15.8 Generation ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.16 Replication Domain Aggregation Metrics

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▪ <a href="#">Age of Oldest Missing Change (sec)</a>	▪ <a href="#">Received Updates</a>
▪ <a href="#">Missing Changes</a>	▪ <a href="#">Received Updates Per Second</a>
▪ <a href="#">Delay (seconds)</a>	▪ <a href="#">Replayed Updates</a>
▪ <a href="#">Pending Updates</a>	▪ <a href="#">Replayed Updates Per Second</a>
▪ <a href="#">Remote Pending Updates</a>	▪ <a href="#">Successful Replayed Updates</a>
▪ <a href="#">Resolved Modify Conflicts</a>	▪ <a href="#">Successful Replayed Updates (%)</a>
▪ <a href="#">Naming Conflicts</a>	▪ <a href="#">Untrusted Changes</a>
▪ <a href="#">Resolved Naming Conflicts</a>	▪ <a href="#">Untrusted Changes Per Second</a>
▪ <a href="#">Resolved Naming Conflicts (%)</a>	▪ <a href="#">Total Lost Connections</a>
▪ <a href="#">Sent Updates</a>	▪ <a href="#">Delta Lost Connections</a>
▪ <a href="#">Sent Updates Per Second</a>	▪ <a href="#">Lost connections Per Second</a>

---

### A.16.1 Age of Oldest Missing Change (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Age of Oldest Missing Change value crossed warning threshold or critical threshold.

**A.16.2 Missing Changes****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Missing Changes value crossed warning threshold or critical threshold.

**A.16.3 Delay (seconds)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delay (sec) value crossed warning threshold or critical threshold.

**A.16.4 Pending Updates****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Pending Updates value crossed warning threshold or critical threshold.

## A.16.5 Remote Pending Updates

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Remote Pending Updates value crossed warning threshold or critical threshold.

## A.16.6 Resolved Modify Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Resolved Modify Conflicts value crossed warning threshold or critical threshold.

## A.16.7 Naming Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Naming Conflicts value crossed warning threshold or critical threshold.

### A.16.8 Resolved Naming Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Resolved Naming Conflicts value crossed warning threshold or critical threshold.

### A.16.9 Resolved Naming Conflicts (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Resolved Naming Conflicts value crossed warning threshold or critical threshold.

### A.16.10 Sent Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.16.11 Sent Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Sent Updates Per Second value crossed warning threshold or critical threshold.

## A.16.12 Received Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.16.13 Received Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Received Updates Per Second value crossed warning threshold or critical threshold.

## A.16.14 Replayed Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.16.15 Replayed Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Replayed Updates Per Second value crossed warning threshold or critical threshold.

### A.16.16 Successful Replayed Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.16.17 Successful Replayed Updates (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Percentage of Successful Replayed Updates value crossed warning threshold or critical threshold.

### A.16.18 Untrusted Changes

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.16.19 Untrusted Changes Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Untrusted Changes Per Second value crossed warning threshold or critical threshold.

### A.16.20 Total Lost Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.16.21 Delta Lost Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Lost Connections value crossed warning threshold or critical threshold.

## A.16.22 Lost connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lost connections Per Second value crossed warning threshold or critical threshold.



## A.17 Replication Domain Information Metrics

■ Host Name	■ Resolved Naming Conflicts (%)
■ Administration Port	■ Resolved Naming Conflicts - Replication Connection Average (%)
■ Base DN	■ Sent Updates
■ Replication Group ID	■ Sent Updates Per Second
■ Status	■ Received Updates
■ Entries	■ Received Updates Per Second
■ Age of Oldest Missing Change (sec)	■ Replayed Updates
■ Missing Changes	■ Replayed Updates Per Second
■ Delay (sec)	■ Successful Replayed Updates
■ Generation ID	■ Successful Replayed Updates (%)
■ Connected Replication Server	■ Successful Replayed Updates (Repl Connection Avg) (%)
■ Pending Updates	■ Untrusted Changes
■ Remote Pending Updates	■ Untrusted Changes Per Second
■ Resolved Modify Conflicts	■ Total Lost Connections
■ Naming Conflicts	■ Delta Lost Connections
■ Resolved Naming Conflicts	■ Lost connections Per Second

### A.17.1 Host Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.2 Administration Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.3 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.4 Replication Group ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.17.5 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Entries value crossed warning threshold or critical threshold.

## A.17.6 Entries

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lost connections Per Second value crossed warning threshold or critical threshold.

## A.17.7 Age of Oldest Missing Change (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Age of Oldest Missing Change (sec) value crossed warning threshold or critical threshold.

### A.17.8 Missing Changes

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Missing Changes value crossed warning threshold or critical threshold.

### A.17.9 Delay (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delay (sec) value crossed warning threshold or critical threshold.

### A.17.10 Generation ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.11 Connected Replication Server

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.12 Pending Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.13 Remote Pending Updates

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Remote Pending Updates value crossed warning threshold or critical threshold.

### A.17.14 Resolved Modify Conflicts

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.15 Naming Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Naming Conflicts value crossed warning threshold or critical threshold.

### A.17.16 Resolved Naming Conflicts

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.17.17 Resolved Naming Conflicts (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Resolved Naming Conflicts value crossed warning threshold or critical threshold.

**A.17.18 Resolved Naming Conflicts - Replication Connection Average (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Resolved Naming Conflicts (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.17.19 Sent Updates****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.17.20 Sent Updates Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Sent Updates Per Second value crossed warning threshold or critical threshold.

## A.17.21 Received Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.17.22 Received Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Received Updates Per Second value crossed warning threshold or critical threshold.

## A.17.23 Replayed Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.17.24 Replayed Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Replayed Updates Per Second value crossed warning threshold or critical threshold.

## A.17.25 Successful Replayed Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.17.26 Successful Replayed Updates (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Successful Replayed Updates value crossed warning threshold or critical threshold.

**A.17.27 Successful Replayed Updates (Repl Connection Avg) (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Successful Replayed Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.17.28 Untrusted Changes****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.17.29 Untrusted Changes Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Untrusted Changes Per Second value crossed warning threshold or critical threshold.

## A.17.30 Total Lost Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.17.31 Delta Lost Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Lost Connections value crossed warning threshold or critical threshold.

## A.17.32 Lost connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lost connections Per Second value crossed warning threshold or critical threshold.



## A.18 Replication Domain Assured Information Metrics

■ Host Name	■ Failed (Timed Out) Safe Read Sent Updates (Repl Cnx Avg) (%)
■ Administration Port	■ Failed (Wrong Status) Safe Read Sent Updates
■ Base DN	■ Failed (Wrong Status) Safe Read Sent Updates (%)
■ Safe Data Configured	■ Failed (Wrong Status) Safe Read Sent Updates (Repl Cnx Avg) (%)
■ Safe Read Configured	■ Failed (Replay Error) Safe Read Sent Updates
■ Safe Data Updates	■ Failed (Replay Error) Safe Read Sent Updates (%)
■ Delta Safe Data Updates Per Second	■ Failed (Replay Error) Safe Read Sent Updates (Repl Cnx Avg) (%)
■ Acknowledged Safe Data Updates	■ Safe Read Received Updates
■ Acknowledged Safe Data Updates (%)	■ Delta Safe Read Received Updates Per Second
■ Acknowledged Safe Data Updates (Repl Connection Avg) (%)	■ Acknowledged Safe Read Received Updates
■ Safe Read Sent Updates	■ Acknowledged Safe Read Received Updates (%)
■ Delta Safe Read Sent Updates Per Second	■ Acknowledged Safe Read Received Updates (Repl Cnx Avg) (%)
■ Acknowledged Safe Read Sent Updates	
■ Acknowledged Safe Read Sent Updates (%)	
■ Acknowledged Safe Read Sent Updates (Repl Connection Avg) (%)	
■ Failed (Timed Out) Safe Read Sent Updates	
■ Failed (Timed Out) Safe Read Sent Updates (%)	

### A.18.1 Host Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.18.2 Administration Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.18.3 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.18.4 Safe Data Configured

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.18.5 Safe Read Configured

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.18.6 Safe Data Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.18.7 Delta Safe Data Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Acknowledged Safe Data Updates value crossed warning threshold or critical threshold.

## A.18.8 Acknowledged Safe Data Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.18.9 Acknowledged Safe Data Updates (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Data Updates value crossed warning threshold or critical threshold.

**A.18.10 Acknowledged Safe Data Updates (Repl Connection Avg) (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Data Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.18.11 Safe Read Sent Updates****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.18.12 Delta Safe Read Sent Updates Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Safe Read Sent Updates Per Second value crossed warning threshold or critical threshold.

### A.18.13 Acknowledged Safe Read Sent Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.18.14 Acknowledged Safe Read Sent Updates (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Read Sent Updates value crossed warning threshold or critical threshold.

### A.18.15 Acknowledged Safe Read Sent Updates (Repl Connection Avg) (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Read Sent Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

### A.18.16 Failed (Timed Out) Safe Read Sent Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.18.17 Failed (Timed Out) Safe Read Sent Updates (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Failed (Timed Out) Safe Read Sent Updates value crossed warning threshold or critical threshold.

**A.18.18 Failed (Timed Out) Safe Read Sent Updates (Repl Cnx Avg) (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Failed (Timed Out) Safe Read Sent Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.18.19 Failed (Wrong Status) Safe Read Sent Updates****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.18.20 Failed (Wrong Status) Safe Read Sent Updates (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Failed (Wrong Status) Safe Read Sent Updates value crossed warning threshold or critical threshold.

### **A.18.21 Failed (Wrong Status) Safe Read Sent Updates (Repl Cnx Avg) (%)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Failed (Wrong Status) Safe Read Sent Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

### **A.18.22 Failed (Replay Error) Safe Read Sent Updates**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **A.18.23 Failed (Replay Error) Safe Read Sent Updates (%)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Failed (Replay Error) Safe Read Sent Updates value crossed warning threshold or critical threshold.

### **A.18.24 Failed (Replay Error) Safe Read Sent Updates (Repl Cnx Avg) (%)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Percentage of Failed (Replay Error) Safe Read Sent Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.18.25 Safe Read Received Updates****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.18.26 Delta Safe Read Received Updates Per Second****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.18.27 Acknowledged Safe Read Received Updates****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Acknowledged Safe Read Received Updates value crossed warning threshold or critical threshold.

**A.18.28 Acknowledged Safe Read Received Updates (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Read Received Updates value crossed warning threshold or critical threshold.

**A.18.29 Acknowledged Safe Read Received Updates (Repl Cnx Avg) (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Acknowledged Safe Read Received Updates (Repl Connection Avg) value crossed warning threshold or critical threshold.

**A.19 Administration Connector General Information Metrics**

---

■ Administration Connector Port	■ Current Connections
■ Operations Initiated Since Startup	■ Total Connections
■ Operations Initiated Per Second Since Startup	■ Total Connections Per Second
■ Operations Initiated Per Second	■ Delta Total Connections Per Second
■ Operations Completed Since Startup	■ Total Returned Search Result Entries Since Startup
■ Operations Completed Per Second Since Startup	■ Returned Search Result Entries Per Second Since Startup
■ Operations Completed Per Second	■ Returned Search Result Entries Per Second
■ Operations Unsuccessful Since Startup	■ Total MB Read
■ Operations Unsuccessful Per Second Since Startup	■ KB Read Per Second Since Startup
■ Operations Unsuccessful Per Second	■ KB Read Per Second
■ Elapsed Time for all Operations Since Startup	■ Total MB Written
■ Average Elapsed Time Per Operation Since Startup	■ KB Written Per Second Since Startup
■ Average Elapsed Time Per Operation	■ KB Written Per Second

---



### A.19.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.19.2 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.19.3 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

### A.19.4 Operations Initiated Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second value crossed warning threshold or critical threshold.

### A.19.5 Operations Completed Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.19.6 Operations Completed Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

## **A.19.7 Operations Completed Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second value crossed warning threshold or critical threshold.

## **A.19.8 Operations Unsuccessful Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.19.9 Operations Unsuccessful Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.19.10 Operations Unsuccessful Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.19.11 Elapsed Time for all Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.19.12 Average Elapsed Time Per Operation Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### A.19.13 Average Elapsed Time Per Operation

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## A.19.14 Current Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

## A.19.15 Total Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.19.16 Total Connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Connections Per Second value crossed warning threshold or critical threshold.

## A.19.17 Delta Total Connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Total Connections Per Second value crossed warning threshold or critical threshold.

**A.19.18 Total Returned Search Result Entries Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.19.19 Returned Search Result Entries Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

**A.19.20 Returned Search Result Entries Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

**A.19.21 Total MB Read****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.19.22 KB Read Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

## A.19.23 KB Read Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.

## A.19.24 Total MB Written

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.19.25 KB Written Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

**A.19.26 KB Written Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.

## A.20 Administration Connector Read Operations Metrics

■ Administration Connector Port	■ Compare Operations Per Second Since Startup
■ Read Operations Since Startup	■ Compare Operations Per Second
■ Read Operations Per Second Since Startup	■ Elapsed Time for Bind Operations Since Startup
■ Read Operations Per Second	■ Average Elapsed Time Per Bind Since Startup
■ Total Elapsed Time for all Read Operations Since Startup (ms)	■ Average Elapsed Time Per Bind
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Elapsed Time for Search Operations Since Startup
■ Average Elapsed Time Per Operation (ms)	■ Average Elapsed Time Per Search Since Startup
■ Bind Operations Since Startup	■ Average Elapsed Time Per Search
■ Operations Unsuccessful Per Second Since Startup	■ Elapsed Time for Unbind Operations Since Startup
■ Bind Operations Per Second	■ Average Elapsed Time Per Unbind Since Startup
■ Search Operations Since Startup	■ Average Elapsed Time Per Unbind
■ Search Operations Per Second Since Startup	■ Elapsed Time for Abandon Operations Since Startup
■ Search Operations Per Second	■ Average Elapsed Time Per Abandon Since Startup
■ Unbind Operations Since Startup	■ Average Elapsed Time Per Abandon
■ Unbind Operations Per Second Since Startup	■ Elapsed Time for Compare Operations Since Startup
■ Unbind Operations Per Second	■ Average Elapsed Time Per Compare Since Startup
■ Abandon Operations Since Startup	■ Average Elapsed Time Per Compare
■ Abandon Operations Per Second Since Startup	
■ Abandon Operations Per Second	
■ Compare Operations Since Startup	

### A.20.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.20.2 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



### A.20.3 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.20.4 Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

### A.20.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.20.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## A.20.7 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## A.20.8 Bind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.20.9 Bind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.20.10 Bind Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

**A.20.11 Search Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.20.12 Search Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.20.13 Search Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

## A.20.14 Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.20.15 Unbind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.20.16 Unbind Operations Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.20.17 Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.20.18 Abandon Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.20.19 Abandon Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

**A.20.20 Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.20.21 Compare Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.20.22 Compare Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

## **A.20.23 Elapsed Time for Bind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.20.24 Average Elapsed Time Per Bind Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

## **A.20.25 Average Elapsed Time Per Bind**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

## A.20.26 Elapsed Time for Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.20.27 Average Elapsed Time Per Search Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

## A.20.28 Average Elapsed Time Per Search

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

## A.20.29 Elapsed Time for Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.20.30 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### A.20.31 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### A.20.32 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.20.33 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample



**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

**A.20.34 Average Elapsed Time Per Abandon****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

**A.20.35 Elapsed Time for Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.20.36 Average Elapsed Time Per Compare Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

**A.20.37 Average Elapsed Time Per Compare****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## A.21 Administration Connector Write Operations Metrics

■ Administration Connector Port	■ Delete Operations Since Startup
■ Write Operations Since Startup	■ Delete Operations Per Second Since Startup
■ Write Operations Per Second Since Startup	■ Delete Operations Per Second
■ Write Operations Per Second	■ Elapsed Time for Modify Operations Since Startup
■ Total Elapsed Time for all Write Operations Since Startup (ms)	■ Average Elapsed Time Per Modify Since Startup
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Average Elapsed Time Per Modify
■ Average Elapsed Time Per Operation (ms)	■ Elapsed Time for Add Operations Since Startup
■ Modify Operations Since Startup	■ Average Elapsed Time Per Add Since Startup
■ Modify Operations Per Second Since Startup	■ Average Elapsed Time Per Add
■ Modify Operations Per Second	■ Elapsed Time for Mod DN Operations Since Startup
■ Add Operations Since Startup	■ Average Elapsed Time Per Mod DN Since Startup
■ Add Operations Per Second Since Startup	■ Average Elapsed Time Per Mod DN
■ Add Operations Per Second	■ Elapsed Time for Delete Operations Since Startup
■ Mod DN Operations Since Startup	■ Average Elapsed Time Per Delete Since Startup
■ Mod DN Operations Per Second Since Startup	■ Average Elapsed Time Per Delete
■ Mod DN Operations Per Second	

### A.21.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.21.2 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.21.3 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.21.4 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## A.21.5 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.21.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## **A.21.7 Average Elapsed Time Per Operation (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## **A.21.8 Modify Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.21.9 Modify Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.21.10 Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

### A.21.11 Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.21.12 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.21.13 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

## **A.21.14 Mod DN Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.21.15 Mod DN Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **A.21.16 Mod DN Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

## **A.21.17 Delete Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.21.18 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.21.19 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

### A.21.20 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.21.21 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

## **A.21.22 Average Elapsed Time Per Modify**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

## **A.21.23 Elapsed Time for Add Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.21.24 Average Elapsed Time Per Add Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

## **A.21.25 Average Elapsed Time Per Add**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes



**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

**A.21.26 Elapsed Time for Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.21.27 Average Elapsed Time Per Mod DN Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

**A.21.28 Average Elapsed Time Per Mod DN****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

## A.21.29 Elapsed Time for Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.21.30 Average Elapsed Time Per Delete Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

## A.21.31 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## A.22 Administration Connector Extended Operations Metrics

- [Administration Connector Port](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)

- [Average Elapsed Time Per Extended](#)

## A.22.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.22.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.22.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.22.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

## A.22.5 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.22.6 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

## A.22.7 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

## A.23 Connection Handlers Configuration Metrics

- [Name](#)
- [Type](#)
- [Port](#)
- [Enabled](#)
- [Is SSL](#)

### A.23.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.23.2 Type

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.23.3 Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.23.4 Enabled

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.23.5 Is SSL

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24 Connection Handlers General Information Metrics

▪ Connection Handler Name	▪ Current Connections
▪ Operations Initiated Since Startup	▪ Total Connections
▪ Operations Initiated Per Second Since Startup	▪ Total Connections Per Second
▪ Operations Initiated Per Second	▪ Delta Total Connections Per Second
▪ Operations Completed Since Startup	▪ Total Returned Search Result Entries Since Startup
▪ Operations Completed Per Second Since Startup	▪ Returned Search Result Entries Per Second Since Startup
▪ Operations Completed Per Second	▪ Returned Search Result Entries Per Second
▪ Operations Unsuccessful Since Startup	▪ Total MB Read
▪ Operations Unsuccessful Per Second Since Startup	▪ KB Read Per Second Since Startup
▪ Operations Unsuccessful Per Second	▪ KB Read Per Second
▪ Elapsed Time for all Operations Since Startup	▪ Total MB Written
▪ Average Elapsed Time Per Operation Since Startup	▪ KB Written Per Second Since Startup
▪ Average Elapsed Time Per Operation	▪ KB Written Per Second

### A.24.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.24.2 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.24.3 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

**A.24.4 Operations Initiated Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second value crossed warning threshold or critical threshold.

**A.24.5 Operations Completed Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.24.6 Operations Completed Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

**A.24.7 Operations Completed Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second value crossed warning threshold or critical threshold.

## A.24.8 Operations Unsuccessful Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.9 Operations Unsuccessful Per Second Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.10 Operations Unsuccessful Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.11 Elapsed Time for all Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.12 Average Elapsed Time Per Operation Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample



**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**A.24.13 Average Elapsed Time Per Operation****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**A.24.14 Current Connections****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

**A.24.15 Total Connections****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.24.16 Total Connections Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Connections Per Second value crossed warning threshold or critical threshold.

## **A.24.17 Delta Total Connections Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Total Connections Per Second value crossed warning threshold or critical threshold.

## **A.24.18 Total Returned Search Result Entries Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.24.19 Returned Search Result Entries Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

## A.24.20 Returned Search Result Entries Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

## A.24.21 Total MB Read

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.22 KB Read Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

## A.24.23 KB Read Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.

## A.24.24 Total MB Written

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.24.25 KB Written Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

## A.24.26 KB Written Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.

## A.25 Connection Handlers Read Operations Metrics

■ Connection Handler Name	■ Compare Operations Since Startup
■ Read Operations Since Startup	■ Compare Operations Per Second Since Startup
■ Read Operations Per Second Since Startup	■ Compare Operations Per Second
■ Read Operations Per Second	■ Elapsed Time for Bind Operations Since Startup
■ Total Elapsed Time for all Read Operations Since Startup (ms)	■ Average Elapsed Time Per Bind Since Startup
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Average Elapsed Time Per Bind
■ Average Elapsed Time Per Operation (ms)	■ Elapsed Time for Search Operations Since Startup
■ Bind Operations Since Startup	■ Average Elapsed Time Per Search Since Startup
■ Bind Operations Per Second Since Startup	■ Average Elapsed Time Per Search
■ Bind Operations Per Second	■ Elapsed Time for Unbind Operations Since Startup
■ Search Operations Since Startup	■ Average Elapsed Time Per Unbind Since Startup
■ Search Operations Per Second Since Startup	■ Average Elapsed Time Per Unbind
■ Search Operations Per Second	■ Elapsed Time for Abandon Operations Since Startup
■ Unbind Operations Since Startup	■ Average Elapsed Time Per Abandon Since Startup
■ Unbind Operations Per Second Since Startup	■ Average Elapsed Time Per Abandon
■ Unbind Operations Per Second	■ Elapsed Time for Compare Operations Since Startup
■ Abandon Operations Since Startup	■ Average Elapsed Time Per Compare Since Startup
■ Abandon Operations Per Second Since Startup	■ Average Elapsed Time Per Compare Since Startup
■ Abandon Operations Per Second	

### A.25.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.2 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.3 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.25.4 Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

### A.25.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**A.25.7 Average Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**A.25.8 Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.25.9 Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.25.10 Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

## A.25.11 Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.25.12 Search Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.25.13 Search Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.



### A.25.14 Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.15 Unbind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.25.16 Unbind Operations Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.17 Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.18 Abandon Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.25.19 Abandon Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

## A.25.20 Compare Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.25.21 Compare Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.25.22 Compare Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

**A.25.23 Elapsed Time for Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.25.24 Average Elapsed Time Per Bind Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

**A.25.25 Average Elapsed Time Per Bind****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

## A.25.26 Elapsed Time for Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.25.27 Average Elapsed Time Per Search Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

## A.25.28 Average Elapsed Time Per Search

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

## A.25.29 Elapsed Time for Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.30 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### A.25.31 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### A.25.32 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.25.33 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

### **A.25.34 Average Elapsed Time Per Abandon**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

### **A.25.35 Elapsed Time for Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **A.25.36 Average Elapsed Time Per Compare Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

### **A.25.37 Average Elapsed Time Per Compare**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## A.26 Connection Handlers Write Operations Metrics

■ Connection Handler Name	■ Mod DN Operations Per Second
■ Write Operations Since Startup	■ Delete Operations Since Startup
■ Write Operations Per Second Since Startup	■ Delete Operations Per Second Since Startup
■ Write Operations Per Second	■ Delete Operations Per Second
■ Total Elapsed Time for all Write Operations Since Startup (ms)	■ Elapsed Time for Modify Operations Since Startup
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Average Elapsed Time Per Modify Since Startup
■ Average Elapsed Time Per Operation (ms)	■ Average Elapsed Time Per Modify
■ Modify Operations Since Startup	■ Elapsed Time for Add Operations Since Startup
■ Modify Operations Per Second Since Startup	■ Average Elapsed Time Per Add Since Startup
■ Modify Operations Per Second	■ Average Elapsed Time Per Add
■ Add Operations Since Startup	■ Elapsed Time for Mod DN Operations Since Startup
■ Add Operations Per Second Since Startup	■ Average Elapsed Time Per Mod DN Since Startup
■ Add Operations Per Second	■ Average Elapsed Time Per Mod DN
■ Mod DN Operations Since Startup	■ Elapsed Time for Delete Operations Since Startup
■ Mod DN Operations Per Second Since Startup	■ Average Elapsed Time Per Delete Since Startup
	■ Average Elapsed Time Per Delete

### A.26.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.2 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.3 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.26.4 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## A.26.5 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions



**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**A.26.7 Average Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**A.26.8 Modify Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.26.9 Modify Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.26.10 Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

## A.26.11 Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.12 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.26.13 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

**A.26.14 Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.26.15 Mod DN Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**A.26.16 Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**A.26.17 Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.18 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## A.26.19 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

## A.26.20 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.21 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

**A.26.22 Average Elapsed Time Per Modify****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

**A.26.23 Elapsed Time for Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.26.24 Average Elapsed Time Per Add Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

**A.26.25 Average Elapsed Time Per Add****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

## **A.26.26 Elapsed Time for Mod DN Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **A.26.27 Average Elapsed Time Per Mod DN Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

## **A.26.28 Average Elapsed Time Per Mod DN**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

## A.26.29 Elapsed Time for Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.26.30 Average Elapsed Time Per Delete Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

## A.26.31 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## A.27 Connection Handlers Extended Operations Metrics

- [Connection Handler Name](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)

- [Average Elapsed Time Per Extended](#)

### A.27.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.27.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.27.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### A.27.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.



## A.27.5 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## A.27.6 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

## A.27.7 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

## A.28 System Resource Information - CPU Usage Metric

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

CPU Usage value crossed warning threshold or critical threshold.

## A.29 Server Resource Information Metrics

---

▪ <a href="#">Max Allowed Heap (MB)</a>	▪ <a href="#">Memory Eden Used (MB)</a>
▪ <a href="#">Used Memory in Heap (MB)</a>	▪ <a href="#">Memory OldGen Used (MB)</a>
▪ <a href="#">Free Memory in Heap (MB)</a>	▪ <a href="#">Number of Scavenge Collector Processes</a>
▪ <a href="#">Heap Size (MB)</a>	▪ <a href="#">Total Duration of the Scavenge Collector Processing</a>
▪ <a href="#">Non-Heap Size (MB)</a>	▪ <a href="#">Average Duration of the Scavenge Collector Processing</a>
▪ <a href="#">Memory CodeCache Used (MB)</a>	▪ <a href="#">Number of markSweep Collector Processes</a>
▪ <a href="#">Memory PermGen Used (MB)</a>	▪ <a href="#">Total Duration of the markSweep Collector Processing</a>
▪ <a href="#">Memory Survivor Used (MB)</a>	▪ <a href="#">Average Duration of the markSweep Collector Processing</a>

---

### A.29.1 Max Allowed Heap (MB)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.29.2 Used Memory in Heap (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Used Memory in Heap value crossed warning threshold or critical threshold.

### A.29.3 Free Memory in Heap (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Free Memory in Heap value crossed warning threshold or critical threshold.

**A.29.4 Heap Size (MB)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Heap Size value crossed warning threshold or critical threshold.

**A.29.5 Non-Heap Size (MB)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Non-Heap Size value crossed warning threshold or critical threshold.

**A.29.6 Memory CodeCache Used (MB)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory CodeCache Used value crossed warning threshold or critical threshold.

## A.29.7 Memory PermGen Used (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory PermGen Used value crossed warning threshold or critical threshold.

## A.29.8 Memory Survivor Used (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory Survivor Used value crossed warning threshold or critical threshold.

## A.29.9 Memory Eden Used (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory Eden Used value crossed warning threshold or critical threshold.

### A.29.10 Memory OldGen Used (MB)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory OldGen Used value crossed warning threshold or critical threshold.

### A.29.11 Number of Scavenge Collector Processes

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.29.12 Total Duration of the Scavenge Collector Processing

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### A.29.13 Average Duration of the Scavenge Collector Processing

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the scavenge Collector processing value crossed warning threshold or critical threshold.

### A.29.14 Number of markSweep Collector Processes

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.29.15 Total Duration of the markSweep Collector Processing**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**A.29.16 Average Duration of the markSweep Collector Processing**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the markSweep Collector processing value crossed warning threshold or critical threshold.

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## OID Proxy Server Instance Metrics

This Appendix contains the following sections:

- [Response Metrics](#)
- [General Information Metrics](#)
- [Server Role Metrics](#)
- [Naming Contexts Metrics](#)
- [WorkQueue information Metrics](#)
- [Connections Information Metrics](#)
- [Operations Read Metrics](#)
- [Operations Write Metrics](#)
- [Operations Extended Metrics](#)
- [Administration Connector General Information Metrics](#)
- [Administration Connector Read Operations Metrics](#)
- [Administration Connector Write Operations Metrics](#)
- [Administration Connector Extended Operations Metrics](#)
- [Connection Handlers Configuration Metrics](#)
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- [CPU Utilization \(%\)](#)
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- [Remote LDAP Servers Connection Pool Metrics](#)
- [Remote LDAP Servers Read Operations Metrics](#)
- [Remote LDAP Servers Write Operations Metrics](#)
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- [Remote LDAP Servers Read Errors Metrics](#)
- [Remote LDAP Servers Write Errors Metrics](#)

- [Remote LDAP Servers Extended Errors Metrics](#)
- [Capacity Distribution Workflow Element Information Metrics](#)
- [Capacity Distribution Partition Information Metrics](#)
- [Global Index Shared Cache Information Metrics](#)
- [Global Index Operations Metrics](#)
- [Global Index Errors Metrics](#)

## B.1 Response Metrics

- [Status](#)
- [Details](#)

### B.1.1 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 1 minute

**Upload Frequency**

After every sample

**Operator**

Not equal

**Default Critical Threshold**

0

**Alert Text**

The OUD Proxy Server is down.

### B.1.2 Details

**Target Version**

All versions

**Collection Frequency**

Every 1 minute

## B.2 General Information Metrics

- [Full Version](#)
- [Vendor Name](#)
- [Current Time](#)
- [Start Time](#)
- [Instance Path](#)
- [Install Path](#)
- [Java Version](#)



- [Java Home](#)
- [Java Architecture](#)

### B.2.1 Full Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.2.2 Vendor Name

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.2.3 Current Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.2.4 Start Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.2.5 Instance Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.2.6 Install Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## B.2.7 Java Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## B.2.8 Java Home

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## B.2.9 Java Architecture

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## B.3 Server Role Metrics

- [Directory Server](#)
- [Proxy](#)
- [Distributor](#)
- [Load Balancer](#)
- [Replication Gateway](#)
- [Role](#)

### B.3.1 Directory Server

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 24 hours

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

True

**Alert Text**

The target is not a Proxy. Please Select the oracle\_oud\_directory plugin to monitor your instance..

**B.3.2 Proxy****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**B.3.3 Distributor****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**B.3.4 Load Balancer****Target Version**

All versions

**Collection Frequency**

Every 24 hours

**B.3.5 Replication Gateway****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 24 hours

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

True

**Alert Text**

The target is not a Proxy. Please Select the oracle\_oud\_gateway plugin to monitor your instance..

**B.3.6 Role****Target Version**

All versions

**Collection Frequency**

Every 24 hours

## B.4 Naming Contexts Metrics

- [Base DN](#)
- [Role](#)
- [Network Groups](#)
- [Algorithm](#)

### B.4.1 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.4.2 Role

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### B.4.3 Network Groups

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.4.4 Algorithm

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.5 WorkQueue information Metrics

- [Max Number of Requests in the Queue](#)
- [Current Number of Requests in the Queue](#)
- [Number of Rejected Requests Due to Full Queue](#)
- [Maximum Requests Allowed in the Queue](#)

### B.5.1 Max Number of Requests in the Queue

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.5.2 Current Number of Requests in the Queue

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Number of requests in the Queue value crossed warning threshold or critical threshold.

### B.5.3 Number of Rejected Requests Due to Full Queue

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Rejected Requests due to Full Queue value crossed warning threshold or critical threshold.

### B.5.4 Maximum Requests Allowed in the Queue

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.6 Connections Information Metrics

- [Connections Peak](#)

- [Current Connections](#)
- [Total Connections](#)
- [Connections Per Second Since Startup](#)
- [Connections Per Second](#)

## B.6.1 Connections Peak

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.6.2 Current Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

## B.6.3 Total Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.6.4 Connections Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections Per Second Since Startup value crossed warning threshold or critical threshold.

**B.6.5 Connections Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections Per Second value crossed warning threshold or critical threshold.

## B.7 Operations Read Metrics

▪ Read Operations Since Startup	▪ Abandon Operations Per Second Since Startup
▪ Read Operations Per Second Since Startup	▪ Abandon Operations Per Second
▪ Read Operations Per Second	▪ Compare Operations Since Startup
▪ Total Elapsed Time for all Read Operations Since Startup (ms)	▪ Compare Operations Per Second Since Startup
▪ Average Elapsed Time Per Operation Since Startup (ms)	▪ Compare Operations Per Second
▪ Average Elapsed Time Per Operation (ms)	▪ Elapsed Time for Bind Operations Since Startup
▪ Bind Operations Since Startup	▪ Average Elapsed Time Per Bind Since Startup
▪ Bind Operations Per Second Since Startup	▪ Average Elapsed Time Per Bind
▪ Bind Operations Per Second	▪ Elapsed Time for Search Operations Since Startup
▪ Search Operations Since Startup	▪ Average Elapsed Time Per Search Since Startup
▪ Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Search
▪ Search Operations Per Second	▪ Elapsed Time for Unbind Operations Since Startup
▪ One Level Search Operations Since Startup	▪ Average Elapsed Time Per Unbind Since Startup
▪ One Level Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Unbind
▪ One Level Search Operations Per Second	▪ Elapsed Time for Abandon Operations Since Startup
▪ Subtree Search Operations Since Startup	▪ Average Elapsed Time Per Abandon Since Startup
▪ Subtree Search Operations Per Second Since Startup	▪ Average Elapsed Time Per Abandon
▪ Subtree Search Operations Per Second	▪ Elapsed Time for Compare Operations Since Startup
▪ Unbind Operations Since Startup	▪ Average Elapsed Time Per Compare Since Startup
▪ Unbind Operations Per Second Since Startup	
▪ Unbind Operations Per Second	
▪ Abandon Operations Since Startup	

### B.7.1 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.7.2 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes



**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.7.3 Read Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

**B.7.4 Total Elapsed Time for all Read Operations Since Startup (ms)****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.7.5 Average Elapsed Time Per Operation Since Startup (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## B.7.6 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## B.7.7 Bind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.7.8 Bind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.7.9 Bind Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

**B.7.10 Search Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.7.11 Search Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

.

**B.7.12 Search Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

**B.7.13 One Level Search Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.14 One Level Search Operations Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.15 One Level Search Operations Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.16 Subtree Search Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.17 Subtree Search Operations Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.18 Subtree Search Operations Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.19 Unbind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.20 Unbind Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.7.21 Unbind Operations Per Second****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.7.22 Abandon Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.7.23 Abandon Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.7.24 Abandon Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

## **B.7.25 Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.26 Compare Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.7.27 Compare Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

### **B.7.28 Elapsed Time for Bind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.7.29 Average Elapsed Time Per Bind Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

### **B.7.30 Average Elapsed Time Per Bind**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

### **B.7.31 Elapsed Time for Search Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.7.32 Average Elapsed Time Per Search Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

### **B.7.33 Average Elapsed Time Per Search**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

### **B.7.34 Elapsed Time for Unbind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.7.35 Average Elapsed Time Per Unbind Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.



### B.7.36 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### B.7.37 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.7.38 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

### B.7.39 Average Elapsed Time Per Abandon

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

## **B.7.40 Elapsed Time for Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.7.41 Average Elapsed Time Per Compare Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Default Critical Threshold**

True

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

## B.8 Operations Write Metrics

▪ Write Operations Since Startup	▪ Delete Operations Since Startup
▪ Write Operations Per Second Since Startup	▪ Delete Operations Per Second Since Startup
▪ Write Operations Per Second	▪ Delete Operations Per Second
▪ Total Elapsed Time for all Write Operations Since Startup (ms)	▪ Elapsed Time for Modify Operations Since Startup
▪ Average Elapsed Time Per Operation Since Startup (ms)	▪ Average Elapsed Time Per Modify Since Startup
▪ Average Elapsed Time Per Operation (ms)	▪ Average Elapsed Time Per Modify
▪ Modify Operations Since Startup	▪ Elapsed Time for Add Operations Since Startup
▪ Modify Operations Per Second Since Startup	▪ Average Elapsed Time Per Add Since Startup
▪ Modify Operations Per Second	▪ Average Elapsed Time Per Add
▪ Add Operations Since Startup	▪ Elapsed Time for Mod DN Operations Since Startup
▪ Add Operations Per Second Since Startup	▪ Average Elapsed Time Per Mod DN Since Startup
▪ Add Operations Per Second	▪ Average Elapsed Time Per Mod DN
▪ Mod DN Operations Since Startup	▪ Elapsed Time for Delete Operations Since Startup
▪ Mod DN Operations Per Second Since Startup	▪ Average Elapsed Time Per Delete Since Startup
▪ Mod DN Operations Per Second	▪ Average Elapsed Time Per Delete

### B.8.1 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.8.2 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.8.3 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

### B.8.4 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.8.5 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### B.8.6 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**B.8.7 Modify Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.8.8 Modify Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.8.9 Modify Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

**B.8.10 Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.8.11 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.8.12 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

## B.8.13 Mod DN Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.8.14 Mod DN Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.8.15 Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**B.8.16 Delete Operations Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Since Startup startup value crossed warning threshold or critical threshold.

**B.8.17 Delete Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.8.18 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

## B.8.19 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.8.20 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

## B.8.21 Average Elapsed Time Per Modify

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than



**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

**B.8.22 Elapsed Time for Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.8.23 Average Elapsed Time Per Add Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

**B.8.24 Average Elapsed Time Per Add****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

**B.8.25 Elapsed Time for Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.8.26 Average Elapsed Time Per Mod DN Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

## B.8.27 Average Elapsed Time Per Mod DN

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

## B.8.28 Elapsed Time for Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.8.29 Average Elapsed Time Per Delete Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

### B.8.30 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## B.9 Operations Extended Metrics

- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)
- [Average Elapsed Time Per Extended](#)

### B.9.1 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.9.2 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.9.3 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

### B.9.4 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.9.5 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

### B.9.6 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Default Critical Threshold**

True

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

## B.10 Administration Connector General Information Metrics

■ Administration Connector Port	■ Current Connections
■ Operations Initiated Since Startup	■ Total Connections
■ Operations Initiated Per Second Since Startup	■ Total Connections Per Second
■ Operations Initiated Per Second	■ Delta Total Connections Per Second
■ Operations Completed Since Startup	■ Total Returned Search Result Entries Since Startup
■ Operations Completed Per Second Since Startup	■ Returned Search Result Entries Per Second Since Startup
■ Operations Completed Per Second	■ Returned Search Result Entries Per Second
■ Operations Unsuccessful Since Startup	■ Total MB Read
■ Operations Unsuccessful Per Second Since Startup	■ KB Read Per Second Since Startup
■ Operations Unsuccessful Per Second	■ KB Read Per Second
■ Elapsed Time for all Operations Since Startup	■ Total MB Written
■ Average Elapsed Time Per Operation Since Startup	■ KB Written Per Second Since Startup
■ Average Elapsed Time Per Operation	■ KB Written Per Second

### B.10.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.10.2 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.10.3 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Default Critical Threshold**

True

**Alert Text**

Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

### B.10.4 Operations Initiated Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second value crossed warning threshold or critical threshold.

### B.10.5 Operations Completed Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.10.6 Operations Completed Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

**B.10.7 Operations Completed Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second value crossed warning threshold or critical threshold.

**B.10.8 Operations Unsuccessful Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.10.9 Operations Unsuccessful Per Second Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.10.10 Operations Unsuccessful Per Second****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.10.11 Elapsed Time for all Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.10.12 Average Elapsed Time Per Operation Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## **B.10.13 Average Elapsed Time Per Operation**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## **B.10.14 Current Connections**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Default Critical Threshold**

True



**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

**B.10.15 Total Connections****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.10.16 Total Connections Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Connections Per Second value crossed warning threshold or critical threshold.

**B.10.17 Delta Total Connections Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Total Connections Per Second value crossed warning threshold or critical threshold.

**B.10.18 Total Returned Search Result Entries Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.10.19 Returned Search Result Entries Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

## B.10.20 Returned Search Result Entries Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

## B.10.21 Total MB Read

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.10.22 KB Read Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

**B.10.23 KB Read Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.

**B.10.24 Total MB Written****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.10.25 KB Written Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

**B.10.26 KB Written Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.

## B.11 Administration Connector Read Operations Metrics

■ Administration Connector Port	■ Compare Operations Since Startup
■ Read Operations Since Startup	■ Compare Operations Per Second Since Startup
■ Read Operations Per Second Since Startup	■ Compare Operations Per Second
■ Read Operations Per Second	■ Elapsed Time for Bind Operations Since Startup
■ Total Elapsed Time for all Read Operations Since Startup (ms)	■ Average Elapsed Time Per Bind Since Startup
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Average Elapsed Time Per Bind
■ Average Elapsed Time Per Operation (ms)	■ Elapsed Time for Search Operations Since Startup
■ Bind Operations Since Startup	■ Average Elapsed Time Per Search Since Startup
■ Bind Operations Per Second Since Startup	■ Average Elapsed Time Per Search
■ Bind Operations Per Second	■ Elapsed Time for Unbind Operations Since Startup
■ Search Operations Since Startup	■ Average Elapsed Time Per Unbind Since Startup
■ Search Operations Per Second Since Startup	■ Average Elapsed Time Per Unbind
■ Search Operations Per Second	■ Elapsed Time for Abandon Operations Since Startup
■ Unbind Operations Since Startup	■ Average Elapsed Time Per Abandon Since Startup
■ Unbind Operations Per Second Since Startup	■ Average Elapsed Time Per Abandon
■ Unbind Operations Per Second	■ Elapsed Time for Compare Operations Since Startup
■ Abandon Operations Since Startup	■ Average Elapsed Time Per Compare Since Startup
■ Abandon Operations Per Second Since Startup	■
■ Abandon Operations Per Second	■

### B.11.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.11.2 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.11.3 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.11.4 Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

## B.11.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.11.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### **B.11.7 Average Elapsed Time Per Operation (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

### **B.11.8 Bind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.11.9 Bind Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.11.10 Bind Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

### B.11.11 Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.11.12 Search Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.11.13 Search Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

### **B.11.14 Unbind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.11.15 Unbind Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### **B.11.16 Unbind Operations Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.11.17 Abandon Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.11.18 Abandon Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes



**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.11.19 Abandon Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

**B.11.20 Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.11.21 Compare Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.11.22 Compare Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

## B.11.23 Elapsed Time for Bind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.11.24 Average Elapsed Time Per Bind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

## B.11.25 Average Elapsed Time Per Bind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

**B.11.26 Elapsed Time for Search Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.11.27 Average Elapsed Time Per Search Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

**B.11.28 Average Elapsed Time Per Search****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

**B.11.29 Elapsed Time for Unbind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.11.30 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### B.11.31 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### B.11.32 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.11.33 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

**B.11.34 Average Elapsed Time Per Abandon****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

**B.11.35 Elapsed Time for Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.11.36 Average Elapsed Time Per Compare Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

## B.12 Administration Connector Write Operations Metrics

---

■ Administration Connector Port	■ Delete Operations Per Second Since Startup
■ Write Operations Since Startup	■ Delete Operations Per Second
■ Write Operations Per Second Since Startup	■ Elapsed Time for Modify Operations Since Startup
■ Write Operations Per Second	■ Average Elapsed Time Per Modify Since Startup
■ Total Elapsed Time for all Write Operations Since Startup (ms)	■ Average Elapsed Time Per Modify
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Elapsed Time for Add Operations Since Startup
■ Average Elapsed Time Per Operation (ms)	■ Average Elapsed Time Per Add Since Startup
■ Modify Operations Since Startup	■ Average Elapsed Time Per Add
■ Modify Operations Per Second Since Startup	■ Elapsed Time for Mod DN Operations Since Startup
■ Modify Operations Per Second	■ Average Elapsed Time Per Mod DN Since Startup
■ Add Operations Since Startup	■ Average Elapsed Time Per Mod DN
■ Add Operations Per Second Since Startup	■ Elapsed Time for Delete Operations Since Startup
■ Add Operations Per Second	■ Average Elapsed Time Per Delete Since Startup
■ Mod DN Operations Since Startup	■ Average Elapsed Time Per Delete
■ Mod DN Operations Per Second Since Startup	
■ Mod DN Operations Per Second	
■ Delete Operations Since Startup	

---

### B.12.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.12.2 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.12.3 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.12.4 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## B.12.5 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.12.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## B.12.7 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold

## B.12.8 Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.12.9 Modify Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.12.10 Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample



**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

**B.12.11 Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.12.12 Add Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.12.13 Add Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

**B.12.14 Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.12.15 Mod DN Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.12.16 Mod DN Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

## **B.12.17 Delete Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.12.18 Delete Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.12.19 Delete Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

**B.12.20 Elapsed Time for Modify Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.12.21 Average Elapsed Time Per Modify Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

## B.12.22 Average Elapsed Time Per Modify

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

## B.12.23 Elapsed Time for Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.12.24 Average Elapsed Time Per Add Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

## B.12.25 Average Elapsed Time Per Add

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

**B.12.26 Elapsed Time for Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.12.27 Average Elapsed Time Per Mod DN Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

**B.12.28 Average Elapsed Time Per Mod DN****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

**B.12.29 Elapsed Time for Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.12.30 Average Elapsed Time Per Delete Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

### **B.12.31 Average Elapsed Time Per Delete**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## **B.13 Administration Connector Extended Operations Metrics**

- [Administration Connector Port](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)
- [Average Elapsed Time Per Extended](#)

### B.13.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.13.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.13.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.13.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

### B.13.5 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.13.6 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

### B.13.7 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

## B.14 Connection Handlers Configuration Metrics

- [Name](#)
- [Type](#)
- [Port](#)
- [Enabled](#)
- [Is SSL](#)

### B.14.1 Name

**Target Version**

All versions



**Collection Frequency**  
Every 5 minutes

**B.14.2 Type**

**Target Version**  
All versions

**Collection Frequency**  
Every 5 minutes

**B.14.3 Port**

**Target Version**  
All versions

**Collection Frequency**  
Every 5 minutes

**B.14.4 Enabled**

**Target Version**  
All versions

**Collection Frequency**  
Every 5 minutes

**B.14.5 Is SSL**

**Target Version**  
All versions

**Collection Frequency**  
Every 5 minutes

## B.15 Connection Handlers General Information Metrics

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▪ Connection Handler Name	▪ Current Connections
▪ Operations Initiated Since Startup	▪ Total Connections
▪ Operations Initiated Per Second Since Startup	▪ Total Connections Per Second
▪ Operations Initiated Per Second	▪ Delta Total Connections Per Second
▪ Operations Completed Since Startup	▪ Total Returned Search Result Entries Since Startup
▪ Operations Completed Per Second Since Startup	▪ Returned Search Result Entries Per Second Since Startup
▪ Operations Completed Per Second	▪ Returned Search Result Entries Per Second
▪ Operations Unsuccessful Since Startup	▪ Total MB Read
▪ Operations Unsuccessful Per Second Since Startup	▪ KB Read Per Second Since Startup
▪ Operations Unsuccessful Per Second	▪ KB Read Per Second
▪ Elapsed Time for all Operations Since Startup	▪ Total MB Written
▪ Average Elapsed Time Per Operation Since Startup	▪ KB Written Per Second Since Startup
▪ Average Elapsed Time Per Operation	▪ KB Written Per Second

---

### B.15.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.15.2 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.15.3 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

**B.15.4 Operations Initiated Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second value crossed warning threshold or critical threshold.

**B.15.5 Operations Completed Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.15.6 Operations Completed Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

**B.15.7 Operations Completed Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second value crossed warning threshold or critical threshold.

## **B.15.8 Operations Unsuccessful Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.9 Operations Unsuccessful Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.10 Operations Unsuccessful Per Second**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.11 Elapsed Time for all Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.12 Average Elapsed Time Per Operation Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**B.15.13 Average Elapsed Time Per Operation****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**B.15.14 Current Connections****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

**B.15.15 Total Connections****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.15.16 Total Connections Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Connections Per Second value crossed warning threshold or critical threshold.

## **B.15.17 Delta Total Connections Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Total Connections Per Second value crossed warning threshold or critical threshold.

## **B.15.18 Total Returned Search Result Entries Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.19 Returned Search Result Entries Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

## B.15.20 Returned Search Result Entries Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

## B.15.21 Total MB Read

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.15.22 KB Read Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

## B.15.23 KB Read Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.

## **B.15.24 Total MB Written**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.15.25 KB Written Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.15.26 KB Written Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.



## B.16 Connection Handlers Read Operations Metrics

▪ Connection Handler Name	▪ Compare Operations Per Second Since Startup
▪ Read Operations Since Startup	▪ Compare Operations Per Second
▪ Read Operations Per Second Since Startup	▪ Elapsed Time for Bind Operations Since Startup
▪ Read Operations Per Second	▪ Average Elapsed Time Per Bind Since Startup
▪ Total Elapsed Time for all Read Operations Since Startup (ms)	▪ Average Elapsed Time Per Bind
▪ Average Elapsed Time Per Operation Since Startup (ms)	▪ Elapsed Time for Search Operations Since Startup
▪ Average Elapsed Time Per Operation (ms)	▪ Average Elapsed Time Per Search Since Startup
▪ Bind Operations Since Startup	▪ Average Elapsed Time Per Search
▪ Bind Operations Per Second Since Startup	▪ Elapsed Time for Unbind Operations Since Startup
▪ Bind Operations Per Second	▪ Average Elapsed Time Per Unbind Since Startup
▪ Search Operations Since Startup	▪ Average Elapsed Time Per Unbind
▪ Search Operations Per Second Since Startup	▪ Elapsed Time for Abandon Operations Since Startup
▪ Search Operations Per Second	▪ Average Elapsed Time Per Abandon Since Startup
▪ Unbind Operations Since Startup	▪ Average Elapsed Time Per Abandon
▪ Unbind Operations Per Second Since Startup	▪ Elapsed Time for Compare Operations Since Startup
▪ Unbind Operations Per Second	▪ Average Elapsed Time Per Compare Since Startup
▪ Abandon Operations Since Startup	▪ Average Elapsed Time Per Compare
▪ Abandon Operations Per Second Since Startup	
▪ Abandon Operations Per Second	
▪ Compare Operations Since Startup	

### B.16.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.2 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.3 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.16.4 Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

### B.16.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**B.16.7 Average Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**B.16.8 Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.16.9 Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.16.10 Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

## **B.16.11 Search Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.16.12 Search Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.16.13 Search Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

### B.16.14 Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.15 Unbind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.16.16 Unbind Operations Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.17 Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.18 Abandon Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.16.19 Abandon Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

## **B.16.20 Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.16.21 Compare Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.16.22 Compare Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

**B.16.23 Elapsed Time for Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.16.24 Average Elapsed Time Per Bind Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

**B.16.25 Average Elapsed Time Per Bind****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

## **B.16.26 Elapsed Time for Search Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.16.27 Average Elapsed Time Per Search Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

## **B.16.28 Average Elapsed Time Per Search**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

## **B.16.29 Elapsed Time for Unbind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



### B.16.30 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### B.16.31 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### B.16.32 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.16.33 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

### **B.16.34 Average Elapsed Time Per Abandon**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

### **B.16.35 Elapsed Time for Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.16.36 Average Elapsed Time Per Compare Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Default Critical Threshold**

True

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

## B.16.37 Average Elapsed Time Per Compare

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## B.17 Connection Handlers Write Operations Metrics

▪ Connection Handler Name	▪ Delete Operations Per Second Since Startup
▪ Write Operations Since Startup	▪ Delete Operations Per Second
▪ Write Operations Per Second Since Startup	▪ Elapsed Time for Modify Operations Since Startup
▪ Write Operations Per Second	▪ Average Elapsed Time Per Modify Since Startup
▪ Total Elapsed Time for all Write Operations Since Startup (ms)	▪ Average Elapsed Time Per Modify
▪ Average Elapsed Time Per Operation Since Startup (ms)	▪ Elapsed Time for Add Operations Since Startup
▪ Average Elapsed Time Per Operation (ms)	▪ Average Elapsed Time Per Add Since Startup
▪ Modify Operations Since Startup	▪ Average Elapsed Time Per Add
▪ Modify Operations Per Second Since Startup	▪ Elapsed Time for Mod DN Operations Since Startup
▪ Modify Operations Per Second	▪ Average Elapsed Time Per Mod DN Since Startup
▪ Add Operations Since Startup	▪ Average Elapsed Time Per Mod DN
▪ Add Operations Per Second Since Startup	▪ Elapsed Time for Delete Operations Since Startup
▪ Add Operations Per Second	▪ Average Elapsed Time Per Delete Since Startup
▪ Mod DN Operations Since Startup	▪ Average Elapsed Time Per Delete
▪ Mod DN Operations Per Second Since Startup	
▪ Mod DN Operations Per Second	
▪ Delete Operations Since Startup	

### B.17.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.17.2 Write Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.17.3 Write Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.17.4 Write Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## **B.17.5 Total Elapsed Time for all Write Operations Since Startup (ms)**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.17.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### B.17.7 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

### B.17.8 Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.17.9 Modify Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.17.10 Modify Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

## **B.17.11 Add Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.17.12 Add Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.17.13 Add Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

**B.17.14 Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.17.15 Mod DN Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.17.16 Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

### B.17.17 Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.17.18 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.17.19 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

### B.17.20 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.17.21 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions



**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

**B.17.22 Average Elapsed Time Per Modify****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

**B.17.23 Elapsed Time for Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.17.24 Average Elapsed Time Per Add Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

### B.17.25 Average Elapsed Time Per Add

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

### B.17.26 Elapsed Time for Mod DN Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.17.27 Average Elapsed Time Per Mod DN Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

### B.17.28 Average Elapsed Time Per Mod DN

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

**B.17.29 Elapsed Time for Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.17.30 Average Elapsed Time Per Delete Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

**B.17.31 Average Elapsed Time Per Delete****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

**B.18 Connection Handlers Extended Operations Metrics**

- [Connection Handler Name](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)

- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)
- [Average Elapsed Time Per Extended](#)

### B.18.1 Connection Handler Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.18.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.18.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.18.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

**B.18.5 Elapsed Time for Extended Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.18.6 Average Elapsed Time Per Extended Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

**B.18.7 Average Elapsed Time Per Extended****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

**B.19 CPU Utilization (%)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**  
After every sample

**Operator**  
Greater than

**Alert Text**  
CPU Usage value crossed warning threshold or critical threshold.

## B.20 Server Resource Usage Metrics

<ul style="list-style-type: none"><li>▪ Max Allowed Heap</li><li>▪ Used Memory Inside Heap</li><li>▪ Free Memory Inside Heap</li><li>▪ Heap Size</li><li>▪ Non-Heap Size</li><li>▪ Memory Code Cache Used</li><li>▪ Memory Perm Gen Bytes Used</li><li>▪ Memory Survivor Used</li><li>▪ Memory Eden Used</li><li>▪ Memory Old Gen Used</li></ul>	<ul style="list-style-type: none"><li>▪ Number of scavenge Collector processing</li><li>▪ Duration of the last scavenge Collector processing</li><li>▪ Average Duration of the last scavenge Collector processing</li><li>▪ Number of markSweep Collector processing</li><li>▪ Duration of the last markSweep Collector processing</li><li>▪ Average Duration of the last markSweep Collector processing</li></ul>
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### B.20.1 Max Allowed Heap

**Target Version**  
All versions

**Collection Frequency**  
Every 5 minutes

### B.20.2 Used Memory Inside Heap

**Target Version**  
All versions

**Evaluation and Collection Frequency**  
Every 5 minutes

**Upload Frequency**  
After every sample

**Operator**  
Greater than

**Default Critical Threshold**  
True

**Alert Text**  
Used Memory in Heap value crossed warning threshold or critical threshold.

### B.20.3 Free Memory Inside Heap

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Free Memory in Heap value crossed warning threshold or critical threshold.

### B.20.4 Heap Size

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Heap Size value crossed warning threshold or critical threshold.

### B.20.5 Non-Heap Size

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Non-Heap Size value crossed warning threshold or critical threshold.

### B.20.6 Memory Code Cache Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory CodeCache Used value crossed warning threshold or critical threshold.

## B.20.7 Memory Perm Gen Bytes Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory PermGen Used value crossed warning threshold or critical threshold.

## B.20.8 Memory Survivor Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory Survivor Used value crossed warning threshold or critical threshold.

## B.20.9 Memory Eden Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample



**Operator**

Greater than

**Alert Text**

Memory Eden Used value crossed warning threshold or critical threshold.

**B.20.10 Memory Old Gen Used****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory OldGen Used value crossed warning threshold or critical threshold.

**B.20.11 Number of scavenge Collector processing****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.20.12 Duration of the last scavenge Collector processing****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.20.13 Average Duration of the last scavenge Collector processing****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the scavenge Collector processing value crossed warning threshold or critical threshold.

**B.20.14 Number of markSweep Collector processing**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.20.15 Duration of the last markSweep Collector processing**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.20.16 Average Duration of the last markSweep Collector processing**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the markSweep Collector processing value crossed warning threshold or critical threshold.

## B.21 General Remote LDAP Servers Information Metrics

<ul style="list-style-type: none"> <li>General Remote LDAP Servers Information Metrics</li> <li>Host Name</li> <li>LDAP Port</li> <li>LDAPS Port</li> <li>Associated Suffixes and Workflow Elements</li> <li>State</li> <li>Last Update Date</li> <li>Last Down Date</li> <li>Total Operations Completed Since Startup</li> <li>Total Operations Completed Per Second Since Startup</li> <li>Total Operations Completed Per Second</li> </ul>	<ul style="list-style-type: none"> <li>Total Elapsed Time for all Operations Since Startup (ms)</li> <li>Average Elapsed Time Per Operation Since Startup (ms)</li> <li>Average Elapsed Time Per Operation (ms)</li> <li>Total Failed Operations Per Second Since Startup</li> <li>Total Failed Operations Per Second Since Startup</li> <li>Total Failed Operations Per Second</li> <li>Total Aborted Operations Since Startup</li> <li>Total Aborted Operations Per Second Since Startup</li> <li>Total Aborted Operations Per Second</li> </ul>
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### B.21.1 General Remote LDAP Servers Information Metrics

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.21.2 Host Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.21.3 LDAP Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.21.4 LDAPS Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.21.5 Associated Suffixes and Workflow Elements

### **Target Version**

All versions

### **Collection Frequency**

Every 5 minutes

## B.21.6 State

### **Target Version**

All versions

### **Evaluation and Collection Frequency**

Every 5 minutes

### **Upload Frequency**

After every sample

### **Operator**

Greater than

### **Alert Text**

State value crossed warning threshold or critical threshold.

## B.21.7 Last Update Date

### **Target Version**

All versions

### **Collection Frequency**

Every 5 minutes

## B.21.8 Last Down Date

### **Target Version**

All versions

### **Collection Frequency**

Every 5 minutes

## B.21.9 Total Operations Completed Since Startup

### **Target Version**

All versions

### **Collection Frequency**

Every 5 minutes

## B.21.10 Total Operations Completed Per Second Since Startup

### **Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

**B.21.11 Total Operations Completed Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Operations Completed Per Second value crossed warning threshold or critical threshold.

**B.21.12 Total Elapsed Time for all Operations Since Startup (ms)****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.21.13 Average Elapsed Time Per Operation Since Startup (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### B.21.14 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

### B.21.15 Total Failed Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.21.16 Total Failed Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Failed Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.21.17 Total Failed Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Failed Operations Per Second value crossed warning threshold or critical threshold.

**B.21.18 Total Aborted Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.21.19 Total Aborted Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Aborted Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.21.20 Total Aborted Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Aborted Operations Per Second value crossed warning threshold or critical threshold.

**B.22 Remote LDAP Servers Connection Pool Metrics**

- [Name](#)
- [Pool Connections](#)

- [Pool Full Time Since Startup](#)
- [Used Connections](#)
- [Free Connections](#)
- [Pool Max Size](#)
- [Connections in Client Bound Connection Cache](#)
- [Connections in Proxy Bound Connection Cache](#)
- [Released Invalid Connections](#)
- [Client Connections Connected](#)

### B.22.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.22.2 Pool Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.22.3 Pool Full Time Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.22.4 Used Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Used Connections value crossed warning threshold or critical threshold.



### B.22.5 Free Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Free Connections value crossed warning threshold or critical threshold.

### B.22.6 Pool Max Size

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.22.7 Connections in Client Bound Connection Cache

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections in Client Bound Connection Cache value crossed warning threshold or critical threshold.

### B.22.8 Connections in Proxy Bound Connection Cache

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Connections in Proxy Bound Connection Cache value crossed warning threshold or critical threshold.

## **B.22.9 Released Invalid Connections**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Released Invalid Connections value crossed warning threshold or critical threshold.

## **B.22.10 Client Connections Connected**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Client Connections Connected value crossed warning threshold or critical threshold.

## B.23 Remote LDAP Servers Read Operations Metrics

▪ Name	▪ Compare Operations Since Startup
▪ Number of Read Operations Since Startup	▪ Compare Operations Per Second Since Startup
▪ Number of Read Operations Per Second Since Startup	▪ Compare Operations Per Second
▪ Number of Read Operations Per Second	▪ Current Persistent Searches
▪ Total Elapsed Time for all Read Operations Since Startup (ms)	▪ Elapsed Time for Bind Operations Since Startup
▪ Average Elapsed Time Per Operation Since Startup (ms)	▪ Average Elapsed Time Per Bind Since Startup
▪ Average Elapsed Time Per Read Operation (ms)	▪ Average Elapsed Time Per Bind
▪ Bind Operations Since Startup	▪ Elapsed Time for Search Base Operations Since Startup
▪ Bind Operations Per Second Since Startup	▪ Average Elapsed Time Per Search Base Since Startup
▪ Bind Operations Per Second	▪ Average Elapsed Time Per Search Base
▪ Search Base Operations Since Startup	▪ Elapsed Time for Search One Operations Since Startup
▪ Search Base Operations Per Second Since Startup	▪ Average Elapsed Time Per Search One Since Startup
▪ Search Base Operations Per Second	▪ Average Elapsed Time Per Search One
▪ Search One Operations Since Startup	▪ Elapsed Time for Search Subtree Operations Since Startup
▪ Search One Operations Per Second Since Startup	▪ Average Elapsed Time Per Search Subtree Since Startup
▪ Search One Operations Per Second	▪ Average Elapsed Time Per Search Subtree
▪ Search Subtree Operations Since Startup	▪ Elapsed Time for Compare Operations Since Startup
▪ Search Subtree Operations Per Second Since Startup	▪ Average Elapsed Time Per Compare Since Startup
▪ Search Subtree Operations Per Second	▪ Average Elapsed Time Per Compare
▪ Abandon Operations Since Startup	
▪ Abandon Operations Per Second Since Startup	
▪ Abandon Operations Per Second	

### B.23.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.2 Number of Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.3 Number of Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.23.4 Number of Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

### B.23.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**B.23.7 Average Elapsed Time Per Read Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**B.23.8 Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.23.9 Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.23.10 Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

## **B.23.11 Search Base Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.23.12 Search Base Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Base Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.23.13 Search Base Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Base Operations Per Second value crossed warning threshold or critical threshold.

### B.23.14 Search One Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.15 Search One Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search One Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.23.16 Search One Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search One Operations Per Second value crossed warning threshold or critical threshold.

### B.23.17 Search Subtree Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.18 Search Subtree Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Subtree Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.23.19 Search Subtree Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Subtree Operations Per Second value crossed warning threshold or critical threshold.

### B.23.20 Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.21 Abandon Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample



**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.23.22 Abandon Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

**B.23.23 Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.23.24 Compare Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.23.25 Compare Operations Per Second****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.23.26 Current Persistent Searches**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.23.27 Elapsed Time for Bind Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.23.28 Average Elapsed Time Per Bind Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

## **B.23.29 Average Elapsed Time Per Bind**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

### **B.23.30 Elapsed Time for Search Base Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.23.31 Average Elapsed Time Per Search Base Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Base Since Startup value crossed warning threshold or critical threshold.

### **B.23.32 Average Elapsed Time Per Search Base**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Base value crossed warning threshold or critical threshold.

### **B.23.33 Elapsed Time for Search One Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.34 Average Elapsed Time Per Search One Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search One Since Startup value crossed warning threshold or critical threshold.

### B.23.35 Average Elapsed Time Per Search One

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search One value crossed warning threshold or critical threshold.

### B.23.36 Elapsed Time for Search Subtree Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.23.37 Average Elapsed Time Per Search Subtree Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Subtree Since Startup value crossed warning threshold or critical threshold.

**B.23.38 Average Elapsed Time Per Search Subtree****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Subtree value crossed warning threshold or critical threshold.

**B.23.39 Elapsed Time for Compare Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.23.40 Average Elapsed Time Per Compare Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

**B.23.41 Average Elapsed Time Per Compare****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## B.24 Remote LDAP Servers Write Operations Metrics

▪ <a href="#">Name</a>	▪ <a href="#">Delete Operations Since Startup</a>
▪ <a href="#">Write Operations Since Startup</a>	▪ <a href="#">Delete Operations Per Second Since Startup</a>
▪ <a href="#">Write Operations Per Second Since Startup</a>	▪ <a href="#">Delete Operations Per Second</a>
▪ <a href="#">Write Operations Per Second</a>	▪ <a href="#">Elapsed Time for Modify Operations Since Startup</a>
▪ <a href="#">Total Elapsed Time for all Write Operations Since Startup (ms)</a>	▪ <a href="#">Average Elapsed Time Per Modify Since Startup</a>
▪ <a href="#">Average Elapsed Time Per Operation Since Startup (ms)</a>	▪ <a href="#">Average Elapsed Time Per Modify</a>
▪ <a href="#">Average Elapsed Time Per Operation (ms)</a>	▪ <a href="#">Elapsed Time for Add Operations Since Startup</a>
▪ <a href="#">Modify Operations Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Add Since Startup</a>
▪ <a href="#">Modify Operations Per Second Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Add</a>
▪ <a href="#">Modify Operations Per Second</a>	▪ <a href="#">Elapsed Time for Mod DN Operations Since Startup</a>
▪ <a href="#">Add Operations Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Mod DN Since Startup</a>
▪ <a href="#">Add Operations Per Second Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Mod DN</a>
▪ <a href="#">Add Operations Per Second</a>	▪ <a href="#">Elapsed Time for Delete Operations Since Startup</a>
▪ <a href="#">Mod DN Operations Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Delete Since Startup</a>
▪ <a href="#">Mod DN Operations Per Second Since Startup</a>	▪ <a href="#">Average Elapsed Time Per Delete</a>
▪ <a href="#">Mod DN Operations Per Second</a>	
▪	

### B.24.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.24.2 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.24.3 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.24.4 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## B.24.5 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.24.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## **B.24.7 Average Elapsed Time Per Operation (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## **B.24.8 Modify Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.24.9 Modify Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.



### B.24.10 Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

### B.24.11 Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.24.12 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.24.13 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

## **B.24.14 Mod DN Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.24.15 Mod DN Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.24.16 Mod DN Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

## **B.24.17 Delete Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.24.18 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.24.19 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

### B.24.20 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.24.21 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

## **B.24.22 Average Elapsed Time Per Modify**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

## **B.24.23 Elapsed Time for Add Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.24.24 Average Elapsed Time Per Add Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

## **B.24.25 Average Elapsed Time Per Add**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

**B.24.26 Elapsed Time for Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.24.27 Average Elapsed Time Per Mod DN Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

**B.24.28 Average Elapsed Time Per Mod DN****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.

## B.24.29 Elapsed Time for Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.24.30 Average Elapsed Time Per Delete Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

## B.24.31 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## B.25 Remote LDAP Servers Extended Operations Metrics

- [Name](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)

- [Average Elapsed Time Per Extended](#)

### B.25.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.25.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.25.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.25.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

## B.25.5 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.25.6 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

## B.25.7 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.



## B.26 Remote LDAP Servers Read Errors Metrics

▪ Name	▪ Failed Compare Operations Since Startup
▪ Failed Read Operations Since Startup	▪ Failed Compare Operations Per Second Since Startup
▪ Failed Read Operations Per Second Since Startup	▪ Failed Compare Operations Per Second
▪ Failed Read Operations Per Second	▪ Aborted Bind Operations Since Startup
▪ Aborted Read Operations Since Startup	▪ Aborted Bind Operations Per Second Since Startup
▪ Aborted Read Operations Per Second Since Startup	▪ Aborted Bind Operations Per Second
▪ Aborted Read Operations Per Second	▪ Aborted Search Base Operations Since Startup
▪ Failed Bind Operations Since Startup	▪ Aborted Search Base Operations Per Second Since Startup
▪ Failed Bind Operations Per Second Since Startup	▪ Aborted Search Base Operations Per Second
▪ Failed Bind Operations Per Second	▪ Aborted Search One Operations Since Startup
▪ Failed Search Base Operations Since Startup	▪ Aborted Search One Operations Per Second Since Startup
▪ Failed Search Base Operations Per Second Since Startup	▪ Aborted Search One Operations Per Second
▪ Failed Search Base Operations Per Second	▪ Aborted Search Subtree Operations Since Startup
▪ Failed Search One Operations Since Startup	▪ Aborted Search Subtree Operations Per Second Since Startup
▪ Failed Search One Operations Per Second Since Startup	▪ Aborted Search Subtree Operations Per Second
▪ Failed Search One Operations Per Second	▪ Aborted Compare Operations Since Startup
▪ Failed Search Subtree Operations Since Startup	▪ Aborted Compare Operations Per Second Since Startup
▪ Failed Search Subtree Operations Per Second Since Startup	▪ Aborted Compare Operations Per Second
▪ Failed Search Subtree Operations Per Second	

### B.26.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.26.2 Failed Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.26.3 Failed Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.26.4 Failed Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Read Operations Per Second value crossed warning threshold or critical threshold.

### B.26.5 Aborted Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.26.6 Aborted Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.26.7 Aborted Read Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Read Operations Per Second value crossed warning threshold or critical threshold.

**B.26.8 Failed Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.26.9 Failed Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.26.10 Failed Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Bind Operations Per Second value crossed warning threshold or critical threshold.

## **B.26.11 Failed Search Base Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.26.12 Failed Search Base Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search Base Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.26.13 Failed Search Base Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search Base Operations Per Second value crossed warning threshold or critical threshold.

### B.26.14 Failed Search One Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.26.15 Failed Search One Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search One Operations Per Second Since Startup value crossed warning or critical threshold.

### B.26.16 Failed Search One Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search One Operations Per Second value crossed warning threshold or critical threshold.

### B.26.17 Failed Search Subtree Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.26.18 Failed Search Subtree Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search Subtree Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.26.19 Failed Search Subtree Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Search Subtree Operations Per Second value crossed warning threshold or critical threshold.

## B.26.20 Failed Compare Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.26.21 Failed Compare Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.26.22 Failed Compare Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Compare Operations Per Second value crossed warning threshold or critical threshold.

**B.26.23 Aborted Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.26.24 Aborted Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.26.25 Aborted Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Bind Operations Per Second value crossed warning threshold or critical threshold.

## **B.26.26 Aborted Search Base Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.26.27 Aborted Search Base Operations Per Second Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.26.28 Aborted Search Base Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Search Base Operations Per Second value crossed warning threshold or critical threshold.

## **B.26.29 Aborted Search One Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



### B.26.30 Aborted Search One Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Search One Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.26.31 Aborted Search One Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Search One Operations Per Second value crossed warning threshold or critical threshold.

### B.26.32 Aborted Search Subtree Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.26.33 Aborted Search Subtree Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Search Subtree Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.26.34 Aborted Search Subtree Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Search Subtree Operations Per Second value crossed warning threshold or critical threshold.

## **B.26.35 Aborted Compare Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.26.36 Aborted Compare Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.26.37 Aborted Compare Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Compare Operations Per Second value crossed warning threshold or critical threshold.

**B.27 Remote LDAP Servers Write Errors Metrics**

▪ Name	▪ Failed Delete Operations Since Startup
▪ Failed Write Operations Since Startup	▪ Failed Delete Operations Per Second Since Startup
▪ Failed Write Operations Per Second Since Startup	▪ Failed Delete Operations Per Second
▪ Failed Write Operations Per Second	▪ Aborted Modify Operations Since Startup
▪ Aborted Write Operations Since Startup	▪ Aborted Modify Operations Per Second Since Startup
▪ Aborted Write Operations Per Second	▪ Aborted Modify Operations Per Second
▪ Failed Modify Operations Since Startup	▪ Aborted Add Operations Since Startup
▪ Failed Modify Operations Per Second Since Startup	▪ Aborted Add Operations Per Second Since Startup
▪ Failed Modify Operations Per Second	▪ Aborted Add Operations Per Second
▪ Failed Add Operations Since Startup	▪ Aborted Mod DN Operations Since Startup
▪ Failed Add Operations Per Second Since Startup	▪ Aborted Mod DN Operations Per Second Since Startup
▪ Failed Add Operations Per Second	▪ Aborted Mod DN Operations Per Second
▪ Failed Mod DN Operations Since Startup	▪ Aborted Delete Operations Since Startup
▪ Failed Mod DN Operations Per Second Since Startup	▪ Aborted Delete Operations Per Second Since Startup
▪ Failed Mod DN Operations Per Second	▪ Aborted Delete Operations Per Second

**B.27.1 Name****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.27.2 Failed Write Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.27.3 Failed Write Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### **B.27.4 Failed Write Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Write Operations Per Second value crossed warning threshold or critical threshold.

### **B.27.5 Aborted Write Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.27.6 Aborted Write Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.27.7 Aborted Write Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Write Operations Per Second value crossed warning threshold or critical threshold.

**B.27.8 Failed Modify Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.27.9 Failed Modify Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.27.10 Failed Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Modify Operations Per Second value crossed warning threshold or critical threshold.

## B.27.11 Failed Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.27.12 Failed Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.27.13 Failed Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second value crossed warning threshold or critical threshold.

**B.27.14 Failed Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.27.15 Failed Mod DN Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.27.16 Failed Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**B.27.17 Failed Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.27.18 Failed Delete Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.27.19 Failed Delete Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Delete Operations Per Second value crossed warning threshold or critical threshold.

## **B.27.20 Aborted Modify Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.27.21 Aborted Modify Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes



**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.27.22 Aborted Modify Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Modify Operations Per Second value crossed warning threshold or critical threshold.

**B.27.23 Aborted Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.27.24 Aborted Add Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.27.25 Aborted Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Add Operations Per Second value crossed warning threshold or critical threshold.

## B.27.26 Aborted Mod DN Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.27.27 Aborted Mod DN Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## B.27.28 Aborted Mod DN Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**B.27.29 Aborted Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.27.30 Aborted Delete Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.27.31 Aborted Delete Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Delete Operations Per Second value crossed warning threshold or critical threshold.

**B.28 Remote LDAP Servers Extended Errors Metrics**

- [Name](#)
- [Failed Extended Operations Since Startup](#)

- [Failed Extended Operations Per Second Since Startup](#)
- [Failed Extended Operations Per Second](#)
- [Aborted Extended Operations Since Startup](#)
- [Aborted Extended Operations Per Second Since Startup](#)
- [Aborted Extended Operations Per Second](#)

### B.28.1 Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.28.2 Failed Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.28.3 Failed Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.28.4 Failed Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Extended Operations Per Second value crossed warning threshold or critical threshold.

**B.28.5 Aborted Extended Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.28.6 Aborted Extended Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.28.7 Aborted Extended Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Extended Operations Per Second value crossed warning threshold or critical threshold.

**B.29 Capacity Distribution Workflow Element Information Metrics**

- [Workflow Element Name](#)
- [Algorithm Operations Since Startup](#)
- [Algorithm Operations Per Second Since Startup](#)

- [Algorithm Operations Per Second](#)
- [Global Index Operations Since Startup](#)
- [Global Index Operations Per Second Since Startup](#)
- [Algorithm Operations Per Second](#)
- [Broadcast Operations Since Startup](#)
- [Broadcast Operations Per Second Since Startup](#)
- [Broadcast Operations Per Second](#)

### B.29.1 Workflow Element Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.29.2 Algorithm Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.29.3 Algorithm Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Algorithm Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.29.4 Algorithm Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Algorithm Operations Per Second value crossed warning threshold or critical threshold.

**B.29.5 Global Index Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.29.6 Global Index Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Global Index Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.29.7 Algorithm Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Algorithm Operations Per Second value crossed warning threshold or critical threshold.

**B.29.8 Broadcast Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.29.9 Broadcast Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Broadcast Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.29.10 Broadcast Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Broadcast Operations Per Second value crossed warning threshold or critical threshold.

## **B.30 Capacity Distribution Partition Information Metrics**

- [Partition Name](#)
- [Associated Suffixes and Workflow Elements](#)
- [Space Usage Ratio \(%\)](#)

### **B.30.1 Partition Name**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



## B.30.2 Associated Suffixes and Workflow Elements

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## B.30.3 Space Usage Ratio (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Space Usage Ratio value crossed warning threshold or critical threshold.

## B.31 Global Index Shared Cache Information Metrics

- [Cache Name](#)
- [Associated Suffixes and Workflow Elements](#)
- [Used Space](#)

### B.31.1 Cache Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.31.2 Associated Suffixes and Workflow Elements

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.31.3 Used Space

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Used Space value crossed warning threshold or critical threshold.

## B.32 Global Index Operations Metrics

▪ Index Name	▪ Delete Operations Per Second
▪ Index Catalog Name	▪ Lookup Elapsed Time for all Operations Since Startup (ms)
▪ Attribute Name	▪ Average Lookup Elapsed Time Per Operation Since Startup (ms)
▪ Used In	▪ Average Lookup Elapsed Time Per Operation (ms)
▪ State	▪ Add Elapsed Time for all Operations Since Startup (ms)
▪ Number of Entries	▪ Average Add Elapsed Time Per Operation Since Startup (ms)
▪ Last Access Date	▪ Average Add Elapsed Time Per Operation (ms)
▪ Lookup Operations Since Startup	▪ Delete Elapsed Time for all Operations Since Startup (ms)
▪ Lookup Operations Per Second Since Startup	▪ Average Delete Elapsed Time Per Operation Since Startup (ms)
▪ Lookup Operations Per Second	▪ User Action
▪ Add Operations Since Startup	
▪ Add Operations Per Second Since Startup	
▪ Add Operations Per Second	
▪ Delete Operations Since Startup	
▪ Delete Operations Per Second Since Startup	

### B.32.1 Index Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.2 Index Catalog Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.3 Attribute Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.4 Used In

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.5 State

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

State value crossed warning threshold or critical threshold.

### B.32.6 Number of Entries

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Number of Entries value crossed warning threshold or critical threshold.

### B.32.7 Last Access Date

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.32.8 Lookup Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.32.9 Lookup Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lookup Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.32.10 Lookup Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lookup Operations Per Second value crossed warning threshold or critical threshold.

## **B.32.11 Add Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.12 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.32.13 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

### B.32.14 Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.32.15 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## **B.32.16 Delete Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

## **B.32.17 Lookup Elapsed Time for all Operations Since Startup (ms)**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **B.32.18 Average Lookup Elapsed Time Per Operation Since Startup (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Lookup Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## **B.32.19 Average Lookup Elapsed Time Per Operation (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Lookup Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**B.32.20 Add Elapsed Time for all Operations Since Startup (ms)****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.32.21 Average Add Elapsed Time Per Operation Since Startup (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Add Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**B.32.22 Average Add Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Add Elapsed Time Per Operation value crossed warning threshold or critical threshold.

### **B.32.23 Delete Elapsed Time for all Operations Since Startup (ms)**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.32.24 Average Delete Elapsed Time Per Operation Since Startup (ms)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Delete Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### **B.32.25 User Action**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Delete Elapsed Time Per Operation value crossed warning threshold or critical threshold.



## B.33 Global Index Errors Metrics

▪ Index Name	▪ Aborted Lookup Operations Since Startup
▪ Index Catalog Name	▪ Aborted Lookup Operations Per Second Since Startup
▪ Failed Lookup Operations Since Startup	▪ Aborted Lookup Operations Per Second
▪ Failed Lookup Operations Per Second Since Startup	▪ Aborted Add Operations Since Startup
▪ Failed Lookup Operations Per Second	▪ Aborted Add Operations Per Second Since Startup
▪ Failed Add Operations Since Startup	▪ Aborted Add Operations Per Second
▪ Failed Add Operations Per Second Since Startup	▪ Aborted Delete Operations Since Startup
▪ Failed Add Operations Per Second	▪ Aborted Delete Operations Per Second Since Startup
▪ Failed Delete Operations Since Startup	▪ Aborted Delete Operations Per Second
▪ Failed Delete Operations Per Second Since Startup	▪ Index Name
▪ Failed Delete Operations Per Second	

### B.33.1 Index Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.2 Index Catalog Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.3 Failed Lookup Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.4 Failed Lookup Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Lookup Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### **B.33.5 Failed Lookup Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Lookup Operations Per Second value crossed warning threshold or critical threshold.

### **B.33.6 Failed Add Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### **B.33.7 Failed Add Operations Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### **B.33.8 Failed Add Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second value crossed warning threshold or critical threshold.

**B.33.9 Failed Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**B.33.10 Failed Delete Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**B.33.11 Failed Delete Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second value crossed warning threshold or critical threshold.

### B.33.12 Aborted Lookup Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.13 Aborted Lookup Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Lookup Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.33.14 Aborted Lookup Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Lookup Operations Per Second value crossed warning threshold or critical threshold.

### B.33.15 Aborted Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.16 Aborted Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### B.33.17 Aborted Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Add Operations Per Second value crossed warning threshold or critical threshold.

### B.33.18 Aborted Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### B.33.19 Aborted Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### **B.33.20 Aborted Delete Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Aborted Delete Operations Per Second value crossed warning threshold or critical threshold.

### **B.33.21 Failed Delete Operations Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Failed Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

---

## Replication Gateway Instance Metrics

This Appendix contains the following metrics:

- [Response Metrics](#)
- [General Information Metrics](#)
- [Server Role Metrics](#)
- [Replication Gateway Metrics](#)
- [Replication Gateway \(Total\) Metrics](#)
- [CPU Utilization \(%\)](#)
- [Server Resource Usage Metrics](#)
- [Replication Servers \(OUD\) Metrics](#)
- [Replication Domains \(OUD\) Metrics](#)
- [Administration Connector General Information Metrics](#)
- [Administration Connector Read Operations Metrics](#)
- [Administration Connector Write Operations Metrics](#)
- [Administration Connector Extended Operations Metrics](#)

### C.1 Response Metrics

- [Status](#)
- [Details](#)

#### C.1.1 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 1 minute

**Upload Frequency**

After every sample

**Operator**

Not equal

**Default Critical Threshold**

0

**Alert Text**

The OUD Replication Gateway is down.

## C.1.2 Details

**Target Version**

All versions

**Collection Frequency**

Every 1 minute

## C.2 General Information Metrics

- [Full Version](#)
- [Vendor Name](#)
- [Current Time](#)
- [Start Time](#)
- [Instance Path](#)
- [Install Path](#)
- [Java Version](#)
- [Java Home](#)
- [Java Architecture](#)

### C.2.1 Full Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### C.2.2 Vendor Name

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### C.2.3 Current Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours



## C.2.4 Start Time

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.2.5 Instance Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.2.6 Install Path

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.2.7 Java Version

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.2.8 Java Home

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.2.9 Java Architecture

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.3 Server Role Metrics

- [Directory Server](#)
- [Proxy](#)

- [Distributor](#)
- [Load Balancer](#)
- [Replication Gateway](#)
- [Role](#)

### C.3.1 Directory Server

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

True

**Alert Text**

The target is a Replication Gateway. Please Select the oracle\_oud\_directory plugin to monitor your instance.

### C.3.2 Proxy

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

True

**Alert Text**

The target is not a Replication Gateway. Please Select the oracle\_oud\_directory plugin to monitor your instance.

### C.3.3 Distributor

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### C.3.4 Load Balancer

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

### C.3.5 Replication Gateway

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Default Critical Threshold**

False

**Alert Text**

The target is not a Replication Gateway.

### C.3.6 Role

**Target Version**

All versions

**Collection Frequency**

Every 24 hours

## C.4 Replication Gateway Metrics

- [Base DN](#)
- [Status](#)
- [Updates Sent to ODSEE Since Startup](#)
- [Updates Sent to ODSEE Per Second](#)
- [Updates Received from ODSEE Since Startup](#)
- [Updates Received from ODSEE Per Second](#)
- [Updates Sent to OUD Since Connection with RS Established](#)
- [Updates Sent to OUD Per Second](#)
- [Updates Received from OUD Since Connection with RS Established](#)
- [Updates Received from OUD Per Second](#)
- [Total Lost Connections](#)

- [Delta Lost Connections](#)

### C.4.1 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.4.2 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Alert Text**

Status value crossed warning threshold or critical threshold.

### C.4.3 Updates Sent to ODSEE Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.4.4 Updates Sent to ODSEE Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Sent to ODSEE Per Second value crossed warning threshold or critical threshold.

## C.4.5 Updates Received from ODSEE Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.4.6 Updates Received from ODSEE Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Received from ODSEE Per Second value crossed warning threshold or critical threshold.

## C.4.7 Updates Sent to OUD Since Connection with RS Established

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.4.8 Updates Sent to OUD Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Sent to OUD Per Second value crossed warning threshold or critical threshold.

## C.4.9 Updates Received from OUD Since Connection with RS Established

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.4.10 Updates Received from OUD Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Received from OUD Per Second value crossed warning threshold or critical threshold.

## C.4.11 Total Lost Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.4.12 Delta Lost Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Lost Connections value crossed warning threshold or critical threshold.

## C.5 Replication Gateway (Total) Metrics

- [Updates Sent to ODSEE Since Startup](#)

- Updates Sent to ODSEE Per Second
- Updates Received from ODSEE Since Startup
- Updates Received from ODSEE Per Second
- Updates Sent to OUD Since Connection with RS Established
- Updates Sent to OUD Per Second
- Updates Received from OUD Since Connection with RS Established
- Updates Received from OUD Per Second
- Total Lost Connections
- Delta Lost Connections

### C.5.1 Updates Sent to ODSEE Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.5.2 Updates Sent to ODSEE Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Sent to ODSEE Per Second value crossed warning threshold or critical threshold.

### C.5.3 Updates Received from ODSEE Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.5.4 Updates Received from ODSEE Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Received from ODSEE Per Second value crossed warning threshold or critical threshold.

## **C.5.5 Updates Sent to OUD Since Connection with RS Established**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.5.6 Updates Sent to OUD Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Sent to OUD Per Second value crossed warning threshold or critical threshold.

## **C.5.7 Updates Received from OUD Since Connection with RS Established**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.5.8 Updates Received from OUD Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes



**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Updates Received from OUD Per Second value crossed warning threshold or critical threshold.

## C.5.9 Total Lost Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.5.10 Delta Lost Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Lost Connections value crossed warning threshold or critical threshold.

## C.6 CPU Utilization (%)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

CPU Usage value crossed warning threshold or critical threshold.

## C.7 Server Resource Usage Metrics

---

▪ <a href="#">Max Allowed Heap</a>	▪ <a href="#">Memory Eden Used</a>
▪ <a href="#">Used Memory Inside Heap</a>	▪ <a href="#">Memory Old Gen Used</a>
▪ <a href="#">Free Memory Inside Heap</a>	▪ <a href="#">Number of Scavenge Collector Processing</a>
▪ <a href="#">Heap Size</a>	▪ <a href="#">Duration of the Last Scavenge Collector Processing</a>
▪ <a href="#">Non-Heap Size</a>	▪ <a href="#">Average Duration of the Last Scavenge Collector Processing</a>
▪ <a href="#">Memory Code Cache Used</a>	▪ <a href="#">Number of markSweep Collector Processing</a>
▪ <a href="#">Memory Perm Gen Bytes Used</a>	▪ <a href="#">Duration of the last markSweep Collector Processing</a>
▪ <a href="#">Memory Survivor Used</a>	▪ <a href="#">Average Duration of the last markSweep Collector Processing</a>

---

### C.7.1 Max Allowed Heap

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.7.2 Used Memory Inside Heap

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Used Memory in Heap value crossed warning threshold or critical threshold.

### C.7.3 Free Memory Inside Heap

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Free Memory in Heap value crossed warning threshold or critical threshold.

## C.7.4 Heap Size

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Heap Size value crossed warning threshold or critical threshold.

## C.7.5 Non-Heap Size

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Non-Heap Size value crossed warning threshold or critical threshold.

## C.7.6 Memory Code Cache Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory CodeCache Used value crossed warning threshold or critical threshold.

## C.7.7 Memory Perm Gen Bytes Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory PermGen Used value crossed warning threshold or critical threshold.

## C.7.8 Memory Survivor Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory Survivor Used value crossed warning threshold or critical threshold.

## C.7.9 Memory Eden Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory Eden Used value crossed warning threshold or critical threshold.

## C.7.10 Memory Old Gen Used

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Memory OldGen Used value crossed warning threshold or critical threshold.

**C.7.11 Number of Scavenge Collector Processing****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.7.12 Duration of the Last Scavenge Collector Processing****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.7.13 Average Duration of the Last Scavenge Collector Processing****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the scavenge Collector Processing value crossed warning threshold or critical threshold.

**C.7.14 Number of markSweep Collector Processing****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.7.15 Duration of the last markSweep Collector Processing

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.7.16 Average Duration of the last markSweep Collector Processing

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Duration of the markSweep Collector Processing value crossed warning threshold or critical threshold.

## C.8 Replication Servers (OUD) Metrics

- [Host Name](#)
- [Replication Port](#)
- [Base DN](#)
- [Administration Port](#)
- [Replication Group ID](#)
- [Age of Oldest Missing Change \(sec\)](#)
- [Missing Changes](#)
- [Generation ID](#)

### C.8.1 Host Name

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.8.2 Replication Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.8.3 Base DN****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.8.4 Administration Port****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.8.5 Replication Group ID****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.8.6 Age of Oldest Missing Change (sec)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Age of Oldest Missing Change (sec) value crossed warning threshold or critical threshold.

**C.8.7 Missing Changes****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Missing Changes value crossed warning threshold or critical threshold.

## C.8.8 Generation ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9 Replication Domains (OUD) Metrics

▪ Replication Domains (OUD) Metrics	▪ Percentage of Resolved Naming Conflicts
▪ Administration Port	▪ Percentage of Resolved Naming Conflicts (Average)
▪ Base DN	▪ Sent Updates
▪ Replication Group ID	▪ Sent Updates Per Second
▪ Status	▪ Received Updates
▪ Entries	▪ Received Updates Per Second
▪ Age of Oldest Missing Change (sec)	▪ Replayed Updates
▪ Missing Changes	▪ Replayed Updates Per Second
▪ Delay (sec)	▪ Successful Replayed Updates
▪ Generation ID	▪ Percentage of Successful Replayed Updates
▪ Connected Replication Server	▪ Percentage of Successful Replayed Updates (Average)
▪ Pending Updates	▪ Untrusted Changes
▪ Remote Pending Updates	▪ Untrusted Changes Per Second
▪ Resolved Modify Conflicts	▪ Total Lost Connections
▪ Naming Conflicts	▪ Delta Lost Connections
▪ Resolved Naming Conflicts	▪ Lost connections Per Second

### C.9.1 Replication Domains (OUD) Metrics

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



## C.9.2 Administration Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.3 Base DN

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.4 Replication Group ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.5 Status

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Match

**Alert Text**

Atatus value crossed warning threshold or critical threshold.

## C.9.6 Entries

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Entries value crossed warning threshold or critical threshold.

## C.9.7 Age of Oldest Missing Change (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Age of Oldest Missing Change (sec) value crossed warning threshold or critical threshold.

## C.9.8 Missing Changes

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Missing Changes value crossed warning threshold or critical threshold.

## C.9.9 Delay (sec)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delay value crossed warning threshold or critical threshold.

### C.9.10 Generation ID

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.11 Connected Replication Server

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.12 Pending Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.13 Remote Pending Updates

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Remote Pending Updates value crossed warning threshold or critical threshold.

### C.9.14 Resolved Modify Conflicts

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.15 Naming Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Naming Conflicts value crossed warning threshold or critical threshold.

## C.9.16 Resolved Naming Conflicts

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.17 Percentage of Resolved Naming Conflicts

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Resolved Naming Conflicts value crossed warning threshold or critical threshold.

## C.9.18 Percentage of Resolved Naming Conflicts (Average)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Resolved Naming Conflicts (Average) value crossed warning threshold or critical threshold.

### C.9.19 Sent Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.20 Sent Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Sent Updates Per Second value crossed warning threshold or critical threshold.

### C.9.21 Received Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.9.22 Received Updates Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Received Updates Per Second value crossed warning threshold or critical threshold.

### C.9.23 Replayed Updates

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.9.24 Replayed Updates Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Replayed Updates Per Second value crossed warning threshold or critical threshold.

## **C.9.25 Successful Replayed Updates**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.9.26 Percentage of Successful Replayed Updates**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Successful Replayed Updates value crossed warning threshold or critical threshold.

## **C.9.27 Percentage of Successful Replayed Updates (Average)**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Less than

**Alert Text**

Percentage of Successful Replayed Updates (Average) value crossed warning threshold or critical threshold.

## C.9.28 Untrusted Changes

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.29 Untrusted Changes Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Untrusted Changes Per Second value crossed warning threshold or critical threshold.

## C.9.30 Total Lost Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.9.31 Delta Lost Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Lost Connections value crossed warning threshold or critical threshold.

## C.9.32 Lost connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Lost connections Per Second value crossed warning threshold or critical threshold.

## C.10 Administration Connector General Information Metrics

■ Administration Connector Port	■ Total Connections Per Second
■ Operations Initiated Since Startup	■ Delta Total Connections Per Second
■ Operations Initiated Per Second Since Startup	■ Total Returned Search Result Entries Since Startup
■ Operations Initiated Per Second	■ Returned Search Result Entries Per Second Since Startup
■ Operations Completed Since Startup	■ Returned Search Result Entries Per Second
■ Operations Completed Per Second Since Startup	■ Total MB Read
■ Operations Completed Per Second	■ KB Read Per Second Since Startup
■ Elapsed Time for all Operations Since Startup	■ KB Read Per Second
■ Average Elapsed Time Per Operation Since Startup	■ Total MB Written
■ Average Elapsed Time Per Operation	■ KB Written Per Second Since Startup
■ Current Connections	■ KB Written Per Second
■ Total Connections	

### C.10.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes



## C.10.2 Operations Initiated Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.10.3 Operations Initiated Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second Since Startup value crossed warning threshold or critical threshold.

## C.10.4 Operations Initiated Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Initiated Per Second value crossed warning threshold or critical threshold.

## C.10.5 Operations Completed Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.10.6 Operations Completed Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second Since Startup value crossed warning threshold or critical threshold.

## C.10.7 Operations Completed Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Operations Completed Per Second value crossed warning threshold or critical threshold.

## C.10.8 Elapsed Time for all Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.10.9 Average Elapsed Time Per Operation Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

### C.10.10 Average Elapsed Time Per Operation

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

### C.10.11 Current Connections

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Current Connections value crossed warning threshold or critical threshold.

### C.10.12 Total Connections

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.10.13 Total Connections Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Total Connections Per Second value crossed warning threshold or critical threshold.

## **C.10.14 Delta Total Connections Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delta Total Connections Per Second value crossed warning threshold or critical threshold.

## **C.10.15 Total Returned Search Result Entries Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.10.16 Returned Search Result Entries Per Second Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second Since Startup value crossed warning threshold or critical threshold.

## **C.10.17 Returned Search Result Entries Per Second**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Returned Search Result Entries Per Second value crossed warning threshold or critical threshold.

**C.10.18 Total MB Read****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.10.19 KB Read Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second Since Startup value crossed warning threshold or critical threshold.

**C.10.20 KB Read Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Read Per Second value crossed warning threshold or critical threshold.

## C.10.21 Total MB Written

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.10.22 KB Written Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second Since Startup value crossed warning threshold or critical threshold.

## C.10.23 KB Written Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

KB Written Per Second value crossed warning threshold or critical threshold.

## C.11 Administration Connector Read Operations Metrics

■ Administration Connector Port	■ Compare Operations Per Second Since Startup
■ Read Operations Since Startup	■ Compare Operations Per Second
■ Read Operations Per Second Since Startup	■ Elapsed Time for Bind Operations Since Startup
■ Read Operations Per Second	■ Average Elapsed Time Per Bind Since Startup
■ Total Elapsed Time for all Read Operations Since Startup (ms)	■ Average Elapsed Time Per Bind
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Elapsed Time for Search Operations Since Startup
■ Average Elapsed Time Per Operation (ms)	■ Average Elapsed Time Per Search Since Startup
■ Bind Operations Since Startup	■ Average Elapsed Time Per Search
■ Bind Operations Per Second Since Startup	■ Elapsed Time for Unbind Operations Since Startup
■ Bind Operations Per Second	■ Average Elapsed Time Per Unbind Since Startup
■ Search Operations Since Startup	■ Average Elapsed Time Per Unbind
■ Search Operations Per Second Since Startup	■ Elapsed Time for Abandon Operations Since Startup
■ Search Operations Per Second	■ Average Elapsed Time Per Abandon Since Startup
■ Unbind Operations Since Startup	■ Average Elapsed Time Per Abandon
■ Unbind Operations Per Second Since Startup	■ Elapsed Time for Compare Operations Since Startup
■ Unbind Operations Per Second	■ Average Elapsed Time Per Compare Since Startup
■ Abandon Operations Since Startup	■ Average Elapsed Time Per Compare
■ Abandon Operations Per Second Since Startup	
■ Abandon Operations Per Second	
■ Compare Operations Since Startup	

### C.11.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.2 Read Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.3 Read Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.11.4 Read Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Read Operations Per Second value crossed warning threshold or critical threshold.

### C.11.5 Total Elapsed Time for all Read Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than



**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

**C.11.7 Average Elapsed Time Per Operation (ms)****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

**C.11.8 Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.11.9 Bind Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**C.11.10 Bind Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Bind Operations Per Second value crossed warning threshold or critical threshold.

### C.11.11 Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.12 Search Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.11.13 Search Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Search Operations Per Second value crossed warning threshold or critical threshold.

### C.11.14 Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.15 Unbind Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Unbind Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.11.16 Unbind Operations Per Second

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.17 Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.18 Abandon Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.11.19 Abandon Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Abandon Operations Per Second value crossed warning threshold or critical threshold.

### C.11.20 Compare Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.21 Compare Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.11.22 Compare Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Compare Operations Per Second value crossed warning threshold or critical threshold.

**C.11.23 Elapsed Time for Bind Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.11.24 Average Elapsed Time Per Bind Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind Since Startup value crossed warning threshold or critical threshold.

**C.11.25 Average Elapsed Time Per Bind****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Bind value crossed warning threshold or critical threshold.

### C.11.26 Elapsed Time for Search Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.27 Average Elapsed Time Per Search Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search Since Startup value crossed warning threshold or critical threshold.

### C.11.28 Average Elapsed Time Per Search

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Search value crossed warning threshold or critical threshold.

### C.11.29 Elapsed Time for Unbind Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.30 Average Elapsed Time Per Unbind Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind Since Startup value crossed warning threshold or critical threshold.

### C.11.31 Average Elapsed Time Per Unbind

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Unbind value crossed warning threshold or critical threshold.

### C.11.32 Elapsed Time for Abandon Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.33 Average Elapsed Time Per Abandon Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon Since Startup value crossed warning threshold or critical threshold.

### C.11.34 Average Elapsed Time Per Abandon

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Abandon value crossed warning threshold or critical threshold.

### C.11.35 Elapsed Time for Compare Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.11.36 Average Elapsed Time Per Compare Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare Since Startup value crossed warning threshold or critical threshold.

### C.11.37 Average Elapsed Time Per Compare

**Target Version**

All versions



**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Compare value crossed warning threshold or critical threshold.

## C.12 Administration Connector Write Operations Metrics

■ Administration Connector Port	■ Delete Operations Since Startup
■ Write Operations Since Startup	■ Delete Operations Per Second Since Startup
■ Write Operations Per Second	■ Delete Operations Per Second
■ Write Operations Per Second Since Startup	■ Elapsed Time for Modify Operations Since Startup
■ Total Elapsed Time for all Write Operations Since Startup (ms)	■ Average Elapsed Time Per Modify Since Startup
■ Average Elapsed Time Per Operation Since Startup (ms)	■ Average Elapsed Time Per Modify
■ Average Elapsed Time Per Operation (ms)	■ Elapsed Time for Add Operations Since Startup
■ Modify Operations Since Startup	■ Average Elapsed Time Per Add Since Startup
■ Modify Operations Per Second Since Startup	■ Average Elapsed Time Per Add
■ Modify Operations Per Second	■ Elapsed Time for Mod DN Operations Since Startup
■ Add Operations Since Startup	■ Average Elapsed Time Per Mod DN Since Startup
■ Add Operations Per Second Since Startup	■ Average Elapsed Time Per Mod DN
■ Add Operations Per Second	■ Elapsed Time for Delete Operations Since Startup
■ Mod DN Operations Since Startup	■ Average Elapsed Time Per Delete Since Startup
■ Mod DN Operations Per Second Since Startup	■ Average Elapsed Time Per Delete
■ Mod DN Operations Per Second	

### C.12.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.2 Write Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.3 Write Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## C.12.4 Write Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Write Operations Per Second value crossed warning threshold or critical threshold.

## C.12.5 Total Elapsed Time for all Write Operations Since Startup (ms)

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.6 Average Elapsed Time Per Operation Since Startup (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation Since Startup value crossed warning threshold or critical threshold.

## C.12.7 Average Elapsed Time Per Operation (ms)

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Operation value crossed warning threshold or critical threshold.

## C.12.8 Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.9 Modify Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## C.12.10 Modify Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Modify Operations Per Second value crossed warning threshold or critical threshold.

## C.12.11 Add Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.12 Add Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## C.12.13 Add Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Add Operations Per Second value crossed warning threshold or critical threshold.

**C.12.14 Mod DN Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.12.15 Mod DN Operations Per Second Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second Since Startup value crossed warning threshold or critical threshold.

**C.12.16 Mod DN Operations Per Second****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Mod DN Operations Per Second value crossed warning threshold or critical threshold.

**C.12.17 Delete Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.18 Delete Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second Since Startup value crossed warning threshold or critical threshold.

## C.12.19 Delete Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Delete Operations Per Second value crossed warning threshold or critical threshold.

## C.12.20 Elapsed Time for Modify Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## C.12.21 Average Elapsed Time Per Modify Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify Since Startup value crossed warning threshold or critical threshold.

**C.12.22 Average Elapsed Time Per Modify****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Modify value crossed warning threshold or critical threshold.

**C.12.23 Elapsed Time for Add Operations Since Startup****Target Version**

All versions

**Collection Frequency**

Every 5 minutes

**C.12.24 Average Elapsed Time Per Add Since Startup****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add Since Startup value crossed warning threshold or critical threshold.

**C.12.25 Average Elapsed Time Per Add****Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Add value crossed warning threshold or critical threshold.

## **C.12.26 Elapsed Time for Mod DN Operations Since Startup**

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

## **C.12.27 Average Elapsed Time Per Mod DN Since Startup**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN Since Startup value crossed warning threshold or critical threshold.

## **C.12.28 Average Elapsed Time Per Mod DN**

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Mod DN value crossed warning threshold or critical threshold.



### C.12.29 Elapsed Time for Delete Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.12.30 Average Elapsed Time Per Delete Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete Since Startup value crossed warning threshold or critical threshold.

### C.12.31 Average Elapsed Time Per Delete

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Delete value crossed warning threshold or critical threshold.

## C.13 Administration Connector Extended Operations Metrics

- [Administration Connector Port](#)
- [Extended Operations Since Startup](#)
- [Extended Operations Per Second Since Startup](#)
- [Extended Operations Per Second](#)
- [Elapsed Time for Extended Operations Since Startup](#)
- [Average Elapsed Time Per Extended Since Startup](#)

- [Average Elapsed Time Per Extended](#)

### C.13.1 Administration Connector Port

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.13.2 Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.13.3 Extended Operations Per Second Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second Since Startup value crossed warning threshold or critical threshold.

### C.13.4 Extended Operations Per Second

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Extended Operations Per Second value crossed warning threshold or critical threshold.

### C.13.5 Elapsed Time for Extended Operations Since Startup

**Target Version**

All versions

**Collection Frequency**

Every 5 minutes

### C.13.6 Average Elapsed Time Per Extended Since Startup

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended Since Startup value crossed warning threshold or critical threshold.

### C.13.7 Average Elapsed Time Per Extended

**Target Version**

All versions

**Evaluation and Collection Frequency**

Every 5 minutes

**Upload Frequency**

After every sample

**Operator**

Greater than

**Alert Text**

Average Elapsed Time Per Extended value crossed warning threshold or critical threshold.

