



## **VT Writer, VT Insights On-Premise Deployment Overview**

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### VisibleThread Deployment Overview

#### DEPLOYMENT OVERVIEW

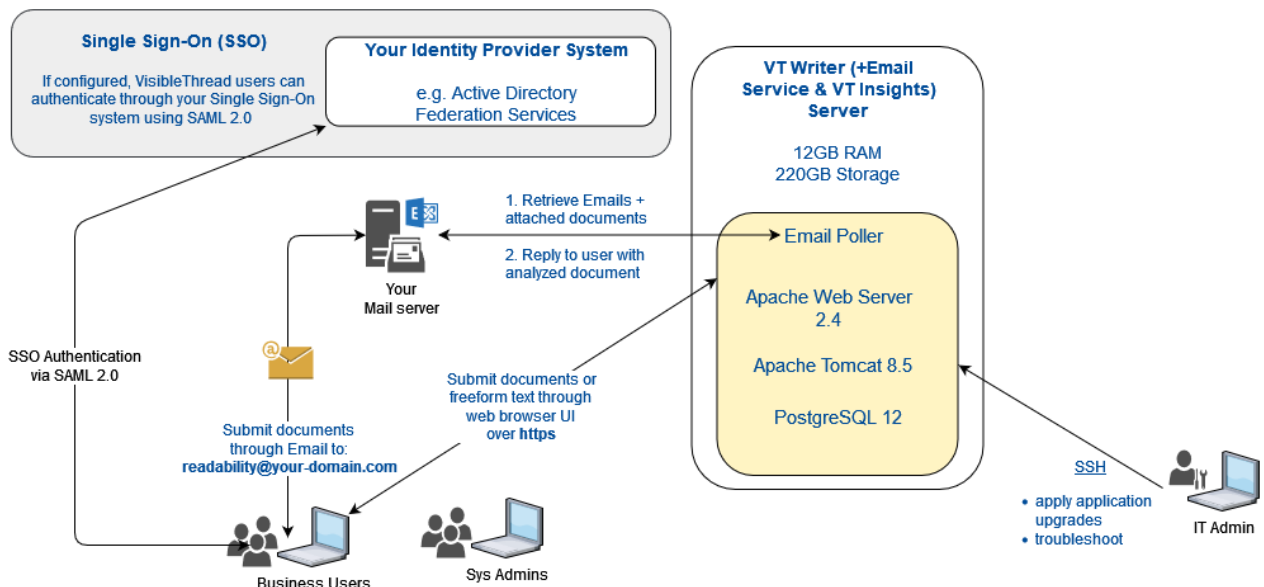
A VT Writer/Insights deployment involves a single server:

- **VT Writer Server** hosts a web browser-based application.
- **VT Insights** is a component of VT Writer and is enabled via license file.

The diagram below illustrates the server deployed on-prem (inside your organization) including user and system interactions.

#### VisibleThread Architecture for on-prem deployment

This diagram describes the VisibleThread Servers - **VT Writer (includes Email Service & VT Insights)** and their interaction/usage by end-users and administrators.



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.
- 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.

An on-premise VisibleThread deployment has the following properties:

- Runs inside your organization's network/firewall & is fully under your control. No external access required.
- OS security/patching fully under your control.
- Initial install and application upgrades done by your IT team.
- Low IT management overhead – application upgrades are made available twice a year; your IT team can install the upgrades directly.
- Email/phone/screen-sharing support is available from VisibleThread staff.
- You can optionally setup a test/staging server to try out upgrades before rolling out to production.

- All end-user access is secured over https using a web browser.
- There is an option to encrypt data at rest.
- With a Virtual Appliance deployment, you can use virtualisation backup/restore.

**MINIMUM REQUIREMENTS**

Below are the minimum requirements for the server:

|   |                           |
|---|---------------------------|
| VT Writer   |                           |
| 12GB RAM  |                           |
| 2 CPU Cores   |                           |
| 220GB disk  |                           |
| Install type  |                           |
| -----   |                           |
| Red Hat package install   | Virtual Appliance install |
| Red Hat Enterprise Linux RHEL 7.2 – 8.3   | VMware vSphere            |
| PostgreSQL*   |                           |
| * We support PostgreSQL versions 10 - 13 and recommend using a version minimum of 12. The Virtual Appliance comes with PostgreSQL 12. |                           |

**VT Writer Email Server- Requirements**

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

**INSTALLED COMPONENTS**

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

|                       |
|-----------------------|
| VT Writer             |
| Apache web server 2.4 |
| Apache Tomcat 8.5     |

**NETWORKING**

VT Writer is a web application. End-users and system admins access the application via their web browser over https.

All end-user communication with the application is via port 443 (https)

If using the Virtual Appliance deployment model, IT administrators access the VisibleThread server console via SSH on port 22.

All communication with VisibleThread Virtual Appliance uses these ports:

- Port 443 is used for HTTPS communication via the web browser.
- Port 22 is used for SSH and secure FTP access.

VT Writer does not require access to any external location.

With a Virtual Appliance deployment, the VisibleThread Server is configured to use DHCP to pick up an IP address automatically on start-up. It is recommended you allocate a designated static IP address to the server on initial deployment.

### SSL Termination

The VT Writer installation includes installation of an Apache web server with a self-signed certificate. This allows the application to run “out of the box”. You can install your own SSL certificate on the box should you choose.

Alternatively, you can choose to front the Writer web application with your own existing Web Server or Load Balancer (e.g., Microsoft IIS, F5) and have the SSL configuration handled by your existing service. Please contact [support@visiblethread.com](mailto:support@visiblethread.com) for more details.

### ENCRYPTION AT REST

VT Writer supports the encryption of the data volume using AES. Contact our support team at [support@visiblethread.com](mailto:support@visiblethread.com) for more details.

### USER MANAGEMENT

VisibleThread provides a web application to manage users and application licenses. User accounts are created and managed locally on your VisibleThread installation using the web browser-based application.

Each user must be created with a username (email address) and a password. Passwords are salted, securely hashed, and stored locally in the VisibleThread database.

Users can be given ‘Admin’ privileges which allows them add/remove users from the system and configure common user settings. A ‘System Admin’ role also exists to allow system configuration such as data retention policies, email integration etc.

Single Sign-On (SSO) with SAML 2.0 is available with VT Writer version 2.4.4 and above. See our configuration help guide for more details.

### AUDITING

We support review & audit of user activity including user login, add/remove documents, generate reports. All user activity is tracked in our application database and is available for review.