Ipswitch Analytics Administrator Guide

ipswitch
Analytics

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Contents

Introduction

The Ipswitch Analytics Administrator Guide gives a system-level view of Ipswitch Analytics, and includes post-installation configuration and management tasks. Administrators can learn how Ipswitch Analytics works, what security features are in place, and how to configure the Ipswitch Analytics Server, manage Ipswitch Analytics users, change system-wide Ipswitch Analytics settings, and perform audit and logging tasks.

It contains the following sections:

Introduction (on page 1): Gives an ***overview*** (on page 2) of the Ipswitch Analytics product, a description of available ***modules*** (on page 3), a list of system requirements, suggests common ***use cases*** (on page 4) and shows you where to ***get help*** (on page 6).

How Ipswitch Analytics Works (on page 6): Provides a detailed description of how the Ipswitch Analytics Server and Agents work together within your MOVEit system, including possible ***installation configurations*** (on page 8), how Ipswitch Analytics handles ***time zones*** (on page 14) and the ***security features*** (on page 14) in place within Ipswitch Analytics.

Install, Modify and Remove (on page 15): Includes system requirements and steps to ***install*** (on page 17), ***modify*** (on page 49), or ***remove*** (on page 57) Ipswitch Analytics.

Manage (on page 94): Gives an overview of ***access control*** (on page 94) options. Shows you how to create and manage ***users*** (on page 95), ***user groups*** (on page 104), and ***rulesets*** (on page 109) and how to configure ***email notifications*** (on page 111), the global ***password policy*** (on page 113) and ***licensing*** (on page 114). This section also describes how you can ***manage reports*** (on page 106), including how the ability to create reports is controlled, how to control access to MOVEit sources during report creation, and who can view and manage Library reports. The ***Troubleshoot*** (on page 115) section can help you solve problems you might encounter.

Use (on page 129, http://docs.ipswitch.com/MOVEit/Transfer2017PLUS/Help/Admin/en/#31215.htm): Describes how to use Ipswitch Analytics. Shows how to ***sign in*** (on page 133), and includes a ***quick tour*** (on page 134) of the interface to help you learn how to get up and running with minimal delay. Includes detailed descriptions of modules and a ***How Do I...*** (on page 190) section to help you locate instructions for common tasks quickly.

Reference (on page 207): Includes stock report template definitions and report field definitions.

Overview

Ipswitch Analytics™ is a web-based application for IT professionals that offers a single viewpoint into file transfer and processing activity on all of your MOVEit Automation and MOVEit Transfer servers. It is designed to be the system of record for all auditable activities that occur across your entire MOVEit system. Ipswitch Analytics captures transaction, processing and system data that may be located on MOVEit servers in different geographical regions and then presents that data in a web browser for analysis.

The Ipswitch Analytics interactive Monitor graphs current high-level activity across one or more MOVEit servers to verify system status, identify file transfer impacts to business and discover actionable information for real-time response to issues. The Ipswitch Analytics customizable Reports show both detailed and high-level transfer and processing metrics across one or more MOVEit servers. Run reports on demand, or schedule reports for delivery to select business groups on a one-time or recurring basis. Transfer and Workflow reports provide a window into the transactions that occur on your MOVEit servers, and help identify file transfer impacts to business for planning purposes. User Audit and Security reports help administrators track user actions, failed logins and IP lockouts across multiple MOVEit servers and on the Ipswitch Analytics Server itself, providing the necessary tools to trace abusive or malicious activity within the enterprise.

Ipswitch Analytics offers end-to-end visibility of critical business processes while providing IT departments with the tools they need to collect actionable business intelligence and provide audit trails to meet regulatory compliance. The simple-to-use and flexible web interface makes it easy to retrieve key performance metrics across multiple MOVEit systems using a single tool.

Modules

Ipswitch Analytics includes the following modules. User roles control access to each module.

MONITOR (on page 146)
The MONITOR is a colorful chart that shows a high-level summary activity on your MOVEit server(s) for the past 72 hours, updating every 60 seconds to refresh with new data. Charted performance metrics include successful and failed uploads, downloads, tasks, and transfer size. A dashboard also shows the reporting status of all of Ipswitch Analytics Agents that collect data from your MOVEit database(s). Use the Monitor to track current server usage and status, detect short-term transfer and processing trends, discover and manage system issues as they arise, diagnose system health, and isolate failures. The Monitor will show you timely and actionable information for real-time response to system issues so you can focus quickly on trouble spots to catch and respond to problems before they get out of hand.

REPORTS (on page 134)

The REPORTS module includes three work areas:

§ Library (on page 136): The Library tab contains all saved reports. It will be empty initially. A report is a template that has been populated with actual data captured from one or more MOVEit server(s) over a specific time range. Reports can show a high-level summary of data, or details of individual transactions. The contents of a report are static and unalterable; a report represents a snapshot in time of activity on your MOVEit system(s). You cannot change the data fields that display in a report, or the MOVEit source included in the data set, but users with sufficient role privileges may edit a report's properties to share it with other users and groups. You can also export a report as a PDF or CSV file from the Library. Users with the role of Creator (or higher) can add a report to the Library by either running a template and saving the resulting report to the Library, or by creating a schedule to deliver the report automatically to the Library.

§ Templates (on page 138): A template describes the content and layout of a report, but does not include any actual data. Ipswitch Analytics includes pre-configured stock templates that cover many commonly required reporting areas. You can also use the Template Editor to create custom templates from scratch that contain the exact fields, field placement, and Server/Org/User filters that you require. Run a report to populate a template with up-to-the-minute data from your MOVEit system(s), then optionally save the report to the Library for later viewing, or export it to PDF or CSV.

§ Schedule (on page 143): Create a schedule to automate the creation and delivery of reports to the Library, to specific Ipswitch Analytics users and groups, or to email recipients. Set a schedule to occur one time, or on a recurring basis.

USERS (on page 95)
The Users module is where administrators add and manage Ipswitch Analytics users and user groups.

SETTINGS (on page 110)
The SETTINGS module is where System Administrators configure ***rulesets*** (on page 109), ***email notifications*** (on page 111), ***global password policy*** (on page 113), preferred language, and ***licensing*** (on page 114).

Use Cases

Ipswitch Analytics is ideal for enterprise customers with on-premises deployments of MOVEit Transfer and/or MOVEit Automation who want to:

- Gain a detailed understanding of system activity and usage:
  - Collect, analyze and take action on file transfer statistics across all of MOVEit Automation and MOVEit Transfer, including multi-vendor organizations.
  - Discover file transfer impacts to business, and understand and manage operational activity/file transfer flows across your most important B2B relationships, internal projects, and file sharing activities.
  - Learn who has accessed the system to trace abusive and/or malicious activity within the enterprise and avoid security breaches.
- Be proactive:
  - Identify lulls in activity to update your system, expand storage, and change retention policies.
  - Identify the most active users or processes, see statistics, analyze trends, and create automated system reports to manage bandwidth and keep ahead of the next problem.
  - Understand system operations and user/process activity to take action before system demands exceed capabilities.
  - Manage storage ahead of the end-of-month rush by allocating resources to ensure that business processes and ad-hoc user file transfers don’t miss a beat.
  - Plan for and justify capital expenditures to contain costs, which meets a corporate trend of analysis- and data-driven decisions.
- Simplify regulatory compliance:
  - Provide detailed audit trails for accountability and visibility, showing the process/data flow and who had access to data at every step.
  - Satisfy regulatory and industry compliance to avoid fines, or worse.
  - Provide end-to-end governance of file transactions across all MOVEit systems with no business interruptions.
  - Produce a complete audit trail to analyze overall system behavior or search for a specific user activity, activity on a specific date or across a time range to conclusively show what happened when, and who or what process was responsible.
  - Produce an accessible and evidentiary journal of timestamped activities to show compliance or any violations/exceptions.
  - Discover file transfer impacts to regulatory compliance.
  - Avoid blame for loss of business, security breaches, and/or failures to adhere to industry compliance.
- Manage Bills:
  - Streamline transfer service billing by producing accurate usage reports over a specific time range that include multiple reporting criteria for select clients, groups, files or users.
  - Expose transfer and processing reports to partners to provide better visibility in a safe location.

- Verify completion of events:
  - Discover if files disseminated successfully (i.e., did everyone get the Q3 sales report? If not, who did not receive it?).
  - Learn if 100% of files in a process were delivered successfully.

Get Help

Use either of the following ways to get help with Ipswitch Analytics:

- At the top of the screen, click HELP and select one of the following:

  User Guide (for Partners, Monitors, Readers and Creators): Includes instructions for using Ipswitch Analytics.

  Administrator Guide (for System Administrators and Administrators). Includes instructions for installing, managing and using Ipswitch Analytics.

How Ipswitch Analytics Works

- Visit the ***Ipswitch support website*** (***http://www.ipswitch.com/support/main***). The main Support page contains links to all documentation and help videos, a form to submit a support request, and customer support telephone numbers.

Ipswitch Analytics consists of one or more Ipswitch Analytics Agents that pull data periodically from MOVEit databases and send that data securely to the Ipswitch Analytics Server. The Ipswitch Analytics Server stores the data in a PostgreSQL database and presents it for analysis within a web browser when requested.

An Agent is required for each MOVEit database you want to include in Ipswitch Analytics. For example, if you have one MOVEit Automation database and two MOVEit Transfer databases, you require three Agents.

The standard perpetual base Ipswitch Analytics license supports two Agents connected with a single Server, however, a Ipswitch Analytics Server can support up to 20 Agents and up to 100 users may sign in to the Ipswitch Analytics Server concurrently. Please visit ***How to Buy*** (***http://www.ipswitchft.com/how-to-buy***) to purchase add-on Agent licenses or to convert from an evaluation license to a perpetual license.

Note: In a MOVEit Automation Failover environment, you install two Agents that use the same license but only one Agent is active at a time. See Install Ipswitch Analytics Agents in Legacy Failover Environments.

The installation package contains a Ipswitch Analytics Server install file and a Ipswitch Analytics Agent install file.

The Ipswitch Analytics Server

The Ipswitch Analytics Server is a secure web server that uses Apache Tomcat to run as a Windows service. The Server receives data from each Agent periodically, consolidates that data into a dedicated PostgreSQL database that retains historical MOVEit data, and then presents that data in the form of reports and a real-time monitor within a web browser. Up to 100 users can sign in to the Ipswitch Analytics Server concurrently.

Ipswitch Analytics Agents

An Agent is a Windows service that periodically captures the most recent data from a MOVEit database, formats and encrypts that data, and then sends the data to the Ipswitch Analytics Server securely via HTTPS. Data collection occurs every one minute for Monitor data and every two minutes for Reports. Agents have a small software footprint and use simple read-only queries that have minimal impact on MOVEit processing. The Agent's access to the MOVEit database is controlled by credentials entered during Agent installation. The Ipswitch Analytics Agent service typically runs on the Agent machine as an administrator user specified during installation, or in the context of the standard `LocalService` or `NetworkService` account.

Configuration Options

- Before installing Ipswitch Analytics, evaluate your current MOVEit system to determine the best installation configuration for your organization. Your organization's MOVEit servers may be located on stand-alone machines, separate from their MOVEit databases, or both MOVEit Server and MOVEit database may be installed on the same machine. Your organization may have numerous MOVEit servers, or perhaps only one or two MOVEit servers.

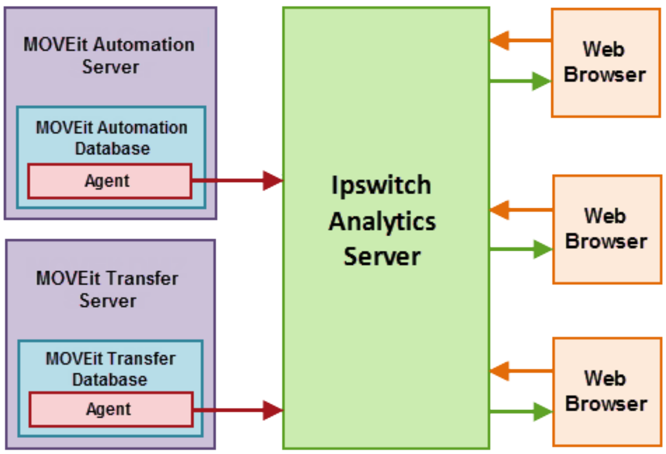
Consider the following components when deciding how to install Ipswitch Analytics within your existing MOVEit system:

- **The Ipswitch Analytics Server:** You must install the Server on a standalone machine. The Server installation includes the installation of a dedicated PostgreSQL database.
- **Ipswitch Analytics Agents:** You must install one Agent for each MOVEit database that you want to include in the Ipswitch Analytics environment for analysis. You can install an Agent on any machine that has network access to the MOVEit database; the Agent machine does not need network access to the MOVEit server. The Agent must also have network access to the Ipswitch Analytics Server, but cannot be installed on the Ipswitch Analytics Server. You can install only one Agent per machine (bare metal or virtual machine), and one Agent per SQL instance.
- MOVEit Automation Servers and Databases
- MOVEit Transfer Servers and Databases
- Microsoft Exchange Servers and Databases

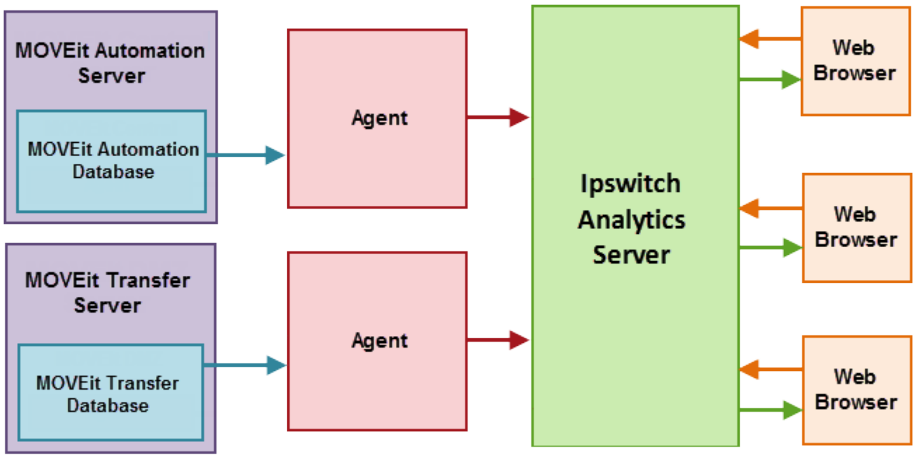
Below are some sample Ipswitch Analytics installation configurations. Each sample configuration includes only one MOVEit Automation server and only one MOVEit Transfer server for demonstration purposes. Your system could have a different number of MOVEit servers. You can choose a different configuration for each MOVEit server if desired.

Note: The sample configurations show only three web browsers connecting to the Ipswitch Analytics Server; however, the Ipswitch Analytics Server can support up to 100 concurrent web client users.

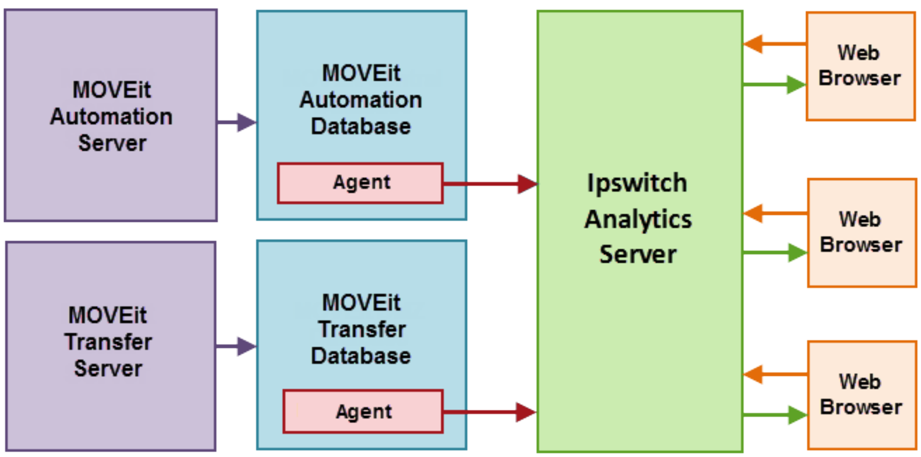
- ***MOVEit server, MOVEit database and Ipswitch Analytics Agent installed on same machine:***



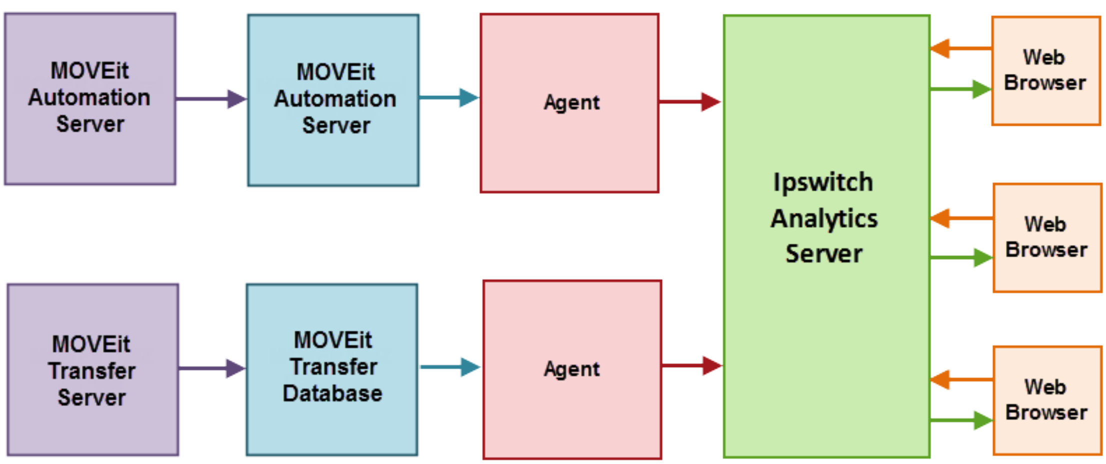
- ***MOVEit server and MOVEit database installed on the same machine, and Ipswitch Analytics Agent installed on a separate machine:***



- ***MOVEit server installed on a separate machine, with MOVEit database and Ipswitch Analytics Agent installed on the same machine:***

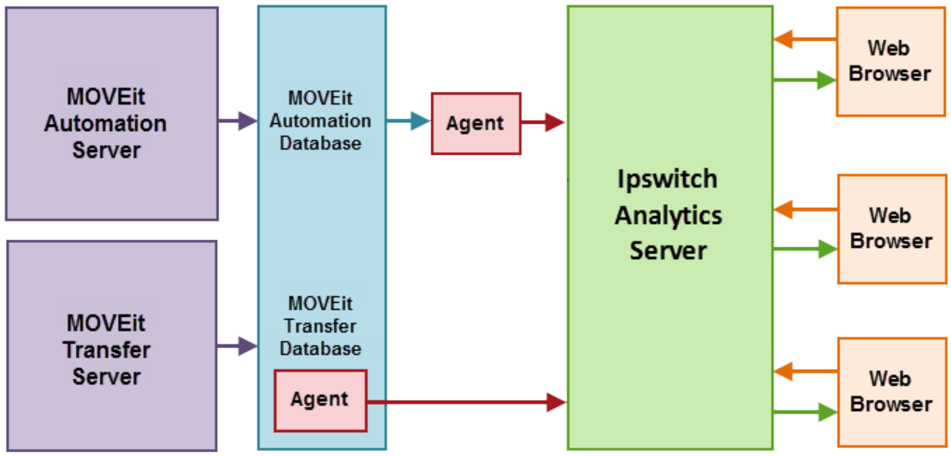


- ***MOVEit server, MOVEit database and Ipswitch Analytics Agent installed on separate standalone machines:***

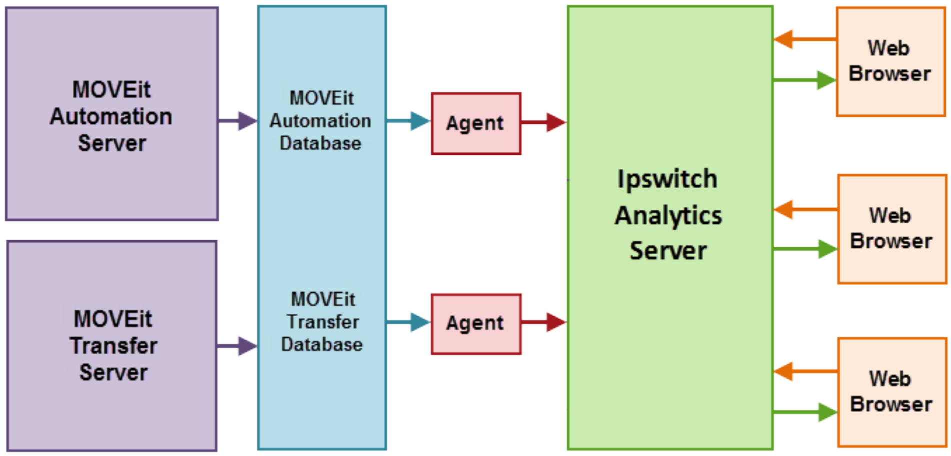


The following configurations show MOVEit Transfer and MOVEit Automation installed on standalone machines with both MOVEit SQL Server databases sharing a third standalone machine.

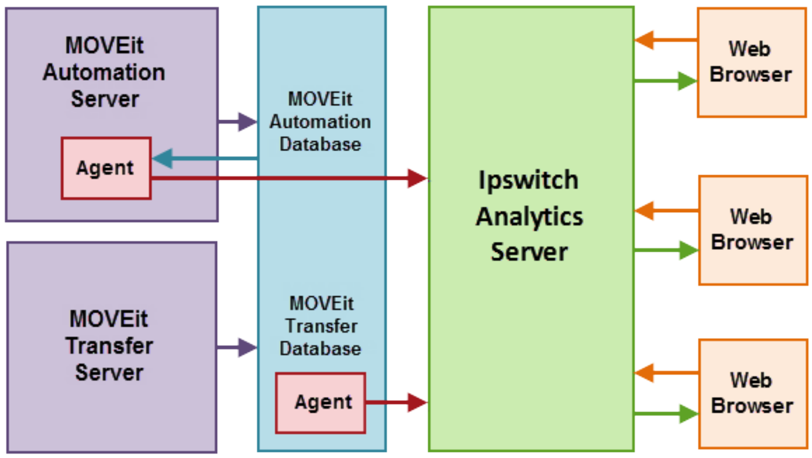
§ ***One Agent installed on the SQL Server database machine and one Agent installed on a standalone machine (physical or virtual):***



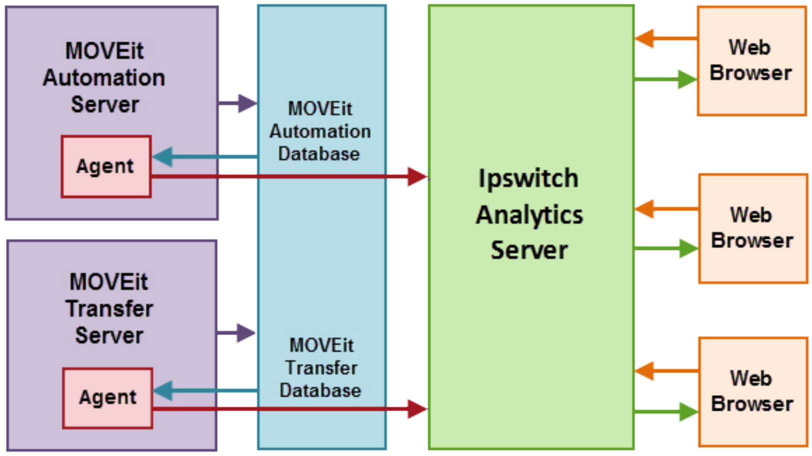
§ ***Both Agents installed on standalone machines (physical or virtual):***



§ ***One Agent installed on the SQL Server database machine, the other Agent installed on a MOVEit server:***



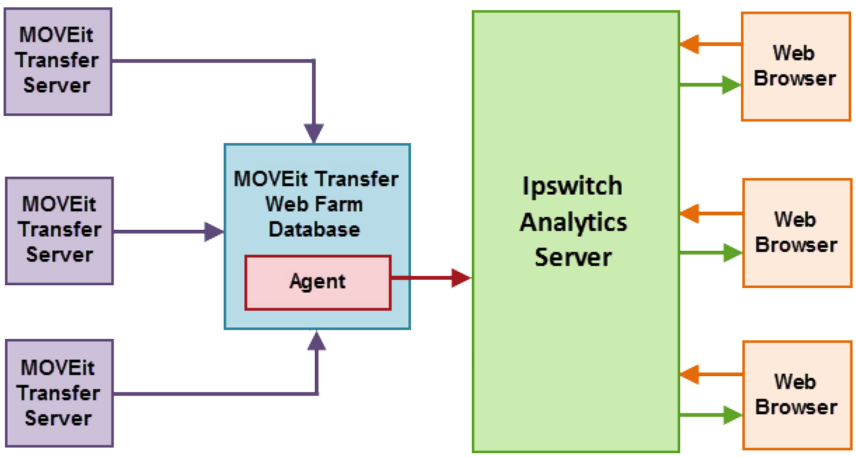
§ ***An Agent installed on each MOVEit server:***



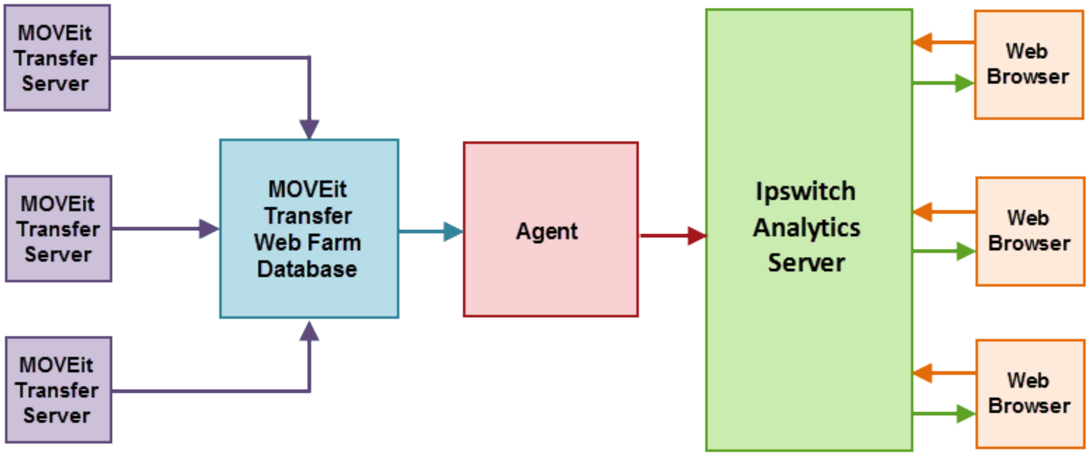
MOVEit Transfer Web Farms

If your MOVEit Transfer system is set up as a Web Farm, it contains only one MOVEit database. Install only one Agent, either on the Web Farm database machine, or on a separate machine that has a network connection connects to the Web Farm database machine.

MOVEit Transfer Web Farm database connected to multiple MOVEit Transfer servers. Ipswitch Analytics Agent installed on same machine as Web Farm database:



§ ***MOVEit Transfer Web Farm database connected to multiple MOVEit Transfer servers. Ipswitch Analytics Agent installed on a separate standalone machine that connects to the Web Farm database:***

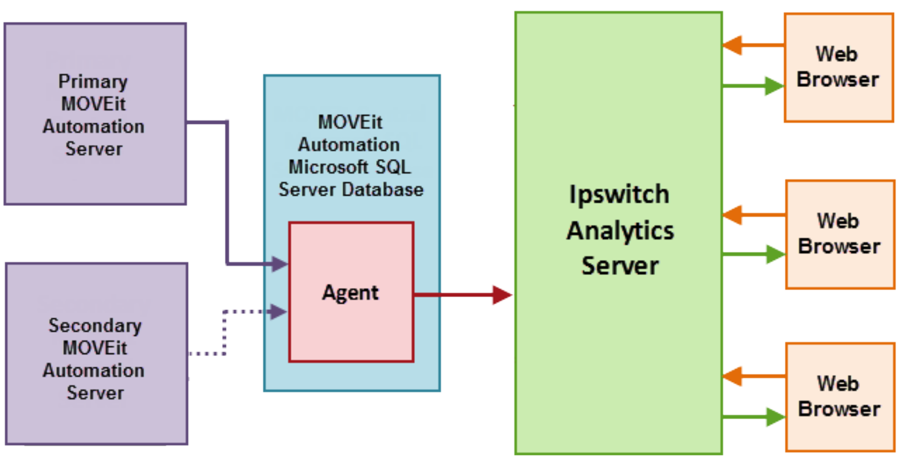


MOVEit Automation Legacy Failover

If your MOVEit Automation system is set up for Failover, you will have a primary server and a secondary (failover) server that activates only if the primary server fails. Below are the two possible configuration options for installing Ipswitch Analytics into a MOVEit Automation Legacy Failover environment. Dotted lines indicate dormant connections.

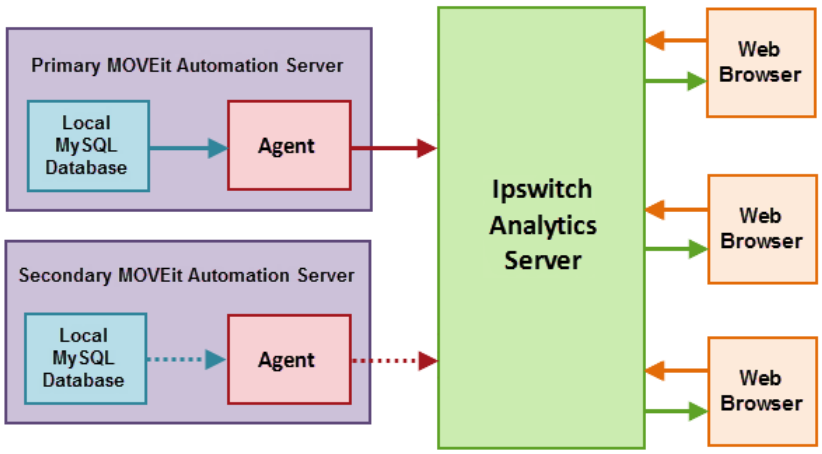
§ ***Single Microsoft SQL Server Database***

MOVEit Automation primary and secondary servers point to the same Microsoft SQL Server database on a standalone machine. Install one Agent on the MOVEit Automation Microsoft SQL Server database machine.



- ***Two Local MySQL Databases***

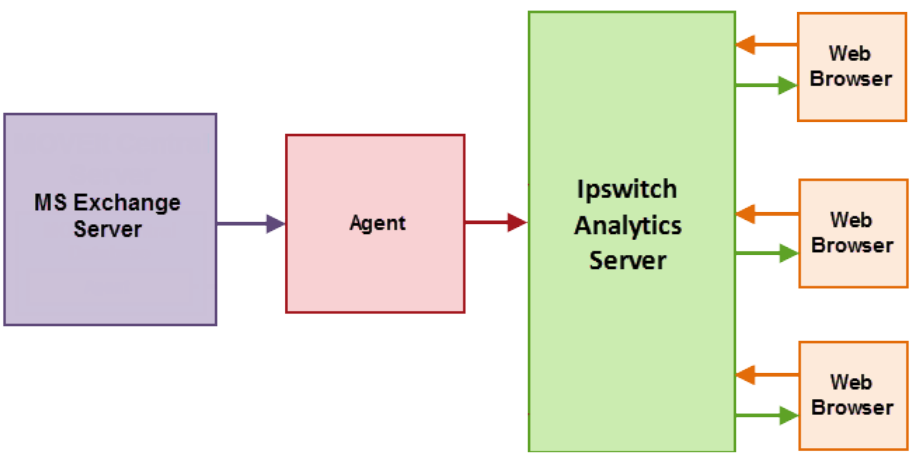
  In this scenario, the primary and secondary servers point to their own local MySQL databases. Install Agents on each MOVEit Automation server. You can use a single Agent license for both the primary and secondary Agents since only one database will send data to the Agent at a time.



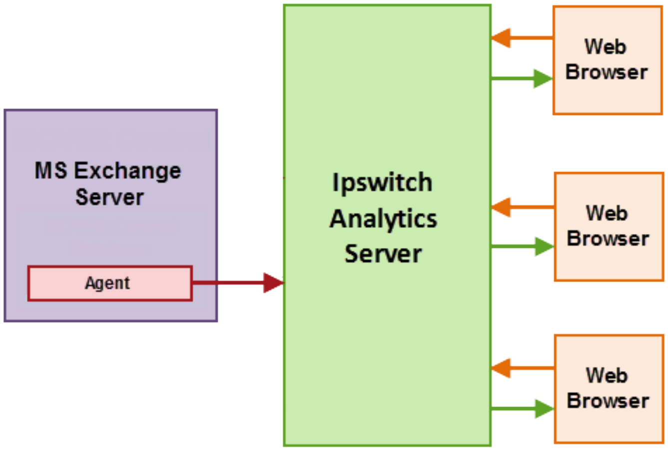
IPSWITCH ANALYTICS FOR MICROSOFT EXCHANGE

The following configurations show options for the MS Exchange Server, the Ipswitch Analytics Agent, and Ipswitch Analytics Server:

- ***MS Exchange server, Ipswitch Analytics Agent, and Ipswitch Analytics Server on separate machines:***



§ ***Ipswitch Analytics Agent and the MS Exchange server on one machine, and the Ipswitch Analytics server on a separate machine:***



Time Zones

Ipswitch Analytics Agents may collect data from multiple servers located in different geographic locations. When the Ipswitch Analytics Server receives a data record from an Agent, it converts the timestamp of that record to GMT (Greenwich Mean Time) before presenting it in a report. All queries also convert user-input times to GMT.

Security

The following security methods are in place for Ipswitch Analytics:

Passwords

Ipswitch Analytics uses the Advanced Encryption Standard (AES) to protect the passwords used to grant access to Ipswitch Analytics, and to protect access to the MOVEit database and the Ipswitch Analytics Server.

§ Ipswitch Analytics Agent: The only sensitive data that the Agents store is the password to access the MOVEit Transfer/MOVEit Automation database tables and the Ipswitch Analytics Agent password to access the Ipswitch Analytics Server. The MOVEit database password is protected using standards-based, bi-directional AES256 encryption.

The MOVEit database password is entered in plaintext during the install process and is encrypted before being stored in the configuration. When establishing a connection to the MOVEit database, the password is decrypted and passed to the JDBC driver. Internally, the JDBC driver encrypts the password using a value supplied by the database server before it is transmitted to the server for authentication. The plaintext password is never transmitted or stored.

- **Ipswitch Analytics Server:** The Ipswitch Analytics Server stores passwords for locally authenticated Ipswitch Analytics users and SMTP server login passwords. These passwords are protected using a one-way secure salted hash. When a local user is added to the system, the password that is entered in plain text will be hashed and stored in the database.

  When a local user attempts to sign in, the password that is supplied will be hashed and the resulting hash will be compared with the stored hash and the user will be authenticated if they are equal. When a local user password is changed, the new password must be entered twice. These two passwords are compared against each other, and if they are equal, the new password will be hashed and stored in the database.

  System Administrators can also set minimum and maximum password size and a ***password strength policy*** (on page 113) ranging from Very Tough to Almost None.

Note: Report data is not considered sensitive and is not encrypted in the database nor on the file system of the servers that generate the reporting data or on the Ipswitch Analytics Server.

All authentication information used by Ipswitch Analytics is encrypted or hashed. Encryption and hashing are done using the Java Simplified Encryption library (Jasypt). Details of the Jayspt library can be found at www.jayspt.org. For Ipswitch Analytics, hashing is done using the SHA-512 algorithm and utilizes the Jasypt library to enhance the protection using random salts and multiple iterations of the hashing function. Bi-directional encryption is done using Jasypt to provide password-based encryption. The password is based on a random number generated by the Ipswitch Analytics Server at install.

Data Transmission

Communication between the Ipswitch Analytics Agents and the Ipswitch Analytics Server uses HTTPS, so data is always encrypted during transmission.

Communication between the web client browser and the Ipswitch Analytics Server uses HTTPS, so data is always encrypted during transmission.

Certificates

Certificates are used for encryption of communications. The Ipswitch Analytics Server supports the use of certificates issued by a Certificate Authority and also supports the use of self-signed certificates.

When the Ipswitch Analytics Server is installed, a keystore is created and the certificates required for secure communication between the Ipswitch Analytics Agents and the Ipswitch Analytics Server and also between the client browser and the Ipswitch Analytics Server are added to the keystore.

Install, Modify, Remove, and Update

This section shows IT administrators how to install, modify and remove Ipswitch Analytics. It contains the following sections:

Install (on page 17): Install the Ipswitch Analytics Server and Agents, sign on and upload the license, and then verify Agent functionality. Also includes steps to setup and configure Ipswitch Analytics for the first time.

Modify (on page 49): Modify an Ipswitch Analytics Server or Agent installation to make changes to the installation setup.

Remove (on page 57): Remove the Ipswitch Analytics Server and/or Agents.

Update (on page 60): Update to a new version of the Ipswitch Analytics Server and Agents

See the ***System Requirements https://docs.ipswitch.com/MOVEit/Analytics2.1/ReleaseNotes/en/index.htm#27770.htm*** in the Release Notes.

Install

Below is a high-level view of the installation process. Click any item to view instructions for that step.

Step 1: Gather Items (on page 17)

- Admin credentials to sign in to your network
- MOVEit IP addresses or hostnames
- MOVEit database administrator credentials
- Certificate Keystore file (optional)
- Ipswitch Analytics license file

Step 2: Install the Analytics Server (on page 18)

- Download the Ipswitch Analytics Server install file
- Install the Ipswitch Analytics Server

Step 3: Sign in, Upload the License File (on page 21)

- In a web browser, navigate to Ipswitch Analytics Server URL
- Sign in
- Upload license file to SETTINGS > Licensing

Step 4: Install Ipswitch Analytics Agents (on page 22)

- Download the Ipswitch Analytics Agent install file
- Install one or more Analytics Agents

Step 5: Verify Agent Functionality (on page 37)

- Go to the Monitor
- Verify that all Agents are online

Step 6: Configure Analytics Server (on page 38)

- Set global password policy
- Create user accounts
- Set up email notifications
- Create rulesets
- Create user groups

INSTALLATION COMPLETE. Give sign in credentials and Ipswitch Analytics Server URL to users.

Step 1: Gather Items

Next: ***Step 2: Install the Analytics Server*** (on page 18)

Step 2: Install the Analytics Server

Install the Ipswitch Analytics Server on a dedicated physical or virtual machine. As part of the installation, a PostgreSQL database will be installed on this machine.

Do not install the Ipswitch Analytics Server on a machine that hosts a MOVEit server or a MOVEit database.

You do not have to stop your MOVEit servers to install the Ipswitch Analytics Server.

Legacy Failover Environments: To install Ipswitch Analytics in a MOVEit Automation Failover environment with primary and secondary (failover) databases, first Install the Ipswitch Analytics Server as described in this topic, then ***Install Ipswitch Analytics Agents in Legacy Failover Environments*** (on page 27).

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1 Sign in as an Administrator on a Windows Server machine. This will be the account under which all Ipswitch Analytics Server processing occurs.

2 Download the Ipswitch Analytics Server installation file: Ipswitch_Analytics_Base_v*n*.exe, where *n* is the version number of the software.

3 Open Ipswitch_Analytics_Base_v*n*.exe.

Note: If the machine is missing any prerequisites, a list of software items appears. Click Install.

The Start Install page of the installer opens. Click Next.

4 Accept the License Agreement. Click Next.

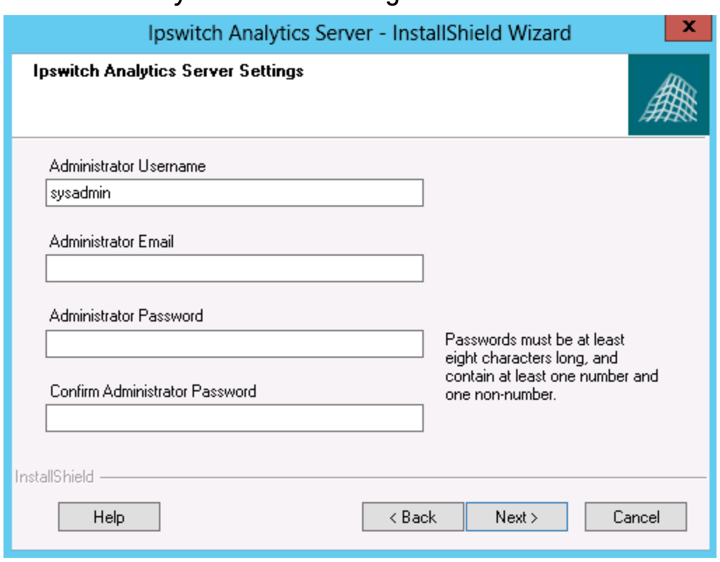
5 Select a Destination Folder for the Ipswitch Analytics Server files. *Recommended:* Use the default location.

Caution: Do not specify a destination on a drive that is mapped to a network drive.

Caution: Do not specify a destination on the desktop.

Note: You select the location for the Ipswitch Analytics Server database files in a later step.

6 Enter the Analytics Server Settings.

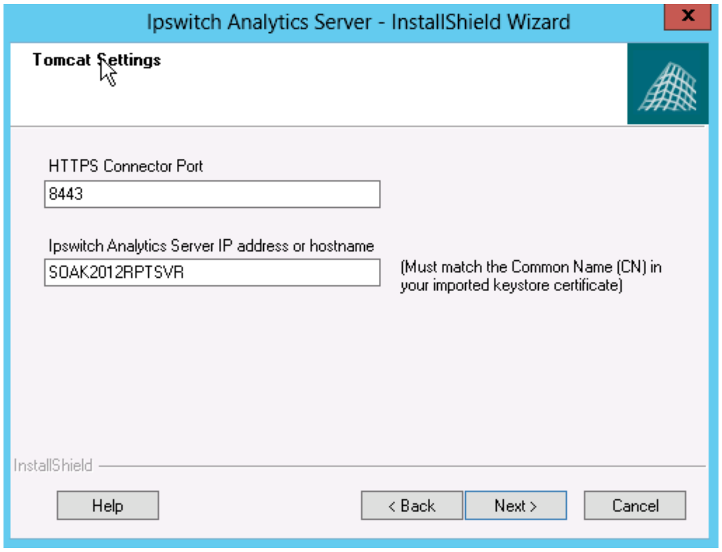


§ System Administrator Username: The username of the user who has access to all of Ipswitch Analytics. This user will be the only System Administrator initially.

- **System Administrator Email Address:** An email address for the System Administrator.
- **System Administrator Password:** The password for the username you entered.

Click **Next**.

7 Enter the **Tomcat Settings**.



- **HTTPS Connector Port:** The connector port used for HTTPS and the Ipswitch Analytics Server URL.

  Adhere to your IT security or other IT network policies when configuring ports.
- **Ipswitch Analytics Server IP address or hostname:** Must match the Common Name (CN) in your imported keystore certificate.

Click **Next**. The HTTPS Connector Port will be validated.

8 Specify the **Tomcat Logon Account**.

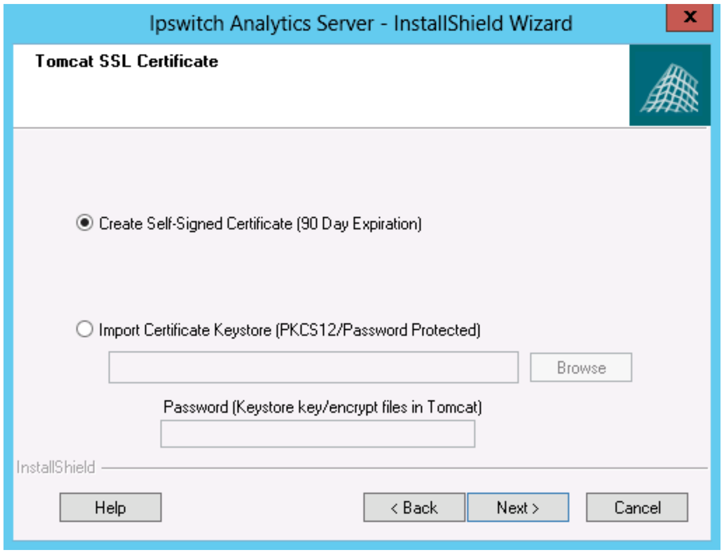
Make a selection based on the account you want to use to sign in and run the Ipswitch Analytics Server service:

- **Use Local System Account** (default): Uses the Local System account to sign in and run the service. This is the account that you used to sign in to Windows. (If you select this option, you are not required to provide additional credentials.)
- **Specify a different account:** Does not use the Local System account. If you select this option, an additional screen opens for you to provide the user name, password, and group of the account to sign in and run the Ipswitch Analytics service. To use a domain account, provide credentials in the format DOMAIN\username.

Click **Next**.

9 Select a **Tomcat SSL Certificate** option.

The Ipswitch Analytics Server uses this information to validate identity certificates.



- **Create Self-Signed Certificate**

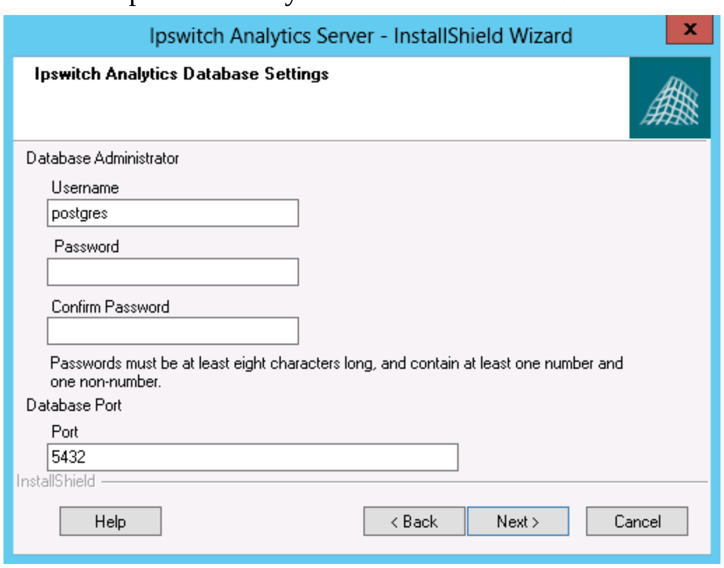
  Select this option for Evaluation Accounts only; it creates a certificate that expires in 90 days. Click **Next**.
- **Import Certificate Keystore**: Import an SSL password-protected PKCS12 certificate keystore file with .PFX or .P12 file extension. Click **Browse** to locate and select the certificate keystore, and then provide the password for the keystore. Click **Next**.

10 Select a **Database Location** for the Ipswitch Analytics Server's PostgreSQL database. MOVEit data collected from all Agents is sent to this database. *Recommended:* Use the default location.

IMPORTANT: If you select a different database location, it must be a data-specific directory that is not limited to a single user.

Click **Next**.

11 Enter the **Ipswitch Analytics Database Settings**. This information is required to run the PostgreSQL database on the Ipswitch Analytics Server. A PostgreSQL database will be installed on this machine as part of the Ipswitch Analytics Server installation.



- **Database Administrator Username**: Username for the account that the database administrator can use to access the PostgreSQL database if necessary. *Recommended:* use the suggested username.
- **Database Administrator Password**: Password for the Administrator Username you entered.
- **Database Port**: This port number is predefined to the standard PostgreSQL port. You can specify any unused port.

Click **Next**.

12 Review the installation setup, and then click **Install**.

13 On the Installshield Wizard Completed screen, click **Finish**.

The installation program places an Ipswitch Analytics shortcut icon on your desktop and the Start menu.

Tip: The log files are located in <installation_directory>\Logs. For example, C:\Program Files\Ipswitch\Analytics Server\Logs

Next: ***Step 3: Sign in, Upload the License File, and Reset the Agent Access User Password*** (on page 21).

Step 3: Sign in, Upload the License File, and Reset the Agent Access User Password

After you click **Finish** on the Installation Complete screen, an Ipswitch Analytics shortcut icon is placed on your desktop and Start menu.

Note: If users will access the Analytics Server from outside the corporate firewall, go to an external computer not connected to your network, open a ***web browser https://docs.ipswitch.com/MOVEit/Analytics2.1/ReleaseNotes/en/index.htm#29484.htm***, and enter the Analytics Server URL in the address bar. If you cannot connect to the Analytics Server from the external computer, you might need to configure your firewall to open the port.

Ø *Upload the License File*

1 Click the Ipswitch Analytics shortcut. A browser window opens to the sign-in page. Sign in using the **System Administrator** user name and password that you created during the Ipswitch Analytics Server installation. The Ipswitch Analytics workspace opens with a Welcome message.

Note: If you cannot sign in, see ***Troubleshooting (Installation)*** (on page 46).

2 Click **Browse to License**, select your license file, and click Open.

The **SETTINGS > Agents** page opens, showing license information at the upper right side:

- **Licenses (nn)**: The number of Agent licenses allowed by your license.

  For details, click **Licenses (nn)**.

  - The Base license contains two agent licenses, each of which can be connected to either a MOVEit Automation server, a MOVEit Transfer server, or a Microsoft Exchange server.
  - Additional licenses are specific to the MOVEit server type.

For more information about:

- Disconnecting and reconnecting Agents to a MOVEit database, see **Licenses and Agents** (on page 114) (in the *Administrator Guide*).
- Purchasing add-on Agent licenses, see **How to Buy (http://www.ipswitchft.com/how-to-buy).**

Ø *Reset the Agent Access User Password*

The Agent Access Username and Password are automatically set by the Ipswitch Analytics server installation program. On the USERS page, the password appears as a series of dots. You must manually change the password so that you have it available when you install the Ipswitch Analytics agent.

1. Click USERS.
2. Click the Agent Access User name (default name is feeder). The Edit User dialog box opens.
3. In the Password area, click Change. In the Edit Password for feeder dialog box, type and confirm a new password.
4. Remember this password. When you install the Ipswitch Analytics Agent, you will be prompted for it.

Next: ***Step 4: Install an Analytics Agent*** (on page 22)

Step 4: Install an Analytics Agent

For MOVEit Automation Legacy Failover Environments: See ***Install Analytics Agents in Legacy Failover Environments*** (on page 27).

Install an Agent for each MOVEit database or MS Exchange database that you want to include in the Ipswitch Analytics environment. Install only one Agent per machine.

Prerequisites	§ The Ipswitch Analytics Server must be installed before you install an agent. § The machine that hosts the MOVEit database must be online and network accessible.
Recommended configuration	MOVEit Automation or MOVEit Transfer: install the agent on the machine that hosts the MOVEit database. Ipswitch Analytics for MS Exchange: The agent can be installed on any machine that has an SSL connection with the Exchange server and the Ipswitch Analytics server.
Alternative configurations	The agent can be installed on any machine that has network connectivity with the MOVEit database. For more information, see ***Configuration Options*** (on page 8).
Number of Licenses	Each Ipswitch Analytics agent uses one license. The standard Ipswitch Analytics package comes with two agent licenses. To add another MOVEit server to the Ipswitch Analytics system at a later time, install another Agent and purchase an add-on Agent license. For more information, see ***How to Buy*** (***http://www.ipswitchft.com/how-to-buy***).
Other information	It is not necessary to stop the MOVEit server to install an Agent, because the installation process does not significantly affect MOVEit Transfer or MOVEit Automation system performance.

To install an Analytics Agent:

1. On the machine where you want to install the agent, sign in with an account that has administrator privileges.

   Recommended:

   § For MOVEit Automation and MOVEit Transfer, install the agent on the machine that hosts the MOVEit database.

   § For MS Exchange, install the agent on any machine that has network connectivity with the Exchange server and the Ipswitch Analytics server.

2 Download the appropriate Ipswitch Analytics Agent installation file, where ***n*** is the release number:

§ 64-bit: Ipswitch_Analytics_Agent64_v***n***.exe

§ 32-bit: Ipswitch_Analytics_Agent32_v***n***.exe

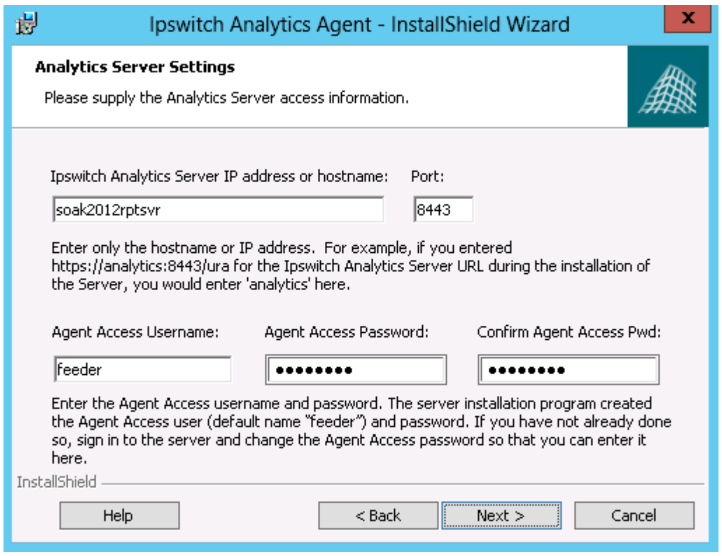
3 Open the Ipswitch Analytics Agent installation file. The Welcome page appears. Click Next.

4 Accept the License Agreement. Click Next.

5 Select a Destination Folder. *Recommended:* Use the default location.

Caution: Do not specify a destination on the desktop. Click Next.

6 Enter the Analytics Server Settings. The Agent forwards data from the MOVEit server to the Ipswitch Analytics Server that you specify here.



§ Ipswitch Analytics Server IP address or hostname: (From the Tomcat Settings that you entered during the Server installation).

§ Port: The port on which the Ipswitch Analytics Server accepts HTTPS connections. Default is 8443. Adhere to your IT security or other IT network policies when configuring ports.

§ Agent Access Username: The username that the Agent uses to authenticate with the Ipswitch Analytics server. You specified this username during the Ipswitch Analytics server installation. See the Installation Worksheet.

§ Agent Access Password: See the Installation Worksheet.

7 Click Next.

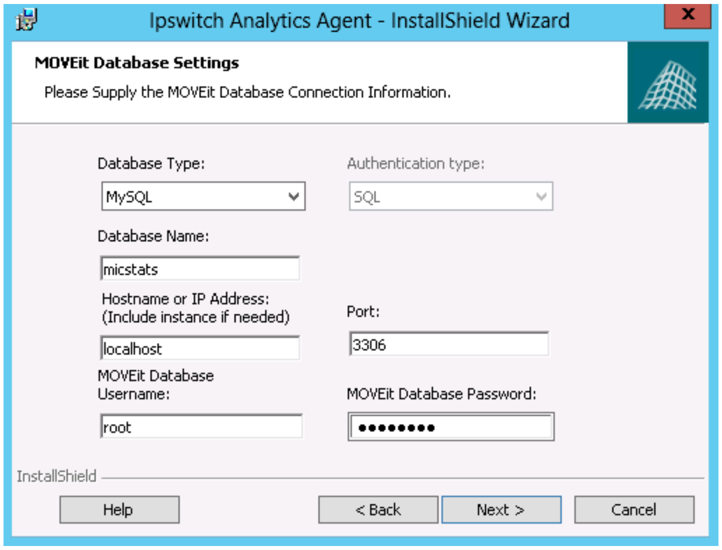
8 Select the Analytics Agent Type. Choose the type of server that the Ipswitch Analytics agent communicates with. Options are MOVEit Automation Server, MOVEit Transfer Server, Exchange Server.

9 If you selected Exchange Server as the agent type, the Exchange Server Settings page opens. Provide the Microsoft Exchange Server connection information.

Click Next.

10 Enter the MOVEit Database Settings.

Note: This dialog box appears only if you selected MOVEit Automation or MOVEit Transfer in the Analytics Agent Type dialog box.



- **Database Type**: Select either **MySQL** or **Microsoft SQL Server**, depending on the type of database used by the MOVEit server you selected in the prior step.
- **Authentication Type** (SQL Server only): Select the authentication type that is used for logon to the SQL Server.

  Windows: SQL Server logon will use Windows authentication. If you select this option, username must be entered in the **DOMAIN\User** format.

  SQL: SQL Server logon uses a separate user/password created specifically for logon to the SQL Server database.
- **Database Name**: The name of the MOVEit database. If you are installing the Agent on the same machine as the MOVEit server, this field is pre-populated.
- **Hostname or IP Address**: The location of the MOVEit database. The value you specify depends on your configuration:
  - If the MOVEit database is on the same machine as the MOVEit server, value is **localhost**.
  - If the MOVEit database and MOVEit server are on separate machines, the value is the Hostname or IP address of the machine where the database is located.

    Note: If you are installing the Agent on a machine that contains an SQL Server database with multiple instances on the same server, the Hostname or IP Address field prepopulates with the default value used by MOVEit Automation or MOVEit Transfer (for example, localhost\instance1). You can enter a different instance. If the machine does not contain MOVEit Transfer or MOVEit Automation, you must enter the instance name manually.
  - If you are installing the Agent on a machine that does not have MOVEit Transfer or MOVEit Automation, the default database name appears here (for example, moveitdmz).
- **Port**: The port that is used to connect with the MOVEit database. Default is the default port value for MSSQL/MySQL.

  Note: If the MOVEit database is using a non-standard port number, you must remove the default port number and replace it with the non-standard port number.
- **Username** and **Password**: The username and password that allows access to the MOVEit database.

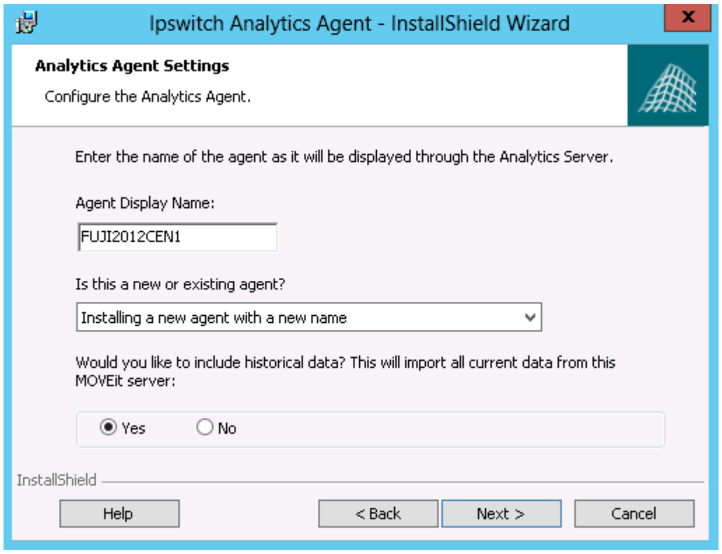
  For an SQL Server database: The Authentication Type you selected in a previous step determines what user credentials you enter here. Windows authentication requires that the username be in the **DOMAIN\User** format.

Tip: If you cannot locate the username and password to the MOVEit database, look in **C:\MOVEitDMZ_Install.INI** file (MOVEit Transfer) or **C:\MOVEitCentral_Install.INI** file (MOVEit Automation).

11 Click **Next**.

Tip: If the connection to the database fails, make sure that your firewall is open.

12 Enter the **Analytics Agent Settings**.



- **Agent Display Name:** Enter a name to identify the agent (and the server with which it communicates) within Ipswitch Analytics. The name will appear in the Monitor dashboard and in reports.

  Tip: Use the MOVEit Automation name in the Agent Display Name so that in the Ipswitch Analytics interface, users can identify data that comes from this MOVEit server.
- **Is this a new or existing agent?** Select an option:
  - **Installing a new agent with a new name:** The Agent Display Name must be unique.
  - **Installing an agent already known to Analytics Server:** Use this option if an agent with this display name was previously installed on this MOVEit Automation, MOVEit Transfer, or Exchange server, and was later removed. If you install a new agent on the same server, you can use the same name as the "old" agent.

The next field appears only if you selected MOVEit Transfer or MOVEit Automation in the Analytics Agent Type dialog box.

- **Would you like to include historical data? This will import all current data from this MOVEit server:**
  - **Yes:** Ipswitch Analytics includes all historical data from this MOVEit server.
  - **No:** Ipswitch Analytics reports include data *from this time forward only*, and does include any past data from this MOVEit server.

  See the subsection **About historical data**, below.

  Tip: This selection pertains only to the agent you are currently installing and its corresponding server. You might want some servers to include historical data but not others. You can select a different option when you install other agents.

Click **Next**.

Tip: If the connection to the database fails, check that your firewall is open.

13 Review the installation setup, and then click **Install**.

Note: If you click Cancel, the installation stops, but the Agent installation folder remains in the installation directory that you selected. You can safely delete the Analytics Agent directory to remove any files that remain after an interruption of the installation process.

To view the installer log after the installation finishes, select the checkbox.

To view the log at another time: the log is located in a temp directory in the user's AppData folder. For example, C:\Users\Administrator\AppData\Local\Temp*n*\MSI*string*.log (where *n* is a number, and *string* is an alphanumeric string).

14 Click **Finish**.

The **Ipswitch Analytics Agent** service is now running on this machine and immediately starts to report data to the Ipswitch Analytics Server. To disconnect this Agent, see Licensing (https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28525.htm) in the *Ipswitch Analytics Administrator Guide*.

To install another licensed Agent for a different MOVEit database, repeat this procedure (Step 4: Install an Analytics Agent).

About Historical Data

Note: Historical data can be included for MOVEit sources.

If during the Agent installation, you chose to include historical data, it might take some time (a few minutes to a few hours) to retrieve the historical data and send it to the Ipswitch Analytics server. While the data is being captured, the MOVE it server continues to operate, and you can use Ipswitch Analytics. However, because data capture is a "trickle" process, some historical data cannot be viewed until the data capture process is complete. You are not notified when the Agent finishes including all historical data. To verify that the historical data capture process is complete, run a report for a time range in the past.

If you have a large number (more than 10) Analytics Agents to be connected to the Analytics Server, the server might face heavy data volume from the agents if they all feed historical data at the same time. To make the initial data loading process run more smoothly, start the agents by smaller groups of 10 agents. Start the second group after the first group has finished loading historical data. After the historical data is loaded, the data volume returns to normal levels and all agents can stay up. Users can then start to use the Analytics Server.

Next: ***Step 5: Verify Agent Functionality*** (on page 37)

Install Analytics Agents in Legacy Failover Environments

This topic shows you how to install Ipswitch Analytics Agents in a Legacy Failover environment that includes a primary database and a secondary (failover) database.

Before you install Agents, you must ***install the Ipswitch Analytics Server*** (on page 18).

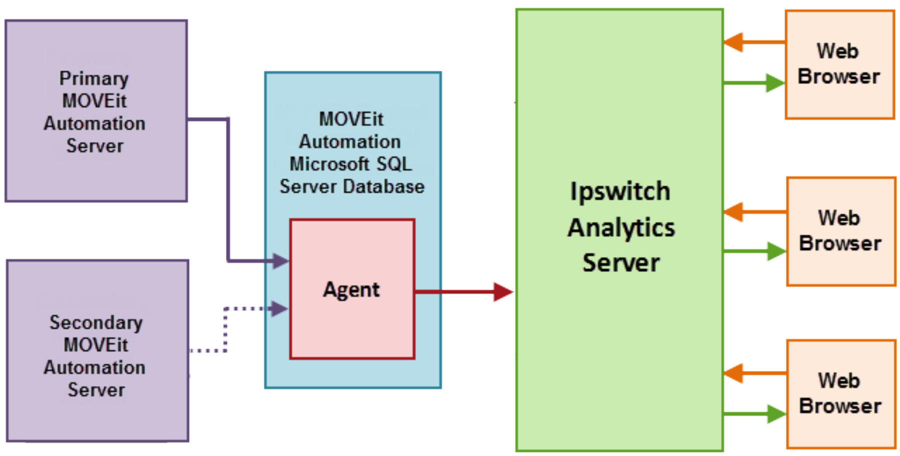
In a MOVEit Automation Legacy Failover environment, you install two Agents that use the same license, but only one Agent is active at a time.

You can install the Agents on the machine that hosts the MOVEit database, or on any machine that has network connectivity with the MOVEit database.

If your MOVEit Automation system is set up for Failover, you will have a **primary** server and a **secondary (failover)** server that activates only if the primary server fails. Below are the two possible configuration options for installing Ipswitch Analytics into a MOVEit Automation Legacy Failover environment. Dotted lines indicate dormant connections.

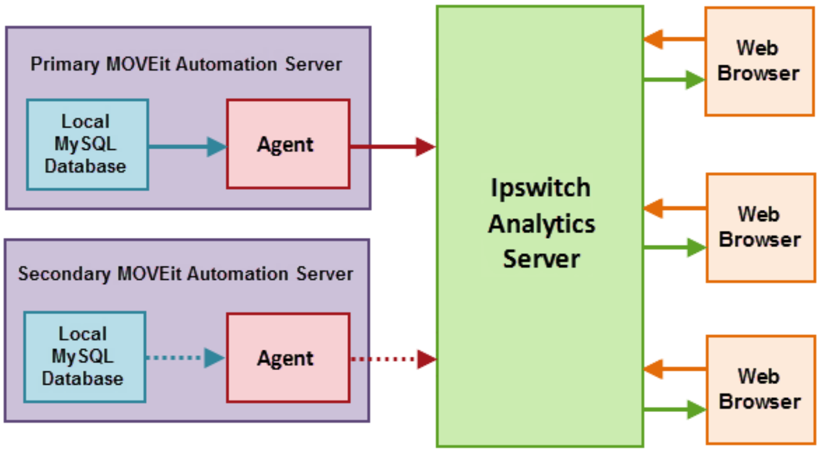
§ ***Single Microsoft SQL Server Database***

MOVEit Automation primary and secondary servers point to the same Microsoft SQL Server database on a standalone machine. Install one Agent on the MOVEit Automation Microsoft SQL Server database machine.



§ ***Two Local MySQL Databases***

In this scenario, the primary and secondary servers point to their own local MySQL databases. Install Agents on each MOVEit Automation server. You can use a single Agent license for both the primary and secondary Agents since only one database will send data to the Agent at a time.



The machine that hosts the MOVEit database must be online and network accessible before you begin an Agent installation. You do not have to stop the MOVEit server to install an Agent. Agent installation will not significantly affect MOVEit Transfer and MOVEit Automation system performance.

First you must install an Agent for the PRIMARY database machine and then install an Agent for the SECONDARY database machine:

Install a Primary Agent (on page 28)
Install a Secondary Agent (on page 33)

Install a Primary Agent

1 Retrieve the **public certificate file** for the Ipswitch Analytics Server. You can do this on the Agent machine, or on the Ipswitch Analytics Server machine:

On the Agent machine:

a) Open a browser to the Ipswitch Analytics Server IP address or hostname and accept the certificate.

b) Go into your browser's settings to manage certificates and export the public certificate that is associated with the Ipswitch Analytics Server. The exported certificate must be in one of the following file formats: .pem, .cer, .crt, or .der.

c) Place the exported certificate on the Agent machine's desktop or easily accessible file location.

– or –

On the Ipswitch Analytics Server machine:

§ Copy c:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\certs\servercert.pem and place it on the Agent machine's desktop or other easily accessible location.

2 On the machine where you want to install the agent, sign in with an account that has administrator privileges.

Recommended:

§ For MOVEit Automation and MOVEit Transfer, install the agent on the machine that hosts the MOVEit database.

For MS Exchange, install the agent on any machine that has network connectivity with the Exchange server and the Ipswitch Analytics server.

3 Download the appropriate Ipswitch Analytics Agent installation file, where ***n*** is the release number:

§ 64-bit: Ipswitch_Analytics_Agent64_v***n***.exe

§ 32-bit: Ipswitch_Analytics_Agent32_v***n***.exe

4 Open the Ipswitch Analytics Agent installation file. Click Next.

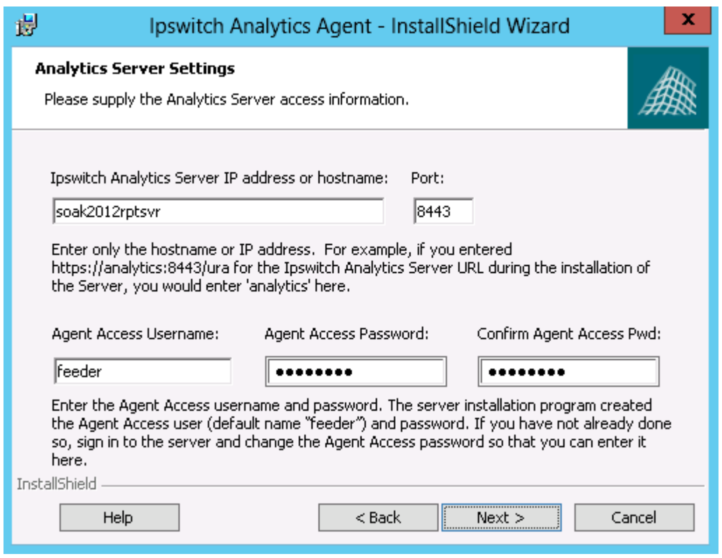
5 Accept the License Agreement. Click Next.

6 Select a Destination Folder. *Recommended:* Use the default location.

Caution: Do not specify a destination on the desktop.

Click Next.

7 Enter the Analytics Server Settings. The Agent forwards data from the MOVEit server to the Ipswitch Analytics Server that you specify here.



§ Ipswitch Analytics Server IP address or hostname: (From the Tomcat Settings that you entered during the Server installation).

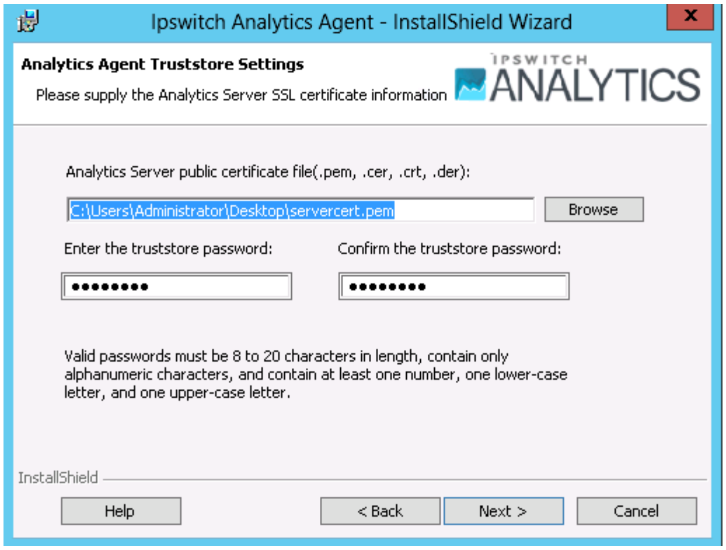
§ Port: The port on which the Ipswitch Analytics Server accepts HTTPS connections. Default is 8443. Adhere to your IT security or other IT network policies when configuring ports.

§ Agent Access Username: The username that the Agent uses to authenticate with the Ipswitch Analytics server. You specified this username during the Ipswitch Analytics server installation. See the Installation Worksheet.

§ Agent Access Password: See the Installation Worksheet.

Click Next.

8 Enter the **Analytics Agent Truststore Settings**:



- **Analytics Server public certificate file**: Browse to select the public certificate file that you located in the first step of the Agent installation. It has the extension .pem, .cer, .crt, or .der.

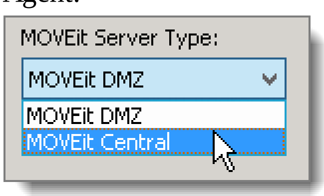
IMPORTANT: Do not use the .p12 or .pfx certificate file that you used during installation of the Ipswitch Analytics Server.

- **Truststore password**: Enter the truststore password for the certificate. Write down this password and keep it safe. You need it when you ***install an Agent for the secondary failover HA database*** (on page 33), and if you ever have to ***modify the Agent installation*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***).

The installer creates the 'ipswitchcerts' truststore in /jre/lib/security.

Click **Next**.

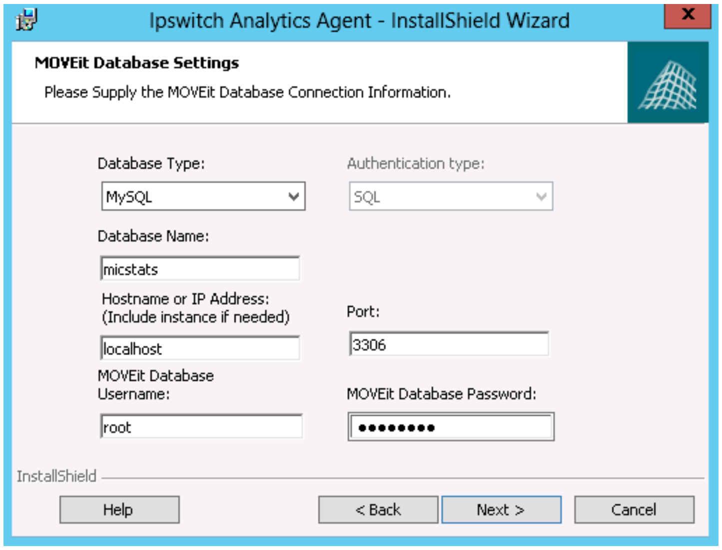
9 If the machine on which you are installing the Agent does not contain an installation of MOVEit Automation or MOVEit Transfer, select the **MOVEit server type** for which you are installing this Agent.



Click **Next**.

10 Enter the **MOVEit Database Settings**.

11 Note: This dialog box appears only if you selected MOVEit Automation or MOVEit Transfer in the Analytics Agent Type dialog box.



- Database Type: Select either MySQL or Microsoft SQL Server, depending on the type of database used by the MOVEit server you selected in the prior step.
- Authentication Type (SQL Server only): Select the authentication type that is used for logon to the SQL Server.

  Windows: SQL Server logon will use Windows authentication. If you select this option, username must be entered in the DOMAIN\User format.

  - SQL: SQL Server logon uses a separate user/password created specifically for logon to the SQL Server database.
- Database Name: The name of the MOVEit primary database.
- Hostname or IP Address: The location of the MOVEit primary database. The value you specify depends on your configuration:
  - If the primary MOVEit database is on the same machine as the MOVEit server, value is localhost.
  - If the primary MOVEit database and MOVEit server are on separate machines, the value is the Hostname or IP address of the machine where the database is located.

    Note: If you are installing the Agent on a machine that contains an SQL Server database with multiple instances on the same server, the Hostname or IP Address field prepopulates with the default value used by MOVEit Automation or MOVEit Transfer (for example, localhost\instance1). You can enter a different instance. If the machine does not contain MOVEit Transfer or MOVEit Automation, you must enter the instance name manually.
  - If you are installing the Agent on a machine that does not have MOVEit Transfer or MOVEit Automation, the default database name appears here (for example, moveitdmz).
- Port: The port that is used to connect with the MOVEit primary database. Default is the default port value for MSSQL/MySQL.

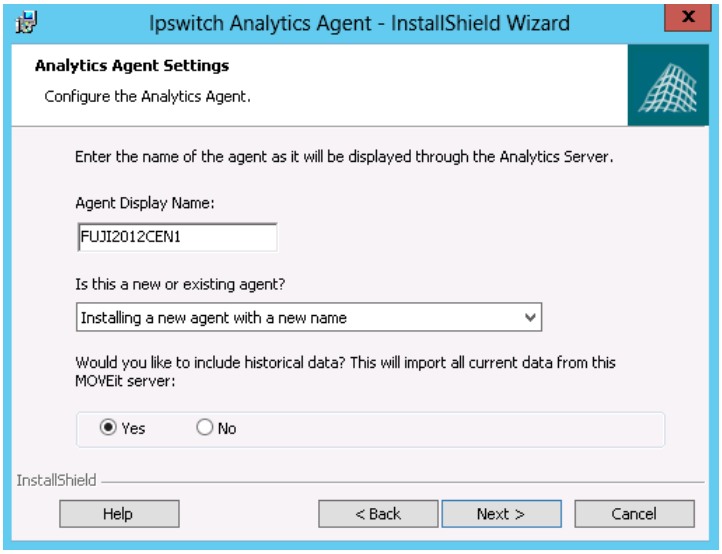
  Note: If the MOVEit primary database is using a non-standard port number, you must remove the default port number and replace it with the non-standard port number.
- Username and Password: The username and password that allow access to the MOVEit primary database.

Tip: If you cannot locate the username and password to the MOVEit database, look in *c:*\MOVEitCentral_Install.INI file.

Click **Next**.

Tip: If the connection to the database fails, make sure that your firewall is open.

12 Enter the **Analytics Agent Settings**.



§ **Agent Display Name:** Enter a name to identify the agent (and the server with which it communicates) within Ipswitch Analytics. The name will appear in the Monitor dashboard and in reports.

Tip: Use the MOVEit Automation name in the Agent Display Name so that in the Ipswitch Analytics interface, users can identify data that comes from this MOVEit server.

§ **Is this a new or existing agent?** Select an option:

- **Installing a new agent with a new name:** The Agent Display Name must be unique.
- **Installing an agent already known to Analytics Server:** Use this option if an agent with this display name was previously installed on this MOVEit Automation, MOVEit Transfer, or Exchange server, and was later removed. If you install a new agent on the same server, you can use the same name as the "old" agent.

The next field appears only if you selected MOVEit Transfer or MOVEit Automation in the Analytics Agent Type dialog box.

§ **Would you like to include historical data? This will import all current data from this MOVEit server:**

- **Yes:** Ipswitch Analytics includes all historical data from this MOVEit server.
- **No:** Ipswitch Analytics reports include data *from this time forward only*, and does include any past data from this MOVEit server.
- See the subsection **About historical data**, below.

Click **Next**.

13 Review the installation setup, and then click **Install**.

Note: If you click Cancel, the installation stops, but the Agent installation folder remains in the installation directory that you selected. You can safely delete the Analytics Agent directory to remove any files that remain after an interruption of the installation process.

To view the installer log after the installation finishes, select the checkbox.

To view the log at another time: the log is located in a temp directory in the user's AppData folder. For example, C:\Users\Administrator\AppData\Local\Temp*n*\MSI*string*.log (where *n* is a number, and *string* is an alphanumeric string).

14 Click Finish.

Installation of the primary Agent is complete. The Ipswitch Analytics Agent service is now running on this machine and immediately starts to report data to the Ipswitch Analytics Server. To disconnect this Agent, see Licensing (on page 114) in the *Ipswitch Analytics Administrator's Guide*.

Next, ***Install a Secondary Agent*** (on page 33)

Install a Secondary Agent

Important: Before you install a secondary agent, you must ***Install an Agent for the Primary HA Database*** (on page 28).

1 On the machine where you want to install the SECONDARY Agent. sign in with an account that has administrator privileges.

Recommended: Install the Agent on the machine that hosts the MOVEit database.

2 Copy the public certificate file for the Analytics Server from the primary Agent machine to the secondary Agent machine. Place it on the secondary Agent machine's desktop or other easily accessible location. You located this file in Step 1 of ***Install a Primary Agent*** (on page 28).

3 Download the appropriate Ipswitch Analytics Agent installation file, where ***n*** is the release number:

§ 64-bit: Ipswitch_Analytics_Agent64_v***n***.exe

§ 32-bit: Ipswitch_Analytics_Agent32_v***n***.exe

Click Next.

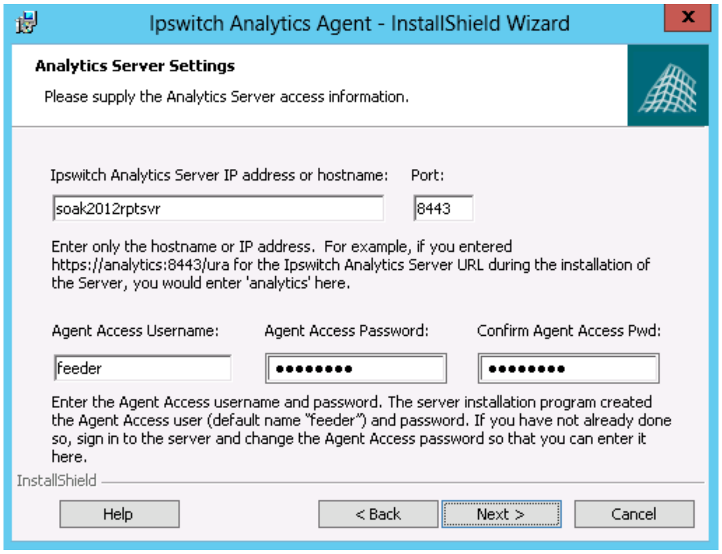
4 Accept the License Agreement. Click Next.

5 Select a Destination Folder. *Recommended:* Use the default location.

Caution: Do not specify a destination on the desktop.

6 Click Next.

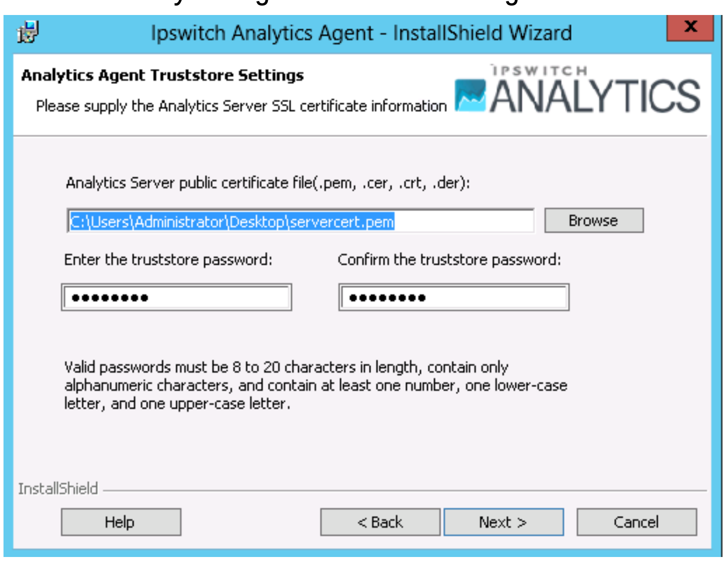
7 Enter the **Analytics Server Settings.** The Agent forwards data from the MOVEit secondary database to the Ipswitch Analytics Server that you specify here.



- **Ipswitch Analytics Server IP address or hostname:** (From the **Tomcat Settings** that you entered during the Server installation).
- **Port:** The port on which the Ipswitch Analytics Server accepts HTTPS connections. Default is 8443. Adhere to your IT security or other IT network policies when configuring ports.
- **Agent Access Username:** The username that the Agent uses to authenticate with the Ipswitch Analytics server. You specified this username during the Ipswitch Analytics server installation. See the Installation Worksheet.
- **Agent Access Password:** See the Installation Worksheet.

Click **Next.**

8 Enter the **Analytics Agent Truststore Settings:**



- **Analytics Server public certificate file:** Browse to select the public certificate file that you located at the beginning of the Agent installation. It will have the extension .pem, .cer, .crt, or .der.

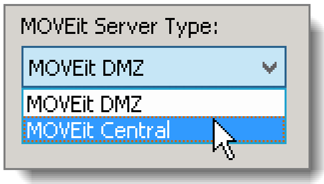
IMPORTANT: Do not use the .p12 or .pfx certificate file that you used during installation of the Ipswitch Analytics Server.

§ **Truststore password:** Enter the same **truststore password** you entered for the Primary Agent installation.

The installer creates the 'ipswitchcerts' truststore in /jre/lib/security.

Click **Next.**

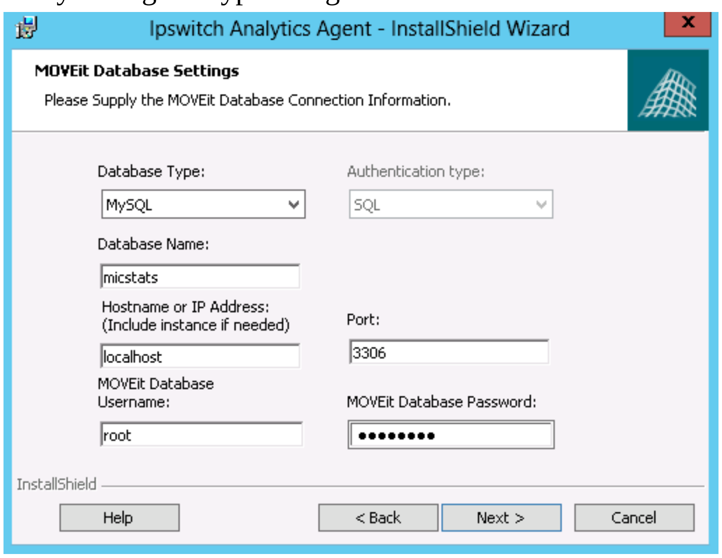
9 If the machine on which you are installing the Agent does not contain an installation of MOVEit Automation or MOVEit Transfer, select **MOVEit Automation** from the drop-down menu:



Click **Next.**

10 Enter the **MOVEit Database Settings.**

Note: This dialog box appears only if you selected MOVEit Automation or MOVEit Transfer in the Analytics Agent Type dialog box.



§ **Database Type:** Select either **MySQL** or **Microsoft SQL Server,** depending on the type of database used by the MOVEit server you selected in the prior step.

§ **Authentication Type** (SQL Server only): Select the authentication type that is used for logon to the SQL Server.

Windows: SQL Server logon will use Windows authentication. If you select this option, username must be entered in the **DOMAIN\User** format.

SQL: SQL Server logon uses a separate user/password created specifically for logon to the SQL Server database.

§ **Database Name:** The name of the secondary MOVEit database. If you are installing the Agent on the same machine as the MOVEit server, this field is pre-populated.

§ **Hostname or IP Address:** The location of the secondary MOVEit database.

- If the secondary MOVEit database is on the same machine as the MOVEit server, value is **localhost**.
- If the secondary MOVEit database and MOVEit server are on separate machines, the value is the Hostname or IP address of the machine where the database is located.

  Note: If you are installing the Agent on a machine that contains an SQL Server database with multiple instances on the same server, the Hostname or IP Address field prepopulates with the default value used by MOVEit Automation or MOVEit Transfer (for example, localhost\instance1). You can enter a different instance. If the machine does not contain MOVEit Transfer or MOVEit Automation, you must enter the instance name manually.
- If you are installing the Agent on a machine that does not have MOVEit Transfer or MOVEit Automation, the default database name appears here (for example, moveitdmz).

§ **Port**: The port that is used to connect with the secondary MOVEit database. Default is the default port value for MSSQL/MySQL.

Note: If the MOVEit primary database is using a non-standard port number, you must remove the default port number and replace it with the non-standard port number.

§ **Username and Password:** The username and password that allow access to the MOVEit primary database.

If the secondary database is an SQL Server database, the selection you made in the Authentication Type field determines what user credentials you enter here. Windows authentication requires that the username be in the **DOMAIN\User** format.

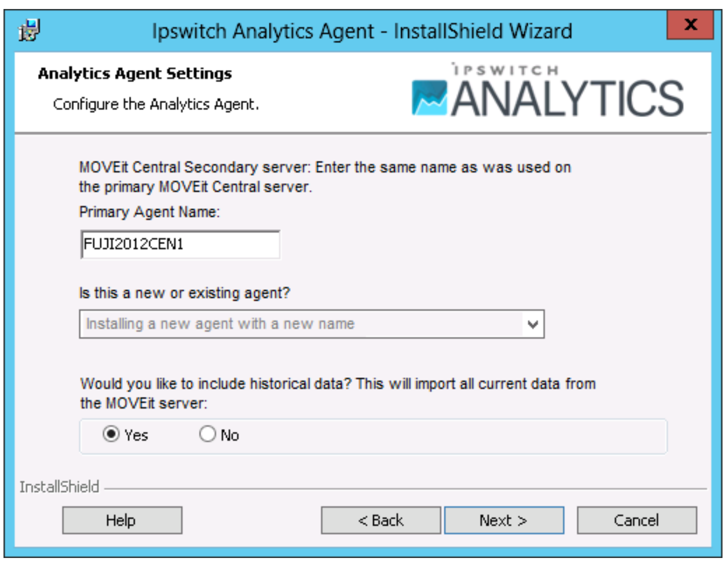
Tip: If you cannot locate the username and password to the MOVEit database, look in *c:*/MOVEitCentral_Install.INI file (MOVEit Automation/Central).

Click **Next**.

Tip: If the connection to the database fails, make sure that your firewall is open.

---

11 Enter the **Analytics Agent Settings**.



§ **Primary Agent Name:** Enter the primary Agent's **Agent Display Name**. You entered this value in the final step of the PRIMARY Agent's installation.

§ **Is this a new or existing agent?:** This item is disabled.

§ **Would you like to include historical data?** Select **Start with current data**.

Click **Next**.

12 Review the installation setup, and then click **Install**.

Note: If you click Cancel, the installation stops, but the Agent installation folder remains in the installation directory that you selected. You can safely delete the Analytics Agent directory to remove any files that remain after an interruption of the installation process.

To view the installer log after the installation finishes, select the checkbox.

To view the log at another time: the log is located in a temp directory in the user's AppData folder. For example, C:\Users\Administrator\AppData\Local\Temp*n*\MSI*string*.log (where *n* is a number, and *string* is an alphanumeric string).

13 Click **Finish**.

Installation of the secondary Agent is complete. The secondary **Ipswitch Analytics Agent** service is now running on this machine but reports data to the Ipswitch Analytics Server only if the primary database fails. This secondary Agent does not display in ***Settings > Licensing*** (on page 114) unless the primary database fails.

About Historical Data

Note: Historical data can be included for MOVEit sources.

If during the Agent installation, you chose to include historical data, it might take some time (a few minutes to a few hours) to retrieve the historical data and send it to the Ipswitch Analytics server. While the data is being captured, the MOVE it server continues to operate, and you can use Ipswitch Analytics. However, because data capture is a "trickle" process, some historical data cannot be viewed until the data capture process is complete. You are not notified when the Agent finishes including all historical data. To verify that the historical data capture process is complete, run a report for a time range in the past.

If you have a large number (more than 10) Analytics Agents to be connected to the Analytics Server, the server might face heavy data volume from the agents if they all feed historical data at the same time. To make the initial data loading process run more smoothly, start the agents by smaller groups of 10 agents. Start the second group after the first group has finished loading historical data. After the historical data is loaded, the data volume returns to normal levels and all agents can stay up. Users can then start to use the Analytics Server.

Next: ***Step 5: Verify Agent Functionality*** (on page 37)

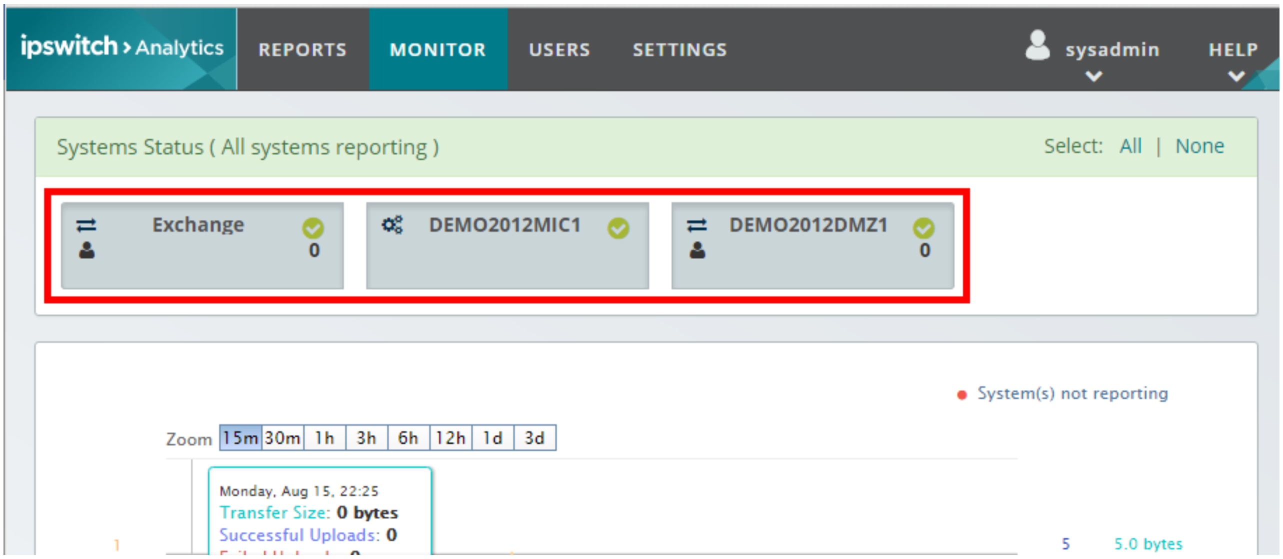
Step 5: Verify Agent Functionality

1 In the web browser where you signed in earlier, navigate to the **Monitor** module.

The top of the workspace contains a Dashboard that shows all of the Agents that you installed.

2 Verify that all Agents are Online and sending data to the Ipswitch Analytics Server. If the status of any Agent is Unknown or Offline, see ***Troubleshooting*** (on page 46).

For example, the figure shows three installed agents that are online and sending data to the Ipswitch Analytics Server.



To release an Agent license to use with a different MOVEit server, see the *Ipswitch Analytics Administrator's Guide* > *Manage* > *Licensing* (on page 114).

Next: ***Step 6: Configure the Analytics Server*** (on page 38)

Step 6: Configure the Ipswitch Analytics Server

Complete each of the following steps to configure the Analytics Server for the first time.

1. Set the Global Password Policy (on page 39).
2. Add user accounts (on page 40).
3. If you plan to allow scheduled report delivery to email addresses, Set Up Email Notifications (on page 42).
4. Optionally Create a Ruleset (on page 44) to:
    - Block Creators from viewing and selecting specific MOVEit servers, organizations and usernames in the Templates Filter.
    - Limit a scheduled report to include only specific MOVEit servers, organizations and usernames.
5. Optionally Create a User Group (on page 45) to:
    - Allow only a specific group of users to view and/or manage a Library report
    - Deliver a scheduled report to a specific group of users

Set the Global Password Policy

The default password policy requires that all Ipswitch Analytics user passwords:

- Be a minimum of eight characters
- Be a maximum of 20 characters
- Follow the Sturdy password policy: a password cannot be the username or a shorter version of it, cannot contain dictionary words, and must contain at least one numeric and one non-numeric character

To keep this policy, proceed to the next step: Add User Accounts. To select a stronger or weaker password policy, follow the steps below.

1. Go to the Analytics Server URL and sign in as System Administrator
2. Go to the SETTINGS module and select the System tab.
3. Select Password Policy.
4. Select a password policy from the list of built-in user password policies, with strengths from low to high:
   - Very Tough: Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric character, one non-numeric character, one special character (such as $ or !), and contain uppercase and lowercase letters.
   - Tough: Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric and one non-numeric character, and contain both uppercase and lowercase letters.
   - Sturdy (Default): Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric and one non-numeric character.
   - Minimal: Password cannot contain or be short version of the username. Password must contain at least one numeric and one non-numeric character.
   - Weak: Password cannot contain or be short version of the username.
   - Almost None: Password cannot be the same as username.
5. For User password minimum size, enter the minimum number of characters the password must be.
6. For User password maximum size, enter the maximum number of characters the password can be.

   For more information on user password security measures in place with Ipswitch Analytics, see ***Security*** (on page 14).

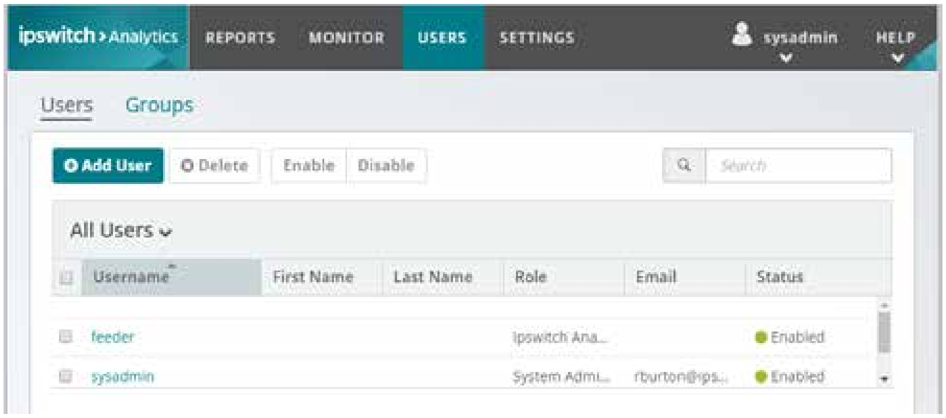
Next: ***Add User Accounts*** (on page 40)

Add User Accounts

Access to Ipswitch Analytics requires a user account. Ipswitch Analytics user accounts are not connected to MOVEit user accounts.

Note: The same user can sign in to Ipswitch Analytics at multiple locations. Users can also share the same email address.

1 Open the **USERS** module.



Note: The feeder username is used only for Agent access to the Ipswitch Analytics Server. It has the role of Ipswitch Analytics Agent and no name or email is associated with it. If you entered a different name for the Agent Access Username during Agent installation, it will show a different name. If you change the Agent Access Username or password here, you must ***modify the Agent*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***) and change it there also.

2 Click **Add User**. The **New user** page appears:

3 Provide the following information:

Username: A unique alphanumeric username. Names are case-sensitive. Duplicate names are not allowed, but you can reuse the name of a user who has been deleted..

Role drop-down list: The user's Role controls access to Ipswitch Analytics modules and Ipswitch Analytics report types, and allows the following actions:

- Partner: View Transfer and Workflow reports in the Library.
- Monitor: View the Monitor.
- Reader: View the Monitor; view Transfer and Workflow reports in the Library.
- Creator: View the Monitor; view Transfer and Workflow reports in the Library; create reports in the Templates and Schedule tabs. This role is for users whose main purpose is to create reports.

  Note: A ***ruleset*** (on page 109) can limit the MOVEit sources that a Creator can access when creating and running templates, and when creating schedules.
- Administrator: Access all Ipswitch Analytics modules except the SETTINGS > System tab; view all report types, including User Audit and Security reports; create rulesets, assign rulesets to schedules.
- System Administrator: Full access: manage all system settings and access all areas of Ipswitch Analytics.

  Caution: Assign users to the System Administrator role with caution. Only System Administrators can manage system-wide settings in the Settings module, and can access all areas of Ipswitch Analytics.

The table shows each role, its permissions, and the accessible Ipswitch Analytics modules.

Role	Reports			Monitor	Users	Settings		
	Library	Templates	Schedule			Rulesets	System	Licensing
Partner	Transfer and Workflow only	NO	NO	NO	NO	NO	NO	NO
Monitor	NO	NO	NO	YES	NO	NO	NO	NO
Reader	Transfer and Workflow only	NO	NO	YES	NO	NO	NO	NO
Creator	Transfer and Workflow only			YES	Read only	NO	NO	NO
Administrator	YES	YES	YES	YES	YES	YES	NO	NO
System Administrator	YES	YES	YES	YES	YES	YES	YES	YES

Follow your organization's accepted security practices when assigning roles.

Password: The field shows a suggested password. Do one of the following:

- Keep the suggested password (no action required).
- To have the system suggest a different password, click Generate. A new randomly-generated password appears in the Password box
- To create a custom password, click Change. The Enter Password for <username> dialog box opens. Type the password for the user and click Save.

Firstname and Lastname: These fields are optional.

Email address: The address where the user will receive email notifications when scheduled reports are ready for viewing.

The email address does not need to be unique; multiple users can share the same email address for the purpose of receiving reports.

4 Click Save.

The user is created and assigned the preferred system language.

Users can change their preferred language after they sign in. Or you can edit the user to ***change the user's language*** (on page 102).

5 Give the following information to users so they can sign in to Ipswitch Analytics:

- Ipswitch Analytics Server IP address or hostname
- Username
- Password

Next: ***Set Up Email Notifications*** (on page 42)

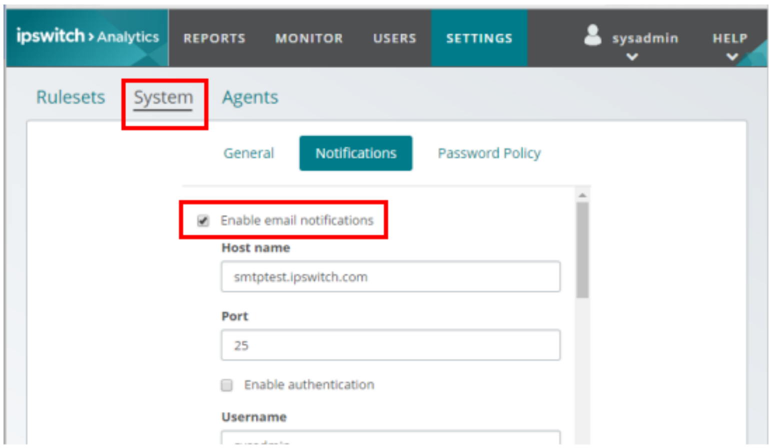
Set up Email Notifications

If you want users to receive email notification when a scheduled report is ready for viewing, you must configure email notifications first.

1 Go to the SETTINGS module and select the System tab.

2 Click Notifications.

3 Select the Enable Email Notifications checkbox.



4 Enter the following information:

- Host Name: Host name or IP address of the SMTP server. This is the server that will deliver the outgoing email messages. For example: smtptest.ipswitch.com or 192.168.1.1.
- Port: 25 is the default.
- Enable Authentication: This box must be checked to allow email notifications.
- Username and Password: The login credentials for the SMTP server.
- Enable STARTTLS: STARTTLS is a popular protocol used to communicate with the SMTP server. Most modern SMTP servers support it because it can use the same port for encryption. If set, and a socket factory hasn't been specified, this enables the use of a MailSSLSocketFactory. When Enable STARTTLS is checked, enter values for the following:
  - Hosts to trust for SSL connection: Enter the host name or IP address of the hosts you want to trust. Wildcards are accepted ("*" will trust all hosts). Enter multiple hosts separated by spaces.
  - Socket connection timeout in milliseconds: 10,000 is the default timeout, but you may want to set this higher if you have a slow network.
  - Socket I/O timeout in milliseconds: 30,000 is the default timeout, but you may want to set this higher if you have a slow network.
- Enable HTML email (optional): Sends email notifications in HTML format. If unchecked, email will be sent in plain text only.

§ **From email address:** Enter an email address from which notifications will be sent.

Note: Supported email clients are: Gmail, Microsoft Outlook and Apple Mail.

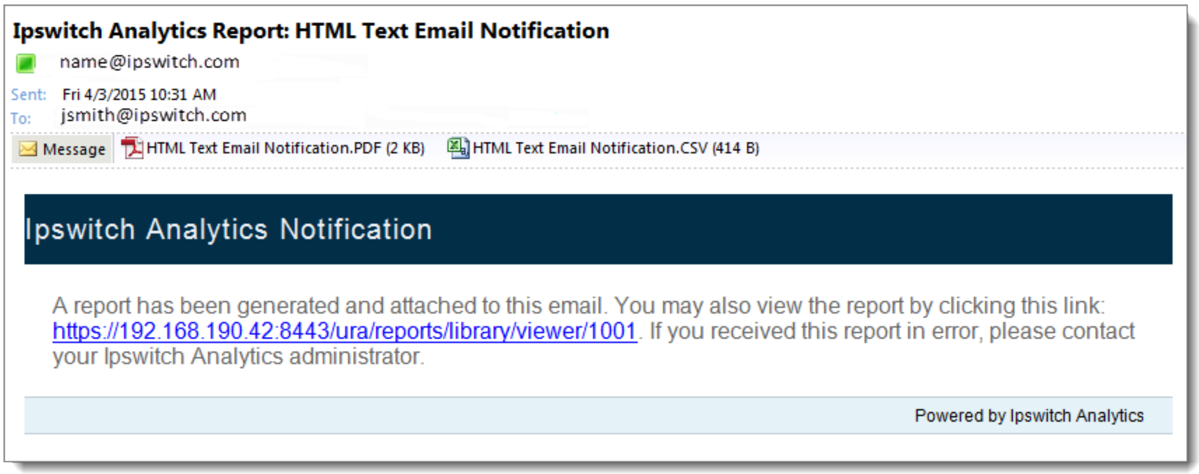
5 Click **Save**.

You can also click **Reset** to return to the original default Notifications settings.

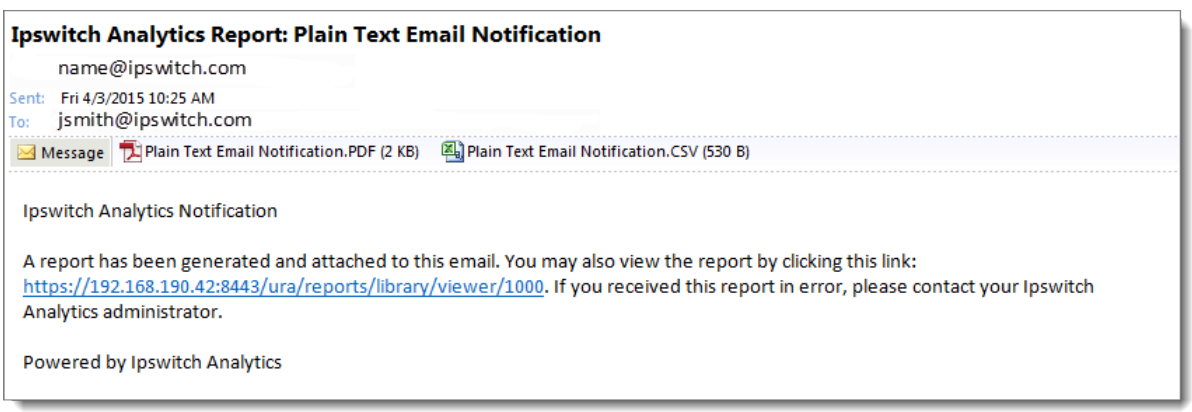
Note: If the Save button is not enabled, make sure you've completed all items in the prior step.

EMAIL SAMPLES:

HTML email:



Plain text email:



Next: ***Create a Ruleset*** (on page 44)

Create a Ruleset

Rulesets are used to allow or restrict access to specific data sources. You can apply a ruleset to a user group or schedule.

- **User Group**. If a ruleset is applied to a user group, then when Creator members of the group are working in the template editor, they are blocked from viewing and selecting any MOVEit source that is not allowed by the ruleset. The template editor's filter lists only the allowed sources for selection.
- **Schedule**. Administrators and System Administrators can assign a ruleset to a schedule to provide an additional layer of source control over scheduled report results.

Using Rulesets and Templates

When you create a new template or edit a stock template in the Template Editor, all sources are included by default. You can apply ***filters*** (on page 193) to a template to include or exclude data from only specific MOVEit sources (servers, organizations, usernames) and MS Exchange sources. Filter selections can be saved as a custom template. When the template is used as a basis for a report, that report accesses only the sources allowed by the filters.

When both a filter and a ruleset are in place (for example, if the template used to create a schedule has specific Filter settings AND a ruleset is assigned to the schedule), they combine to include only the MOVEit sources allowed by both filter and ruleset.

Rulesets do not affect anything in the MONITOR or any report that already resides in the Reports Library.

You must create a ruleset before you can assign it to a user group or schedule. Only Administrators and System Administrators can create rulesets.

Ø *To create a ruleset:*

1. In the top menu bar, click SETTINGS, and then click the Rulesets tab.
2. Click Create. The New Ruleset window opens.
3. Enter a Ruleset Name and an optional Description.
4. On the left, click Add Filter. The Add Filter dialog box opens. Make selections to limit the data in the ruleset. Click Add to add the filter and close the dialog box.
5. To add additional filters, click Add Filter and repeat the process.

   For more information, see ***Create a Filter*** (on page 193).

After you create a ruleset, Administrators and System Administrators can assign it to ***user groups*** (on page 104) and to ***schedules*** (on page 170). For more information, see the *Ipswitch Analytics Administrator's Guide* > Manage > *User Groups (on page 104) and Schedules (on page 169)*.

Next: ***Create a User Group*** (on page 45)

Create a User Group

Create a user group if you want to:

- Allow only a specific group of users to view and/or manage a Library report
- Deliver a scheduled report to a specific group of users
- Limit Creators within a user group to seeing in the Template Editor only those MOVEit sources allowed by the ruleset assigned to the user group

A user does not have to belong to any user group; user group membership is optional.

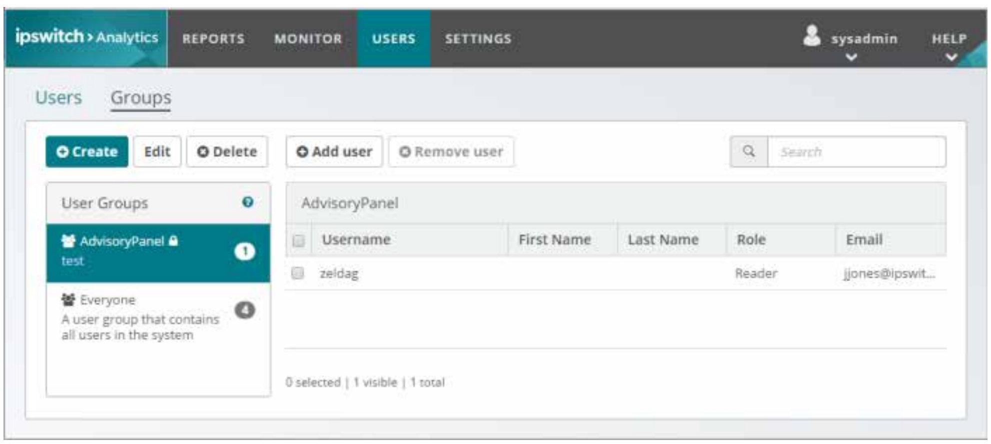
A user group includes the following data:

- User Group Name
- Description
- Ruleset (optional). A ruleset blocks Creator users from viewing and selecting specific MOVEit servers, organizations and usernames in the Template Editor.
- User members of the group

User groups are located in the USERS module under the Groups tab.

Only users with the role of System Administrator or Administrator can create and manage user groups. Creators have read-only access to the Groups tab.

All user groups appear in the left panel, and the users that belong to the selected user group appear in the right panel. Ipswitch Analytics comes with only one user group initially: Everyone. The Everyone user group contains all Ipswitch Analytics users.



If a user group has a ***ruleset*** (on page 109) assigned to it, a lock icon appears next to the user group name. Hover your mouse over the lock to see the ruleset assigned to that user group.

Ø *To create a user group:*

1. Click the USERS module and then select the Groups tab.
2. Click Create. The Create User Group page opens.
3. Provide the following information:
   - Group name
   - Description
   - Ruleset (optional): Use the dropdown list. You can select one ruleset per group.

A ruleset blocks Creators from viewing and working with specific MOVEit servers, organizations and users in the Templates and Schedule tabs.

Note: Rulesets that appear in the drop-down list were previously created. For more information, see ***Rulesets*** (on page 109).

4 Click **Create**. The new group appears in the list of groups, in the left panel.

If you assigned a ruleset, a lock icon appears next to the user group name. To see which ruleset is assigned to that user group, hover your mouse over the lock icon.

5 Click **Add User**. The Add Users to Group dialog box opens.

6 Click inside the Users field. A list of users who are not already members of the group appears. Select a user.

7 To add more users, click in the field again and make another selection.

8 Click **Save**. The users are added to the group.

You can select this user group as a ***schedule recipient*** (on page 170), and grant ***Library report access*** (on page 177) to this user group.

Note: You can also select a user group and click **Delete** to remove that group, or click **Edit** to add or remove members from the group.

Troubleshooting (Installation)

Problems and possible causes:

Cannot access the Ipswitch Analytics server

§ During the Server installation, when selecting a Tomcat certificate option, you imported a Certificate Keystore but the keystore failed. To fix the certificate keystore, update the certificate by ***Modifying the Server Installation*** , ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28706.htm***.

Ipswitch Analytics Server sign-in page does not appear

§ The Ipswitch Analytics Server machine is shut down or is restarting.

§ The Ipswitch Analytics Server service is not running. Check this in your computer's **Control Panel** > **Administrative Tools** > **Services**.

§ Verify internet connectivity on both machines.

§ During the Ipswitch Analytics Server installation, the PKCS12 keystore certificate was entered in an unsupported format. The installer does not validate imported certificates.

To fix this: Modify the server installation and select a keystore certificate that has a .PFX or .P12 extension.

In the Monitor module, Agent status is Unknown or Offline

§ The MOVEit database machine is shut down or is restarting.

§ The MOVEit database service has stopped running.

To check this: On the MOVEit database machine, go to the Control Panel > Administrative Tools > Services. Depending on the MOVEit database, make sure either the Microsoft SQL Server or the MySQL service is running.

- The Agent machine is shut down or is restarting.
- The Ipswitch Analytics Agent service has stopped running on the Agent machine.

  To check this: On the Agent machine, go to the Control Panel > Administrative Tools > Services. Verify that the Ipswitch Analytics Agent service is running.
- There is no Internet connectivity on the Agent machine or the MOVEit database machine.
- Firewall restrictions prevent the Agent machine from having network access to the MOVEit database machine or the Ipswitch Analytics Server machine.
- The password that the Agent uses to access the MOVEit database has expired or was changed.

  To update the Agent username or password, you must ***modify the Agent installation*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***).
- The HTTPS port on the Agent machine, the MOVEit database machine and/or the Ipswitch Analytics Server machine is not open.

  To update the port numbers for any of these machines, you must ***modify the Agent installation*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***).

In the Monitor module, the Agent does not appear on the dashboard

- ***Modify the Agent installation*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***): on the Analytics Server Settings screen, make sure that you enter the correct password for the Agent to access the Ipswitch Analytics server.
- Check the Agent log on the Agent machine, located at C:\Program Files\Ipswitch\Analytics Agent\logs\agent.log to see if the Agent is able to receive data from the MOVEit database, authenticate with the Ipswitch Analytics Server and send data to the Ipswitch Analytics Server.

Modify

After you installed Ipswitch Analytics, if you want to make changes to the original setup, you need to modify the Ipswitch Analytics Server or an Ipswitch Analytics Agent installation.

You must ***modify an Ipswitch Analytics Server installation*** (on page 49) to change:

- Tomcat settings:
  - HTTPS Connector Port
  - Ipswitch Analytics Server IP address or hostname (Analytics Server URL)
  - Tomcat Service Logon Account
  - Tomcat SSL certificate option (self-signed or certificate keystore)
  - Certificate passwords, or certificate keystore import
- Analytics Server Database settings:
  - Admin username and password
  - Access username and password
  - Port

You must ***modify an Ipswitch Analytics Agent installation*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28697.htm***) if you want to change:

- The Ipswitch Analytics Server IP address or hostname and/or port number.
- The Agent Access Username and/or Password that the Agent uses to gain access to the Ipswitch Analytics Server.
- The Ipswitch Analytics Server public certificate file and/or password.
- The MOVEit Database Type, Authentication Type, IP address or hostname, Database Name, Port number, or login credentials used to access the MOVEit database (this may be required if your corporate security policy expires passwords after a set amount of time).
- The Agent Display Name (the name of the Agent as it appears in Ipswitch Analytics).

Important: If you upgrade a MOVEit server after installing an Agent on it, you must run the Agent install program on that server again and select Modify so that the Agent will detect the proper MOVEit version number. If you fail to do so, the older server version number will be reported in Ipswitch Analytics.

Modify the Ipswitch Analytics Server

You can modify the Ipswitch Analytics Server to update either of the following areas.

- Tomcat settings:
  - HTTPS Connector Port
  - Ipswitch Analytics Server IP address or hostname (Analytics Server URL)
  - Tomcat Service Logon Account
  - Tomcat SSL certificate option (self-signed or certificate keystore)
  - Certificate passwords, or certificate keystore import

- Analytics Server Database settings:
  - Admin username and password
  - Access username and password
  - Port

You do not have to stop your MOVEit Transfer or MOVEit Automation server(s) to modify the Ipswitch Analytics Server.

The Modify wizard makes changes in one area at a time. For example, if you select Modify and then select Tomcat, you provide changes to the tomcat settings, the program implements them and then closes. If you want to also make changes to the database, run the program again, select to modify Database and provide your changes.

Note: You can change the System Administrator's name and password via the USERS module.

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1. Before you modify a Ipswitch Analytics Server setting, stop all Ipswitch Analytics Agents. Go to each Agent machine and under Administrative Tools select **Services**. Right-click **Ipswitch Analytics Agent** and select **Stop**.
2. Sign in to the Ipswitch Analytics Server machine using an account with administrator privileges.
3. Do one of the following:
   - Open **Ipswitch_Analytics_Base_v*n*.exe**, where *n* is the version number of your current software.
   - Open **Control Panel** > **Programs and Features**, right-click **Ipswitch Analytics Server** and select **Change**.

   The installer opens.
4. Click **Next**.
5. Select **Modify**. Click **Next**.
6. Select a category to modify, and click **Next**.
7. Modify items in the category you selected:

   Tomcat:

   Tomcat Settings:

   - **HTTPS Connector Port**: The connector port used for HTTPS and the Ipswitch Analytics Server URL.

     Adhere to your IT security or other IT network policies when configuring ports.
   - **Ipswitch Analytics Server IP address or hostname**: Must match the Common Name (CN) in your imported keystore certificate.

     IMPORTANT: If you change the Analytics Server IP address or hostname, you must also ***Modify the Ipswitch Analytics Agent*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28636.htm***) so that it points to the new name or IP address.

   Tomcat Service Logon Account:

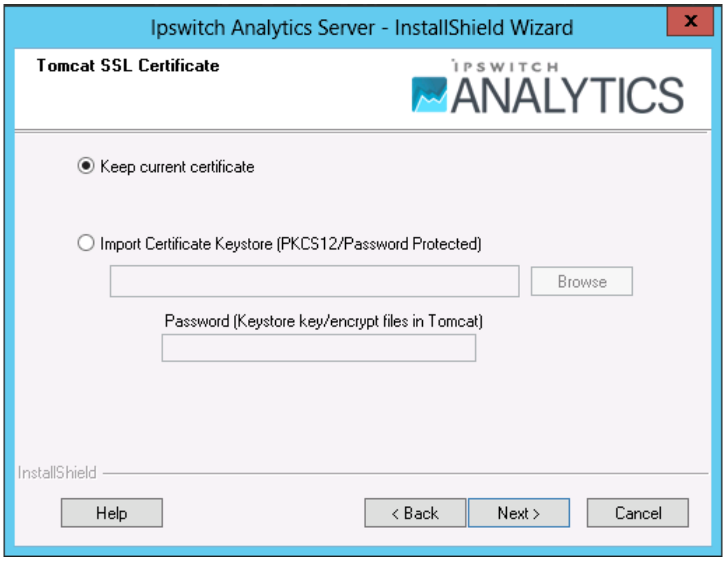
   Make a selection based on the account you want to use to sign in and run the Ipswitch Analytics Server service:

   - **Use Local System Account** (default): Uses the Local System account to sign in and run the service. This is the account that you used to sign in to Windows. (If you select this option, you are not required to provide additional credentials.)

§ **Specify a different account:** Does not use the Local System account. If you select this option, an additional screen opens for you to provide the user name, password, and group of the account to sign in and run the Ipswitch Analytics service. To use a domain account, provide credentials in the format DOMAIN\username.

Tomcat Certificate:

Specify how you want the Ipswitch Analytics Server to validate identity certificates:



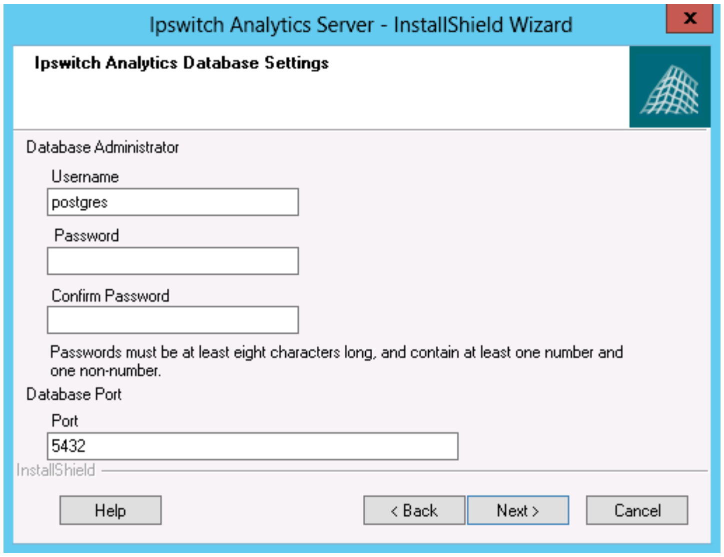
§ **Create Self-Signed Certificate**

Select this option for Evaluation Accounts only; it creates a certificate that expires in 90 days. Click **Next**.

§ **Import Certificate Keystore:** Import an SSL password-protected PKCS12 certificate keystore file with .PFX or .P12 file extension. Click **Browse** to locate and select the certificate keystore, and then provide the password for the keystore. Click **Next**.

Database:

Specify the Analytics Server **Database Settings**. This information is required to run the PostgreSQL database on the Ipswitch Analytics Server:



- **Database Administrator Username:** Username for the account that the database administrator can use to access the PostgreSQL database if necessary. *Recommended:* use the suggested username.
- **Database Administrator Password:** Password for the Administrator Username you entered.
- **Database Port:** This port number is predefined to the standard PostgreSQL port. You can specify any unused port.

8 After you finish making the necessary modifications, click **Install**.

9 Click **Finish**.

Modify an Ipswitch Analytics Agent

Note: To change the Agent Access Username or password, change it first in the Ipswitch Analytics interface by ***editing the Ipswitch Analytics Agent user*** (on page 99). Then run Modify below to change the Agent Access Username on all machines that have Agents that send data to the Ipswitch Analytics Server.

The machine that hosts the MOVEit database must be online and network accessible before you begin an Agent modification. You do not have to stop the MOVEit server to modify an Agent. Agent modification will not significantly affect MOVEit Transfer and MOVEit Automation system performance.

1 If you need to modify the Ipswitch Analytics Server IP address or hostname, first complete the items in this step. Otherwise, go to step 2.

a) Sign in on the Agent machine with administrator privileges.

b) Go to **Administrative Tools** and select **Services**. Right-click **Ipswitch Analytics Agent** and select **Stop** to stop the Agent service.

c) Sign in on the Ipswitch Analytics Server machine.

d) ***Modify the Ipswitch Analytics Server*** (on page 49) installation to make the necessary changes to the Ipswitch Analytics Server IP address or hostname.

e) Return to the Agent machine and then proceed with step 3 below, making sure to update the Ipswitch Analytics Server IP address or hostname during the Agent modification process.

2 Sign in on the Agent machine with administrator privileges.

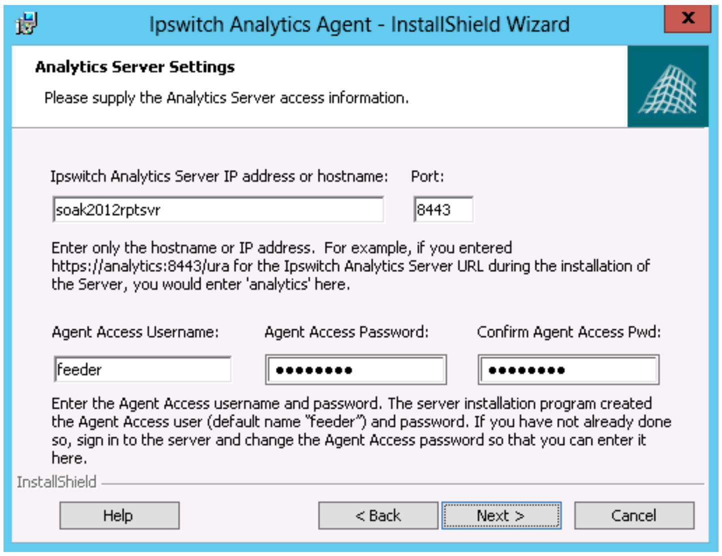
3 Open **Control Panel** > **Uninstall** and select **Change**.

The installer opens.

4 Click **Next**.

The Program Maintenance screen appears. **Modify** is already selected. Click **Next**.

5 Enter the **Analytics Server Settings**. The Agent forwards data from the MOVEit server to the Ipswitch Analytics Server that you specify here.



- **Ipswitch Analytics Server IP address or hostname:** (From the **Tomcat Settings** that you entered during the Server installation).
- **Port:** The port on which the Ipswitch Analytics Server accepts HTTPS connections. Default is 8443. Adhere to your IT security or other IT network policies when configuring ports.
- **Agent Access Username:** The username that the Agent uses to authenticate with the Ipswitch Analytics server. You specified this username during the Ipswitch Analytics server installation. See the Installation Worksheet.
- **Agent Access Password:** See the Installation Worksheet.

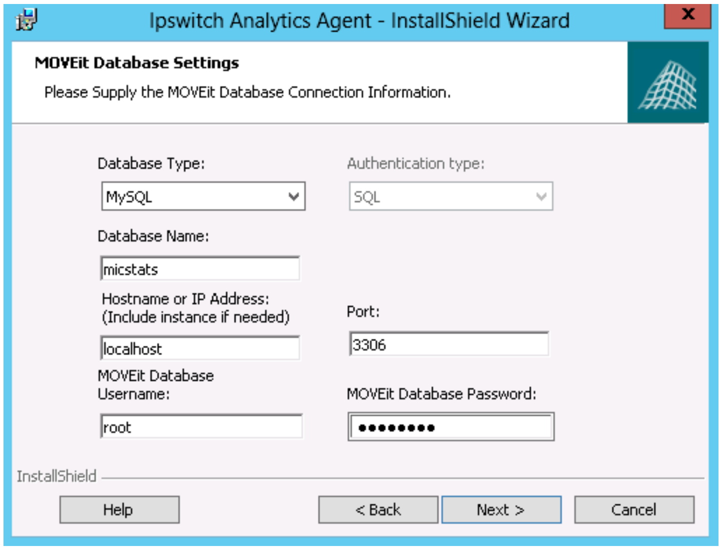
Click **Next**.

6 If the machine on which you are installing the Agent does not contain an installation of MOVEit Automation or MOVEit Transfer, select the MOVEit server type for which you are installing this Agent.

Click **Next**.

7 Enter the **MOVEit Database Settings**.

8 **Note:** This dialog box appears only if you selected MOVEit Automation or MOVEit Transfer in the Analytics Agent Type dialog box.



- **Database Type:** Select either **MySQL** or **Microsoft SQL Server**, depending on the type of database used by the MOVEit server you selected in the prior step.
- **Authentication Type** (SQL Server only): Select the authentication type that is used for logon to the SQL Server.

  Windows: SQL Server logon will use Windows authentication. If you select this option, username must be entered in the **DOMAIN\User** format.

  SQL: SQL Server logon uses a separate user/password created specifically for logon to the SQL Server database.
- **Database Name:** The name of the MOVEit database. If you are installing the Agent on the same machine as the MOVEit server, this field is pre-populated.
- **Hostname or IP Address:** The location of the MOVEit database. The value you specify depends on your configuration:
  - If the MOVEit database is on the same machine as the MOVEit server, value is **localhost.**
  - If the MOVEit database and MOVEit server are on separate machines, the value is the Hostname or IP address of the machine where the database is located.

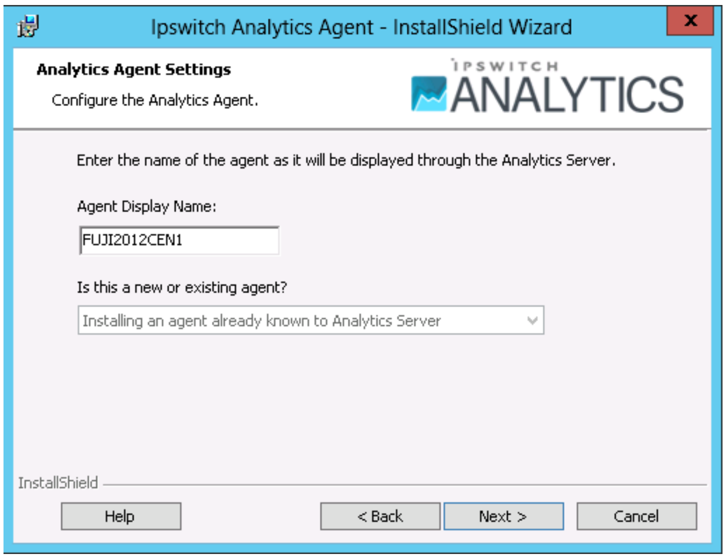
    Note: If you are installing the Agent on a machine that contains an SQL Server database with multiple instances on the same server, the Hostname or IP Address field prepopulates with the default value used by MOVEit Automation or MOVEit Transfer (for example, localhost\instance1). You can enter a different instance. If the machine does not contain MOVEit Transfer or MOVEit Automation, you must enter the instance name manually.
  - If you are installing the Agent on a machine that does not have MOVEit Transfer or MOVEit Automation, the default database name appears here (for example, moveitdmz).
- **Port:** The port that is used to connect with the MOVEit database. Default is the default port value for MSSQL/MySQL.
- **Note:** If the MOVEit database is using a non-standard port number, you must remove the default port number and replace it with the non-standard port number.
- **Username** and **Password:** The username and password that allows access to the MOVEit database.

For an SQL Server database: The Authentication Type you selected in a previous step determines what user credentials you enter here. Windows authentication requires that the username be in the **DOMAIN\User** format.

Tip: If you cannot locate the username and password to the MOVEit database, look in **C:\MOVEitDMZ_Install.INI** file (MOVEit Transfer) or **C:\MOVEitCentral_Install.INI** file (MOVEit Automation).

Click **Next**.

9 On the **Analytics Agent Settings** screen, change the **Agent Display Name** if necessary. This name identifies this MOVEit Automation server within Ipswitch Analytics. The name appears in the Monitor dashboard and in reports.



Tip: Use the MOVEit Automation name in the Agent Display Name so that in the Ipswitch Analytics interface, users can identify data that comes from this MOVEit server.

Important: Agent Display Names must be unique. If an Agent attempts to connect to the Ipswitch Analytics Server with a name that is already in use, the connection is denied, the Agent does not appear in the Monitor dashboard, and reports do not contain any data from that Agent.

10 Click **Next**.

11 To make changes to the setup, click **Back**. When you are satisfied with the setup, click **Install**.

Warning: If you click **Install** now, the modification will proceed and you will NOT be able to back out your changes even if you click Cancel on the next screen.

After a few minutes, the modification completes.

To view the installer log after the installation finishes, select the checkbox.

12 Click **Finish**.

Repeat these steps to modify another licensed Agent for a different MOVEit database.

Remove

This topic describes how to remove the Ipswitch Analytics Server or an Ipswitch Analytics Agent from the machines on which they are installed. You might need to remove the Ipswitch Analytics Server or remove an Ipswitch Analytics Agent to move them to different machines, for example.

See:

Remove the Ipswitch Analytics Server (on page 57)

Remove an Ipswitch Analytics Agent (on page 59)

Removing Ipswitch Analytics Exchange Support Setup and Configuration (on page 81)

Remove the Ipswitch Analytics Server

IMPORTANT: If you plan to remove the Ipswitch Analytics Server and then reinstall it later AND you want to retain your existing Ipswitch Analytics Server database, follow the instructions in ***Remove and Reinstall the Ipswitch Analytics Server*** (on page 58).

To remove the Ipswitch Analytics Server, first sign in to the Ipswitch Analytics Server machine using an account with administrator privileges.

You can remove the Ipswitch Analytics Server using the Control Panel or the Ipswitch Analytics Server installation file:

Remove the Analytics Server using the Control Panel:

WARNING: If you remove the Ipswitch Analytics Server via the Control Panel, you will lose your entire Ipswitch Analytics Server database.

1 Open Control Panel > Uninstall a program.
2 Select Ipswitch Analytics Server from the list and click Uninstall.

   The Ipswitch Analytics Server uninstalls. No further action is required. When the process completes, the Ipswitch Analytics Server and its database will be removed from the machine.

Remove the Analytics Server using the installation file:

1 Open Ipswitch_Analytics_Base_v*n*.exe where *n* is the release number of the Analytics Server.
2 Click Next. A message box opens, asking you to confirm the removal.

   WARNING: The Ipswitch Analytics Server and the Ipswitch Analytics database will be removed.

3 To remove the server and database, click Yes. The uninstallation begins immediately, and progress bar appears.
4 On the Uninstall Complete screen, click Finish.

WARNING: If you want to keep your Ipswitch Analytics Server database and reinstall Ipswitch Analytics Server later, *cancel the removal now* and follow the instructions here: ***Remove and Reinstall the Ipswitch Analytics Server*** (on page 58), which shows you how to preserve your Ipswitch Analytics Server database for later use. You can also visit the ***PostgreSQL website*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***) for instructions on backing up your Ipswitch Analytics Server database.

5 Verify that c:\Program Files\Ipswitch\Analytics Server is removed. In some cases this folder may remain after a removal. Remove it manually if you see the Analytics Server folder remaining.

Remove and Reinstall the Ipswitch Analytics Server

This topic shows you how to save your Ipswitch Analytics Server database, remove the Ipswitch Analytics Server, and then reinstall the Ipswitch Analytics Server.

1 Shut down all Ipswitch Analytics Agents. Go to each Agent machine and under Administrative Tools select Services. Right-click Ipswitch Analytics Agent and select Stop.

2 Sign in on the Ipswitch Analytics Server machine with administrative privileges.

3 Go to Administrative Tools > Services, right-click Ipswitch Analytics Server and select Stop.

4 Back up the Ipswitch Analytics Server database by following the ***PostgreSQL documentation*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***).

5 Remove the Ipswitch Analytics Server. See ***Remove the Ipswitch Analytics Server*** (on page 57).

6 Install the Ipswitch Analytics Server. See ***Install the Ipswitch Analytics Server*** (on page 18).

7 Go to Administrative Tools > Services, right-click Ipswitch Analytics Server and select Stop.

8 Restore the Ipswitch Analytics Server database by following the ***PostgreSQL documentation*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***).

9 Edit the following file, located in the Ipswitch Analytics Server installation directory:

```
<install_directory>\apache-tomcat-7\webapps\ura\WEB-INF\classes\spri
ng\properties\config.properties
```

Set the following property value to true, then save the file.

```
ura.appsettings.dataAcquisitionSettings.dataIndexer.forceReindex=tru
e
```

10 Go to Administrative Tools > Services, right-click Ipswitch Analytics Server and select Start.

11 Go to each Agent machine, and under Administrative Tools select Services. Right-click Ipswitch Analytics Agent and select Start.

Remove an Ipswitch Analytics Agent

Removing an Ipswitch Analytics Agent removes all installation files, registry keys, shortcuts, and the installation directory that were created during installation.

After the Agent is removed, the Ipswitch Analytics Server database still contains all data sent from the removed Agent, and because of that, the removed Agent continues to appear as an option inside the Template Editor's Filter and inside the Rulesets Filter if data exists for that Agent on the Ipswitch Analytics Server.

Ø *To remove an Ipswitch Analytics Agent:*

1 Sign in on the Agent machine using an account with administrator privileges.

2 Do one of the following:

§ Open Control Panel > Uninstall and select Uninstall. No further action is required. The Agent removal is complete.

§ Open the Ipswitch Analytics Agent installation file and complete the steps below. Make sure you select the proper installation file. *n* is the release version number.

· 64-bit: Ipswitch_Analytics_Agent64_v*n*.exe

· 32-bit: Ipswitch_Analytics_Agent32_v*n*.exe.

The installer opens.

3 Click Next.

4 Select Remove and click Next.

The Installer is ready to remove the Agent.

Warning: If you proceed to click Remove, the Agent will uninstall and you will NOT be able to cancel it even if you click Cancel on the next screen.

---

5 Click Remove.

6 When the removal is complete, click Finish.

Note: If you need to reinstall the Agent on this same machine, you must manually remove the following folder after removal completes: c:\Program Files\Ipswitch\Analytics Agent. If you cannot remove it, terminate any program that may be accessing that directory, such as an antivirus program. If you still cannot delete the directory manually, reboot the machine and delete it after reboot.

If you plan to install an Agent on a different machine that will use the same Agent Display Name as the one you just removed, then when installing the Agent select Installing an agent already known to Analytics Server on the screen where you enter the Agent Display Name.

Update to a New Release of Ipswitch Analytics

Update the Analytics server first, and then update the Agents.

Before You Run the Update Program

1 Requirements for RAM have been increased in Version 2.1. See System Requirements and manually increase your system's RAM if necessary.

2 Back up your existing database. For instructions, see the ***POSTgreSQL documentation*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***).

Note: Ipswitch strongly recommends that you back up your database before you run the installer.

3 Back up the following files:

§ cert files. These files are named `server*.pem` and are located under the install directory in `apache/tomcat7/certs/`

§ .init file This file is located under the install directory in ...`apache/tomcat7/conf/.init`

Note: Make sure that you do not have any files open in the existing installation directories for the Ipswitch Analytics Server or the Ipswitch Analytics Agents.

New License is Required

A new Ipswitch Analytics license is required to complete the upgrade process. Licenses for your existing version of Ipswitch Analytics do not work with the upgraded version. To obtain a new license, visit the ***Ipswitch File Transfer Customer Portal https://ipswitchft.secure.force.com/cp/CPMyLicenses***.

What Happens During the Server Update?

When you run the installation program, it detects that a previous version of the Ipswitch Analytics server is installed. The installation program saves your server settings, retains the database, and uninstalls the existing server software. Next, it installs the new version of server software, moves back the database, and restores your server settings. You then sign in to the Admin Console and upload your license file.

First, ***Update the Analytics Server*** (on page 60)

Next, ***Update the Analytics Agents*** (on page 61)

Update the Analytics Server

1 Sign in as Administrator on the Windows machine where the Ipswitch Analytics server is currently installed.

2 Download the Ipswitch Analytics Server installation file: Ipswitch_Analytics_Base_v*n*.exe, where *n* is the version number of the software. Open the file.

The Preparing Setup screen opens, with a progress bar. The installer detects the presence of a previous version of Ipswitch Analytics Server software.

The Welcome screen opens.

3 Click **Next**.

The Setup Status screen opens, showing a progress bar. The upgrade process can take several minutes, depending on the size of your database.

Note: When you originally installed the previous version of Ipswitch Analytics, you provided Tomcat Logon Account information. The default was to use the local system account. If during that installation *you specified a different account*, the upgrade program prompts you for the username, password, and group of that account.

4 When the Update Complete screen opens, click Finish. A Ipswitch Analytics icon appears on the desktop. Double-click the icon to open Ipswitch Analytics.

5 Enter your username and password, and click Sign in. Ipswitch Analytics opens to the Licensing page with an Upgrade Complete message.

6 Click Browse to License and select your new license file. The license file is uploaded.

Next: ***Update the Analytics Agents*** (on page 61).

Update the Analytics Agent

Update the Agent on each MOVEit database machine in your Ipswitch Analytics environment.

1 On the machine where you want to upgrade the Agent, sign in with an account that has administrator privileges.

2 Download the appropriate Ipswitch Analytics Agent installation file, where ***n*** is the release number:

- 64-bit: Ipswitch_Analytics_Agent64_v***n***.exe
- 32-bit: Ipswitch_Analytics_Agent32_v***n***.exe

3 Open the Ipswitch Analytics Agent installation file.

The Preparing to Install screen opens, showing a progress bar. The installation program detects the existing agent. A Question dialog box opens with the message "This setup will perform an upgrade of 'Ipswitch Analytics Agent'. Do you want to continue?"

4 Click Yes. The Welcome screen appears briefly, and the installation program begins. The process can take several minutes.

In some situations, the following Installer Information message appears:

> The setup must update files or services that cannot be updated while the system is running. If you choose to continue, a reboot might be required to complete the setup.

5 If you receive the information message, click OK.

The program continues until the InstallShield Wizard Completed screen appears.

Tip: To open the log after installation finishes, select the checkbox.

Updating Agents in Legacy Failover Environments

Use this procedure if you are using Legacy Failover.

Note: If you are using Ipswitch Failover (Failover Manager), these instructions do not apply. For more information, see ***Ipswitch Failover 9.0 https://www.ipswitch.com/support/documentation***.

To update Analytics Agents when using Legacy Failover:

1. Shut down the Analytics Agent service on the server machines that host the ***primary*** and ***secondary*** instances of MOVEit Automation.
2. Update the Analytics Agent on the ***primary*** instance of MOVEit Automation. For more information, see ***Update the Analytics Agent*** (on page 61).
3. Update the Analytics Agent on the ***secondary*** instance of MOVEit Automation. For more information, see ***Update the Analytics Agent*** (on page 61).

Configuring Exchange Support for Ipswitch Analytics

Overview

Microsoft® Exchange Support for Ipswitch Analytics 2017 relies on configuration and mechanisms provided by Microsoft Exchange to identify and collect data about file transfers that are based on email attachments. Metadata about these file transfers is pulled down by the Ipswitch Analytics Exchange Agent using an IMAPS connection and submitted to the Ipswitch Analytics Server. After the metadata is in the Analytics Server, it is available when creating Transfer reports.

Setting Up and Configuring Ipswitch Analytics for MS Exchange

Important: Before you begin, you must have a Microsoft Exchange server installed, up and running. The machine that hosts the Exchange server must be online and network accessible.

Perform these procedures in the order listed in the table.

Procedure	Description
1	Meet ***Prerequisites*** (on page 63).
2	***Create an Exchange Mailbox Database*** (on page 70) for Ipswitch Analytics.
3	***Run the Setup and Configuration Script*** (on page 71).
4	***Configure the Exchange Transport Rule Conditions*** (on page 72).
5	***Install the Ipswitch Analytics Server and Agent*** (on page 75).
6	***Enable Ipswitch Analytics Exchange Transport Rule*** (on page 75).

Prerequisites

Important: Before you begin, you must have a Microsoft Exchange server installed, up and running. The machine that hosts the Exchange server must be online and network accessible.

Meet the following prerequisites before you configure Ipswitch Analytics Exchange Support, or install and configure the Ipswitch Analytics Server or the Ipswitch Analytics Exchange Agent.

- ***Enable Exchange IMAPS Services*** (on page 63).
- ***Ensure the ability to Create and Mount an Exchange Mailbox Database for Ipswitch Analytics*** (on page 66).
- ***Capacity Planning*** (on page 67).
- ***Planned Exchange Service Interruption*** (on page 70).

Enable Exchange IMAPS Services on port 993

The Analytics Exchange Agent connects to Exchange using the IMAPS protocol on the standard IMAPS port 993. The Exchange IMAP4 services must be running for the Ipswitch Analytics Agent to connect. Configure the services to start automatically.

Verify that IMAP4 is Available from MS Exchange

This procedure tests whether your MS Exchange is listening on IMAPS port 993.

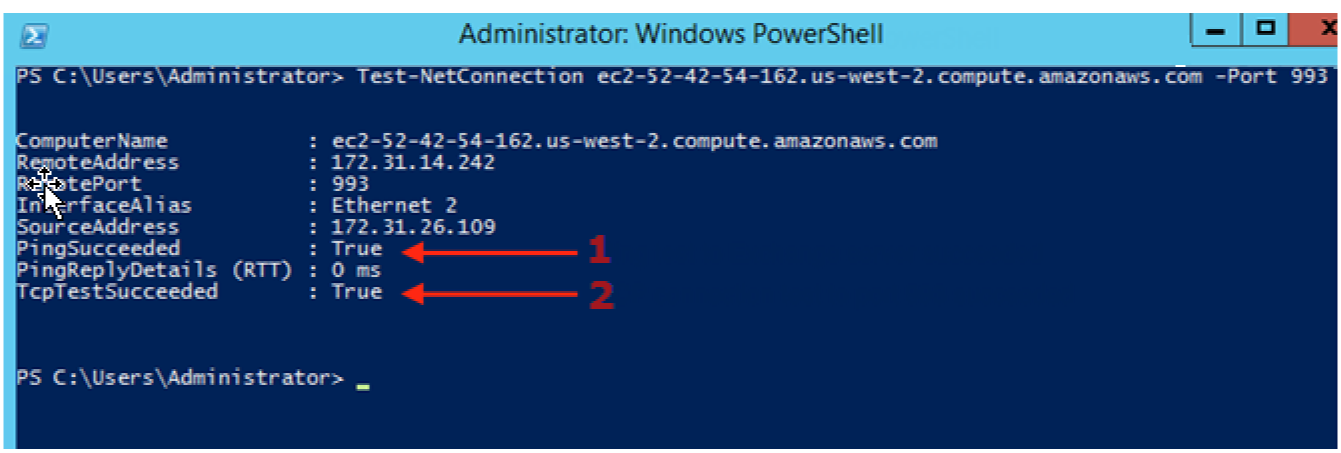
Reference: ***Microsoft Technet https://technet.microsoft.com/en-us/library/dn372891(v=wps.630).aspx***

Ø *Verify that IMAP4 is available from Exchange*

- From a computer that has network access to MS Exchange, execute the following command, where `<Microsoft Exchange DNS or IP>` is the DNS or IP address of your MS Exchange

```
Test-NetConnection <Microsoft Exchange DNS or IP> -Port 993
```

The example shows a successful TCP connection test to port 993.



Item	Description
1	Ping test to Exchange server succeeded
2	TCP connection test to port 993 succeeded

Troubleshooting:

- If the TCP connection test to port 993 fails, verify that your network configurations are not blocking TCP traffic to port 993 between your computer and Exchange.
- If TCP traffic to port 993 is open but the TCP test fails, this means that IMAP4 is not configured and/or listening on port 993. Follow the instructions in the section **Enable IMAP4 in Exchange 2013** (on page 64).

Enable IMAP4 in Exchange 2013

Overview

When you install Microsoft Exchange Server 2013, IMAP4 client connectivity is not enabled. To enable it, you must start the following IMAP services to enable connectivity. If there is a server running both roles, both services must be running and configured to start automatically..

- Microsoft Exchange IMAP4 service (`MSExchangeImap4`)—for servers that are running the Client Access Server role (CAS)
- Microsoft Exchange IMAP4 Backend service—for servers running the Mailbox Server role.

After you enable IMAP4, Exchange 2013 accepts unsecured IMAP4 client communications on port 143 and over port 993 using Secure Sockets Layer (SSL).

NOTE: By default Exchange 2013 IMAP4 Services allow unsecured connections on port 143. Consider disabling unsecured IMAP4 connections on port 143.

Reference: ***Microsoft Technet*** (***https://technet.microsoft.com/en-us/library/bb124489(v=exchg.150).aspx***).

Procedures

Ø *To enable IMAP4 Client Connectivity:*

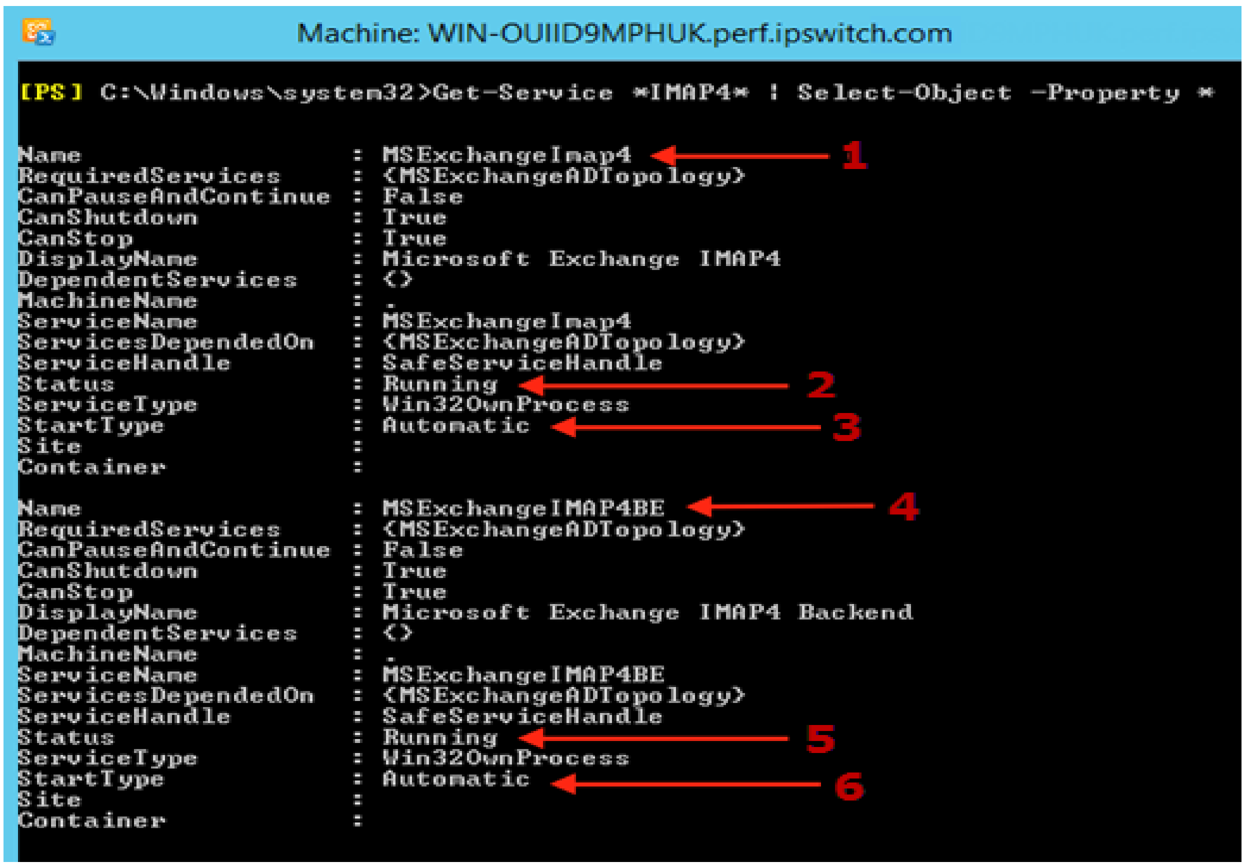
1. On each server that is running the **Client Access Server** role, open the Exchange Management Shell as Administrator and execute the following commands:
```
Set-service msExchangeIMAP4 -startuptype automatic
Start-service msExchangeIMAP4
```
2. On each server that is running the **Mailbox Server** role, open the Exchange Management Shell as Administrator and execute the following commands:
```
Set-service msExchangeIMAP4BE -startuptype automatic
Start-service msExchangeIMAP4BE
```

Ø *To verify that the services are running and configured to start automatically:*

1. On each Exchange server that is running the Client Access Server (CAS) role or the Mailbox Server role, execute the following command:
   `Get-Service *IMAP4* | Select-Object -Property *`

Example

This example shows a single-instance Exchange 2013 deployment with both the Client Access Server role IMAP4 service (`MSExchangeImap4`) and Mailbox Server role IMAP4 service (`MSExchangeIMAP4BE`) running and configured to start automatically.



Item	Description
1	Client Access Server Role IMAP4 Service
2	Status: Running
3	StartType: Automatic
4	Mailbox Server Role IMAP4 Service
5	Status: Running
6	StartType; Automatic

Ability to Create and Mount an Exchange Mailbox Database for Ipswitch Analytics Exchange Support

Ipswitch Analytics Exchange Support recommends creating a dedicated Ipswitch Analytics ***Exchange Mailbox Database*** (***https://technet.microsoft.com/en-us/library/jj150580(v=exchg.150).aspx***).

This accomplishes the following:

§ Physically and logically separates the Ipswitch Analytics Exchange Mailbox contents and activities from those of your organization.

§ Allows Ipswitch Analytics Exchange Support to take advantage of Exchange Mailbox Database-level optimizations.

§ Allows the Ipswitch Analytics Exchange Mailbox to be isolated from ***Exchange Database Access Group (DAG)*** (***https://technet.microsoft.com/en-us/library/dd979799(v=exchg.150).aspx***) configurations your organization may have set up for user mailbox ***backup, restore and disaster recovery*** (***https://technet.microsoft.com/en-us/library/dd876874(v=exchg.150).aspx***).

Note: A more advanced setup could include Exchange DAG backup, restore and disaster recovery for the Ipswitch Analytics Exchange Mailbox database but this isn't required for Ipswitch Analytics Exchange Support.

The Ipswitch Analytics Exchange Mailbox Database can be used for multiple Ipswitch Analytics Exchange Mailboxes if more than one Ipswitch Analytics Exchange Agent is used provided the Exchange Mailbox Database capacity configurations will support the capacity configurations of the Ipswitch Analytics Exchange Mailboxes.

(alternative)

Using the Ipswitch Analytics Exchange Mailbox Database for multiple Ipswitch Analytics Exchange Mailboxes:

This configuration is supported if

§ More than one Ipswitch Analytics Exchange Agent is used, and

§ The Exchange Mailbox Database capacity supports the capacity configurations of the Ipswitch Analytics Exchange mailboxes.

Exchange Mailbox Database Mounting Limits

MS Exchange 2013 licensing (Standard Edition or Enterprise Edition) determines the maximum Mailbox Databases per Exchange Server. Make sure that your MS Exchange 2013 deployment has the capacity to mount an Exchange Mailbox Database for Ipswitch Analytics Exchange Support.

Microsoft Exchange Server 2013 is available in two server editions:

- **Enterprise Edition** can scale to 50 mounted databases per server in the Release to Manufacturing (RTM) and Cumulative Update 1 (CU1) versions, and 100 mounted databases per server in Cumulative Update 2 (CU2) and later versions;
- **Standard Edition** is limited to 5 mounted databases per server.

Reference: ***Microsoft Technet*** (***https://technet.microsoft.com/en-us/library/bb232170(v=exchg.150).aspx***).

Capacity Planning - Exchange Mailbox Database Server and Mailbox

The Ipswitch Analytics Exchange Mailbox acts as a persistent work-queue for the Ipswitch Analytics Exchange Agent. It collects ***Exchange 2013 Incident Reports*** (***https://technet.microsoft.com/en-us/library/jj150534(v=exchg.150).aspx***) that are generated by an Exchange Transport Rule.

The Ipswitch Analytics Exchange Agent connects to the mailbox using IMAPS, pulls down the Exchange Incident Reports and submits the email attachment-based file transfer metadata to the UREP> Server.

Ensure both of the following:

- The configured Exchange Mailbox Database Server that hosts the Ipswitch Analytics Exchange Mailbox must have sufficient storage capacity.
- The configured size quotas of the Ipswitch Analytics Exchange Mailbox must be large enough to ensure that items are not rejected from the Mailbox.

General capacity planning for Exchange 2013 deployments (***https://technet.microsoft.com/en-us/library/dn178505(v=exchg.150).aspx***) is a complex process and out-of-scope for this document. However, this example of ***Exchange 2013 capacity planning*** (***https://blogs.technet.microsoft.com/exchange/2013/05/06/ask-the-perf-guy-sizing-exchange-2013-deployments/***) provides helpful information that you can use as you approach capacity planning for the Ipswitch Analytics Exchange Database and Mailbox.

Important: Before you configure Ipswitch Analytics Exchange support, you need an understanding of quota configurations for the Ipswitch Analytics Exchange Mailbox. See the following table:

Exchange Mailbox Quota Configurations

Parameter	Description
ProhibitSendReceiveQuota	Specifies the mailbox size at which the user associated with this mailbox can no longer send or receive messages.
RecoverableItemsQuota	Specifies the limit for the Recovery Items folder. When you reach the quota limit, you cannot put any more items in the Recovery Items folder.
RecoverableItemsWarningQuota	Specifies the quota for when a warning event is entered in Event Viewer

Quota Planning - Inbox - Example Calculations

Emails originating internally to your Exchange organization

500 Exchange Mailboxes x 42 emails sent per day = 21,000 total emails sent per day
21,000 total emails sent per day x 20% with a qualifying attachment = 4,200 Incident Reports per day
4,200 Incident Reports per day x 100 KB average message with attachment size = ~410 MB per day

~410 MB per day x 30-day work queue capacity = ~12 GB

Emails originating externally to your Exchange organization

50,000 emails originating externally arrive per day x 20% with a qualifying attachment = 10,000 Incident Reports per day
10,000 Incident Reports per day x 100 KB average message-with-attachment size = ~980 MB per day

~980 MB per day x 30-day work queue capacity = ~29 GB

Set `ProhibitSendReceiveQuota` to at least **~41 GB** (~12 GB + ~29 GB)

Quota Planning - Recoverable Items

The Ipswitch Analytics Exchange Mailbox is configured to retain deleted items for '0' days (via the ***RetainDeletedItemsFor*** (***https://technet.microsoft.com/en-us/library/ee364752(v=exchg.150).aspx***) Mailbox property).

The RecoverableItemsQuota size should be a function of the size of the daily Incident Reports processed and the frequency in which your Exchange Mailbox Server runs the Microsoft Exchange 2013 Mailbox Assistant. The default schedule is set to one day. Before you configure Ipswitch Analytics Exchange Support, verify your Exchange Mailbox Server Mailbox Assistant schedule:

```
4,200 Incident Reports per day + 10,000 Incident Reports per day = 14,200 Incident Reports per day
14,200 Incident Reports per day x 100 KB average message-with-attachment size = ~1.4 GB
```

Important: The behavior of the Microsoft Exchange 2013 Mailbox Assistant does not guarantee that a specific Exchange Mailbox will be processed at a specific interval. A schedule configured for one day means that the Mailbox Assistant will process the Mailbox on the Exchange Mailbox Server *at least one time within a 24 hour period*. However, this means that an Exchange Mailbox might go unprocessed by the Mailbox Assistant for up to 48 hours.

For example, the Microsoft Exchange 2013 Mailbox Assistant might process the Ipswitch Analytics Exchange Mailbox early Monday morning, and then process it again late Tuesday night. Although the Mailbox Assistant delivered on the 'at least once within a 24 hour period' configuration, the amount of time between the different runs is more than 24 hours.

This gives us a Retained Deleted Items multiplier that must be factor into the quota planning for *RecoverableItemsQuota*:

```
 (Microsoft Exchange 2013 Mailbox Assistant schedule in days x 2)
```

Applying the multiplier produces:

```
~1.4 GB x (1 day schedule x 2) = ~3 GB
```

This represents the 'best case' scenario because it does not factor in the capacity for periods of Incident Report spikes or Microsoft Exchange 2013 Mailbox Assistant self-throttling based on available Exchange system resources.

Recommended: Add additional capacity for at least one additional Microsoft Exchange 2013 Mailbox Assistant work-cycle (factoring in the Retained Deleted Items multiplier, also).

```
~1.4 GB x (1 day schedule x 2) x (1 day schedule x 2) = ~6 GB
```

Set the *RecoverableItemsQuota* to at least ~6 GB

Set the *RecoverableItemsWarningQuota* relative to *RecoverableItemsQuota*. The *RecoverableItemsWarningQuota* determines at what Recoverable Items Folder size a warning event is entered in Event Viewer. Set this parameter appropriately so that corrective action can be taken before mailbox item deletions are blocked.

RecoverableItemsWarningQuota = RecoverableItemsQuota *x .75*

RecoverableItemsWarningQuota could be set to ~4.5 GB

Monitor and adjust quotas over time

Capacity planning is not an exact science.

Best practices:

- Configure the quotas based on reasonable assumptions.
- Adopt a plan to gradually increase the scope of the Ipswitch Analytics Exchange Transport Rule. Reference:
- Actively monitor storage usage and adjust over time.

Planned Exchange Service Interruption

After creating a new Exchange Mailbox Database Exchange 2013 warns that the Microsoft Exchange Information Store service should be restarted. This will force connected Exchange mail clients to reconnect.

Create an Exchange Mailbox Database

***Recommended**:* For the name of the Exchange Mailbox Database, use IpswitchAnalyticsDatabase to keep the name consistent with the instructions in the following sections.

Recommended: Use the Exchange 2013 Administrator Console (EAC) to create the Ipswitch Analytics Exchange Mailbox Database. The console provides a comprehensive view of the available Exchange Mailbox Servers in your Exchange deployment.

Ø *Use the EAC to create a mailbox database*

1. From the Exchange admin center, navigate to **Servers**.
2. Select **Databases**, and then click the **+** symbol to create a database.
3. Use the new database wizard to create your database.
   Reference: ***Microsoft TechNet***
   https://technet.microsoft.com/en-us/library/jj150580(v=exchg.150).aspx
4. After the database is created, you receive a warning that the Microsoft Exchange Information Store service must be restarted.

   Click **OK** to restart the service. This action forces connected Exchange mail clients to reconnect.

Ipswitch Analytics Setup and Configuration Script for MS Exchange 2013

The Ipswitch Analytics 2.1 distribution contains a utility Windows powershell script to help with the Ipswitch Analytics Exchange Support setup and configuration. It is an interactive script and walks you through the configuration with a series of prompts.

Note: If you prefer to perform the steps manually instead of using the script, see ***Manual Setup and Configuration of Exchange Support*** (on page 84).

Ø *Before you run the script, do the following:*

- Meet the ***Prerequisites*** (on page 63).
- ***Create the Exchange Mailbox Database for Ipswitch Analytics*** (on page 70).
- The script must be local on the system.

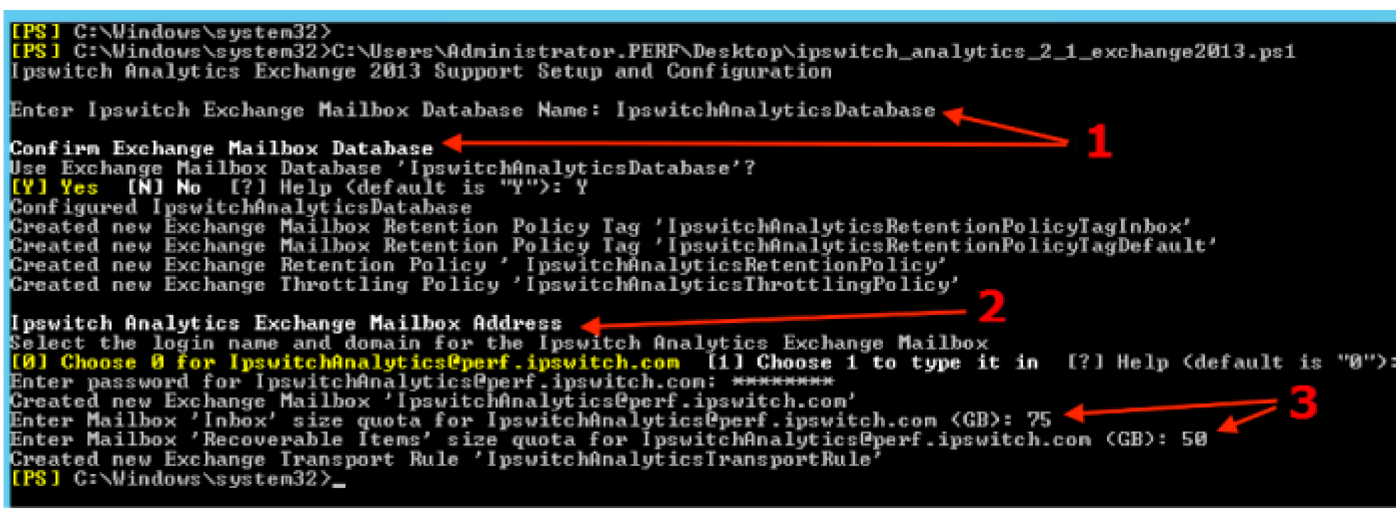
  Recommended: set your system's Windows Power Shell script execution policy to RemoteSigned.

  - Check the current execution policy with the `Get-ExecutionPolicy` `https://technet.microsoft.com/en-us/library/hh849821.aspx` cmdlet.
  - If necessary, use the `Set-ExecutionPolicy` `https://technet.microsoft.com/en-us/library/ee176961.aspx` to change the execution policy.

Ø *To run the script:*

1. Open the Exchange Management Shell as Administrator.
2. Execute the **`ipswitch_analytics_2_1_exchange2013.ps1`** script provided in the distribution.
3. Provide the information requested by the prompts.

   Numbers in the figure point out some specific prompts. See the table that follows the figure for more information.



#	Prompt	Description
1	Ipswitch Exchange mailbox Database Name:	The name you provided when you ***created the Exchange Mailbox Database*** (on page 70).
1	Confirm Exchange Mailbox Database	Retype the name.
2	Ipswitch Analytics Exchange Mailbox Address	Select or enter the Mailbox principal name (user@domain).
3	Mailbox 'Inbox' size quota	For more information, see ***Quota Planning - Inbox*** (on page 68).
3	Mailbox "Recoverable Items' size quota	For more information, see ***Quota Planning - Recoverable Items*** (on page 69).

Configure Exchange Transport Rule Conditions

Exchange Transport Rule conditions https://technet.microsoft.com/en-us/library/dd638183(v=exchg.150).aspx are used by the Exchange Transport Rule to decide which emails qualify as attachment-based file transfers. When the Transport Rule conditions are met, the Transport Rule sends an Exchange Incident Report to the Ipswitch Analytics Exchange Mailbox. The incident report is available for the Analytics Exchange Agent to process.

Configuring Exchange Transport Rule conditions that are optimal for your organization might require several iterations. The recommended approach is to start with a very small subset of the organization using the Exchange User Properties (such as a specific office or Department), and then gradually increase the scope of the Exchange Transport Rule, using the rich set of Exchange 2013 Transport Rule conditions.

To add or modify the Transport Rule conditions, use the ***Exchange 2013 Administrator Console https://technet.microsoft.com/en-us/library/jj150562(v=exchg.150).aspx*** (EAC).

Ø *Use the EAC to view or modify a mail flow rule*

1. From the EAC, go to Mail flow > Rules.
2. When you select a rule in the list, the conditions, actions, exceptions and select properties of that rule are displayed in the details pane. To view all the properties of a specific rule, double click it. This opens the rule editor window, where you can make changes to the rule. For more information about rule properties, see the ***Exchange 2013 Administrator Console https://technet.microsoft.com/en-us/library/jj150562(v=exchg.150).aspx*** (EAC).

   Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/jj657505(v=exchg.150).aspx***

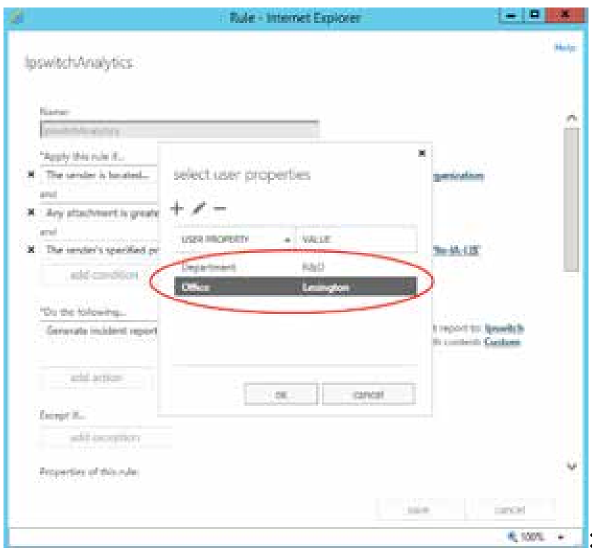
Example

The example shows a Transport Rule condition that limits the scope to the members of the R&D department in the Lexington office.

USER PROPERTY	VALUE
Department	R&D
Office	Lexington

See the figure.

Starting small and gradually increasing the scope of the Transport Rule conditions allows you to observe how the volume of Exchange Incident Reports drives Exchange Mailbox Database and Mailbox capacity requirements in a controlled way.



:

In this section:

Systems that generate automated emails can be a source of unexpected email volume. Consider explicitly excluding these sources in the Analytics Exchange Support Transport Rule. Common examples include Salesforce, ADP, Sharepoint, JIRA, Taleo etc.

MS Exchange chains the execution of the enabled Transport Rules in *priority* order. The placement of the Analytics Support Exchange Transport Rule relative to the other Transport Rules is significant. Depending on how they are defined, Transport Rules that are executed before the Analytics Exchange Support Transport Rule might affect the emails made available to the Analytics Exchange Support Transport Rule by Exchange.

How Rules are Ordered

The rule with a priority of 0 is processed first, followed by the rule with a priority of 1, and so on. You can change the rule priority by adjusting the order of rules in the EAC or changing the priority of individual rules. For example, if you have one rule to reject messages that include a credit card number, and another one requiring approval, give the reject rule a priority that causes it to happen first, and stop applying other rules.

All messages in your organization are evaluated against the enabled mail flow rules for your organization. Rules are processed in the order listed on the Rules page in EAC, or based on the value of the Priority parameter in the Shell. Each rule includes an option for stopping the processing of more rules when the rule is matched.

Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/dd638183(v=exchg.150).aspx***

In a hybrid Office 365 and on-premises Exchange deployment, Transport Rules are not replicated between the cloud and on-premises instances.

Hybrid Scenarios

In the hybrid scenario, there is no replication of rules between your on-premises deployment and Office 365. Therefore, when you create a rule in your on-premises Exchange organization, you need to create a matching rule in Office 365. The rules you create in Office 365 are stored in the cloud, along with the rest of your Office 365 organization configuration, whereas the rules you create in your on-premises Exchange organization are stored locally in Active Directory. When managing rules in a hybrid scenario, you need to make sure that you keep the two sets of rules synchronized by making the change in both places, or making the change in one environment and then exporting the rules and importing them in the other environment.

Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/dd638183(v=exchg.150).aspx***

Wait 30 minutes after creating a rule before you test it. If you test immediately after you create the rule, you might get inconsistent behavior. If are using Exchange Server and have multiple Exchange servers, it might take even longer for all the servers to receive the rule.

Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/dn831862%28v=exchg.150%29.aspx?f=255&MSPPError=-2147217396***

Install the Ipswitch Analytics Server and Agent

If you do not have a previous installation of Ipswitch Analytics:

§ Follow instructions in ***Install Ipswitch Analytics*** (on page 17). Complete the server and agent installation.

During the agent installation, when you are prompted to choose the agent type, select Exchange Server.

If you have a version of Ipswitch Analytics prior to Ipswitch Analytics 2.1:

§ ***Update your server installation*** (on page 60) and upload a license for Ipswitch Analytics 2.1

§ ***Install a new Ipswitch Analytics Agent*** (on page 22) to use for Exchange. (Agents prior to 2.1 do not include Exchange support).

Enable Ipswitch Analytics Exchange Transport Rule

After Ipswitch Analytics Exchange Support is set up, configured and running, and you have installed the Ipswitch Analytics server and agent, enable the Ipswitch Analytics Exchange Transport Rule.

Use either of the following methods:

Ø *Use the EAC to enable or disable a mail flow rule*

1. From the EAC, go to Mail flow > Rules.
2. To disable a rule, clear the check box next to its name.
3. To enable a disabled rule, select the check box next to its name.

Reference: ***Microsoft TechNet***
https://technet.microsoft.com/en-us/library/jj657505(v=exchg.150).aspx#enable

Ø *Use the Enable-TransportRule cmdlet*

1. Open the Exchange Management Shell as Administrator.
2. Execute the Enable-TransportRule cmdlet:

```
Enable-TransportRule "IpswitchAnalyticsTransportRule"
```

Reference: ***Microsoft Tech Net***
https://technet.microsoft.com/en-us/library/aa996744(v=exchg.150).aspx

Ipswitch Analytics Exchange Support Administration

Managing Storage for the Ipswitch Analytics Exchange Mailbox

How the Ipswitch Analytics Exchange Mailbox folders are used by Ipswitch Analytics Exchange Support.

The Ipswitch Analytics Exchange Transport Rule is responsible for identifying emails that match its configured conditions. When one is identified, the Transport Rule creates an ***Exchange Incident Report https://technet.microsoft.com/en-us/library/jj150534(v=exchg.150).aspx*** and places it in the Ipswitch Analytics Exchange Mailbox Inbox folder. The Ipswitch Analytics Exchange Agent looks for items to process in the Inbox folder.

When the Ipswitch Analytics Exchange Agent connects and discovers items in the Inbox folder, it moves a number of them into the Ipswitch_Processing folder. Items in this folder are processed and their associated email attachment-based file transfer metadata is submitted to the Ipswitch Analytics Server. After the metadata is submitted, the Ipswitch Analytics Exchange Agent deletes the processed items from the Ipswitch_Processing folder. Any items that cause a processing error are moved to the Ipswitch_Error folder.

When items are permanently deleted from an Exchange Mailbox they are moved to a hidden Recoverable Items folder. This is ***where Exchange 2013 keeps permanently deleted items https://technet.microsoft.com/en-us/library/ee364755(v=exchg.150).aspx*** until the deleted item retention period is reached. The ***Microsoft Exchange 2013 Mailbox Assistant https://technet.microsoft.com/en-us/library/bb123958(v=exchg.150).aspx*** background process is responsible for removing items from Recoverable Items. After items are deleted from the Recoverable Items folder, they are physically deleted from the system and no longer take up space in the Mailbox Database.

Ø *To check current Ipswitch Analytics Exchange Mailbox storage usage.*

- Open the Exchange Management Shell as Administrator and execute the following Get-MailboxFolderStatistics cmdlet:

```
Get-MailboxFolderStatistics "IpswitchAnalytics" -FolderScope All |
Format-Table Name, FolderAndSubfolderSize,
ItemsInFolderAndSubfolders -Auto
```

Example

The example shows the mailbox folder statistics for the Ipswitch Analytics Exchange Mailbox. It indicates a healthy Ipswitch Analytics Exchange system.

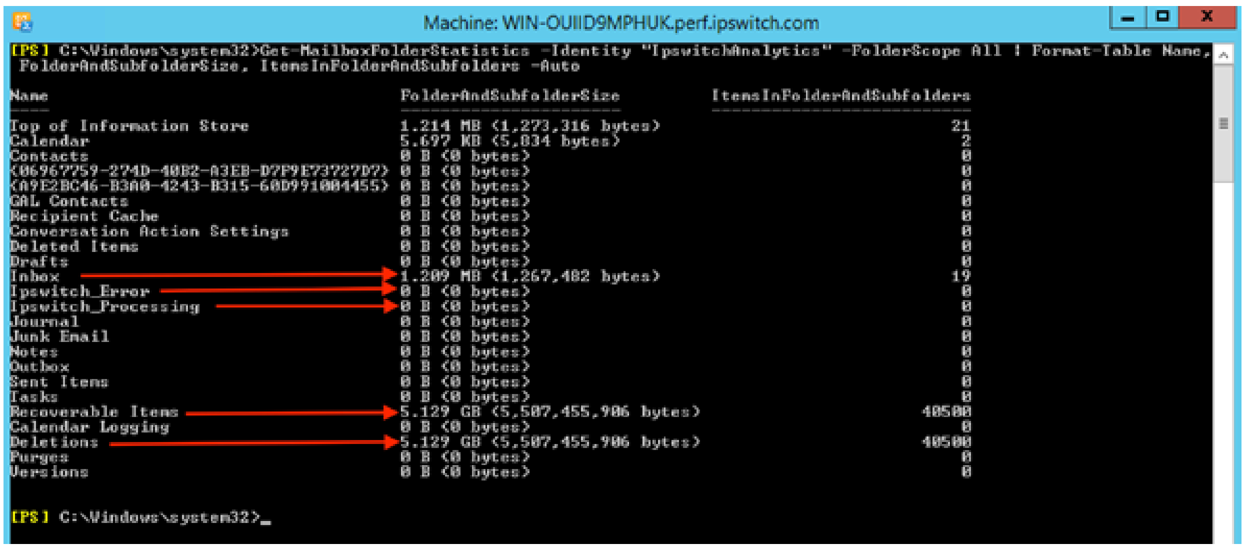
§ **Inbox** folder. The small number and size of the **Inbox** folder (19 items, 1.209 MB) indicates that the Ipswitch Analytics Exchange Agent is easily handling the volume of incoming Exchange Incident Reports.

§ **Ipswitch_Processing** folder. This folder is empty, indicating that the system is between processing cycles.

§ **Ipswitch_Error** folder. This folder is empty

§ **Recoverable Items** folder. Shows the number and size of items processed (40,500 items, 5.129 GB) by the Ipswitch Analytics Exchange Agent since the last time the Microsoft Exchange 2013 Mailbox Assistant processed the Ipswitch Analytics Exchange Mailbox.

§ **Deletions** folder. This is a subfolder of the **Recoverable Items** folder, and is the actual folder to which deleted items are moved. The size and number reported by the two folders represent the same set of deleted items. Expect the reported size and number of items to be the same.



Deleted Items Retention

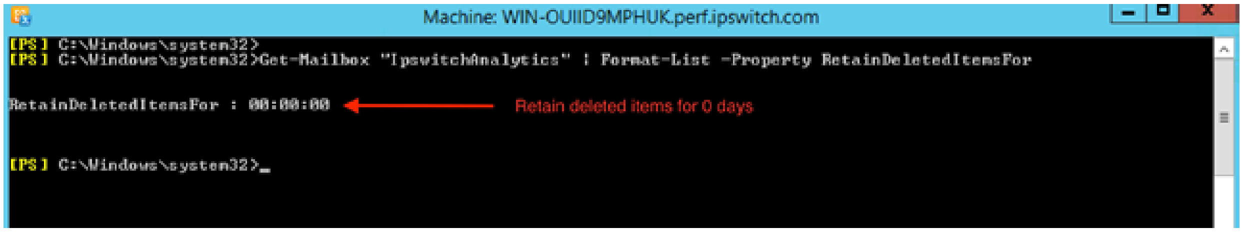
The Ipswitch Analytics Exchange Mailbox must have the Deleted Items Retention set to '0' days. This informs the Microsoft Exchange 2013 Folder Assistant to remove all items in the **Recoverable Items** folder each time it processes the Ipswitch Analytics Exchange Mailbox.

Ø *To verify that the Ipswitch Analytics Exchange Mailbox Deleted Items Retention period is set to '0' days.*

§ Open the Exchange Management Shell as Administrator and execute the following Get-Mailbox cmdlet:

```
Get-Mailbox "IpswitchAnalytics" | Format-List -Property
RetainDeletedItemsFor
```

Example: The figure shows that the Ipswitch Analytics Exchange Mailbox is correctly configured to retain deleted items for 0 days.



The Mailbox Assistant Schedule

Your Exchange deployment's Microsoft Exchange 2013 Mailbox Assistant schedule plays an important part in ensuring that the Ipswitch Analytics Exchange Mailbox stays below its storage capacity configurations. If the Recoverable Items folder reaches its configured capacity, Exchange 2013 will prevent the Ipswitch Analytics Exchange Agent from deleting processed items from the Ipswitch_Processing folder. The inability to move items out of the Ipswitch_Processing folder will prevent the Ipswitch Analytics Exchange Agent from reducing the items in the Mailbox. This will result in items collecting in the Inbox folder. If the Ipswitch Analytics Exchange Mailbox reaches the configured 'Inbox' quota Exchange will reject new items destined for the Ipswitch Analytics Exchange Mailbox. ***These rejected items will be lost***.

The default Microsoft Exchange 2013 Mailbox Assistant schedule is set to one day.

In Exchange 2013, the Managed Folder Assistant is a throttle-based assistant. Throttle-based assistants are always running and don't need to be scheduled. The system resources they can consume are throttled. You can configure the Managed Folder Assistant to process all mailboxes on a Mailbox server within a certain period (known as a *work cycle)*. The work cycle is set to one day by default. *Reference*: ***Microsoft TechNet. https://technet.microsoft.com/en-us/library/bb123958(v=exchg.150).aspx***

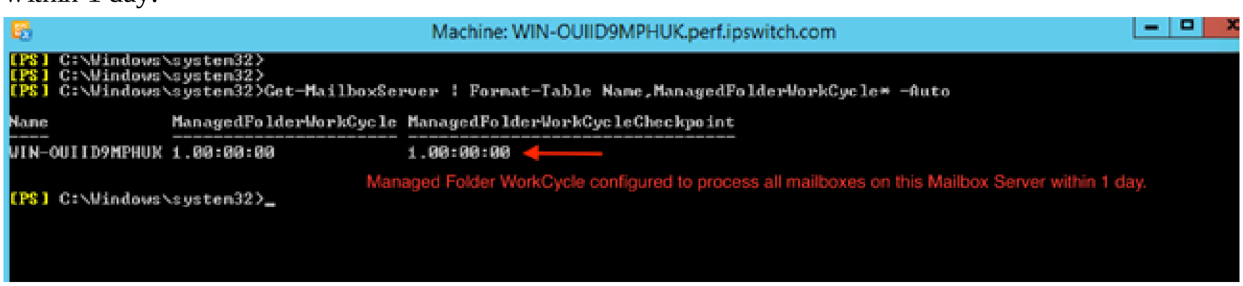
Ø *To check the Mailbox Server's* ***`ManagedFolderWorkCycle`*** *configuration*

§ Open the Exchange Management Shell as Administrator and execute the following ***Get-MailboxServer https://technet.microsoft.com/en-us/library/bb123539(v=exchg.150).aspx*** cmdlet:

```
Get-MailboxServer | Format-Table Name,ManagedFolderWorkCycle* -Auto
```

Example: The figure shows that the Microsoft Exchange 2013 Mailbox Assistant is configured to process all mailboxes within one day.

Red arrow: Managed Folder WorkCycle configured to process all mailboxes on this Mailbox Server within 1 day.



Server-Wide Configuration

The `ManagedFolderWorkCycle` configuration is an Exchange Mailbox Server-wide configuration.

Caution: Adjusting the ManagedFolderWorkCycle configuration for the Ipswitch Analytics Exchange Mailbox will affect other Exchange Mailboxes hosted on the Exchange Mailbox Server. Doing so is *not recommended*.

The Microsoft Exchange 2013 Mailbox Assistant can run on a specific Mailbox by executing the Start-ManagedFolderAssistant cmdlet. If you need the Microsoft Exchange 2013 Mailbox Assistant to run more frequently for the Ipswitch Analytics Exchange Mailbox, consider ***scheduling*** (***http://www.msexchange.org/kbase/exchangeservertips/exchangeserver2013/powershell/scheduling-exchange-powershell-task.html***) the Start-ManagedFolderAssistant cmdlet with Windows Scheduler.

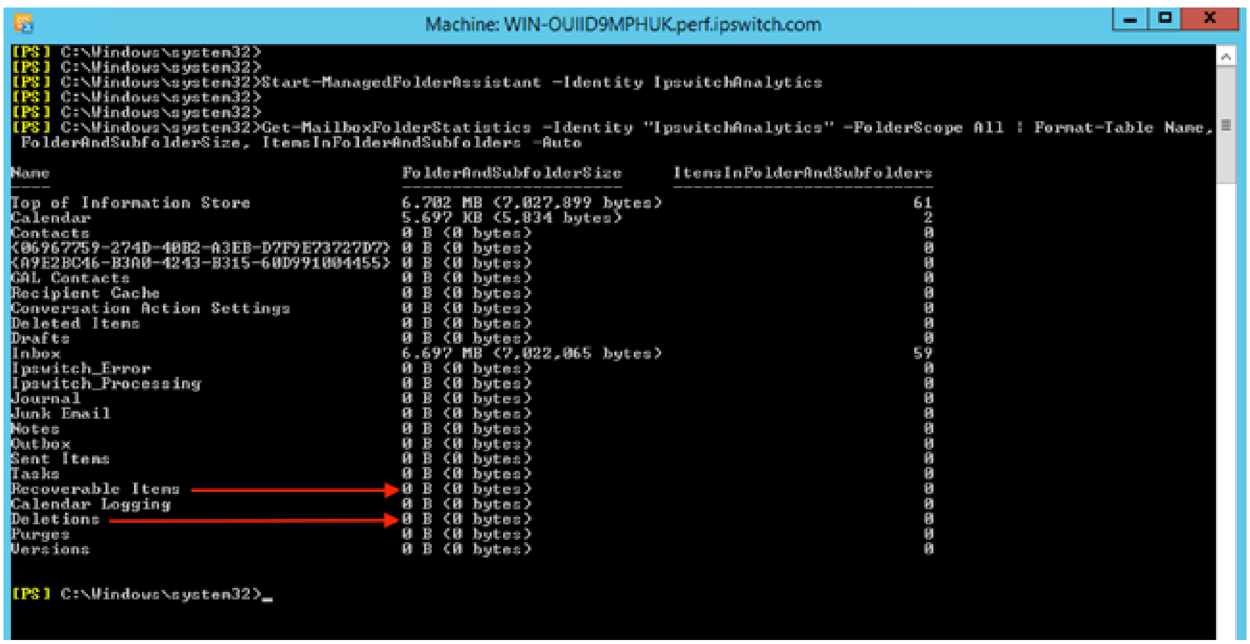
Ø *To run the Mailbox Assistant on a specific mailbox:*

§ Open the Exchange Management Shell as Administrator and execute the following Start-ManagedFolderAssistant cmdlet:

```
Start-ManagedFolderAssistant "IpswitchAnalytics"
```

Example: The figure shows the mailbox folder statistics for the Ipswitch Analytics Exchange Mailbox after running `Start-ManagedFolderAssistant` for the Ipswitch Analytics Exchange Mailbox.

Red arrows indicate the Recoverable Items and Deletions.



Quick shutoff: Disabling Ipswitch Analytics Exchange Transport Rule

After the Ipswitch Exchange Transport Rule is enabled, Exchange Incident Reports are placed into the Ipswitch Analytics Exchange Mailbox. The volume of Exchange Incident Reports depends on your Exchange Transport Rule conditions and the volume of emails that match these conditions.

To shut off this flow, disable the Ipswitch Analytics Transport Rule. If you have created multiple Ipswitch Analytics Transport Rules to supply multiple Ipswitch Analytics Exchange Mailboxes, disable all of them.

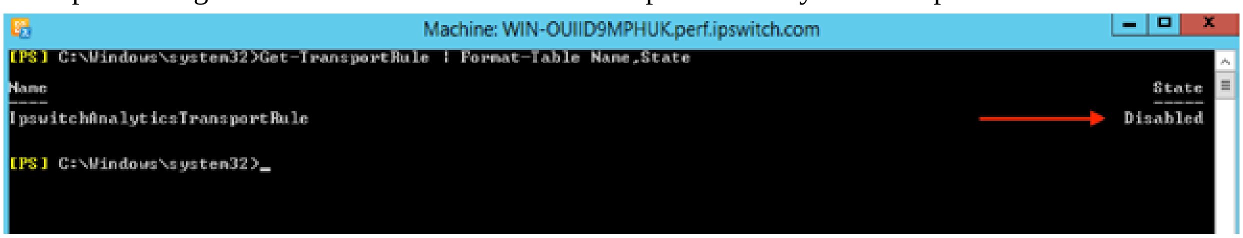
Reference: ***Microsoft TechNet***
https://technet.microsoft.com/en-us/library/jj657505(v=exchg.150).aspx#enable

Ø *Using the EAC to enable or disable a mail flow rule*

1. From the EAC, go to Mail flow > Rules.
2. To disable a rule, clear the check box next to its name.
3. To enable a disabled rule, select the check box next to its name.

Ø *Using the Exchange Management Shell to disable a mail flow (transport) rule*

1. As Administrator, open the Exchange Management Shell.
2. Execute the following Disable-TransportRule cmdlet:
   ```
   Disable-TransportRule "IpswitchAnalyticsTransportRule"
   ```
3. To verify the Transport Rule is disabled, execute the following Get-TransportRule cmdlet:
   ```
   Get-TransportRule | Format-Table Name,State
   ```
   Example: The figure shows the disabled status of the Ipswitch Analytics Transport Rule.



Removing Ipswitch Analytics Exchange Support Setup and Configurations

To remove Ipswitch Analytics Exchange Support setup and configurations, do the following tasks in the order listed. For details, click the link in each item.

1. ***Disable the Ipswitch Analytics Transport Rule*** (on page 82).
2. ***Remove Ipswitch Analytics Transport Rule*** (on page 82).
3. ***Remove Ipswitch Analytics Exchange Mailbox*** (on page 82).
4. ***Remove Ipswitch Analytics Exchange Throttling Policy*** (on page 83).
5. ***Remove Ipswitch Analytics Retention Policy and Tags*** (on page 83).
6. ***Remove Ipswitch Analytics Exchange Mailbox Database*** (on page 83).

Disable Ipswitch Analytics Transport Rule

Use either of the following methods:

Ø *Use the EAC to enable or disable a mail flow rule*

1. As Administrator, open the EAC.
2. Click **Mail flow** > **Rules**.
   - To disable a rule, clear the check box next to its name.
   - To enable a disabled rule, select the check box next to its name.

Ø *Use the Exchange Management Shell to disable a mail flow rule*

1. As Administrator, open the Exchange Management Shell
2. Execute the Disable-TransportRule cmdlet:
   `Disable-TransportRule "IpswitchAnalyticsTransportRule"`

Reference: ***Enable or disable a mail flow rule https://technet.microsoft.com/en-us/library/jj657505(v=exchg.150).aspx#enable***.

Remove Ipswitch Analytics Transport Rule

from: https://technet.microsoft.com/en-us/library/bb125203(v=exchg.150).aspx

Use the EAC to remove a mail flow rule

1 From the EAC, go to **Mail flow** > **Rules**.

2 Select the rule you want to remove and then click **Delete**

Open the Exchange Management Shell as Administrator and execute the Remove-TransportRule cmdlet:

```
Remove-TransportRule "IpswitchAnalyticsTransportRule"
```

Remove Ipswitch Analytics Exchange Mailbox

from: ***https://technet.microsoft.com/en-us/library/jj863434(v=exchg.150).aspx*** (***https://technet.microsoft.com/en-us/library/jj150580(v=exchg.150).aspx***)

As previously stated, when you delete a mailbox, both the Exchange attributes and the Active Directory user account are deleted. The mailbox (and the archive mailbox, if it's enabled) will be permanently deleted from the mailbox database after the mailbox retention period expires.

The following procedure shows how to delete a user mailbox. Use the same procedure to delete other mailbox types after navigating to the appropriate page in the EAC.

1 In the EAC, navigate to **Recipients** > **Mailboxes**.

2 In the list of user mailboxes, click the mailbox that you want to delete, and then click the Delete icon.

3 A warning appears asking if you're sure you want to delete the mailbox. Click Yes to delete the mailbox.

The mailbox is removed from the mailbox list.

Open the Exchange Management Shell as Administrator and execute the Remove-Mailbox cmdlet:

```
Remove-Mailbox "IpswitchAnalytics"
```

Remove Ipswitch Analytics Exchange Throttling Policy

Open the Exchange Management Shell as Administrator and execute the Remove-ThrottlingPolicy cmdlet:

```
Remove-ThrottlingPolicy "IpswitchAnalyticsThrottlingPolicy"
```

Remove Ipswitch Analytics Exchange Retention Policy and Tags

Open the Exchange Management Shell as Administrator and execute the Remove-RetentionPolicy cmdlet:

```
Remove-RetentionPolicy "IpswitchAnalyticsRetentionPolicy"
```

Open the Exchange Management Shell as Administrator and execute these Remove-RetentionPolicyTag cmdlets:

```
Remove-RetentionPolicyTag "IpswitchAnalyticsRetentionPolicyTagInbox"
Remove-RetentionPolicyTag "IpswitchAnalyticsRetentionPolicyTagDefault"
```

Remove Ipswitch Analytics Exchange Mailbox Database

NOTE: This procedure assumes that you have followed the recommended Ipswitch Analytics Exchange Support setup and configuration, and created a Ipswitch Analytics Exchange Mailbox Database specifically for Ipswitch Analytics Exchange Support. Removing an Exchange Mailbox Database removes all Exchange Mailboxes contained within it.

After removing the Ipswitch Analytics Exchange Mailbox Database Exchange 2013 may instruct you to manually remove the database file if it exists.

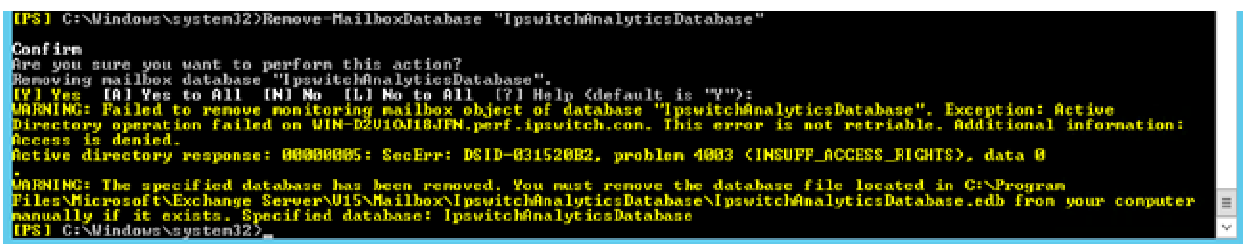
from: ***https://technet.microsoft.com/en-us/library/jj150580(v=exchg.150).aspx*** (***https://technet.microsoft.com/en-us/library/jj150580(v=exchg.150).aspx***)

Use the EAC to remove a mailbox database

1. From the EAC, select **Servers** > **Databases**, and then click to select the appropriate mailbox.
2. Click the Delete icon to remove the mailbox database.

Open the Exchange Management Shell as Administrator and execute the Remove-MailboxDatabase cmdlet:

```
Remove-MailboxDatabase "IpswitchAnalyticsDatabase"
```



Manual Setup and Configuration of Exchange Support

If you do not want to use the Ipswitch Analytics Setup and Configuration Script (on page 71) for MS Exchange 2013, you can perform a manual configuration.

Before you perform the manual configuration, you must have already done the following:

§ ***Met the Prerequisites*** (on page 63).

§ ***Created the Exchange Mailbox Database*** (on page 70).

Manual Configuration Tasks

To manually set up and configure MS Exchange for Ipswitch Analytics, do the following tasks in the order listed.

§ ***Configure the Exchange Mailbox Database*** (on page 84).

§ ***Create the Ipswitch Analytics Mailbox Retention Policy*** (on page 86).

§ ***Create the Ipswitch Analytics Throttling Policy for IMAP Throttling Relief*** (on page 87).

§ ***Create the Ipswitch Analytics Exchange Mailbox*** (on page 87).

§ ***Create the Exchange Transport Rule*** (on page 89).

After you finish the above tasks, continue with ***Configure Exchange Transport Rule Conditions*** (on page 72).

Configure the Exchange Mailbox Database

Perform the following tasks in the order listed.

§ ***Disable Content Indexing*** (on page 84)

§ ***Exclude From Provisioning*** (on page 85)

§ ***Mount at Startup*** (on page 85)

Disable Content Indexing

Content Indexing

By default, when a new Exchange Mailbox Database is created, Exchange enables mailbox indexing for all Mailboxes in the Mailbox Database. This makes full-text searching of email content possible, but adds processing overhead and increases the storage requirements for the mailbox, because indexes take space.

The Ipswitch Analytics Mailbox does not need full-text searching of email content. Because the Ipswitch Analytics Mailbox uses the **`IpswitchAnalyticsDatabase`**, this Mailbox Database-level setting can be disabled without affecting your Exchange users. Disabling the setting saves processing time and a significant amount of storage space.

The space required for files related to the content indexing process can be estimated as 20% of the database size. *Reference*: ***Microsoft TechNet https://blogs.technet.microsoft.com/exchange/2013/05/06/ask-the-perf-guy-sizing-exchange-2013-deployments/***.

Ø *To disable Content Indexing:*

1. As Administrator, open the Exchange Management Shell

2. Execute the Set-MailboxDatabase cmdlet:
   ```
   Set-MailboxDatabase "IpswitchAnalyticsDatabase" -IndexEnabled
   $false
   ```
   Reference: ***Microsoft TechNet***
   https://technet.microsoft.com/en-us/library/bb123971(v=exchg.141).aspx

---

Note: You cannot use the Exchange Admin Center (EAC) to disable or enable Exchange Search for a Mailbox Database.

Exclude from Provisioning

Auto-provisioning

By default a new Exchange Mailbox Database is available for auto-provisioning. This allows Exchange to select the new database at random for a new (or migrated) Exchange user. Ipswitch Analytics Exchange Mailbox Database should be excluded from auto-provisioning to prevent Exchange from selecting it as the target database for your organization's Exchange users.

When you create or move a mailbox, or mail-enable an existing user, that mailbox needs to be stored in a mailbox database. In Microsoft Exchange Server 2013, you can let Exchange choose the database for you using automatic mailbox distribution.

With automatic mailbox distribution, Exchange looks at the mailbox databases in your organization, excludes databases that are not suitable using criteria discussed later in this topic, and then randomly chooses a database where the mailbox should be located. This process randomly distributes mailboxes across all of the suitable mailbox databases in your organization.

Reference: ***Microsoft Technet***
https://technet.microsoft.com/en-us/library/ff477621%28v=exchg.150%29.aspx?f=255&MSPPError=-2147217396

Ø *To exclude the Ipswitch Analytics Exchange Mailbox Database from provisioning:*

1. As Administrator, open the Exchange Management Shell
2. Execute the Set-MailboxDatabase cmdlet:
   ```
   Set-MailboxDatabase "IpswitchAnalyticsDatabase"
   -IsExcludedFromProvisioning $true
   ```
   Reference: ***Microsoft TechNet***
   https://technet.microsoft.com/en-us/library/bb123971(v=exchg.141).aspx

Mount at Startup

Configure the **`IpswitchAnalyticsDatabase`** so that it is mounted on startup.

When you create an Exchange Mailbox Database in the EAC, this option is selected by default. However, if it was deselected, you must explicitly set it.

Ø *To configure the database to mount on startup:*

1. As Administrator, open the Exchange Management Shell
2. Execute the Set-MailboxDatabase cmdlet:

```
Set-MailboxDatabase "IpswitchAnalyticsDatabase" -MountAtStartup
$true
```

Reference: ***Microsoft TechNet***
https://technet.microsoft.com/en-us/library/bb123971(v=exchg.141).aspx

Create Ipswitch Analytics Mailbox Retention Policy

The Ipswitch Analytics Exchange Mailbox is used as a persistent work-queue for the Ipswitch Analytics Exchange Agent. The Ipswitch Analytics Mailbox Retention Policy is configured so that Exchange never deletes items from the Mailbox that have aged-out because of a retention policy.

Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/jj150573(v=exchg.150).aspx***

Ø *To create the Ipswitch Analytics Mailbox Retention Policy:*

1. As Administrator, open the Exchange Management Shell
2. Execute the following ***New-RetentionPolicyTag*** ***https://technet.microsoft.com/en-us/library/dd335226(v=exchg.150).aspx*** and ***New-RetentionPolicy*** ***https://technet.microsoft.com/en-us/library/dd297970(v=exchg.150).aspx*** cmdlets:

```
New-RetentionPolicyTag -Name
"IpswitchAnalyticsRetentionPolicyTagInbox" -Type Inbox
-RetentionAction DeleteAndAllowRecovery -RetentionEnabled $false
New-RetentionPolicyTag -Name
"IpswitchAnalyticsRetentionPolicyTagDefault" -Type All
-RetentionAction DeleteAndAllowRecovery -RetentionEnabled $false

New-RetentionPolicy "IpswitchAnalyticsRetentionPolicy"
-RetentionPolicyTagLinks
"IpswitchAnalyticsRetentionPolicyTagInbox","IpswitchAnalyticsReten
tionPolicyTagDefault"
```

Create Ipswitch Analytics Mailbox Throttling Policy for IMAP Throttling Relief

By default, Exchange 2013 has global threshold values that are configured to limit throughput by connection type. There are specific configurations for each of the connection types by which clients can connect to Exchange. The default threshold values for IMAP clients are too low for the Ipswitch Analytics Exchange Support Exchange Mailbox. Exchange 2013 supports Mailbox-specific threshold settings.

§ The figures (outside of the concurrency value) are measured in milliseconds and represent the amount of time over a 1 hour period.

§ The max burst value represents the amount of time that can be spent before any throttling is done (microdelays).

§ The recharge rate shows how much budget will be added over a 1 hour period (constant process).

§ The cutoff balance represents the amount of budget that can be used after which a backoff request (exception) is generated.

Reference: ***Mail server migration http://www.emailquestions.com/threads/mail-server-migration-stories.8120/***.

Ø *To create an Ipswitch Analytics Exchange Mailbox throttling policy that does not throttle IMAP usage.*

1. As Administrator, open the Exchange Management Shell
2. Execute the New-ThrottlingPolicy cmdlet:

```
New-ThrottlingPolicy "IpswitchAnalyticsThrottlingPolicy"
Set-ThrottlingPolicy "IpswitchAnalyticsThrottlingPolicy"
-ImapMaxConcurrency Unlimited -ImapMaxBurst Unlimited
-ImapRechargeRate Unlimited -ImapCutoffBalance Unlimited
```

   Reference: ***Microsoft TechNet https://technet.microsoft.com/en-us/library/dd351045(v=exchg.150).aspx***

Create Ipswitch Analytics Exchange Mailbox

Perform the following tasks in the order listed.

Ø *To create and configure the Ipswitch Analytics Exchange Mailbox:*

1. As Administrator, open the Exchange Management Shell
2. Execute the ***New-Mailbox https://technet.microsoft.com/en-us/library/aa997663(v=exchg.150).aspx*** cmdlet, making the following substitutions:

- Replace `Ipswitch Analytics Exchange Mailbox User Principal Name` with the actual Mailbox user principal name (email address as user@domain)
- Replace `<Ipswitch Analytics Exchange Mailbox Password>` with the actual Mailbox password.
- Replace `<Ipswitch Analytics Exchange Mailbox Database>` with the actual Mailbox Database name.

```
New-Mailbox -Alias "IpswitchAnalytics" -Name "Ipswitch Analytics" -DisplayName "Ipswitch Analytics" -UserPrincipalName "<Ipswitch Analytics Exchange Mailbox User Principal Name>" -Password (ConvertTo-SecureString -String '<Ipswitch Analytics Exchange Mailbox Password>' -AsPlainText -Force) -Database "<Ipswitch Analytics Exchange Mailbox Database>" -ThrottlingPolicy IpswitchAnalyticsThrottlingPolicy -ResetPasswordOnNextLogon $false
```

3. Execute the ***Set-Mailbox https://technet.microsoft.com/en-us/library/bb123981(v=exchg.150).aspx*** cmdlet, making the following substitutions:
   - Replace `<Ipswitch Exchange Mailbox Recoverable Items Quota>` for the actual ***Recoverable Items Quota*** (on page 69).
   - Replace `<Ipswitch Exchange Mailbox Recoverable Items Warning Quota>` for the actual ***Recoverable Items Quota*** (on page 69)

```
Set-Mailbox "IpswitchAnalytics" -RetainDeletedItemsFor 0 -RecoverableItemsWarningQuota <Ipswitch Exchange Mailbox Recoverable Items Warning Quota>GB -RecoverableItemsQuota <Ipswitch Exchange Mailbox Recoverable Items Quota>GB -HiddenFromAddressListsEnabled $true -RequireSenderAuthenticationEnabled $true -UseDatabaseRetentionDefaults $false -CalendarVersionStoreDisabled $true -UseDatabaseQuotaDefaults $false -RetentionPolicy "IpswitchAnalyticsRetentionPolicy" -ProhibitSendQuota 'unlimited' -SingleItemRecoveryEnabled $false
```

Ø *To get the Active Directory SAMAccountName for the Ipswitch Analytics Exchange Mailbox:*

1. As Domain Administrator, open the Exchange Management Shell.
2. Execute the ***Get-Mailbox https://technet.microsoft.com/en-us/library/bb123685(v=exchg.150).aspx*** cmdlet.

```
Get-Mailbox <Ipswitch Analytics Exchange Mailbox User Principal name> | Format-List -Property SAMAccountName
```

Ø *To configure the Ipswitch Analytics Exchange Mailbox password to never expire:*

1. As Domain Administrator, open the Exchange Management Shell.
2. Execute the ***Set-ADUser https://technet.microsoft.com/en-us/library/aa998221(v=exchg.160).aspx*** cmdlet, using the SAMAccountName that was returned by the previous Get-Mailbox cmdlet:

```
Set-ADUser "<Ipswitch Analytics Exchange User SAMAccountName>" -PasswordNeverExpires $true
```

Important: If the Ipswitch Analytics Exchange Mailbox password is ever changed, you must reconfigure the Ipswitch Analytics Exchange Agent with the new password. For more information, see Modify an Ipswitch Analytics Agent (in the Administrator Guide).

Create Exchange Transport Rule

An ***Exchange Transport Rule https://technet.microsoft.com/en-us/library/dd351127(v=exchg.150).aspx*** is the mechanism that governs which emails qualify as email attachment-based file transfers. Create the default Ipswitch Analytics Exchange Transport Rule with the following conditions:

- Disabled. The Transport Rule should remain disabled until after the Ipswitch Analytics Exchange Agent is installed, configured and successfully connecting to Exchange.
- Attachment Size over 1 KB:
- Send Exchange Incident Report to the Ipswitch Analytics Exchange User Mailbox
- Include all Incident Report content including the original email and attachment.

Ø *To create an Exchange Transport Rule:*

1. As Administrator, open the Exchange Management Shell
2. Run the ***New-TransportRule https://technet.microsoft.com/en-us/library/bb125138(v=exchg.150).aspx*** cmdlet, making the following substitution:

   Replace `<Ipswitch Analytics Exchange Mailbox User Email Address>` with the actual Mailbox user principal name.

   ```
   New-TransportRule "IpswitchAnalyticsTransportRule" -Enabled $false
   -AttachmentSizeOver 1KB -GenerateIncidentReport "<Ipswitch Analytics
   Exchange Mailbox User Email Address>" -IncidentReportContent
   "Sender","Recipients","Subject","CC","BCC","Severity","Override","
   RuleDetections","FalsePositive","DataClassifications","IdMatch","A
   ttachOriginalMail" -Mode Enforce -SetAuditSeverity DoNotAudit
   ```

What to do next:

- ***Configure Exchange Transport Rule Conditions*** (on page 72).

MS Exchange Data Mapping: Email to File Transfer Fields

The table lists data mapping between **email** fields in Exchange Server and **transfer type** fields in Analytics Server.

To create Ipswitch Analytics reports that use data from Microsoft Exchange, use Transfer templates.

Email Field in Exchange	Ipswitch Analytics Field Name
<Sender email address>	Source
<Receiver email address>	Destination
<Attachment name>	Filename

	Source Filename Destination Filename
<Attachment size>	Upload Size **Note:** The size of the email attachment in MS Exchange is reported by the Ipswitch Analytics server as approximately the Base64 encoded size of the original file. Base64-encoded binary data is equal to 1.37 times the original data size + 814 bytes (for headers).
0	Download Size
<Email sent date & time>	Timestamp
0	Duration
<Email Subject>	Email Subject
<Message Id>	Email Identifier
<domain part of sender's email address>	Source Host
<type based on <Source Host>>	Source Host Type
<domain part of receiver's email address>	Destination Host
<type based on <Destination Host>>	Destination Host Type
SMTP	Protocol
I	Direction
Upload	Operation
Exchange	Server Type
Exchange	Server Subtype

Update a Certificate or Certificate Chain: updatecert.bat utility

Administrators can use the **`updatecert.bat`** utility to update the truststore whenever the cert has been changed on the Ipswitch Analytics server.

Run the utility in a command promt.

Description

The **`updatecert.bat`** utility does the following:

§ Downloads a single certificate or a certificate chain from the Ipswitch Analytics server.
§ Recreates the ipswitchcerts file in jre\lib\security directory.
§ Adds the downloaded certs in to the directory.
§ Restarts the Ipswitch Analytics Agent service.

Location

The agent installation program places `updatecert.bat` in the installation directory for the agent. Default location is C:\Program Files\Ipswitch\Analytics Agent\.

Syntax

```
updatecert.bat
```

There are no parameters.

To update the truststore without restarting the service

Use `utilities.bat` with option `-updatecert`. For example:

```
utilities.bat -updatecert
```

Estimate Monthly Transactions

Install the Ipswitch Analytics Server on a machine that has the hardware capacity to properly handle the number of transactions that occur on your MOVEit Transfer and MOVEit Automation systems. If you cannot estimate the number of monthly transactions, follow the instructions below to calculate

§ The average MOVEit Transfer transactions per month, and
§ The average MOVEit Automation transactions per month.

Add the two together, and then determine whether you have enough hard disk space to retain all of your data for 15 months.

Number of transactions	Hard disk size

<100 K	1TB
100K to 1 million	2 TB
>1 million	4 TB

Note: Complete the steps below for only the type of MOVEit servers on your system.

MOVEit Transfer:

1 Select a MOVEit Transfer server that is representative of a typical MOVEit Transfer server on your system.

Note: If you think the number of transfers varies widely on different MOVEit Transfer servers in your system, perform steps 2-3 for every MOVEit Transfer server. Do not complete step 5; instead, sum the average number of transactions from each MOVEit Transfer server and then divide by the total number of MOVEit Transfer servers.

2 Sign in as **sysadmin** and create the following report to estimate that server's average transfers per month:

§ Report Category: **File Transfer**

§ Report Type: **By Month**

§ Start/End Date: Select the **prior 12 months** if available, or as many months as possible within the last year.

3 Find the **Total transfers per report time period** by calculating the following: **(Total number of Uploads x 2) + Total number of Downloads.**

4 Find the **Average number of transfers per month** for this MOVEit Transfer server by calculating the following: **Total transfers per report time period number** (calculated in step 3) / **Number of months in the report.**

5 Find the **Estimated Monthly MOVEit Transfer transactions** by calculating the following: **Average number of transfers per month** x **Number of MOVEit Transfer servers in your system.**

Note: Logins, logouts, and maintenance actions can be added as a factor when determining impact on the system but do not need to be calculated.

MOVEit Automation:

1 Select a MOVEit Automation server that is representative of a typical MOVEit Automation server on your system.

2 Select **View** > **Reports.**

3 For **Display**, select **File/Folder Activity.**

4 Click **Edit Filter.**

5 On the **File/Folder Activity** tab, select the following:

§ Status is: **Failure** and **Success**

§ Action is: **Upload**, **Download** and **Process**

§ Display any file/folder activity entries with errors, regardless of action

6 On the **Date/Time** tab, select **Continuous date/time range** and select the following:

§ **Start Date:** Enter a date 12 months prior to today.

§ **End Date:** Enter today's date.

7 On the **Limit** tab, limit results to the **10,000 Newest.**

8 Click OK to run the report. The total number of transactions displays at the bottom right. If the total number of transactions shows 10000, select the Large system size. Otherwise, find the average number of MOVEit Automation transactions by calculating the following: Total number of transactions x Number of MOVEit Automation servers on your system.

Server Backup and Restore

Database Backup

Back up the server database before you upgrade to a new version of the Analytics Server.

Best Practice: Back up the server database on a regular basis.

For more information, see the ***POSTgreSQL documentation*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***).

Configuration Files Backup

Back up the following configuration files after the initial installation of Ipswitch Analytics server, and whenever the configuration is modified.

Important: Store the following files in a secure location.

- apache-tomcat-7\webapps\ura\WEB-INF\classes\spring\properties\config.properties
- apache-tomcat-7\webapps\ura\WEB-INF\classes\spring\properties\database.properties
- apache-tomcat-7\conf\server.xml
- apache-tomcat-7\conf\.init
- apache-tomcat-7\certs* where * denotes all certs

See also:

Restore the Analytics Server (on page 93)

Restore the Analytics Server

This procedure assumes that you have previously ***backed up the database and the configuration files*** (on page 93).

1 Shut down all Ipswitch Analytics Agents by doing the following on each Agent machine:
- Under Administrative Tools, select Services. Right-click Ipswitch Analytics Agent and select Stop.

2 Sign in on the Ipswitch Analytics Server machine with administrative privileges.

3 Reinstall the Ipswitch Analytics Server. See ***Install the Analytics Server*** (on page 18).

4 Under Administrative Tools, select Services. Right-click the Ipswitch Analytics Server and select Stop.

5 Restore the Ipswitch Analytics Server database by following the ***PostgreSQL documentation*** (***http://www.postgresql.org/docs/9.3/static/backup.htm***).

6 Copy the following backed-up files from their backup location to the corresponding location under the Analytics Server install directory:
- apache-tomcat-7\webapps\ura\WEB-INF\classes\spring\properties\config.properties

  - apache-tomcat-7\webapps\ura\WEB-INF\classes\spring\properties\database.properties
  - apache-tomcat-7\conf\server.xml
  - apache-tomcat-7\conf\.init
  - apache-tomcat-7\certs* where * denotes all certs

7. Under **Administrative Tools**, select **Services**. Right-click **Ipswitch Analytics Server** and select **Start**.
8. Start the Ipswitch Analytics agents by doing the following on each Agent machine:

Manage

  - Under **Administrative Tools**, select **Services**. Right-click **Ipswitch Analytics Agent** and select **Start**.

This section describes how to configure and manage:

- ***Access Control*** (on page 94)
- ***Users*** (on page 95)
- ***User Groups*** (on page 104)
- ***Reports*** (on page 106)
- ***Rulesets*** (on page 109)
- ***System*** (on page 110) (***Email Notifications*** (on page 111) and ***Password Policy*** (on page 113))
- ***Licensing*** (on page 114)

Access Control

Ipswitch Analytics contains multiple levels of access control:

Access to	Controlled by
The Ipswitch Analytics Server	***Username and password*** (on page 95) on the web browser sign in page. Ipswitch Analytics user accounts to MOVEit user accounts.
Modules within the Ipswitch Analytics web interface	The user's ***role*** (on page 95).
MOVEit sources	Assigning a ***ruleset*** (on page 109) to a ***user group*** (on page 104) or ***schedule*** (on page 170). A ruleset lim sources (servers, organizations, usernames) that appear for selection during report creation. **Important:** A MOVEit user's folder permissions do not transfer to Ipswitch Analytics. If a MOVEit user ha view only certain folders in a MOVEit organization, that same person, using a Ipswitch Analytics user ac able to view reports that include file transfer data related to all folders within that organization. Access to controlled at the server, organization and username level only for version 1.0.0.
Library reports	***Granting Library report access*** (on page 177) to a user or user group.

By creating role and user group policies, you can provide partners and business users customized access to only pertinent data.

Users

Access to Ipswitch Analytics requires a user account. The same Ipswitch Analytics user can sign in to Ipswitch Analytics in multiple browser tabs, windows, and from different machines. Ipswitch Analytics user actions are reportable in the ***User Audit*** (on page 215) and ***Security*** (on page 217) reports.

Note: Ipswitch Analytics user accounts are not connected to MOVEit user accounts.

To add and manage Ipswitch Analytics users, you must have the role of **System Administrator** or **Administrator.** Users with the role of **Creator** have read-only access to the Users module.

Ø *To access user accounts:*

§ Sign in to Ipswitch Analytics and at the top of the screen, click **USERS.**

The Users list includes the following information about each user:

Username	The user's name.
Firstname (optional)	The user's first name.
Lastname (optional)	The user's last name.
Role	Determines the modules and report types that a user can access within Ipswitch Analytics.
Email	The email address where the user will receive email notifications when a scheduled report is ready for viewing. Multiple users can share the same email address.
Status	The user's current ability to sign in to Ipswitch Analytics: **Enabled:** User can sign in to Ipswitch Analytics. **Disabled:** User cannot sign in to Ipswitch Analytics.

About the Ipswitch Analytics Agent user

The Ipswitch Analytics Agent user has the name that was assigned to it during installation. Its default username is **feeder.** It has the role of Ipswitch Analytics Agent and no name or email is associated with it. If you change the Agent Access Username on the Users page, you must ***modify the Agent*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28636.htm***) by running the installation program again and change the name.

User Roles

The user's Role controls access to Ipswitch Analytics modules and Ipswitch Analytics report types, and allows the following actions:

- **Partner:** View Transfer and Workflow reports in the Library.
- **Monitor:** View the Monitor.
- **Reader:** View the Monitor; view Transfer and Workflow reports in the Library.
- **Creator:** View the Monitor; view Transfer and Workflow reports in the Library; create reports in the Templates and Schedule tabs. This role is for users whose main purpose is to create reports.

  Note: A ***ruleset*** (on page 109) can limit the MOVEit sources that a Creator can access when creating and running templates, and when creating schedules.
- **Administrator:** Access all Ipswitch Analytics modules except the SETTINGS > System tab; view all report types, including User Audit and Security reports; create rulesets, assign rulesets to schedules.
- **System Administrator:** Full access: manage all system settings and access all areas of Ipswitch Analytics.

  Caution: Assign users to the System Administrator role with caution. Only System Administrators can manage system-wide settings in the **Settings** module, and can access all areas of Ipswitch Analytics.

The table shows each role, its permissions, and the accessible Ipswitch Analytics modules.

Role	Reports			Monitor	Users	Settings		
	Library	Templates	Schedule			Rulesets	System	Licensing
Partner	Transfer and Workflow only	NO	NO	NO	NO	NO	NO	NO
Monitor	NO	NO	NO	YES	NO	NO	NO	NO
Reader	Transfer and Workflow only	NO	NO	YES	NO	NO	NO	NO
Creator	Transfer and Workflow only			YES	Read only	NO	NO	NO
Administrator	YES	YES	YES	YES	YES	YES	NO	NO
System Administrator	YES	YES	YES	YES	YES	YES	YES	YES

Follow your organization's accepted security practices when assigning roles.

In this section:

Add a User

New users are assigned the ***system language*** (on page 111). To change a user's language, create the user, then edit the user and ***select the user's language*** (on page 111).

1. Sign in to Ipswitch Analytics as a System Administrator or Administrator.
2. At the top of the screen, click USERS. The Users module opens.
3. Click Add User. The New User page opens.
4. On the New User page, provide the following information:

   Username: A unique alphanumeric username. Names are case-sensitive. Duplicate names are not allowed, but you can reuse the name of a user who has been deleted..

   Role drop-down list: Default role is Reader.

   The user's Role controls access to Ipswitch Analytics modules and Ipswitch Analytics report types, and allows the following actions:

- **Partner:** View Transfer and Workflow reports in the Library.
- **Monitor:** View the Monitor.
- **Reader:** View the Monitor; view Transfer and Workflow reports in the Library.
- **Creator:** View the Monitor; view Transfer and Workflow reports in the Library; create reports in the Templates and Schedule tabs. This role is for users whose main purpose is to create reports.

  Note: A ***ruleset*** (on page 109) can limit the MOVEit sources that a Creator can access when creating and running templates, and when creating schedules.
- **Administrator:** Access all Ipswitch Analytics modules except the SETTINGS > System tab; view all report types, including User Audit and Security reports; create rulesets, assign rulesets to schedules.
- **System Administrator:** Full access: manage all system settings and access all areas of Ipswitch Analytics.

  Caution: Assign users to the System Administrator role with caution. Only System Administrators can manage system-wide settings in the **Settings** module, and can access all areas of Ipswitch Analytics.

The table shows each role, its permissions, and the accessible Ipswitch Analytics modules.

Role	Reports			Monitor	Users	Settings		
	Library	Templates	Schedule			Rulesets	System	Licensing
Partner	Transfer and Workflow only	NO	NO	NO	NO	NO	NO	NO
Monitor	NO	NO	NO	YES	NO	NO	NO	NO
Reader	Transfer and Workflow only	NO	NO	YES	NO	NO	NO	NO
Creator	Transfer and Workflow only			YES	Read only	NO	NO	NO
Administrator	YES	YES	YES	YES	YES	YES	NO	NO
System Administrator	YES	YES	YES	YES	YES	YES	YES	YES

Follow your organization's accepted security practices when assigning roles.

Password: If you are creating a new user, the field shows a suggested password. If you are editing a user, the field shows the current password.

- To have the system suggest a different password, click **Generate.** A new randomly-generated password appears in the Password box
- To create a custom password, click **Change.** The Enter Password for <username> dialog box opens. Type the password for the user and click **Save.**

Firstname and **Lastname:** These fields are optional.

Email address: The address where the user will receive email notifications when scheduled reports are ready for viewing.

The email address does not need to be unique; multiple users can share the same email address for the purpose of receiving reports.

5 Click **Save.**

The user is created with the default language. To assign a different language, ***edit the user*** (on page 99).

6 Give the following information to users so they can sign in to Ipswitch Analytics:

§ Ipswitch Analytics Server IP address or hostname.

§ Username.

§ Password.

Edit a User

Note: If you change a user's name, password, role, preferred language, or email address while that user is signed in, the changes do not take effect until the user signs out and signs in again.

1 Sign in to Ipswitch Analytics as a **System Administrator** or **Administrator**.

2 At the top of the screen, click **USERS.** The Users module opens.

3 In the list of users, click the name of the user that you want to edit. The Edit user dialog box opens.

4 Change any of the following items:

Note: Administrators cannot make changes to users who have the System Administrator role.

Username: A unique alphanumeric username. Names are case-sensitive. Duplicate names are not allowed, but you can reuse the name of a user who has been deleted..

Role drop-down list: Default role is **Reader**.

The user's Role controls access to Ipswitch Analytics modules and Ipswitch Analytics report types, and allows the following actions:

- **Partner:** View Transfer and Workflow reports in the Library.
- **Monitor:** View the Monitor.
- **Reader:** View the Monitor; view Transfer and Workflow reports in the Library.
- **Creator:** View the Monitor; view Transfer and Workflow reports in the Library; create reports in the Templates and Schedule tabs. This role is for users whose main purpose is to create reports.

  Note: A ***ruleset*** (on page 109) can limit the MOVEit sources that a Creator can access when creating and running templates, and when creating schedules.
- **Administrator:** Access all Ipswitch Analytics modules except the SETTINGS > System tab; view all report types, including User Audit and Security reports; create rulesets, assign rulesets to schedules.
- **System Administrator:** Full access: manage all system settings and access all areas of Ipswitch Analytics.

  Caution: Assign users to the System Administrator role with caution. Only System Administrators can manage system-wide settings in the **Settings** module, and can access all areas of Ipswitch Analytics.

The table shows each role, its permissions, and the accessible Ipswitch Analytics modules.

Role	Reports			Monitor	Users	Settings		
	Library	Templates	Schedule			Rulesets	System	Licensing
Partner	Transfer and Workflow only	NO	NO	NO	NO	NO	NO	NO
Monitor	NO	NO	NO	YES	NO	NO	NO	NO
Reader	Transfer and Workflow only	NO	NO	YES	NO	NO	NO	NO
Creator	Transfer and Workflow only			YES	Read only	NO	NO	NO
Administrator	YES	YES	YES	YES	YES	YES	NO	NO
System Administrator	YES	YES	YES	YES	YES	YES	YES	YES

Follow your organization's accepted security practices when assigning roles.

Password: If you are creating a new user, the field shows a suggested password. If you are editing a user, the field shows the current password.

- To have the system suggest a different password, click **Generate.** A new randomly-generated password appears in the Password box
- To create a custom password, click **Change.** The Enter Password for <username> dialog box opens. Type the password for the user and click **Save.**

Firstname and **Lastname:** These fields are optional.

Email address: The address where the user will receive email notifications when scheduled reports are ready for viewing.

The email address does not need to be unique; multiple users can share the same email address for the purpose of receiving reports.

5 To change the user's language, click **User preferences,** select a language, and click **Save.**

6 When you are finished with your changes, click **Save.**

Change a User's Name

Note: If you change a user's name while that user is signed in, the changes take effect *after* the user signs out and signs in again.

1 Sign in to Ipswitch Analytics as an **Admin** or **System Administrator**.

2 Open the **USERS** module.

3 Click the username you want to edit. The Edit user dialog box opens.

4 To change the name with which the user signs on, enter an new alphanumeric **Username**. You can also edit the **Firstname** and **Lastname** if necessary.

Note: Spaces are not allowed. Duplicate names are not allowed, but you can reuse the name of a user who is deleted. Names are case-insensitive.

5 To change the user's **Firstname** or **Lastname**, enter new names for those fields.

6 Click **Save**.

Change a User's Password

Note: If you change a user's password while that user is signed in, the changes take effect *after* the user signs out and signs in again.

1 Sign in to Ipswitch Analytics as an **Admin** or **System Administrator**.

2 Open the **USERS** module.

3 Click the username you want to edit. The Edit user dialog box opens.

4 Beneath **Password**,

§ Click **Change** to create a new password. In the dialog box that appears, enter a **New password** and **Confirmation**, then click **Save**.

– or –

§ Click **Generate** to have the system suggest a new password. A new password appears in the Password box. You can click Generate multiple times to regenerate the password.

5 When you are satisfied with your changes, click **Save**.

Change a User's Role

Note: If you change a user's role while that user is signed in, the changes take effect *after* the user signs out and signs in again.

1 Sign in to Ipswitch Analytics as an **Admin** or **System Administrator**.

2 Open the **USERS** module. The Users module opens, with a list of users.

3 Click the username. The Edit user dialog box opens.

4 Select a **Role** for the user to control what that user can access in Ipswitch Analytics. The following table shows what each Role can access in Ipswitch Analytics:

Role	Reports			Monitor	Users	Settings		
	Library	Templates	Schedule			Rulesets	System	Licensing
Partner	Transfer and Workflow only	NO	NO	NO	NO	NO	NO	NO
Monitor	NO	NO	NO	YES	NO	NO	NO	NO
Reader	Transfer and Workflow only	NO	NO	YES	NO	NO	NO	NO
Creator	Transfer and Workflow only			YES	Read only	NO	NO	NO
Administrator	YES	YES	YES	YES	YES	YES	NO	NO
System Administrator	YES	YES	YES	YES	YES	YES	YES	YES

Caution: Assign users to the System Administrator role with caution. Only System Administrators can manage all settings in the **Settings** module and access all areas of Ipswitch Analytics.

Follow your organization's accepted security practices when assigning roles.

5 Click **Save**.

Change a User's Email Address

Note: If you change a user's email address while that user is signed in, the changes take effect *after* the user signs out and signs in again.

1 Sign in to Ipswitch Analytics as an **Admin** or **System Administrator**.

2 Open the **USERS** module. The Users module opens, showing the list of users.

3 Click the username. The Edit user dialog box opens.

4 Enter a new **Email address**.

5 Click **Save**.

Change s User's Preferred Language

1 Sign in to Ipswitch Analytics as an Admin or System Administrator.

2 Open the **USERS** module.

3 Click the username. The Edit user dialog box opens.

4 Near the bottom of the dialog box, click **User preferences**.

5 Select a Preferred language and click **Save**.

6 Click **Save**.

The new language setting takes effect the next time that the user logs in.

Delete a User

When you delete a user:

- The user no longer appears in the Users list
- The user's actions continue to appear in User Audit and Security reports in the Target field.

You can reuse a username after it has been deleted.

Warning: The action of deleting a user cannot be undone. After you delete a user, you cannot undelete that user.

An Administrator can delete other Administrators but cannot delete a System Administrator. A System Administrator can delete users of any role.

Note: If two different administrators try to delete the same user at the same time, only the first deletion succeeds and appears in User Audit reports. The second user receives an error on the attempt to delete.

To delete users:

1. Sign in to Ipswitch Analytics as a **System Administrator** or **Administrator**.
2. At the top of the screen, click **USERS.** The Users module opens.
3. Select the checkboxes for users you want to delete.

   Note: The System Administrator cannot be deleted.

4. Above the list of users, click **Delete**.
5. To confirm the deletion, click **OK**.

Deactivate a User

Users that have been disabled cannot sign in to Ipswitch Analytics.

1. Sign in to Ipswitch Analytics as a **System Administrator** or **Administrator**.
2. At the top of the screen, click **USERS.** The Users module opens.
3. Select the checkboxes of the users you want to disable.
4. Click **Disable**.

Enable a User

If a user has been disabled, you can enable the user to allow access to Ipswitch Analytics.

1. Sign in to Ipswitch Analytics as a **System Administrator** or **Administrator**.
2. At the top of the screen, click **USERS.** The Users module opens.
3. Select the checkboxes of the users you want to enable. (Do not click the user name.)
4. Click **Enable**.

User Groups

Create a user group if you want to:

- Allow only a specific group of users to view and/or manage a Library report
- Deliver a scheduled report to a specific group of users
- Limit Creators within a user group to seeing in the Template Editor only those MOVEit sources allowed by the ruleset assigned to the user group

A user does not have to belong to any user group; user group membership is optional.

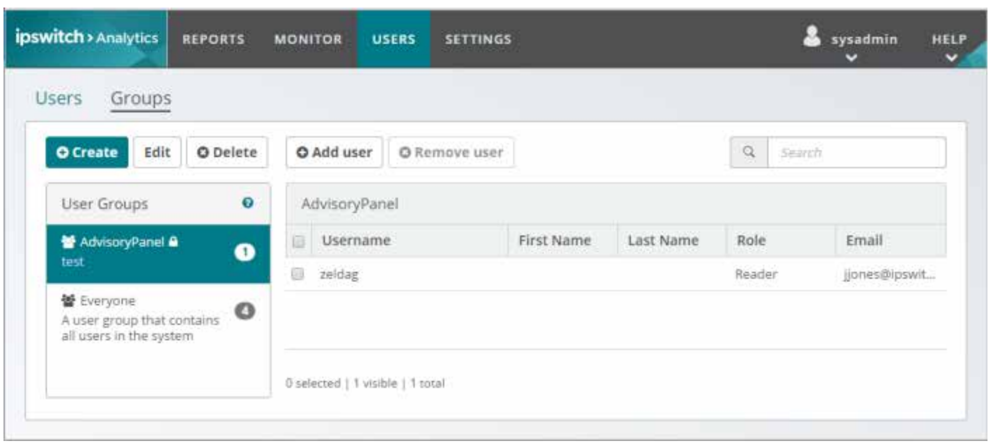
A user group includes the following data:

- User Group Name
- Description
- Ruleset (optional). A ruleset blocks Creator users from viewing and selecting specific MOVEit servers, organizations and usernames in the Template Editor.
- User members of the group

User groups are located in the USERS module under the Groups tab.

Only users with the role of System Administrator or Administrator can create and manage user groups. Creators have read-only access to the Groups tab.

All user groups appear in the left panel, and the users that belong to the selected user group appear in the right panel. Ipswitch Analytics comes with only one user group initially: Everyone. The Everyone user group contains all Ipswitch Analytics users.



If a user group has a ***ruleset*** (on page 109) assigned to it, a lock icon appears next to the user group name. Hover your mouse over the lock to see the ruleset assigned to that user group.

Create a User Group

1. Sign in to Ipswitch Analytics as a System Administrator or Administrator.
2. At the top of the screen, click USERS. The Users module opens.
3. Click the USERS module and then select the Groups tab.

4 Click Create. The Create User Group page opens.

5 Provide the following information:

- Group name
- Description
- Ruleset (optional): Use the dropdown list. You can select one ruleset per group.

  A ruleset blocks Creators from viewing and working with specific MOVEit servers, organizations and users in the Templates and Schedule tabs.

  Note: Rulesets that appear in the drop-down list were previously created. For more information, see ***Rulesets*** (on page 109).

6 Click Create. The new group appears in the list of groups, in the left panel.

If you assigned a ruleset, a lock icon appears next to the user group name. To see which ruleset is assigned to that user group, hover your mouse over the lock icon.

7 Click Add User. The Add Users to Group dialog box opens.

8 Click inside the Users field. A list of users who are not already members of the group appears. Select a user.

9 To add more users, click in the field again and make another selection.

10 Click Save. The users are added to the group.

You can select this user group as a ***schedule recipient*** (on page 170), and grant ***Library report access*** (on page 177) to this user group.

Note: You can also select a user group and click Delete (on page 106) to remove that group, or click Edit (on page 105) to add or remove members from the group.

Edit a User Group

Note: Changes to a user group will not affect users until they sign out and sign in again.

1 Sign in to Ipswitch Analytics as a System Administrator or Administrator.

2 Go to the USERS module and select the Groups tab.

3 From the left pane, select the user group you want to edit. That user group's members are listed on the right.

Ø *To add users to this group:*

1. Click Add User. In the Add Users to Group dialog box, click inside the Select Users field and select users from the list.

   Note: Only users who are not already members of the group appear in the list.
2. Click Save. The new user appears in the list of members.

Ø *To remove users from this group:*

- Select the checkbox next to the usernames, click Remove user and then click OK.

  Note: A user group continues to exist even if it has 0 users.

Ø *To change the Group name, Description or Ruleset assignment:*

1. Click Edit. The Edit User Group dialog box opens.
2. Change any of the following:

- Group name
- Description
- Ruleset: A ruleset blocks Creators from viewing and working with specific MOVEit servers, organizations and users in the Templates and Schedule tabs. You can select only one ruleset per user group.

3. Click Save.

Delete a User Group

Note: You must ***remove all Users from a user group*** (on page 105) before deleting the user group.

1. Sign in to Ipswitch Analytics as a System Administrator or Administrator.
2. Go to the USERS module and select the Groups tab.
3. In the left panel, select a user group and click Delete.
4. Click OK.

Reports

A report is a template that has been populated with actual data from one or more MOVEit servers.

The following topics describe how Ipswitch Analytics controls access to reports:

Report Creation

Only Creators, Administrators and System Administrators can create reports. Creators are limited to creating Transfer and Workflow reports.

A user can create a report in the following ways::

- In the Template Editor, run a template. Optionally download the report as a PDF or CSV file or save it to the Library.
- Create a schedule. A scheduled report uses a template to create the report at the specified time(s). The schedule can deliver the report to the Library, or email it as a PDF or CSV attachment.

After a report is run it is a static artifact; nothing within the report can be altered.

To create reports, see ***Reports*** (on page 157).

Report Data Sources

Rulesets are used to allow or restrict access to specific data sources. You can apply a ruleset to a user group or schedule.

§ User Group. If a ruleset is applied to a user group, then when Creator members of the group are working in the template editor, they are blocked from viewing and selecting any MOVEit source that is not allowed by the ruleset. The template editor's filter lists only the allowed sources for selection.

§ Schedule. Administrators and System Administrators can assign a ruleset to a schedule to provide an additional layer of source control over scheduled report results.

Using Rulesets and Templates

When you create a new template or edit a stock template in the Template Editor, all sources are included by default. You can apply ***filters*** (on page 193) to a template to include or exclude data from only specific MOVEit sources (servers, organizations, usernames) and MS Exchange sources. Filter selections can be saved as a custom template. When the template is used as a basis for a report, that report accesses only the sources allowed by the filters.

When both a filter and a ruleset are in place (for example, if the template used to create a schedule has specific Filter settings AND a ruleset is assigned to the schedule), they combine to include only the MOVEit sources allowed by both filter and ruleset.

Rulesets do not affect anything in the MONITOR or any report that already resides in the Reports Library.

You must create a ruleset before you can assign it to a user group or schedule. Only Administrators and System Administrators can create rulesets.

Report Management

Report management can include:

§ ***Deleting reports*** (on page 178)

§ ***Changing report names*** (on page 177)

§ ***Changing report descriptions*** (on page 177)

§ ***Granting/removing report access to users and user groups*** (on page 177)

§ ***Analyzing a report's template*** (on page 175)

Administrators and System Administrators can view and manage all ***Library*** (on page 175) reports. Creators can manage a Transfer or Workflow Library report only if granted access to that report. All other users cannot manage Library reports.

Report Viewing

Controlling access to view a report is different than ***controlling the MOVEit sources (servers, organizations and users)*** (on page 107) that contribute data to the report. If a user has access to a report, that user will be able to view the report in its entirety. It is therefore important to grant access to view reports judiciously.

Library:

Reports ***saved to the Library*** (on page 166) from the Template Builder are private until the report creator grants access to other users and/or user groups. See ***Control Access to Library Reports*** (on page 177).

Reports delivered to the Library from a schedule are viewable by the schedule's user and user group recipients. See ***Schedule Reports for Delivery*** (on page 169).

A user's role always limits the report types that user can view in the Library:

- Partners, Readers and Creators can view Transfer and Workflow reports only.
- Administrators and System Administrators can view all report types.

Note: Administrators can view all Library reports at all times.

PDF/CSV files:

Reports saved as a PDF/CSV file from the Template Builder are downloaded by the web browser to the local machine.

Reports delivered on schedule as an email PDF/CSV attachment are viewable by the schedule's email recipients.

Rulesets

Rulesets are used to allow or restrict access to specific data sources. You can apply a ruleset to a user group or schedule.

- **User Group.** If a ruleset is applied to a user group, then when Creator members of the group are working in the template editor, they are blocked from viewing and selecting any MOVEit source that is not allowed by the ruleset. The template editor's filter lists only the allowed sources for selection.
- **Schedule.** Administrators and System Administrators can assign a ruleset to a schedule to provide an additional layer of source control over scheduled report results.

Using Rulesets and Templates

When you create a new template or edit a stock template in the Template Editor, all sources are included by default. You can apply ***filters*** (on page 193) to a template to include or exclude data from only specific MOVEit sources (servers, organizations, usernames) and MS Exchange sources. Filter selections can be saved as a custom template. When the template is used as a basis for a report, that report accesses only the sources allowed by the filters.

When both a filter and a ruleset are in place (for example, if the template used to create a schedule has specific Filter settings AND a ruleset is assigned to the schedule), they combine to include only the MOVEit sources allowed by both filter and ruleset.

Rulesets do not affect anything in the MONITOR or any report that already resides in the Reports Library.

You must create a ruleset before you can assign it to a user group or schedule. Only Administrators and System Administrators can create rulesets.

Create a Ruleset (on page 109)
Edit a Ruleset (on page 110)
Delete a Ruleset (on page 110)

Create a Ruleset

1. Sign in as an Administrator or System Administrator.
2. Click SETTINGS > Rulesets.
3. Click Create. The New Ruleset page opens.
4. Enter a Ruleset Name and optional Description.
5. On the left, click Add Filter.

   A filter lets you choose to include or exclude data from only specific MOVEit sources and MS Exchange sources.
6. Make selections to limit the data in the ruleset. For details about filter fields, see ***Add a Filter*** (on page 193).
7. Click Add.
8. To add additional filters, click Add Filter and repeat the process.

Edit a Ruleset

Note: This topic describes how to edit a ruleset's name, description and MOVEit sources. To remove a ruleset from a user group or a schedule, edit the user group or schedule in either Users > ***Groups*** (on page 104)or Reports > ***Schedule*** (on page 170), edit the user group or schedule, and for **Ruleset** select **No ruleset.**

1 Sign in as an **Administrator** or **System Administrator.**

2 In the top bar, click **SETTINGS.**

The Rulesets tab appears, with a list of existing rulesets.

3 Click a ruleset name. The Edit Ruleset - *ruleset-name* page opens

If filters have been applied to the ruleset, the sources appear on the left.

4 *Optional*: Change the **Ruleset Name** and/or **Description.**

5 To limit the sources of the ruleset, click **Add Filter.** The Add Filter dialog box opens, Make selections and click **Add.** For more information, see ***Add a Filter*** (on page 193).

6 Click **Save** when you are finished editing the ruleset.

Delete a Ruleset

Note: This topic describes how to edit a ruleset's name, description and MOVEit sources. To remove a ruleset from a user group or a schedule, edit the user group or schedule in either Users > ***Groups*** (on page 104)or Reports > ***Schedule*** (on page 170), edit the user group or schedule, and for **Ruleset** select **No ruleset.**

You cannot delete a ruleset that is assigned to a schedule or user group.

1 Sign in as an **Administrator** or **System Administrator.**

2 Open the **SETTINGS** module.

3 Select the checkbox for the ruleset.

4 Click **Delete.** Confirm the deletion.

System

System Administrators can change System Settings, which includes:

§ Setting up ***email notifications*** (on page 111) to allow sending scheduled reports via email

§ Setting a ***password policy*** (on page 113): The default user password policy requires that all Ipswitch Analytics user passwords:

  § Be a minimum of eight characters

  § Be a maximum of 20 characters

  § Follow the **Sturdy** password policy: a password cannot be the username or a shorter version of it, cannot contain dictionary words, and must contain at least one numeric and one non-numeric character

Preferred Language

Administrators can set the preferred language for Ipswitch Analytics. Choices are English (default), French, Spanish, and German. The language you select is used as the

- Language in the Web Admin console. Changes take effect the next time an administrator signs in.
- Default language for users.

    Administrators can edit a user to select a different language.

    Each user can select a language after signing in.

  Changes to a user's preferred language take effect the next time the individual user signs in.

To set or change the system default language:

1. Select the ADMIN module, click the System tab, and click General.
2. Select a language and click Save.

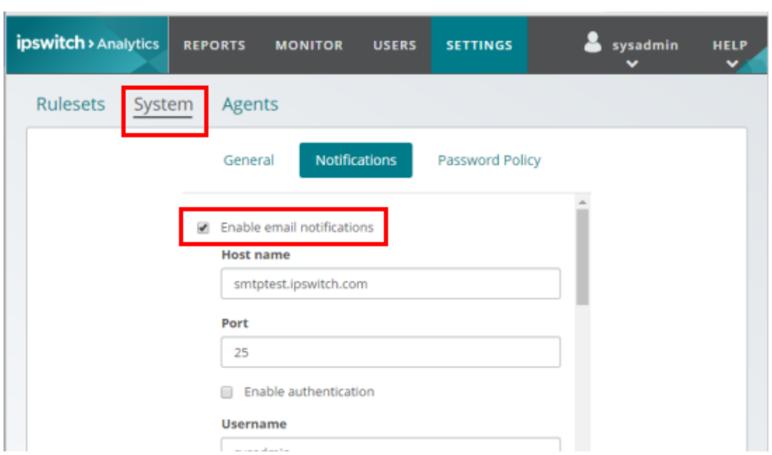
To change a user's language:

1. If the user does not exist, ***add the user*** (on page 97).
2. Select the USERS module.
3. Click the username whose language you want to change.
4. Click User preferences, select the language, and click Save.
5. Click Save.

Email Notifications

If you plan to schedule reports for delivery to email, you must configure email notifications first.

1. Sign in to Ipswitch Analytics with a System Administrator account.
2. Go to the SETTINGS module and select the System tab.
3. Click Notifications.
4. Select the Enable Email Notifications checkbox.



5. Enter the following information:
   - Host Name: Host name or IP address of the SMTP server. This is the server that will deliver the outgoing email messages. For example: smtptest.ipswitch.com or 192.168.1.1.

- **Port**: 25 is the default.
- **Enable Authentication**: This box must be checked to allow email notifications.
- **Username** and **Password**: The login credentials for the SMTP server.
- **Enable STARTTLS**: STARTTLS is a popular protocol used to communicate with the SMTP server. Most modern SMTP servers support it because it can use the same port for encryption. If set, and a socket factory hasn't been specified, this enables the use of a MailSSLSocketFactory. When Enable STARTTLS is checked, enter values for the following:
  - **Hosts to trust for SSL connection**: Enter the host name or IP address of the hosts you want to trust. Wildcards are accepted ("*" will trust all hosts). Enter multiple hosts separated by spaces.
  - **Socket connection timeout in milliseconds**: 10,000 is the default timeout, but you may want to set this higher if you have a slow network.
  - **Socket I/O timeout in milliseconds**: 30,000 is the default timeout, but you may want to set this higher if you have a slow network.
- **Enable HTML email** (optional): Sends email notifications in HTML format. If unchecked, email will be sent in plain text only.
- **From email address**: Enter an email address from which notifications will be sent.

Note: Supported email clients are: Gmail, Microsoft Outlook and Apple Mail.

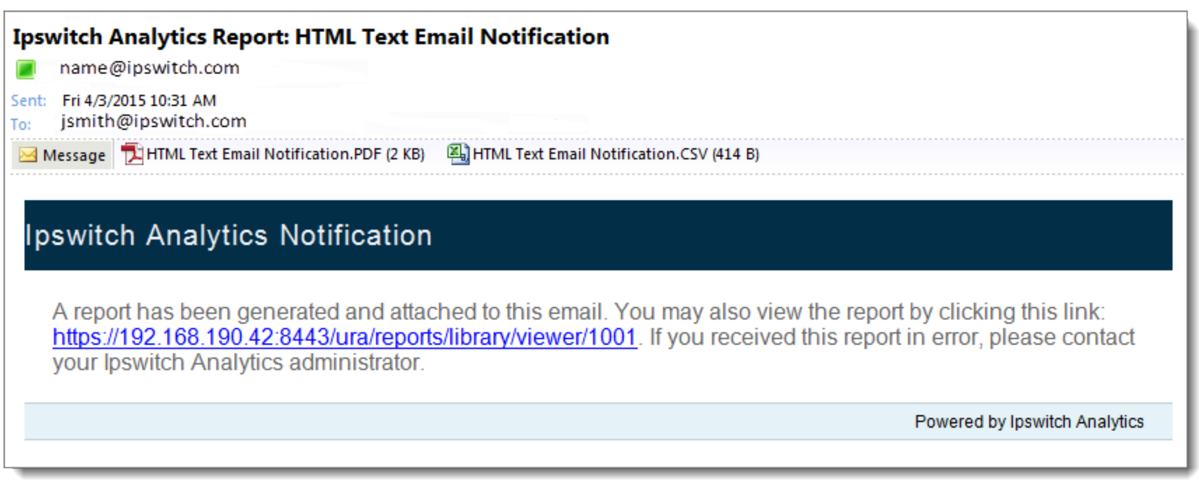
6 Click **Save**.

You can also click **Reset** to return to the original default Notifications settings.

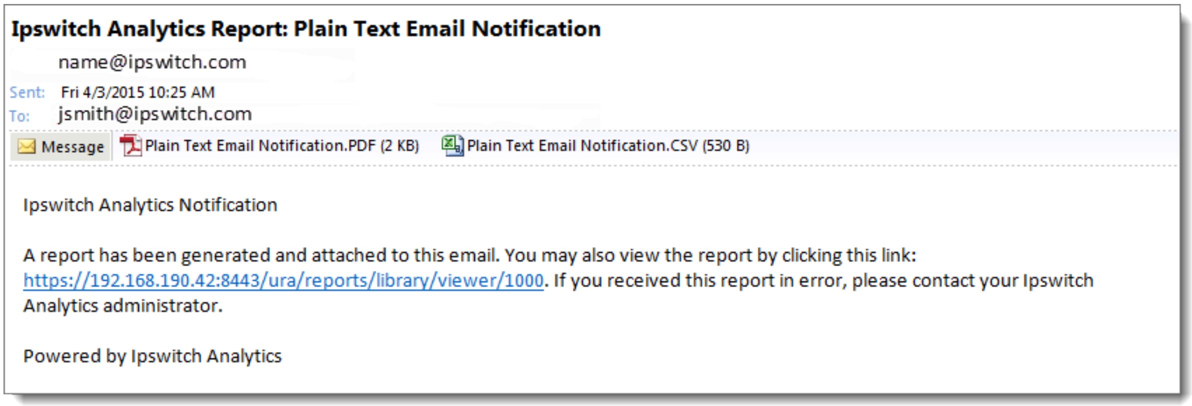
Note: If the Save button is not enabled, make sure you've completed all items in the prior step.

EMAIL SAMPLES:

HTML email:



Plain text email:



Ipswitch Analytics Report: Plain Text Email Notification

name@ipswitch.com

Sent: Fri 4/3/2015 10:25 AM

To: jsmith@ipswitch.com

Message | Plain Text Email Notification.PDF (2 KB) | Plain Text Email Notification.CSV (530 B)

Ipswitch Analytics Notification

A report has been generated and attached to this email. You may also view the report by clicking this link: https://192.168.190.42:8443/ura/reports/library/viewer/1000. If you received this report in error, please contact your Ipswitch Analytics administrator.

Powered by Ipswitch Analytics

Password Policy

The default user password policy requires that all Ipswitch Analytics user passwords:

- Be a minimum of eight characters
- Be a maximum of 20 characters
- Follow the **Sturdy** password policy: a password cannot be the username or a shorter version of it, cannot contain dictionary words, and must contain at least one numeric and one non-numeric character

To change the user password policy:

1. Sign in with a **System Administrator** user account.
2. Go to the **SETTINGS** module and select the **System** tab.
3. Select **Password Policy**. This screen shows the current user password policy.
4. Select a password policy from the list of built-in user password policies, with strengths from low to high:
   - **Very Tough**: Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric character, one non-numeric character, one special character (such as $ or !), and contain uppercase and lowercase letters.
   - **Tough**: Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric and one non-numeric character, and contain both uppercase and lowercase letters.
   - **Sturdy** (Default): Password cannot contain or be a short version of the username and cannot contain popular dictionary words. Password must contain at least one numeric and one non-numeric character.
   - **Minimal**: Password cannot contain or be short version of the username. Password must contain at least one numeric and one non-numeric character.
   - **Weak**: Password cannot contain or be short version of the username.
   - **Almost None**: Password cannot be the same as username.
5. For **User password minimum size**, enter the required minimum number of characters for the password
6. For **User password maximum size**, enter the maximum number of characters allowed for the password..

See also ***Security*** (on page 14) for more information on user password security measures in place with Ipswitch Analytics.

Licenses and Agents

You must sign in as System Administrator to manage licenses and agents.

About Ipswitch Analytics Licenses and Agents

Each Ipswitch Analytics agent must be associated with a license in order to collect data. During the Ipswitch Analytics installation process, you install the Ipswitch Analytics server, upload a license file, and install the Ipswitch Analytics agent. The first time the agent reports to the server, it takes an available license, and uses that license until you remove the license or remove the agent with which it is associated.

The Base license contains two agent licenses, each of which can be connected to either a MOVEit Automation server, a MOVEit Transfer server, or a Microsoft Exchange server. Additional licenses are specific to the MOVEit server type.

Ø *To view license and agent information:*

1. Click SETTINGS > Agents or Click Help > Licensing. The Agents page opens.
   In the upper right corner, Licenses (***nn***) lists the total number of licenses in your Ipswitch Analytics configuration, and the number of Available licenses. Available licenses have not been applied to a server.
2. For details about the licenses, click Licenses (***nn***).

Ø *To upload a license file:*

1. Click SETTINGS > Agents or Help > Licensing. The Agents page opens.
2. In the upper right corner, click Upload License. Browse to the license file, select it, and click Open.

Ø *To obtain a new license:*

§ See ***How to Buy*** (***http://www.ipswitchft.com/how-to-buy***).

Actions Available for Agents

Agent Action	What happens?
Enable/Disable	§ Enabled: Agent is connected and licensed. § Disabled: Agent is disconnected, and does not send data to the Ipswitch Analytics server. The license is still associated with the agent.
Remove License	Disables the license and disassociates (removes) the license from the agent. § The Ipswitch Analytics server stops receiving data from the agent. § The license becomes available for use with another agent.

Agent Action	What happens?
Clear Data	Removes from the Ipswitch Analytics server any existing data that was reported on the source system by this agent. The following options are available: § **Clear all existing report data.** Removes data from the Ipswitch Analytics server, starts collecting data from the source system from this time forward, and reports it to the Ipswitch Analytics server. § **Clear and reload all existing report data** (MOVEit servers only). Removes data from the Ipswitch Analytics server. Collects all data from the source system and reports it to the Ipswitch Analytics server. For both options, the agent remains enabled, and the license remains associated with the agent.
Remove Agent	Before you remove an agent, you must stop the remote agent services. **Note:** If you do not stop the services, then after the agent is removed and the data that it collected is cleared, the services will cause the agent to contact the server again, and the agent will start collecting data again. Removing an agent disconnects the agent and makes the agent unavailable to the Ipswitch Analytics server. All associated report data is also cleared. The license is available for use with another agent.

Troubleshoot

This section helps you solve problems you might encounter. You can also look in the log files to help resolve issues:

Agent log files are located on the Agent machine at c:\Program Files\Ipswitch\Analytics Agent\logs\agent.log.
Tomcat logs are located on the Ipswitch Analytics Server machine at c:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\logs.
Ipswitch Analytics Server logs are located on the Ipswitch Analytics Server machine at c:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\logs\ura.
PostgreSQL logs are located on the Ipswitch Analytics Server machine at c:\ProgramData\PGData\data\pg_log.

Category	Problem	Possible Causes
Sign in	User cannot sign in to the Ipswitch Analytics Server	Improper user credentials. The user entered an incorrect username and/or password. Usernames and passwords are case-sensitive. Check the caps lock key and try again.

Category	Problem	Possible Causes
Server Connection	User has connection failure when attempting to access the Ipswitch Analytics Server	§ The Ipswitch Analytics Server may be stopped or be in the process of restarting. § Internet connectivity may be down: The user's computer and/or the Ipswitch Analytics Server may have lost internet connectivity in general. § Ipswitch Analytics Server has a startup error, please check the server logs to investigate. § Ipswitch Postgresql Windows service is down
Upgrading	After upgrading a MOVEit server to a later version, the Ipswitch Analytics Agent installed on that server still reports the earlier MOVEit version.	On the MOVEit server, run the Install program and select Modify. The Modify program will detect the new MOVEit version number.
Monitor	MOVEit server shows a status of Unknown or Offline	§ The Ipswitch Analytics Agent may not have network access to the MOVEit database machine. § The Agent may not have network access to the Ipswitch Analytics Server. § The password that the Agent uses to access the MOVEit database may have expired. § The HTTPS port on the Agent machine may not be open. Ports must be open on both the Agent machine and the Ipswitch Analytics Server machine. § A firewall on the Ipswitch Analytics Server may be preventing the transfer of data from the Agent. § A firewall on the MOVEit database machine may be preventing the ability of the Agent to make a connection and gather data. § The Ipswitch Analytics Agent service may have stopped running. § Internet connectivity could be down in general for the Agent machine. § If the Agent machine is set to update Java automatically, you may need to manually restart the Ipswitch Analytics Agent service on the Agent machine. § The Agent's license may have expired.
Monitor	An Ipswitch Analytics Agent doesn't display in the dashboard	The Agent's connection to the Ipswitch Analytics Server may be refused because the Agent name may be a duplicate of another Agent name. Check the Agent log for information the connection refusal (c:\Program Files\Ipswitch\Analytics Agent\logs\agent.log). Check the Ipswitch Analytics Server log for the duplicate name (c:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\logs\ura).
Filter	Not all MOVEit servers, organizations or usernames display in the template Filter or in the ruleset Filter	§ If a MOVEit Administrator recently added or removed a MOVEit server, organization or user, Ipswitch Analytics users must sign out of Ipswitch Analytics and sign back in before seeing the changes. § The current user may not have permission to view certain servers, organizations or usernames.

Category	Problem	Possible Causes
Schedules	Scheduled reports sent to email address that include a link to a Library report won't open. The user sees "Unable to Connect" message.	Instruct the user to copy and paste the correct URL for the report server in place of the one in the link.
Schedules	Schedule sends email that contains a link to the Library but it requires Ipswitch Analytics sign in.	In order to click an email link to view the report in the Library, the email recipient must have an Ipswitch Analytics user account and use it to sign in first.
Reports	Report contains inaccurate information	§ Verify that the Ipswitch Analytics Agent is fully operational (see above). § Check Monitoring to confirm that the MOVEit databases are online and not showing failure. It is possible that a report's time range coincided with a brief period of time when one of the Agents failed to report. Once the Agent is back online, it will resend all missing data to fill in any missing time periods, and all further reports will be accurate. § It's a good idea to check the Monitor daily to verify that all Agents are online (sending data to the Ipswitch Analytics Server). § The Ipswitch Analytics administrator should receive notification of MOVEit database failures and alert Ipswitch Analytics users that reports will not contain data from that MOVEit database temporarily until the problem is resolved.
Templates	Templates take a long time to run	You may need to upgrade the RAM on the Ipswitch Analytics Server machine. See Hardware Requirements.
Display	Clicking Library, Templates or Schedules shows a blank page	Session has timed out. Sign out and sign in again.

How Do I...

Remove Ipswitch Analytics Server data for past 3-15 months?

The Ipswitch Analytics Server automatically purges data after 15 months. To purge the data before 15 months, you must ***remove the Ipswitch Analytics Server*** (on page 57)and then ***reinstall*** (on page 18) the Ipswitch Analytics Server.

Change the HTTPS port numbers used by an Ipswitch Analytics Agent machine to connect with the Ipswitch Analytics Server machine and/or the MOVEit database machine?

Modify the Ipswitch Analytics Agent (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28636.htm***) installation and update the port numbers.

Update the username or password that an Ipswitch Analytics Agent uses to authenticate with a MOVEit database?

Go to the Users module, locate the user with the role of Ipswitch Analytics Agent and change that user's password. This user's name will be whatever name was entered during installation for the Agent user. Then you must ***modify the Agent*** (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28636.htm***) to change the Agent Access Username name within the install.

Change the name of a MOVEit system as shown within Ipswitch Analytics?

Modify an Ipswitch Analytics Agent Installation (on page 52, ***https://docs.ipswitch.com/MOVEit/Analytics2.1/Help/Admin/en/index.htm#28636.htm***) and on the Analytics Agent Settings dialog, enter a new name for the Agent.

Remove an Ipswitch Analytics Agent from tracking a MOVEit system, or use an Ipswitch Analytics Agent license for a different MOVEit system?

Remove the existing Agent (on page 59) or ***Disconnect the Agent from the MOVEit Server*** (on page 114).

Move my Ipswitch Analytics Server to a different machine?

See ***Remove and Reinstall the Ipswitch Analytics Server*** (on page 58)

Add a MOVEit system to Ipswitch Analytics?

Ipswitch Analytics comes with two Agent licenses initially. If you have already used both Agent licenses and want to purchase another license, see ***How to Buy*** (***http://www.ipswitchft.com/how-to-buy***), then ***Install an Ipswitch Analytics Agent*** (on page 22).

Add users to Ipswitch Analytics?

Go to the ***Users*** (on page 95) module and click ***Add User*** (on page 97).

Control what MOVEit data display in reports?

See ***Report Data Sources*** (on page 107).

Prevent a user from creating templates, running reports, and scheduling reports?

In the ***Users*** (on page 95) module, click the user's name, and for Role, choose either Partner or Reader.

Prevent a user from seeing the Monitor?

In the ***Users*** (on page 95) module, click the user's name, and for Role, choose Partner.

Prevent a user from viewing the Users module?

In the ***Users*** (on page 95) module, click the user's name, and for Role, choose Partner or Reader. Creators have read-only access to the Users module.

Prevent a user from seeing the Admin module?

In the ***Users*** (on page 95) module, click the user's name, and for Role, choose Partner, Reader, or Creator. Administrators can view only the ***Rulesets*** (on page 109) tab in the Admin module.

Restrict access to a Library report so that only certain users can see it?

Select the report in the Library, click Edit Properties, and then grant access to individual users or user groups.

Prevent a user from seeing User Audit and Security reports in Templates and Library?

In the ***Users*** (on page 95) module, click the user's name, and for Role, choose Partner, Reader or Creator.

Prevent a user from viewing and running a specific template?

To prevent a user from seeing any templates, assign the role of Partner or Reader. Only Creators and higher can view and run templates in the ***Templates*** (on page 159) tab and select templates to schedule in the ***Schedule*** (on page 169) tab.

Templates are either *public* (viewable by all users who have the role of Creator or higher) or *private* (viewable by the template creator only). The template creator decides to make a custom template public or private during template creation, or by editing the custom template afterwards. After a template is made public, it cannot be changed back to private.

- All stock templates that come with Ipswitch Analytics are public.
- Custom templates that user create can be either public or private.

Track user activity on the Ipswitch Analytics Server?

Administrators and System Administrators can create ***User Audit*** (on page 226) and ***Security*** (on page 231) reports that show detailed user activity on the Ipswitch Analytics Server.

Take an Ipswitch Analytics Agent offline?

On the Agent machine, open Windows Services, right-click Ipswitch Analytics Agent, and select Stop.

Verify that all Ipswitch Analytics Agents are up and running for maximum uptime performance?

Check the Monitor Dashboard. If an Agent is not sending data to the Ipswitch Analytics Server, it appears as offline or unknown.

View Ipswitch Analytics log files?

- To view the Agent log file: go to the machine on which you installed the Ipswitch Analytics Agent and open C:\Program Files\Ipswitch\Analytics Agent\logs\agent.log. The log file can help you verify that the Agent is receiving data from the MOVEit database and sending it to the Ipswitch Analytics Server.
- To view the Tomcat log file: go to C:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\logs.
- To view the Ipswitch Analytics Server log file: go to C:\Program Files\Ipswitch\Analytics Server\apache-tomcat-7\logs\ura.

Back up the Ipswitch Analytics Server database?

Recommended: use standard hard drive mirroring software to back up the Ipswitch Analytics Server database to protect against hardware failure.

Remove data from the Ipswitch Analytics server database

You can remove data that was pulled by a specific agent. For more information, see ***Licenses and Agents*** (on page 114).

Manage the private templates that users create?

Users who have access to the Templates tab can create custom templates that are private and hidden from view. Only System Administrators can see, manage, and delete private templates. The template creator must grant access to other users and/or user groups to make it public.

Enable email notifications on Ipswitch Analytics?

A System Administrator must set the proper ***email notifications*** (on page 111).

Change the password policy for Ipswitch Analytics users?

A System Administrator can change the ***password policy*** (on page 113) in the SETTINGS module.

Improving System Performance

Disk Performance

Analytics Server extensively accesses data stored on disk to perform data ingestion, reporting and analysis. A good performance from the disk subsystem is crucial to the overall health of the application.

While the documented minimum disk performance must be met, investing in a better disk subsystem would further improve the data throughput and application responsiveness.

IOPS

To tune the disk performance for Analytics Server, the effort should be focused on improving Input/Output Operations per Second (IOPS).

The following are the main factors that can impact IOPS:

§ Multidisk Arrays
§ Average IOPS per drive
§ RAID Factor
§ Read and Write Workload

Measure and Tune Disk Performance

Microsoft has a utility called Diskspd that can be used to quickly measure the disk subsystem performance. It can be downloaded from ***Microsoft Technet https://gallery.technet.microsoft.com/DiskSpd-a-robust-storage-6cd2f223***. .

Download the zip file and extract the files to the target system where Ipswitch Analytics Server will be installed. Then use the command line listed below to:

1 Set the block size to 8K
2 Run the test for 60 seconds.
3 Disable all hardware and software caching, leverage 2 overlapped IOs and 4 threads per target, random 30% writes and 70% reads and create a 10GB test file at c:\io.dat.

In the sample output below, pay attention to the values of columns **`I/O per s, MB/s`** and "**`AvgLat`**. They collectively represent the performance of the disk. Specifically, if the total IOPS (**`I/O per s`** column) is lower than the expected value, you must either tune your disk configurations or replace with better physical hardware.

Note: There could be additional caching in some virtual environments. To prevent the results from being skewed by I/O caching, the size of the test file must be large enough. Depending how much free disk space you have, you might want to try different sizes with **`-c`** option, starting from 10GB and then incrementing by 10GB for each additional test, and capture the screen output for each run. Remember to delete the test file c:\io.dat at the end to free up the disk space.

Command Line (amd64fre\diskspd.exe):

`diskspd.exe -b8K -d60 -Sh -L -o2 -t4 -r -w30 -c10G c:\io.dat`

Sample Output

The following is a sample output for 20G workload file, with a relatively slow hard disk, IOPS for SSD drives will be much higher. The total **`I/O per s`** is 314.25 for **`Total IO`**, and the average latency (**`AvgLat`**) is 25.864.

```
Command Line: diskspd.exe -b8k -d60 -Sh -L -o2 -t4 -r -w30 -c20G c:\io.dat
Input parameters:
        timespan:   1
        -------------
        duration: 60s
        warm up time: 5s
        cool down time: 0s
        measuring latency
        random seed: 0
        path: 'c:\io.dat'
                think time: 0ms
                burst size: 0
                software cache disabled
                hardware write cache disabled, writethrough on
                performing mix test (read/write ratio: 70/30)
                block size: 8192
                using random I/O (alignment: 8192)
                number of outstanding I/O operations: 2
                thread stride size: 0
                threads per file: 4
                using I/O Completion Ports
                IO priority: normal
Results for timespan 1:
*******************************************************************************
actual test time:       60.01s
thread count:           4
proc count:             4
CPU |  Usage |  User  |  Kernel |  Idle
-------------------------------------------
   0|  98.84%|   2.45%|   96.40%|   1.17%
   1|  97.67%|   1.15%|   96.53%|   2.40%
   2|  98.32%|   1.56%|   96.76%|   1.74%
   3|  98.37%|   1.30%|   97.07%|   1.69%
-------------------------------------------
avg.|  98.30%|   1.61%|   96.69%|   1.75%
Total IO
thread |       bytes     |     I/Os     |     MB/s   |  I/O per s |  AvgLat  | LatStdDev |  file
---------------------------------------------------------------------------------------------------
----
     0 |        37060608 |         4524 |       0.59 |      75.39 |   26.385 |   27.878 | c:\io.dat
(20GB)
```

```
     1 |        38715392 |         4726 |       0.62 |      78.76 |   25.285 |  26.946 | c:\io.dat
(20GB)
     2 |        39542784 |         4827 |       0.63 |      80.44 |   24.704 |  25.889 | c:\io.dat
(20GB)
     3 |        39157760 |         4780 |       0.62 |      79.66 |   24.999 |  26.461 | c:\io.dat
(20GB)
-------------------------------------------------------------------------------------------------
----
total:         154476544 |        18857 |       2.46 |     314.25 |   25.328 |  26.793
Read IO
thread |       bytes     |     I/Os     |     MB/s   |  I/O per s |  AvgLat  | LatStdDev |  file
-------------------------------------------------------------------------------------------------
----
     0 |        26075136 |         3183 |       0.41 |      53.04 |   25.090 |  27.321 | c:\io.dat
(20GB)
     1 |        26902528 |         3284 |       0.43 |      54.73 |   23.654 |  25.688 | c:\io.dat
(20GB)
     2 |        28024832 |         3421 |       0.45 |      57.01 |   23.621 |  25.272 | c:\io.dat
(20GB)
     3 |        27377664 |         3342 |       0.44 |      55.69 |   23.151 |  23.991 | c:\io.dat
(20GB)
-------------------------------------------------------------------------------------------------
----
total:         108380160 |        13230 |       1.72 |     220.48 |   23.864 |  25.582
Write IO
thread |       bytes     |     I/Os     |     MB/s   |  I/O per s |  AvgLat  | LatStdDev |  file
-------------------------------------------------------------------------------------------------
----
     0 |        10985472 |         1341 |       0.17 |      22.35 |   29.459 |  28.927 | c:\io.dat
(20GB)
     1 |        11812864 |         1442 |       0.19 |      24.03 |   29.000 |  29.274 | c:\io.dat
(20GB)
     2 |        11517952 |         1406 |       0.18 |      23.43 |   27.339 |  27.152 | c:\io.dat
(20GB)
     3 |        11780096 |         1438 |       0.19 |      23.96 |   29.294 |  31.038 | c:\io.dat
(20GB)
-------------------------------------------------------------------------------------------------
----
total:          46096384 |         5627 |       0.73 |      93.77 |   28.770 |  29.157

  %-ile |  Read (ms) | Write (ms) | Total (ms)
----------------------------------------------
    min |      0.279 |      0.448 |      0.279
   25th |     11.928 |     14.880 |     12.685
   50th |     18.962 |     23.046 |     20.092
   75th |     27.768 |     33.176 |     29.308
   90th |     38.372 |     44.770 |     40.827
   95th |     49.850 |     58.433 |     52.565
   99th |    163.746 |    182.827 |    170.291
3-nines |    248.696 |    265.721 |    251.552
4-nines |    276.149 |    278.435 |    277.200
5-nines |    277.200 |    278.435 |    278.435
6-nines |    277.200 |    278.435 |    278.435
7-nines |    277.200 |    278.435 |    278.435
8-nines |    277.200 |    278.435 |    278.435
9-nines |    277.200 |    278.435 |    278.435
    max |    277.200 |    278.435 |    278.435
```

Memory

Memory sizes must be configured properly for Analytics Server to perform well. Analytics Server encompasses two main processes, Tomcat and PostgreSQL. Both consume RAM that is configured separately. The installer calculates the configuration values and applies them automatically during the initial installation or subsequent upgrades.

If more RAM is added between upgrades, manual adjustments must be made in order to configure Analytics Server services to effectively leverage the added capacity.

For Tomcat

The Analytics Server JVM memory settings are set by the Analytics Server Installer at installation time.

The JVM settings for Tomcat are stored in the Windows Registry under

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Apache Software Foundation\Procrun 2.0\IpswitchAS\Parameters.

The following parameters are related to memory allocations:

§ JvmMs – minimum memory, always set to 512 (i.e. 512MB)

§ JvmMx – maximum memory. This sets the maximum amount of memory that the JVM running the Analytics Server application can claim.

Use the following rules to calculate the proper value for JvmMx.

§ For Analytics Servers with OVER 4G of system memory, the Installer must set the JVM Max Heap configuration value to 50% of the system memory.

§ For Analytics Servers with 4G of system memory the Installer must set the JVM Max Heap configuration value to 37.5% of the system memory (half way between 25% and 50%).

Examples:

§ 4G (4096M) system memory should have JVM max heap set to 1.5G (1536M), using value 1536.

§ 8G (8192M) system memory should have JVM max heap set to 4G (4096M), using value 4096.

§ 16G (16384M) system memory should have JVM max heap set to 8G (8192M), using value 8192.

§ 32G (32768M) system memory should have JVM max heap set to 16G (16384M), using value 16384.

For PostgreSQL

The values are determined in relation to the system memory on the server.

Make the following changes in **`postgresql.conf`**, which is located under PostgreSQL's data directory. A server restart is needed for the change to take effect.

§ For systems with OVER 4G of memory change the **`effective_cache_size`** value calculation from 62.5% to 40% of system memory.

§ For systems with 4G of memory change the **`effective_cache_size`** value calculation from 62.5% to 25% of system memory.

Data Acquisition Volume

Data Acquisition Throttling

A Data Acquisition Throttling mechanism has been introduced in V2.1 to limit the data acquisition data volume to ensure the overall balance of system resource usage.

The default property values for throttling works well for common system configurations. However, for a larger system, if more CPU cores (more than 8, for example) are allocated to boost the system performance, the throttling property values will need to be adjusted to allow more data throughput for data acquisition, therefore more agents can be supported.

For example, double the values as shown below for a 16-core system in config.properties. A rule of thumb is to make the values of corePoolSize and maxPoolSize equal, and set queueCapacity to half of the value of corePoolSize. An Analytics server restart is required for the changed value to take effect.

```
ura.appsettings.dataAcquisitionSettings.executor.corePoolSize=20
ura.appsettings.dataAcquisitionSettings.executor.maxPoolSize=20
ura.appsettings.dataAcquisitionSettings.executor.queueCapacity=10
```

Analytics Agent Data Feed Volume

There are a number of properties in **`agent.properties`** that can be adjusted to change the volume of the data transmitted from Analytics Agent to the Analytics Server.

Consider reducing the data chunk size and/or increasing the cycle intervals to lower the data feed volume from a particular agent, for a slow Analytics Server. The Analytics Agent service must be restarted for the changes to take effect.

Note: If the Analytics Server is slow or under configured, tune the Analytics Server first before tuning the agent. A well-equipped Analytics Server is required for the entire system to run properly.

```
observing.system.ftoperation.period.sec=180
observing.system.workflow.period.sec=180
observing.system.useraudit.period.sec=180
```

Use

```
observing.system.history.data.chunk.size=2500
```

To use Ipswitch Analytics, you must connect to the Internet using a ***supported browser https://docs.ipswitch.com/MOVEit/Analytics2.1/ReleaseNotes/en/index.htm#29484.htm***.

In this section:

Modules (on page 3): Describes the main work areas of Ipswitch Analytics.

Sign In (on page 133)

Quick Tour (on page 134): Take a quick tour the interface to help you learn how to get up and running with minimal delay. Familiarize yourself with the main work areas and learn how use the most common features.

Reports (on page 157): Learn how to create templates, view reports in the Library, and schedule reports for delivery.

Monitor (on page 179): Learn how to use the Monitor to check the current health of your MOVEit system and isolate areas of concern, such as failed transfers or tasks, and reduced throughput.

How Do I... (on page 190): Quickly locate what you want to do from a list of common tasks.

Modules

Ipswitch Analytics includes the following modules. User roles control access to each module.

MONITOR (on page 146)
The MONITOR is a colorful chart that shows a high-level summary activity on your MOVEit server(s) for the past 72 hours, updating every 60 seconds to refresh with new data. Charted performance metrics include successful and failed uploads, downloads, tasks, and transfer size. A dashboard also shows the reporting status of all of Ipswitch Analytics Agents that collect data from your MOVEit database(s). Use the Monitor to track current server usage and status, detect short-term transfer and processing trends, discover and manage system issues as they arise, diagnose system health, and isolate failures. The Monitor will show you timely and actionable information for real-time response to system issues so you can focus quickly on trouble spots to catch and respond to problems before they get out of hand.

REPORTS (on page 134)

The REPORTS module includes three work areas:

§ Library (on page 136): The Library tab contains all saved reports. It will be empty initially. A report is a template that has been populated with actual data captured from one or more MOVEit server(s) over a specific time range. Reports can show a high-level summary of data, or details of individual transactions. The contents of a report are static and unalterable; a report represents a snapshot in time of activity on your MOVEit system(s). You cannot change the data fields that display in a report, or the MOVEit source included in the data set, but users with sufficient role privileges may edit a report's properties to share it with other users and groups. You can also export a report as a PDF or CSV file from the Library. Users with the role of Creator (or higher) can add a report to the Library by either running a template and saving the resulting report to the Library, or by creating a schedule to deliver the report automatically to the Library.

§ Templates (on page 138): A template describes the content and layout of a report, but does not include any actual data. Ipswitch Analytics includes pre-configured stock templates that cover many commonly required reporting areas. You can also use the Template Editor to create custom templates from scratch that contain the exact fields, field placement, and Server/Org/User filters that you require. Run a report to populate a template with up-to-the-minute data from your MOVEit system(s), then optionally save the report to the Library for later viewing, or export it to PDF or CSV.

§ Schedule (on page 143): Create a schedule to automate the creation and delivery of reports to the Library, to specific Ipswitch Analytics users and groups, or to email recipients. Set a schedule to occur one time, or on a recurring basis.

USERS (on page 95)
The Users module is where administrators add and manage Ipswitch Analytics users and user groups.

SETTINGS (on page 110)
The SETTINGS module is where System Administrators configure ***rulesets*** (on page 109), ***email notifications*** (on page 111), ***global password policy*** (on page 113), preferred language, and ***licensing*** (on page 114).

CHAPTER 1

Sign In

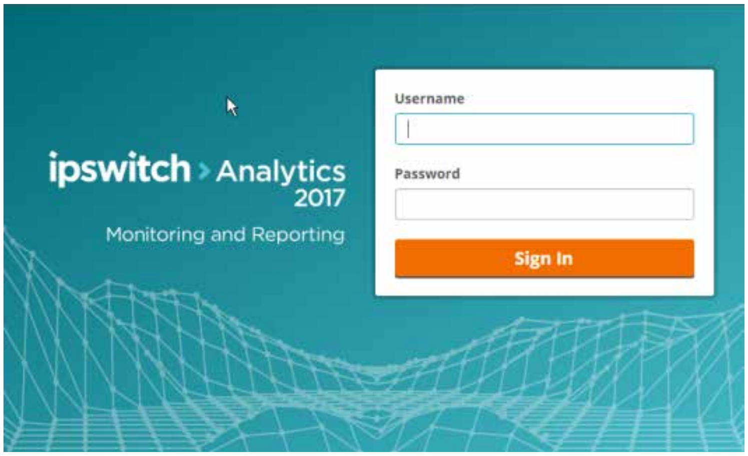
This section introduces you to the main work areas in Ipswitch Analytics and shows you how to get up and running as quickly as possible.

Before you begin, make sure you are connected to the internet and using a supported browser, and obtain the following information from your administrator:

§ **The Ipswitch Analytics Server IP address or hostname** (for example, https://CompanyABC.company.com or https://192.0.0.255)

§ **Your Ipswitch Analytics user name and password**

To sign in to the Ipswitch Analytics Server, open a web browser and enter the Ipswitch Analytics server IP address or hostname. The sign in screen opens:

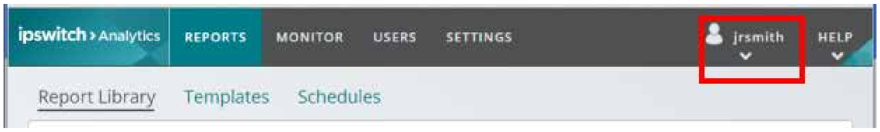


Enter your Ipswitch Analytics **Username** and **Password**, then click **Sign In**.

Note: If your Ipswitch Analytics user account is invalid or disabled, the message "Invalid username or password" appears. Contact your administrator.

Note: If your Ipswitch Analytics password is invalid or disabled, you will be prompted to enter a new password before you can sign in.

After you sign in, your username appears on the right side of the navigation bar. You can click on your username to change your password, or to sign out:



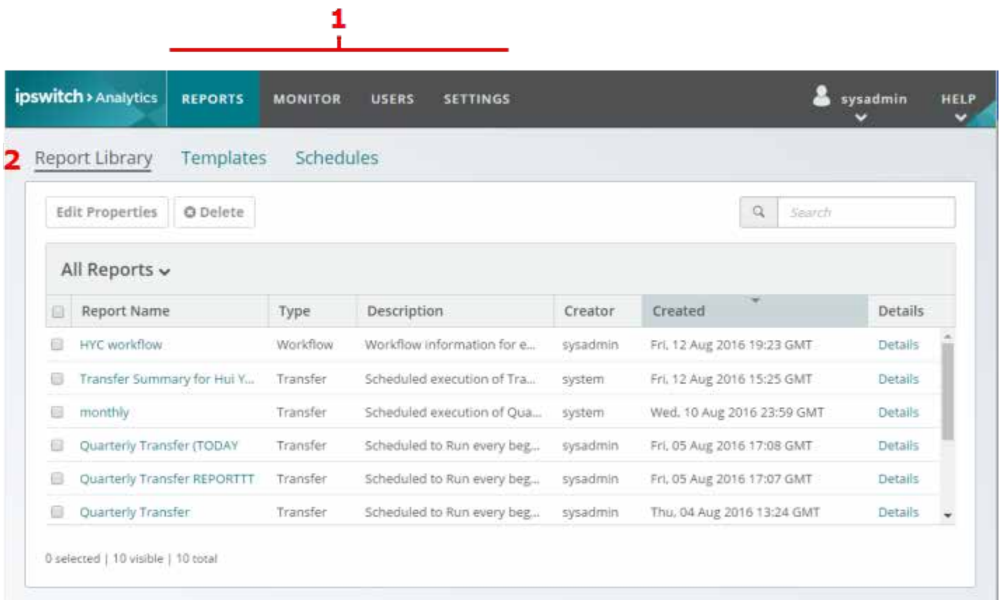
To access the Ipswitch Analytics help system, select **help > User Guide** or **Administrator Guide**.

You can also **Contact sales**, **Contact support** and learn more about MOVEit and Ipswitch Analytics from the about menu.

Next, take a ***quick tour*** (on page 134) of the interface.

Quick Tour

Ipswitch Analytics contains four modules that display at the top of the screen. Select a module to open it within the main workspace. Some modules contain tabs that organize features within the module, such as the **Library** tab beneath the **Reports** module:



Note: The modules that appear on your screen depend on your user permissions.

When you first ***sign in*** (on page 133), Ipswitch Analytics opens to either the **Monitor** module or the **Reports** module. For a quick tour of each module, click the following links:

Reports (on page 134)
Monitor (on page 146)

Reports Tour

The **Reports** module includes the following work areas:

Report Library (on page 136)

The Library tab contains all saved reports. It will be empty initially. A report is a template that has been populated with actual data captured from one or more MOVEit server(s) over a specific time range. Reports can show a high-level summary of data, or details of individual transactions. The contents of a report are static and unalterable; a report represents a snapshot in time of activity on your MOVEit system(s). You cannot change the data fields that display in a report, or the MOVEit source included in the data set, but users with sufficient role privileges may edit a report's properties to share it with other users and groups. You can also export a report as a PDF or CSV file from the Library. Users with the role of Creator (or higher) can add a report to the Library by either running a template and saving the resulting report to the Library, or by creating a schedule to deliver the report automatically to the Library.

Templates (on page 138)

A template describes the content and layout of a report, but does not include any actual data. Ipswitch Analytics includes pre-configured stock templates that cover many commonly required reporting areas. You can also use the Template Editor to create custom templates from scratch that contain the exact fields, field placement, and Server/Org/User filters that you require. Run a report to populate a template with up-to-the-minute data from your MOVEit system(s), then optionally save the report to the Library for later viewing, or export it to PDF or CSV.

Schedule (on page 143)

Create a schedule to automate the creation and delivery of reports to the Library, to specific Ipswitch Analytics users and groups, or to email recipients. Set a schedule to occur one time, or on a recurring basis.

Report Library Tour

The **Library** is a repository of saved reports that you can view within the Ipswitch Analytics interface, export and analyze. A report contains actual data captured from one or more MOVEit servers over a specific period of time.

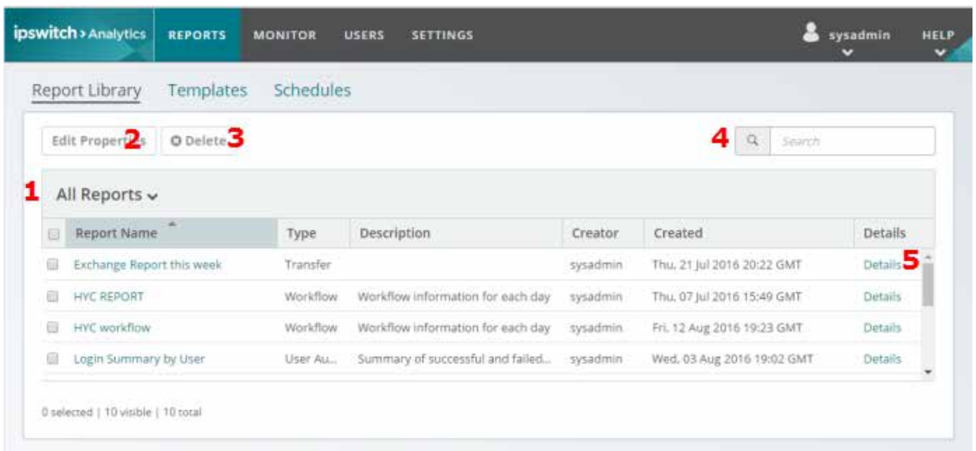
Reports arrive in the Library two ways:

§ Run a template in the ***Template Editor*** (on page 139) then save the report to the Library

§ Create a ***schedule*** (on page 143) to deliver the report to the Library

The **Library** tab contains list of all Library reports to which you have been granted access. The Library tab contains each report's name, type, description, creator, and details. Initially the list is empty.

In the figure, numbers designate areas on the screen that are described in the following table.

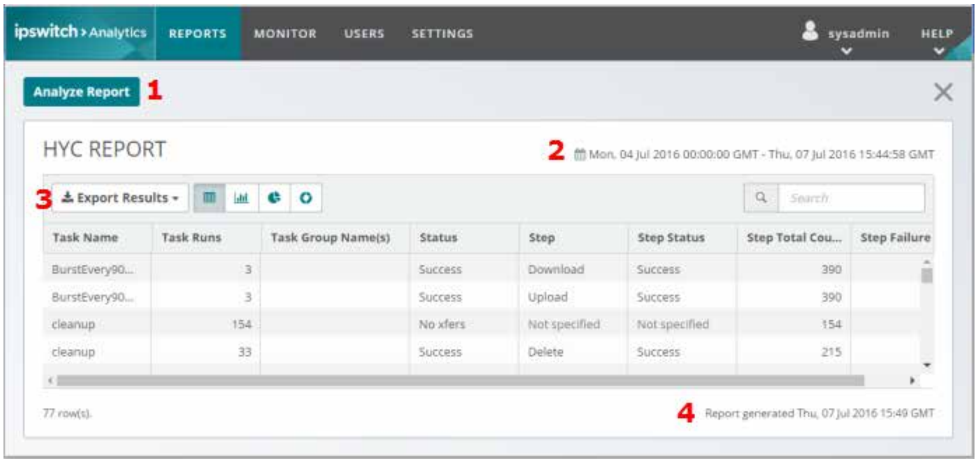


The tasks that you can perform depend on your user role and permissions.

	Area/Item	More Info
1	Filter	Filter Library reports by report type, such as Transfer or Workflow reports.
2	Edit Properties	Select a report row in the list, then click Edit Properties to change the report name, description, and user/group access
3	Delete	Select a report row, then click Delete to remove it from the Library.
4	Search	Searches the Report Name, Type, and Description fields of the library reports.
5	Details	View information such as when the report was most recently updated, and who updated it.

To view a report, click the report name. The report opens.

In the figure, numbers designate areas on the screen that are described in the following table.

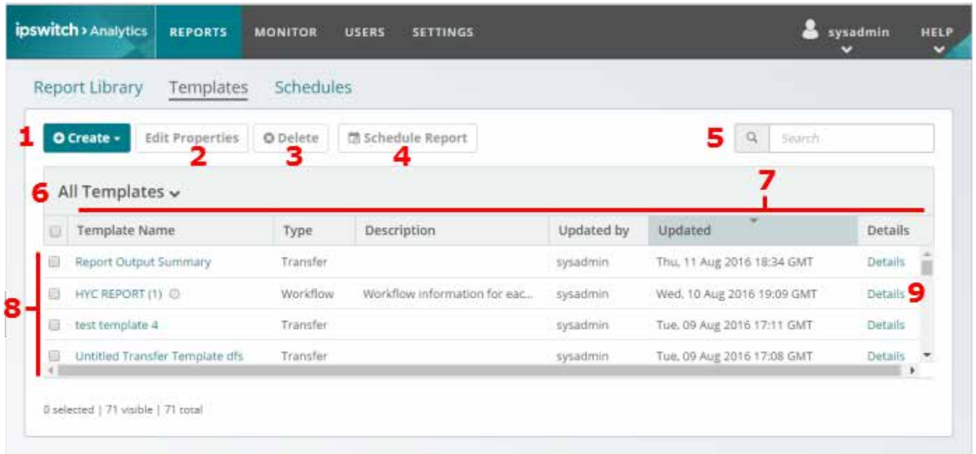


	Area/Item	More Info
1	Analyze report	Opens the report's underlying template in the Template Editor so you can view and modify its fields and filters.
2	Time range	Time range of the report.
3	Export options	Download the report as a PDF or CSV file.
4	Report creation date	Date and time that the report was created.

The following topics describe how to manage Library reports in greater detail:

View and Manage Library Reports (on page 175)
Edit a Library Report's Name and Description (on page 177)
Control Access to a Library Report (on page 177)
Export a Library Report (on page 177)
Delete a Library Report (on page 178)

Templates Tour



Ipswitch Analytics comes with a number of stock templates that you can start using right away to create reports. You can also create your own custom templates.

When you first enter the **Templates** tab, the screen contains a list of all templates. Initially the list contains only stock templates that are visible to all users who have access to Templates. As you create your own templates they appear in the list also.

Numbers in the figure identify areas on the screen, which are described in the following table

	Area/Item	More Info
1	Create	Creates a custom template. Click and select the template type. To create a custom template from an existing template, select a template in the list (8), make changes, and save to a new template name. If you create a custom template, it is visible in the list only to you until you publish it.
2	Edit Properties	To change a custom template's name or description, or publish the template to all users, select the template row and click Edit Properties.
3	Delete	To delete a custom template, select its checkbox and click **Delete**.
4	Schedule Report	To schedule a template to deliver a report to the Library or other recipients in the future, select the template row, then click Schedule Report.
5	Search	Search for a template name.
6	All Templates	To show only one template type in the list, select from the drop-down list of template types.
7	Column Headings	To sort by the column value, click the column heading. To rearrange columns, click and drag the column heading.
8	List of all templates	To open the template in the Template Editor, click the template name.
9	Details	Click Details to see the template's privacy, read-only setting, and creation data.

You cannot rename or delete any of the stock templates, but you can open a stock template in the Template Editor, modify it and then save your changes as new template.

Note: When you create a custom template, it is visible in this list to only you and your administrators until you publish it.

The following topics describe in detail how to manage templates in this master list and use the features on this page. The next part of the tour looks inside the **Template Editor**, where you create and modify the building blocks of a template.

Click any stock template name in the list, then ***Tour the Template Editor*** (on page 139).

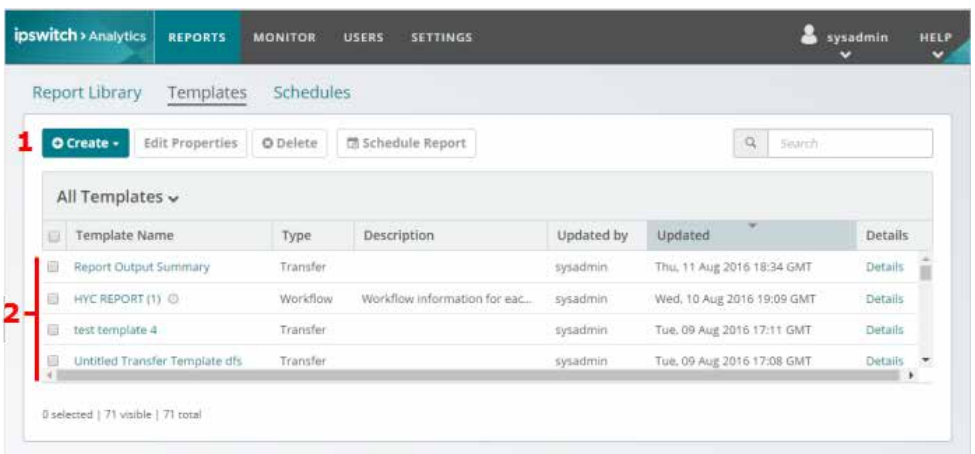
Template Editor Tour

The Template Editor is where you add fields to the template, decide the ordering of the field columns, and optionally add a filter to limit the MOVEit sources that will contribute data to the eventual report. You can also run the template to produce a report that contains actual MOVEit data, and then save the report to the Library or save it as a PDF or CSV file.

To open the Template editor:

§ Go to **REPORTS > Templates.**

In the figure, numbers designate areas on the screen that are described in the following table.

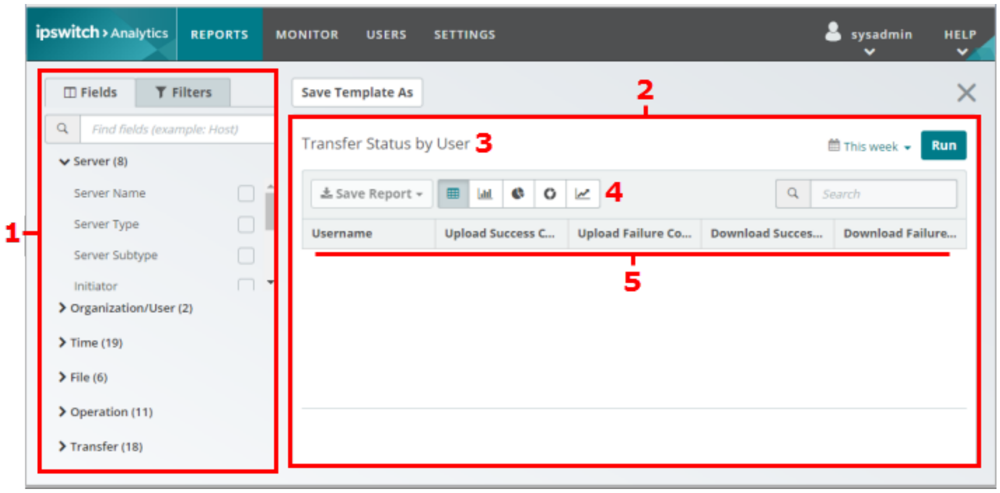


	Area/Item	More Info
1	Create	Create a new custom template. Click and select a ***template type*** (on page 157). A blank template opens in the Template Editor.
2	Template name	In the list, click a template name. The template opens in the Template Editor.

Tip: Users with sufficient privileges can also open the Template Editor from the Library by clicking **Analyze Report**.

THE TEMPLATE EDITOR

In the figure, numbers designate areas on the screen that are described in the following table.



	Area/Item	More Info
1	Palette - Fields tab	Area where you select the data fields to include in the template The **Fields** palette contains fields associated with the ***template type*** (on page 157) you selected, organized by field type. § Click a field type to show or hide the fields beneath it. You can show fields for one field type at a time. § Click a field to see a description of the type of data that the field will display in a report. Each field that you click in the palette appears as a column header in the canvas.
	Palette - Filter tab (not selected in the figure)	Area where you optionally filter data by MOVEit sources.
2	Canvas	The main workspace that contains all of the template's data fields, placed as column headers. New templates do not contain any fields.
3	Template Name	One template at a time is shown in the canvas.
4	Data Visualization Options	Icons for ***configuring a line chart, bar chart, donut chart, and/or pie chart*** (on page 164) as part of the template.
5	Template Fields	Fields that you added to the template (by clicking a field name in the palette). You can rearrange the column order by clicking and dragging.

DISPLAYING DETAILED OR SUMMARY FIELDS IN THE PALETTE

A field can contain either **Detailed** information about a single transfer, process, or action, or **Summary** information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. The **Field** palette can display only one of these field output types at a time; Summary fields display in the palette by default. Use the **Report Output** selector to change the type of fields that display in the palette:

When creating a NEW template, you can opt to display summary or detailed fields in the palette.

- **Detailed:** Displays fields that capture a datum of information about an individual transaction (a single transfer, process, or action).
- **Summary:** Displays fields that aggregate multiple detailed fields to summarize data at a high level.

To make your selection, use the **Report Output** selector located in the upper right corner of the template editor.

Note: Many fields will display regardless of your selection. Only those fields that are specifically Summary vs Detailed will be affected by the **Report Output** selector.

Warning: You will lose all fields that you have already added to the template if you change the **Report Output**.

Tip: Summary fields reduce the number of rows in the report, which is useful if you want to reduce report results to a manageable length.

ADDING, REMOVING, AND REORDERING FIELDS IN A TEMPLATE

- **To add a field:** In the palette, click the plus sign (**+**) next to the field name.
- **To remove a field:** In the palette, click the minus sign (**–**) next to the field, or in the canvas, click the **X** next to the field heading.
- **To reorder fields:** In the canvas, click a field and drag it to a new position.

ADDING DATA VISUALIZATIONS TO A TEMPLATE

- **To add a chart:** Click the icon for the chart type. Make selections for the data to include in the chart.

  You can add one of each chart type to the template: line chart, bar chart, donut chart, pie chart. For more information, see ***Add Data Visualizations*** (on page 164).

FILTERING A TEMPLATE

Use filters to include data only from specific MOVEit servers, organizations or usernames, Reports that you generate with the template include data only from the sources you select.

Note: This section includes a brief description of filters. For more information, see ***Using the Filter Palette*** (on page 193).

1 Click the Palette's **Filters** tab.

2 In the **Filter** drop-down menu, select the type of MOVEit source you want to view: **Servers**, **Organizations** or **Usernames**.

MOVEit sources are nested. A server contains organizations; organizations contain usernames. You can filter only one level above the current filter type. For example, you cannot filter usernames by specific servers.

In the palette, a source list appears, reflecting your selection.

- **To locate a specific item in the list**, use the Search box. The asterisk (*) wildcard is accepted.
- **To narrow the list** so it displays only items from specific organizations, click **All Organization(s)**, select the organizations to include, and click **OK**.

After you have customized the source list to your satisfaction, optionally select the checkboxes for individual source items to include in the template.

SAVE AND CLOSE A TEMPLATE

A template must contain at least one field before you can save it.

1 Click **Save template as.** The Save Template dialog box opens.

2 Provide the following information:

- **Template name**
- **Description** (optional)
- **Publish to all users** checkbox: When checked, allows all users who have access to Templates to view your custom template.

RUNNING A TEMPLATE

A template must contain at least one field before you can run it.

Tip: To avoid lengthy report processing times, narrow the filters. For example, select only two servers instead of all servers, or select specific users instead of all users.

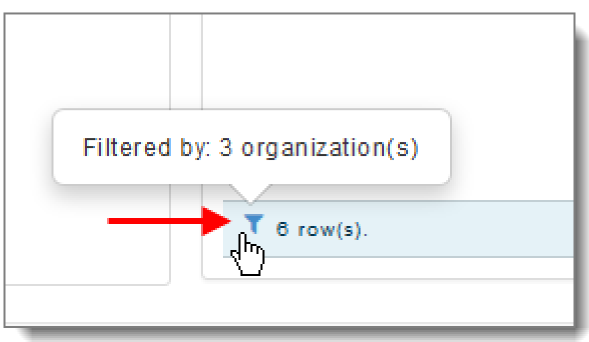
---

1 In the upper right corner of the canvas, select a **time range** from the drop-down option.

2 Click **Run.**

The template fields are populated with data from the MOVEit sources you selected in the Filter.

If the template filters by MOVEit source, a blue filter icon appears at the bottom left of the report. Click on the icon to see the filter settings.



To sort data in a column in ascending or descending order, click any column heading in the report. Arrows indicate sort direction.

SAVING A REPORT

After the template populates with data, it becomes a report that you can then save to the ***Library*** (on page 175), or export.

§ Click **Save report** and make a selection to save the report to the Library or download it as a PDF or CSV file.

Note: Saved templates and reports do not retain sort order.

Note: You cannot save a time range with a template definition.

For more detailed information about working with templates and reports, see:

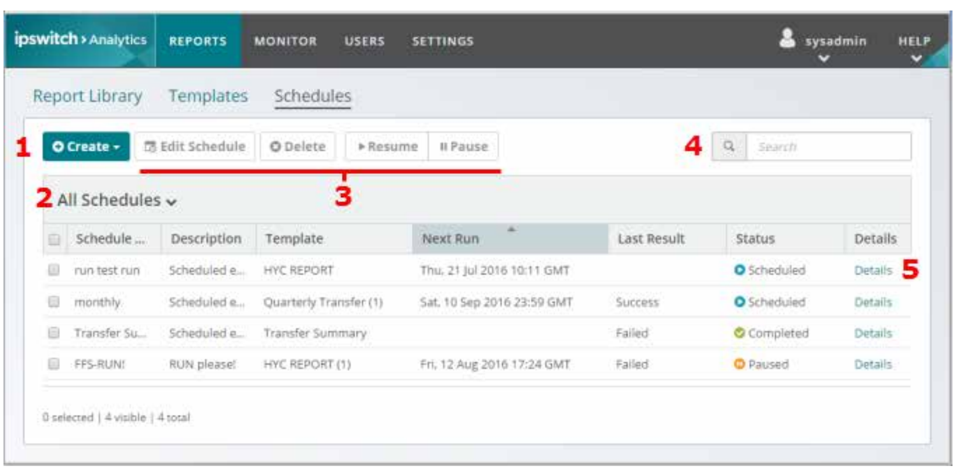
Create a Template (on page 161)
Publish a Custom Template (on page 165)
Edit a Custom Template's Name or Description (on page 165)
Edit a Template's Fields and Filters (on page 166)
Use the Filter Palette (on page 193)
Create a Report On Demand (on page 166)
Delete a Template (on page 168)

Schedule Tour

To create a schedule that will be generated automatically and delivered to the recipients of your choice, visit the **Schedule** tab. You can deliver a template one time, or on a recurring basis. The schedule recipients can be Ipswitch Analytics users or user groups, external email addresses, or the Library.

The **Schedule** tab contains a list of all schedules, including the schedule's name, description, template, next run, last result, status and details. Initially the list is empty, but as you create schedules they appear here.

In the figure, numbers designate areas on the screen that are described in the following table.



Area/Item	Description

1	Create	Creates a new schedule. Click **Create** and select a template. When the report is scheduled to run, it uses the template you specified.
2	Filter	Filters the list of schedules by status. Options: All, Scheduled, Paused, Completed, Failed, Blocked.
3	Buttons	Select a schedule in the list and then click a button: **Edit Schedule:** Change schedule name, start date and time, recurrence period, end date, the report name, report description, report type, and recipients. **Delete:** Remove the schedule from the list of schedules. **Pause:** Pause the schedule to prevent it from running, **Resume:** Resume a schedule after it was paused. **Pause:** Pause the schedule to prevent it from running,
4	Search	Searches the Schedule Name, Description, and Template columns for the characters you type.
5	Details	For a schedule in the list, click **Details** to view who created the schedule, when it was created it, who updated it most recently, and when it was last updated

To create a new schedule, click **Create** and select from a list of available templates to use as your basis. When the report is scheduled to run, it will use the template you specify when you first create the schedule.

CREATING A SCHEDULE

§ Click **Create**. The Create Schedule dialog box opens. Provide the following information

Field - Create Schedule	Description
Schedule Name	The name you specify appears in the list of schedules.
Report data from	Select the preconfigured dynamic time range of data to include in the report.
Repeat	Repeat options: None (run once) (default), or select the repeat interval: Hourly, Daily, Weekdays, Weekly, Monthly, Annually.
Start	The date and time when you want the schedule to begin.
Every	By default, all month boxes are selected. **Tip**: To schedule quarterly reports, select one month in each quarter, and in **Report data from**, select Past quarter.
Ends	If the schedule repeats, select when it will end: Never (default), or specify a date.

Preferences	Opens the Schedule Report Preferences dialog box, where you can enter § A Report Name using optional dynamic time macros in the report title § A Report description
Recipients	Opens the Schedule Report Recipients dialog box, where you select who will receive the report: Groups, Users, external email addresses.

SPECIFYING REPORT PREFERENCES

§ In the Create Schedule/Edit <schedule name> dialog box, click **Preferences.**

The Report Preferences dialog box opens. Provide the following information.

Field - Scheduled Recipients	Description
Report Name	Specify a report name. Default is the schedule name. The report name appears in the Library, or becomes the filename if the report is delivered as a PDF or CSV attachment Optionally select a dynamic time macro to append a dynamic date/time at the end of the report name.
Description	The description you enter appears next to the report name in the Library.
Report Types	Select one or more report types to determine the format of the report. IMPORTANT: In the Schedule Report Recipients dialog box, you must check the Send Notifications to all recipients checkbox

SPECIFYING REPORT RECIPIENTS

§ In the Create Schedule/Edit <schedule name> dialog box, click **Recipients.**.

The Scheduled Report Recipients dialog box opens. Provide the following information

Area/Item	Description
Groups Users	User Groups and Users who have access to view the report in the Library or the attached report in PDF or CSV format (depending on your selections in the Report Preferences dialog box).
Send notifications to all recipients checkbox	Select to have email recipients receive an email that contains a link to the Library report and/or the attached report in PDF or CSV format (depending on your selections in the Report Preferences dialog box.

The following topics describe how to work with schedules in greater detail:

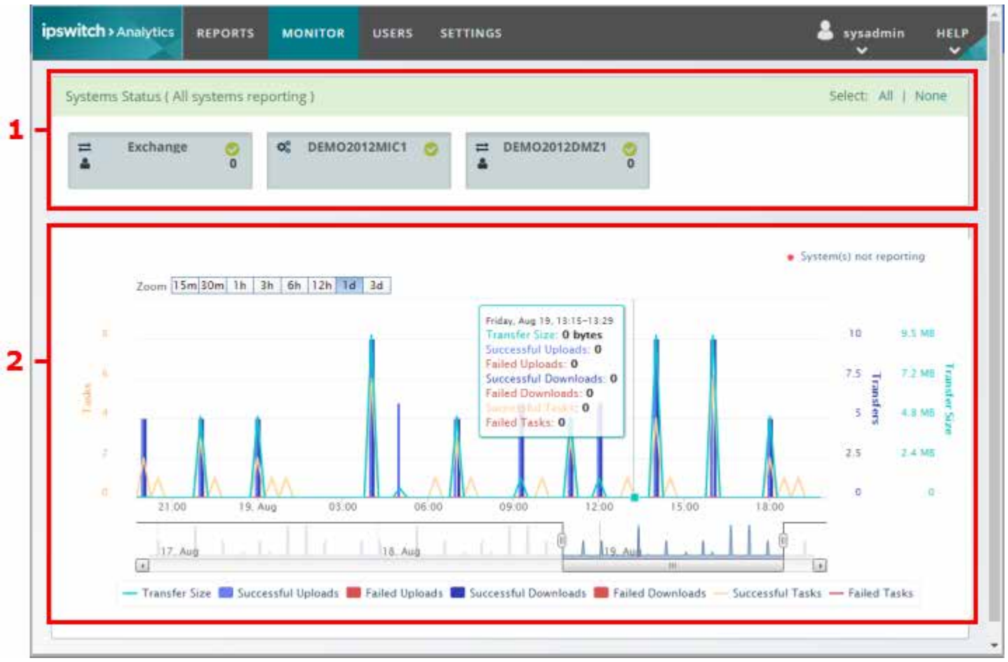
Schedule Reports for Delivery (on page 169)
Create a Schedule (on page 170)
Edit a Schedule (on page 172)
Pause or resume a schedule (on page 174)
Delete a Schedule (on page 174)

Monitor Tour

The Monitor is a chart that shows a high-level summary activity on your MOVEit server(s) for the past 72 hours, updating every 60 seconds to refresh with new data. Charted performance metrics include successful and failed uploads, downloads, tasks, and transfer size. A dashboard also shows the reporting status of all of Ipswitch Analytics Agents that collect data from your MOVEit database(s). Use the Monitor to track current server usage and status, detect short-term transfer and processing trends, discover and manage system issues as they arise, diagnose system health, and isolate failures. The Monitor shows you timely and actionable information for real-time response to system issues, so you can focus quickly on trouble spots to catch and respond to problems before they get out of hand.

Tip: Display the Monitor on a large screen where it can be seen by many people. The Monitor will continue to refresh graph data every minute until you choose to sign out.

The Monitor includes a dashboard where you can see the status of each Agent that collects data from a MOVEit database, and a chart below it that graphs that data:



	Area/Item	More Info
1	Dashboard	Shows the status of each agent that collects data from a MOVEit database or a MS Exchange database.

2	Chart	Shows a graph of the collected data.

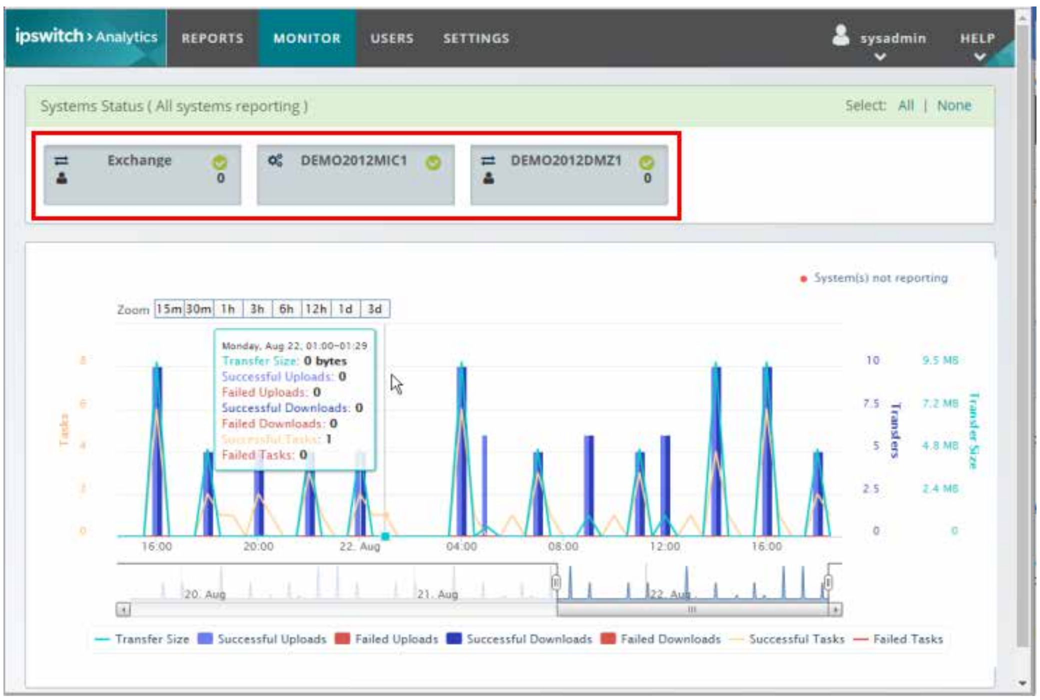
Select an Agent in the dashboard to include its data in the chart, or deselect it to remove its data from the chart.

For more information, see

Monitor Dashboard (on page 147)
Monitor Chart (on page 149)

Monitor Dashboard

The dashboard at the top of the Monitor displays all Ipswitch Analytics Agents on your system. An Agent collects data from a MOVEit database and sends that data to Ipswitch Analytics.



The dashboard shows a different colored SystemStatus, depending on how many Agents are online currently:

Systems Status (All systems reporting)	All Agents are online and sending data to Ipswitch Analytics.
Systems Status (3 of 4 systems reporting)	Some Agents are online and sending data to Ipswitch Analytics while others are not.
Systems Status (No systems reporting)	All Agents are offline and none are sending data to Ipswitch Analytics.

The System Status also shows "***X* of *X* systems reporting**", so you know at a glance how many Agents are online.

Tip: Click on **System Status** to show or hide the dashboard. This is helpful when you want to maximize screen space to display more of the graph below.

Each Agent inside the dashboard includes the following information:

§ **Name**: The name of the Agent collecting data from a MOVEit database. Frequently this name will be similar to the MOVEit server name. If using a MOVEit Transfer web farm, this will be the name of the Agent that collects data from the web farm's single database. If using a MOVEit Transfer High Availability (HA) configuration, this will be the name of the Agent that collects data from the HA primary server.

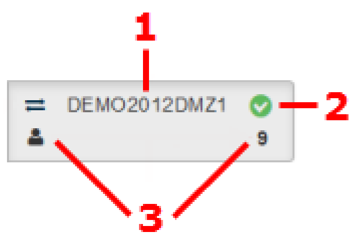
§ **Status**:

Agent is online and sending data to Ipswitch Analytics.

Agent was not able to send data to Ipswitch Analytics in the last minute. After three consecutive failed attempts to send data, status changes to offline .

Agent is offline. There have been at least three consecutive failed attempts to send data. The chart will continue to show historical data for minutes when the Agent was not sending data.

§ **Number of signed-in users** (MOVEit Transfer servers only)



Item	Description
1	Agent Name
2	Status
3	Number of users signed on concurrently

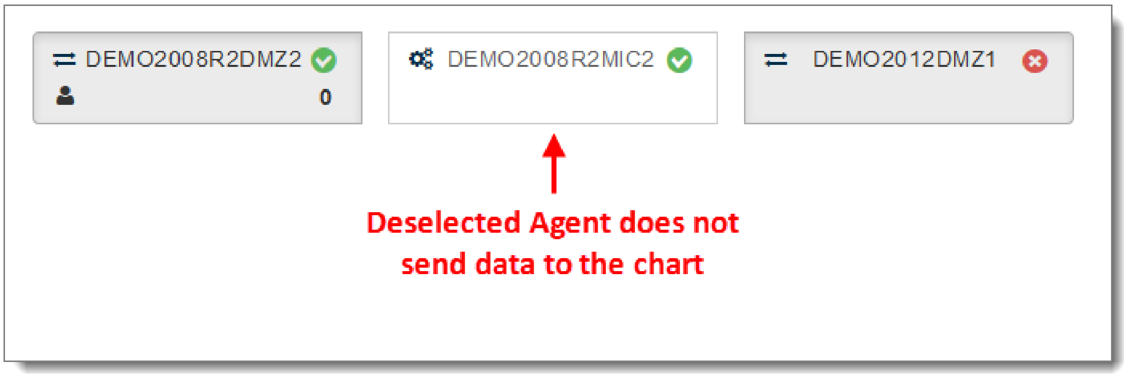
Click on an Agent to include or exclude data from that MOVEit database in the graph. Selected Agents display with a gray tint in the dashboard, while unselected Agents are white:

Monitor Chart

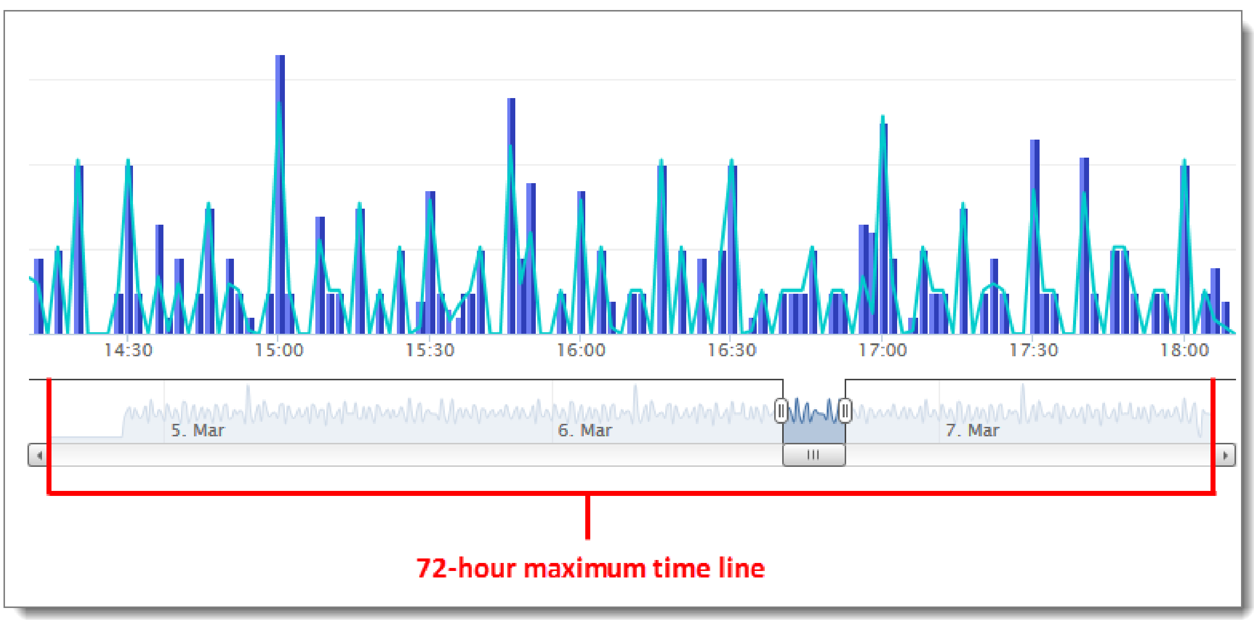
Beneath the dashboard is an easy-to-interpret chart that shows a high-level summary of activity on your MOVEit server(s). Charted metrics include successful and failed uploads, downloads, tasks, and transfer size.

Important: All dates and times in the Monitor are in Greenwich Mean Time (GMT).

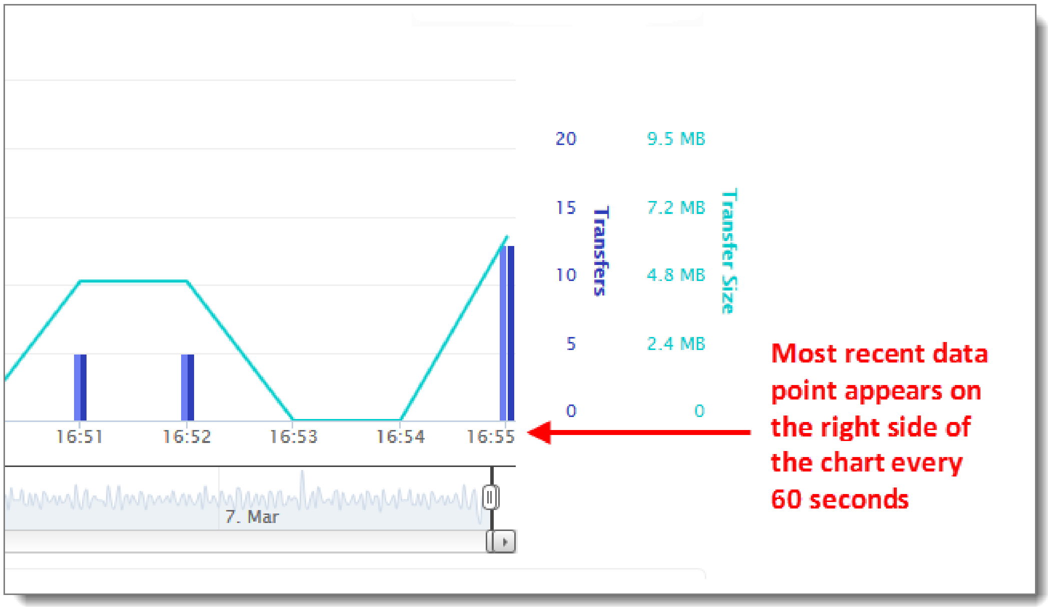
The chart includes data only from the MOVEit Agents you select in the ***dashboard*** (on page 147). Select an Agent to show or hide its data in the graph below.



A 72-hour time line at the bottom of the chart shows the maximum amount of time that can display in the chart.



New data points add to the right side of the chart every 60 seconds. The last update shows at the bottom right.

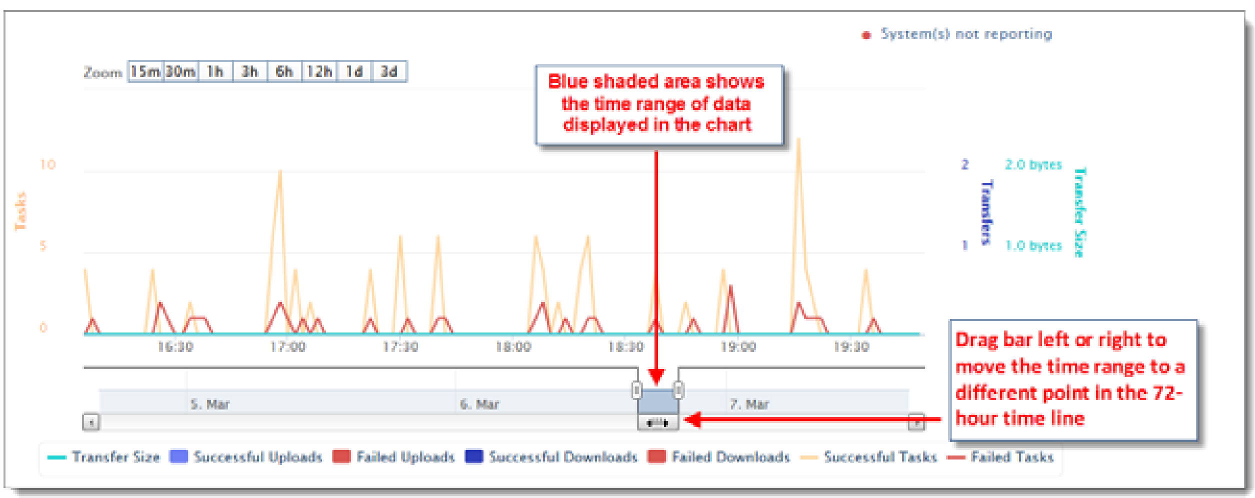


ADJUST TIME RANGE OF DATA SHOWN IN CHART

When you first open the Monitor, only data for the past 15 minutes display in the chart, as indicated by the blue shaded area in the time line at the bottom of the chart. The blue shaded area in the time line indicates the time range of data displayed in the chart.

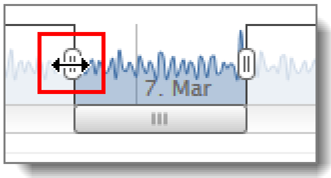
You can adjust the time range of data displayed in the chart by doing any of the following:

Move the sliders in the time line:



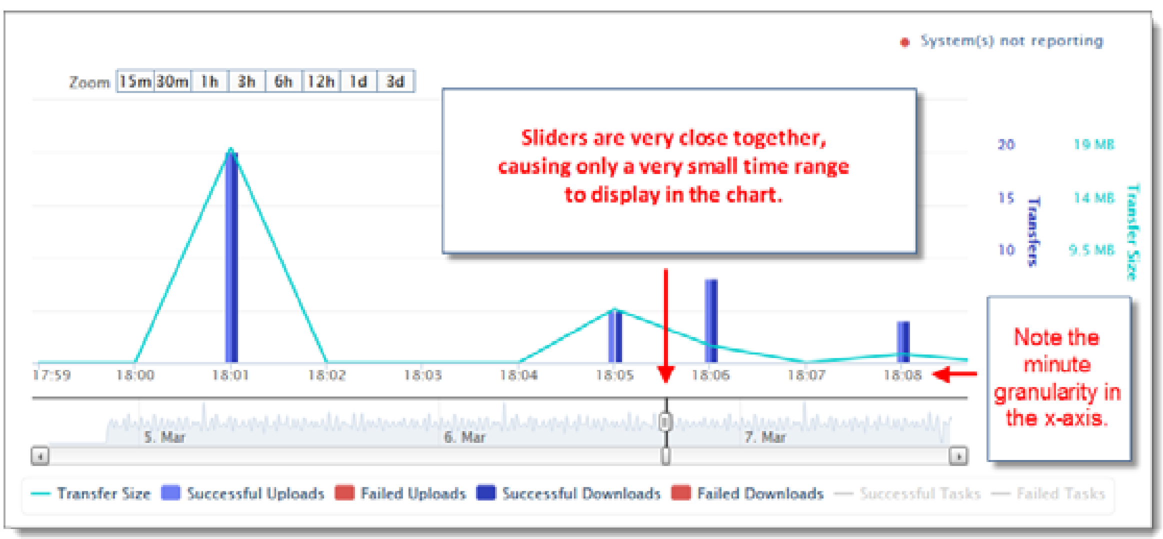
Drag the slider bar left or right to move the time range to a different point within the 72 hours. The chart data updates to show the new time range.

You can also drag one or both sliders in the time line to new positions to create a custom time window.

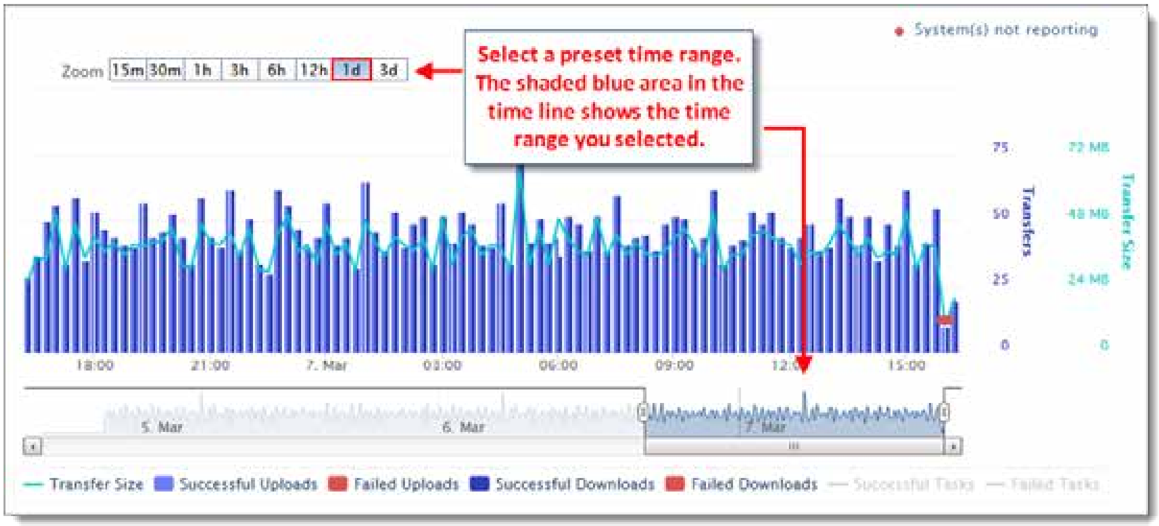


Drag the sliders their maximum distance apart to display the full 72 hours in the chart:

Move the sliders closer together to narrow the time range. This can help you focus on a specific time range of interest:

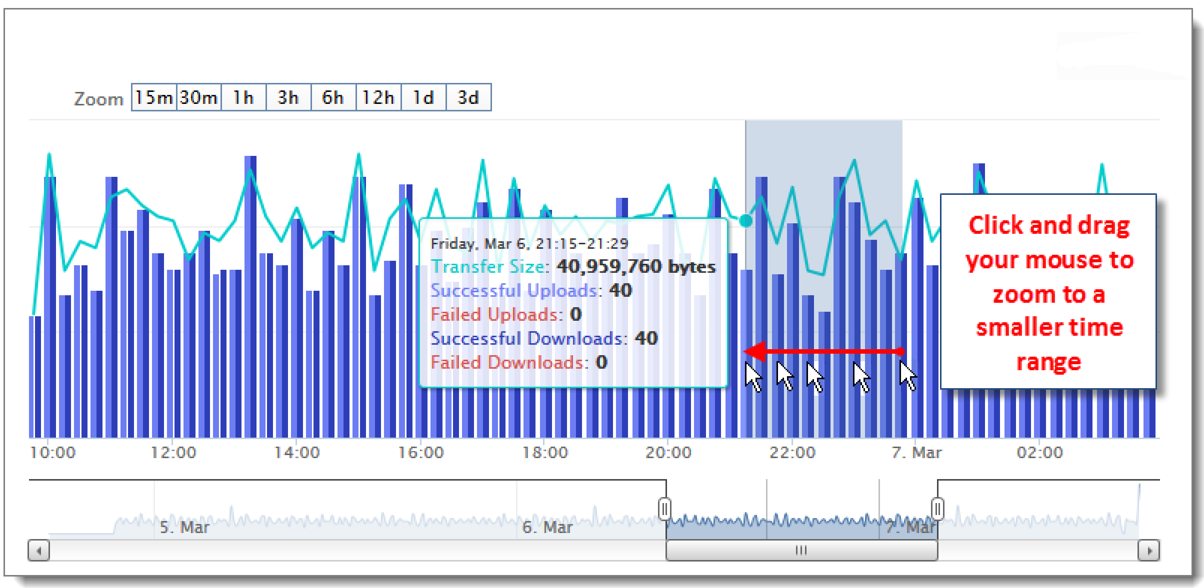


Zoom to a preset time range:



Zoom options range from 15 minutes to the entire 3-day window. The selected zoom displays in blue.

Click and drag inside the chart with your mouse:



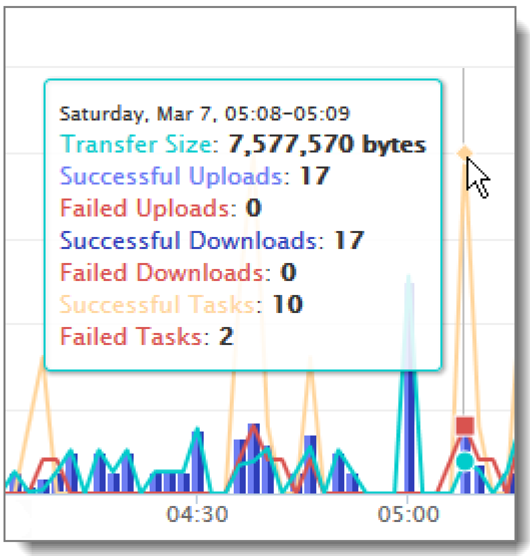
You can drag your mouse either left or right inside the chart.

Note: This method only works if you want to view a SMALLER time range; you cannot click and drag to view a larger time range.

Whenever you adjust the time range with the methods shown above, the horizontal x-axis updates to display data for that time range only, and the vertical y-axis on both sides of the chart also updates to show a value range that is appropriate for the selected time range.

VIEW DATA POINTS

Hover your mouse over any time point to view all data available for that time point:



You may not be able to see small values if you select a large time range, or if other values within the time range are disproportionately large. For example, if the 1:24 pm time point has 12,780 successful uploads but only two failed uploads, the vertical bar showing the two failed uploads will probably be too small to notice on the screen. To isolate small values of interest so they are more easily visible in the chart, select a smaller time range, or hide all other data metrics using the interactive legend (explained below).

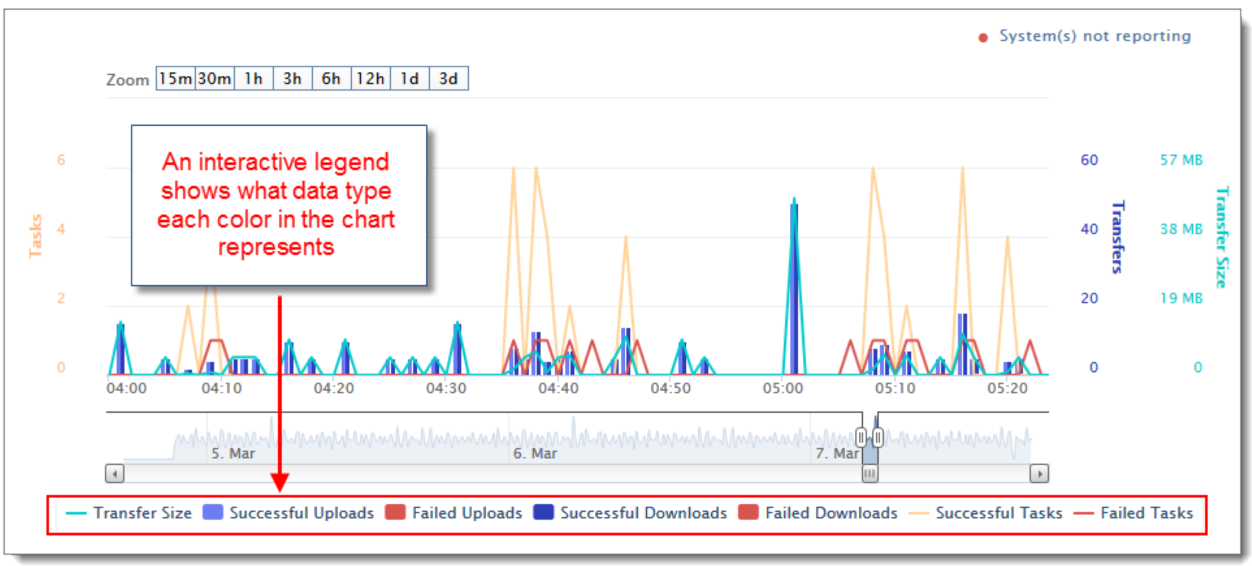
Note: All times display Greenwich Mean Time (GMT).

SHOW/HIDE DATA TYPES IN THE CHART

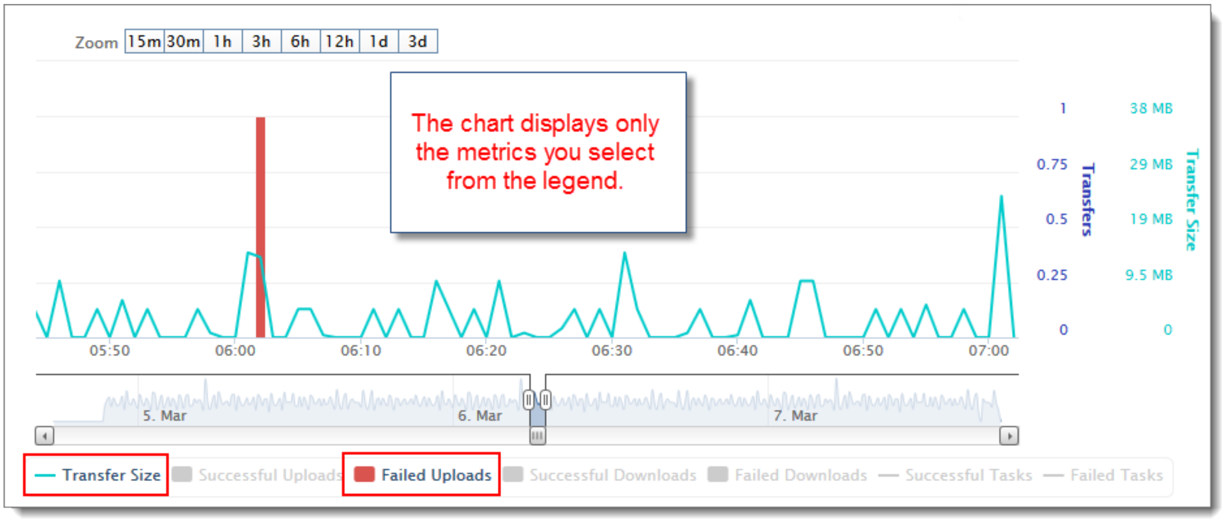
The chart includes the following transactions from your MOVEit server(s):

- **Successful Uploads** (bar chart)
- **Failed Uploads** (bar chart)
- **Successful Downloads** (bar chart)
- **Failed Downloads** (bar chart)
- **Transfer Size** (line chart)
- **Successful Tasks** (line chart)
- **Failed Tasks** (line chart) **Note:** A MOVEit Automation task fails when at least one of its script/action failed.

Each data type has a different color in the chart for easy identification, with an interactive color legend below.



Click a data type inside the legend to show or hide that data type in the chart. This is useful for isolating transfer and task failures, abnormal behavior, and other items of interest. For example, you may want to hide everything except Failed Uploads on a specific MOVEit Transfer server.

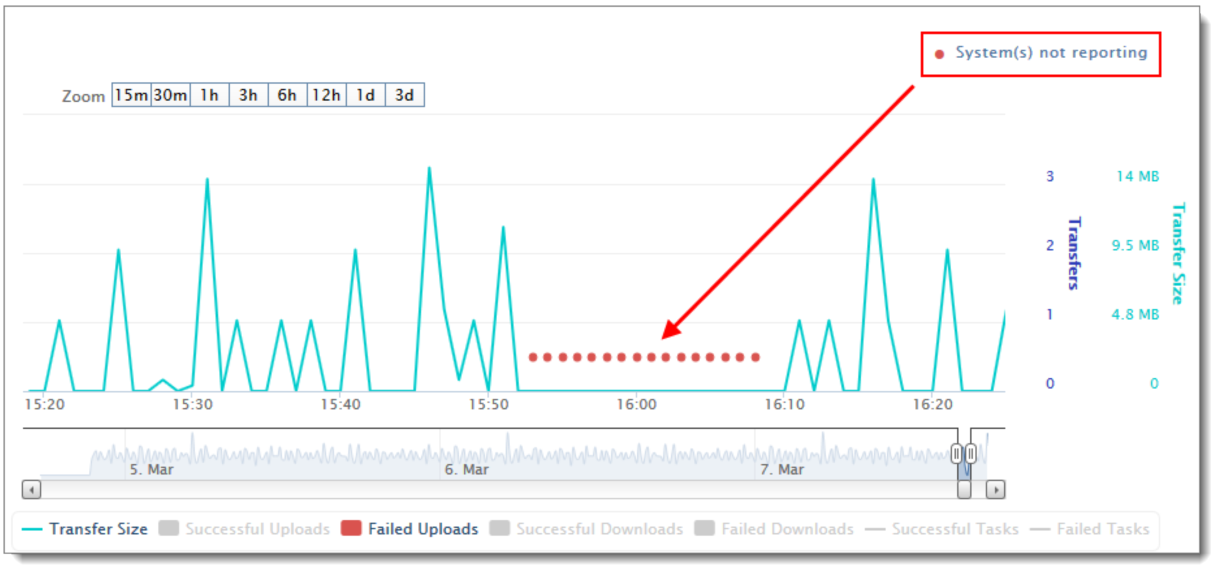


Note: Successful Uploads and Successful Downloads display side-by-side within each time point.

Note: If you select only MOVEit Transfer Agents in the dashboard, the legend grays out Successful Tasks and Failed Tasks, and the Tasks label disappears from the y-axis. Likewise, if you select only MOVEit Automation Agents in the dashboard, the legend grays out Transfer Size, Successful Uploads, Failed Uploads, Successful Downloads and Failed Downloads, and the Transfers label disappears from the y-axis. The chart always displays Transfer Size whenever at least one Agent of any type is selected in the dashboard.

AGENTS OFFLINE

If the status of at least one of the Agents is either offline or unknown, you will see a red dot floating just above the x-axis. A single red dot may represent multiple Agents that are offline, so hover your mouse over the red dot to see which Agents are offline. You will also see a **System(s) not reporting** in the upper right.



Red dots from prior minutes will remain in the chart even when connection re-establishes.

Note: Metrics may not be 100% accurate for transfers in transient states (for example, when a transfer occurs over multiple minutes). Once the transfer completes, the chart refreshes to show the final correct size and count. The chart displays a current snapshot of server activity only; once the transfer completes, the chart refreshes to show the final correct size and count for those minutes.

SAVE CHART DATA

Chart data is dropped after 72 hours and is not archived. The chart is transitory and is not meant to be saved or exported. However, chart data is obtained from the same data source as Report data, so you can also get the same underlying data from ***reports*** (on page 157) (in tabular rather than graphical format).

You can also preserve a snapshot of the chart by capturing an image of the screen:

- Press **Control + P** to print your browser page (Windows only)
- Use the built-in screen capture tool for your operating system:
  - Windows: Press the **Print Screen** key to save a picture of your screen to the clipboard, and then press **Control** + **V** to paste the image into a file
  - Macintosh: Press **Command + Shift + 3** to save your screen as an image file on your desktop

Reports

A report contains data captured from one or more MOVEit servers over a specific time range. Reports can show a high-level summary of data, or details of individual transactions. After a report is created, its data cannot be changed. Each report is a snapshot in time of activity on your system(s).

The REPORTS module includes three work areas:

Templates (on page 159)

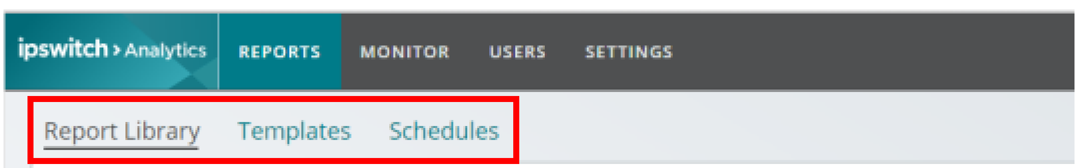
In the Templates tab, you create and manage the templates that provide the structural framework for reports. Use one of the stock templates provided with Ipswitch Analytics, or use the Template Editor and its comprehensive palette of fields to build your own custom templates, including a filter that narrows report results to include transactions from specific MOVEit servers, organizations, and users. Run any template to create a report on demand that can then be saved to the Library or as a PDF or CSV file.

Schedule (on page 169)

In the Schedule tab, you schedule a report for automatic delivery to the Library or to email recipients on a one-time or recurring basis.

Report Library (on page 175)

In the Report Library you can view saved reports that contain data captured from MOVEit servers over a specific period of time. Select **REPORTS > Report Library**.



The table describes template/report types.

Template/Report Type	Data Captured	User Permissions
Transfer	Transfer templates capture transfer upload and download data for MOVEit Transfer and MOVEit Automation, including transfers from ad-hoc and mobile. Transfer templates are also used for data from Microsoft Exchange support for Ipswitch Analytics, for file transfers that are based on email attachments.	All users
Workflow	Workflow templates capture workflow, task, and step data for MOVEit Automation only.	All users
User Audit	User Audit templates capture all actions initiated by a user on MOVEit Transfer and Ipswitch Analytics, which can be used to demonstrate regulatory compliance. User Audit templates show who accessed the system, what they did, and when. User Audit templates do not include system actions, only actions initiated by a user. **Note:** MOVEit Automation file operations are not captured in User Audit reports because tasks are not user-initiated actions.	Administrators and System Administrators only

Template/Report Type	Data Captured	User Permissions
Security	Security templates capture failed login activity and user/IP lockout activity on MOVEit Transfer and Ipswitch Analytics to help you locate suspicious activity (defined as an excessive number of failed access attempts).	Administrators and System Administrators only

For all reports:

- Reports include up to 15 months of historical data only.
- All dates and times are in Greenwich Mean Time (GMT).
- Reports that display inside Ipswitch Analytics and in PDF documents cannot exceed 1,000 rows; to see all row results, you must save the report as a CSV file.
- The Ipswitch Analytics Server synchronizes with all MOVEit servers on your system every two minutes; report data is only as current as the most recent synchronization. Consequently, data in reports may not include the last two minutes of activity.
- MOVEit Transfer scheduled tasks that zip and upload archived log files into the Archive Directory are not captured in Ipswitch Analytics reports.
- A record will not display in a report if no activity was logged at all. A report may include some records that contain zero values when activity was logged for some other value not shown in the report. For example, User A may display in a report with zero File Uploads because that user logged other actions during the specified time period, whereas User B may also have zero File Uploads but will not display in the same report because User B logged no other actions at all.
- Ipswitch Analytics supports Spanish, French and German characters from MOVEit source systems using the Ad-hoc module.

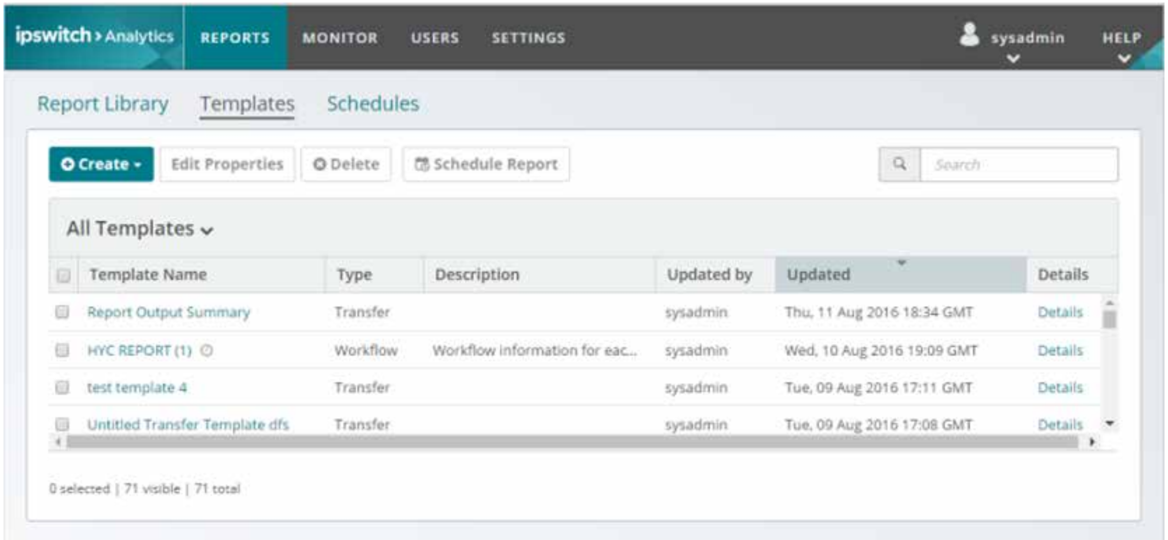
Work with Templates

A template is a framework that defines what will appear in a report, but does not itself include any actual MOVEit data.

A template must include at least one data field. It may also include:

- The placement of data field columns from left to right
- A filter that narrows the report to include data only from specific MOVEit servers, organizations and users

When you first select the **Templates** tab, all templates display in a list.



Initially only pre-defined ***stock templates*** (on page 207) display (stock templates contain data fields and column placement only). All stock templates are visible to any user who has access to the Templates tab. Stock templates cannot be deleted or overwritten.

Users can also create ***custom templates*** (on page 161) that contain data fields, column placement and filter selections. Custom templates can be public (visible to any use who has access to the Templates tab) or private (visible to the template creator only); you will see only custom templates for which the privacy setting is public. Unlike stock templates, custom templates can be edited, renamed and deleted. If you make a custom template public, any user who has access to the Templates tab will be able to edit, rename, and delete that template.

Note: All users with access to the Templates tab can view the Transfer and Workflow templates (stock and custom); only users with the role of Administrator or System Administrator can view the User Audit and Security templates.

The templates list includes the following information about each template:

Template Name	Name of the template. Names are case-sensitive. A clock icon appears next to the template name if that template is part of a schedule (regardless of schedule status).

Type	Each template is one of the following types: § **Transfer**: Transfer templates capture transfer upload and download data for MOVEit Transfer and MOVEit Automation, including transfers from ad-hoc and mobile. Transfer templates are also used for data from Microsoft Exchange support for Ipswitch Analytics, for file transfers that are based on email attachments. § **Workflow**: Workflow templates capture workflow, task, and step data for MOVEit Automation only. § **User Audit**: User Audit templates capture all actions initiated by a user on MOVEit Transfer and Ipswitch Analytics, which can be used to demonstrate regulatory compliance. User Audit templates show who accessed the system, what they did, and when. User Audit templates do not include system actions, only actions initiated by a user. **Note**: MOVEit Automation file operations are not captured in User Audit reports because tasks are not user-initiated actions. § **Security**: Security templates capture failed login activity and user/IP lockout activity on MOVEit Transfer and Ipswitch Analytics to help you locate suspicious activity (defined as an excessive number of failed access attempts). To display only one type of template at a time, select a type from the drop-down menu at the top of the table.
Description	A brief description of the template.
Updated by	The username of the last person to make changes to the template. Stock templates show "system" here.
Updated	The date and time when someone last edited the template.

Details	Displays the following information:
	§ **ID**: A numeric identifier assigned to each template.
	§ **Privacy setting**:
	    § **Public**: Viewable by all users.
	    § **Private**: Viewable only by the user who created the template.
	§ **Read-only setting**:
	    § **True**: Template cannot be modified. All stock template have a read-only setting of True.
	    § **False**: Template can be modified. All custom templates have a read-only setting of False.
	§ **Creation on**: The date/time when the template was created.
	§ **Created by**: The user who created the template. Stock templates show "system" here.

Click a column header to sort templates in ascending or descending order.

Use the Search box to locate a specific template (the asterisk * wildcard is accepted in searches).

To view only certain ***template types*** (on page 157), select that type from the drop down menu:

From the Templates tab, you can:

- Create (on page 161) a new template in the Template Editor
- Click any existing template name to open it in the Template Editor and optionally make changes to its fields, field placement and filter. Only one template displays in the Template Editor at a time.
- Select a template row and:
  - Click Schedule Report (on page 169) to create a schedule that will run the template and deliver it automatically on a one-time or recurring basis (permission to schedule depends on user's role)
  - Click Edit Properties (on page 165) to change the template's name, description and public setting (custom templates only)
  - Delete (on page 168) it (custom templates only)

When viewing a template in the Template Editor, you can:

- Add or remove fields, change field placement, and edit the filter (on page 166) to change which MOVEit sources are included in the report, then optionally save your template changes. You can also ***add data visualizations*** (on page 164) (line chart, bar chart, donut chart, pie chart). If you modify a stock template and want to save your modifications, you must save the template with a new name. Stock templates cannot be changed or deleted.
- Run the template (on page 166): Select a time range then click Run at any time to populate the template with actual data from one or more MOVEit system(s) (depending on the Filter settings). You can then save the resulting report to the Library or download it as a PDF or CSV file. You cannot save the time range with the template; the time range selector affects only templates run within the Template Editor.

Tips:
Modify any template's fields and filters and then run the template without having to save the template.
Make template modifications and run the template multiple times without saving the underlying template.

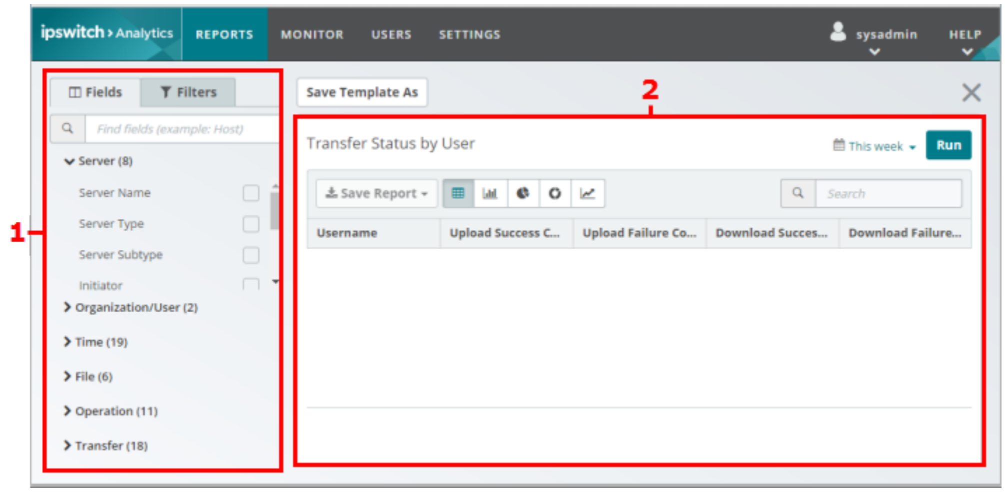
Create a Template

1 Go to REPORTS > Templates.

To create a template, you can:

- Open an existing template (stock or custom), modify that template, and then click Save Template As to save it with a new name
- Create a new template from scratch.

2 Click Create and select the ***type of template*** (on page 157). Options are Transfer, Workflow, User Audit, and Security, The template editor contains a Palette and a Canvas.



1. Palette

 Fields tab: Area where you select the data fields to include in the template. Initially, the Fields palette is empty. Each field that you click in the palette appears as a column header in the canvas.

 Filter tab (unselected in the figure): Area where you optionally filter data by MOVEit sources.

2. Canvas

 The main workspace that contains all of the template's data fields, placed as column headers. New templates do not contain any fields.

Template Editor Actions

To	Do this
Show summary or detailed fields in the palette	This option is available when you are creating a new template. In the Report Output dropdown box, in the upper right corner of the screen, select Summary or Detailed. § **Detailed**: Displays fields that capture a single item of information about an individual transaction (transfer, process, or action). § **Summary** (default): Displays fields that aggregate multiple detailed fields to summarize data at high levels. Summary information can include multiple transfers, processes or actions that have been aggregated for higher-level analysis. Summary fields reduce the number of rows in the report, which is useful if you want to reduce report results to a manageable length. Only fields that are specifically Summary or Detailed fields are affected by your selection. **Warning:** You will lose all fields that you have already added to the template if you change the Report Output
Add fields to a template	In the palette, click the **Fields** tab, and then click the plus sign (+) next to the field name. The field that you click appears as a column in the template canvas. To see a description of the type of data that the field displays in a report, hover over the field name in the palette. For more information, see ***Field Definitions*** (on page 218).
Remove fields from a template	In the palette, clear the checkbox for the field.

Change the layout of field columns	Click and drag a column heading.
Sort data in a column	Click a column heading. Column sorting is available only in the template editor. Sort order cannot be saved in the report. To save a report with a specific column sort order, save to CSV file (see row, below), and use the column sorting feature in Excel® or similar tool.
Filter a template	A filter lets you choose to include or exclude data from only specific MOVEit sources and MS Exchange sources. **1** In the palette, click the Filters tab. Click Add Filter. Make selections to limit the data in the template. Click Add. **2** To add additional filters, repeat the process. For details about filter fields, see ***Add a Filter*** (on page 193).
Add data visualizations to a template	Click an icon for the chart type. You can add one of each type of chart: line, bar, donut, pie. For more information, see ***Add Data Visualizations*** (on page 164).
Run a template to produce a report	**1** In the upper right corner of the screen, from the dropdown, select a Time Range. **2** Click Run to populate the template with data
Save a report	**1** Run the template to produce the report. **2** Click Save Report and make a selection: § Report Library. Report is saved as a private report, viewable only by you. To allow viewing by specific users and groups, see ***Control Access to Library Reports*** (on page 177). § PDF. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report. § CSV file. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.
Save a template	**1** Click Save Template and enter a name and optional description. Names are case-sensitive. **2** Optionally select Publish to all users. This option allows any user with access to the templates tab to view, modify, and delete the template, providing their user role allows access to that template type. If this option is not selected, only you can access the template. Note: Time Ranges are not saved with the template. The time range selector affects only templates run inside the template editor.

Add Data Visualizations (bar, pie, donut, and line charts)

You can include data visualizations as part of a template. When you use the template as the basis for a report, the charts that you defined in the template are included in the report.

You can define one of each chart type in a template: bar chart, pie chart, donut chart, line chart.

Chart icons - location

§ Select REPORTS > Templates. Click a template name or create a new template.

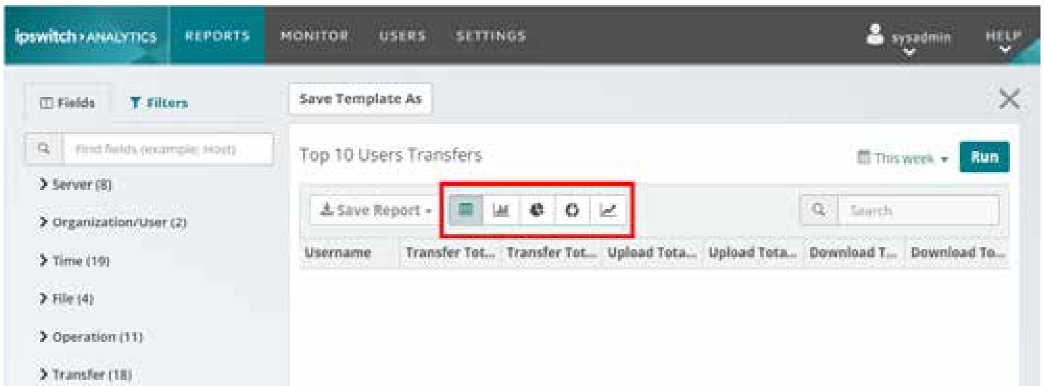
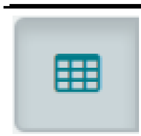
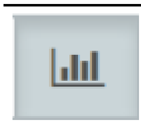
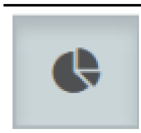
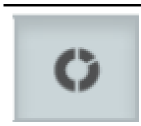
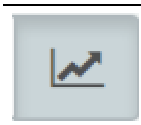


Chart icons

Icon	Description
	Grid. Does not represent a chart, but provides a convenient way to view the fields that are included in the template. Click this icon, then click Run.
	Bar chart
	Pie chart
	Donut chart
	Line chart To produce a line chart, the template must contain a minimum of one numeric field and one date-related field.

To add a chart to a new or existing template:

1 Select REPORTS > Templates.

2 Create a new template or click the name of an existing template.

The properties page for the template opens.

3 Click the icon for the type of chart. Click **Create**.

4 A dialog box opens for configuring the chart. Fields in the **<chart type> Selections** dialog box depend on the fields that are included in the template .

5 Make your selections and click **Create Chart.**

6 The chart needs data in order to be viewed. In the upper right, select the timeframe for the chart, and click **Run**.

The chart is populated with data.

7 To add other types of charts, click another chart icon and repeat the procedure.

Saving a report that contains charts

After you define each chart, its timeframe, and click **Run**, you can save the report. Data in the report, including data represented in the charts, cannot be changed.

Using a template in a schedule

If you save a template that contains charts, and set up a schedule that uses the template, reports that are generated when the schedule runs contain those charts, populated with data from the schedule run.

Charts that you do not configure in the template are not available in reports generated from that template.

Publish a Custom Template

After you create a custom template, you can publish it to make it visible to all users who have access to the Templates tab.

Note: Stock templates are always visible by anyone with access to the Templates tab.

Important: If a template is public, anyone with access to the Templates tab can delete it.

1 In **REPORTS** > **Templates**, select the checkbox for the template.

2 Click **Edit Properties.**

The Edit Template Properties dialog box opens.

3 Select the **Publish to all users (cannot be undone)** checkbox.

Warning: When you make a template public, users who have access to the Templates tab can view, modify, and delete that template, providing their user role allows access to that template type.

4 Click **Save.**

Edit a Custom Template's Name or Description

You can edit the name and description of custom templates only.

1 In **REPORTS** > **Templates**, select the checkbox for the template.

2 Click **Edit Properties.** The Edit Template Properties dialog box opens.

3 Enter a new **Template Name** and/or a new **Description.**

4 Click **Save.**

Edit a Template's Fields and Filters

You can open any template to edit its fields and filters in the Template Editor. You can save your changes, or run the template and exit without saving.

Note: If you modify a stock template's fields and filters, you can click **Save Template As** to save your changes as a new template. You cannot overwrite a stock template.

1 In **REPORTS** > **Templates**, click the checkbox for the template.

 The Template Editor opens. The template's fields and field placement appear in the main workspace, but the template does not contain any actual data yet. The **Fields** and **Filter** palettes appear in the left panel.

2 Make your changes.

 § For details on how to add or remove fields, and change field placement, see ***Create a Template*** (on page 161).

 § For details on how to add graphs (line, bar, donut, pie), see ***Add Data Visualizations*** (on page 164).

 § For more information about filters, see ***Add a Filter*** (on page 193).

3 Click **Save**.

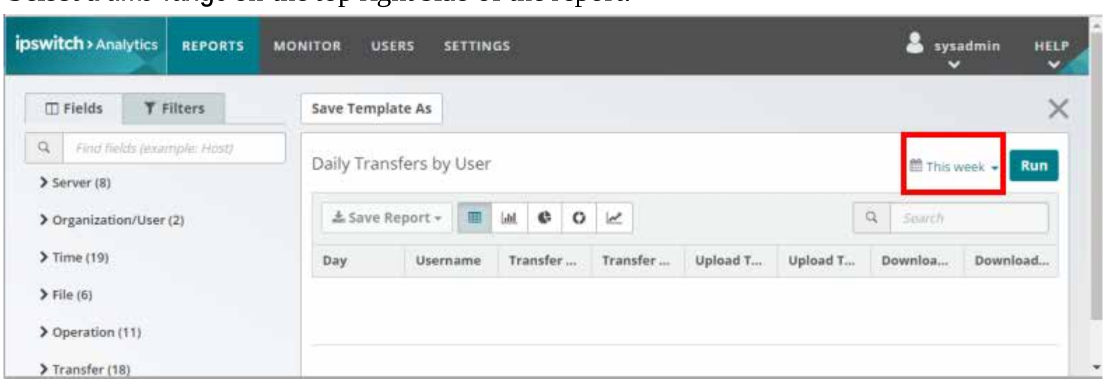
Create a Report On Demand

This topic describes how to run a template to create a report on demand. You can also ***schedule a report for delivery*** (on page 169) at a future time.

1 In **REPORTS** > **Templates**, click on a template name.

 The Template Editor opens, showing the template.

2 Select a **time range** on the top right side of the report.



 When run, the report will include only events that fall within the time range you select. The default is **This Week**.

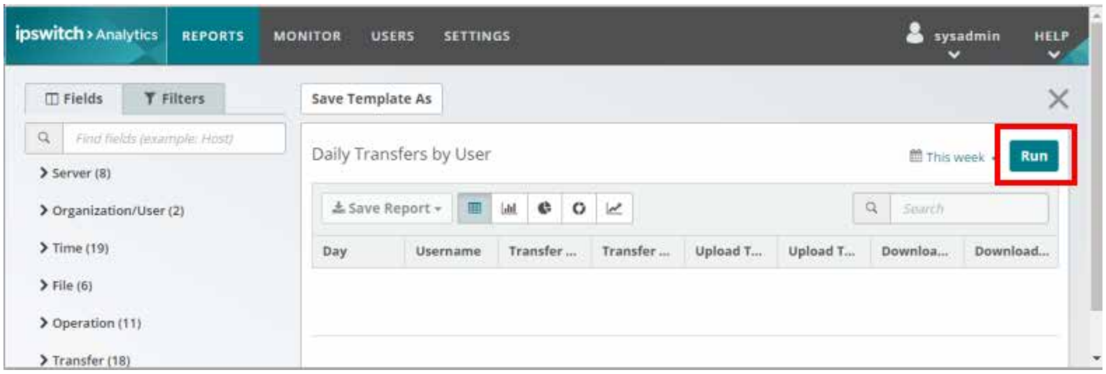
Note: You cannot save a time range with a template. The time range selector affects only templates that you run in the Template Editor.

Warning: Long time ranges might take longer to process. To reduce the amount of time it takes to run a template, make the time range shorter.

3 Optionally add charts to the report to show report data.

Click the button for the chart type (line, bar, donut, pie) and make your selections. For more information, see ***Add Data Visualizations*** (on page 164).

4 Click Run to populate the template with actual data from the MOVEit source(s) included in the Filter.



After a few moments, the report opens. It contains data records for the fields and filters specified by the template. The time range is listed beneath the template title:

Click any column heading in the report to sort data in ascending or descending order (arrows indicate sort direction).

5 SAVE A REPORT (optional):

After the template is populated with data, it becomes a report that you can save to the ***Library*** (on page 175), or export and download as a PDF or CSV file. Click Save report and make a selection..

Note: Saved reports do not contain column sorting.

After the report is run, you can use the Search box to locate any item in the report results. The asterisk (*) wildcard is accepted in searches.

Note: Searches cannot be performed inside of packages/files transferred.

Note: When searching for a time, enter 16.30 instead of 16:30.

Click a column heading to sort data in ascending or descending order (an up or down arrow indicates sort direction). Column sorting is available only in the Template Editor; sort order cannot be saved with the report.

Tip: To save a report with a specific column sort order, save the report to CSV and then use the column sorting feature in Excel or similar tool.

Tip: If a template takes a long time to run, click Close if necessary to close the Template Editor (you will lose any unsaved template changes).

Tip: To view multiple reports at the same time, open Ipswitch Analytics in additional web browser tabs or windows.

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6 *Optional*: Save the report to the Library or as a PDF or CSV file, click **Save Report** and select one of the following:

§ **Library**: Saves the report to the Library. By default, all Library reports will be private (viewable only by the user who saves the report). To allow specific users and user groups to see the Library report, see ***Control Access to Library Reports*** (on page 177).

§ **PDF**: Your web browser downloads the PDF file, which you can view on any device or operating system (requires Adobe Reader). The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.

§ **CSV** (comma separated value): Your web browser downloads the CSV file. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

The saved report includes all of the report's fields, field placement, filters, and time range. Reports that display in the Template Editor are limited to 1000 rows, but saved CSV reports will include all possible row results.

Note: If you searched for a value within the report, then go to save the report, the saved report will include ALL report results, not just the rows that met your search criteria.

Tip: A saved report does not include any data reported after the template was run. To save the most up-to-the-minute data, re-run the template right before saving the report.

Enter a **Report name** and **Description**.

Use the suggested name, or enter a new name.

Note: A saved report does not indicate Filter and time range settings. We recommend that you include Filter and time range information in the report name.

Click **Save**.

It may take a few moments for the report to complete the save/download process. Your browser will notify you when the download is complete.

If you saved the report to the Library, the Library report will be viewable only by you initially. To allow other users and user groups to see the Library report, see ***Control Access to a Library Report*** (on page 177).

If you saved the report as a PDF or CSV file, your browser will download the file. You can then print the report or attach it to an email.

Important: You may need to reformat some of the columns to display all content in a CSV file, such as any Field that contains a comma (for example, content in a Status Message Field), and the Timestamp Field. To reformat an Excel column, first select the cell or column, right-click and then select **Format Cells**. On the **Number** tab, select **Text** if the Field contains a comma, or **Date** to reformat the Timestamp Field.

Delete a Template

Note: You cannot delete a stock template, or a template that is currently used in a ***Schedule*** (on page 169).

Important: If a template is public, anyone with access to the Templates tab can delete it.

Note: Deleting a template will not delete any reports that were created in the past using that template.

1 In **Reports** > **Templates**, check the boxes next to the templates to delete.

2 Click **Delete**.

Note: You cannot delete the stock templates that come with Ipswitch Analytics.

3 Click **OK** to confirm.

Schedule Reports for Delivery

When you create a schedule, Ipswitch Analytics runs a template at a specific time and delivers the resulting report to the Library and/or to email recipients. You can create one-time or recurring schedules.

Warning: Any user who has access to the Schedule tab can view, edit, pause/resume and delete any schedule, regardless of who originally created the schedule.

Ø *To view all schedules:*

- In the top menu bar, click **REPORTS**. Click the **Schedule** tab.

  The list includes schedules that you create.

Information in the Schedule list

Column	Description
Schedule Name	Name of the schedule. Names are case-sensitive.
Description	A brief description of the schedule.
Template	The template that will be run on schedule.
Next Run	Time when the template will run next.
Last Result	§ **Success:** The most recent schedule run was successful. § **Failure:** The most recent schedule run failed. Failure might be caused by lack of internet connectivity. § **Started:** A schedule run has just begun.
Status	§ **Scheduled:** Schedule still has runs to complete in the future. § **Paused:** Schedule is currently paused; schedule will not produce reports until a user resumes the schedule. § **Completed:** Schedule has completed its final run.
Details	§ **ID:** A numeric identifier assigned to each schedule. § **Updated on:** The date/time when the schedule was last updated. § **Updated by:** The user who last updated the schedule. § **Created on:** The date/time when the template was created. § **Created by:** The user who created the template. Stock templates show "system" here.

From the **Schedule** tab you can:

- **Create a schedule** (on page 170)
- **Edit a schedule** (on page 172)
- **Pause or resume a schedule** (on page 174)
- **Delete a schedule** (on page 174)

To limit the MOVEit sources that will contribute data to a scheduled report:

- **Adjust the filter in the underlying template** (on page 166). Custom templates may already contain filter settings; stock templates do not contain any filter settings.
- **Assign a ruleset to the schedule** (on page 172) A ruleset behaves just like a template filter: it filters out data from any MOVEit source not included in the ruleset. Assigning a ruleset to a schedule is useful if you're using a template that does not have set filters.

Important: If a schedule's underlying template already contains filter settings AND you assign a ruleset to the schedule, the report will include only the MOVEit data sources allowed by both. For example, if the template filter allows data from only MOVEit servers A and B and the schedule ruleset allows data from only MOVEit servers B and C, the delivered report will include data from server B only. However, if a schedule's underlying template does not contain any filter settings and the schedule creator does not assign a ruleset to the schedule, the delivered report will contain data from all MOVEit sources.

Create a Schedule

Tip: Before creating a schedule, you might want to visit the **USERS** module to check user group membership. You cannot access group membership information from the schedule creation page.

---

1. Open the **REPORTS** module.
2. There are two ways to create a schedule:
   - On the **Schedule** tab, click **Create** and then select a template from the drop-down list.

     – or –
   - On the **Templates** tab, select a template you want to use as the basis of your schedule, and click **Schedule report**
3. The Create Schedule dialog box opens. Provide or select the following information:
   - **Schedule name.** The name that appears in the schedule list.
   - **Report data from.** A time range of data to include in the report. Time ranges are relative to the time when the report runs.
   - **Start (GMT).** Click the calendar icon to select a date. Enter a start time in the hour and minute boxes.

     To clear the date, click the calendar icon and click Clear.
     - ***Important***. All times are in GMT. For example, if you are in the Eastern Standard Time zone and it is 2:00 pm and you want to schedule a report to run immediately, for Start time you must enter 19:00 (2:00 pm + 5 hours offset from GMT = 7:00 pm, which is 19:00).
     - Do not select a Start time that is in the past. The schedule will not run.
     - To repeat this schedule on a recurring basis (next step), do not select the 31st of the month as a **Start** date.
   - **Repeat.** (Optional). Repeat frequency. Default is None (run once).

When selecting a **Repeat** mode, you must specify when the schedule **Ends:**

- **Never:** The schedule repeats indefinitely into the future.
- **On date:** Specify the last calendar day to run the schedule.

Note: If you save the schedule now, the schedule will deliver report(s) to the Library only. Only you, Administrators and System Administrators will have access to view the Library report.

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4 Click **Preferences.**

The Scheduled Report Preferences dialog box opens. Specify the following information:

§ **Report name:** The suggested name is the same as the schedule name, but you can change it. The report name is listed in the Library (if delivered there), or is used as the file name if delivered as a PDF or CSV attachment.

§ *Optional*: Select a **Macro** from the drop-down list to the right of Report name to append a dynamic date/time at the end of the report name.

§ **Description:** This description appears next to the report name in the Library.

§ **Report Type:** Select where you want to deliver the report: You must select at least one report type. You can select multiple types for the same schedule.

- **Library:** Sends the report to the Library.
- **PDF:** Sends the report to email recipients as a PDF file attachment. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.
- **CSV:** Sends the report to email recipients as a CSV file attachment. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

Click **Save.**

5 Click **Recipients.** The Scheduled Report Recipients dialog box opens. Make your selections for recipients, notifications, and language for notifications and attachments.

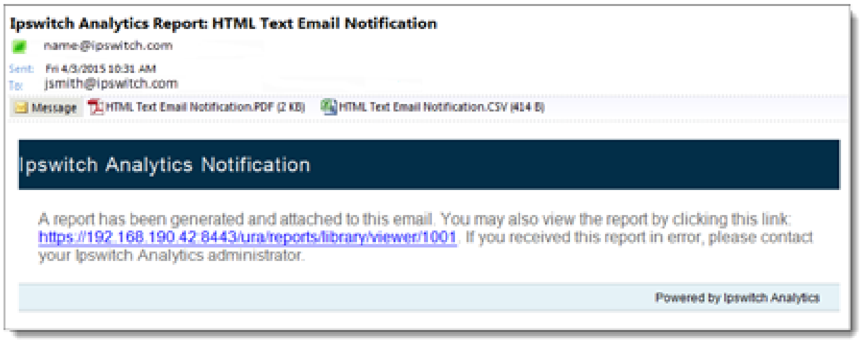
Important: If you do not select any recipients, the report is delivered to the Library only, where it is accessible only to Administrators and System Administrators. Recipients receive the report via email only if you select **Send notifications to all recipients.**

Types of Recipients:

§ **Users** and **User Groups:** These recipients can view the report in the Library (if sent there). If **Send notifications to all recipients** is checked, these recipients receive an email that contains a link to the Library report and/or the attached report in PDF or CSV format (depending on the Report Type you selected in Step 7). **Warning:** If you are a Creator, you must include your user name or user group here, otherwise you will not be able to view the Library report. Administrators and System Administrators can view all Library reports at all times.

§ **External email addresses:** Enter email addresses (separated by commas) beneath **Also notify others using the following email addresses.** If **Send notifications to all recipients** is checked, these email recipients receive an email that contains a link to the Library report and/or the attached report in PDF or CSV forma (depending on the Report Type you selected). **Note:** If the email address is not an address that is recognized by Ipswitch Analytics, links to Library reports will require sign-in to Ipswitch Analytics.

The following email notification shows a recipient who has received PDF and CSV report attachments, as well as a link to the report in the **Library**:



The link opens the Library, where the recipient can locate the report name in the title of the email. For any recipient, the Library lists only those reports for which the recipient has permission.

Ruleset. *This field is available to Administrators and System Administrators only:* The Ruleset option appears only if a ruleset has been previously created. For more information, see ***Create a ruleset*** (on page 109).

Optionally select a **Ruleset** to control which MOVEit sources will contribute data to the scheduled report.

Important: If a schedule's underlying template already contains filter settings AND you assign a ruleset to the schedule, the report will include only the MOVEit data sources allowed by both. For example, if the template filter allows data from only MOVEit servers A and B and the schedule ruleset allows data from only MOVEit servers B and C, the delivered report will include data from server B only. However, if a schedule's underlying template does not contain any filter settings and the schedule creator does not assign a ruleset to the schedule, the delivered report will contain data from all MOVEit sources.

Click **Save** when you are finished with Recipients.

6 Click **Save** again to save the schedule.

The schedule appears in the Schedule list showing **Status** > **Scheduled**.

Edit a Schedule

Any Creator, Administrator or System Administrator can edit a schedule.

1 Go to **REPORTS** > **Schedule**.

2 Select a schedule to edit and click **Edit Properties**. The Edit Schedule dialog box opens.

3 You can edit any of the following items:

- **Schedule name:** The name that appears in the Schedule list. If you modify the schedule name, the Last Result column in the Schedule list will clear, because the schedule is operating under a different name.
- **Report data from:** The time range of data to include in the report. Time ranges are relative to the time when the report runs.
- **Start (GMT)** date and time: Click the calendar icon to select a date in the future, and enter the start time in the hour and minute boxes provided. To clear the date, click the calendar icon and then click **Clear**.

Important: All times are in GMT. For example, if you are in the Eastern Standard Time zone and it is 2:00 pm and you want to schedule a report to run immediately, for Start time you must enter 19:00 (2:00 pm + 5 hours offset from GMT = 7:00 pm, which is 19:00).

§ Repeat Mode:

When selecting a Repeat mode, you must specify when the schedule Ends:

· Never: The schedule repeats indefinitely into the future.

· On date: Specify the last calendar day to run the schedule.

4 Click Preferences.

The Scheduled Report Preferences dialog box opens. Edit any of the following items:

§ Report name: The suggested name is the same as the schedule name, but you can change it. The report name is listed in the Library (if delivered there), or is used as the file name if delivered as a PDF or CSV attachment.

§ *Optional*: Select a Macro from the drop-down list to the right of Report name to append a dynamic date/time at the end of the report name.

§ Description: This description appears next to the report name in the Library.

§ Report Type: Select where you want to deliver the report: You must select at least one report type. You can select multiple types for the same schedule.

· Library: Sends the report to the Library.

· PDF: Sends the report to email recipients as a PDF file attachment. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.

· CSV: Sends the report to email recipients as a CSV file attachment. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

Note: You must select at least one Report Type. You can select multiple Report Types for the same schedule.

Click Save when you are finished.

5 Click Recipients to edit any of the following:

§ Users and User Groups: These recipients will have access to view the report in the Library (if sent there). If Send notifications to all recipients is checked, these recipients will receive an email that contains a link to the Library report and/or the attached report in PDF or CSV format (depending on the Report Type you selected). Warning: If you are a Creator, you must include your user name or user group here, otherwise you will not be able to view the Library report. Administrators and System Administrators can view all Library reports at all times.

§ External email addresses: Manually enter one or more email addresses beneath Also notify others using the following email addresses. If Send notifications to all recipients is checked, these email recipients will receive an email that contains a link to the Library report and/or the attached report in PDF or CSV forma (depending on the Report Type you selected). Note: If the email address is not an address that is recognized by Ipswitch Analytics, links to Library reports will require sign in to Ipswitch Analytics.

§ Important: If you don't select any recipients, the report will deliver to the Library only and the only users who will have access to view the Library report will be Administrators and System Administrators. Recipients will receive the report via email only if you select Send notifications to all recipients.

Administrators and System Administrators only: Optionally select a **Ruleset** to control what MOVEit sources will contribute data to the scheduled report.

Note: You must first ***create a ruleset*** (on page 109) before the Ruleset option will display here.

Important: If a schedule's underlying template already contains filter settings AND you assign a ruleset to the schedule, the report will include only the MOVEit data sources allowed by both. For example, if the template filter allows data from only MOVEit servers A and B and the schedule ruleset allows data from only MOVEit servers B and C, the delivered report will include data from server B only. However, if a schedule's underlying template does not contain any filter settings and the schedule creator does not assign a ruleset to the schedule, the delivered report will contain data from all MOVEit sources.

Click **Save** when you are finished with Recipients.

6. Click **Save** again to save the schedule.

Pause or Resume a Schedule

You can pause a schedule to prevent it from creating and sending reports, and then resume it at any time.

Any Creator, Administrator or System Administrator can pause or resume a schedule.

You can pause a schedule only when its status is Scheduled.

1. Go to **REPORTS > Schedule**.
2. To pause a schedule, select the checkboxes for the schedules and click **Pause**.
   The status shows **Paused**.
3. To resume a schedule, select the checkboxes for the schedules and click **Resume**,

Delete a Schedule

Any Creator, Administrator or System Administrator can delete any schedule.

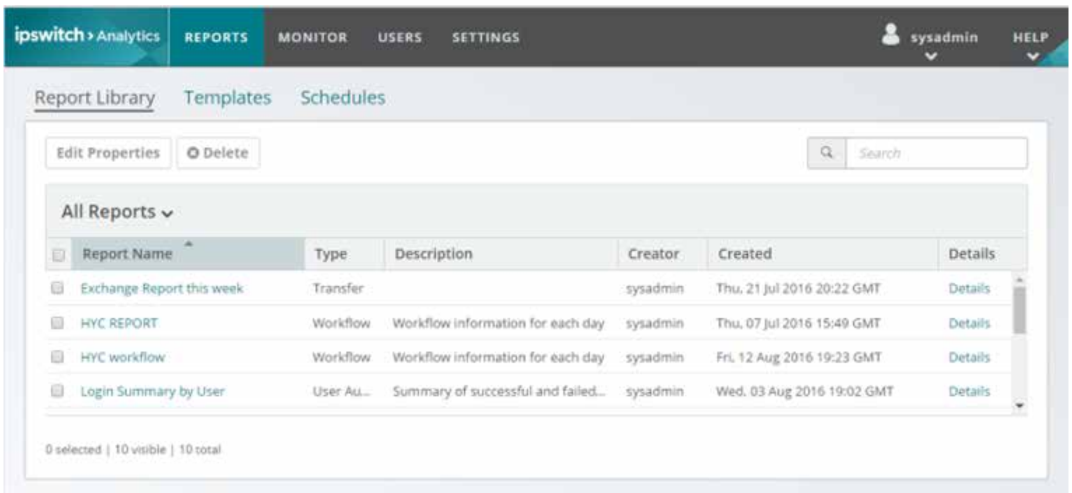
1. Go to **REPORTS > Schedule**.
2. Select the checkboxes for the schedules to delete.
3. Click **Delete**.
4. Click **OK** to confirm.

View and Manage Library Reports

The **Library** is a repository of saved reports that you can view within the Ipswitch Analytics interface, export and analyze.

A report contains actual data captured from one or more MOVEit servers over a specific period of time.

The list contains only those Library reports for which you have been granted access. Administrators and System Administrators can view, edit and delete all Library reports. Any Creator who has access to a Library report can edit the report's properties (access rights, name, and description), or delete it from the Library.



To add reports to the Report Library:

- Run a template in the Template Editor then save the report to the Library
- Create a schedule to deliver the report to the Library

The Library shows the following information about each report. Click any column header to sort reports in ascending or descending order.

Report Name	The name of the report.

Type	Every report has a type. There are four types of reports: § **Transfer:** Transfer templates capture transfer upload and download data for MOVEit Transfer and MOVEit Automation, including transfers from ad-hoc and mobile. Transfer templates are also used for data from Microsoft Exchange support for Ipswitch Analytics, for file transfers that are based on email attachments. § **Workflow:** Workflow templates capture workflow, task, and step data for MOVEit Automation only. § **User Audit:** User Audit templates capture all actions initiated by a user on MOVEit Transfer and Ipswitch Analytics, which can be used to demonstrate regulatory compliance. User Audit templates show who accessed the system, what they did, and when. User Audit templates do not include system actions, only actions initiated by a user. **Note:** MOVEit Automation file operations are not captured in User Audit reports because tasks are not user-initiated actions. § **Security:** Security templates capture failed login activity and user/IP lockout activity on MOVEit Transfer and Ipswitch Analytics to help you locate suspicious activity (defined as an excessive number of failed access attempts). To display only one type of report at a time, select a type from the drop-down menu at the top of the table.
Description	A brief description of the report.
Creator	The user who created the template.
Created	The date/time when the report was created.
Details	Contains details about the report: § **ID:** A numeric identifier assigned to each report. § **Privacy setting:** § **Public:** Viewable by all users. § **Private:** Viewable only by the user who ran the report. § **Updated on:** The date and time when the report properties were last changed. § **Updated by:** The last user who edited the report properties (such as renaming or changing report access).

Use the **Search** box to locate any item in the reports. The asterisk (*) wildcard is accepted in searches.

Note: You cannot search for terms inside of packages/files transferred.

Tip: When searching for a time, enter **16.30** instead of 16:30.

Creators (and higher) can select a report row and click **Delete** to delete a report.

Select any report name to **open the report** and view its contents.

The time range of the report displays in the upper right. All times are in Greenwich Mean Time (GMT).

Click **Export Results** to save the report as a PDF or CSV file. Your web browser will download the file.

Creators (and higher) can click **Analyze Report** to open the report's underlying template in the ***Template Editor*** (on page 166) to add or remove fields if desired, change the field column order, rerun the report with a new configuration and optionally save the new configuration as a new template.

Edit a Library Report's Name and Description

You can edit a Library report's properties to change its name, description, and access rights.

Note: Creators must have access to a Library report to be able to edit its properties. Administrators and System Administrators can view and edit all Library reports at all times, even if they are not explicitly given access to any reports.

1. Go to **REPORTS** > **Report Library**.
2. Select any Library report row and click **Edit Properties**.

   The Edit Report Properties dialog box opens.
3. Change the **Report Name** and/or **Description**.
4. *Optional*: to grant or remove access to this Library report, change the **Group Access** and **User Access** settings.
5. Click **Save**.

Control Access to a Library Report

Edit a Library report's properties to change its access settings.

Note: Creators must have access to a Library report to be able to edit its properties. Administrators and System Administrators can view and edit all Library reports at all times, even if they are not explicitly given access to any reports.

1. Go to **REPORTS** > **Report Library**.
2. Select any Library report row and click **Edit Properties**.

   The Edit Report Properties dialog box opens.
3. Change the **Group Access** and **User Access** settings to grant or remove access to this Library report. Click inside each box to select from a list of groups and users.

   Optional: Change the **Report name** and **Description**.
4. Click **Save**.

Export a Library Report

You can export a Library report to save it as a PDF or CSV file. Your web browser will download the report file.

1. Go to **REPORTS** > **Report Library**.
2. Select a report name. The report opens.
3. Click **Export Results** and select one of the following export formats:
   - PDF
   - CSV
4. Enter a **Report Title** for the export.

   Use the existing Report Title, or enter a new one.

   Recommended: Include filter and time range information in the report title.
5. Click **Save**.
6. Choose to either **Save File** to your local machine, or **Open with** to open the report immediately.

Delete a Library Report

Note: Creators must have access to a Library report to be able to delete it. Administrators and System Administrators can delete any Library report at any time, even if they are not explicitly given access to any reports.

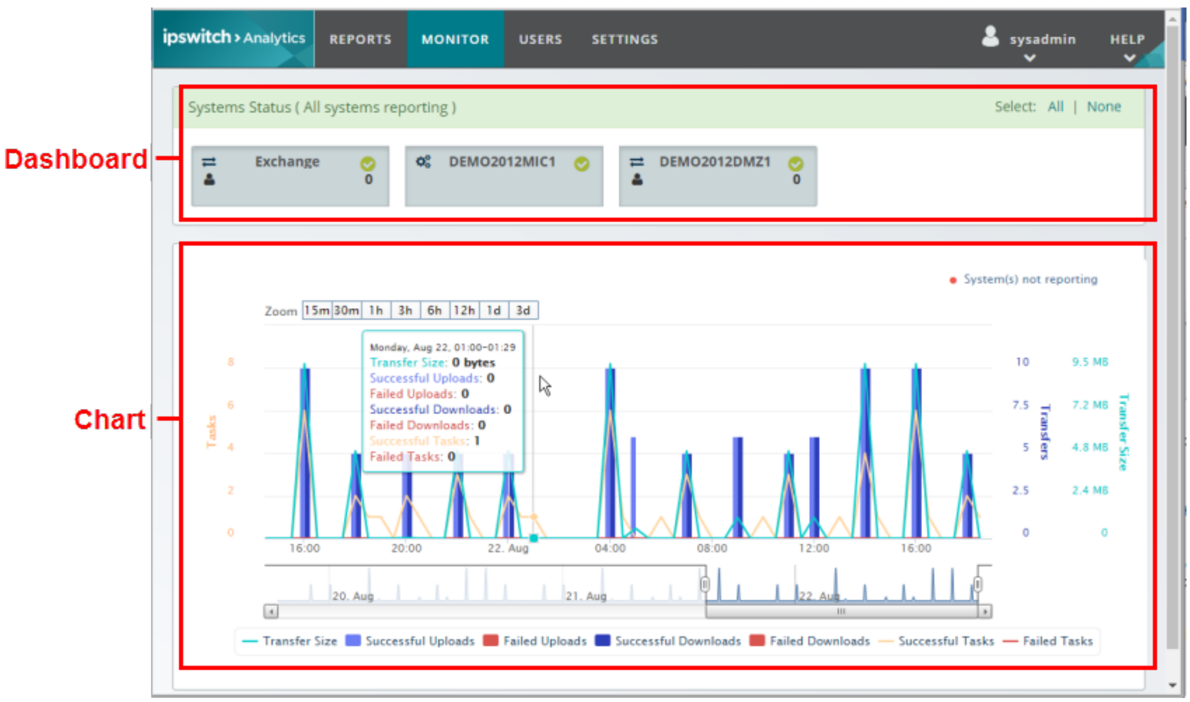
1. Go to **REPORTS** > **Report Library**.
2. Select the checkboxes for the reports to delete.
3. In the upper right, click **Delete**.
4. Confirm the deletion by clicking **OK**.

Monitor

The **Monitor** is a chart that shows a high-level summary activity on your MOVEit server(s) for the past 72 hours, updating every 60 seconds to refresh with new data. Charted performance metrics include successful and failed uploads, downloads, tasks, and transfer size. A dashboard also shows the reporting status of all of Ipswitch Analytics Agents that collect data from your MOVEit database(s). Use the Monitor to track current server usage and status, detect short-term transfer and processing trends, discover and manage system issues as they arise, diagnose system health, and isolate failures. The Monitor shows you timely and actionable information for real-time response to system issues, so you can focus quickly on trouble spots to catch and respond to problems before they get out of hand.

Tip: Display the Monitor on a large screen where it can be seen by many people. The Monitor will continue to refresh graph data every minute until you choose to sign out.

The Monitor includes a dashboard where you can see the status of each Agent that collects data from a MOVEit database, and a chart below it that graphs that data:



For more information, see :

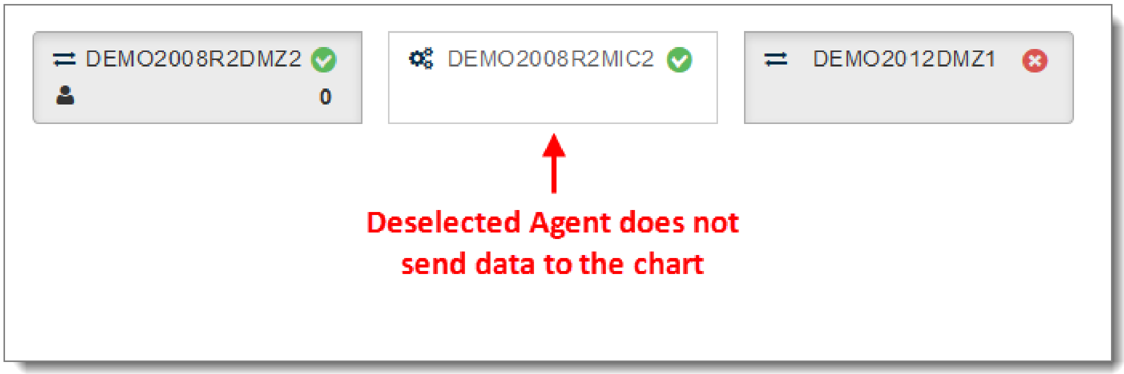
Monitor Dashboard (on page 147)
Monitor Chart (on page 149)

Monitor Chart

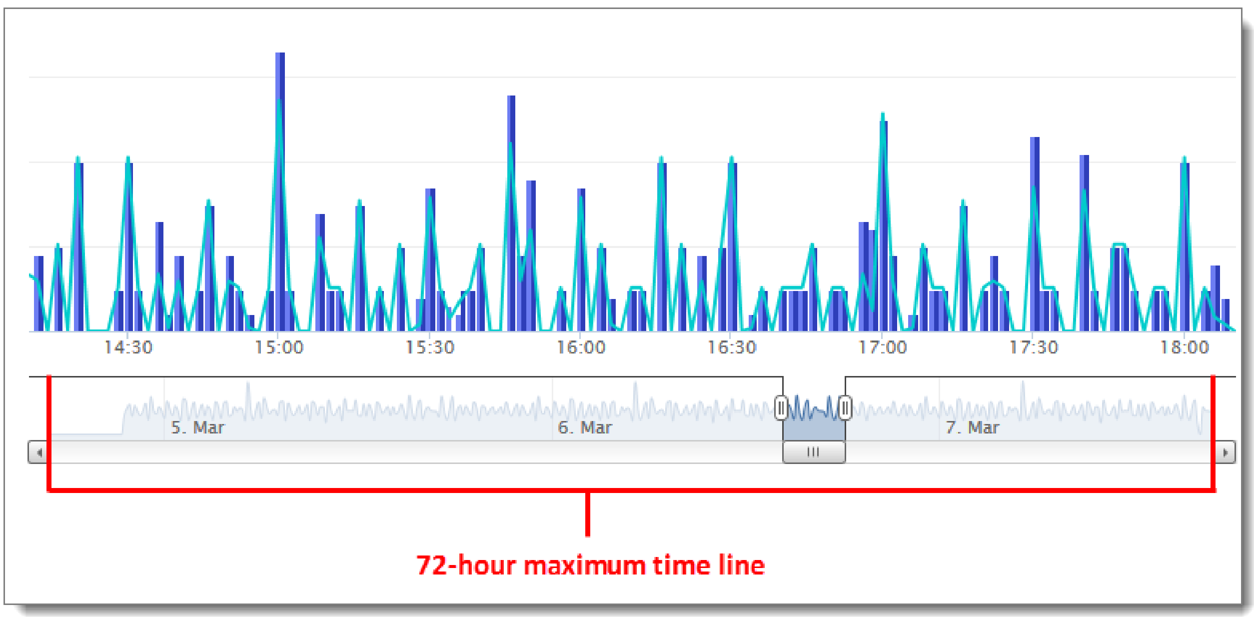
Beneath the dashboard is an easy-to-interpret chart that shows a high-level summary of activity on your MOVEit server(s). Charted metrics include successful and failed uploads, downloads, tasks, and transfer size.

Important: All dates and times in the Monitor are in Greenwich Mean Time (GMT).

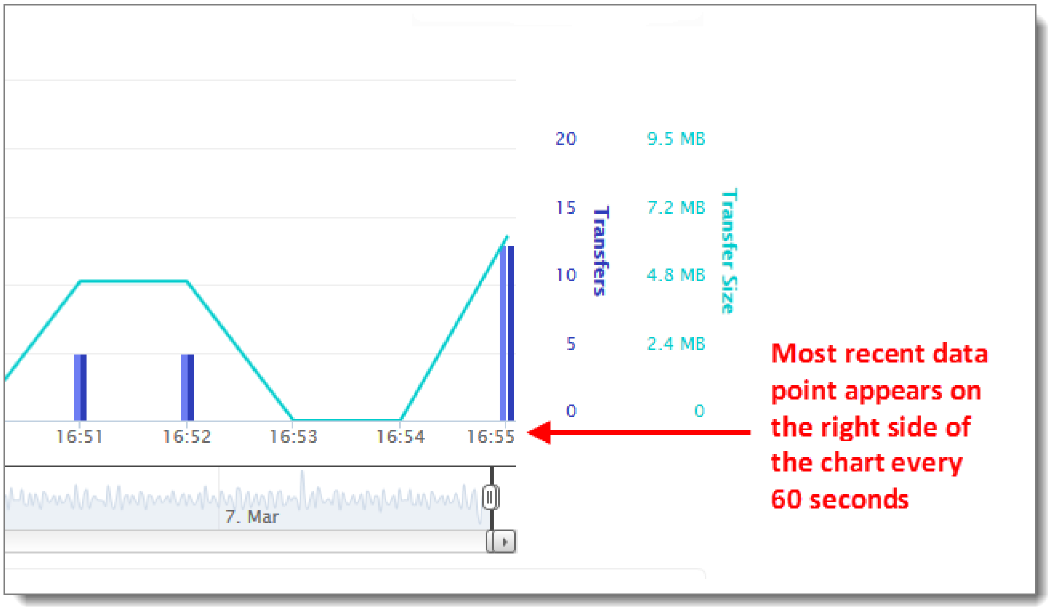
The chart includes data only from the MOVEit Agents you select in the ***dashboard*** (on page 147). Select an Agent to show or hide its data in the graph below.



A 72-hour time line at the bottom of the chart shows the maximum amount of time that can display in the chart.



New data points add to the right side of the chart every 60 seconds. The last update shows at the bottom right.

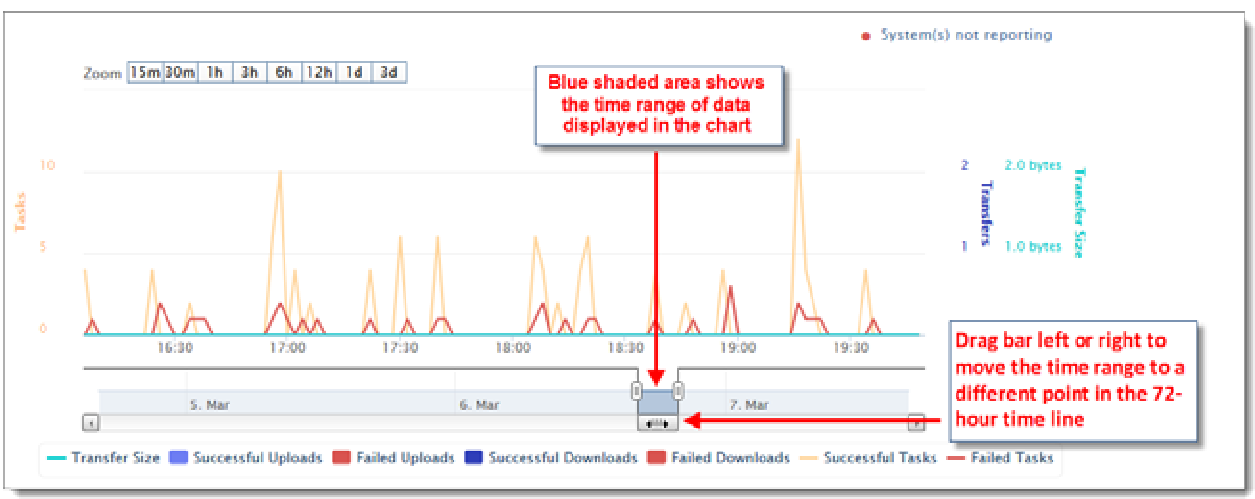


ADJUST TIME RANGE OF DATA SHOWN IN CHART

When you first open the Monitor, only data for the past 15 minutes display in the chart, as indicated by the blue shaded area in the time line at the bottom of the chart. The blue shaded area in the time line indicates the time range of data displayed in the chart.

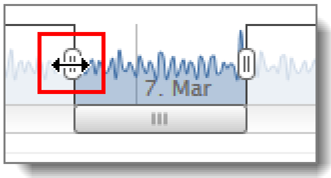
You can adjust the time range of data displayed in the chart by doing any of the following:

Move the sliders in the time line:



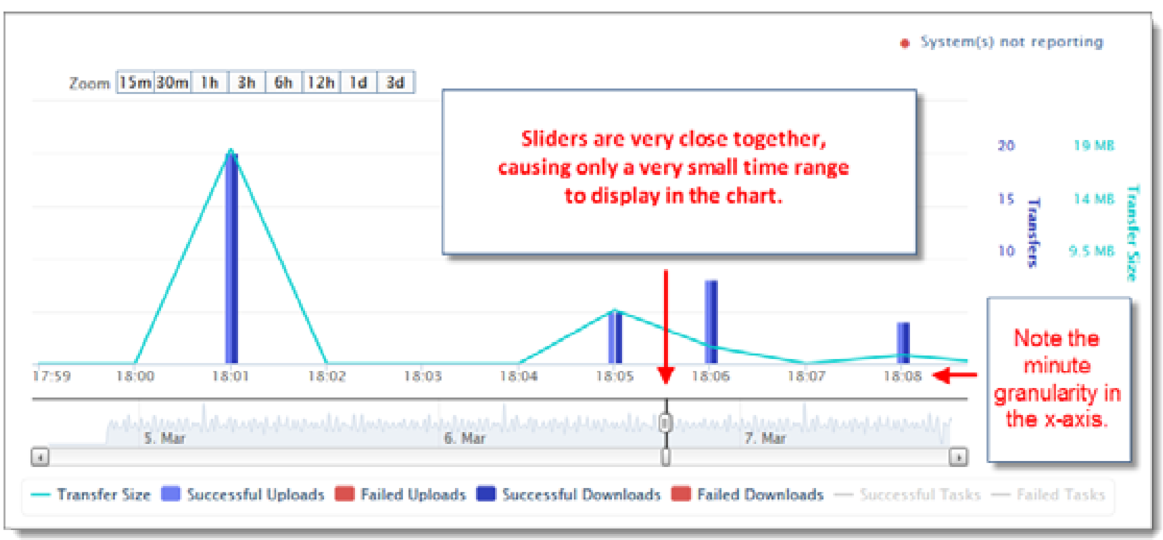
Drag the slider bar left or right to move the time range to a different point within the 72 hours. The chart data updates to show the new time range.

You can also drag one or both sliders in the time line to new positions to create a custom time window.

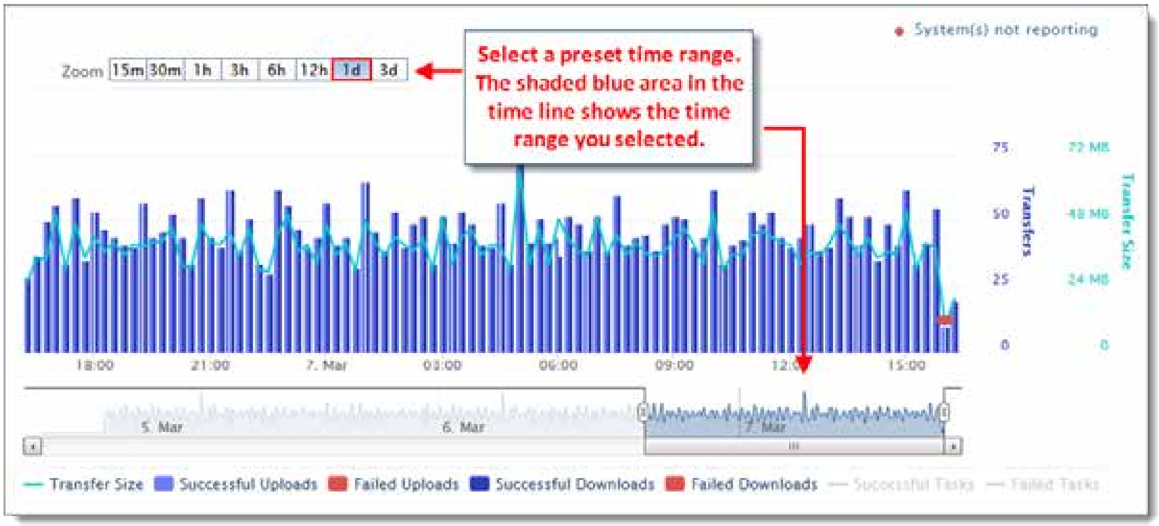


Drag the sliders their maximum distance apart to display the full 72 hours in the chart:

Move the sliders closer together to narrow the time range. This can help you focus on a specific time range of interest:

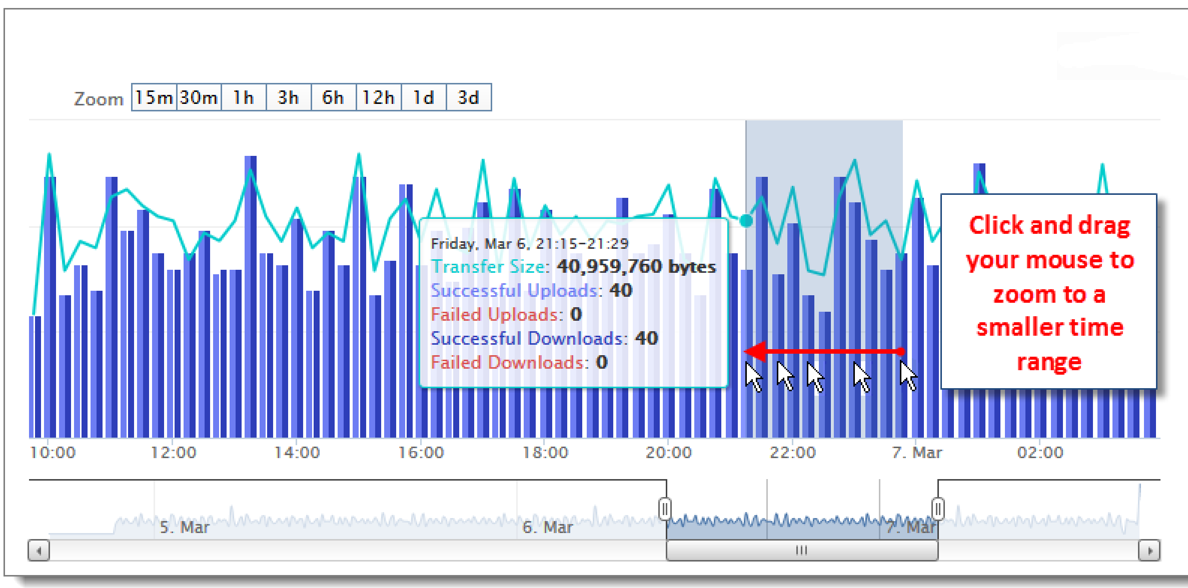


Zoom to a preset time range:



Zoom options range from 15 minutes to the entire 3-day window. The selected zoom displays in blue.

Click and drag inside the chart with your mouse:



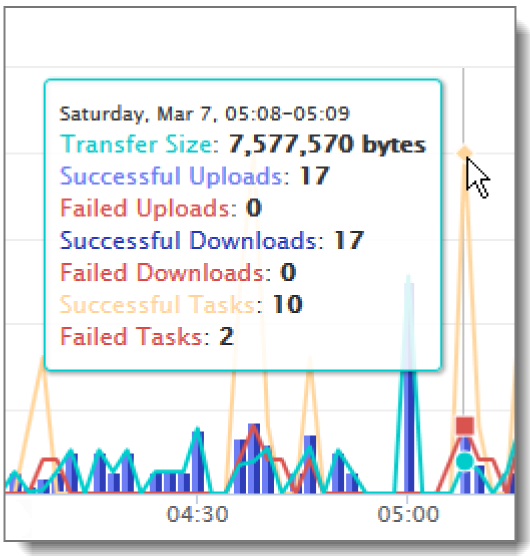
You can drag your mouse either left or right inside the chart.

Note: This method only works if you want to view a SMALLER time range; you cannot click and drag to view a larger time range.

Whenever you adjust the time range with the methods shown above, the horizontal x-axis updates to display data for that time range only, and the vertical y-axis on both sides of the chart also updates to show a value range that is appropriate for the selected time range.

VIEW DATA POINTS

Hover your mouse over any time point to view all data available for that time point:



You may not be able to see small values if you select a large time range, or if other values within the time range are disproportionately large. For example, if the 1:24 pm time point has 12,780 successful uploads but only two failed uploads, the vertical bar showing the two failed uploads will probably be too small to notice on the screen. To isolate small values of interest so they are more easily visible in the chart, select a smaller time range, or hide all other data metrics using the interactive legend (explained below).

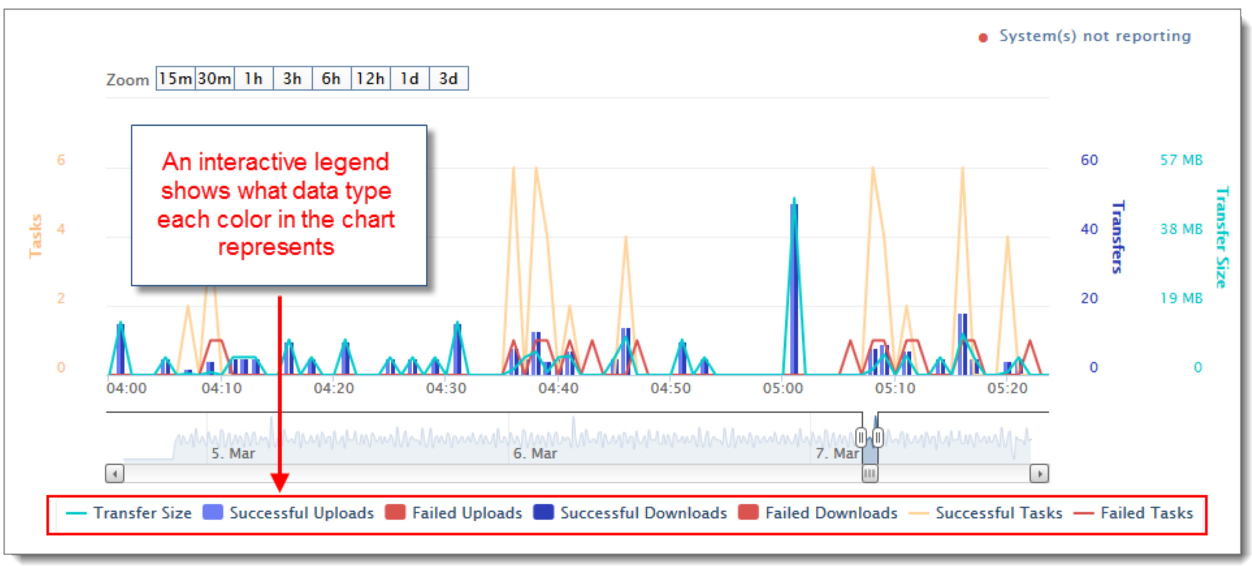
Note: All times display Greenwich Mean Time (GMT).

SHOW/HIDE DATA TYPES IN THE CHART

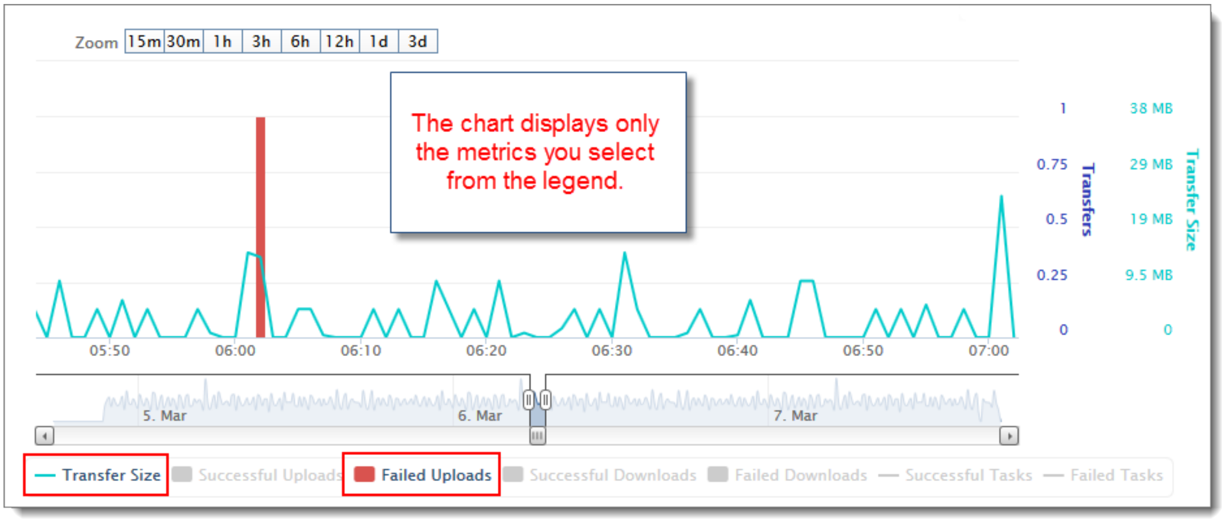
The chart includes the following transactions from your MOVEit server(s):

- **Successful Uploads** (bar chart)
- **Failed Uploads** (bar chart)
- **Successful Downloads** (bar chart)
- **Failed Downloads** (bar chart)
- **Transfer Size** (line chart)
- **Successful Tasks** (line chart)
- **Failed Tasks** (line chart) **Note:** A MOVEit Automation task fails when at least one of its script/action failed.

Each data type has a different color in the chart for easy identification, with an interactive color legend below.



Click a data type inside the legend to show or hide that data type in the chart. This is useful for isolating transfer and task failures, abnormal behavior, and other items of interest. For example, you may want to hide everything except Failed Uploads on a specific MOVEit Transfer server.

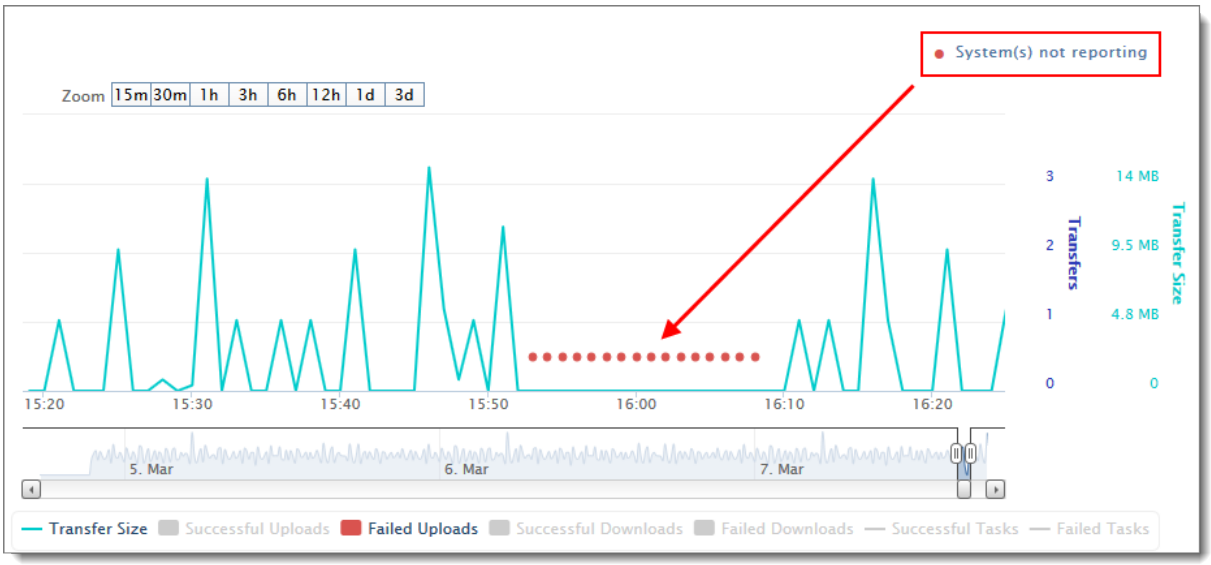


Note: Successful Uploads and Successful Downloads display side-by-side within each time point.

Note: If you select only MOVEit Transfer Agents in the dashboard, the legend grays out Successful Tasks and Failed Tasks, and the Tasks label disappears from the y-axis. Likewise, if you select only MOVEit Automation Agents in the dashboard, the legend grays out Transfer Size, Successful Uploads, Failed Uploads, Successful Downloads and Failed Downloads, and the Transfers label disappears from the y-axis. The chart always displays Transfer Size whenever at least one Agent of any type is selected in the dashboard.

AGENTS OFFLINE

If the status of at least one of the Agents is either offline or unknown, you will see a red dot floating just above the x-axis. A single red dot may represent multiple Agents that are offline, so hover your mouse over the red dot to see which Agents are offline. You will also see a **System(s) not reporting** in the upper right.



Red dots from prior minutes will remain in the chart even when connection re-establishes.

Note: Metrics may not be 100% accurate for transfers in transient states (for example, when a transfer occurs over multiple minutes). Once the transfer completes, the chart refreshes to show the final correct size and count. The chart displays a current snapshot of server activity only; once the transfer completes, the chart refreshes to show the final correct size and count for those minutes.

SAVE CHART DATA

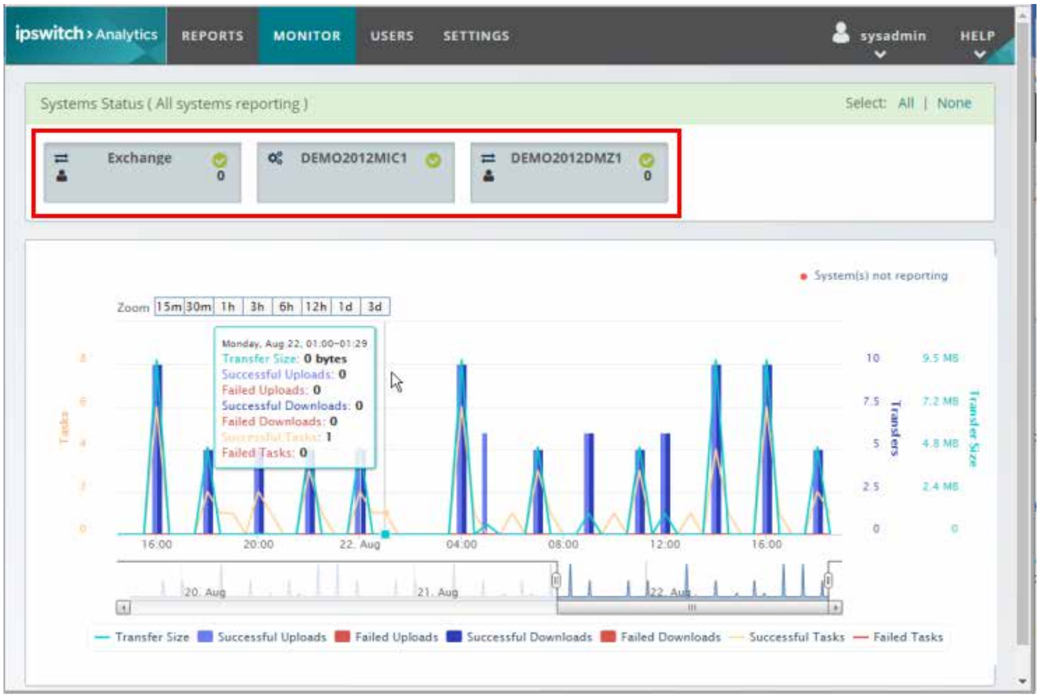
Chart data is dropped after 72 hours and is not archived. The chart is transitory and is not meant to be saved or exported. However, chart data is obtained from the same data source as Report data, so you can also get the same underlying data from ***reports*** (on page 157) (in tabular rather than graphical format).

You can also preserve a snapshot of the chart by capturing an image of the screen:

- Press **Control + P** to print your browser page (Windows only)
- Use the built-in screen capture tool for your operating system:
  - Windows: Press the **Print Screen** key to save a picture of your screen to the clipboard, and then press **Control + V** to paste the image into a file
  - Macintosh: Press **Command + Shift + 3** to save your screen as an image file on your desktop

Monitor Dashboard

The dashboard at the top of the Monitor displays all Ipswitch Analytics Agents on your system. An Agent collects data from a MOVEit database and sends that data to Ipswitch Analytics.



The dashboard shows a different colored **System Status**, depending on how many Agents are online currently:

Systems Status (All systems reporting)	All Agents are online and sending data to Ipswitch Analytics.
Systems Status (3 of 4 systems reporting)	Some Agents are online and sending data to Ipswitch Analytics while others are not.
Systems Status (No systems reporting)	All Agents are offline and none are sending data to Ipswitch Analytics.

The System Status also shows "***X* of *X* systems reporting**", so you know at a glance how many Agents are online.

Tip: Click on **System Status** to show or hide the dashboard. This is helpful when you want to maximize screen space to display more of the graph below.

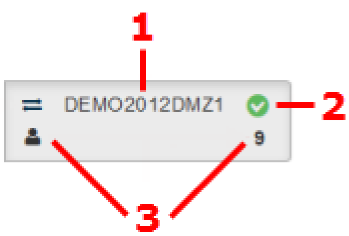
Each Agent inside the dashboard includes the following information:

- **Name**: The name of the Agent collecting data from a MOVEit database. Frequently this name will be similar to the MOVEit server name. If using a MOVEit Transfer web farm, this will be the name of the Agent that collects data from the web farm's single database. If using a MOVEit Transfer High Availability (HA) configuration, this will be the name of the Agent that collects data from the HA primary server.
- **Status**:

  Agent is online and sending data to Ipswitch Analytics.

  Agent was not able to send data to Ipswitch Analytics in the last minute. After three consecutive failed attempts to send data, status changes to offline .

  Agent is offline. There have been at least three consecutive failed attempts to send data. The chart will continue to show historical data for minutes when the Agent was not sending data.
- **Number of signed-in users** (MOVEit Transfer servers only)



Item	Description
1	Agent Name
2	Status
3	Number of users signed on concurrently

Click on an Agent to include or exclude data from that MOVEit database in the graph. Selected Agents display with a gray tint in the dashboard, while unselected Agents are white:

How Do I...

Create a Template

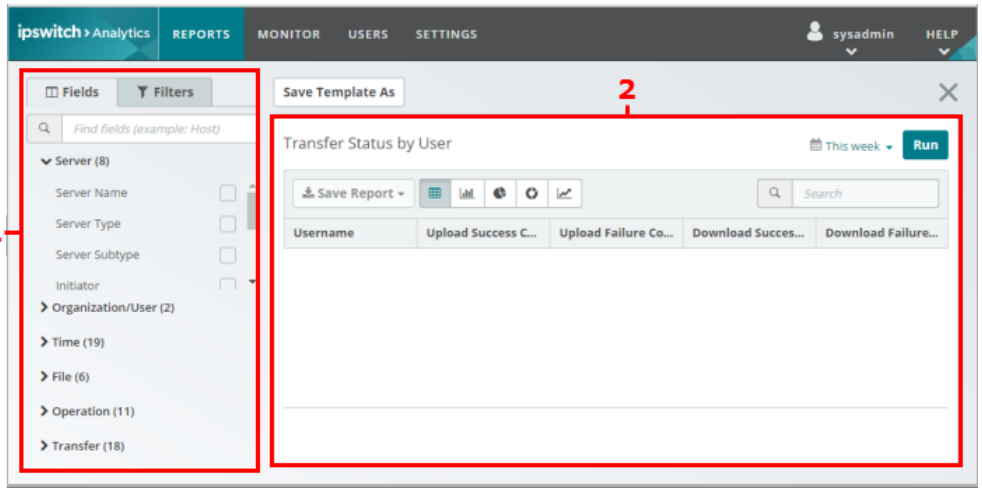
1 Go to REPORTS > Templates.

To create a template, you can:

- Open an existing template (stock or custom), modify that template, and then click Save Template As to save it with a new name
- Create a new template from scratch.

2 Click Create and select the ***type of template*** (on page 157). Options are Transfer, Workflow, User Audit, and Security,

The template editor contains a Palette and a Canvas.



1. Palette

Fields tab: Area where you select the data fields to include in the template. Initially, the Fields palette is empty. Each field that you click in the palette appears as a column header in the canvas.

Filter tab (unselected in the figure): Area where you optionally filter data by MOVEit sources.

2. Canvas

The main workspace that contains all of the template's data fields, placed as column headers. New templates do not contain any fields.

Template Editor Actions

To	Do this
Show summary or detailed fields in the palette	This option is available when you are creating a new template. In the Report Output dropdown box, in the upper right corner of the screen, select Summary or Detailed. § **Detailed**: Displays fields that capture a single item of information about an individual transaction (transfer, process, or action). § **Summary** (default): Displays fields that aggregate multiple detailed fields to summarize data at high levels. Summary information can include multiple transfers, processes or actions that have been aggregated for higher-level analysis. Summary fields reduce the number of rows in the report, which is useful if you want to reduce report results to a manageable length. Only fields that are specifically Summary or Detailed fields are affected by your selection. **Warning:** You will lose all fields that you have already added to the template if you change the Report Output
Add fields to a template	In the palette, click the **Fields** tab, and then click the plus sign (+) next to the field name. The field that you click appears as a column in the template canvas. To see a description of the type of data that the field displays in a report, hover over the field name in the palette. For more information, see ***Field Definitions*** (on page 218).
Remove fields from a template	In the palette, clear the checkbox for the field.
Change the layout of field columns	Click and drag a column heading.
Sort data in a column	Click a column heading. Column sorting is available only in the template editor. Sort order cannot be saved in the report. To save a report with a specific column sort order, save to CSV file (see row, below), and use the column sorting feature in Excel® or similar tool.
Filter a template	A filter lets you choose to include or exclude data from only specific MOVEit sources and MS Exchange sources. **1** In the palette, click the **Filters** tab. Click Add Filter. Make selections to limit the data in the template. Click **Add**. **2** To add additional filters, repeat the process. For details about filter fields, see ***Add a Filter*** (on page 193).
Add data visualizations to a template	Click an icon for the chart type. You can add one of each type of chart: line, bar, donut, pie. For more information, see ***Add Data Visualizations*** (on page 164).

Run a template to produce a report	**1** In the upper right corner of the screen, from the dropdown, select a Time Range. **2** Click Run to populate the template with data
Save a report	**1** Run the template to produce the report. **2** Click Save Report and make a selection: § Report Library. Report is saved as a private report, viewable only by you. To allow viewing by specific users and groups, see ***Control Access to Library Reports*** (on page 177). § PDF. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report. § CSV file. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.
Save a template	**1** Click Save Template and enter a name and optional description. Names are case-sensitive. **2** Optionally select Publish to all users. This option allows any user with access to the templates tab to view, modify, and delete the template, providing their user role allows access to that template type. If this option is not selected, only you can access the template. Note: Time Ranges are not saved with the template. The time range selector affects only templates run inside the template editor.

Publish a Custom Template

After you create a custom template, you can publish it to make it visible to all users who have access to the Templates tab.

Note: Stock templates are always visible by anyone with access to the Templates tab.

Important: If a template is public, anyone with access to the Templates tab can delete it.

1 In REPORTS > Templates, select the checkbox for the template.
2 Click Edit Properties.
The Edit Template Properties dialog box opens.
3 Select the Publish to all users (cannot be undone) checkbox.

Warning: When you make a template public, users who have access to the Templates tab can view, modify, and delete that template, providing their user role allows access to that template type.

4 Click Save.

Edit a Custom Template's Name or Description

You can edit the name and description of custom templates only.

1 In REPORTS > Templates, select the checkbox for the template.

2 Click **Edit Properties**. The Edit Template Properties dialog box opens.
3 Enter a new **Template Name** and/or a new **Description**.
4 Click **Save**.

Edit a Template's Fields and Filters

You can open any template to edit its fields and filters in the Template Editor. You can save your changes, or run the template and exit without saving.

Note: If you modify a stock template's fields and filters, you can click **Save Template As** to save your changes as a new template. You cannot overwrite a stock template.

1 In **REPORTS** > **Templates**, click the checkbox for the template.

The Template Editor opens. The template's fields and field placement appear in the main workspace, but the template does not contain any actual data yet. The **Fields** and **Filter** palettes appear in the left panel.

2 Make your changes.
- For details on how to add or remove fields, and change field placement, see ***Create a Template*** (on page 161).
- For details on how to add graphs (line, bar, donut, pie), see ***Add Data Visualizations*** (on page 164).
- For more information about filters, see ***Add a Filter*** (on page 193).

3 Click **Save**.

Create a Filter

A filter lets you choose to include or exclude data from only specific MOVEit sources and MS Exchange sources. Use filters in:

- **Templates**: Use a filter to include or exclude data from specific MOVEit or Exchange sources in the template. If you do not set any filters for a template, reports that you run using the template include field data from all sources to which you have access.
- **Rulesets**: Only data from the MOVEit or Exchange sources that you select with the filter are included in or excluded from any report that is subject to the ruleset.

Ø *To create a filter:*

1. In the palette (on the left side of the screen) select the **Filters** tab and click **Add Filter**. The Add Filter dialog box opens.
2. Make selections or changes in the following fields, and click **Add**. On the palette, the filter is added to the list in the Filters tab.

Field	Description
Look in	Field to which the filter applies. The choices in the dropdown list depend on the type of template or ruleset that you are creating. For example, § For a workflow template, server selections include server name, server type, and server subtype § For a transfer template, server selections include server name, server type, server subtype, initiator, source host, destination host, and host
and include	You can include or exclude items that match the filter criteria.
search box	Searches within the items that are returned by the selection that you made in the **Look in** dropdown box. Wildcards are permitted: § Asterisk (*****) substitutes for zero or more characters. § Question mark (**?**) substitutes for a single character. **Note:** To specify an asterisk or question mark as a literal value, precede it with a backslash; for example ***** You can also search for items that do not exist yet. See below.
List of items, with checkboxes	This area lists all items that apply to the selection you made in the **Look in** dropdown box. To search in the list, use the search box. Select the checkboxes to filter by specific items.

Tip: You can select a filter type even if the template does not include that data field. For example, you can select the Usernames filter even if the eventual report does not contain the Username field.

Specifying Items that Do Not Exist Yet

In a filter, you can also specify items that do not yet exist.

Example: A server named A213B is planned to be added in the future. You want reports to include data from server A213B as soon as it is on line. When creating the template for the report, you can include server A213B in a filter, like this: In the filter's **Look in** field, select Servers, and in the Search box, specify the server name A213B. After the new server A213B is added, reports generated from the template that contain this filter will apply to server A213B.

Multiple Filters

You can add multiple filters to the Filters tab. Each filter uses OR within the same category when matching its filter criteria. Multiple filters use AND between filters.

Example: In the figure, the ABC Transfer Template has the following filters applied, with **include** selected for each filter.

Server Name filter:

- `DEMO2008R2MIC2`
- `DEMO2012DMZ1`

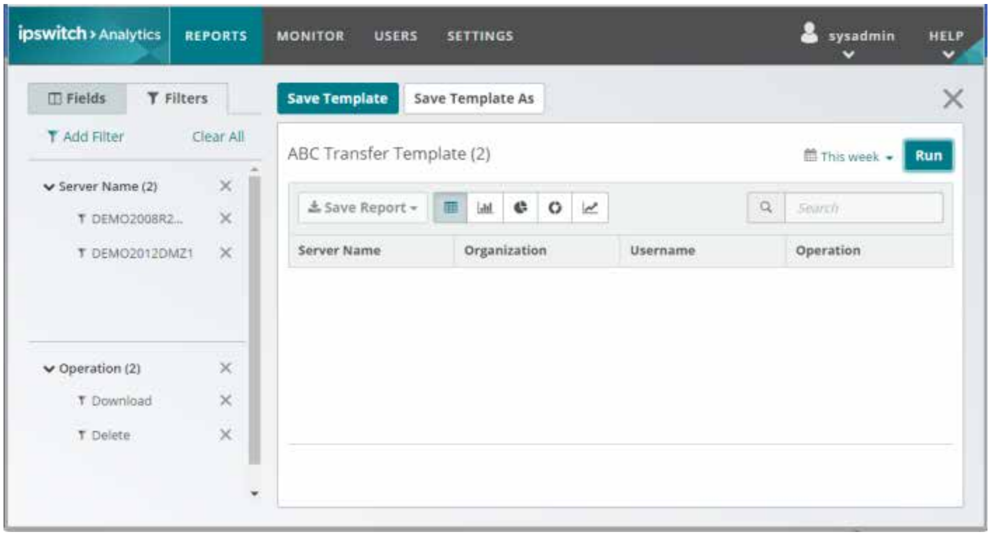
Operation filter:

- `Upload`
- `Download`

The filters return data as follows:

(`DEMO2008R2MIC2` OR `DEMO2012DMZ1`) AND (`Upload` or `Download`)

Return all `Upload` operations from either `DEMO2008R2MIC2` or `DEMO2012DMZ1`, and all `Download` operations from either `DEMO2008R2MIC2` or `DEMO2012DMZ1.`



Add Data Visualizations (bar, pie, donut, and line charts)

You can include data visualizations as part of a template. When you use the template as the basis for a report, the charts that you defined in the template are included in the report.

You can define one of each chart type in a template: bar chart, pie chart, donut chart, line chart.

Chart icons - location

§ Select REPORTS > Templates. Click a template name or create a new template.

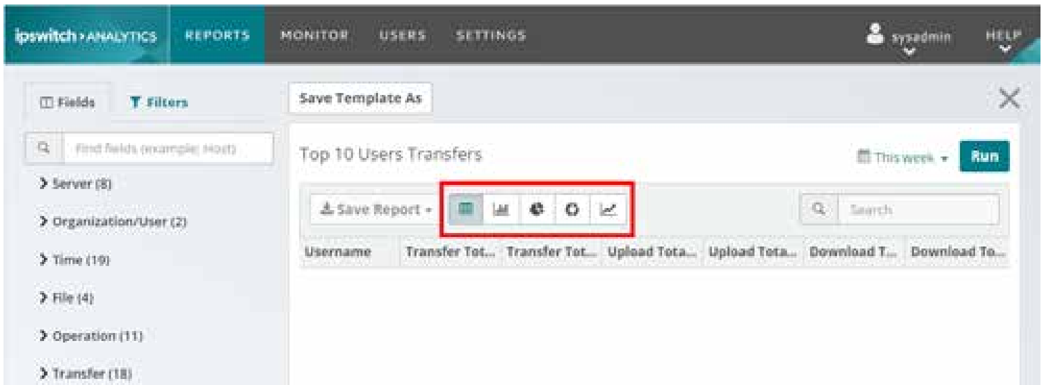
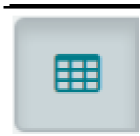
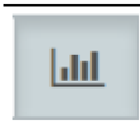
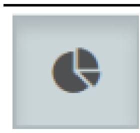
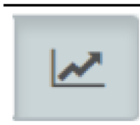


Chart icons

Icon	Description
	Grid. Does not represent a chart, but provides a convenient way to view the fields that are included in the template. Click this icon, then click Run.
	Bar chart
	Pie chart
	Donut chart
	Line chart To produce a line chart, the template must contain a minimum of one numeric field and one date-related field.

To add a chart to a new or existing template:

1 Select REPORTS > Templates.

2 Create a new template or click the name of an existing template.

The properties page for the template opens.

3 Click the icon for the type of chart. Click **Create**.

4 A dialog box opens for configuring the chart. Fields in the **<chart type> Selections** dialog box depend on the fields that are included in the template .

5 Make your selections and click **Create Chart**.

6 The chart needs data in order to be viewed. In the upper right, select the timeframe for the chart, and click **Run**.

The chart is populated with data.

7 To add other types of charts, click another chart icon and repeat the procedure.

Saving a report that contains charts

After you define each chart, its timeframe, and click **Run**, you can save the report. Data in the report, including data represented in the charts, cannot be changed.

Using a template in a schedule

If you save a template that contains charts, and set up a schedule that uses the template, reports that are generated when the schedule runs contain those charts, populated with data from the schedule run.

Charts that you do not configure in the template are not available in reports generated from that template.

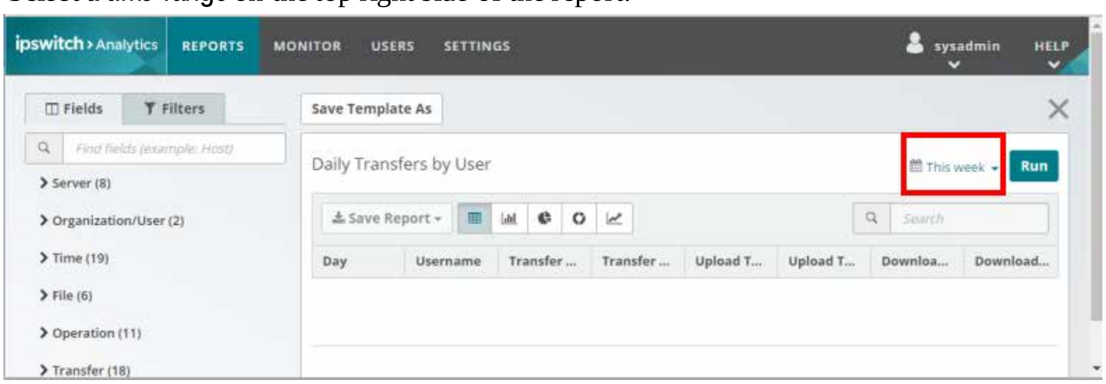
Create a Report On Demand

This topic describes how to run a template to create a report on demand. You can also ***schedule a report for delivery*** (on page 169) at a future time.

1 In **REPORTS** > **Templates**, click on a template name.

The Template Editor opens, showing the template.

2 Select a **time range** on the top right side of the report.



When run, the report will include only events that fall within the time range you select. The default is **This Week**.

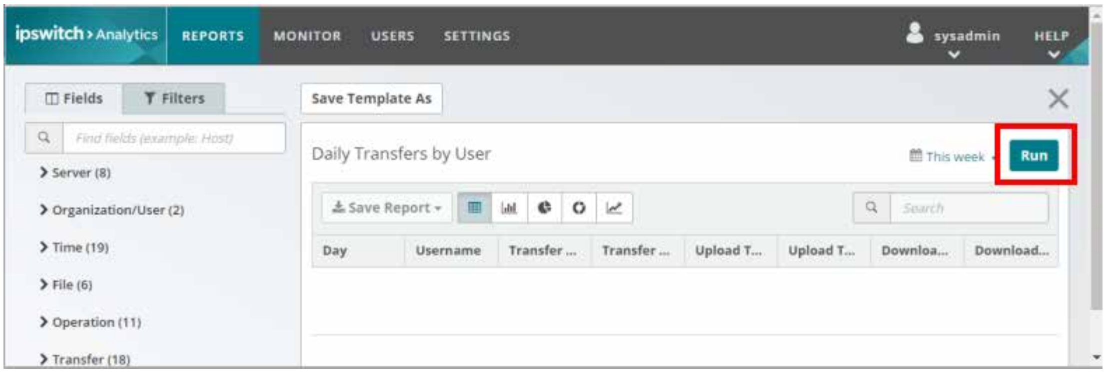
Note: You cannot save a time range with a template. The time range selector affects only templates that you run in the Template Editor.

Warning: Long time ranges might take longer to process. To reduce the amount of time it takes to run a template, make the time range shorter.

3 Optionally add charts to the report to show report data.

Click the button for the chart type (line, bar, donut, pie) and make your selections. For more information, see ***Add Data Visualizations*** (on page 164).

4 Click **Run** to populate the template with actual data from the MOVEit source(s) included in the Filter.



After a few moments, the report opens. It contains data records for the fields and filters specified by the template. The time range is listed beneath the template title:

Click any column heading in the report to sort data in ascending or descending order (arrows indicate sort direction).

5 SAVE A REPORT (optional):

After the template is populated with data, it becomes a report that you can save to the ***Library*** (on page 175), or export and download as a PDF or CSV file. Click **Save report** and make a selection..

Note: Saved reports do not contain column sorting.

After the report is run, you can use the **Search** box to locate any item in the report results. The asterisk (*) wildcard is accepted in searches.

Note: Searches cannot be performed inside of packages/files transferred.

Note: When searching for a time, enter 16.30 instead of 16:30.

Click a column heading to sort data in ascending or descending order (an up or down arrow indicates sort direction). Column sorting is available only in the Template Editor; sort order cannot be saved with the report.

Tip: To save a report with a specific column sort order, save the report to CSV and then use the column sorting feature in Excel or similar tool.

Tip: If a template takes a long time to run, click **Close** if necessary to close the Template Editor (you will lose any unsaved template changes).

Tip: To view multiple reports at the same time, open Ipswitch Analytics in additional web browser tabs or windows.

6 *Optional*: Save the report to the Library or as a PDF or CSV file, click **Save Report** and select one of the following:

- **Library**: Saves the report to the Library. By default, all Library reports will be private (viewable only by the user who saves the report). To allow specific users and user groups to see the Library report, see ***Control Access to Library Reports*** (on page 177).
- **PDF**: Your web browser downloads the PDF file, which you can view on any device or operating system (requires Adobe Reader). The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.
- **CSV** (comma separated value): Your web browser downloads the CSV file. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

The saved report includes all of the report's fields, field placement, filters, and time range. Reports that display in the Template Editor are limited to 1000 rows, but saved CSV reports will include all possible row results.

Note: If you searched for a value within the report, then go to save the report, the saved report will include ALL report results, not just the rows that met your search criteria.

Tip: A saved report does not include any data reported after the template was run. To save the most up-to-the-minute data, re-run the template right before saving the report.

Enter a **Report name** and **Description**.

Use the suggested name, or enter a new name.

Note: A saved report does not indicate Filter and time range settings. We recommend that you include Filter and time range information in the report name.

Click **Save**.

It may take a few moments for the report to complete the save/download process. Your browser will notify you when the download is complete.

If you saved the report to the Library, the Library report will be viewable only by you initially. To allow other users and user groups to see the Library report, see ***Control Access to a Library Report*** (on page 177).

If you saved the report as a PDF or CSV file, your browser will download the file. You can then print the report or attach it to an email.

Important: You may need to reformat some of the columns to display all content in a CSV file, such as any Field that contains a comma (for example, content in a Status Message Field), and the Timestamp Field. To reformat an Excel column, first select the cell or column, right-click and then select **Format Cells**. On the **Number** tab, select **Text** if the Field contains a comma, or **Date** to reformat the Timestamp Field.

Delete a Template

Note: You cannot delete a stock template, or a template that is currently used in a ***Schedule*** (on page 169).

Important: If a template is public, anyone with access to the Templates tab can delete it.

Note: Deleting a template will not delete any reports that were created in the past using that template.

1 In **Reports** > **Templates**, check the boxes next to the templates to delete.
2 Click **Delete**.

   Note: You cannot delete the stock templates that come with Ipswitch Analytics.

3 Click **OK** to confirm.

Create a Schedule

Tip: Before creating a schedule, you might want to visit the USERS module to check user group membership. You cannot access group membership information from the schedule creation page.

1 Open the REPORTS module.
2 There are two ways to create a schedule:
   - On the **Schedule** tab, click **Create** and then select a template from the drop-down list.

     – or –
   - On the **Templates** tab, select a template you want to use as the basis of your schedule, and click **Schedule report**
3 The Create Schedule dialog box opens. Provide or select the following information:
   - **Schedule name**. The name that appears in the schedule list.
   - **Report data from**. A time range of data to include in the report. Time ranges are relative to the time when the report runs.
   - **Start (GMT)**. Click the calendar icon to select a date. Enter a start time in the hour and minute boxes.

     To clear the date, click the calendar icon and click Clear.
     - ***Important***. All times are in GMT. For example, if you are in the Eastern Standard Time zone and it is 2:00 pm and you want to schedule a report to run immediately, for Start time you must enter 19:00 (2:00 pm + 5 hours offset from GMT = 7:00 pm, which is 19:00).
     - Do not select a Start time that is in the past. The schedule will not run.
     - To repeat this schedule on a recurring basis (next step), do not select the 31st of the month as a **Start** date.
   - **Repeat**. (Optional). Repeat frequency. Default is None (run once).

     When selecting a **Repeat** mode, you must specify when the schedule **Ends**:
     - **Never**: The schedule repeats indefinitely into the future.
     - **On date**: Specify the last calendar day to run the schedule.

   Note: If you save the schedule now, the schedule will deliver report(s) to the Library only. Only you, Administrators and System Administrators will have access to view the Library report.

4 Click **Preferences.**

The Scheduled Report Preferences dialog box opens. Specify the following information:

- **Report name**: The suggested name is the same as the schedule name, but you can change it. The report name is listed in the Library (if delivered there), or is used as the file name if delivered as a PDF or CSV attachment.
- *Optional*: Select a **Macro** from the drop-down list to the right of Report name to append a dynamic date/time at the end of the report name.
- **Description**: This description appears next to the report name in the Library.
- **Report Type**: Select where you want to deliver the report: You must select at least one report type. You can select multiple types for the same schedule.
  - **Library**: Sends the report to the Library.
  - **PDF**: Sends the report to email recipients as a PDF file attachment. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.
  - **CSV**: Sends the report to email recipients as a CSV file attachment. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

Click **Save.**

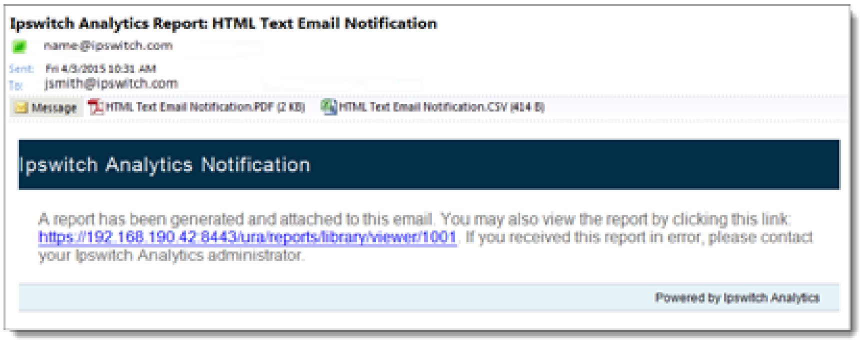
5 Click **Recipients.** The Scheduled Report Recipients dialog box opens. Make your selections for recipients, notifications, and language for notifications and attachments.

Important: If you do not select any recipients, the report is delivered to the Library only, where it is accessible only to Administrators and System Administrators. Recipients receive the report via email only if you select **Send notifications to all recipients.**

Types of Recipients:

- **Users** and **User Groups**: These recipients can view the report in the Library (if sent there). If **Send notifications to all recipients** is checked, these recipients receive an email that contains a link to the Library report and/or the attached report in PDF or CSV format (depending on the Report Type you selected in Step 7). **Warning:** If you are a Creator, you must include your user name or user group here, otherwise you will not be able to view the Library report. Administrators and System Administrators can view all Library reports at all times.
- **External email addresses**: Enter email addresses (separated by commas) beneath **Also notify others using the following email addresses.** If **Send notifications to all recipients** is checked, these email recipients receive an email that contains a link to the Library report and/or the attached report in PDF or CSV forma (depending on the Report Type you selected). **Note:** If the email address is not an address that is recognized by Ipswitch Analytics, links to Library reports will require sign-in to Ipswitch Analytics.

The following email notification shows a recipient who has received PDF and CSV report attachments, as well as a link to the report in the **Library**:



The link opens the Library, where the recipient can locate the report name in the title of the email. For any recipient, the Library lists only those reports for which the recipient has permission.

Ruleset. *This field is available to Administrators and System Administrators only:* The Ruleset option appears only if a ruleset has been previously created. For more information, see ***Create a ruleset*** (on page 109).

Optionally select a **Ruleset** to control which MOVEit sources will contribute data to the scheduled report.

Important: If a schedule's underlying template already contains filter settings AND you assign a ruleset to the schedule, the report will include only the MOVEit data sources allowed by both. For example, if the template filter allows data from only MOVEit servers A and B and the schedule ruleset allows data from only MOVEit servers B and C, the delivered report will include data from server B only. However, if a schedule's underlying template does not contain any filter settings and the schedule creator does not assign a ruleset to the schedule, the delivered report will contain data from all MOVEit sources.

Click **Save** when you are finished with Recipients.

6 Click **Save** again to save the schedule.

The schedule appears in the Schedule list showing **Status** > **Scheduled**.

Edit a Schedule

Any Creator, Administrator or System Administrator can edit a schedule.

1 Go to **REPORTS** > **Schedule**.

2 Select a schedule to edit and click **Edit Properties**. The Edit Schedule dialog box opens.

3 You can edit any of the following items:

- **Schedule name**: The name that appears in the Schedule list. If you modify the schedule name, the Last Result column in the Schedule list will clear, because the schedule is operating under a different name.
- **Report data from**: The time range of data to include in the report. Time ranges are relative to the time when the report runs.
- **Start (GMT)** date and time: Click the calendar icon to select a date in the future, and enter the start time in the hour and minute boxes provided. To clear the date, click the calendar icon and then click **Clear**.

Important: All times are in GMT. For example, if you are in the Eastern Standard Time zone and it is 2:00 pm and you want to schedule a report to run immediately, for Start time you must enter 19:00 (2:00 pm + 5 hours offset from GMT = 7:00 pm, which is 19:00).

§ Repeat Mode:

When selecting a Repeat mode, you must specify when the schedule Ends:

· Never: The schedule repeats indefinitely into the future.

· On date: Specify the last calendar day to run the schedule.

4 Click Preferences.

The Scheduled Report Preferences dialog box opens. Edit any of the following items:

§ Report name: The suggested name is the same as the schedule name, but you can change it. The report name is listed in the Library (if delivered there), or is used as the file name if delivered as a PDF or CSV attachment.

§ *Optional*: Select a Macro from the drop-down list to the right of Report name to append a dynamic date/time at the end of the report name.

§ Description: This description appears next to the report name in the Library.

§ Report Type: Select where you want to deliver the report: You must select at least one report type. You can select multiple types for the same schedule.

· Library: Sends the report to the Library.

· PDF: Sends the report to email recipients as a PDF file attachment. The maximum row limit is applied to the report. Default is 1000 rows. Rows beyond the limit are not saved to the report.

· CSV: Sends the report to email recipients as a CSV file attachment. CSV-only schedules have an unlimited number of rows. If you save a report to *both* PDF and CSV formats, the maximum row limit is applied to both formats.

Note: You must select at least one Report Type. You can select multiple Report Types for the same schedule.

Click Save when you are finished.

5 Click Recipients to edit any of the following:

§ Users and User Groups: These recipients will have access to view the report in the Library (if sent there). If Send notifications to all recipients is checked, these recipients will receive an email that contains a link to the Library report and/or the attached report in PDF or CSV format (depending on the Report Type you selected). Warning: If you are a Creator, you must include your user name or user group here, otherwise you will not be able to view the Library report. Administrators and System Administrators can view all Library reports at all times.

§ External email addresses: Manually enter one or more email addresses beneath Also notify others using the following email addresses. If Send notifications to all recipients is checked, these email recipients will receive an email that contains a link to the Library report and/or the attached report in PDF or CSV forma (depending on the Report Type you selected). Note: If the email address is not an address that is recognized by Ipswitch Analytics, links to Library reports will require sign in to Ipswitch Analytics.

§ Important: If you don't select any recipients, the report will deliver to the Library only and the only users who will have access to view the Library report will be Administrators and System Administrators. Recipients will receive the report via email only if you select Send notifications to all recipients.

Administrators and System Administrators only: Optionally select a **Ruleset** to control what MOVEit sources will contribute data to the scheduled report.

Note: You must first ***create a ruleset*** (on page 109) before the Ruleset option will display here.

Important: If a schedule's underlying template already contains filter settings AND you assign a ruleset to the schedule, the report will include only the MOVEit data sources allowed by both. For example, if the template filter allows data from only MOVEit servers A and B and the schedule ruleset allows data from only MOVEit servers B and C, the delivered report will include data from server B only. However, if a schedule's underlying template does not contain any filter settings and the schedule creator does not assign a ruleset to the schedule, the delivered report will contain data from all MOVEit sources.

Click **Save** when you are finished with Recipients.

6 Click **Save** again to save the schedule.

Pause or Resume a Schedule

You can pause a schedule to prevent it from creating and sending reports, and then resume it at any time.

Any Creator, Administrator or System Administrator can pause or resume a schedule.

You can pause a schedule only when its status is Scheduled.

1. Go to **REPORTS > Schedule**.
2. To pause a schedule, select the checkboxes for the schedules and click **Pause**.
   The status shows **Paused**.
3. To resume a schedule, select the checkboxes for the schedules and click **Resume**,

Delete a Schedule

Any Creator, Administrator or System Administrator can delete any schedule.

1. Go to **REPORTS > Schedule**.
2. Select the checkboxes for the schedules to delete.
3. Click **Delete**.
4. Click **OK** to confirm.

Edit a Library Report's Name and Description

You can edit a Library report's properties to change its name, description, and access rights.

Note: Creators must have access to a Library report to be able to edit its properties. Administrators and System Administrators can view and edit all Library reports at all times, even if they are not explicitly given access to any reports.

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1. Go to **REPORTS** > **Report Library**.
2. Select any Library report row and click **Edit Properties**.
   The Edit Report Properties dialog box opens.

3 Change the **Report Name** and/or **Description**.
4 *Optional*: to grant or remove access to this Library report, change the **Group Access** and **User Access** settings.
5 Click **Save**.

Control Access to a Library Report

Edit a Library report's properties to change its access settings.

Note: Creators must have access to a Library report to be able to edit its properties. Administrators and System Administrators can view and edit all Library reports at all times, even if they are not explicitly given access to any reports.

1 Go to **REPORTS** > **Report Library**.
2 Select any Library report row and click **Edit Properties**.
The Edit Report Properties dialog box opens.
3 Change the **Group Access** and **User Access** settings to grant or remove access to this Library report. Click inside each box to select from a list of groups and users.
Optional: Change the **Report name** and **Description**.
4 Click **Save**.

Export a Library Report

You can export a Library report to save it as a PDF or CSV file. Your web browser will download the report file.

1 Go to **REPORTS** > **Report Library**.
2 Select a report name. The report opens.
3 Click **Export Results** and select one of the following export formats:
§ PDF
§ CSV
4 Enter a **Report Title** for the export.
Use the existing Report Title, or enter a new one.

Recommended: Include filter and time range information in the report title.

5 Click **Save**.
6 Choose to either **Save File** to your local machine, or **Open with** to open the report immediately.

Delete a Library Report

Note: Creators must have access to a Library report to be able to delete it. Administrators and System Administrators can delete any Library report at any time, even if they are not explicitly given access to any reports.

1 Go to **REPORTS** > **Report Library**.

2. Select the checkboxes for the reports to delete.
3. In the upper right, click **Delete**.
4. Confirm the deletion by clicking **OK**.

Get Help

Use either of the following ways to get help with Ipswitch Analytics:

§ At the top of the screen, click HELP and select one of the following:

User Guide (for Partners, Monitors, Readers and Creators): Includes instructions for using Ipswitch Analytics.

Administrator Guide (for System Administrators and Administrators). Includes instructions for installing, managing and using Ipswitch Analytics.

Reference

§ Visit the ***Ipswitch support website*** (***http://www.ipswitch.com/support/main***). The main Support page contains links to all documentation and help videos, a form to submit a support request, and customer support telephone numbers.

This section contains the following reference material:

Stock Templates (on page 207): A list of all stock templates included with Ipswitch Analytics, including the Fields they include, and their report types.

Field Definitions (on page 218): A definition of all Fields that can be added to templates.

Stock templates are located in the REPORTS module under Templates.

The following sections contain detailed information about each stock template. Templates are organized by report type.

Transfer Templates (on page 208)
Workflow Templates (on page 213)
User Audit Templates (on page 215) (viewable by administrators only)
Security Templates (on page 217) (viewable by administrators only)

Transfer templates capture transfer upload and download data for MOVEit Transfer and MOVEit Automation, including transfers from ad-hoc and mobile. Transfer templates are also used for data from Microsoft Exchange support for Ipswitch Analytics, for file transfers that are based on email attachments.

Template Name	Description	Summary or Detailed	Fields
Top 10 Hosts' Failed Transfers	Shows the ten hosts that had the most number of transfer failures (upload and download failures combined).	Summary	***Host*** ***Transfer Failure Count*** ***Upload Failure Count*** ***Download Failure Count***
Top 10 Orgs' Failed Transfers	Shows the ten organizations that had the most number of transfer failures (upload and download failures combined).	Summary	***Organization*** ***Transfer Failure Count*** ***Upload Failure Count*** ***Download Failure Count***
Top 10 Users' Failed Transfers	Shows the ten users who had the most number of transfer failures (includes failed uploads and downloads).	Summary	***User*** ***Transfer Failure Count*** ***Upload Failure Count*** ***Download Failure Count***
Top 10 Hosts' Transfers	Shows the ten hosts that transferred the most number of files (includes successful and failed uploads and downloads).	Summary	***Host*** ***Transfer Total Count*** ***Transfer Total Size*** ***Upload Total Count*** ***Upload Total Size*** ***Download Total Count*** ***Download Total Size***
Top 10 Orgs' Transfers	Shows the ten organizations that transferred the most number of files (includes successful and failed uploads and downloads).	Summary	***Organization*** ***Transfer Total Count*** ***Transfer Total Size*** ***Upload Total Count*** ***Upload Total Size*** ***Download Total Count*** ***Download Total Size***
Top 10 Users' Transfers	Shows the ten users who transferred the most number of files (includes successful and failed uploads and downloads).	Summary	***User*** ***Transfer Total Count*** ***Transfer Total Size*** ***Upload Total Count*** ***Upload Total Size*** ***Download Total Count*** ***Download Total Size***
Transfer Status by Host	Shows number of successful and failed uploads and downloads per host.	Summary	***Host*** ***Upload Success Count*** ***Upload Failure Coun***t ***Download Success Count*** ***Download Failure Count***

Template Name	Description	Summary or Detailed	Fields
Transfer Status by Org	Shows number of successful and failed uploads and downloads per organization.	Summary	***Organization*** ***Upload Success Count*** ***Upload Failure Count*** ***Download Success Count*** ***Download Failure Count***
Transfer Status by User	Shows number of successful and failed uploads and downloads per user.	Summary	***User*** (on page 219) ***Upload Success Count*** (on page 219) ***Upload Failure Count*** (on page 219) ***Download Success Count*** (on page 219) ***Download Failure Count*** (on page 219)
Transfer Status Summary	Shows number of successful and failed uploads and downloads.	Summary	***Upload Success Count*** (on page 219) ***Upload Failure Count*** (on page 219) ***Download Success Count*** (on page 219) ***Download Failure Count*** (on page 219)
Transfer Summary	Shows transfer count and size totals for uploads, downloads, and all transfers.	Summary	***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Daily Transfers by Host	Shows daily transfer count and size totals per host, including a breakdown by uploads and downloads.	Summary	***Day*** (on page 219) ***Host*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)

Template Name	Description	Summary or Detailed	Fields
Daily Transfers by Org	Shows daily transfer count and size totals per organization, including a breakdown by uploads and downloads.	Summary	***Day*** (on page 219) ***Organization*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Daily Transfers by User	Shows daily transfer count and size totals per user, including a breakdown by uploads and downloads.	Summary	***Day*** (on page 219) ***User*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Transfers by Host	Shows transfer count and size totals per host, including a breakdown by uploads and downloads.	Summary	***Host*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)

Template Name	Description	Summary or Detailed	Fields
Monthly Transfers by Host	Shows monthly transfer count and size totals per host, including a breakdown by uploads and downloads.	Summary	***Month*** (on page 219) ***Host*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Monthly Transfers by Org	Shows monthly transfer count and size totals per organization, including a breakdown by uploads and downloads.	Summary	***Month*** (on page 219) ***Organization*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Monthly Transfers by User	Shows monthly transfer count and size totals per user, including a breakdown by uploads and downloads.	Summary	***Month*** (on page 219) ***User*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)

Template Name	Description	Summary or Detailed	Fields
Transfers by Org	Shows transfer count and size totals per organization, including a breakdown by uploads and downloads.	Summary	***Organization*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Transfers by User	Shows transfer count and size totals per user, including a breakdown by uploads and downloads.	Summary	***User*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Weekly Transfers by Host	Shows weekly transfer count and size totals per host, including a breakdown by uploads and downloads.	Summary	***Week*** (on page 219) ***Host*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)

Template Name	Description	Summary or Detailed	Fields
Weekly Transfers by Org	Shows weekly transfer count and size totals per organization, including a breakdown by uploads and downloads.	Summary	***Week*** (on page 219) ***Organization*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)
Weekly Transfers by User	Shows weekly transfer count and size totals per user, including a breakdown by uploads and downloads.	Summary	***Week*** (on page 219) ***User*** (on page 219) ***Transfer Total Count*** (on page 219) ***Transfer Total Size*** (on page 219) ***Upload Total Count*** (on page 219) ***Upload Total Size*** (on page 219) ***Download Total Count*** (on page 219) ***Download Total Size*** (on page 219)

Workflow templates capture workflow, task, and step data for MOVEit Automation only.

A workflow is a series of tasks. A task contains multiple smaller steps.

Template Name	Description	Summary or Detailed	Fields
Processing Status Summary	Shows number of successful and failed steps, and total size of files that were successfully and unsuccessfully processed.	Summary	***Step Success Count*** (on page 223) ***Step Success Size*** (on page 223) ***Step Failure Count*** (on page 223) ***Step Failure Size*** (on page 223)

Template Name	Description	Summary or Detailed	Fields
Step Summary	Shows number of successful and failed steps.	Summary	***Step Name*** (on page 223) ***Step Success Count*** (on page 223) ***Step Failure Count*** (on page 223)
Workflow Details	Shows each executed task, when it began, the steps in the task, the success of each step, and each step's duration.	Detailed	***Task Name*** (on page 223) ***Task Start Time*** (on page 223) ***Step Name*** (on page 223) ***Step Status*** (on page 223) ***Step Duration*** (on page 223)
Daily Workflow Execution	Shows how many times a task executed each day, including its number of successful and failed steps.	Summary	***Day*** (on page 223) ***Task Name*** (on page 223) ***Task Runs*** (on page 223) ***Step Success Count*** (on page 223) ***Step Failure Count*** (on page 223)
Monthly Workflow Execution	Shows how many times a task executed each month, including its number of successful and failed steps.	Summary	***Month*** (on page 223) ***Task Name*** (on page 223) ***Task Runs*** (on page 223) ***Step Success Count*** (on page 223) ***Step Failure Count*** (on page 223)
Weekly Workflow Execution	Shows how many times a task executed each week, including its number of successful and failed steps.	Summary	***Week*** (on page 223) ***Task Name*** (on page 223) ***Task Runs*** (on page 223) ***Step Success Count*** (on page 223) ***Step Failure Count*** (on page 223)
Workflow Summary	Shows each task's number of successful and failed steps.	Summary	***Task Name*** (on page 223) ***Step Success Count*** (on page 223) ***Step Failure Count*** (on page 223)

User Audit templates capture all actions initiated by a user on MOVEit Transfer and Ipswitch Analytics, which can be used to demonstrate regulatory compliance. User Audit templates show who accessed the system, what they did, and when. User Audit templates do not include system actions, only actions initiated by a user.
Note: MOVEit Automation file operations are not captured in User Audit reports because tasks are not user-initiated actions.

Note: If a user logs in to Ipswitch Analytics using multiple machines, browsers, or browser tabs, each login will be recorded separately.

Note: Only Administrators and System Administrators can access User Audit templates.

Template Name	Description	Summary or Detailed	Fields
Login Summary	Shows total number of successful and failed logins.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226)
Daily Login Summary	Shows number of successful and failed logins for each day.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226) ***Day*** (on page 226)
Weekly Login Summary	Shows number of successful and failed logins for each week.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226) ***Week*** (on page 226)
Monthly Login Summary	Shows number of successful and failed logins for each month.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226) ***Month*** (on page 226)
Login Summary By User	Shows number of successful and failed logins for each user.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226) ***User*** (on page 226)
Login Summary By Org	Shows number of successful and failed logins for each <MIDM> organization.	Summary	***Login Success Count*** (on page 226) ***Login Failure Count*** (on page 226) ***Organization*** (on page 226)

Template Name	Description	Summary or Detailed	Fields
User Maintenance Details	Shows actions taken by an administrative user to manage other users (or are initiated by MOVEit Automation and affect user provisioning or settings). Possible actions include: MOVEit Transfer: § Add User § Delete User § Change User Privilege § Change User Password MOVEit Automation: MOVEit Automation does not maintain a list of users. Access is managed by the rights granted to Windows users and groups. Most workflow actions occur within the context of a Windows service and are not associated with a user. The system records login and logout to the console application, but does not record the specific user information. Ipswitch Analytics Server: § Add User § Delete User § Change User Privilege § Change User Password **Note:** If users open Ipswitch Analytics in multiple browser windows or tabs, those logins/logouts will each create a separate action.	Detailed	***Timestamp*** (on page 226) ***User*** (on page 226) ***Action*** (on page 226) ***Target*** (on page 226)
Daily / Weekly / Monthly DLP Maintenance Summary	Number of Data Loss Prevention (DLP) maintenance actions performed each day / week / month. DLP maintenance actions include any changes in MOVEit Transfer Settings > Data Loss Prevention (DLP), such as changing the default DLP ruleset for a user class, adding a DLP ruleset, enabling or disabling DLP for an organization, and changing the action that occurs on server error (whether content will be blocked or allowed with "server error" message).	Summary	***Day / Week / Month*** (on page 226) ***Total Count*** (on page 226)

Template Name	Description	Summary or Detailed	Fields
Daily / Weekly / Monthly DLP Maintenance by Activity	Number of times each Data Loss Prevention (DLP) maintenance action was performed each day / week / month. See above for examples of DLP maintenance actions.	Summary	***Day / Week / Month*** (on page 226) ***Action*** (on page 226) ***Total Count*** (on page 226)

Security templates capture failed login activity and user/IP lockout activity on MOVEit Transfer and Ipswitch Analytics to help you locate suspicious activity (defined as an excessive number of failed access attempts).

Note: Only Administrator and System Administrators can access Security templates.

Template Name	Description	Summary or Detailed	Fields
Excessive Failed Login Summary by IP	Shows the number of login failures for each IP.	Summary	***Server*** (on page 231) ***IP*** (on page 231) ***Login Failure Count*** (on page 231)
Excessive Failed Login Summary by User	Shows the number of login failures for each user.	Summary	***Server*** (on page 231) ***Username*** (on page 231) ***Login Failure Count*** (on page 231)
Failed Login Details	Shows detailed information about users' failed login attempts, including a status message that provides additional information.	Detailed	***Server*** (on page 231) ***Username*** (on page 231) ***Timestamp*** (on page 231) ***IP*** (on page 231) ***Status Message*** (on page 231)
Lockout Details	Shows user lockouts and reactivations, and IP lockouts and unlocks.	Detailed	***Server*** (on page 231) ***Username*** (on page 231) ***IP*** (on page 231) ***Target*** (on page 231) ***LockoutAction*** (on page 231) ***Timestamp*** (on page 231)

Template Name	Description	Summary or Detailed	Fields
DLP Violations Allowed and Blocked	Includes Data Loss Prevention (DLP) violations and files and packages that were scanned and subsequently allowed into the MOVEit system.. Note: Before you can run the DLP Violations Blocked and Allowed report, you must be scanning for incoming files on MOVEit Transfer or MOVEit Automation, and have a DLP scanner configured properly. See *The MOVEit Transfer Administrator Guide* for more information.	Detailed	***Organization*** (on page 232) ***Username*** (on page 232) ***Target*** (on page 232) ***Status Message*** (on page 233) ***Timestamp*** (on page 232) ***IP*** (on page 231)
DLP Violations Blocked	Includes both anti-virus (AV) detections and Data Loss Prevention (DLP) violations. Note: Before you can run the DLP Violations Blocked report, you must be scanning for incoming files on MOVEit Transfer or MOVEit Automation, and have a DLP scanner configured properly. See *The MOVEit Transfer Administrator Guide* for more information.	Detailed	***Organization*** (on page 232) ***Username*** (on page 232) ***Target*** (on page 232) ***Status Message*** (on page 233) ***Timestamp*** (on page 232) ***IP*** (on page 231)

Field Definitions

The Template Editor contains a large set of fields that you can use to create custom templates. The following topics define the fields in each report category.

Transfer Fields (on page 219)

Workflow Fields (on page 223)

User Audit Fields (on page 226)

Security Fields (on page 231)

MS Exchange: Email to File Transfer Fields (on page 89)

Transfer Fields

Transfer templates capture transfer upload and download data for MOVEit Transfer and MOVEit Automation, including transfers from ad-hoc and mobile. Transfer templates are also used for data from Microsoft Exchange support for Ipswitch Analytics, for file transfers that are based on email attachments.

When you create or edit a Transfer template, fields appear in the following sub-categories:

Server (on page 219)
Organization/User (on page 220)
Time (on page 220)
File (on page 221)
Operation (on page 221)
Transfer (on page 222)

Transfer > Server Fields

Server Field	Summary or Detailed*	Description
Server	N/A	Host name or IP address of the MOVEit Transfer or MOVEit Automation system. This is also the name of the Ipswitch Analytics Agent that pulls data from that MOVEit server.
Server Type	N/A	Type of server, such as MOVEit.
Server Subtype	N/A	Type of MOVEit server: either MOVEit Transfer or MOVEit Automation.
Initiator	N/A	The Host that initiated the transaction: S (source), D (destination), or empty if unknown.
Source Host	N/A	IP address or DNS name of source system where transfer originated.
Dest Host	N/A	IP address or DNS name of destination system where transfer completed.
Host	N/A	External system that is the source or destination of the transfer. For uploads, Host = Source Host. For downloads, Host = Destination Host.
Host Type	N/A	Data type for the Dest Host. 0 = DNS name 4 = IPv4 address 6 = IPv6 address

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Transfer > Organization/User Fields

Organization/User Field	Summary or Detailed*	Description
Organization	N/A	MOVEit Transfer: the organization name. MOVEit Automation: the server name.
Username	N/A	MOVEit Transfer: Name of the user who transferred the file. MOVEit Automation: may be the server name, local user, the name of a user who logged in to run a task, or unknown.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Transfer > Time Fields

Time Field	Summary or Detailed*	Description
Year	N/A	Year when the transfer occurred.
Quarter	N/A	Quarter when the transfer occurred.
Month	N/A	Month when the transfer occurred.
Week	N/A	Week when the transfer occurred.
Day	N/A	Day when the transfer occurred.
Hour	N/A	Hour when the transfer occurred.
Timestamp	N/A	Time when the transfer ended, in Greenwich Mean Time (GMT).
Total Duration	Summary	Time it took to complete all transfers, in milliseconds.
Duration	Detailed	Time it took to transfer, in milliseconds.
Success Duration	Summary	Time it took to complete all successful transfers, in milliseconds.
Failure Duration	Summary	Time it took to complete all failed transfers, in milliseconds.
Transfer Total Duration	Summary	Time it took to complete all transfers, in milliseconds.
Transfer Success Duration	Summary	Time it took to complete all successful downloads, in milliseconds.
Transfer Failure Duration	Summary	Time it took to complete all failed transfers, in milliseconds.
Upload Total Duration	Summary	Time it took to complete all uploads, in milliseconds.
Upload Success Duration	Summary	Time it took to complete all successful uploads, in milliseconds.
Upload Failure Duration	Summary	Time it took to complete all failed uploads, in milliseconds.
Download Total Duration	Summary	Time it took to complete all downloads, in milliseconds.
Download Success Duration	Summary	Time it took to complete all successful downloads, in milliseconds.

Time Field	Summary or Detailed*	Description
Download Failure Duration	Summary	Time it took to complete all failed downloads, in milliseconds.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Transfer > File Fields

File Field	Summary or Detailed*	Description
Object Source Name	N/A	Name of the file before transfer.
Object Dest	N/A	Name of the file after transfer.
Source Location	N/A	Directory path where file originated.
Dest Location	N/A	Directory path where file will be stored, typically the directory path where the handler wrote the data.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Transfer > Operation Fields

Operation Field	Summary or Detailed*	Description
Object	N/A	File name. For uploads, the Object Destination Name. For downloads, the Object Source Name.
Operation	N/A	Type of operation: Upload, Download and Delete. MOVEit Transfer: § Upload: A file was uploaded to this server. § Download: A file was downloaded to this server. § Upload Ad-Hoc: An ad-hoc file was uploaded to this server. § Download Ad-Hoc: An ad-hoc file was downloaded to this server. § Delete: A file was deleted from this server. MOVEit Automation: § Upload: A file was uploaded to a server. § Download: A file was downloaded to a server. § Load: A file was read from the local filesystem. § Save: A file was stored on the local filesystem. § Delete: A file was deleted, either from the local filesystem or from another server.

Operation Field	Summary or Detailed*	Description
Status	N/A	Status of the transfer. Empty = success; otherwise will display error code for the non-successful transfer (codes depend on server subtype).
Status Message	N/A	Description of the error.
Direction	N/A	Data direction: I (inbound), O (outbound), X (transfer), or empty if unknown.
Protocol	N/A	Protocol of the handler, such as FTP, SFTP or HTTP.
Total Count	Summary	Number of all transfers.
Success Size	Summary	Size of all successful transfers, in bytes.
Success Count	Summary	Number of all successful transfers.
Failure Size	Summary	Size of all failed transfers, in bytes.
Failure Count	Summary	Number of all failed transfers.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Transfer > Transfer Fields

Transfer Field	Summary or Detailed*	Description
Transfer Total Size	Summary	Size of all transfers, in bytes.
Transfer Total Count	Summary	Number of all transfers.
Transfer Success Size	Summary	Size of all successful transfers, in bytes.
Transfer Success Count	Summary	Number of all successful transfers.
Transfer Failure Size	Summary	Size of all failed transfers, in bytes.
Transfer Failure Count	Summary	Number of all failed transfers.
Upload Total Size	Summary	Size of all uploads, in bytes.
Upload Total Count	Summary	Number of all uploads.
Upload Success Size	Summary	Size of all successful uploads, in bytes.
Upload Success Count	Summary	Number of all successful uploads.
Upload Failure Size	Summary	Size of all failed uploads, in bytes.
Upload Failure Count	Summary	Number of all failed uploads.
Download Total Size	Summary	Size of all downloads, in bytes.
Download Total Count	Summary	Number of all downloads.
Download Success Size	Summary	Size of all successful downloads, in bytes.

Transfer Field	Summary or Detailed*	Description
Download Success Count	Summary	Number of successful downloads.
Download Failure Size	Summary	Size of all failed downloads, in bytes.
Download Failure Count	Summary	Number of all failed downloads.
Upload Size	Detailed	Size of the uploaded file(s).
Download Size	Detailed	Size of the downloaded file(s).

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Workflow Fields

Workflow templates capture workflow, task, and step data for MOVEit Automation only.

When you create or edit a Workflow template, fields appear in the following sub-categories:

Server (on page 223)
Organization/User (on page 224)
Time (on page 224)
File (on page 224)
Workflow (on page 225)

Workflow > Server Fields

Server Field	Summary or Detailed*	Description
Server	N/A	Host name or IP address of the MOVEit Transfer or MOVEit Automation system. This is also the name of the Ipswitch Analytics Agent that pulls data from that MOVEit server.
Server Type	N/A	Type of server, such as MOVEit.
Server Subtype	N/A	Type of MOVEit server: either MOVEit Transfer or MOVEit Automation.
Source Host	N/A	IP address or DNS name of source system that initiated the processing step.
Dest Host	N/A	IP address or DNS name of destination system where processing step completed.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Workflow > Organization/User Fields

Organization/User Field	Summary or Detailed*	Description
Organization	N/A	The MOVEit Automation server name.
Username	N/A	The MOVEit Automation server name.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Workflow > Time Fields

Time Field	Summary or Detailed*	Description
Year	N/A	Year when the task or step occurred.
Quarter	N/A	Quarter when the task or step occurred.
Month	N/A	Month when the task or step occurred.
Week	N/A	Week when the task or step occurred.
Day	N/A	Day when the task or step occurred.
Hour	N/A	Hour when the task or step occurred.
Task Run Time	N/A	Time when the task started, in Greenwich Mean Time (GMT).
Task End Time	NA	Time when the task ended, in Greenwich Mean Time (GMT).
Step Timestamp	N/A	Time when the step completed, in Greenwich Mean Time (GMT).
Total Step Duration	Summary	Time it took to complete step(s), in milliseconds.
Step Duration	Detailed	Time it took to complete the step, in milliseconds.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Workflow > File Fields

File Field	Summary or Detailed*	Description
Object Source Name	N/A	Name of the file before processing.
Object Dest Name	N/A	Name of the file after processing.
Source Location	N/A	Directory path where the processed file originated on the Source Host.

File Field	Summary or Detailed*	Description
Dest Location	N/A	Directory path where processed file will be stored on the Dest Host, typically the directory path where the handler wrote the data.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Workflow > Workflow Fields

Workflow Field	Summary or Detailed*	Description
Task Name	N/A	Name of the task, or other identifier for the overall sequence of steps. **Note**: When a task causes the current system to load a file from the local disk, that data is not recorded or reported.
Task Runs	Summary	Number of times the task ran.
Status	N/A	Success or failure of the task. The value can be: § Success § Failure § No Transfers
Status Message	N/A	Description of the task error, if applicable.
Step	N/A	Name of an individual step in a task. MOVEit Automation: § **[Script Name]**: A file was processed by a script. Examples include scripts that compress, decrypt, convert, and transform, or a processing identifier chosen by the logging entity. § **Upload**: A file was uploaded to the server. § **Download**: A file was downloaded to the server. § **Load**: A file was read from the local filesystem. § **Save**: A file was stored on the local filesystem. § **Delete**: A file was deleted, either from the local filesystem or from another server.
Step Status	N/A	Success or failure of the step.
Step Status Message	N/A	Description of the step error, if applicable.
Step Success Count	Summary	Number of steps completed successfully.
Step Success Size	Summary	Size of files that processed successfully, in bytes.
Step Failure Size	Summary	Size of files that processed unsuccessfully, in bytes.
Step Failure Count	Summary	Number of failed steps.
Step Total Count	Summary	Number of successful and failed steps.

Workflow Field	Summary or Detailed*	Description
Step Total Size	Summary	Size of files that were processed, in bytes. Includes successful and failed processes.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

User Audit Fields

User Audit templates capture all actions initiated by a user on MOVEit Transfer and Ipswitch Analytics, which can be used to demonstrate regulatory compliance. User Audit templates show who accessed the system, what they did, and when. User Audit templates do not include system actions, only actions initiated by a user.

Note: MOVEit Automation file operations are not captured in User Audit reports because tasks are not user-initiated actions.

When you create or edit a User Audit template, fields appear in the following sub-categories:

Server (on page 226)
Organization/User (on page 227)
Time (on page 228)
Activity (on page 229)

User Audit > Server Fields

Server Field	Summary or Detailed*	Description
Server	N/A	Host name or IP address of MOVEit Transfer, MOVEit Automation or Ipswitch Analytics Server.
Server Type	N/A	Type of server, such as MOVEit or Ipswitch Analytics Server.
Server Subtype	N/A	Type of MOVEit server: either MOVEit Transfer or MOVEit Automation. Will be blank for Ipswitch Analytics Server.

Server Field	Summary or Detailed*	Description
IP	N/A	IP address of the machine logging in to the MOVEit or Ipswitch Analytics Server: § **Logins from a remote browser:** IP shows the remote host IP address. § **Logins from the local machine:** shows the localhost IPv6 IP address (for example, 0:0:0:0:0:0:0:1). § **For operations initiated by the server itself** (typically under system user): shows the local machine's default IP address (for example, 172.16.4.116). **Note:** IP may be empty in some cases for actions performed on user groups or other administrative settings.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

User Audit > Organization/User Fields

Organization/User Field	Summary or Detailed*	Description
Organization	N/A	For MOVEit Transfer, the organization name. For MOVEit Automation and Ipswitch Analytics Server, the server name.
Username	N/A	Name of the user who performed the action. "Unknown" may appear for unsuccessful logins, or if logged as "unknown" on the server. MOVEIT TRANSFER: Actions performed by the MOVEit Transfer system log Username as Automation. MOVEIT AUTOMATION: MOVEit Automation systems do not maintain a list of users. Most tasks (workflows) occur within the context of a Windows service and are not associated with a user. Access is managed by the rights granted to Windows users and user groups. The system records login and logout to the console application, but does not record the specific user information. A set of MOVEit Automation servers can also be managed remotely from a single Central system. Therefore for MOVEit Automation, Username may display the server name, local user (for administrative actions), the name of a user who logged in to run a task, or unknown. **Note:** A user who has been inactive since Ipswitch Analytics was installed will not be included in historical reports.

Organization/User Field	Summary or Detailed*	Description
Target	N/A	The target of the action, such as: § User § File § Host § IP that was locked out § Organization § System setting § Session ID § Group name/ID § Announcement text § Package and file quota information § Expiration policy Possible Ipswitch Analytics Server targets include: § Ipswitch Analytics user § Ruleset § Ipswitch Analytics Agent § License file § Template name (or "new" if a custom template) **Note:** Target will be empty if the action was a login. **Important:** If a user opens a stock template in Ipswitch Analytics, adds fields to it and then clicks Run, Target will show the original stock template name but not the additional fields added to it. **Important:** If a user creates a custom template in Ipswitch Analytics and clicks Run before saving the template, Target will be empty because the template did not have a name.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

User Audit > Time Fields

Time Field	Summary or Detailed*	Description
Year	N/A	Year when the action(s) occurred.
Quarter	N/A	Quarter when the action(s) occurred.
Month	N/A	Month when the action(s) occurred.
Week	N/A	Week when the action(s) occurred.
Day	N/A	Day when the action(s) occurred.

Time Field	Summary or Detailed*	Description
Hour	N/A	Hour when the action(s) occurred.
Timestamp	N/A	Time when the action(s) occurred, in Greenwich Mean Time (GMT).

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

User Audit > Activity Fields

Activity Field	Summary or Detailed*	Description
Action	N/A	Name of the action. An action can include user logins, user maintenance actions, DLP maintenance actions, or any number of actions performed on a MOVEit server or the Report Server, depending on the template.

Activity Field	Summary or Detailed*	Description

		Note: The User Maintenance template contains only actions taken to manage other users (or actions that are initiated by MOVEit Automation and affect user provisioning or settings). The DLP Maintenance templates include only DLP maintenance actions.
		
		Each source system (MOVEit Transfer, MOVEit Automation and Ipswitch Analytics server) has a different set of actions, although some actions are common to all source systems. Some values correspond to a single action (such as login or change password) while other values may contain a variety of actions (such as Change System Setting), with detailed information about the action included in the **Details** field.
		
		MOVEIT AUTOMATION ACTIONS:
		Includes only actions that are initiated by a user (or are initiated by MOVEit Automation and affect user provisioning or settings). Most tasks (workflows) occur within the context of a Windows service and are not associated with a user. File operations are executed only in the context of a task run and are not initiated by a user, therefore file operations do not display in User Audit reports. Possible MOVEit Automation Actions include:
		§ User Access:
		    § Login / Logout
		§ Workflow Actions:
		    § Add / Delete / Change / Run Workflow
		    Note: Add task and Update task are logged in MOVEit Automation with the same info and cannot be distinguished.
		§ Administrative Actions:
		    § Add / Change / Delete Host
		    Note: Add host and Change host are logged with the same info and cannot be distinguished.
		    § Add / Change / Delete Script
		    Note: Add script and Update script are logged with the same info and cannot be distinguished.
		    § Change System Settings: The category of system setting that is being changed is logged.
		§ User Management Actions:
		    § Add / Delete User
		    § Change User Info
		
		MOVEIT TRANSFER USER ACTIONS:
		§ User Access:
		    § Login / Logout
		§ File/Folder Actions:
		    § Upload / Download / Delete File
		    § Add / Change / Delete Folder
		§ User Management Actions:
		    § Add / Delete User
		    § Change User Privilege / Role
		    § Change User Password

Activity Field	Summary or Detailed*	Description
Status	N/A	Success or Failure of the action(s).
Status Message	N/A	Error text or message with additional information. The contents of this field are dependent on the action and status.
Activity Count	Summary	Number of times the action occurred.
Login Count	Summary	Number of logins.
Login Success Count	Summary	Number of successful user logins.
Login Failure Count	Summary	Number of unsuccessful user logins.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Security Fields

Security templates capture failed login activity and user/IP lockout activity on MOVEit Transfer and Ipswitch Analytics to help you locate suspicious activity (defined as an excessive number of failed access attempts).

When you create or edit a User Audit template, fields appear in the following sub-categories:

Server (on page 231)
Organization/User (on page 232)
Time (on page 232)
Activity (on page 233)

Security > Server Fields

Server Field	Summary or Detailed*	Description
Server	N/A	Host name or IP address of MOVEit Transfer, MOVEit Automation or Ipswitch Analytics Server.
Server Type	N/A	Type of server, such as MOVEit or Ipswitch Analytics Server.
Server Subtype	N/A	Type of MOVEit server: either MOVEit Transfer or MOVEit Automation. Will be blank for Ipswitch Analytics Server.
IP	N/A	IP Lockouts: IP address of the system that was locked or allowed. User Lockouts: If the MOVEit Transfer sysadmin manually unlocked a user, will show the IP address of the MOVEit server, otherwise will be empty.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Security > Organization/User Fields

Organization/User Field	Summary or Detailed*	Description
Organization	N/A	MOVEit Transfer: The organization name. MOVEit Automation and Ipswitch Analytics Server: The server name.
Username	N/A	MOVEit Transfer: **IP Lockouts:** Will show "sysadmin" if the MOVEit Transfer sysadmin manually locked or allowed the IP. Will show "unknown" if lockout/allow was automated. **User Lockouts:** Name of the user who was locked out. Will show "unknown" if user is not known to MOVEit Transfer, or "sysadmin" if the MOVEit Transfer sysadmin manually reactivated the user. MOVEit Automation: May be the server name, local user, the name of a user who logged in to run a task, or unknown. **Note**: A user who has been inactive since Ipswitch Analytics was installed will not be included in historical reports.
Target	N/A	Name of the user who was locked out or reactivated (due to expiration or manual freeing). For failed logins, shows the username with which user attempted to sign in. Will be empty for IP lockouts/allows.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Security > Time Fields

Time Field	Summary or Detailed*	Description
Year	N/A	Year when the login failure or lockout occurred.
Quarter	N/A	Quarter when the login failure or lockout occurred.
Month	N/A	Month when the login failure or lockout occurred.
Week	N/A	Week when the login failure or lockout occurred.
Day	N/A	Day when the login failure or lockout occurred.
Hour	N/A	Hour when the login failure or lockout occurred.
Timestamp	N/A	Time when the login failure or lockout occurred, in Greenwich Mean Time (GMT).

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

Security > Activity Fields

Activity Field	Summary or Detailed*	Description
Login Failure Count	Summary	Number of failed logins.
Lockout Action	N/A	Lockout action, such as IP locked out, IP reallowed, user locked out, user reactivated. MOVEit Automation: The Lockout Action field includes only actions that are initiated by the system. Possible lockout actions include: § Lock Out IP § Re-enable IP § Disable User § Enable User § Lock Out User § Re-enable User § User Active
Status Message	N/A	Text message with additional information. The contents of this field are dependent on the action and status.

* A field can contain either Detailed information about a single transfer, process, or action, or Summary information about multiple transfers, processes, or actions that have been aggregated for higher-level analysis. N/A means the field appears regardless of the report output type selected.

MS Exchange Data Mapping: Email to File Transfer Fields

The table lists data mapping between **email** fields in Exchange Server and **transfer type** fields in Analytics Server.

To create Ipswitch Analytics reports that use data from Microsoft Exchange, use Transfer templates.

Email Field in Exchange	Ipswitch Analytics Field Name
<Sender email address>	Source
<Receiver email address>	Destination
<Attachment name>	Filename Source Filename Destination Filename
<Attachment size>	Upload Size **Note:** The size of the email attachment in MS Exchange is reported by the Ipswitch Analytics server as approximately the Base64 encoded size of the original file. Base64-encoded binary data is

	equal to 1.37 times the original data size + 814 bytes (for headers).
0	Download Size
<Email sent date & time>	Timestamp
0	Duration
<Email Subject>	Email Subject
<Message Id>	Email Identifier
<domain part of sender's email address>	Source Host
<type based on <Source Host>>	Source Host Type
<domain part of receiver's email address>	Destination Host
<type based on <Destination Host>>	Destination Host Type
SMTP	Protocol
I	Direction
Upload	Operation
Exchange	Server Type
Exchange	Server Subtype

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