

# **Triofox Administration Guide**

Triofox Server Version 13.5.9497.54016

JUNE 8, 2022
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## **Getting Started**

## Introduction

Welcome to the **Triofox Server** Administration Guide. This guide describes administration tasks for Triofox, the mobile access and secure file sharing solution that focuses on local file server cloud-enablement.

Triofox includes the Triofox server running on the Microsoft Windows server platform, and client agent applications for web browsers, Microsoft Windows, macOS, and for mobile platforms such as the Android and Apple iOS operating systems.

#### **Important**

Triofox includes a client application for Windows File Server called "Server Agent". This document is about Triofox itself, not about the "Server Agent".

#### **Attention**

This admin guide has been updated for Triofox version 13.4.9785.53973.

## **Administration Scope**

### Partner Portal

You can register a Triofox cluster in the Triofox Partner Portal.

The Partner Portal is located at <a href="https://www.triofox.com/management/partnerloginpage.aspx">https://www.triofox.com/management/partnerloginpage.aspx</a>. Through the Partner Portal you can download the Triofox software as well as manage the licensing of your servers.

#### Tip

Typically, you download the Triofox software, set it up, and use the built-in 30-day trial period to complete the setup. Towards the end of the trial period, you assign licenses to your server via the partner portal and activate it in a production environment.

## **Self-Hosted Triofox**

In the user interface, the Self-Hosted Triofox instance is referred to as a Cluster or a Server Farm. A Cluster can be as small as a single server or scaled out to include multiple servers in a Server farm.

## Users, Devices, File Server Shares

The objects you manage in the cluster include Users and Devices as well as File Server Network Shares for Team Folder collaboration (Team Shares).

This document focuses on the management scope for a Self-Hosted Triofox. In the server management interface, the administration scopes is called Cluster Administrator.

## **Cluster Administrator**

The Cluster Administrator can manage cluster-wide functionalities, such as email SMTP server setup and worker node properties etc.

Cluster Administrator is often referred to as the Master Admin, Root Admin, or simply the Server Administrator. Although the Cluster Server Farm may have multiple servers, in most cases a server-farm with one single server is sufficient for your use case and user base.

#### Note

- All administration work is done through the web portal in a web browser. Recommended browsers include Google Chrome first, followed by Firefox, Internet Explorer, Safari, and Opera (Internet Explorer requires version 9 and above and includes Microsoft Edge browser).
- 2. The very first user who installed the Cluster Server is also the Cluster Admin.
- 3. You can start the administration work at any time by pointing your web browser to the Cluster Server IP address or DNS name. If you are on the Cluster Server console, you can even use http://localhost to get started.

## **Cluster Administration**

## The Basics

To access your Cluster Administration features, log in to the Web Portal on the server. The description in this guide assumes that you are logged in as the Master Administrator (aka., Cluster Administrator). Some of the options listed may not be available if you are logged in with other privileges. In this document, the Triofox is also referred to simply as Cluster Server.

#### Tip

The Web Portal URL is the DNS name of the server, the IP address, or the local host (http://localhost) when you are in the server console.

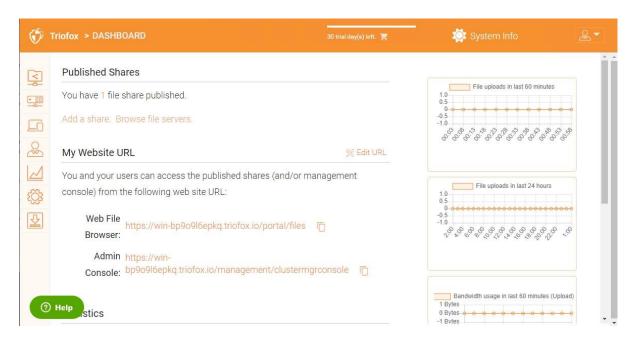


#### Note

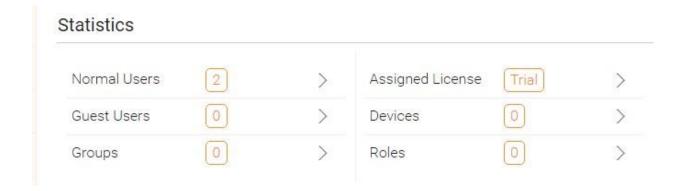
At the bottom of the login screen, you will find version information that tells you which version you have installed.

## Login and Manage

After you log in to the web portal as a Cluster Administrator, you are in the dashboard.

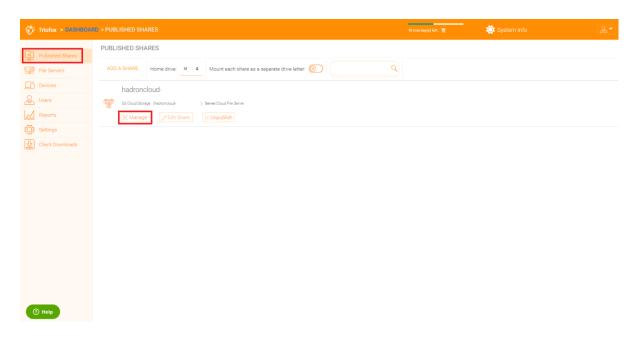


As a Cluster Administrator, you can also see the total number of normal users in the system, the total number of guest users, the number of groups, assigned licenses, devices, and created roles.



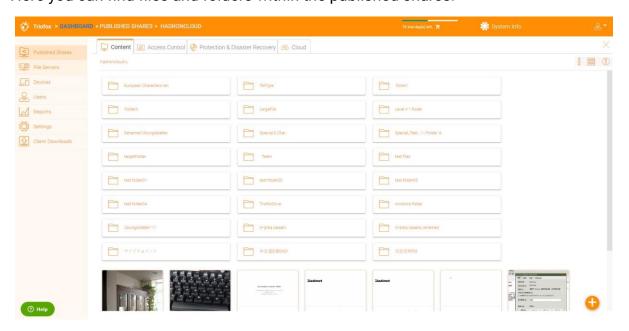
## **Published Shares**

In this section you can browse your published shares. Click **Manage** to view details of published shares.



#### Content

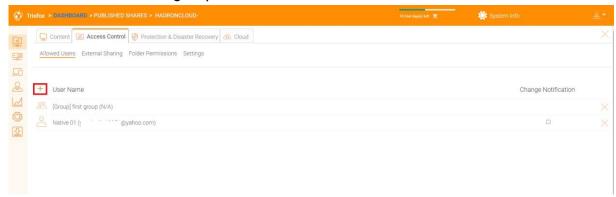
Here you can find files and folders within the published shares.



#### **Access Control**

#### **Allowed Users**

You can add users and groups in the Allowed Users section.



### **External Sharing**

With this setting you can see which folders and files have been shared and control access to them.



#### **Folder Permission**

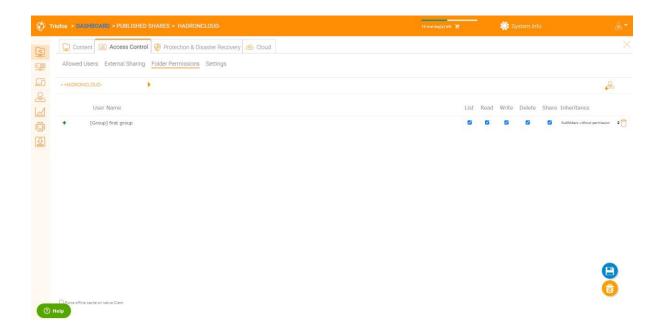
You can browse to different subfolders and set the folder permission. The folder permissions defined here represent the Cluster Server side of the permission.

If you are using the native Active Directory/NTFS permission of a file server, you do not need to define permissions here.

#### Note

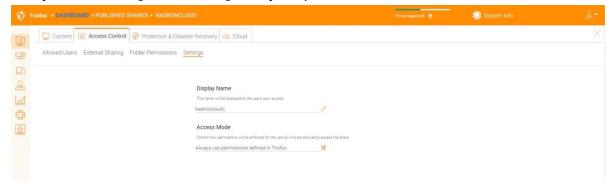
You can think of the permissions as two different gates that control access to files and folders. The first gate is defined here as "Cluster Server Folder Permission". After this permission check, there is another check at the file server level (the NTFS permission).

In practice, this is usually done one way or another. If you have chosen to use NTFS natively, you can leave the permission settings here blank and undefined.

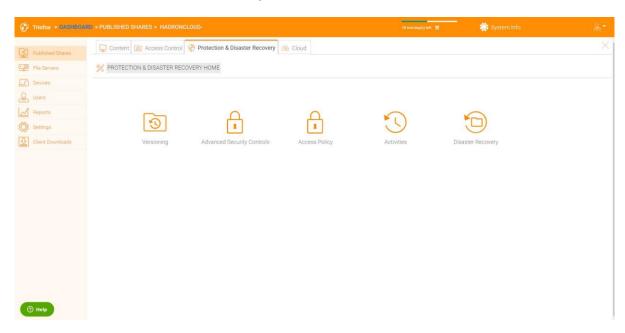


## Settings

Here you can change the settings for your published shares.

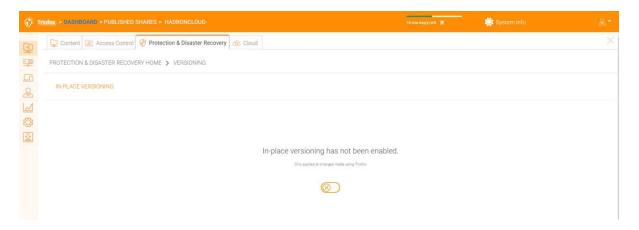


## **Protection & Disaster Recovery**



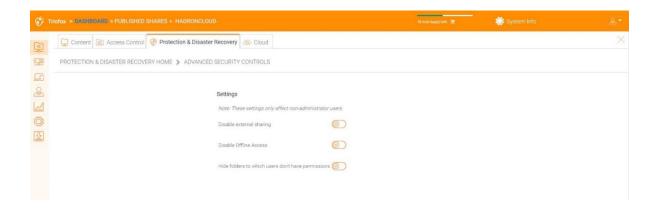
### Versioning

In-place versioning can be enabled here.



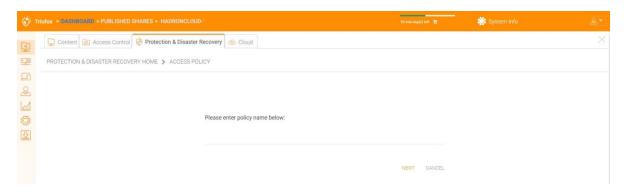
### **Advanced Security Controls**

Here you can find some settings for advanced security controls. You can disable external sharing, disable offline access, or hide folders for which users do not have permission.



#### **Access Policy**

On this tab you can enable an access policy.



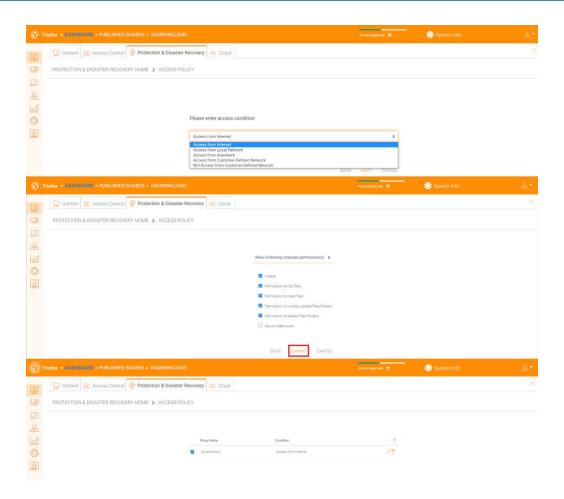
#### **Client Access Policies:**

Define custom access policies to restrict or allow access based on the location of the device. For example, a company may want to allow access from the Internet only for Windows clients and Web clients. IT can configure policies to allow or deny client access from the following locations:

- Access from the Internet
- Access from Local network
- Access from Anywhere
- Access from Customer-Defined Network
- Deny access from Customer-Defined network

The above policies for allowing and denying client access can be configured for the following clients:

web client, web management, windows client, mac client, mobile client.



#### **Share Access Policy:**

IT can also prevent data loss and data leakage of important company confidential shares by configuring "Share Access Policies" for external users who are not employees of the company. Again, IT can configure access policies to approve or deny shares from the following locations:

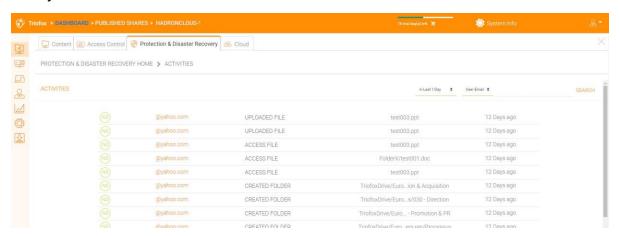
- Access from the Internet
- Access from Local network
- Access from Anywhere
- Access from Customer-Defined Network
- Deny access from Customer-Defined network

The above allow and deny share access policies can be configured with the following conditions:

- Visible
- Permissions to list files
- Permissions to read files
- Permissions to create or update files and folders
- Permissions to delete files and folders
- Secure data room.

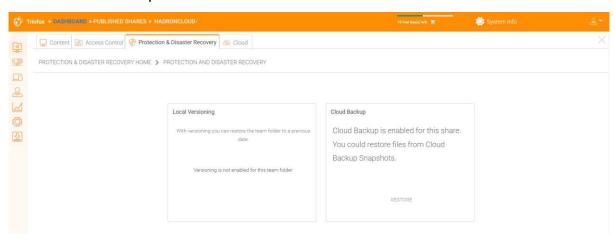
#### **Activities:**

Here you can see activities for shares.



#### **Disaster Recovery:**

You can restore the team folder to a previous date by "Local Versioning", or restore files from a "Cloud Backup".

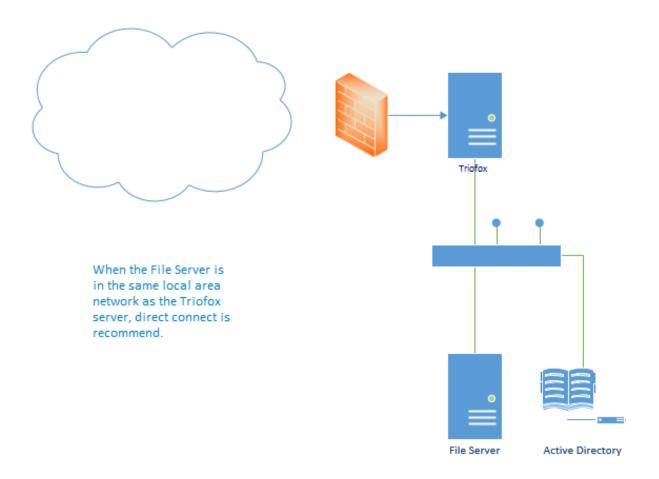


## File Servers

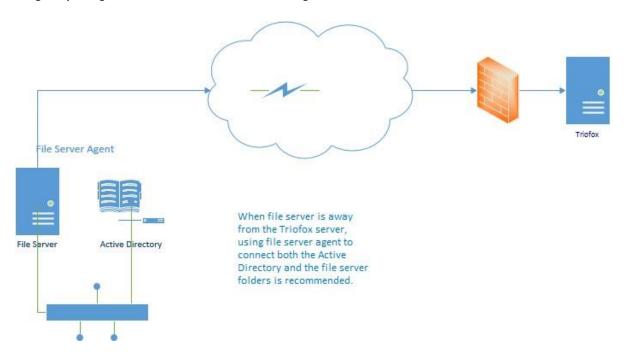
### **Connect Your File Server**

Depending on where your file server is located, there are several ways to connect it.

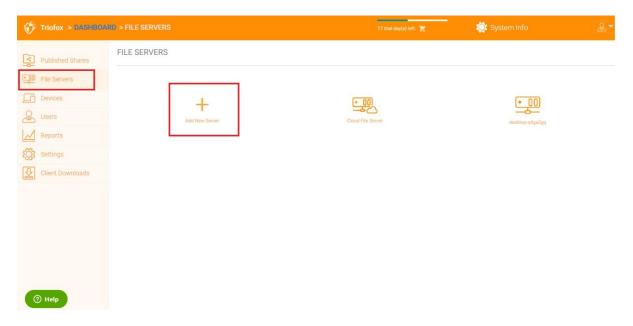
The file server may be on the same local area network (LAN) as the Triofox server. In this case, the direct network share connection is the best. This is usually combined with setting up a direct LDAP connection to Active Directory.



The file server can also be remote, away from the Triofox server and at the customer's premise. In this case, it is recommended to use a file server agent. The file server agent is installed on the file server and is able to connect to the customer's Active Directory and synchronize both folder contents and Active Directory over HTTPS. In this case, the user interface displays "Proxied AD User" to indicate that the Active Directory user or group originated from the file server agent.

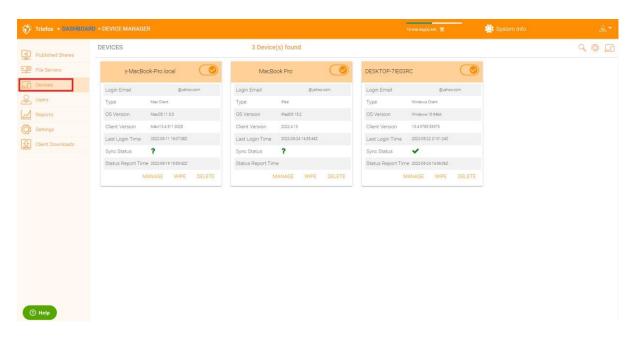


The best way to start using a file server agent is to add a file server via the web portal.

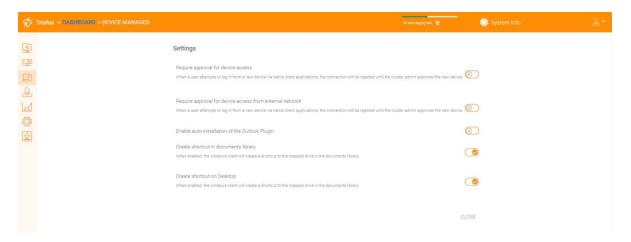


## **Devices**

The cluster administrator can look at the devices that have the client agent software installed and connected in the specific user.



Here you can find the settings for the device management.



## Requiring approval for device access

Disabled by default. When a user attempts to log in from a new device via native client applications, the connection will be rejected until the cluster admin approves the new device. Approval can be done via the "Client Device Manager".

## Enable auto-install of Outlook Plugin

Disabled by default. The Cluster Server Windows desktop client comes with an Outlook plug-in. If this option is enabled, the Outlook plugin will be enabled upon client startup.

## Create a shortcut in the documents library

Enabled by default. This is a convenient feature to add a link to documents library to the cloud drive.

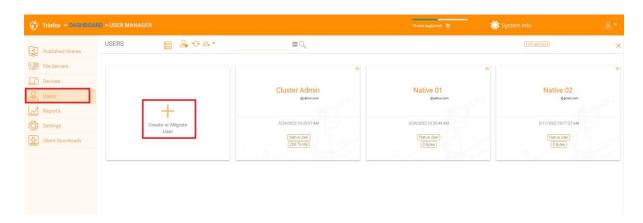
## Create shortcut on desktop

Enabled by default. Same as above but the shortcut is on the desktop.

## **Users**

#### Normal User

Normal users can be added here:



If you have Active Directory, these are normally the users in Active Directory.

#### **Native User**

These are the users that are manually created with an email.

#### **AD User**

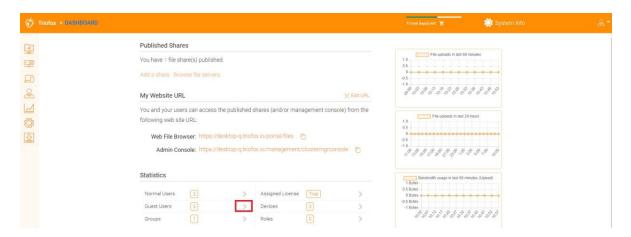
• These are the users that are imported from Active Directory via LDAP.

#### **Proxied AD User**

 These are the users that are imported from Server Agent, where the file server agent is remote and away from the Cluster Server at the customer's site. The customer's Active Directory domain is also remote, and the file server itself (where server agent is installed) is in the remote Active Directory. An admin can view a user's file and folder list.



#### **Guest Users**



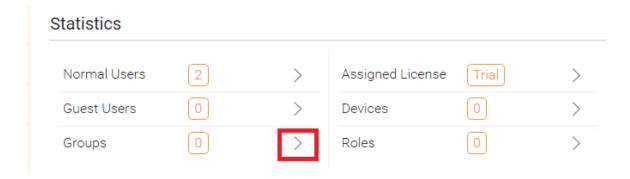
Guest users are users who do not have a home directory. The only folder they have is "Files Shared with Me". So, they rely on other "Normal User" to share files and folders with them before they can do anything. If no one shares anything with a guest user, the guest user will not have any read/write permissions to any folder.

The main reason for the existence of guest users is to provide a secure way for external users to collaborate and edit documents.

## **Group Manager**

If you have Active Directory integration, you will use the Active Directory group instead of using Group Manager here. This group manager allows you to easily create a group of users. It's not as complicated as Active Directory (such as supporting nested groups), but it makes it easy for non-Active Directory users. This is native Cluster group. In the product, you can also see the AD group in the user selection interface and the Proxied AD group in the user-related interface. The AD group and the Proxied AD group are not the same as the group mentioned here.

You can add new groups by clicking the Groups tab.

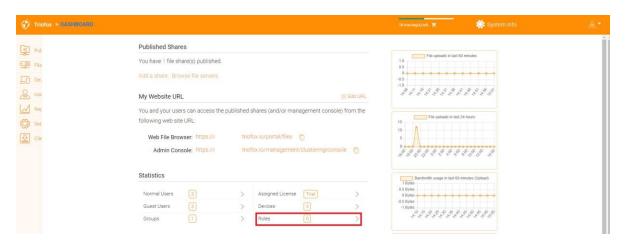


Click "Create New Group" icon at the top to create a new group, then set the "Group Name", click the icons at the top right to add users, and then click "Apply" to finish.



### Role Manager

The Role Manager is used for role-based management. For example, you can assign read-only permissions to some users. You can also set specific group policies for certain groups of users. More and more policy elements are added to the Role Manager, so that the Role Manager can be used not only to manage user roles, but also to define policy elements for users.



There are 3 different sections when creating a roll:

- Sharing
- Policies
- Assigned Users/Groups

#### **Create New Role**

You can define areas in the Role Manager and assign them to a role.





#### **Policies**

Additional policies for the role.



## **Assigned Users/Groups**

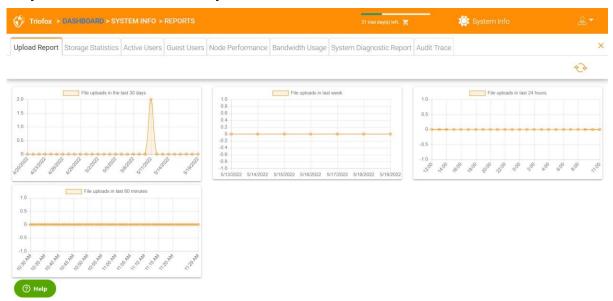
After the content of the role is all set, users and groups can be assigned to a role.



## Reports

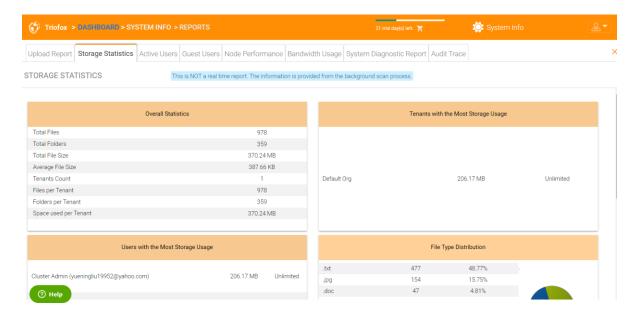
## **Upload Report**

The Upload Report tab shows you graphs for all uploads that have occurred in the last sixty minutes, 24 hours, 30 days, and a full week.



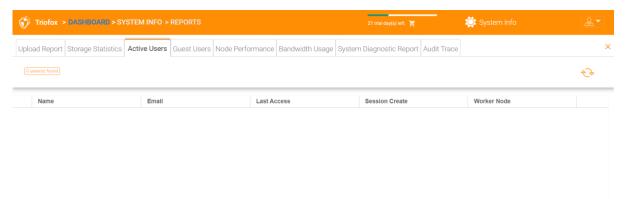
## **Storage Statistics**

Storage Statistics gives you a quick overview of the overall storage statistics, the file type distribution pie charts, and the users who have used the most storage so far.



#### **Active Users**

Active Users show the activity of users on the web portal. The Active Users report does not include users from the Windows client or other native clients, as these users are more persistent (always there). To access this report, click the Active Users section in the panel near the top of the screen.

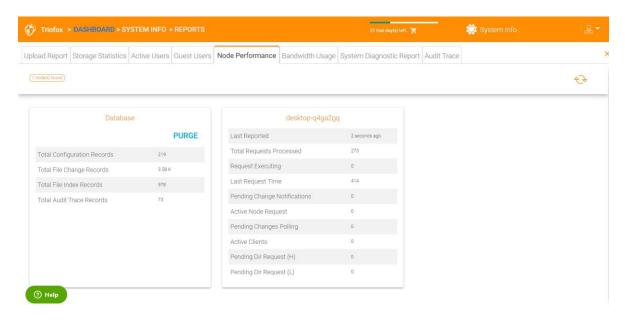


#### **Guest Users**

Other reports are also available, such as Guest Users, which are users who do not have their own directory but are invited to participate in some shared folders and files.

#### **Node Performance**

You can use the Node Performance to check out the worker node health and the database health.



#### **Last Reported**

You should see that this field contains small numbers like 6 seconds or 10 seconds. If you see a number like "3 hours ago", it means that the node is not reporting the health.

#### **Total Requests Processed**

This number should be as large as possible. This number is a cumulative number since the last restart of the service. The larger the number, the more stable the service is. If you have multiple worker nodes, you should see the total number of requests evenly distributed among the worker nodes.

#### **Request Executing**

You want to keep this number as small as possible. This refers to the number of requests that are concurrently executing on the server. In general, a number less than 100 is normal. Greater than 100 is abnormal. Anything greater than 20 needs to be investigated.

#### **Last Request Time**

You should keep this number as small as possible. It is the number of milliseconds for the last request. In general, numbers smaller than 3000 or 5000 are normal, i.e. less than 3-5 seconds.

#### **Pending Change Notification**

For files and folders that are changed, a change notification is written to the database. In general, the queue for pending changes should be kept as short as possible.

#### **Active Node Request**

These are the clients that contact the server. Normally they are for reporting purposes only.

#### **Pending Change Polling**

These are the clients out there polling to see whether there are files and folders that have been changed. As a rule, the smaller the better.

#### **Active Clients**

For reporting purpose.

#### Pending Dir Request(H)

The pending directory listing calls from the remote clients to the Cluster Server. This is the high priority queue.

#### Pending Dir Request(L)

The pending directory listing calls from the remote clients to the Cluster Server. This is the low priority queue.

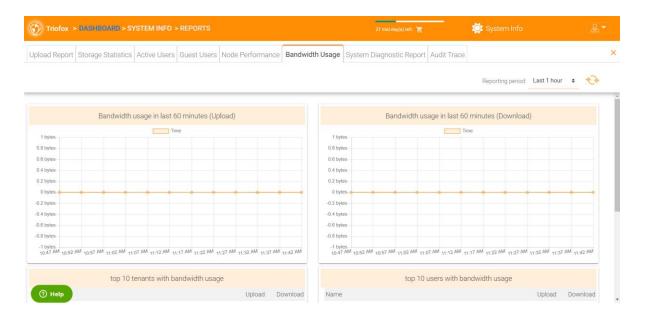
#### Note

If you do not see the Node Performance report, check the **Internal URL** setting of each worker node.

Under Reports, you can view the upload graphs and storage statistics.

## Bandwidth Usage

This shows the overall bandwidth usage statistics as well as more granular tenant and user level statistics.



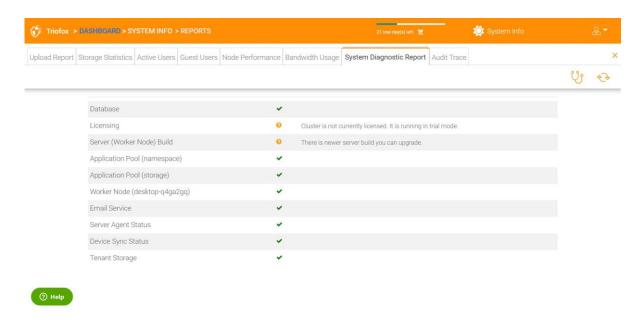
## System Diagnostic Report

Click the "Start System Scan To Generate Report" button to generate system diagnostic report.



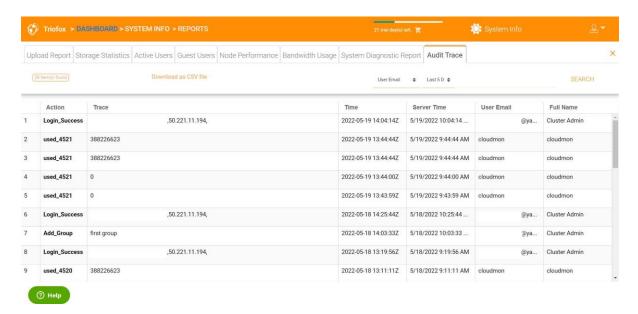


An example of a system diagnostic report is shown below.



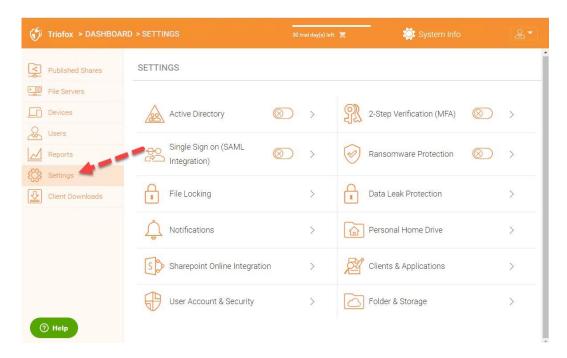
#### **Audit Trace**

This is an example of an audit trace.



## Settings

In the Settings, the administrator can enable/disable some features, such as Active Directory, 2-Step Verification (MFA), Single Sign-On, Ransomware Protection. And there are also many other options that can be configured.



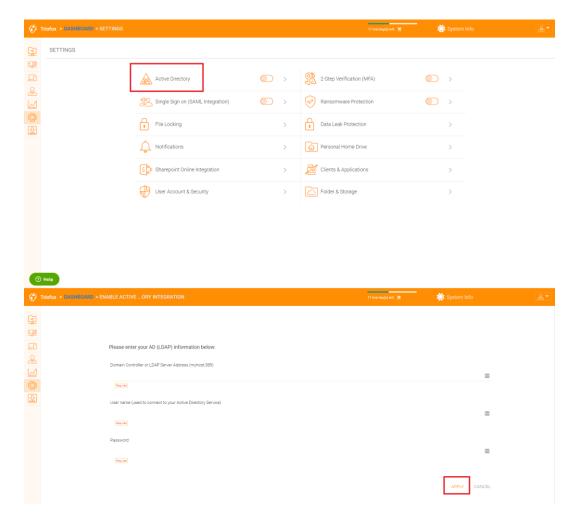
## **Active Directory**

If the Active Directory is in the local area network (LAN), LDAP can be used to connect to the Active Directory. There are several cases here,

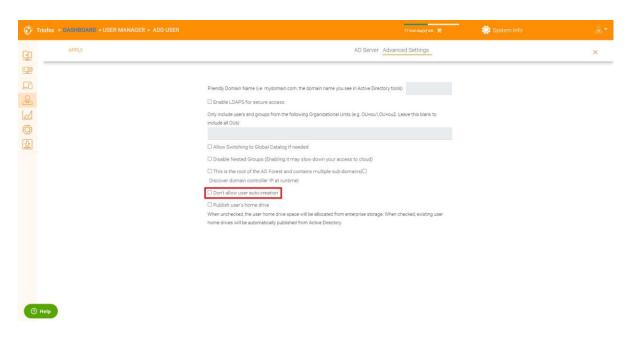
- Sometimes you want the user account to be automatically provisioned so that it is easy for the administrator.
- Sometimes you want the user account to be limited to a specific AD group, but still automatically provision the user's account when the users are in the AD group.
- Sometimes you want the user account to be limited to a specific Organization Unit.

#### AD account auto provision

This option can be found in Settings - > Active Directory.

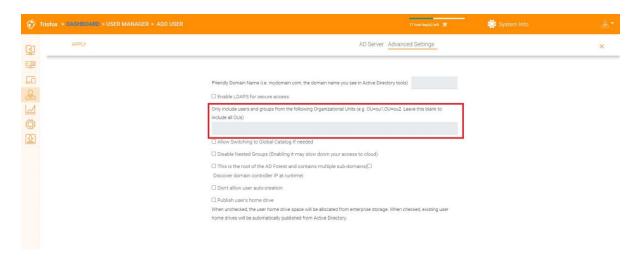


As long as the "Don't allow user auto-creation" is unchecked, Active Directory users will be allowed to go to the web portal and log in. The first time the user logs in, the Triofox account will be automatically provisioned.



### AD account auto provision, limiting to Organization Unit

The organization unit field can be used to further restrict the Active Directory user account to be provisioned automatically.

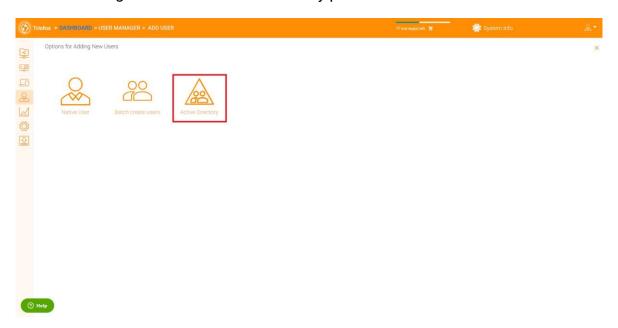


The format of the organization unit is the OU's distinguishedName minus the DC suffix. For example, the following OU's property is:

distinguishedName => DC=tsys,DC=gladinet,DC=com

#### AD account auto provision, limiting to a specific AD group

From the User Manager, you can import the AD group, and the users in the AD group will be able to get the account automatically provisioned.



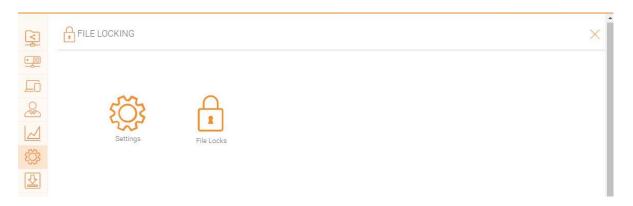
## Single Sign-on

Single Sign on via SAML is a per-cluster setting.



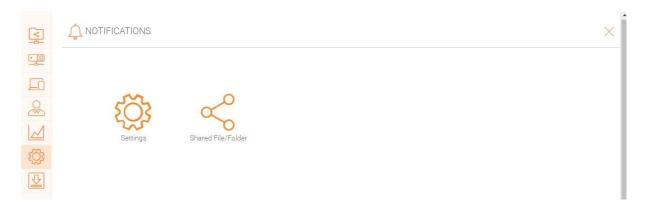
## File Locking

File Locking is another critical component to ensure that users' changes are not overwritten by each other. Here you can enable or disable all file locking options.



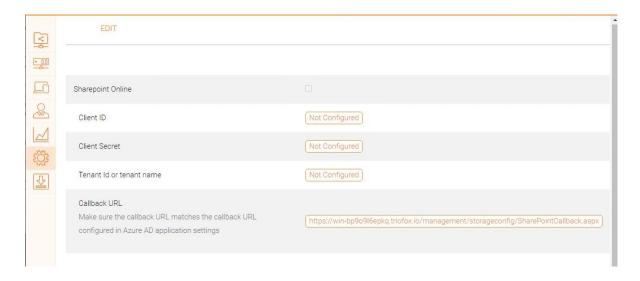
## **Notifications**

Notifications is a critical component to ensure that users have control over what they can do with their notifications.



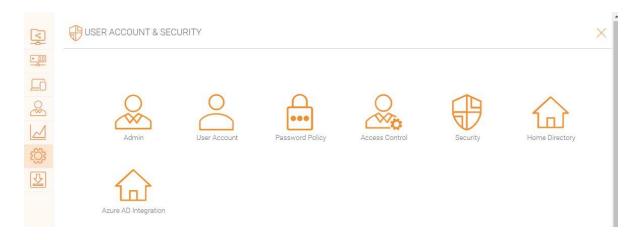
## **SharePoint Online Integration**

Under "SharePoint Online Integration" you can integrate your SharePoint Online with Triofox.



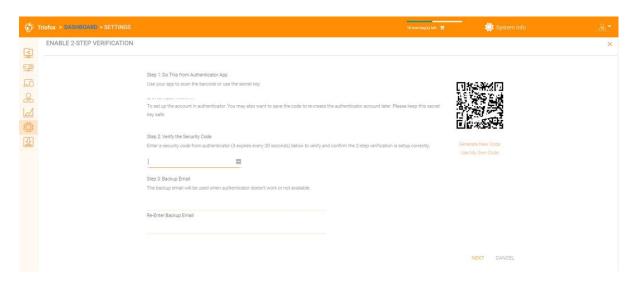
## **User Account & Security**

Under "User Account & Security" you can control the security of the Tenant Administrators, the User Accounts, and the Password Policy. Next to that you can see the settings for Access Control, Security, Home Directory, and Azure AD integration.



## 2-Step Verification

Enforce 2-step verification will force the users to set up 2-step verification via Google Authenticator, Microsoft Authenticator, Amazon MFA, or any other app that supports the same 2-step verification algorithm.



#### Ransomware Protection

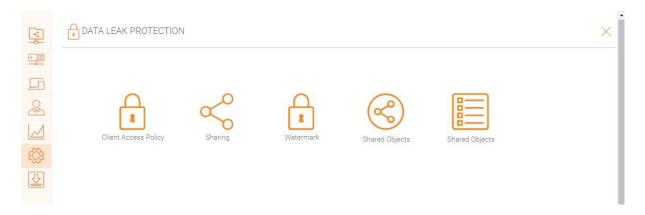
Triofox adds ransomware protection and an automatic alert mechanism to your file servers. It continuously monitors all Triofox clients for unusual activity and automatically shuts them down if it detects a possible attack.

You can enable ransomware protection by clicking Settings.



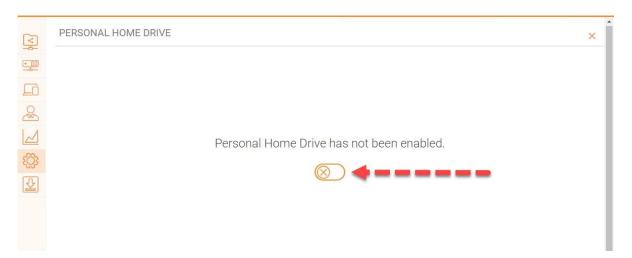
# **Data Leak Protection**

Under "Data Leak Protection" you can control the Client Access Policy, Sharing, Watermarks, Shared Objects, and DLP Events.



# Personal Home Drive

Under "Personal Home Drive", you can enable access to your own personal drive aside from Triofox.



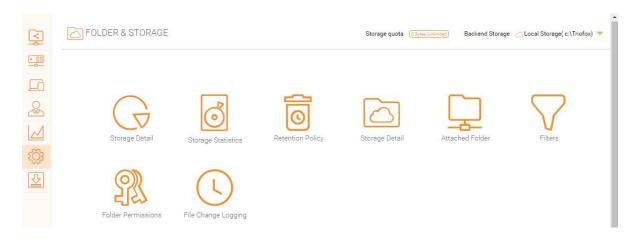
# Clients & Applications

Under "Clients & Applications" you can integrate Office 365, change the Default Document Viewer settings, Client Settings, Web Portal Settings, and Native Client Settings.



# Folder & Storage

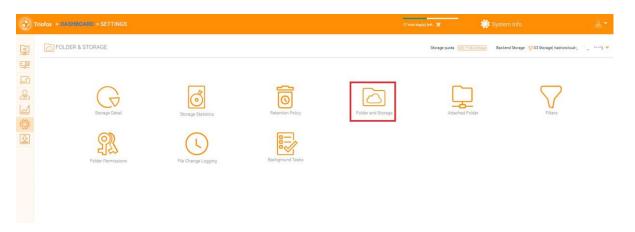
In the "Folders & Storage" section, you can change all the settings for your storage and folders. For example, Retention Policy and Folder Permissions.



#### **Files and Folder Permission**

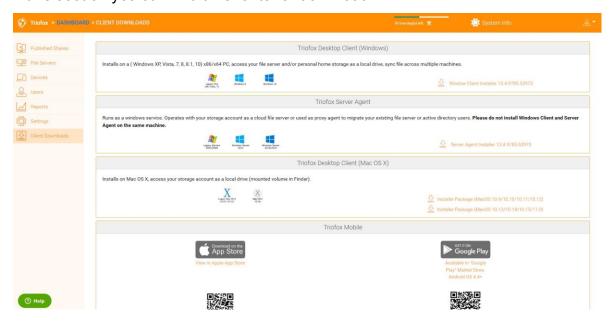
If your files and folders are located on a file server on the same local area network (LAN) as the Triofox server, it is best to delegate 100% of the file and folder permission to the NTFS permission.

If you are not using native NTFS permission. For example, if you use cloud storage services such as Amazon S3 or OpenStack Swift, you can use the Triofox folder permission.



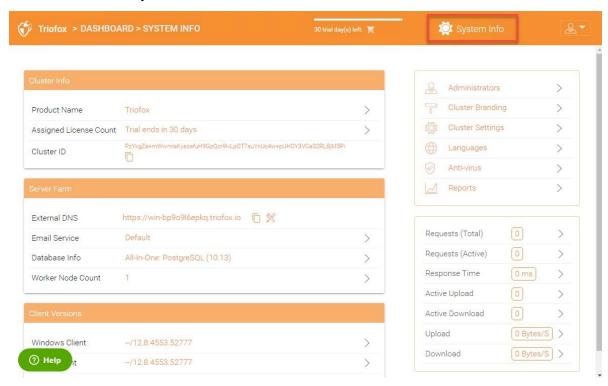
# Client Downloads

In this section you can find all Clients for download.



# Cluster System Info

The System Information pane gives you access to additional settings, as well as information about your cluster, server farm, and client versions.



# Cluster Info

In the cluster info pane, you can see the "Product Name" where you can change the branding of your cluster. The "Assigned License Count" area displays licensing details, including the license edition, number of users, cluster ID, and Triofox server version. Here you can upgrade your environment to a higher edition by clicking on the shopping cart next to your edition. Also, you can view and copy the Cluster ID.



# Server Farm

In the Server Farm you can set up your External DNS, configure the settings for the Email Service, get the Database Information and view the number of Worker Nodes.



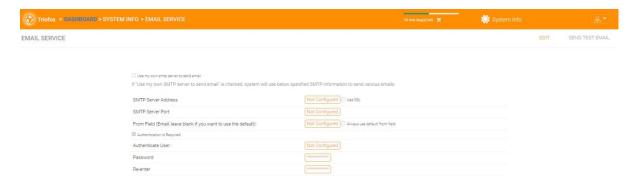
# **Email Service**

In the Triofox solution, there are many places where the user needs to be contacted by email. The email service is used to set up the SMTP email service to send the emails.

By default, it works out of box using the default email service with the Cluster Server's customer support email address as the sender.

It is recommended to set up the SMTP service to use your own SMTP service for sending emails.

If your SMTP service does not require authentication, you can enter a dummy email in the Authenticate User field.



# **Worker Node Count**

Cluster Server Farm has two types of nodes. One is "Worker Node", and the other is "Web Nodes".

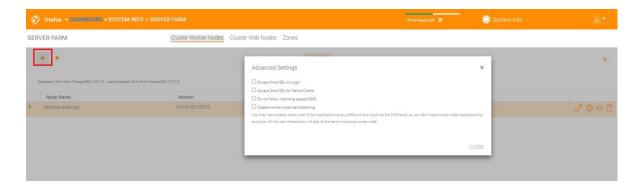
#### **Cluster Worker Nodes**

This type of node contains services such as the Web Browser Based File Manager, Storage Service Connectors, etc. Again, additional nodes can be added as the load increases. Since cache information resides on each node, users have an affinity for a single node once it is assigned. If the load balancer distributes users evenly across all worker nodes, the cache information can be present on all worker nodes.



# **Worker Node Settings**

There are some settings that apply to all worker nodes. After clicking on the "Settings" icon, the "Advanced Settings" panel is displayed.



# Always force SSL on login

In a production environment, almost 100% of the time you will need to enable the "Always force SSL on Login" option. If this option is checked and Triofox detects that the incoming connection is HTTP, it will do a redirect to HTTPS. If you enable SSL, you must first set up an SSL certificate.

However, if you have SSL-offload, such that SSL is offloaded to a hardware appliance, and after that, the incoming connection is HTTP between the hardware appliance and Triofox. In this SSL-offload case, you will NOT check "Always force SSL on Login" because it will create an infinite redirect loop because the incoming connection is always HTTP as far as the Triofox Server is concerned.

# **Always force SSL for Native Clients**

In a production environment, almost 100% of the time you will need to enable the "Always force SSL for Native Clients" option.

Especially in the case of SSL-Offload, you MUST check "Always force SSL for Native Clients". Otherwise, the Triofox Server may think that the incoming connection is HTTP, so it will continue to encourage the native clients (such as Windows clients) to use HTTP instead of HTTPS.

#### Note

On iOS devices, Application Transport Security may be enforced by the operating system, and HTTPS must be used for an iOS application to connect to the Cluster Server.

#### Disable worker-node load balance

If you have your own load balancer, you will disable worker-node load balancing. The Cluster Server has built-in node-affinity load balancing that can be done on a per-user basis. If you have your own load balancer, you can have session affinity or just round-robin, either is fine.

#### Note

How to add a worker node?

Simply install the Cluster Server during the installation and point the Cluster Server to the same database. Once the Cluster Server worker node installation is complete, reboot. The web portal page appears and prompts you to add the worker node to the server farm.

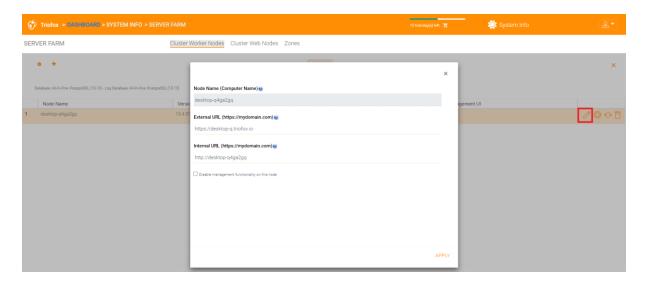
# Warning

What happens if you have changed the Cluster Server Host Name?

In Windows Server 2012 and newer servers OS, a server that is newly provisioned is usually named similarly in the hostname format (WIN-ABCDEFG). Sometimes it is desirable to change the name in the Control Panel -> Systems. If the Cluster Server is already installed, changing the name will make the Cluster Server add itself again with the new name. So, the next time you visit http://localhost on the Cluster Server after the server has been renamed, you will see that the worker node section contains both the node with the old name (which no longer exists) and the node with the new name (which is current and good). In this case, you simply need to remove the worker node with the old name.

### **Worker Node Properties**

You may need to change the worker node properties when you set up SSL and the DNS name for the cluster.



#### **Node Name**

The **Node Name** needs to match the hostname of the worker node. If you rename the Windows hostname (NETBIOS name) of a worker node after installing the Cluster Server, it may happen that the Cluster Server displays a web page after rebooting, asking you to add the new worker node. In this case, you can add the new worker node and then delete the old worker node.

#### **External URL**

The **External URL** needs to match the external URL of the worker node. In a production environment, this is usually in the format https:// and contains the DNS name of the node.

The External URL is an important property for email templates. After the Cluster Server installation is complete, the dashboard displays the warning message "External DNS has not been configured for this worker node. Some functionality may not work properly. Config Now".

The moment that you have finalized on the External DNS name of the Cluster Server, you must come here and configure the External URL property for the Cluster Server.

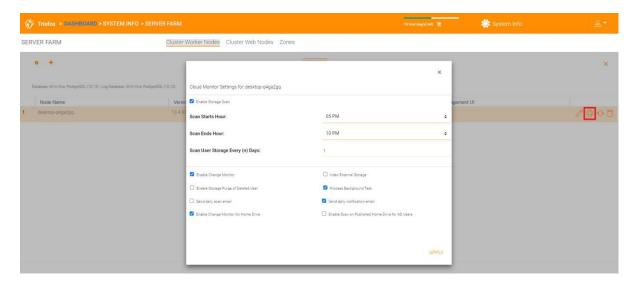
#### Internal URL

The Internal URL is the internal URL of the node, usually in the format http://local-ip-address. In later Cluster Server builds, this property is hidden and does not need to be set any more.

# **Disable management functionality**

You can create an internal facing worker node (that doesn't have an external URL) and allow management functionality only on this worker node. This is a security feature.

# **Edit Cloud Monitor Setting**



# **Enable Storage Scan**

Enables or disables storage scan on the worker node. There is a Cloud Monitor service on the Worker Node. The service performs background monitoring and scans the storage from time to time to correct quota calculation and perform other maintenance tasks.

#### **Scan Starts Hour**

Normally, you set the start time for the scan sometime in the early morning, around 1 AM.

#### Scan End Hour

Typically, you set the end time for the scan to be sometime in the morning, such as 8 AM, before everyone gets to work. The idea is to use the idle time (when people are not at work) for scanning.

### Scan User Storage Every (n) Days

Typically, you can set this to every week or every other week. So a number between 7 and 15 is appropriate.

### **Enable Change Monitor**

If you enable Change monitor, the attached local storage, e.g., storage from file server network share, will be monitored and notification of file changes will be reported to remotely connected clients. This is typically required if your users modify documents both directly from the backend attached network share and from the front-end cluster access clients.

# **Index External Storage**

This setting indexes storage services added through the "Storage Manager". The index is written to the files table in the database.

# **Enable Storage Purge of Deleted User**

When a user is deleted from the system, the user's home directory is not immediately removed. In many cases, you may not want to delete it at all. For example, a user is deleted from the Cluster Server, but the user can still use the files and folders directly from the network.

### **Process Background Task**

Specifies whether this particular node should process background tasks.

# **Enable Change Monitor for Home Drive**

When Active Directory Home Drive integration is enabled, this allows Cluster Server to monitor changes on the home drive and notify remote client agents that the files/folders have been changed.

# Send daily scan email

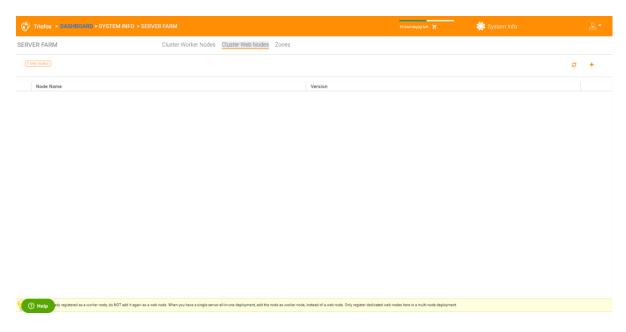
When storage scan is enabled, a daily scan email is sent to the cluster administrator about the scan result.

# Cluster Web Nodes

#### Note

For a small deployment, it is not necessary to have web nodes. You can go directly to worker nodes since worker nodes are also web nodes by default.

The Account Management, Sign-in and Load Balancing services are installed on this physical (or virtual) machine. Depending on the load, you may need 1 to N such nodes. Typically, we recommend using 10+ worker nodes for each web front node. For small deployments, you can omit web front nodes and combine them into worker nodes. All the installation work is the same. If you do not need web front node, you do not need to assign them in Cluster Manager.



### Example:

- ACME Corporation deploys two web front nodes node1.acme.com and node2.acme.com. Each node runs a copy of the Cluster Server connected to the same SQL database.
- ACME Corporation acquires a domain name (DNS) of cloud.acme.com, which is load balanced to node1.acme.com and node2.acme.com.

When users point their browsers to https://cloud.acme.com, they are directed to the login page of one of the nodes.

#### Note

NOTE 1: If you have hardware load balancing available, you do not need to use web nodes at all.

NOTE 2: Windows 2012/R2 comes with Network Load Balancing (NLB). If you use NLB, you do not need web nodes at all.

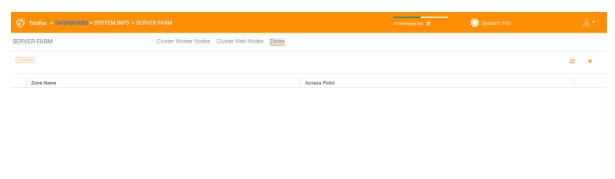
If you have an existing load balancer, you can basically omit the web nodes.

#### Zones

The concept of a zone is to connect your worker nodes to the location of storage. When you think about zones, you will first think about the storage location.

For example, I have storage in LA, so I have a LA zone. I also have storage in NY, so I have a NY zone.

You can also have worker nodes from different zones and assign users to a specific zone. If the user's home directory is from the LA zone, the user must be assigned to the LA zone.



# **Client Versions**



#### Windows Client

For Windows Client, Mac Client and Windows Server Agent, there is an automatic client update feature. Each upgrade package contains the updated clients. By clicking on the **Publish** button, the newer package can be published to the clients.

Each new Cluster Server upgrade includes the newer Windows client, Windows Server Agent, and Mac client. Cluster users can get the clients that are included in Cluster Server via the manual download. However, for existing users with clients already installed, these older clients are not automatically upgraded until the newer client packages are published.

# **Daily Upgrade Limit**

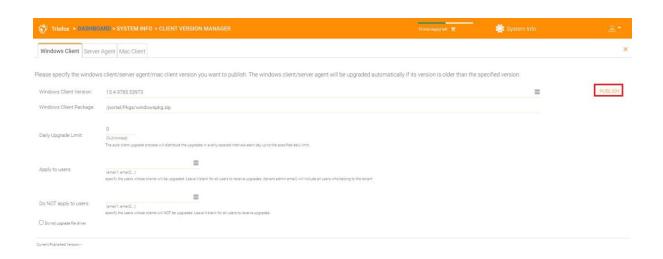
This is a per worker node setting. For example, if you have 2 worker nodes and set the daily upgrade limit to 100, a maximum of 200 clients will be upgraded per day.

# **Apply to Users**

This option is usually used for testing purposes before the client is published.

# **Do Not Apply to Users**

This option is usually used for testing before the client is published and to exclude certain users.



#### Note

The Windows client out there has a process that runs as a Windows service in the background. The service checks in regular intervals of about 1-2 hours if a newer upgrade is available. Once a newer client package is published and discovered, the newer package is downloaded. However, if the client is still actively running, the replacement and upgrade will not occur until the client application is stopped and restarted. This usually happens when the user logs out of Windows or restarts their desktop.

If the Windows client software is actively running, a message may appear in the system tray asking the user if they want to restart the client software and get the newer version.

Once a client is published for automatic client upgrade, you can use **Unpublish** to stop the automatic client upgrade.

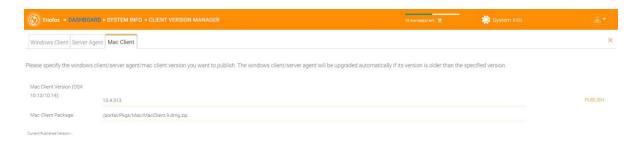
# Server Agent

The Windows Server Agent can be published separately for automatic upgrade.



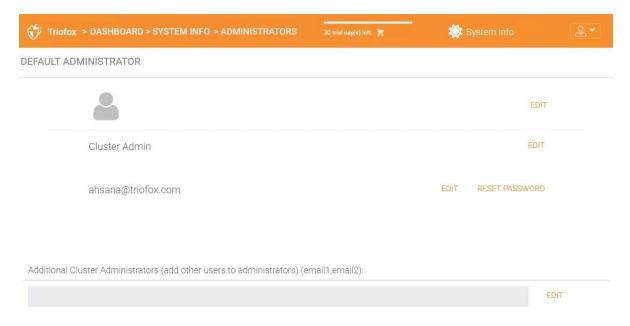
# **Mac Client**

The Mac client can be published separately for automatic upgrade.



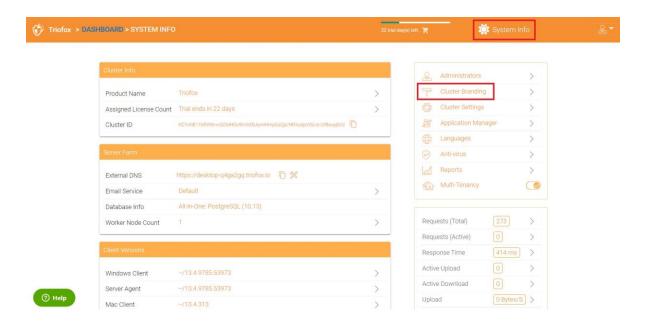
# **Administrators**

The "Administrators" option allows a Triofox administrator to change the cluster administrator's default email address, reset the password, and add additional administrators.



# **Cluster Branding**

You can access the cluster branding under System Info.



In Cluster Branding, you can change the logo, bitmaps, and other branding-related information. There are two branding supports. One is the built-in self-service branding, which is fully controlled by the "Cluster Branding" settings in the "System Info". The other is the full-branding service. Both rely on "Cluster Branding" to change the appearance of the web portal.

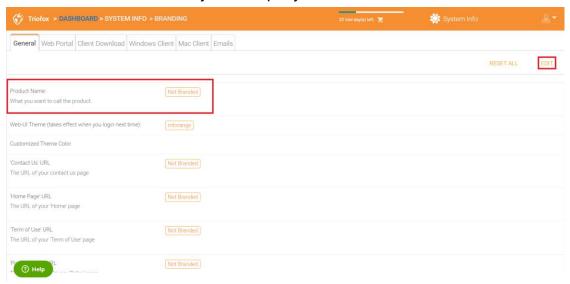
Built-in branding works with white-label clients, which upon the first connection to the cluster, will download the branding-related information and use the branding-related information. Compared to the full-branding service, full-branding clients burn artwork, logo bitmaps, and related information into the client binaries.

#### General

The General tab lets you specify the name and other settings as described below.

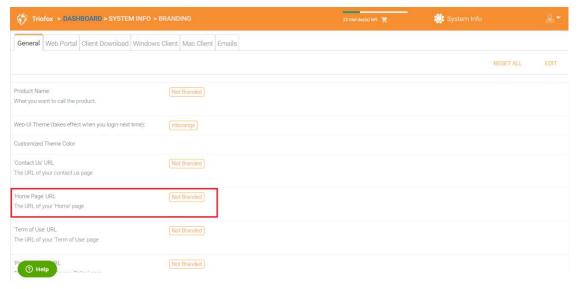
#### **Product Name**

Here you specify what you want to call the product. This is the name that users will see when they log in to either the web portal or client applications. To access the branding settings, click the branding icon (1), then click "EDIT" (2), and then change the setting you want (3). Do not forget to save your settings. You can also choose a color theme that you want your users to see when they log in to the portal. You can choose a color theme that matches your company's colors.



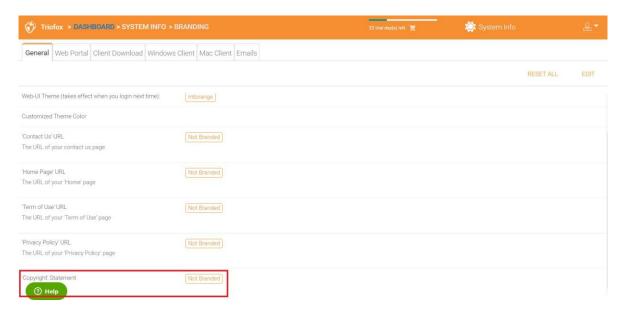
# **Home Page URL**

This is the URL of your "Home Page" page.



# **Copyright Statement**

This is the content of your "Copyright Statement".



### Web Portal

You can find Web Portal section under Cluster Branding.

#### Note

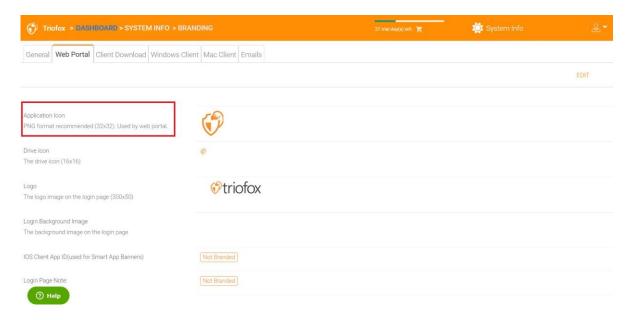
In previous builds, the icons worked best when the icon files were on the same server and the icons were referenced by a relative link.

For example, you can create a subfolder under the Cluster Server installation folder, such as the root/imagetest folder. The dimensions of all the icons for each setting in the web portal should match what is displayed for each setting. The branding of the icons and images require the icons and images have the same width/height as specified or the same aspect ratio if the resolution is higher.

In later builds, the icons used are what-you-see-is-what-you-get and you can upload those icon sets.

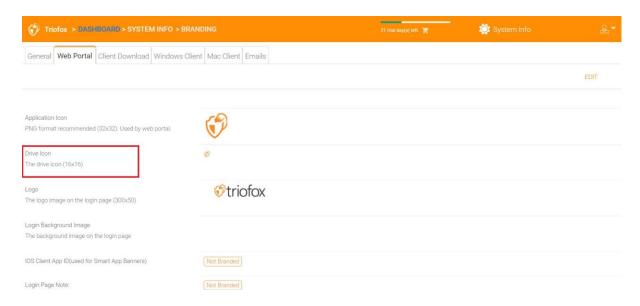
# **Application Icon**

In the Web Portal section of the cluster branding, you can change the application icon. This is the image that appears next to the product name in the web portal.

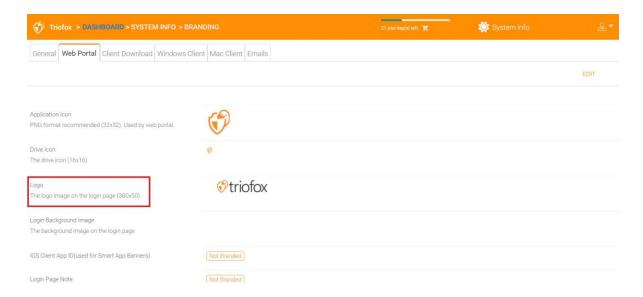


#### **Drive Icon**

This is the icon used for the Triofox drive. For example, in the tree view of the web portal.



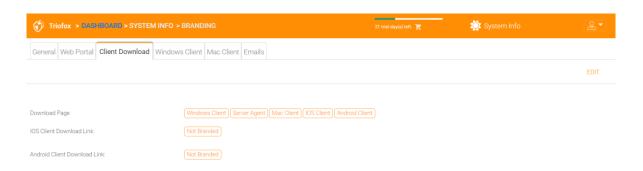
# Logo URL & Login Page Left Image



Please follow the same steps for branding settings for "Login Background Image", "File Share Stamp Icon", "IOS Client App ID", "Login Page Note", "Change Password URL", "Tutorial Page URL".

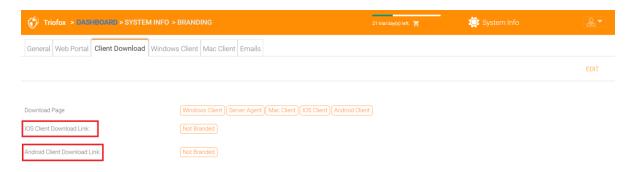
# Client Download

You can find **Client Download** section under **Cluster Branding**. You can also choose not to show the download link for some clients.



#### **Mobile Clients Download Links**

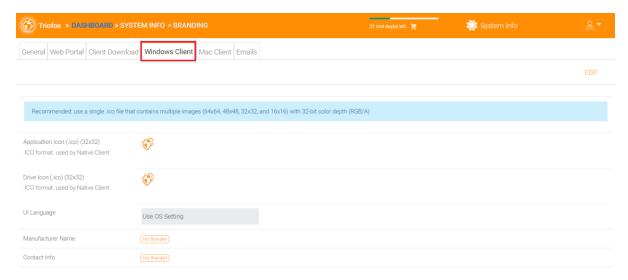
Once you have branded your own iOS client and/or Android client, you can point the download link to your own AppStore and Google Play.



# **Windows Client**

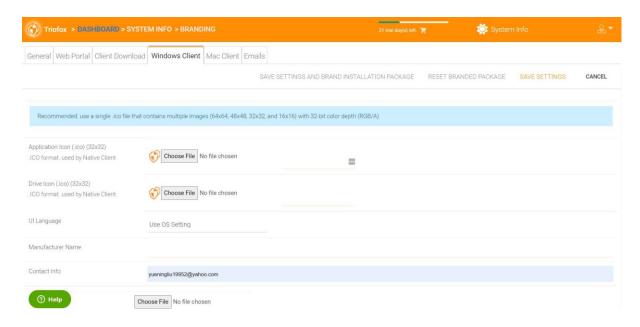
You can find Windows Client section under Cluster Branding.

Here you can specify the URLs for the application icon and the drive icon. You can also enter your company name under "Manufacturer Name" along with the "Contact Info" email. You also have the option to create your own branded MSI Windows client here. You can also use your own code signing certificate to digitally sign the MSI package. The advantage of creating your own MSI client package is that when users download and install the Windows client you provide, they will see your company name along with your branding during the client installation.



The Windows client supports multiple languages. Some language packs are included and shipped with Triofox. If you want to run the Windows client under a different language, you can set the UI language there.

After clicking the "Edit" button to edit the branding information of the Windows client, you can specify the EULA (End User License Agreement) and Code Signing Certificate.



#### **EULA**

The input is in an RTF file format.

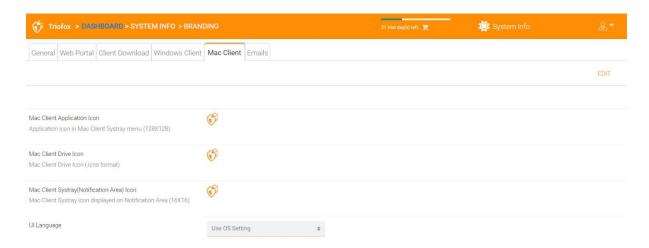
# **Code Signing Certificate**

You can acquire a code signing certificate from your code signing certificate vendor. Most SSL providers also offer code signing certificates. Make sure that you use SHA 256 (SHA2) as the hash algorithm for your digital signing certificate.

If your Code Signing certificate is already installed, you can also use the option - **Sign using cert in certificate store**.

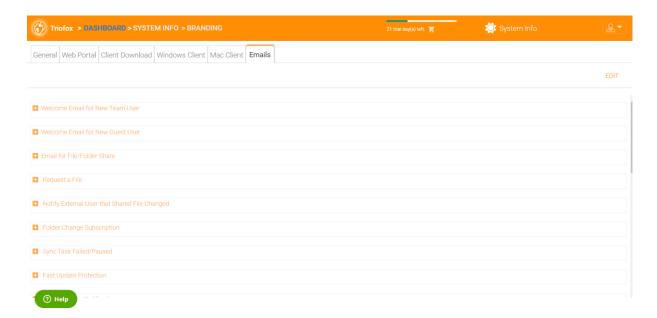
# **MAC Client**

You can configure the MAC client and MAC client installation package branding under here.



# **Emails**

There are many places in Cluster Manager where users need to be contacted via email. So, the **Emails** tab is used to set up the email templates used for contacting users via email.



#### **Welcome Email for New Team User**

The team user is a regular user in a cluster. This is the email template that is sent to the user when the user account is created.

# **Welcome Email for New Guest User**

A guest user is a regular user in a tenant that does not have a home directory associated with it. Therefore, the guest user can only work in the files and folders shared by other regular users. This is the email template that is sent to the guest user when the guest user's account is provisioned.

### **Email for File/Folder Share**

This is the email sent to a user when the user is about to receive file/folder shares.

#### Request a File

This is the email sent to a user when the user is about to receive an invitation to upload a file.

# Notify external user that shared file changed

When a shared file/folder has been modified, this email is sent to the user who receives the shared files/folders.

#### **Admin Reset User Password Email**

This is the email that is sent to a user when their password is reset.

# **User Reset Password Email**

This is the email that is sent to a user when the user resets the password for himself/herself.

# **New Sing-in Action Email**

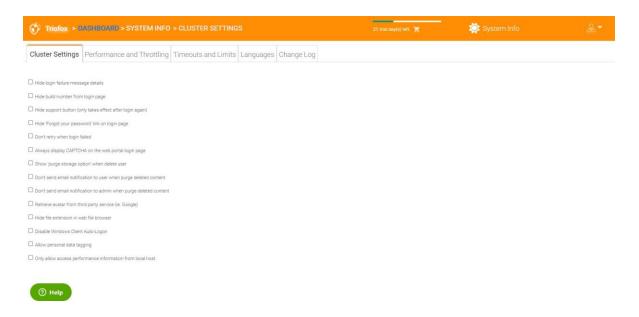
This is the email notification sent to the user when the user logs in from a specific machine.

# **Settings**

This is where the reply email address is set. Normally, the email will be sent using the SMTP service set. However, if the reply address is different, you can set it here.

# **Cluster Settings**

# **Cluster Settings**



# **Hide Login Failure Message**

If this option is enabled, the "Login failed" message will be replaced by a very generic "Login failed" message. If the option is not enabled, a more meaningful login error can be issued, such as user-not-found, authentication-error and so on. This is a security feature if you do not want to reveal too much information so that hackers can guess the reason for the failed authentication.

# Hide build number from login page

This controls the build number on the login page of the web portal.

# **Hide support button**

This hides the floating support icon.

### Hide "Forgot your password" link on login

This option is most often used when Active Directory integration is enabled. The user then needs to forget and change his password in the normal Active Directory way and not in the way Triofox provides. In this case, it is recommended to hide the "Forgot your password" link.

# Don't retry when login failed

This option is often used when the Active Directory user has a low failed-count on lockout policy. If the user's password is incorrect, a few retries may lock the user's Active Directory account. The retry feature can be used when there is no Active Directory lockout or when the number of lockouts is high.

# Show "purge storage option" when delete user

By default, when a user is deleted, the user's home directory storage contents are not touched for later use or review. If it is desired to delete the user's contents when the user is deleted, this can show the purge option.

# Don't send email notification to user when purge deleted content

When the user deletes files, they are not actually deleted immediately. The purge is asynchronous and scheduled for a later time. This setting controls the notification.

### Don't send email notification to admin when purge deleted content

When the user deletes files, they are not actually deleted immediately. The purge is asynchronous and scheduled for a later time. This setting controls the notification to the administrator.

# Retrieve avatar from third party service (i.e. Google)

This is a usability feature that allows the user's image to be retrieved from Google.

#### Hide file extension in web file browser

This setting hides the file extension.

# **Disable Windows Client Auto-Logon**

This is a security feature. The result is that every time the Windows client is closed, and the user tries to log in the next time, it does not remember the login token and the user must re-enter the credentials to log in.

# Allow personal data tagging

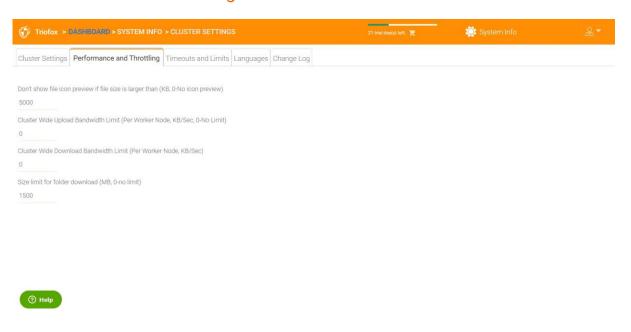
Attach local folder using in place versioned folder.

When synchronizing folders from remote PC/Mac to Triofox, using in place versioned folder will make the folder keep the same folder structure as the folder that is being uploaded. Otherwise, Triofox manages the folder contents on the server side in its own way.

# Only allow access performance information from local host

Performance data can only be accessed from <a href="http://localhost">http://localhost</a> and not from an external URL.

# Performance and Throttling



# Don't show file icon preview if file size is larger than (KB, 0-No icon preview)

This is used to control the generation of iconview thumbnail in the files and folders view of the web browser. Thumbnail generation takes CPU power from the Cluster Server. For large files, thumbnail generation can affect system performance. Therefore, it is recommended to limit the feature to a certain image size.

# Cluster Wide Upload Bandwidth Limit (Per Worker Node, KB/Sec, 0-No Limit)

This limits upload bandwidth.

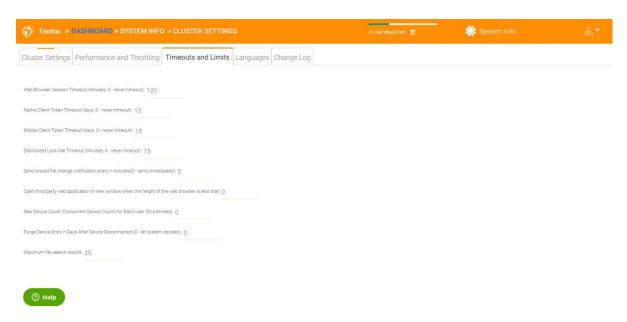
# Cluster Wide Download Bandwidth Limit (Per Worker Node, KB/Sec)

This limits download bandwidth.

# Size limit for folder download (MB, 0-no limit)

This is to prevent a user from downloading a very large folder and consuming all the resources of the Cluster Server.

# **Timeouts and Limits**

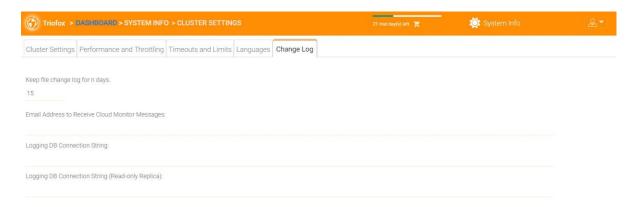


# Languages



This section sets up the web portal languages and the client application languages for Windows client. We have automated the translation and provide the resource files that you can use to localize the web portal and clients in the language of your choice.

# **Change Log**



# Keep file change log for n days

This is a cluster-wide retention policy for the file change log.

The file change log resides in the SQL database. For deployments that use SQL Express, there is a size limit on the database. In the deployment guide, there is an option to split the file change log into a MySQL database or into another SQL database. This option is usually used to keep the SQL database size small.

#### Note

After the Cluster Server has been running in production mode for a while, we recommend that you check the file change log database table and the file index table to see how large these tables are.

# **Email Address to Receive Cloud Monitor Messages**

From time to time, the Cluster Monitor service may send an email about status and alerts.

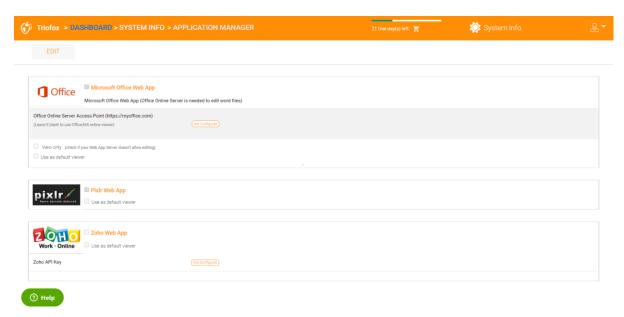
# **Logging DB Connection String**

This is to split the file change log, device table, file index table, and audit trace table out of the main database and into a secondary database. The secondary database can be a Microsoft SQL Server or a MySQL Community Server.

The Cluster Server database is divided into a core part and a logging part. The core part can store the DB connection string that connects to the secondary database. This setting used to be in the web.config file.

# **Application Manager**

You can also configure web apps under the "Application Manager" tab in Cluster Settings. This allows users to edit documents using the web apps. The apps here apply only to web portal-based editing.



Once an application is activated, you can see the context menu entry in the web-based file and folder manager view.

# Languages

Under "Languages" you can set the language of your choice.



# **Anti-Virus**

Under "Anti-Virus" you can activate your own Anti-Virus.



# **Cloud Backup**

# **Cloud Backup**

#### Note

With Triofox's Cloud Backup, you can turn your Triofox server into a backup appliance or create a self-hosted backup solution with the ability to back up endpoints and restore folder permissions.

In this section, you will learn how to enable backup for file shares and endpoint devices, and how to access and restore the files in the backup.

# **Enabling Cloud Backup**

Cloud Backup is enabled on a cluster-wide basis. Instead of purchasing an expensive backup appliance, your Triofox server takes on the role of the virtual appliance, allowing you to create a self-hosted backup service or use Triofox's hosted environment to secure the offsite copies of your data.

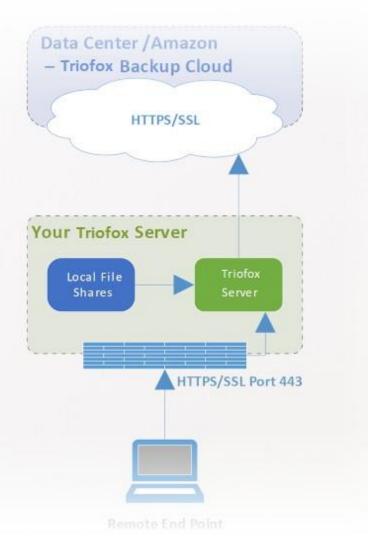
# **Backing Up File Shares**

You can back up file shares from the local file server using your Triofox server as a conduit to the Triofox backup cloud, or you can define your cloud backup destination if you want to use a different storage service.

# **Backing Up Endpoint Devices**

Folders and file shares on remote PCs and servers are backed up using existing Triofox agents to take advantage of existing HTTPS/SSL connections that are rigorously architected to maintain connectivity and reliability.

The following data flow illustrates how the basic architecture functions for this solution works.



#### Note

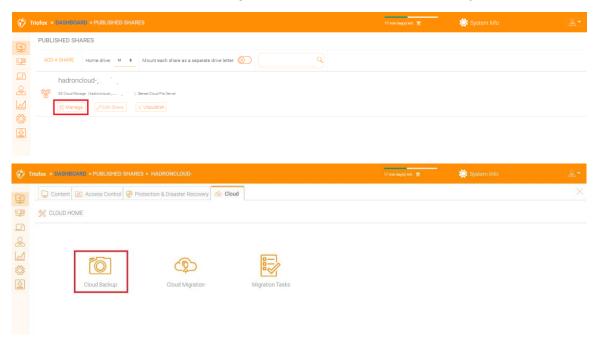
Traditionally, enterprises use on-premises backup appliances to obtain backup sources from servers and desktops on the company network. This is a very secure setup because the backup data resides within the appliance. However, it presents a challenge for remote devices because they are not always inside the company network and the VPN (a virtual private network) of remote devices is not always on to observe certain backup schedules.

On the other hand, cloud backup solutions such as Carbonite and CrashPlan can back up remote devices directly to the cloud, solving the remote backup problem. However, the backup destination is in an opaque location controlled by a third party. This becomes problematic when there are business policies that prevent data replication to third-party controlled locations.

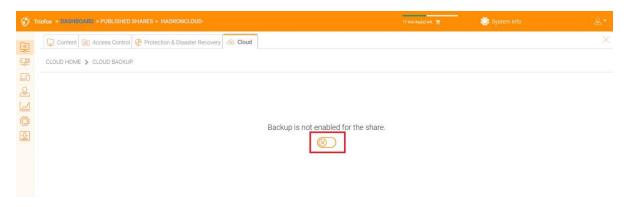
Triofox Cloud Backup solves both of these problems. First of all, the Triofox server maintains the connection to remote PCs and file servers via HTTPS/SSL, so the connection is always on. This means that remote PCs and file servers can always use Triofox's communication channel and data channel to back up via the Triofox backup appliance. And because Triofox's cloud backup is storage agnostic and allows you to back up to a storage service you control, you can now provide continuous backups of your file servers and endpoints to a storage service you control or the Triofox defaults.

# **Enabling Cloud Backup**

Go to Published Shares -> Manage Share and select Cloud Backup.



Then you can enable Cloud Backup by clicking the button below.



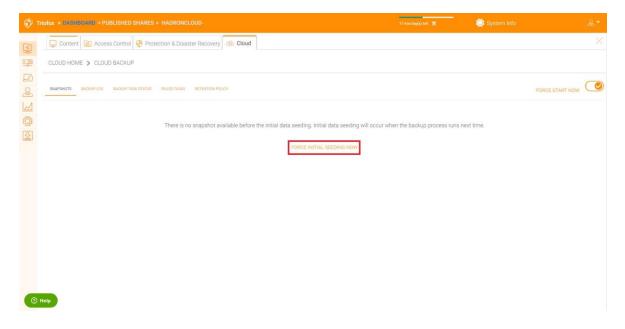
# **Cloud Backup Settings**

# **Cloud Backup Snapshots**

Once enabled, Cloud Backup is stored in snapshots. The snapshot must be initially seeded, and new snapshots are created to capture updates to the data set. The data can be restored from any snapshot.

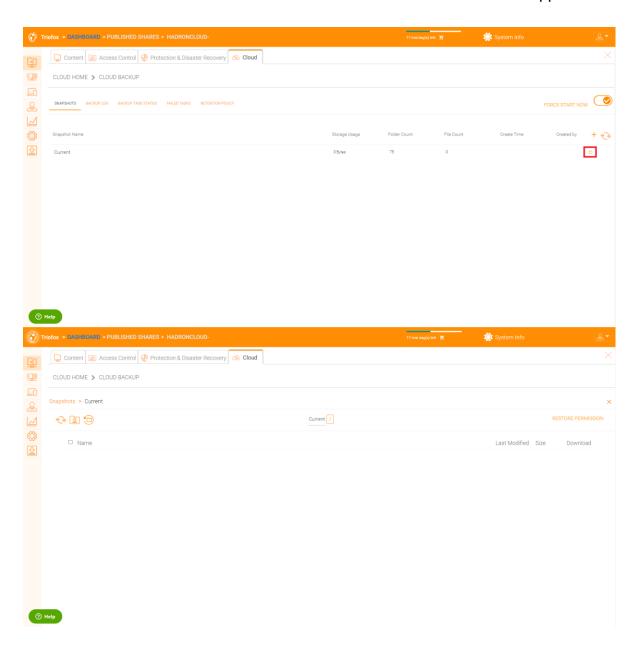
# **Seeding a Snapshot**

Go to Cloud Backup -> Snapshots and click "Force Initial Seeding Now".



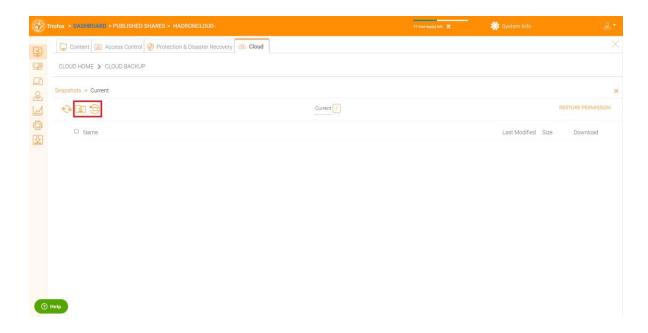
# **Browsing a Snapshot**

To browse a snapshot, click the icon that looks like an eye on the right side of the listed snapshot. You can then navigate through the folder hierarchy in the snapshot to download and restore files and folders using the action icons at the top left of the page. You can use check boxes to filter the list of items to which the action is applied:



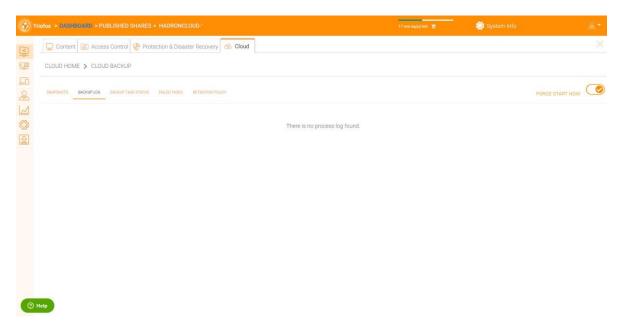
# **Downloading and Restoring from a Snapshot**

For example, in the image below, you can click the highlighted icon to restore the selected items:



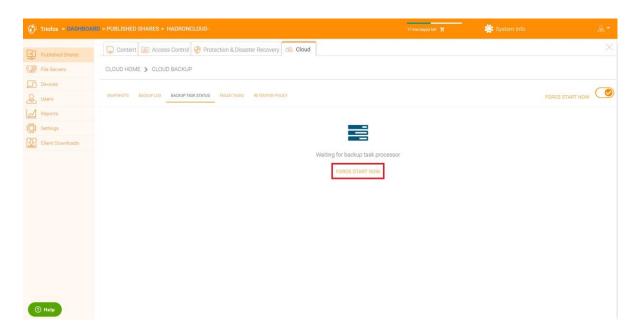
# **Backup Log**

On this page you can browse the backup logs.

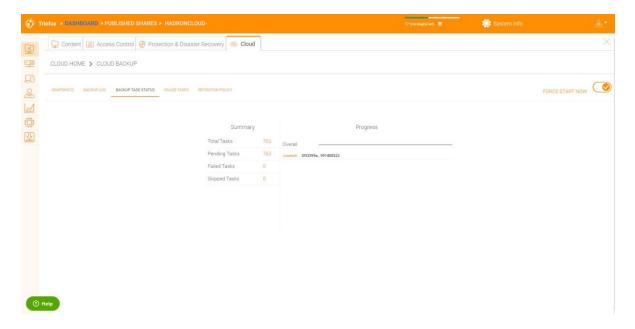


# **Backup Task Status**

You can go to Backup Task Status -> click "Force Start Now" to start backup tasks.

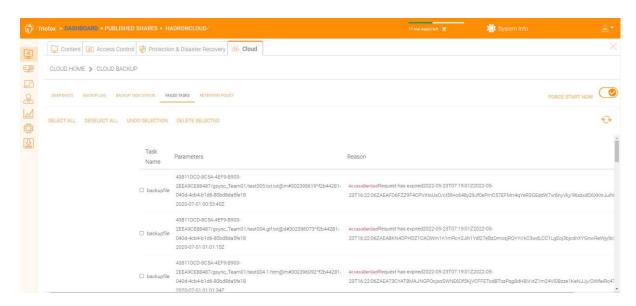


When backup tasks start, you can see the progress bar with progress details.



# **Failed Tasks**

After the backup job is finished, the failed tasks are displayed here and you can manage the tasks.



# **Retention Policy**

There are three retention policies.

"Keep last n snapshots" defines the maximum number of snapshots allowed at a given time. However, this setting can be overridden by the value of "Keep snapshots for at least n days" if it is not 0. For example, you may want to only keep the last 2 snapshots available, but if the system is configured to keep a snapshot for at least 30 days, a daily snapshot could result in 30 snapshots being created before any one is deleted.

