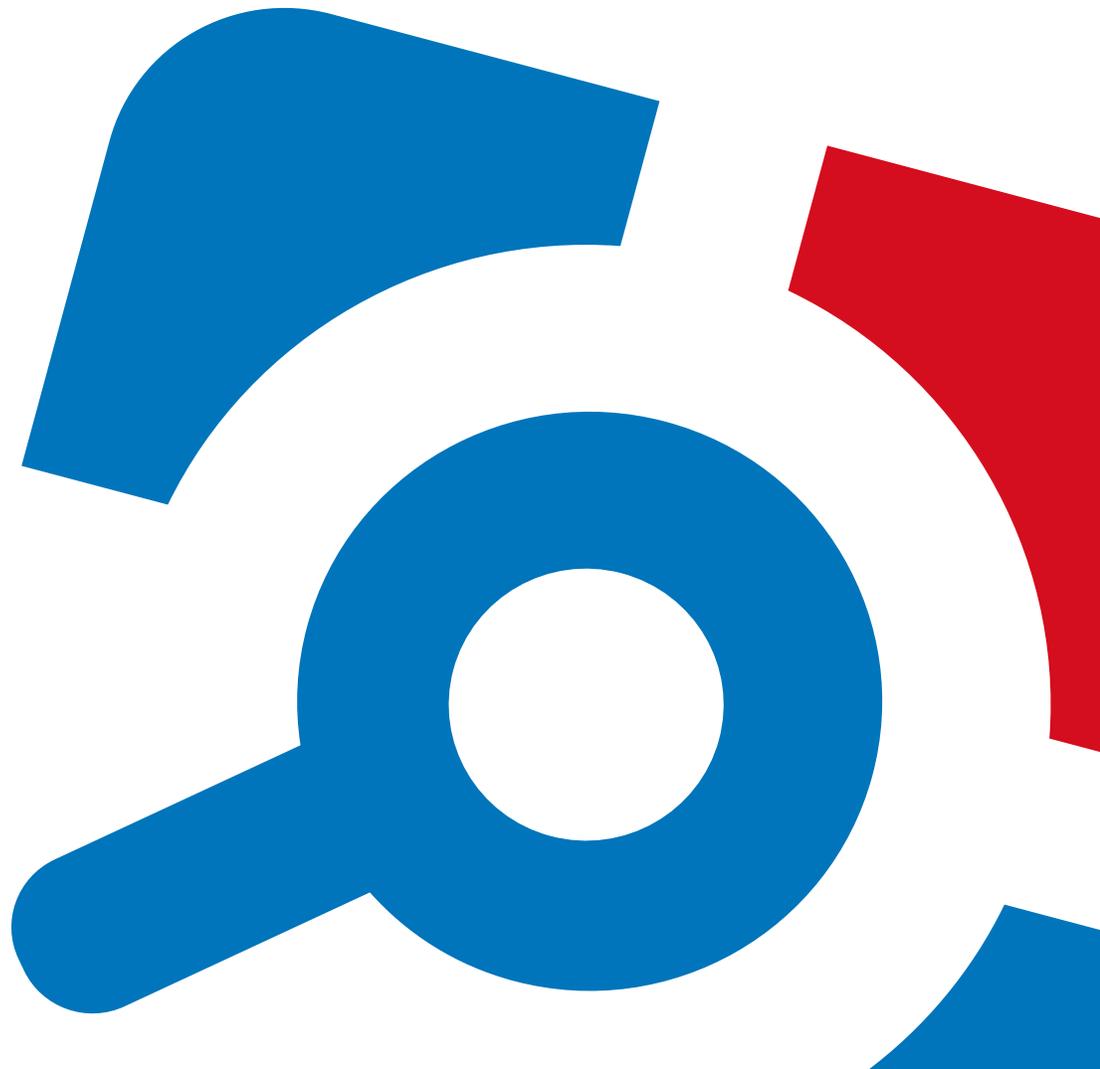


Netwrix Auditor for Nutanix Files Quick-Start Guide

Version: 10
9/14/2021



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1. Introduction

This guide is intended for the first-time users of Netwrix Auditor for Nutanix Files. It can be used for evaluation purposes, therefore, it is recommended to read it sequentially, and follow the instructions in the order they are provided. After reading this guide you will be able to:

- Install and configure Netwrix Auditor
- Create a monitoring plan to start auditing Nutanix Files
- Launch data collection
- See how Netwrix Auditor enables complete visibility

NOTE: This guide only covers the basic configuration and usage options for auditing Nutanix Files with Netwrix Auditor. For advanced installation scenarios and configuration options, as well as for information on various reporting possibilities and other product features, refer to [Netwrix Online Help Center](#).

1.1. Netwrix Auditor Features and Benefits

Netwrix Auditor is a visibility platform for user behavior analysis and risk mitigation that enables control over changes, configurations and access in hybrid IT environments to protect data regardless of its location. The platform provides security analytics to detect anomalies in user behavior and investigate threat patterns before a data breach occurs.

Netwrix Auditor includes applications for Active Directory, Active Directory Federation Services, Azure AD, Exchange, Office 365, Windows file servers, EMC storage devices, NetApp filer appliances, Nutanix Files, network devices, SharePoint, Oracle Database, SQL Server, VMware, Windows Server, and User Activity. Empowered with a RESTful API, the platform delivers visibility and control across all of your on-premises or cloud-based IT systems in a unified way.

Major benefits:

- Detect insider threats—on premises and in the cloud
- Pass compliance audits with less effort and expense
- Increase productivity of IT security and operations teams

To learn how Netwrix Auditor can help you achieve your specific business objectives, refer to [Netwrix Auditor Best Practices Guide](#).

Netwrix Auditor for Nutanix Files detects and reports on all changes made to Nutanix File shares, including modifications of files, folders, shares and permissions, as well as failed and successful access attempts.

2. Prerequisites and System Requirements

This section lists the requirements for the systems that are going to be audited with Netwrix Auditor, and for the computer where the product is going to be installed.

To learn about Netwrix Auditor licenses, refer to the following Netwrix Knowledge Base article: [Netwrix Auditor Licensing FAQs](#). To learn how to install a license, refer to [Licenses](#).

To learn about ports and protocols required for product operation, refer to [Protocols and Ports Required for Netwrix Auditor](#).

To learn about security roles and permissions required for product operation, refer to [Configure Netwrix Auditor Service Accounts](#).

2.1. Supported Data Sources

This section lists platforms and systems that can be monitored with Netwrix Auditor for Nutanix Files.

Active Directory domain

[Supported Data Sources](#)

[Supported Data Sources](#)

[Supported Data Sources](#)

[Supported Data Sources](#)

Exchange

[Supported Data Sources](#)

Office 365 and Azure AD

[Supported Data Sources](#)

[Supported Data Sources](#)

[Supported Data Sources](#)

SharePoint

[Supported Data Sources](#)

File storage systems

[Supported Data Sources](#)

[Supported Data Sources](#)[Supported Data Sources](#)[Nutanix Files](#)*Network devices*[Supported Data Sources](#)*Databases*[Supported Data Sources](#)[Considerations for Oracle Database Auditing](#)[Supported Data Sources](#)*Windows server*[Supported Data Sources](#)[Supported Data Sources](#)[Supported Data Sources](#)[Supported Data Sources](#)*VMware server*[Supported Data Sources](#)

| Data source | Supported Versions |
|---------------|---|
| Nutanix Files | <ul style="list-style-type: none"> Nutanix Files 3.6, 3.7, 3.8 |

2.1.1. Considerations for Oracle Database Auditing

Starting with version 9.95, Netwrix Auditor for Oracle Database is focused on versions 12c and above. It means that Oracle Database 11g users will not be able to benefit from latest features and improvements of the product. Oracle Database 11g users should also consider its support expiration dates set by the vendor. So, when planning your Netwrix Auditor deployment, consider the following:

- Several limitations apply to Oracle 11g support in Netwrix Auditor 9.96:
 - Oracle wallets are not supported
 - Lightweight drivers for Oracle Instant Client are not supported
 - Netwrix Auditor client UI does not display any warnings and / or errors regarding to trail audit mode operation

- If you are using Oracle Database 11g and Netwrix Auditor 9.9 (or earlier) and do not plan to upgrade your deployment, you will have all 9.9 capabilities unchanged.
- If you are using Oracle Database 11g and have performed seamless upgrade to Netwrix Auditor 9.96, the audit data collection will operate properly. However, consider [General Considerations and Known Issues](#) and keep in mind Oracle Database 11g support expiration dates.

If you are using Oracle Database 12c or later, make sure you have **Unified auditing** mode enabled. Otherwise, Netwrix Auditor may not operate properly. Refer to [Migrate to Unified Audit](#) for more information.

Check out the following documentation sections:

- - [Software Requirements](#)
 - [Configure Oracle Database for Monitoring](#)

2.2. Requirements to Install Netwrix Auditor

This section provides the requirements for the computer where Netwrix Auditor is going to be installed. Refer to the following sections for detailed information:

- [Hardware Requirements](#)
- [Software Requirements](#)

2.2.1. Hardware Requirements

This section provides estimations of the resources required for Netwrix Auditor deployment.

IMPORTANT! Consider that actual hardware requirements will depend on your monitored infrastructure, the number of users in your environment, and activities that occur in the infrastructure per day. It is strongly recommended that you go through the [Deployment Planning](#) section before you start the installation.

Requirements provided in this section apply to a clean installation on a server without any additional roles or third-party applications installed.

Below you can find rough estimations, calculated for evaluation of Netwrix Auditor for Nutanix Files. Refer to [Netwrix Online Help Center](#) for more information on the Netwrix Auditor hardware requirements.

You can deploy Netwrix Auditor on a virtual machine running Microsoft Windows guest OS on the corresponding virtualization platform, in particular:

- VMware vSphere
- Microsoft Hyper-V
- Nutanix AHV

Note that Netwrix Auditor supports only Windows OS versions listed in the [Software Requirements](#) section.

2.2.1.0.1. Scenario 1

Netwrix Auditor and SQL Server instance will be deployed on different servers.

Requirements below apply to Netwrix Auditor server.

Hardware component Evaluation, PoC or starter environment

2.2.1.0.2. Scenario 2

Netwrix Auditor server and SQL Server instance will be deployed on the same machine.

IMPORTANT! In large and extra -large environments, installation of Netwrix Auditor and SQL Server on the same server is not recommended. Instead, deploy an SQL Server instance on a separate server or cluster that meets the requirement in Scenario 1. Refer to related Microsoft guidelines.

| Hardware component | Evaluation, PoC or starter environment |
|--------------------|---|
| Processor | 2 cores |
| RAM | 8 GB |
| Disk space | 100 GB—System drive 100 GB—Data drive (Long-Term Archive and SQL Server) |

2.2.2. Software Requirements

The table below lists the software requirements for the Netwrix Auditor installation:

| Component | Requirements |
|---------------------------------|--|
| Operating system (English-only) | Windows Server OS: <ul style="list-style-type: none"> • Windows Server 2019 • Windows Server 2016 • Windows Server 2012 R2 • Windows Server 2012 |

| Component | Requirements |
|----------------|--|
| | Windows Desktop OS (64-bit): <ul style="list-style-type: none"> • Windows 10 • Windows 8.1 |
| .NET Framework | • .NET Framework 4.5 and above. |
| Installer | • Windows Installer 3.1 and above |

2.2.2.1. Using SSRS-based Reports

SQL Server Reporting Services are needed for this kind of reports (see [SQL Server Reporting Services](#)). If you plan to export or print such reports, check the requirements below.

Export

To export SSRS-based reports, **Internet Explorer** must be installed on the machine where Netwrix Auditor client runs.

Internet Options must be configured to allow file downloads for the **Local intranet** zone:

1. Select **Internet Options** and click **Security**.
2. Select **Local intranet** zone and click **Custom level**.
3. In the **Settings** list, locate **Downloads >File download** and make sure the **Enabled** option is selected.

Printing

To print SSRS-based reports, SSRS Report Viewer and Netwrix Auditor Client require ActiveX Control to be installed and enabled on the local machine. See this [Knowledge Base article](#) for details.

You can, for example, open any SSRS-based report using Internet Explorer and click **Print**. Internet Explorer will prompt for installation of the additional components it needs for printing. Having them installed, you will be able to print the reports from Netwrix Auditor UI as well.

3. Review Components Checklist

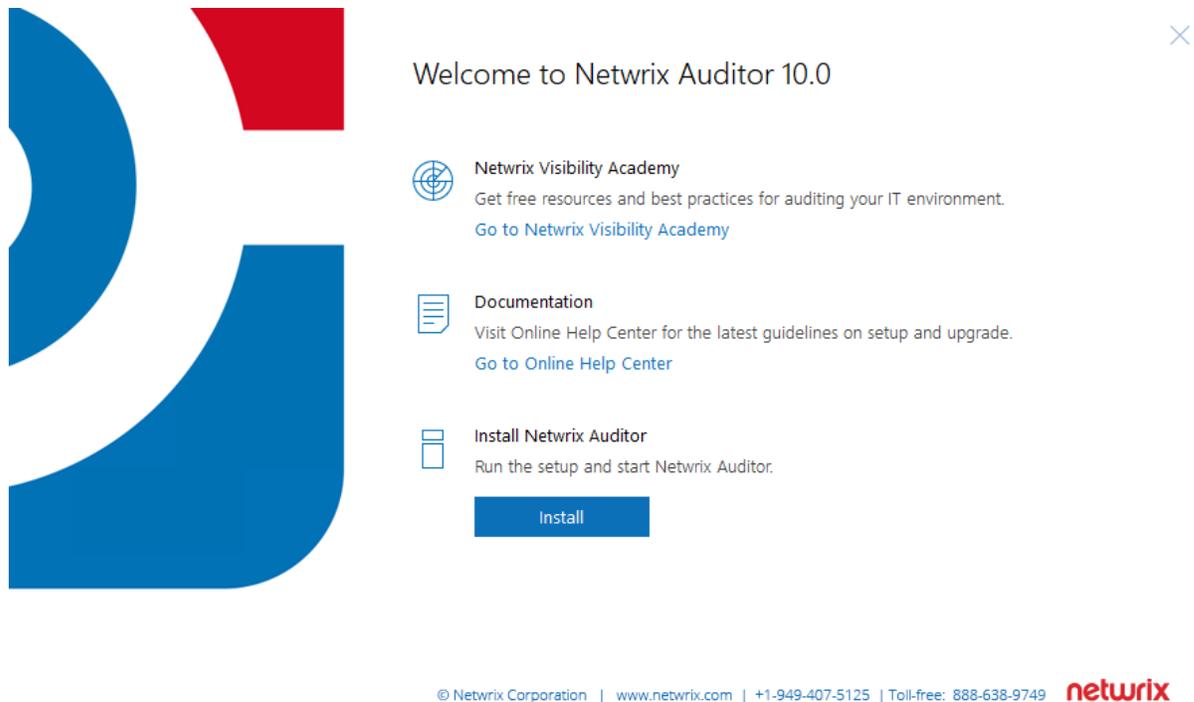
To speed up the evaluation process, Netwrix recommends you to ensure that the following services and components are up and running prior to the Netwrix Auditor installation.

| Service or component | Recommendations |
|---|---|
| SQL Server with Reporting Services (or Advanced Services) 2008 or higher. | <p>Supported SQL Server versions are listed here.</p> <p>Consider maximum database size in different versions. Make your choice based on the size of the environment you are going to monitor, the number of users, and other factors. Remember that maximum database size in Express editions may be insufficient.</p> <p>NOTE: Although Netwrix Auditor provides a convenient way to download SQL Server 2014 Express edition right from the product, it is recommended to deploy SQL Server instance in advance.</p> <p>If installed separately, remember to test SQL Server connectivity.</p> |
| Test account | <p>Netwrix recommends you to create a special account with extensive privileges. This account should have sufficient permissions to:</p> <ul style="list-style-type: none"> • Collect audit data. See Configure Data Collecting Account for more information. • Access data stored in the SQL Server instance: <ul style="list-style-type: none"> • The account must be assigned the Database owner (db_owner) role and the dbcreator server role. • The account must be assigned the Content Manager role on the SSRS Home folder. • Make test changes in your environment. |

4. Install the Product

To install Netwrix Auditor

1. Download Netwrix Auditor 10 from [Netwrix website](#).
2. Unpack the installation package. The following window will be displayed on successful operation completion:



3. Follow the instructions of the setup wizard. When prompted, accept the license agreement.
4. On the **Select Installation Type** step, select **Full installation**.
5. On the **Destination Folder** step, specify the installation folder.
6. On the **Netwrix Customer Experience Program** step, you are invited to take part in the Netwrix Customer Experience Program. It is optional on your part to help Netwrix improve the quality, reliability, and performance of Netwrix products and services. If you accept, Netwrix collects statistical information on how the Licensee uses the product in accordance with applicable law. Select **Skip** if you do not want to participate in the program.

NOTE: You can always opt-out of the Netwrix Customer Experience Program later. See [Netwrix Online Helpcenter](#) for instructions on how to cancel participation in the program.

7. Click **Install**.

After a successful installation, Netwrix Auditor shortcut will be added to the **Start** menu/screen and the product will start. Review the following for more information about the product navigation: [First Launch](#).

Netrix Auditor 10.0

NEW MONITORING PLAN

SEARCH ACTIVITY RECORDS

REPORTS

BEHAVIOR ANOMALIES

CONFIGURATION

- Monitoring plans
- Subscriptions
- Alert settings

RISK ASSESSMENT

Take action

COMPLIANCE MAPPING

LIVE NEWS

8

HEALTH STATUS

Some issues occurred

Welcome to Netrix Auditor

Get started to collect data in your IT infrastructure

- ✓ Create a monitoring plan to start auditing your environment
 - Make sure that your monitoring plan is configured properly
 - Run search to investigate incidents and browse collected data

Close to view statistics across the audited IT infrastructure

ALERTS

7 days

TRIGGERED

0

0% over previous 7 days

ENVIRONMENT STATS

| | |
|-------------------|----|
| Users | 5 |
| Groups | 48 |
| Files and folders | 0 |

Recalculate

FAVORITE REPORTS

- Enterprise Overview
- Failed Activity Trend
- User Account Status Changes
- Activity Outside Business Hours
- Logons by Single User from Multiple Endpoints
- Administrative groups and role changes
- AD or Group Policy modifications by Administrator since yesterday

View all

MONITORING PLANS OVERVIEW

| | |
|---------------|---|
| Ready | 4 |
| Pay attention | 0 |
| Take action | 3 |

ACTIVITY RECORDS

7 days

COLLECTED

30



5. Monitoring Plans

To start auditing your environment and analyzing user behavior with Netwrix Auditor, create a monitoring plan.

A monitoring plan defines data collection, notification, and storage settings.

To start collecting data, and add items to its scope.

So, to collect data from your environment, you need to do the following:

1. Specify a data source and create a monitoring plan with a wizard. See [Create a New Plan](#) for more information.
2. Add items to be monitored. An item is a specific object you want to audit. As soon as the item is added, to the monitoring plan, Netwrix Auditor starts collecting data from it. See [Add Items for Monitoring](#) for more information.

5.1. Using historical data

For many data sources, you can instruct Netwrix Auditor to collect state-in-time data along with event data. For that, Netwrix Auditor uses state-in-time snapshots of the relevant system (for example, see [Data Collection from VMware Servers](#)).

To keep users up-to-date on actual system state, Netwrix Auditor updates the latest snapshot on the regular basis. Thus, only the latest snapshot is available for ongoing reporting in Netwrix Auditor.

However, you may need to generate reports based on the historical data. For that, you must import the historical snapshots to the database.

NOTE: To import snapshots, you must be assigned the *Global administrator* or the *Global reviewer* role. See [Assign Roles](#) for more information.

To import historical snapshots:

1. Select the monitoring plan you need.
2. Select the required data source and click **Edit data source** on the right to open its properties.
3. Click **General** on the left.
4. In the **Manage historical snapshots** section, click **Manage**.
5. In the **Manage Snapshots** window, select the snapshots that you want to import — use the arrows to move the selected snapshots to the **Snapshots available for reporting** list. When finished, click **OK**.

5.2. Create a New Plan

On the main Netwrix Auditor page, click the **All data sources** and select **Nutanix Files** tile in the **Quick Start** section.

Then follow the steps of the Monitoring Plan Wizard:

- Specify an account for collecting data
- Specify default SQL Server instance and configure the Audit Database to store your data
- Configure notification settings
- Specify the recipients who will receive daily activity summaries
- Specify a plan name

5.2.1. Settings for Data Collection

At this step of the wizard, specify the account that Netwrix Auditor will use to access the data source, and general settings for data collection.

| Option | Description |
|---|--|
| Specify the account for collecting data | <p>Provide a user name and a password for the account that Netwrix Auditor will use to collect data. By default, the user name is prepopulated with your account name.</p> <p>Make sure the account has sufficient permissions to collect data. For a full list of the rights and permissions, and instructions on how to configure them, refer to Data Collecting Account. Netwrix recommends creating a special service account with extended permissions.</p> <p>NOTE: If you want to audit network devices or Azure AD/Office 365 infrastructure, you can use any account here.</p> |

5.2.2. Default SQL Server Instance

To provide searching, alerting and reporting capabilities, Netwrix Auditor needs an SQL Server where audit data will be stored in the databases. To store data from the data sources included in the monitoring plan, the wizard creates an Audit Database for each plan. At this step, you should specify the default SQL Server instance that will host Netwrix Auditor databases. To read more, refer to [SQL Server and Audit Database](#).

NOTE: Alternatively, you can instruct Netwrix Auditor not to store data to the databases but only to the repository (Long-Term Archive) – in this scenario, you will only be able to receive activity summaries. Reporting and alerting capabilities will not be provided.

NOTE: Make sure the **Disable security intelligence and make data available only in activity summaries** checkbox is cleared.

Select one of the following options:

- **Install a new instance of Microsoft SQL Server Express automatically** — this option is available at the first run of the wizard. It allows you to deploy SQL Server 2016 SP2 Express with Advanced Services on the local machine. This SQL Server will be used as default host for Netwrix Auditor databases.
- **Use an existing SQL Server instance** — select this option to use an existing SQL Server instance.

NOTE: Local SQL Server instance is detected automatically, and input fields are pre-populated with its settings.

Complete the following fields:

| Option | Description |
|---------------------|---|
| SQL Server instance | Specify the name of the SQL Server instance to store audit data. |
| Authentication | Select the authentication type you want to use to connect to the SQL Server instance: <ul style="list-style-type: none"> • Windows authentication • SQL Server authentication |
| User name | Specify the account to be used to connect to the SQL Server instance. <p>NOTE: This account must be granted the database owner (db_owner) role and the dbcreator server role. See Configure Audit Database Account for more information.</p> |
| Password | Enter a password. |

IMPORTANT! If you want to use Group Managed Service Account (gMSA) to access the SQL Server instance hosting the database, consider that in this case Netwrix Auditor will not be able to generate SSRS-based reports (due to [Microsoft limitations](#)).

5.2.3. Database Settings

At this step, you need to specify a database where Netwrix Auditor will store data collected from the data sources included in this monitoring plan.

NOTE: It is strongly recommended to target each monitoring plan at a separate database.

Make sure the **Disable security intelligence and make data available only in activity summaries** checkbox is cleared and **Use default SQL Server settings** is checked.

Audit Database

Specify the database to store your data and configure settings.

Disable security intelligence and make data available only in activity summaries

Database:

Use default SQL Server settings

Specify custom connection parameters

Authentication:

User name:

Password:

Configure the following:

| Setting | Description |
|---|---|
| <p>Disable security intelligence ...</p> | <p>Only select this option if you do not want your data to be stored in the database. In this case, you will only be able to receive activity summaries. Reporting and alerting capabilities will not be provided.</p> <p>To store data to the database, leave this check box cleared.</p> |
| <p>Database</p> | <p>Default database name is <i>Netwrix_Auditor_<monitoring_plan_name></i>.</p> <p>It is recommended that you enter a meaningful name for the database here. It may include the data source type (e.g. <i>Exchange_Audit_Data</i> or <i>OracleSrv02_Audit_Data</i>), or so.</p> <p>If you decided to use the existing SQL Server instance instead of dedicated, you may want to use <i>Netwrix_Auditor</i> prefix to distinguish Netwrix Auditor databases</p> |

| Setting | Description |
|--------------------------------------|--|
| | from others. |
| Use default SQL Server settings | Select this option if you want Netwrix Auditor to connect to the SQL Server instance using the default settings you specified Default SQL Server Instance . |
| Specify custom connection parameters | Select this option to use custom credentials when connecting to SQL Server. Specify authentication method and the account that Netwrix Auditor will use. Make sure this account has sufficient rights to connect to SQL Server and work with the databases. See Configure Audit Database Account for details. |

Netwrix Auditor will connect to the default SQL Server instance and create a database with the specified name on it.

NOTE: Global settings that apply to all databases with audit data (including retention period and SSRS server used for reporting) are available on the **Audit Database** page of Netwrix Auditor settings. See [Audit Database](#) for details.

5.2.4. SMTP Server Settings

When you create the first monitoring plan, you are prompted to specify the email settings that will be used for activity and health summaries, reports and alerts delivery. For the monitoring plans that follow, Netwrix Auditor will automatically detect SMTP settings; however, for your first plan you should provide them manually. See [this section](#) for details.

5.2.5. Email Notification Recipients

Specify who will receive daily emails: [Activity Summary Email](#) on changes in the monitored infrastructure, and [Health Summary Email](#) on Netwrix Auditor operations and health.

Click **Add Recipient** and enter your email.

NOTE: It is recommended to click **Send Test Email**. The system will send a test message to the specified email address and inform you if any problems are detected.

5.2.6. Monitoring Plan Summary

At this step of the wizard, to provide a meaningful name and optional description for your monitoring plan.

To start collecting data, you should specify the objects (items) that belong to the target data source and should be processed according to the settings of this monitoring plan. For example, for Exchange data source the item will be your Exchange server, for Windows Server data source - computer, IP range or AD container, and so on. To add items right after finishing the monitoring plan wizard, select the **Add item now** checkbox. See [Add Items for Monitoring](#) for details.

5.3. Add Items for Monitoring

Once you completed monitoring plan wizard and specified data sources, add items for monitoring.

Each data source has a dedicated item type. Netwrix Auditor automatically suggests item types associated with your data source.

5.3.1. Nutanix SMB Shares

Complete the following fields:

| Option | Description |
|--|---|
| General | |
| Specify Nutanix File Server | <p>Provide a server name by entering its FQDN, NETBIOS or IPv4 address. You can click Browse to select a computer from the list of computers in your network.</p> <p>NOTE: If you need to audit a 3-node cluster, it is recommended to use FQDN or NETBIOS name.</p> |
| Specify the account for collecting data | Select the account that will be used to collect data for this item. |
| Specify listening port for incoming connections | Provide the name of the TCP port to listen to notifications on the operations with Nutanix file shares. Default is 9898 . |
| Nutanix File Server REST API | |
| Specify account for connecting to Nutanix File Server REST API | Specify the account that will be used to connect to Nutanix REST API. This account should have sufficient privileges on the Nutanix File Server. For details, refer to Create User Account to Access Nutanix REST API . |
| Scope | |
| Monitor hidden shares | <p>By default, Netwrix Auditor will monitor all shares stored in the specified location, except for hidden shares (both default and user-defined). Select Monitor user-defined hidden shares if necessary.</p> <p>IMPORTANT! Even when this option is selected, the product will not collect data from administrative hidden shares such as: default system root or Windows directory (ADMIN\$), default drive shares (D\$, E\$, etc.), shares used by printers to enable remote administration (PRINT\$), etc.</p> |
| Specify monitoring restrictions | <p>Specify restriction filters to narrow your monitoring scope (search results, reports and Activity Summaries). All filters are applied using AND logic.</p> <p>Refer to Configure Scope for detailed instructions on how to configure your monitoring scope.</p> |

| Option | Description |
|--------|-------------|
|--------|-------------|

NOTE: Currently, auditing is available for SMB shares only. Auditing of NFS shares is not supported due to known limitations.

5.3.1.1. Configure Scope

You can configure Netwrix Auditor to audit all file shares except for ones added as exclusions. For that, under **Specify monitoring restrictions**, select **All file shares in the array**. You can also create lists of specific file shares to include and/or exclude from being audited. Review the following for additional information:

- [To add inclusion](#)
- [To add exclusion](#)

To add inclusion

1. Under **Specify monitoring restrictions**, select **Specific file shares**.
2. Click **Add Inclusion**.
3. Provide UNC path to a shared resource. For example: *NewStation\Shared*.

NOTE: Do not specify a default file share mapped to a local drive (e.g., \\Server\e\$).

To add exclusion

Click **Add Exclusion**, then in the **Specify Filters** dialog do the following:

1. Provide the path to the file share where you are going to exclude some audit data. Use the path format as it appears in the "*What*" column of reports and Activity Summaries — for example, *\\corpsrv\shared*.

NOTE: You can use a wildcard (*) only if you need to exclude **user activity** on this file share. For other data types (*state-in-time* or *all data*) wildcards are not supported. This refers to the specified shared folder, its subfolders and files.

2. Select what type of data you want to exclude:

| Option | Description | Example |
|-----------------|--|---|
| All Data | Select if you want to completely exclude the specified file share from being audited. The product will not collect any user activity or state-in-time data. | A Security Officer wants to monitor a file share but s/he does not have access to a certain folder on this share. |

| Option | Description | Example |
|----------------------|--|--|
| | <p>NOTE: In this case, Netwrix Auditor does not adjust audit settings automatically for the selected folders.</p> | Thus, s/he configures the product not to monitor this folder at all. |
| State-in-Time | Select to configure Netwrix Auditor to exclude data for the state-in-time reports from the monitoring scope. | A Security Officer wants to monitor a file share, but it contains a folder with a huge amount of objects, so s/he does not want Netwrix Auditor to collect state-in-time data for this folder. |
| User Activity | Select to exclude actions performed by specific users on the selected file share. See the procedure below for details. <p>NOTE: In this case, the product still collects state-in-time data for this share.</p> | A Security Officer wants to monitor a file share that contains a public folder for which s/he does not want to collect <i>Read</i> operations. |

To exclude specific user activity:

1. Specify what user accounts should be excluded:
 - **All Users** — select to exclude the activity of any user on the file share you specified.
 - **These users** — select to exclude specific users' activity. Provide user names as shown in the "Who" column in reports and Activity Summaries, e.g., *MyDomain\user1*. To enter multiple accounts, use comma as a separator.
2. Specify what actions should be excluded:
 - **All actions** — exclude all actions of the selected users
 - **These actions:** — use the drop-down list to select the actions to exclude, e.g. *Added* and *Moved*.

Specify Filters

Specify filters to narrow the monitoring scope. They will be applied using AND logic. Wildcard (*) is supported in paths only if excluding User Activity data.

Path:

Format: As shown in "What" field of reports and activity summaries.

Data type to exclude:

User activity data will be excluded from data collection for the specified share.

User whose activity to exclude:
 All users
 These users:

Format: As shown in "Who" field of reports and activity summaries. Use comma as a separator.

Actions to exclude:
 All actions
 These actions:

After configuring all filters, click **Add** to save them and return to the item settings.

5.4. Launch Data Collection Manually and Update Status

If you do not want to wait until a scheduled data collection, you can launch it manually.

NOTE: Not applicable to Netwrix Auditor for User Activity. For this data source, the product sends real-time data about sessions and activity.

Along with data collection, the following actions will be performed:

- An Activity Summary email will be generated and sent to the specified recipients. It will list all changes that occurred since the last scheduled or on-demand Activity Summary delivery.
- Changes that occurred between data collections will be written to the Long-Term Archive and the

Audit Database, and become available in the Netwrix Auditor client.

- A state-in-time data will be updated.

To launch data collection manually

1. Navigate to **All monitoring plans** → your monitoring plan, select **Edit**.
2. In the right pane, click **Update**.

NOTE: Depending on the size of the monitored environment and the number of changes, data collection may take a while.

6. Make Test Changes

Now that the product has collected a snapshot of the data source's current configuration state, you can make test changes to see how they will be reported by Netwrix Auditor.

NOTE: Before making any test changes to your environment, ensure that you have the sufficient rights, and that the changes conform to your security policy.

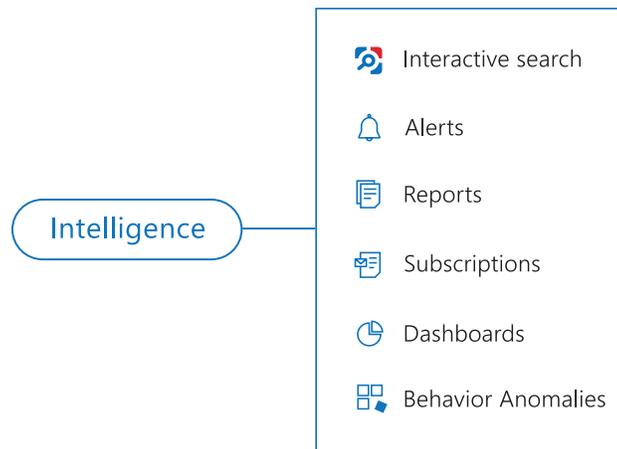
For example, make the following test changes:

- Create a new file
- Modify existing file

NOTE: Monitoring of actions performed from partner server (i.e. Netwrix Auditor Server) is not supported in the current version of Nutanix Files auditing API.

7. See How Netwrix Auditor Enables Complete Visibility

After you have made test changes to your environment, you can see how Netwrix Auditor brings security intelligence into your IT infrastructure and enables complete visibility. Take a closer look at the **Intelligence** section. It contains everything you need to enable complete visibility in your environment.



This chapter explains how to review your test changes with some of the Intelligence options and Activity Summary. Review the following for additional information:

- [Review an Activity Summary](#)
- [Review Overview Dashboard](#)
- [Review the All Changes Report](#)
- [Browse Data with Intelligence Search](#)

In order not to wait for a scheduled Activity Summary generation, force data collection and email delivery.

1. Navigate to **Monitoring Plans** and select your plan in the list.
2. Click **Edit**.
3. In the your monitoring plan settings, click **Update** in the right pane.
4. Check your mailbox for an email notification and make sure that the data collection has completed successfully.

7.1. Review an Activity Summary

Activity Summary email is generated automatically by Netwrix Auditor and lists all changes that occurred since the last Activity Summary delivery. By default, an Activity Summary is generated daily at 3:00

AM and delivered to the specified recipients.

After the data collection has completed, check your mailbox for an Activity Summary and see how your test changes are reported

The screenshot shows an email interface with the following content:

Netrix Auditor for File Servers

Activity Summary

- Added: 1
- Add (Failed Attempt): 0
- Removed: 0
- Remove (Failed Attempt): 0
- Modified: 1
- Modify (Failed Attempt): 0
- Copied: 0
- Moved: 0
- Move (Failed Attempt): 0
- Renamed: 0
- Rename (Failed Attempt): 0
- Read: 0
- Read (Failed Attempt): 0

| Action | Object type | What | Item | Where | Who | When | Workstation | Details |
|----------|-------------|--|---------------------|---------------|--------|------------------------|-------------|---------|
| Added | File | \\afs98.labseven.local\share001\John Smith.rtf | afs98.testlab.local | testlab.local | L7\Adm | 10/17/2019 12:30:47 PM | 172.28.9.1 | none |
| Modified | File | \\afs98.labseven.local\share001\John Smith.rtf | afs98.testlab.local | testlab.local | 7\Adm | 10/17/2019 12:30:47 PM | 172.28.9.1 | none |

The example Activity Summary provide the following information:

| Column | Description |
|-------------|---|
| Action | Shows the type of action that was performed on the object. |
| Object Type | Shows the type of the object. |
| What | Shows the name of the changed object or its path. |
| Item | Shows the item associated with the selected monitoring plan. |
| Where | Shows the name of the server where the change occurred. |
| Who | Shows the name of the account under which the change was made. |
| When | Shows the exact time when the change occurred. |
| Workstation | Shows the of the computer where the user was logged on when the change was made. |
| Details | Shows the before and after values of the modified object, object attributes, etc. |

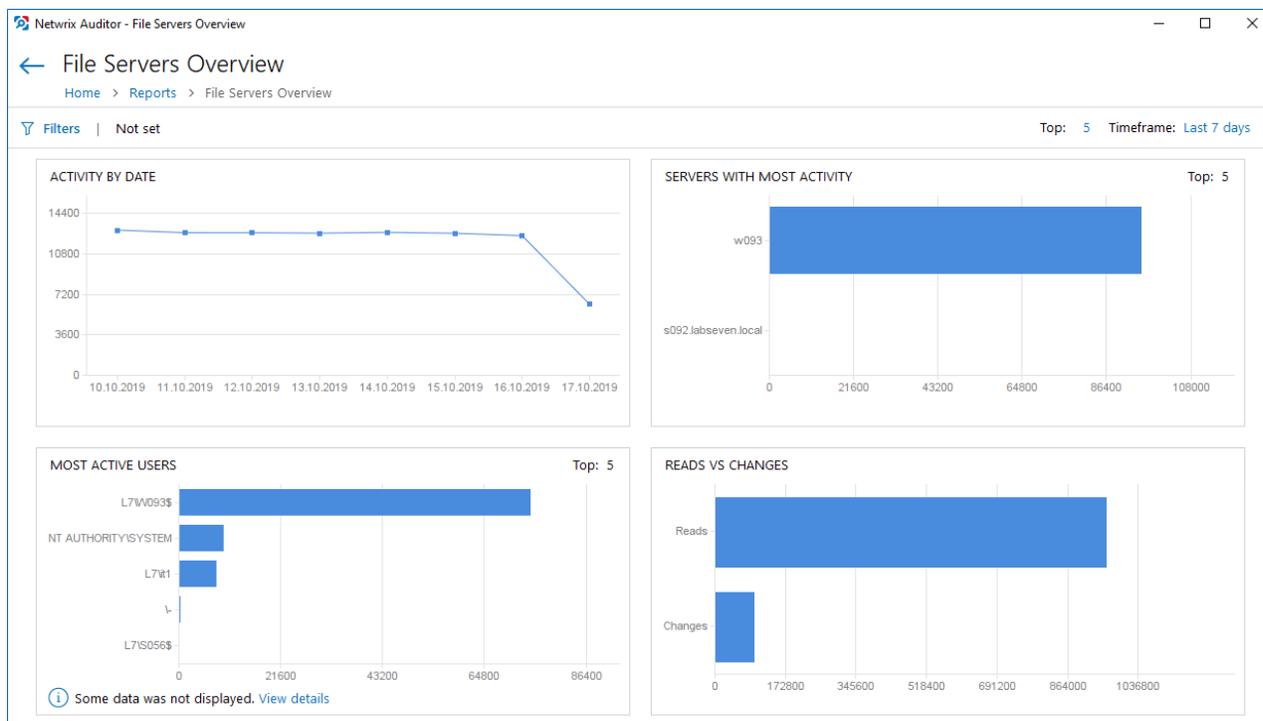
7.2. Review Overview Dashboard

Overview diagram provides a high-level overview of activity trends by date, user, server, object type or data source in your IT infrastructure. The **Overview** diagram aggregates data on all monitoring plans and all data sources, while system-specific diagrams provide quick access to important statistics within one data source.

After collecting initial data, making test changes to your environment and running data collection again, you can get at-a-glance statistics for changes with the **File Servers Overview**.

To see how your changes are reported with File Servers Overview

1. On the main Netrix Auditor page, navigate to the **Intelligence** section and click the **Reports** tile.
2. Expand the **Predefined** → **File Servers** → **File Servers Activity** reports.
3. Select the **File Servers Overview** report and click **View**.
4. Review your changes.
5. Click on any chart to jump to a table report with the corresponding grouping and filtering of data.



7.3. Review the All Changes Report

The Netrix Auditor client provides a variety of predefined reports that aggregate data from the entire audited IT infrastructure or individual data sources.

Change and activity reports can be found under the **Reports** → **Predefined** → **your data source type** and provide a narrower insight into what is going on in the audited infrastructure and help you stay compliant with various standards and regulations (FISMA, HIPAA, PCI, SOX, etc.).

After collecting initial data, making test changes to your environment and running data collection again, you can take advantage of the reports functionality.

To see how your changes are listed in the report

1. On the main Netrix Auditor page, navigate to **Reports** → **Predefined** → **your data source**.
2. Select the **All File Server Activity** report.
3. Click **View** to open the report.

 Netrix Auditor
Thursday, April 13, 2017 5:51 AM

All File Server Activity

Shows all activity (changes, failed modifications, reads, and failed read attempts) on all audited file servers.

| Filter | Value | | | |
|---|-------------|--|------------------------|-------------------------|
| Action | Object Type | What | Who | When |
| ■ Added | Folder | \\Workstation16\Reports\Employees | CORP\adminis trator | 4/13/2017 5:36:25 AM |
| Where: Workstation16 Workstation: Workstation16 Session ID: 0007dcdb-0000-0000-01d2-b39ac7ee7e7 | | | | |
| ■ Modified | File | \\Workstation16\Reports\Work_Items.txt | CORP\adminis trator | 4/13/2017 5:40:27 AM |
| Where: Workstation16 Workstation: Workstation16 Object attributes changed from "Archive, Read-only" to "Archive" Process: C:\Windows\System32\notepad.exe Session ID: 0007dcdb-0000-0000-01d2-b39ac7ee7e7 | | | | |

7.4. Browse Data with Intelligence Search

Netrix Auditor delivers complete visibility into your IT infrastructure. Its convenient interactive search interface enables you to investigate incidents and browse data collected across the entire IT infrastructure. When running a search, you are not limited to a certain data source, change type, or object name. You can create flexible searches that provide you with precise results on *who* changed *what*, and *when* and *where* each change was made.

After collecting initial data, making test changes to your environment and running data collection again, you can review changes in details with Intelligence search.

To browse your audit data and see you test changes

1. On the main Netwrix Auditor page, navigate to **Intelligence** → **Search**.
2. Add search filters to your search by clicking on a corresponding icon and providing a value. By default, all entries that contain this filter value are shown. For an exact match, use quotation marks.

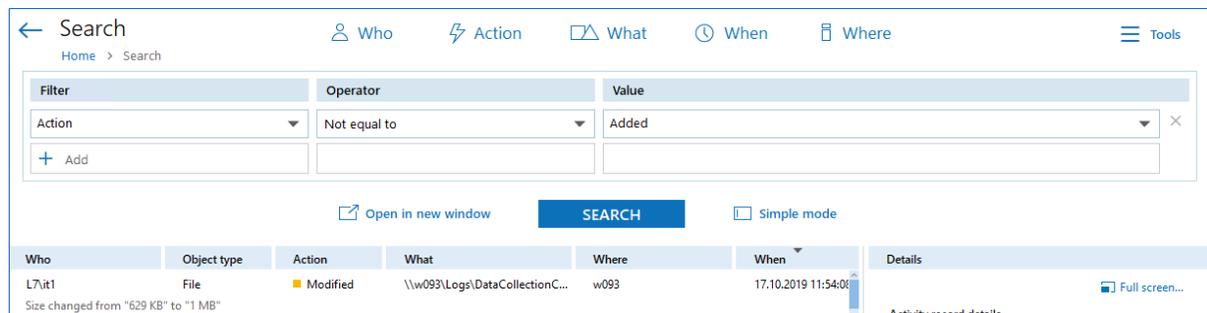
Filters are used to narrow your search results. To create a unique set of filters, you can:

- Add different filters to your search. Search results will be sorted by all selected filters since they work as a logical conjunction (e.g., **Who: Administrator** **AND** **Action: Added**).
- Specify several values in the same filter to search for any of them (e.g., **Action: Modified** **OR** **Action : Removed**). To do this, select a filter again and specify a new value.

NOTE: Refer to [Netwrix Online Helpcenter](#) for detailed instructions on how to apply filters and change match types

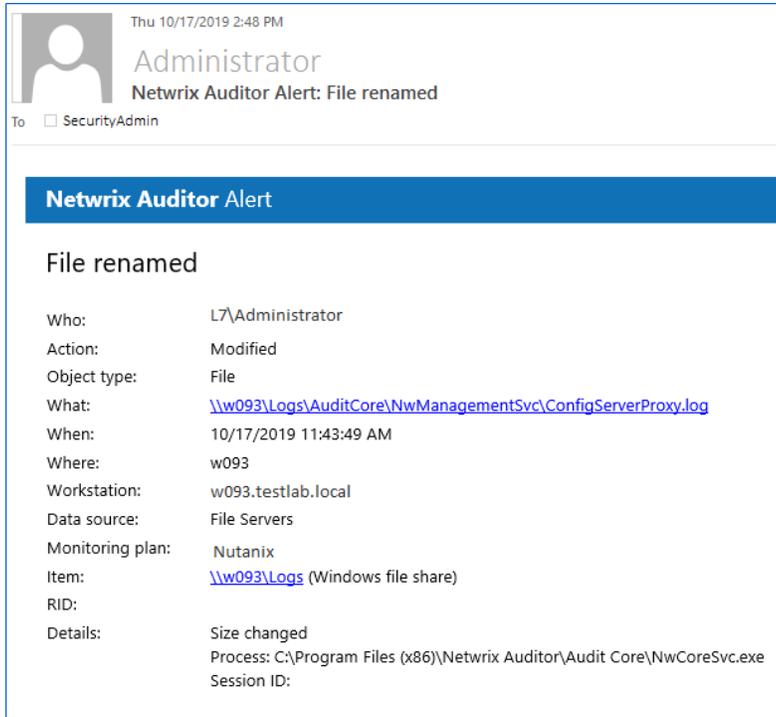
3. Click **Search**.
4. Now, you can narrow your search and modify it right from the search results pane. Click any entry that contains excess data, select **Exclude from search** in the **Details** section and specify a filter, e.g., **Action not equal to: Added** to leave information on modifications only.

Your **Search** field will be updated, the **Action not equal to** filter will be added. Make sure to click **Search** again to update your search results.

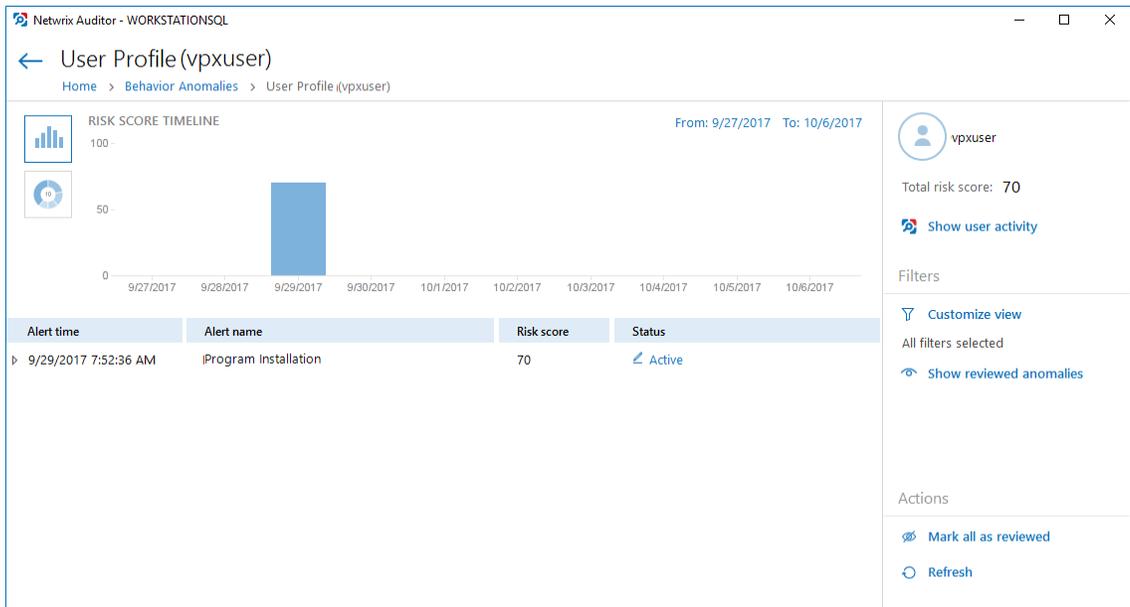


5. Having reviewed your search results, navigate to **Tools**.
 - Click **Save as report** to save the selected set of filters. This search will be added to the **Custom** section inside **Reports**, so that you will be able to access it instantly. Refer to [Custom Search-Based Reports](#) for detailed instructions on how to create saved searches.
 - Click **Create alert** to get instant email or SMS notifications on suspicious activity that matches your current search criteria. You only need to specify a name for a new alert, add recipient and assign a risk score. The selected set of search criteria will be associated with the new alert automatically. Refer to [Alerts](#) for detailed instructions on how to create and configure alerts.

Try making more similar test changes to provoke an alert. For example:



Once you have received the alert, click the **Behavior Anomalies** tile on the main Netwrix Auditor page to see how the product identifies potentially harmful users and displays their risk scores. Drill-down to user profile to review anomalies and mitigate risks. Refer to [Netwrix Online Helpcenter](#) for more information on behavior anomalies and risk scores.



8. Related Documentation

The table below lists all documents available to support Netwrix Auditor for Nutanix Files:

| Document | Description |
|--|---|
| Netwrix Auditor Online Help Center | Gathers information about Netwrix Auditor from multiple sources and stores it in one place, so you can easily search and access any data you need for your business. Read on for details about the product configuration and administration, its security intelligence features, such as interactive search and alerts, and Integration API capabilities. |
| Netwrix Auditor Installation and Configuration Guide | Provides detailed instructions on how to install Netwrix Auditor, and explains how to configure your environment for auditing. |
| Netwrix Auditor Administration Guide | Provides step-by-step instructions on how to configure and use the product. |
| Netwrix Auditor Intelligence Guide | Provides detailed instructions on how to enable complete visibility with Netwrix Auditor interactive search, report, and alert functionality. |
| Netwrix Auditor Integration API Guide | Provides step-by-step instructions on how to leverage Netwrix Auditor audit data with on-premises and cloud auditing solutions using RESTful API. |
| Netwrix Auditor Release Notes | Lists the known issues that customers may experience with Netwrix Auditor 10, and suggests workarounds for these issues. |