VT Writer, VT Insights and Email Service On-premise Configuration Help

Version 4.0.2 (February 2024)

Copyright 2024 VisibleThread Limited. This document is the copyright of VisibleThread Limited and may not be reproduced in whole or in part without the consent of VisibleThread Limited. The document is not intended for production and is furnished "as is" without warranty of any kind. All warranties on this document are hereby disclaimed including the warranties of merchantability and fitness for a particular purpose.

Trademarks

© 2024 VisibleThread™ is a registered trademark of VisibleThread Limited. All rights reserved. All other trademarks are the property of their respective owners.

Table of Contents

1. Introduction – VT Writer and the Email Service 4
1.1. What is VT Writer? 4
1.2. What is the VT Email Service? 4
1.3. What is the VT Writer Word add-in? 4
1.4. Online Documentation & Help 4
2. Deployment – how does it work and what's in the box? 4
2.1. Logical Components 5
2.1.1. VT Writer - Web-based Analysis Tool 5
2.1.2. Web-based Administration Tool 5
2.1.3. VT Writer Email Processing Server (optional) 6
2.1.4. VT Writer Analytics engine: 6
2.1.5. VT Writer Word add-in: 6
2.2. Physical Deployment 6
3. Minimum Requirements 7
3.1. Installed Components 8
3.2. VT Writer Email Service - Requirements 8
3.3. VT Writer Web App – Requirements 8
3.4. VT Writer Word add-in – Requirements 8
4. Installing the Writer Server (Ubuntu OVA Install) 9
4.1. Deploying the OVA File 9
4.2. Verify Appliance Configuration 10
4.3. Turn on appliance and verify network connectivity 10
4.3.1. Configuring networking on the VisibleThread Virtual Appliance 11
4.3.2. Configuring the VisibleThread Virtual Appliance to use a static IP address 12
4.3.3. Using SSH to access the VisibleThread Virtual Appliance 13
5. Installing the VT Writer Server (Red Hat RPM Install) 13
6. VT Writer Server and SSL Termination 13
7. Using the Email Service - Information Flow (optional) 14
8. Deploying the VT Writer Word add-in 15
9. VT Writer user roles 15
10. Setting up VT Writer and the Email Service for the first time 16
10.1. First time setup - setup up your Admin user, configuring your SMTP settings 16
11. Configuring Settings within VT Writer 19
11.1. Configuring Inbound Mail Settings – (For VT Writer Email Service Usage only) 20

© VisibleThread 2024

11.1.1. For POP3 or IMAP, POP3S or IMAPS 21
11.1.2. For MS Graph (Outlook 365) 21
11.2. Configuring System-wide Data Retention Settings 22
11.3. Enabling user self-registration 24
11.4. Enabling Auto Provisioning 25
11.5. Configuring a session timeout setting 25
11.6. Configuring a custom support contact address 26
11.7. Configuring your authentication settings 27
11.7.1. Switch from Username/Password to SSO 28
11.7.2. SSO to Username/Password 29
12. Backing up VisibleThread data 30
12.1. Backing up the entire VisibleThread Appliance 30
12.2. Back up the VisibleThread Data 30
13. Uploading new License Files 31
14. Upgrading the VT Writer Application 31
14.1. Back up the VisibleThread data 32
14.2. Upgrading an Ubuntu Virtual Appliance 32
14.2.1. Uploading the upgrade file to the Virtual Appliance 32
14.2.2. Applying the upgrade to the Virtual Appliance 32
14.2.3. Verifying the upgrade is successful 32
14.3. Upgrading a VT Writer Red Hat install 33
15. Troubleshooting 33

© VisibleThread 2024

1. Introduction – VT Writer and the Email Service

Note: VT Insights is a component of VT Writer and is installed in tandem. Access to VT Insights is controlled by your license.

This guide shows how you set up and configure the VT (VisibleThread) Writer solution and our VT Email Service.

It is for people who are deploying the VisibleThread Server on-premise behind a corporate firewall.

For other help files or updates to this help file, please refer to the documentation section of the VisibleThread support site at: http://www.visiblethread.com/support/documentation/

1.1. What is VT Writer?

VT Writer is a one-click plain language analysis tool for writers looking to improve the clarity and quality of their content. It identifies clarity issues in your documents, on your website or instantly as you type.

1.2. What is the VT Email Service?

The VT Email Service measures & improves the quality & readability of all communications. It helps embed Plain Language policy and programs in a way that requires no training for users.

Content creators submit MS Word and PDFs for scoring and readability analysis right from within their inbox. It couldn't be easier, just attach a doc to a mail and send it. You'll get the results in seconds. Users don't have to sign into any environment. This is a zero-friction way for contributors to score content. The Email Service can run in cloud or on-premise for organizations with sensitive documents.

This document is for an on-premise configuration.

1.3. What is the VT Writer Word add-in?

The VT Writer Word add-in is a MS Word plugin that allows users use VT Writer to analyze word documents, directly from Word. The Word add-in compliments the VT Writer web application, giving users an alternate way to send their documents to the VT Writer server. The add-in sends documents from within Word, directly to the VT Writer application, and displays the feedback directly in Word.

1.4. Online Documentation & Help

You can find the most up to date documentation and help here: http://support.visiblethread.com/forums/21077932-documentation

For common questions & queries, see our support help portal here: http://support.visiblethread.com

You can also submit help queries or report issues using a form on our support portal. Or contact us via email at support@VisibleThread.com

2. Deployment – how does it work and what's in the box?

Let's consider the logical components and physical deployment.

© VisibleThread 2024

2.1. Logical Components

The VT Writer and Email Service comprise four logical components;

2.1.1. VT Writer - Web-based Analysis Tool

End user web app.

Users can:

a. Run analysis on URL's, documents (PDF & MS Word) and Text snippets
b. Sign-in via email address and password
c. View and interact with historical scan results and generate reports

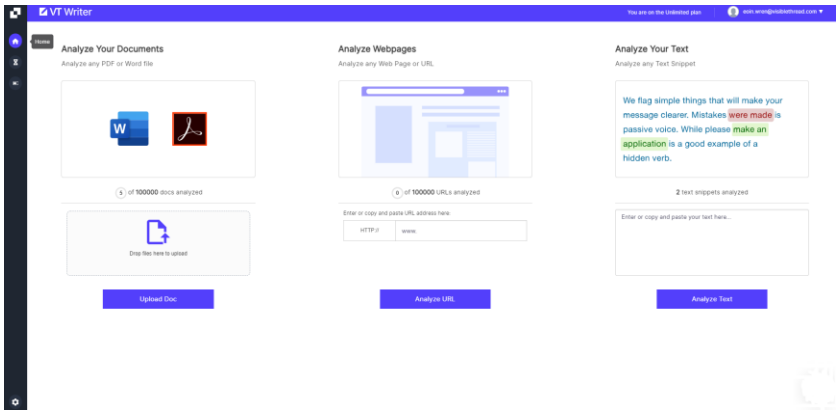


Figure 1 - VT Writer - Web App

2.1.2. Web-based Administration Tool

Administration solution for power end users and IT admin users.

Users can:

a. Administer licenses and users.
b. View usage dashboard that measures user engagement with Writer, tracks scans and results per user.
c. Configure email settings (inbound + outbound mail account settings) for the VT Email Service
d. Configure scan retention policies
e. Configure readability thresholds (e.g. what is an acceptable score for Long Sentences, grade level etc.)
f. Configure authentication mechanism (e.g. SSO)

NOTE Access to the administration tool restricted to user with 'ADMIN' privilege. On initial deployment, you must define a username/password for the initial admin user.

© VisibleThread 2024

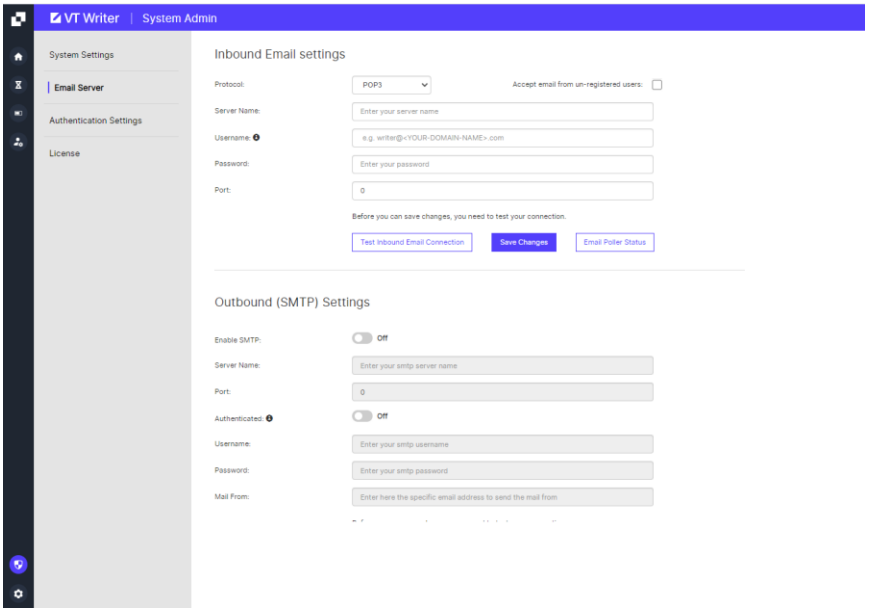


Figure 2 - Configuring Email Settings in the Administration Tool

2.1.3. VT Writer Email Processing Server (optional)

Backend server that:

a. Polls an IMAP/POP3 mailbox and submits any documents found to the analysis engine
b. Takes analysis results and send as email replies via SMTP with scan report as attachment.

2.1.4. VT Writer Analytics engine:

a. Parses document and URL content to extract structure and readable text
b. Complex word identification and Readability scoring

2.1.5. VT Writer Word add-in:

MS Word add-in. End users can sign in to their VT Writer account via the add-in, open a word document and:

a. Send the document contents to VT Writer for analysis.
b. View the analysis results for the document, using the add-in to highlight issues within the document.

2.2. Physical Deployment

We provide two ways to deploy VisibleThread software on-premise:

- A **Red Hat package** (a visiblethread-xxx-.rpm file) that you install into your Red Hat Operating System.

© VisibleThread 2024

- A pre-packaged **Virtual Appliance** (a Virtual Machine (VM) / .ova file) that you import into your virtualisation infrastructure. The VM contains a pre-installed Ubuntu Operating System plus VisibleThread components. We have tested and certify deployment on VMWare ESX hypervisor. If you wish to deploy the appliance on a different hypervisor, please contact our support team at support@visiblethread.com

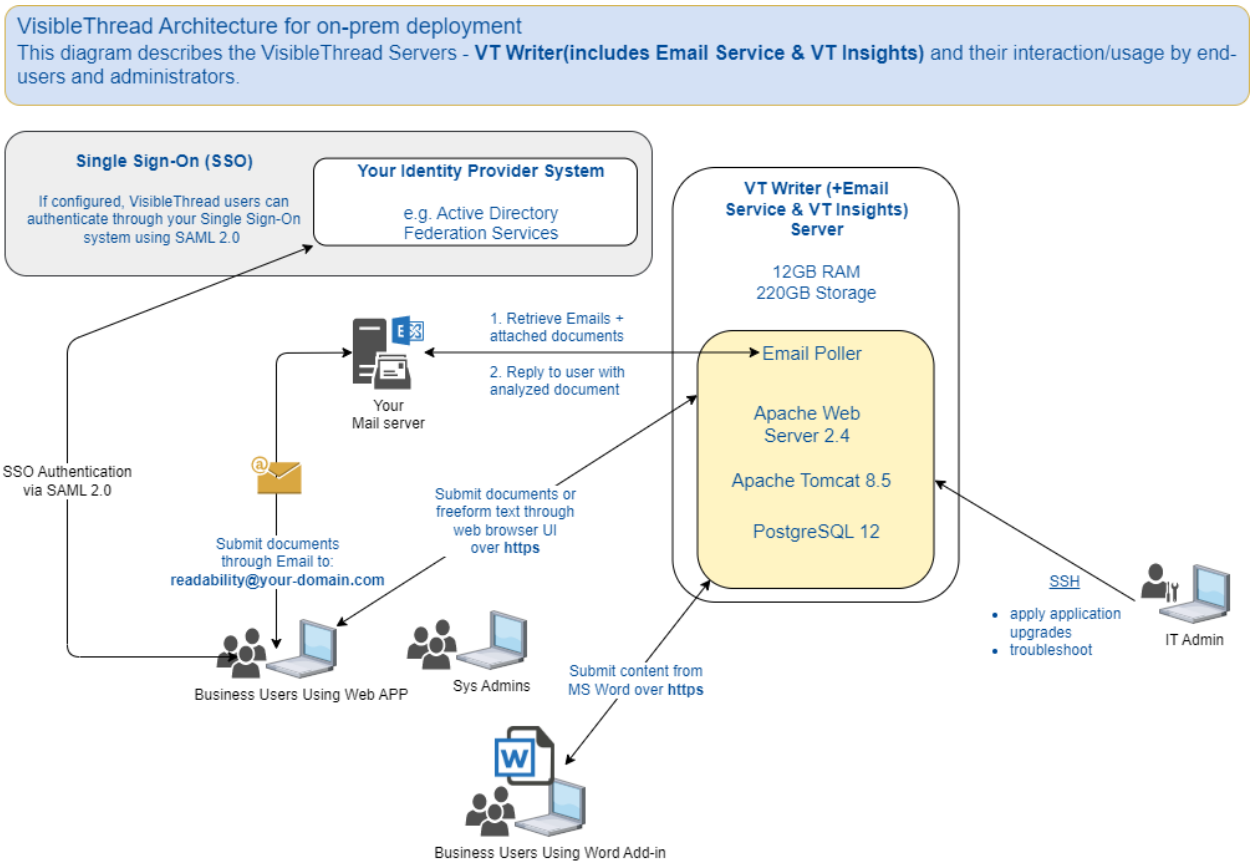


Figure 3 - VT Writer /Insights and Email Service Physical Deployment

3. Minimum Requirements

Here are the minimum requirements for the VT Writer /Insights Service

VisibleThread Writer
12GB RAM
2 CPU Cores
220GB disk
Install type

© VisibleThread 2024

Red Hat package install	Virtual Appliance install
Red Hat Enterprise Linux RHEL 8 / 9 PostgreSQL*	VMware vSphere
***** We support PostgreSQL versions 12 - 15 and recommend using a version minimum of 12. The Virtual Appliance comes with PostgreSQL 12.	

3.1. Installed Components

The following table lists the components/dependencies installed with the application:

VisibleThread Writer
PostgreSQL 12
Apache web server 2.4
Apache Tomcat 9

3.2. VT Writer Email Service - Requirements

The Writer Email Service requires the following:

1. An IMAP or POP3 mailbox to receive documents for analysis. Users email documents to this mailbox. The VT Writer application will require the credentials to read messages from this mailbox
2. An SMTP email account that the VT Writer server can use to send out email replies.

3.3. VT Writer Web App – Requirements

Certified browsers: Edge, Firefox and Chrome.

NOTE: Should also run in Safari, and other browsers, but not certified.

3.4. VT Writer Word add-in – Requirements

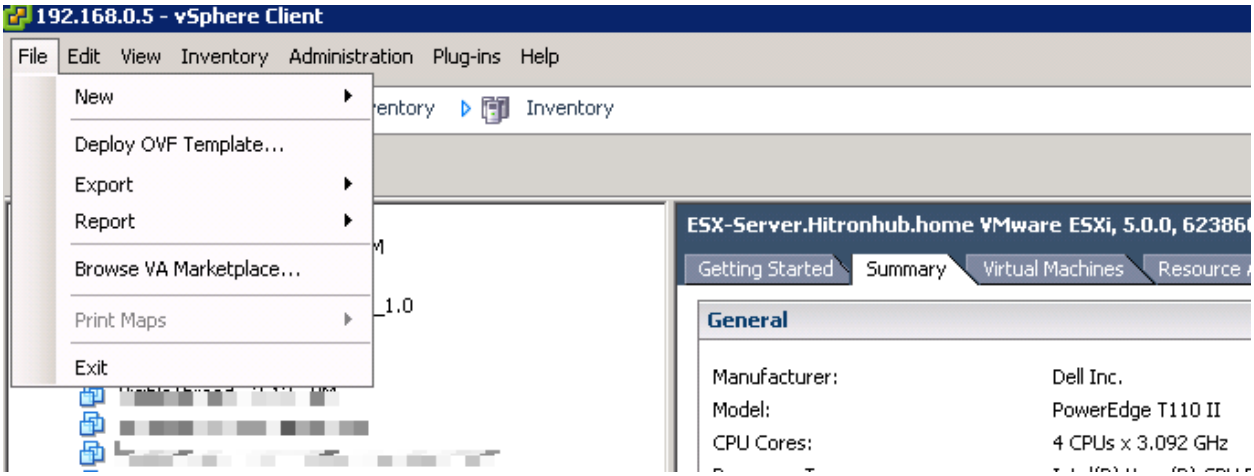
The VT Writer Word add-in supports Microsoft Word on both Windows and Mac devices and is supported on Office 2019, Office 2021 and Microsoft 365, as well as Word on the Web.

© VisibleThread 2024

4. Installing the Writer Server (Ubuntu OVA Install)

4.1. Deploying the OVA File

1. Download the OVA file for the Appliance from the VisibleThread website. For details on how to download the file please see here: https://support.visiblethread.com/hc/en-us/articles/360000766083
2. Open your VMWare vSphere client and select 'Deploy OVF Template' from the File Menu:

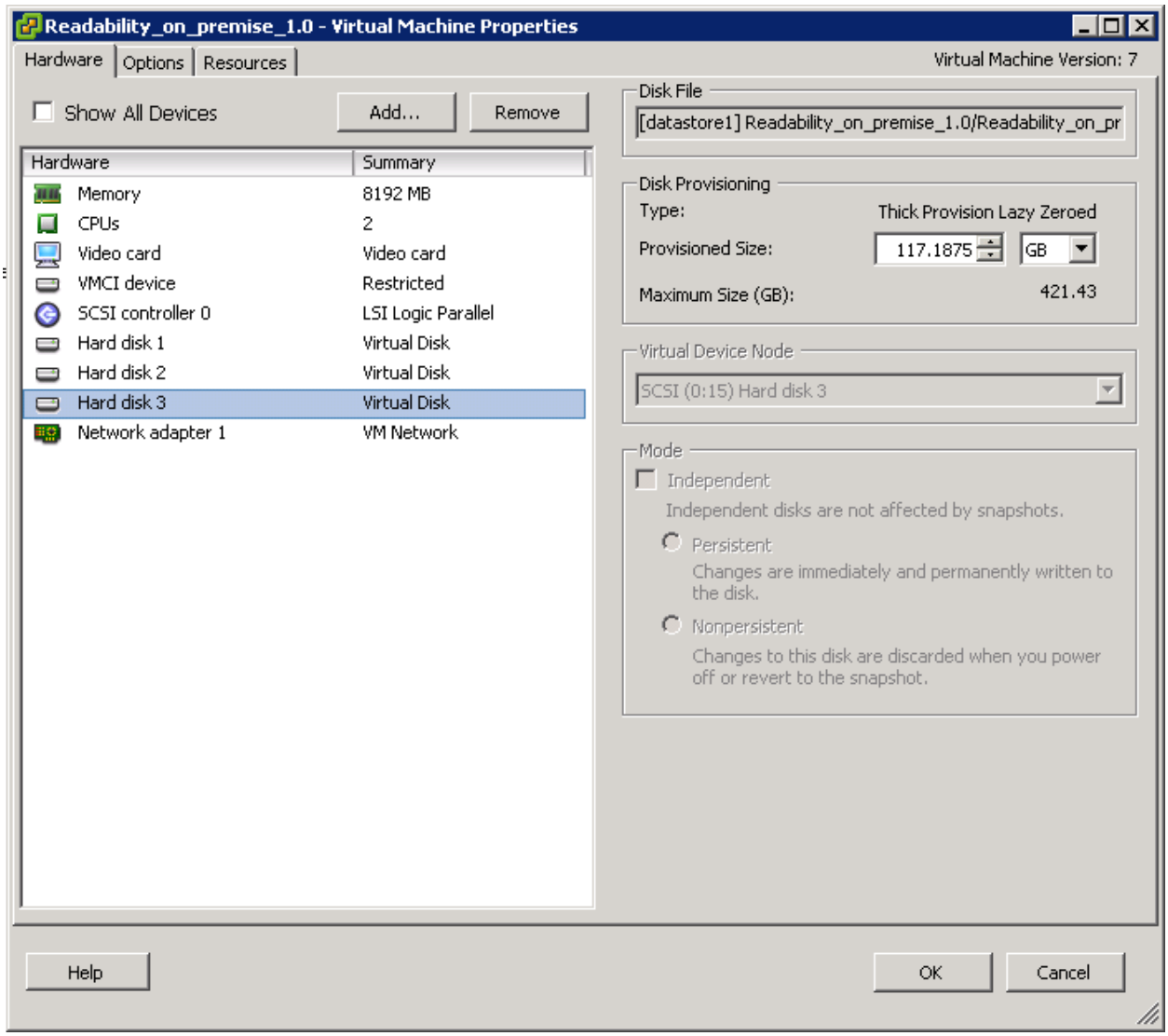


3. In the deploy OVF wizard choose the OVF file you downloaded from the VisibleThread website. Choose a datastore for the new appliance and ensure you select 'Thick Provisioned Lazy Zeroed' under 'Disk Format'

Once you have completed the deploy OVF Wizard, the appliance will be uploaded to your ESX server.

© VisibleThread 2024

4.2. Verify Appliance Configuration



Select the new appliance in the vSphere inventory and view its settings.

Verify:

- The configured memory is 12228MB
- The number of Virtual CPUs is 2
- There are 3 virtual hard disks

4.3. Turn on appliance and verify network connectivity

Select the appliance in the vSphere inventory and power it on.

It may take a minute or two for the appliance to boot up.

© VisibleThread 2024

A default user (note this is case sensitive) account exists on the OS:

- User Id: visiblethread
- PWD: password

This account has root privileges for the appliance.

NOTE: The password for this account has been initially set to 'password' however it should be changed at the earliest possible convenience as this user has full access to configure the VisibleThread server.

When the console window opens enter the default username and password outlined above to log in to the system.

4.3.1. Configuring networking on the VisibleThread Virtual Appliance

In order to access the VisibleThread appliance from within your network, the Virtual Appliance must acquire an IP address. Out of the box, VisibleThread tries to get an IP address dynamically using DHCP.

NOTE: Individual corporate environments differ in terms of network policy. It is recommended to consult with your network administrator to complete the remaining configuration in this section. Specific corporate policies and environment configurations make explicit guidance beyond the remit of this help guide.

The following outlines the basic steps that may work, however as stated in the note above you should consult your network administrator if in doubt.

1. Log on to the Virtual Appliance console using the default account described above.
2. Type the following command 'ifconfig'.
3. This will list the network configuration on the VisibleThread Virtual Appliance. You should see a result similar to below:

```
ens32      Link encap:Ethernet  HWaddr 40:40:2d:ef:41:54
           inet addr:192.168.1.11  Bcast:192.168.1.255  Mask:255.255.255.0
           inet6 addr: fe80::4240:2dff:feef:4154/64 Scope:Link
           UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
           RX packets:17632221 errors:0 dropped:0 overruns:0 frame:0
           TX packets:14928547 errors:0 dropped:0 overruns:0 carrier:0
           collisions:0 txqueuelen:1000
           RX bytes:8069857778 (8.0 GB)  TX bytes:17026117038 (17.0 GB)

lo         Link encap:Local Loopback
           inet addr:127.0.0.1  Mask:255.0.0.0
           inet6 addr: ::1/128 Scope:Host
           UP LOOPBACK RUNNING  MTU:16436  Metric:1
           RX packets:27803287 errors:0 dropped:0 overruns:0 frame:0
           TX packets:27803287 errors:0 dropped:0 overruns:0 carrier:0
           collisions:0 txqueuelen:0
           RX bytes:22318641533 (22.3 GB)  TX bytes:22318641533 (22.3 GB)
```

© VisibleThread 2024

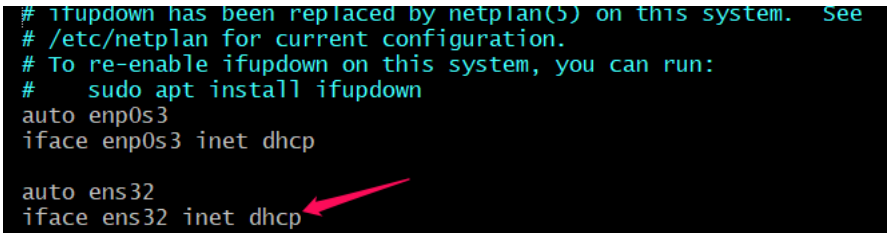
4. If you see an IP address listed for section ‘ens32’ (as highlighted in red above) it means the Virtual Appliance has successfully acquired an IP address. If you do not see a section labelled ‘ens32’ contact your network administrator.
5. From a different machine on the network try to ping the IP address listed in step 4. In this example that IP address is 192.168.1.11. If the ping is successful, the Virtual Appliance has successfully connected to the network.

4.3.2. Configuring the VisibleThread Virtual Appliance to use a static IP address

The VisibleThread Virtual Appliance is configured to acquire an IP address automatically using DHCP. Depending on your networking policies you may wish to configure the Virtual Appliance to use a specific fixed IP address. You can do so using the following steps:

```
sudo pico /etc/network/interfaces
```

Once inside this file you will see the following and notice where it says "dhcp"



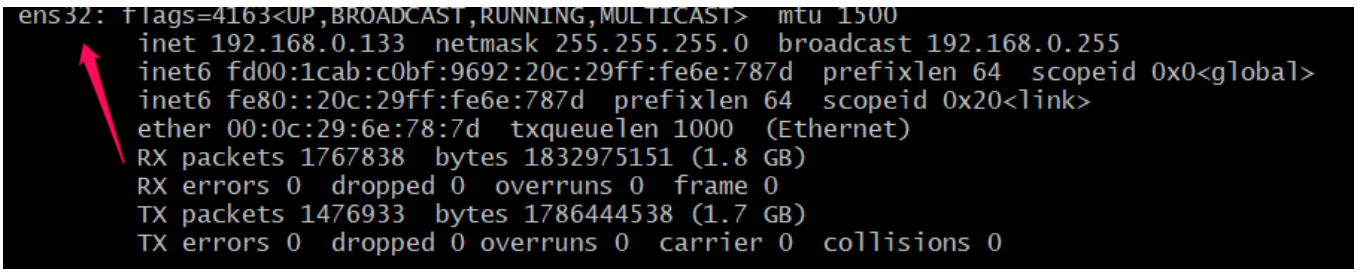
1. Change "dhcp" to "static" and make the below changes relevant to your network:

```
iface ens32 inet static

address 192.168.0.7 (this address is the static address you wish to use)

netmask 255.255.255.0

gateway 192.168.0.1
```

To save the file type Ctrl-O i.e. control key and the letter o (which will prompt to save the file), then hit enter. Then to exit to the console type ctrl-x.

2. Note "ens32" this is the name of the network card and must be replaced with the correct name of your network card, to find this run:

```
ifconfig
```



© VisibleThread 2024

3. Now that the static IP is set you need to add the entry for the nameserver, to do this run the following commands:

```
sudo systemctl disable --now systemd-resolved.service

sudo rm /etc/resolv.conf

sudo pico /etc/resolv.conf


# Add your nameserver in this file
nameserver 192.168.0.8
```

4. Now reboot

```
sudo reboot now
```

Note: You have set a static i.p remember this when trying to SSH back into the machine!

5. To test D.N.S run:

```
nslookup <domainonthenetwork>
```

It should resolve like so:

```
visiblethread@ubuntu-bionic:~$ nslookup test.itzgeek.local
Server:         192.168.0.6
Address:        192.168.0.6#53

Name:   test.itzgeek.local
Address: 192.168.0.100
```

4.3.3. Using SSH to access the VisibleThread Virtual Appliance

The VisibleThread Virtual Appliance console can be accessed via SSH (Secure SHell) using port 22. Using freely available SSH tools (e.g., putty http://www.putty.org/) can be an easier way of working with the console than via the VMware Server console utility.

5. Installing the VT Writer Server (Red Hat RPM Install)

For details on how to install the Readability Server on Red Hat, please see https://support.visiblethread.com/hc/en-us/articles/360000766083-How-to-download-the-VT-Writer-Email-server

6. VT Writer Server and SSL Termination

VisibleThread uses Apache openSSL to provide SSL security of all traffic to the server.

We install a self-signed certificate on the server by default. When using Internet Explorer and other browsers to access VisibleThread, users will receive a warning because the certificate installed on VisibleThread is self-signed.

It is possible to purchase a certificate and install it on the VisibleThread appliance.

© VisibleThread 2024

The details for how to obtain and install a certificate differ depending on who is the signing authority for the certificate. Your company may already use a signing authority to generate certificates, or your company may have the ability to generate your own certificates.

For more in how to install an SSL certificate, see here: https://support.visiblethread.com/hc/en-us/articles/360000767023-How-to-add-an-SSL-Cert-to-the-Readability-Server

It is also possible to front the VT Writer application with your own web server/load balancer and use your existing SSL certificate. For details, please contact support@visiblethread.com

7. Using the Email Service - Information Flow (optional)

The VT Writer Email Service is an optional add that allows users interact with the VT Writer application via their email. At a high level this works like this:

1. The VT Writer Email Service polls a preconfigured email inbox using either IMAP or POP3.
2. The VT Writer Email Service checks each email found and looks for a Word document or PDF document attached. If there are multiple documents attached to the email, it only processes the first document found.
3. Any documents found are submitted to the VT Writer engine for analysis (only one document per email is considered for analysis.)
4. Once done, the system sends an email containing the analysis results to the original mail sender using a preconfigured SMTP account. This mail also contains a full report of the analysis as a mail attachment.

Note on Email setup: We recommend you setup a specific email account on your email service for receiving documents submitted and for sending email responses. A good mail address is memorable, and we suggest a format like this: readability@<DOMAIN-NAME>.com

You can specify the details of the accounts using the VT Writer Admin web application.

Here's how this looks:

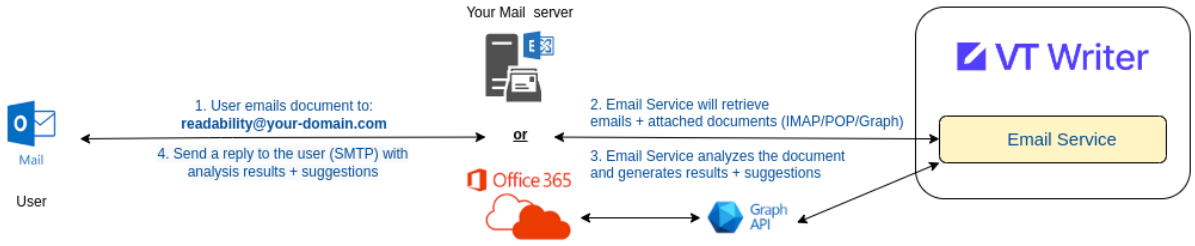


Figure 4 - Email Service Information Flow

And here are the steps explained.

1	**User sends a document as attachment to an**	You should create a dedicated mailbox to receive incoming documents. For example, "readability@yourdomain.com"

© VisibleThread 2024

	internal email address.	
2	**Email Service polls mailbox and downloads messages**	The VT Writer Email Service polls the mailbox above using either POP3 or IMAP (these details are configured using the VT Writer Admin Web app). For each email found, the first word or pdf document attached to the email is downloaded and submitted for analysis.
3	**Email Service sends results to user**	Once the scan is completed, the email service sends a summary results email, along with a detailed report (as an attachment) to the original sender. This is sent using a pre-configured SMTP account.
4	**Email arrives in user's inbox**	

8. Deploying the VT Writer Word add-in

The VT Writer Word add-in is an office plugin developed using the Office add-ins platform. See https://learn.microsoft.com/en-us/office/dev/add-ins/overview/office-add-ins for more information. For details on how to deploy the add-in in your organization please contact support@visiblethread.com.

9. VT Writer user roles

VT Writer supports 4 types of 'roles'. These are outlined in the table below. A user can have multiple roles assigned to them at any time. A user that has been assigned the 'Admin' role can add/remove roles from other users in the environment.

Note: A user with the 'Active User' role consumes a product license. These users are 'regular' application users and can use the application to analyze content. Users that have System Admin, Admin, or Insights roles that are not Active Users do not consume a product license.

A user with the 'User Admin' role can edit 'business' settings such as language quality thresholds, watch word and whitelists as well as configure users and user roles.

A user with the 'System Admin' role can perform system level settings such as configure mail server connections and Single Sign On.

Action	ACTIVE USER	USER ADMIN	SYSTEM ADMIN	INSIGHTS USER
PERFORM SCAMS	✔			
EDIT THRESHOLDS		✔		
EDIT WATCH WORDS		✔		
EDIT WHITELIST		✔		
SYSTEM SETTINGS			✔	
EMAIL SETTINGS			✔	

© VisibleThread 2024

AUTHENTICATION SETTINGS		✔	
LICENSE UPLOADING		✔	
EDIT USERS/TEAMS	✔		
VIEW INSIGHTS			✔

10. Setting up VT Writer and the Email Service for the first time

In this section, we'll show you how to set up the VT Writer and the Email Service. This involves uploading a license file, restarting the server, and configuring the mail settings.

NOTE: If you have only purchased VT Writer Server and not the Email Service, then you can skip certain of the following sections where indicated.

10.1. First time setup - setup up your Admin user, configuring your SMTP settings

Now that the VT Server is running, you need to create an ADMIN account with a valid email and password. You can add further ADMIN accounts later. ADMIN users can add/remove users, configure settings etc.

You can also optionally configure VT Writer to connect with your SMTP server to send emails. VT Writer works best when it can use your SMTP server to:

- Send activation emails to new users
- Send password reset emails to user when they click 'Forgot Password'
- Respond to user emails containing documents to be analysed using the email service.

If you choose not to configure SMTP at this time, you can do so later. If SMTP is not enabled user accounts can only be created by system administrators and user passwords must be defined by administrators on account creation.

If SMTP is not configured, the following features will also be disabled:

- Allowing user self-registration
- Registering new users and analysing documents via a VT Writer email address.

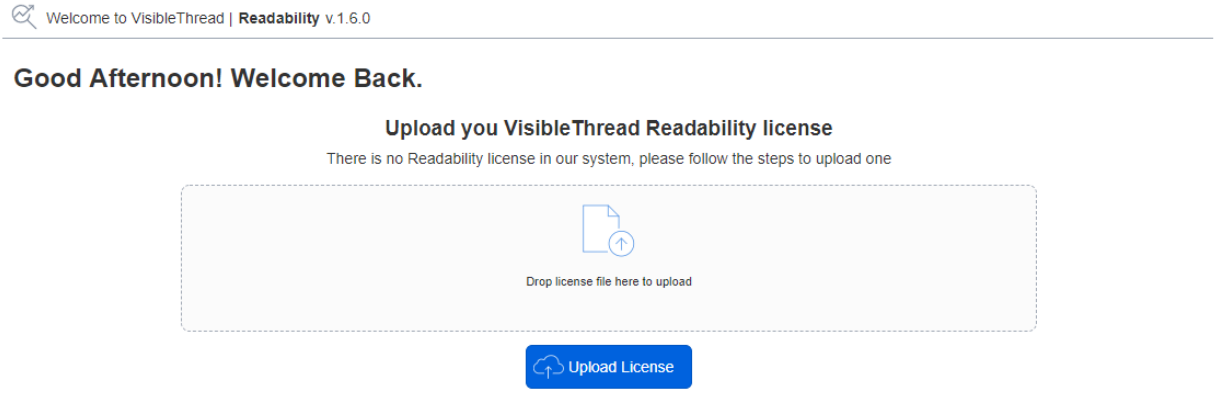
To complete the server setup:

1. Point your browser at the IP address where the server is running.
2. We deploy our server with a self-signed certificate for secure communications between server and web browser. This means you will see a browser warning message. Accept that message and proceed.

   We recommend that you replace the self-signed certificate. See note below for more on this.

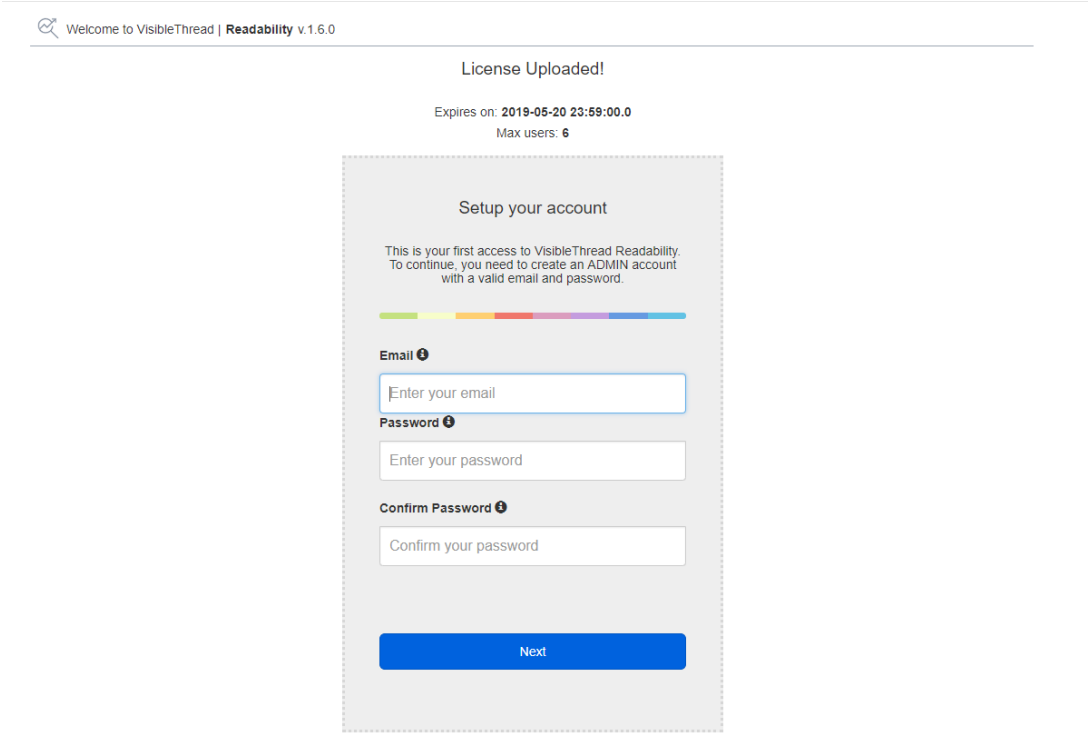
© VisibleThread 2024

3. The first screen will lead you to upload your VT Writer license.



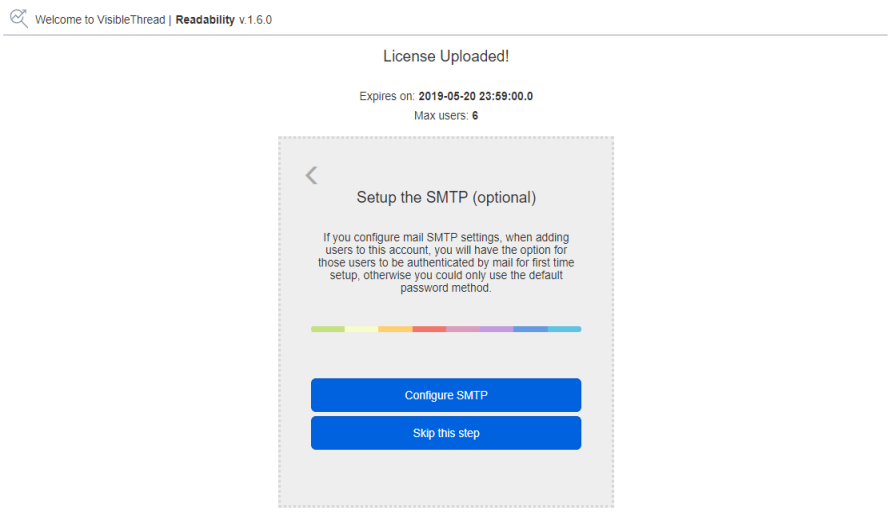
4. You will now start a 3-step process.

   I. Admin account details. Note the user you define here will be granted ‘Admin’ and ‘System Admin’ roles. This means they are able to change system configuration settings as well as add and remove users.

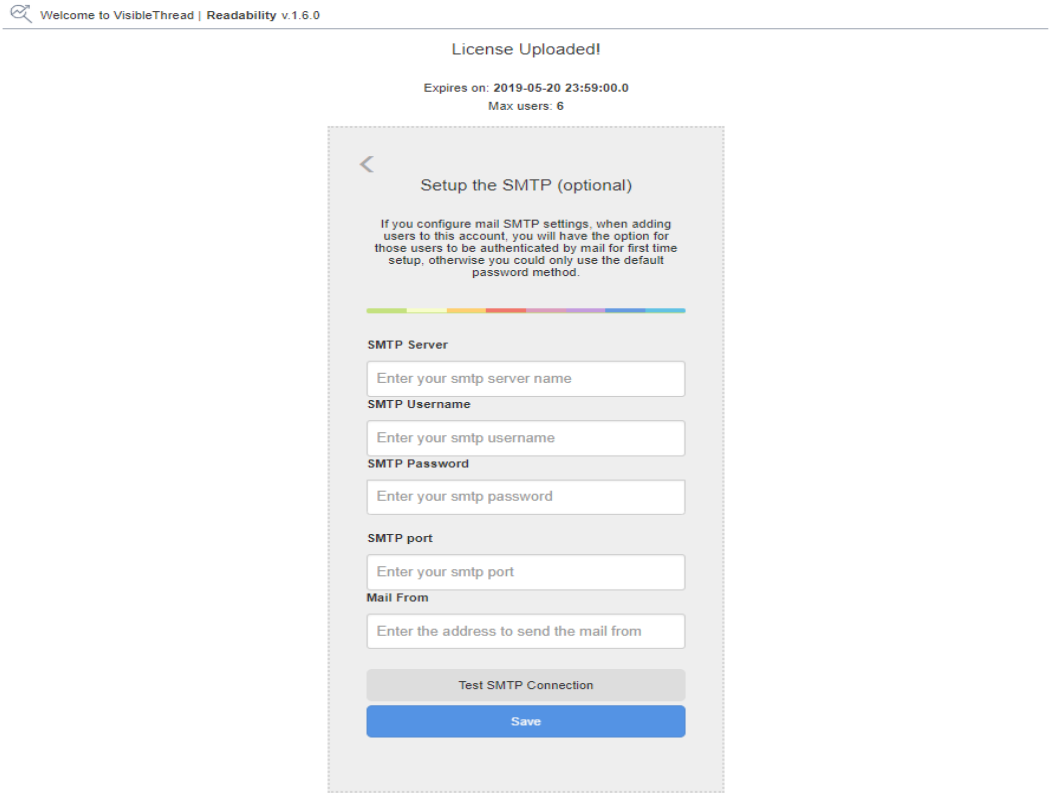


   II. Configure SMTP or skip this step

© VisibleThread 2024



III. SMTP configuration



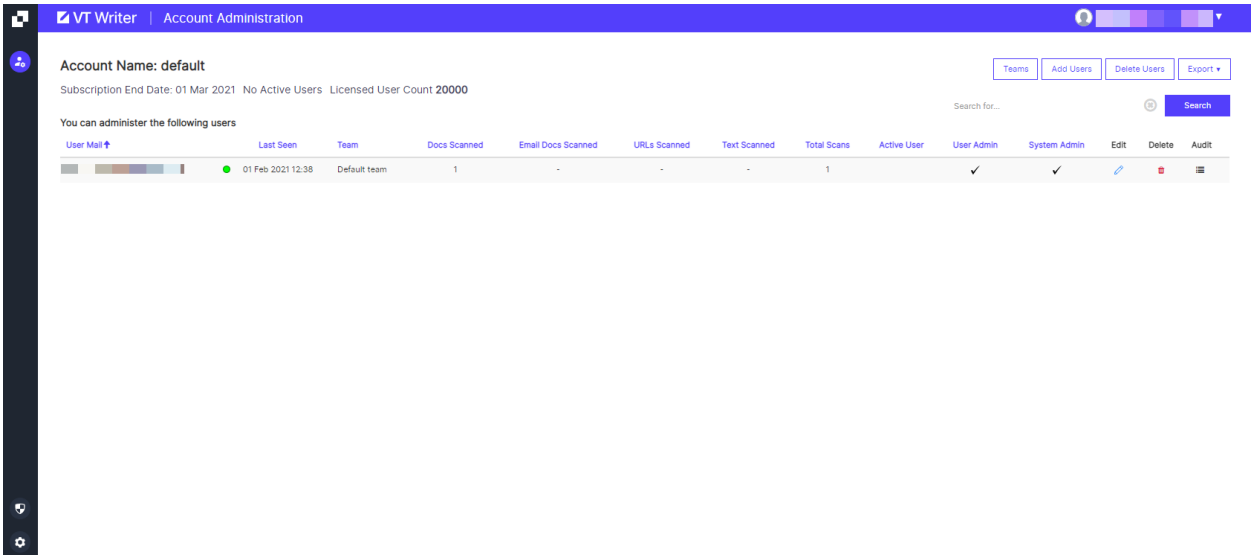
Once entered, click “Test Connection”. If the connection succeeds, then click “Save Changes”.

© VisibleThread 2024

11. Configuring Settings within VT Writer

Now that you have set up your first user and saved the SMTP settings successfully, you will be directed to the Administration screen in VT Writer.

It looks like this:

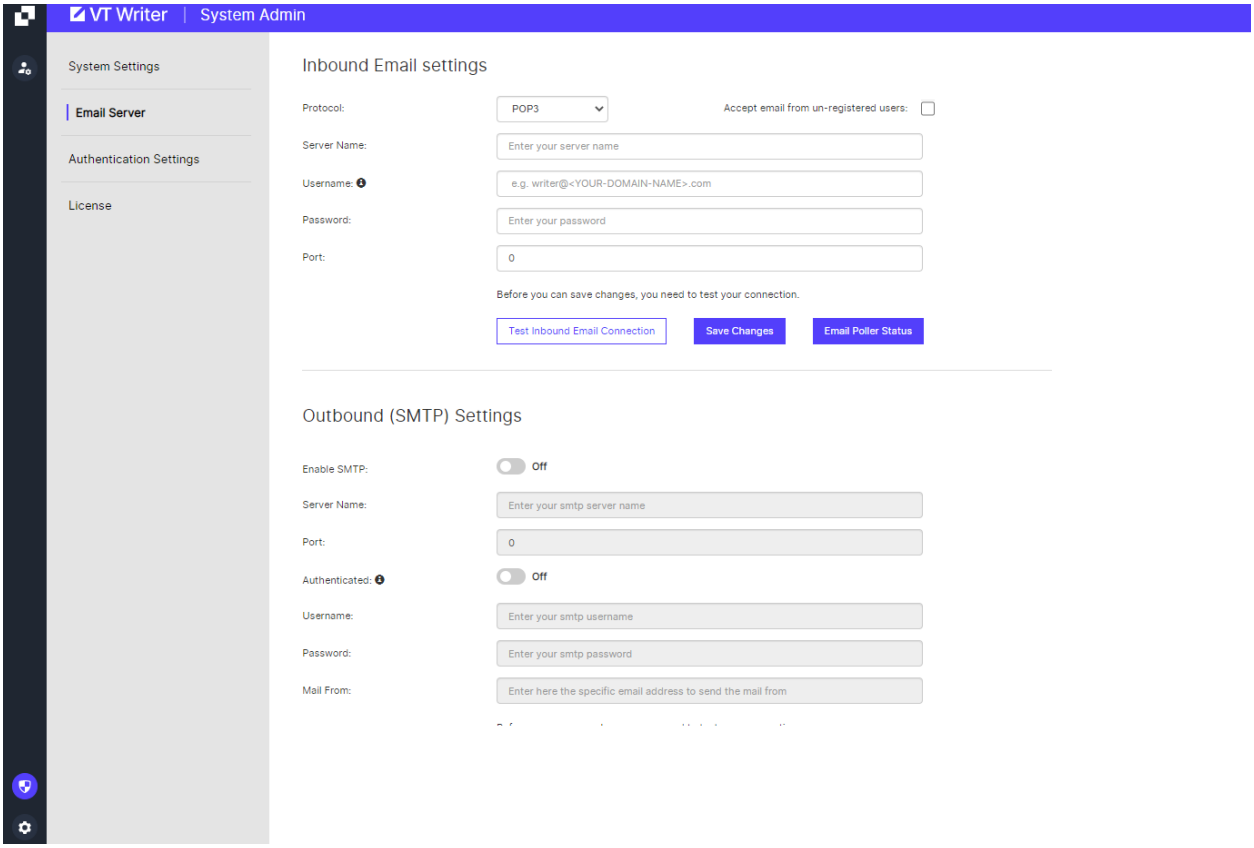


© VisibleThread 2024

11.1. Configuring Inbound Mail Settings – (For VT Writer Email Service Usage only)

If using the VT Writer Email Service, then you need to setup the Inbound Email Service settings. This will allow your users submit mail attachments and receive the scores by return mail.

Go to **System Admin >> Email Service** and you will see a screen like this.



Since we already configured the SMTP settings during initial setup, we now just need to add the Inbound mail settings.

Here are the fields you need to enter:

© VisibleThread 2024

11.1.1. For POP3 or IMAP, POP3S or IMAPS

Field	Description
Protocol	Choose either POP3 or IMAP, or their secure versions, POP3S or IMAPS.
Accept email from unregistered users	The Email Service can be set to automatically create user accounts. This is a very flexible way to allow anyone in your organization to use the Email Service, without having to explicitly set them up as users. This means IT does not have to worry about setting up users. Here's what happens when this setting is on: 1. If a user isn't set up for this account but submits an email. The system will automatically add this user to the account, and issue a confirmation mail to the user to the new user.
Server Name	This is the name of the mail server that the mail account is registered with
Mailbox Username	This is the mail address you want to use for users to send their mails to for analysis. We recommend you set up a user that will be distinctive and easy to remember. For example: readability@<YOUR-DOMAIN-NAME>.com
Password	The password for the mail address
Port	The port to be used. For POP3 this is normally 110 and IMAP 143. For POP3S this is normally 995 and IMAPS 993.

11.1.2. For MS Graph (Outlook 365)

Field	Description
Protocol	Choose MS Graph (Outlook 365)
Accept email from unregistered users	The Email Service can be set to automatically create user accounts. This is a very flexible way to allow anyone in your organization to use the Email Service, without having to explicitly set them up as users. This means IT does not have to worry about setting up users. Here's what happens when this setting is on: 1. If a user isn't set up for this account but submits an email. The system will automatically add this user to the account, and issue a confirmation mail to the new user.
Mailbox Username	This is the mail address you want to use for users to send their mails to for analysis. We recommend you set up a user that will be distinctive and easy to remember. For example: readability@<YOUR-DOMAIN-NAME>.com For MS Graph (Outlook 365) this is a member of the Mail Enabled Security Group that was setup while configuring the Azure Registered App.
Tenant ID	This is your Azure Tenant ID
Client ID:	The ID of the Registered App in Azure. This is the app that has the Graph API permissions set on it.

© VisibleThread 2024

Authenticate with Certificate	This is for whether you will be authenticating to the Registered App with a certificate or a Client Secret.
Client Secret (If cert auth is off)	The Client secret to authenticate with the Registered App.
PFX Certificate (If cert auth is on)	The certificate to authenticate with the Registered App. Must be in PFX format.
PFX Password (If cert auth is on)	The password for the certificate file

For more information and setup help on the MS Graph (Outlook 365) protocol go to our support article https://support.visiblethread.com/hc/en-us/articles/7839833673105-Creating-a-Graph-Integration-for-Writer-Email-Service

11.2. Configuring System-wide Data Retention Settings

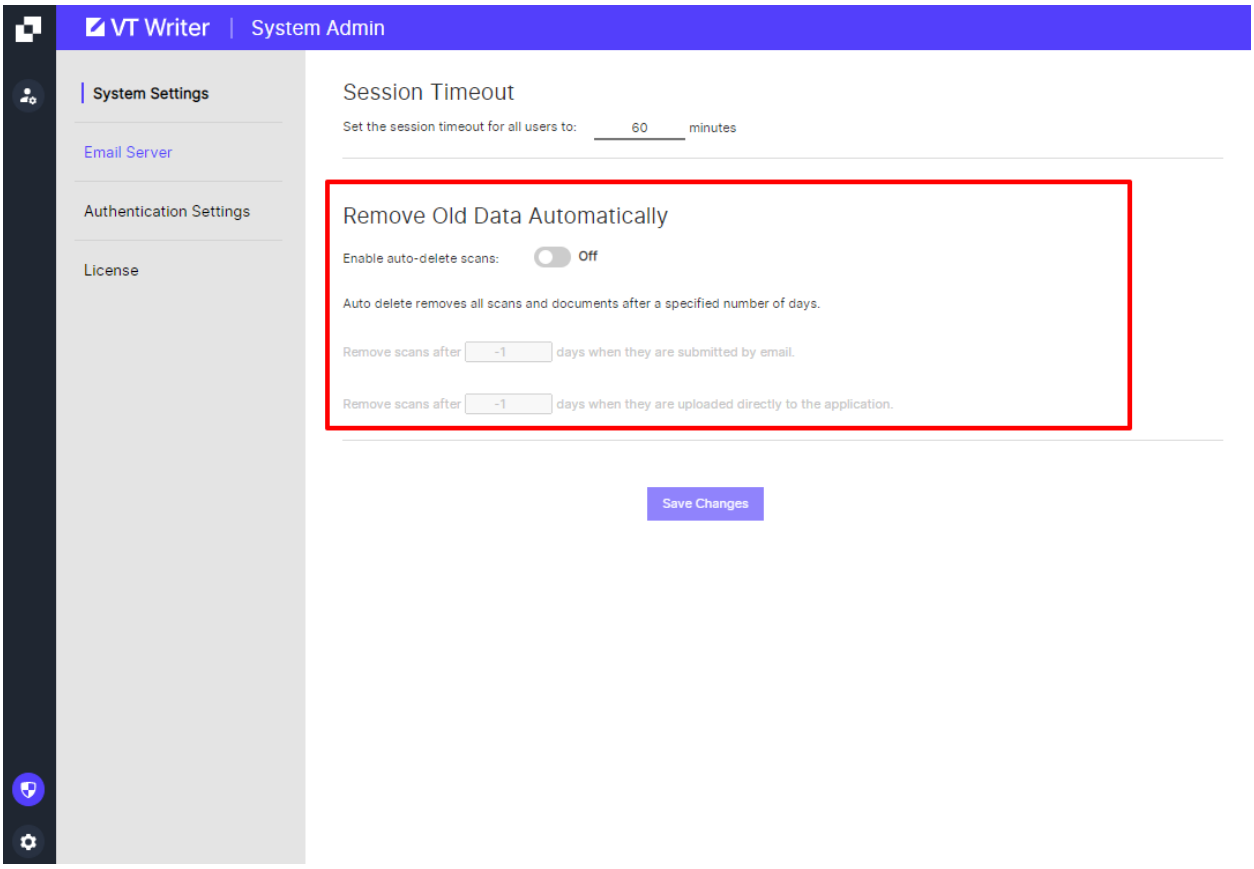
VT Writer Server allows you configure how long data will be retained by the system.

Go to **System Admin >> System Settings** and you will see a screen like this.

If you set the “Enable auto-delete scans” to on, then you can further specify how long to retain scans and associated data.

There are 2 options you can set.

© VisibleThread 2024

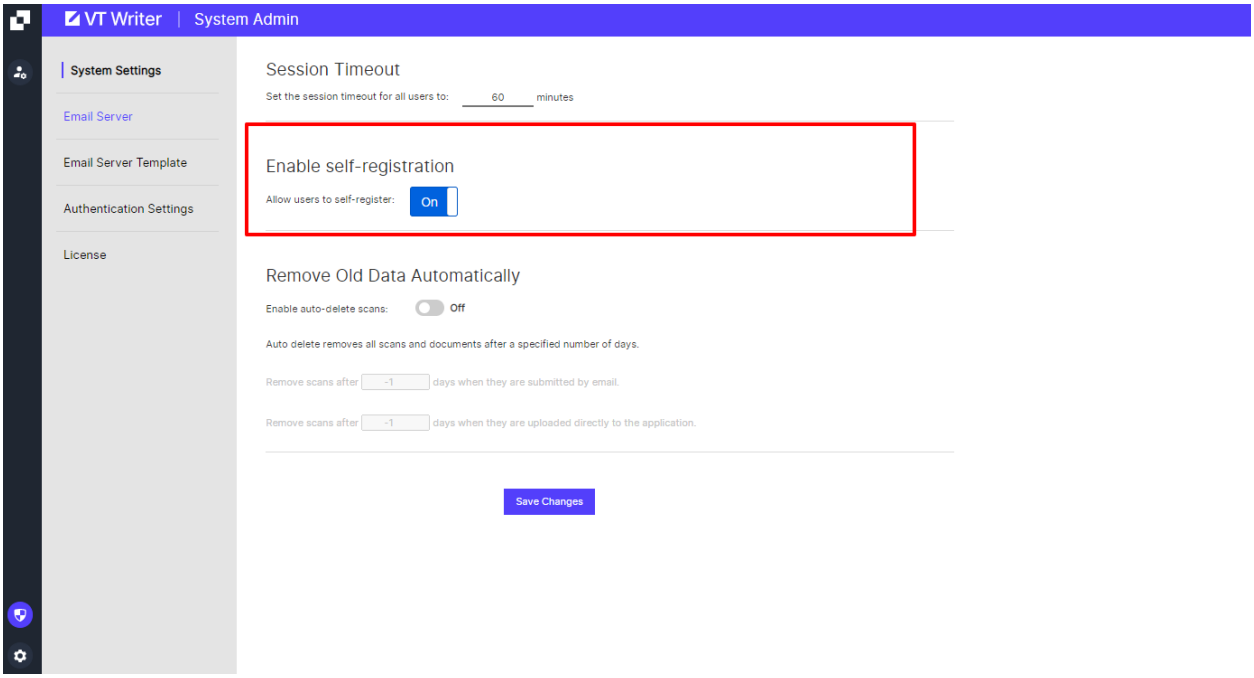


The first option relates to scans that users submit via mail. These scans will have documents submitted. Setting this value will remove any scan information including documents after the number of days you specify.

The second option relates to scans triggered by a user using the VT Writer app directly.

© VisibleThread 2024

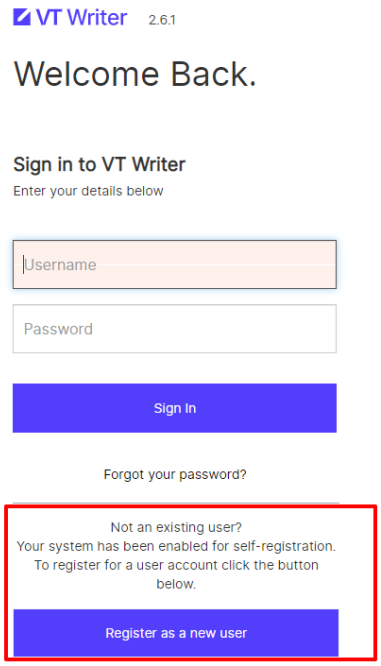
11.3. Enabling user self-registration



If you have configured SMTP you have the option to enable user self-registration. This appears under the System Settings section.

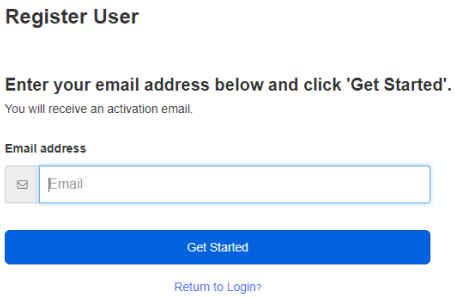
Self-registration is a feature that allows end users register for a new user account directly with no intervention required by system administrators. This setting is not available when the system is configured to use Single Sign-On.

When enabled, a new button appears on the login screen, inviting new users to register for the application:



© VisibleThread 2024

When the user clicks on ‘Register as a new user’ they will be asked for their email address. Once entered, they will be registered in the application as a user and will receive an account activation email. This email will contain a link that allows them to setup their password. They will also be signed in directly to the application.



Note: A user signs that up for the application using the self-register feature will consume a user license. You should only enable this setting if you are certain you have enough free user licenses to satisfy all users that may want to use the application.

11.4. Enabling Auto Provisioning

Auto provisioning is available for systems that are configured to use Single Sign-On. When using Single Sign-On, users must be pre-registered in the VT Writer database before they can login to the application.

Enabling auto provisioning removes this requirement. When a new user logs in to VT Writer using Single Sign-On, an account is automatically created on their behalf, and they are assigned the ‘Active User’ role.

Note: If there are no licenses available on the system, the user account will not be created, and user will not be able to sign in.

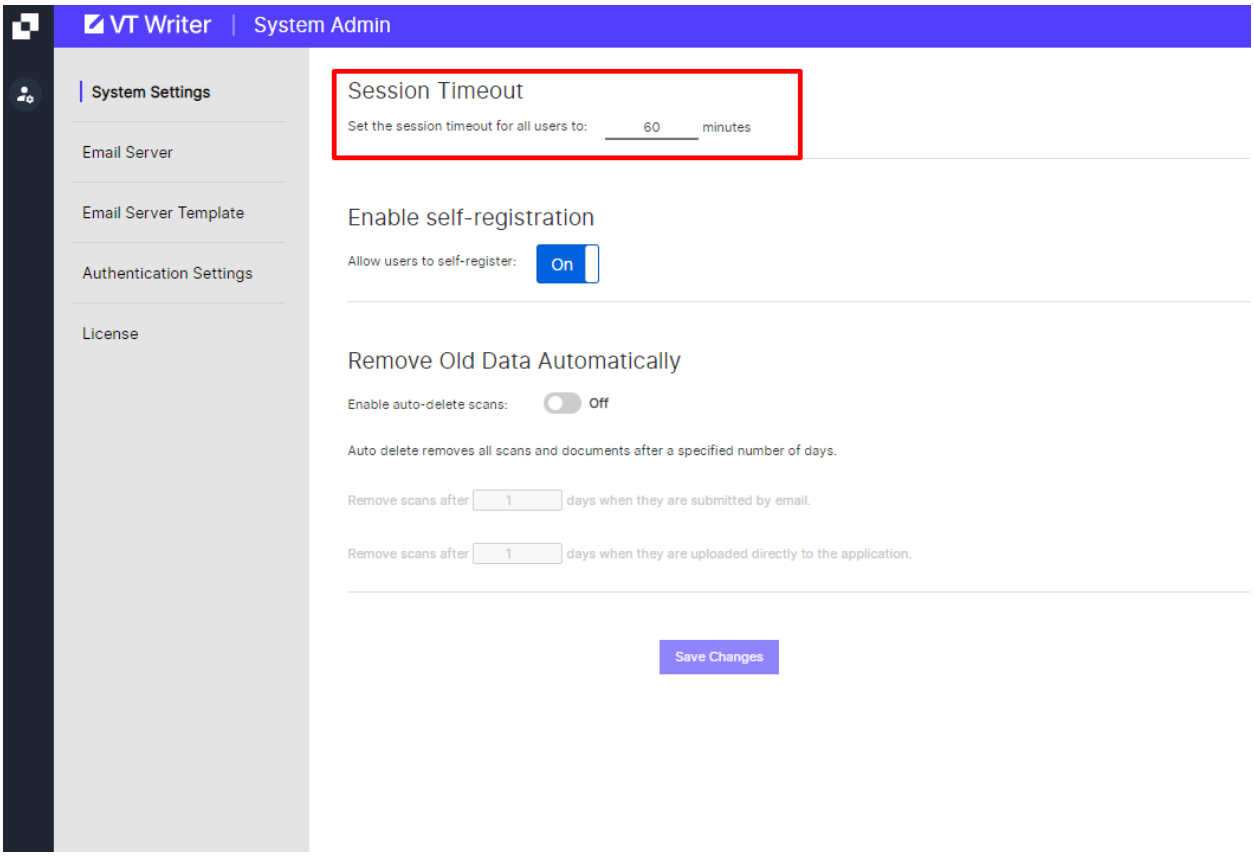
11.5. Configuring a session timeout setting

The default setting for session timeout for all users is 1 hour. You can choose to change this setting for all users on the system.

You do this by navigating to System Settings and then entering a value under ‘Session Timeout’. Click ‘Save Changes’ to save your changes.

Note: The session timeout setting will be applied for each user the next time they sign in.

© VisibleThread 2024

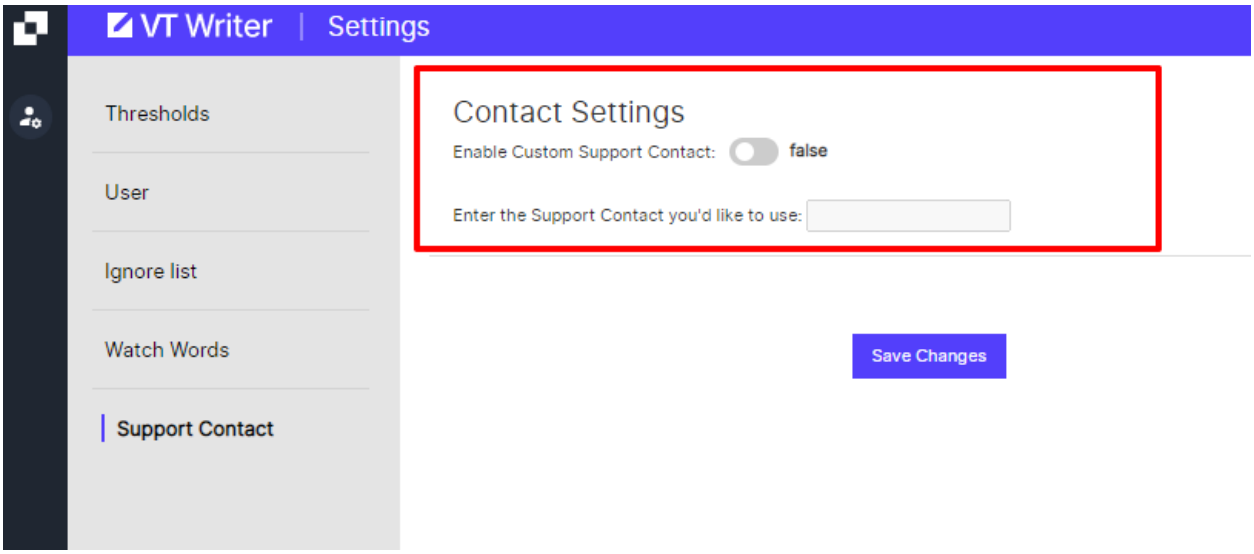


11.6. Configuring a custom support contact address

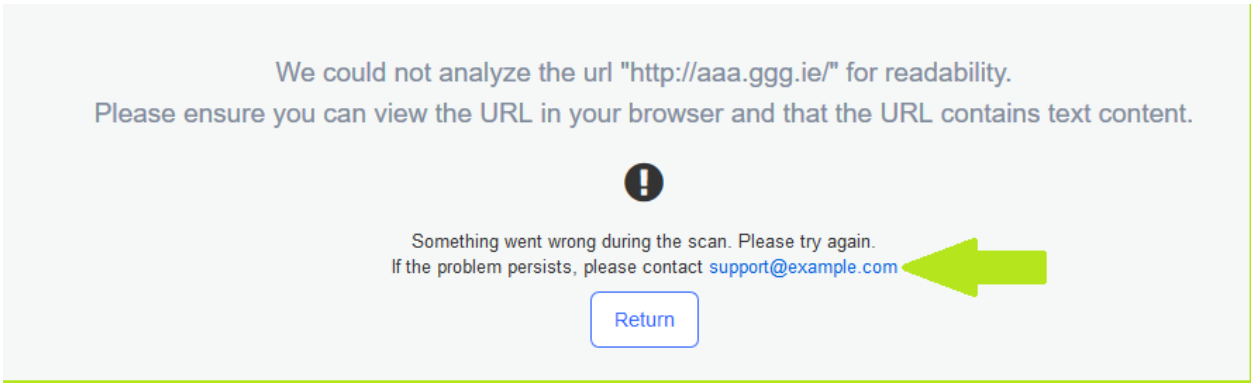
Any error messages that are displayed in the VT Writer application will contact the contact email address of the VisibleThread support team support@visiblethread.com. You can, if you wish, customise this contact to provide the address/phone number of your own application support helpdesk.

To enable a custom support email address, click on “Settings” at the bottom left of the application > Support Mail > Click the “OFF” to “On” > enter your desired email address in the text box and click “Save Changes”. See screenshots below:

© VisibleThread 2024



To test it is working run a URL scan and enter an invalid address (e.g., aaa.ggg.ie) and an error will prompt you to contact the email address you specified.



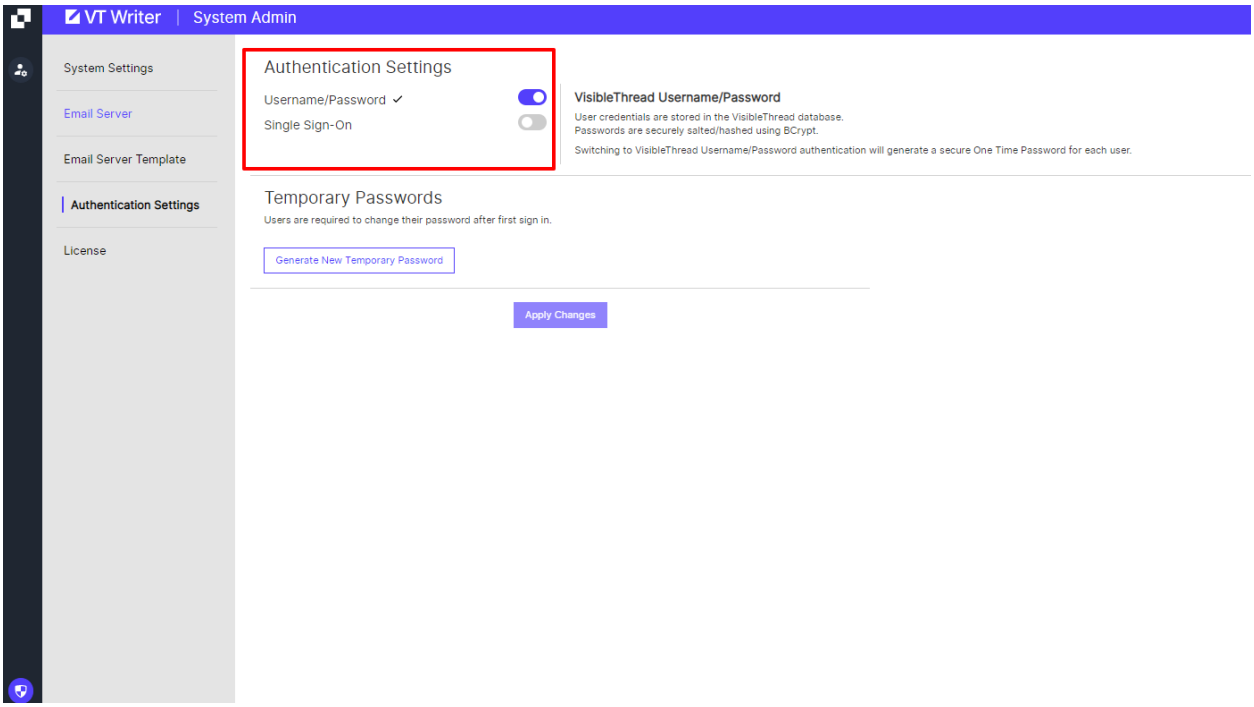
11.7. Configuring your authentication settings

Out of the box VT Writer is configured to use its own local Username/Password credentials.

You can change the authentication scheme to use Single Sign-On (SSO).

To change your authentication scheme, click on “System Admin” > Authentication Settings. You can navigate through the different schemes by clicking the sliders on the right-hand side of each scheme name. Your active scheme has a check mark after the name.

© VisibleThread 2024



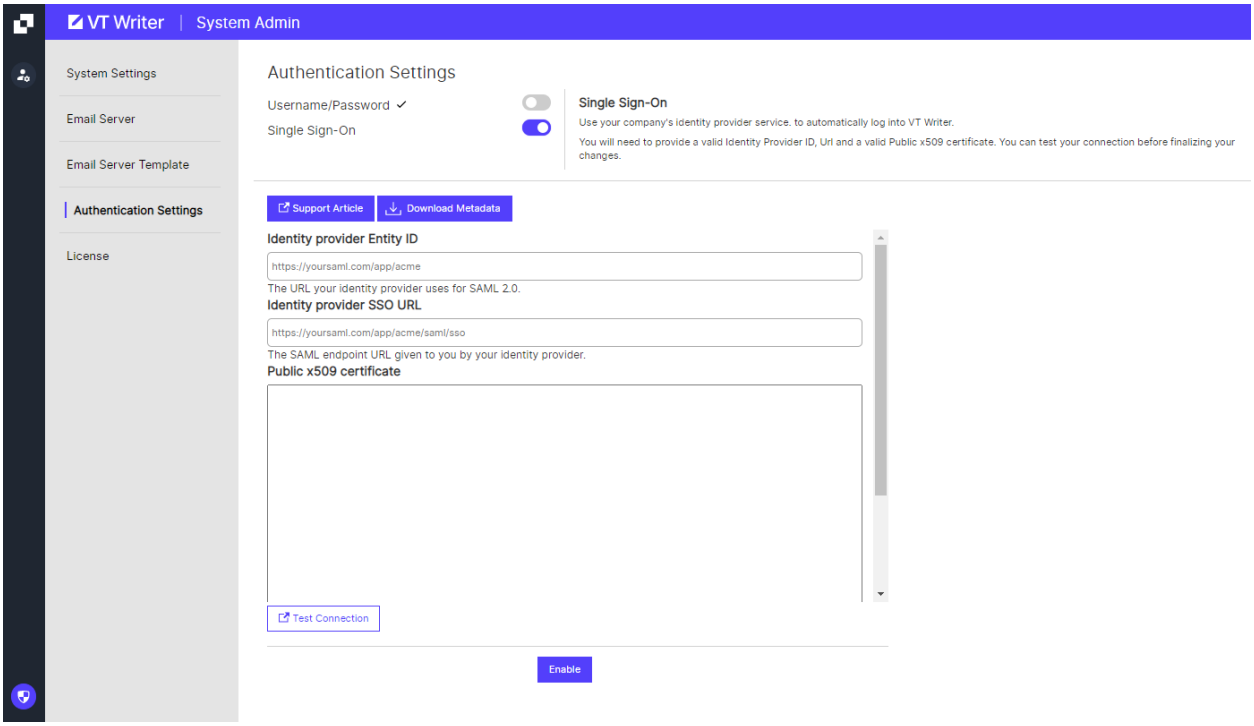
11.7.1. Switch from Username/Password to SSO

You will need an Identity Provider (IDP) valid certificate to enable Single Sign-On (SSO). For details on how to configure the SSO details see here: https://support.visiblethread.com/hc/en-us/articles/360044982551 . You will need VT Writer metadata which you can obtain by clicking on Download Metadata.

When you have everything ready fill in the details and Enable, we strongly recommend to Test Connection before enabling SSO so you can check that the introduced details are correct.

Once you hit Enable all the users will be logged out of VT Writer and redirected to your IDP login.

© VisibleThread 2024



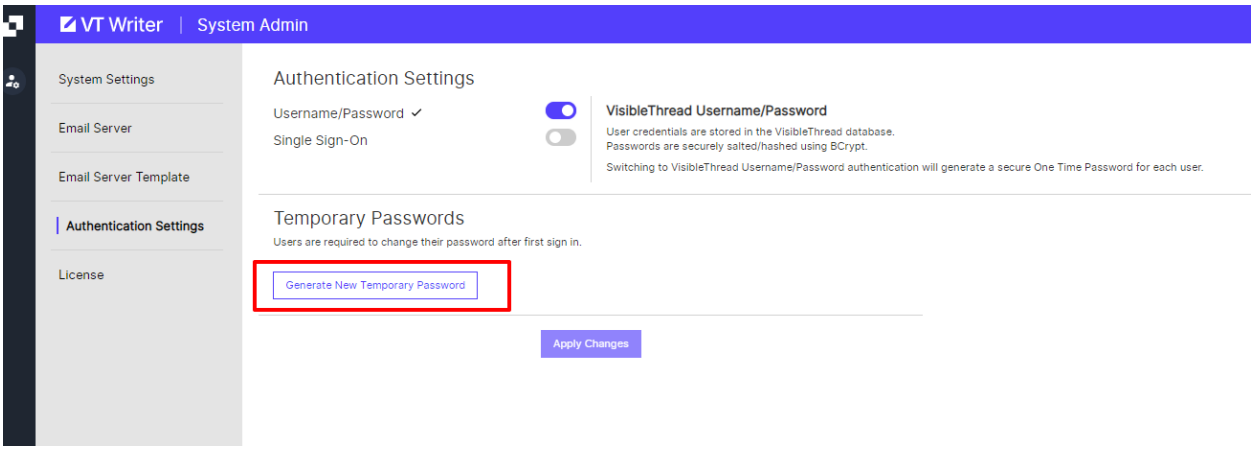
11.7.2. SSO to Username/Password

When moving from SSO to Username/Password all users without a System Admin role will be provided with a temporary password.

If you have SMTP configured all other users will receive an email with their temporary password. If it is not configured, the System Admin will have to communicate the temporary password to all users.

The temporary password can be reset at any time by clicking Generate New Temporary Password.

Once you hit Enable all the users will be logged out of VT Writer and redirected to the VT Writer login.



© VisibleThread 2024

12. Backing up VisibleThread data

It is recommended that you back up the VisibleThread server regularly so that in the unlikely event of a system failure, or outage, the system can be restored to a stable state with minimal loss.

It is possible to backup and restore the VisibleThread server in one of two ways:

- backing up or snapshotting the VisibleThread Virtual Appliance using virtualization backup tools
- backing up the VisibleThread data only

As best practice, we suggest backing up the VisibleThread data twice weekly or at other suitably frequent intervals depending on your corporate policy.

12.1. Backing up the entire VisibleThread Appliance

The easiest way to back up the VisibleThread server is to back up the entire VisibleThread Virtual Appliance. The simplest way to do this is to use ESX snapshots to snapshot the appliance. However, a better way is to use Virtualization backup tools that are designed to take regular backups of appliances deployed on ESX.

12.2. Back up the VisibleThread Data

The VisibleThread Virtual Appliance contains a backup script that will backup all VisibleThread user accounts and user data and config files. This backup data is placed in an archive file in the /home/visiblethread/VisibleThreadTools/vtbackups folder. This script is useful as it takes a relatively short amount of time to run.

To run this script, log on to the VisibleThread Virtual Appliance console and execute the following commands:

```
cd VisibleThreadTools
./vt-backup.sh
```

Note: You may be prompted for the “visiblethread” user password when running this command.

This will create a backup tar.gz file in the /home/visiblethread/VisibleThreadTools/vtbackups folder.

To restore the VisibleThread data log on to the VisibleThread Virtual Appliance console and execute the following commands:

```
cd VisibleThreadTools
./vt-restore.sh  vtbackups/<backupfile>
```

Note: You may be prompted for the “visiblethread” user password when running this command.

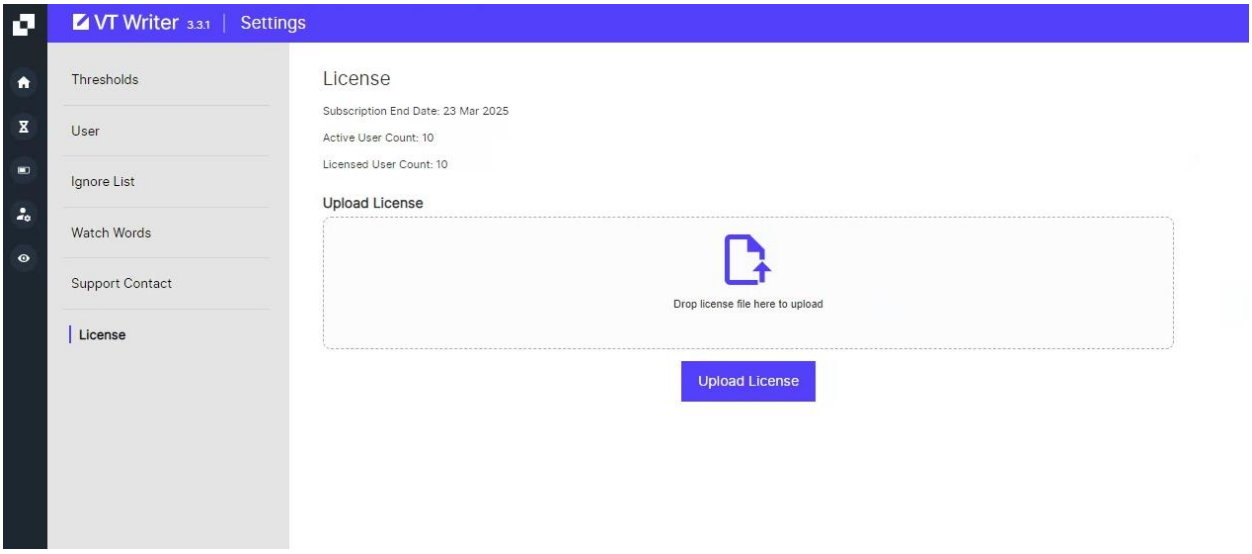
The <backupfile> parameter is the name of a backup file created using the ‘vt-backup’ command.

© VisibleThread 2024

13. Uploading new License Files

You upload extra licenses at any point to the VT Writer Application. New licenses are issued by the VisibleThread Support team (support@visiblethread.com) in the form of license files. When you upload a new license file to the application it supersedes any previous licenses that may have been on the system.

To view your current license allocation or upload a new license file go to the settings area by clicking on the settings icon from the sidebar.



Clicking on the 'Upload license' button will allow you choose a new license file to upload to the system. The new license file is applied immediately.

Note: The system will not allow upload a license file if the number of users current enabled in the system is greater than allowed by the new license file. In this scenario, you should de-activate the required number of users, and the upload your new license file.

14. Upgrading the VT Writer Application

Periodically new versions of the VisibleThread server software become available, for instance you may wish to upgrade from Server version 3.1 to 3.3.1

This section is for those performing such an upgrade.

For VT Writer deployments on Ubuntu Virtual Appliance, upgrade files have an extension of '.tar.gz' so an example file might be 'VisibleThreadReadability1.1-Upgrade.tar.gz'. You will have been provided details of where to download this upgrade file from VisibleThread support via e-mail. Mail support@visiblethread.com should you not have received these details.

When you have downloaded your upgrade file, it needs to be added to the /home/visiblethread/VisibleThreadTools/upgrades folders on the VisibleThread Virtual Appliance.

For deployments on Red Hat, upgrades come in form of new RPMs to install.

© VisibleThread 2024

14.1. Back up the VisibleThread data

Note: We recommend that you perform a backup of data prior to upgrading, in the event that the upgrade encounters any unforeseen issues.

To do so, follow the steps outlined in section: “12 Backing up VisibleThread data” in order to back up your VisibleThread user accounts and user data.

14.2. Upgrading an Ubuntu Virtual Appliance

14.2.1. Uploading the upgrade file to the Virtual Appliance

You can upload the upgrade file to the Virtual Appliance via SSH (Secure SHell) using port 22.

The easiest way to do this is to use one of several freely available tools such as the FileZilla client (http://filezilla-project.org/) or WinSCP (http://www.winscp.net). The next section outlines the detailed steps to complete this:

1. Connect to your Virtual Appliance using the following details:
   - IP address: The IP Address of your Virtual Appliance that was acquired as a result of performing the steps outlined in section 4.3.1 Configuring networking on the VisibleThread Virtual Appliance
   - Username: visiblethread
   - Password: password (unless changed)
   - Port: 22
2. Once connected, navigate to the /home/visiblethread/VisibleThreadTools/upgrades folder.
3. Upload the upgrade file to this folder.

14.2.2. Applying the upgrade to the Virtual Appliance

The VisibleThread Virtual Appliance contains an upgrade script that will perform an upgrade of the Virtual Appliance

To run this script, log on to the VisibleThread Virtual Appliance console and execute the following commands:

```
cd /home/visiblethread/VisibleThreadTools
sudo ./vt-upgrade.sh upgrades/<upgradefilename.tar.gz>
```

Note: You may be prompted for the “visiblethread” user password when running this command.

This will unpackage the archive and deploy the release files and restart the application.

14.2.3. Verifying the upgrade is successful

The upgrade process generates a log file in the following location:

```
/home/visiblethread/VisibleThreadTools/upgradelog.txt
```

© VisibleThread 2024

You should send this file to support@visiblethread.com and they will verify that the upgrade was successful.

The support team can also issue a checklist specific to each upgrade that will provide a list of items that can be used to verify the upgrade was successful.

14.3. Upgrading a VT Writer Red Hat install

For details on how to upgrade a VT Writer application deployed on Red Hat, please see here:

https://support.visiblethread.com/hc/en-us/articles/360035485392-How-To-Upgrade-Readability-on-RedHat

15. Troubleshooting

If you have any issues or need help, please check our support forum at: http://support.visiblethread.com/home

Or mail us directly by sending a mail to: support@visiblethread.com This alias is monitored 24x7 and will automatically create a trouble ticket in our help systems. Forward any usage queries or bugs also to the same address.

© VisibleThread 2024