



Customer Engagement

# EngageOne Vault

Version 7.4.1

Vault Release Notes 7.4 Service Pack 1



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# 1 - About this release

Vault is part of the EngageOne Suite and this release of Vault 7.4 Service Pack 1 provides new features, enhancements and fixes to known issues.

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## Release content

The features made available by this particular release are listed in [New features and enhancements](#) on page 7.

The software distribution contain the Vault user guides in Portable Document Format (PDF). These guides are also available on the "DOC1 Support Net" website.

The products supplied to you will depend on the Vault licenses you hold. Additionally, you will only be able to install products for which you have a valid license keycode. If you believe that you have not received the correct material or keycodes, please contact your Vault supplier.

The functions and features available with all Vault software are controlled by an XML license file. Your XML license file information will be supplied to you (separately from other release material), typically as an email attachment.

You will be required to supply your license details as part of the various installation processes. Should you experience any difficulties with your license file, please contact your Vault supplier.

## Compatibility

### **Vault**

The current versions of Vault and its clients are fully compatible with earlier versions except for Unicode indexes. Unicode indexes may require some processing to accommodate the updates to the sort order. For more information, see "Updating Unicode indexes" in the "Vault Customization Guide".

# Documentation

The following manuals are available with this release.

These guides are provided in PDF format.

## Documentation Set

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### **Vault User Guide**

For Vault, and Service. This guide provides information about the Vault document repository and step by step instructions for using the various Vault Service clients.

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### **Vault Customizing Guide**

This guide provides comprehensive information for establishing a Vault document repository and configuring the various clients to use it. This guide contains reference information required if you wish to customize the various components that make up the Vault modules.

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### **Vault Installation Guide**

This guide is intended for administrators responsible for installing Vault Server and Vault Service clients.

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### **Vault Messages Reference Guide**

This guide contains detailed information on common error messages encountered by Vault users. Each message contains a detailed description of the event and what action the user can take to attempt to remedy the issue.

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### **Vault CMIS Connector Installation and Configuration**

This guide provides introductory information about the Vault CMIS connector operation and installation.

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### **Vault REST API for EngageOne Server Services Guide**

This guide describes the The Vault REST API, which allows a web-based application service to access a Vault server using REST calls.

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# Terminology

The term **Windows** is used to mean any version of Microsoft **Windows** operating system which Vault supports. Please see the "Vault Installation Guide" for more information.

Conventions used in this document

[]	Optional parameters (The square brackets are not typed in). For example, [-x]
monospaced	Text or code you manually type in. For example, <code>lsattr -E -l rmt0</code>

# 2 - New features and enhancements

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## Shared socket pool implementation for E2VaultWS (SOAP API)

The E2VaultWS (SOAP) API has been enhanced to allow the optional use of the shared socket pool introduced in the 7.4 Java API.

The shared socket pool allow you to control the number of connections used when communicating with the underlying Vault system.

See “Vault Web Service” in the “Vault Customizing Guide” for more details.

## Vault Loader REST API enhanced for job loading and tasks

The optional Vault Loader REST API introduced in release 7.4 has been enhanced to allow loading jobs into Vault via the API.

The job loading function introduces a new folder model to the loading process, that allows for enhanced job control features such as:

- Scheduling when jobs will be considered for loading
- Restarting a job that fails with an error
- Specifying job names and the associated profile when a job is submitted

The API now allows for executing tasks via the API that are the equivalent of the job related flag files.

For further details, see the “Vault REST Load API” section in the “Vault Customizing Guide”.

## Socket pool implementation for Java

The Java API has been enhanced to optionally configure and use a pool of socket connections to a Vault server. When used, the communication to the Vault server will occur with a fixed (but dynamically expandable) set of sockets, and the connections will be kept alive with activity between uses. The socket pool should be used where the amount of activity between the client and the Vault server could lead to ephemeral port exhaustion on the client server.

For details, see the “Vault Java API connection pool” section in the “Vault Customizing Guide”.



## Vault Loader REST API

With this release, an optional Vault Loader REST API has been introduced. Using this API, the state of jobs submitted to the Vault loader module can be tracked and queried.

The information presented by Vault loader REST API can be used to:

- Reconcile jobs sent to Vault with jobs that are loaded
- Determine document and page counts loader for a time period
- Determine if a specific job has been loaded and ready to be searched and rendered

See "The Vault Loader REST API" section in the "Vault Customizing Guide" for details.

## Fixed Issues and Changes in behavior

The following fixes have been applied in this release.

Fixed Issue	Description
<b>CES-49543</b>	<p>With this release, TLS and SSL support in the Vault core executables have been tightened.</p> <p>The changes are:</p> <ol style="list-style-type: none"> <li>1. SSL 2, SSL 3 are now disabled.</li> <li>2. TLS 1.0 and TLS 1.1 are disabled by default, but can be controlled with the following settings in the executable .ini file (e2serverd.ini, e2renderd.ini, e2loaderd.ini or e2routerd.ini)</li> </ol> <pre>[server1] / [connection1]  sslallowtls1=1           (allow TLS 1.0 if set to 1) sslallowtls11=1         (allow TLS 1.1 if set to 1) sslallowtls12=1         (allow TLS 1.2 if set to 1)</pre> <ol style="list-style-type: none"> <li>3. The negotiation between the server and the client for a cipher suite now follows the server's preference by default. This can be controlled with the <code>sslpreferserver</code> setting in the executable .ini file (e2serverd.ini, e2renderd.ini, e2loaderd.ini or e2routerd.ini).</li> </ol> <p>For example,</p> <pre>[server1] / [connection1]  sslpreferserver=1</pre> <p>Setting <code>sslpreferserver=0</code> will cause the client cipher suite to take precedence.</p> <ol style="list-style-type: none"> <li>4. The list of available ciphers can now be controlled by explicitly setting a cipher list using the <code>sslcipherlist</code> setting in the executable .ini file (e2serverd.ini, e2renderd.ini, e2loaderd.ini or e2routerd.ini)</li> </ol> <pre>sslcipherlist=CIPHER1:CIPHER2:...</pre> <p>For example,</p> <pre>[server1] / [connection1]</pre>

```
sslcipherlist=ECDHE-RSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES256-SHA384
```

**Note:** If TLS 1.0 or TLS 1.1 is enabled, set an empty cipherlist with “`sslcipherlist=`” to use the default list for TLS 1.0 or TLS 1.1.

- 5. The default list of cipher suites (see table below) has been tightened to the Mozilla Modern compatibility list.

See [https://wiki.mozilla.org/Security/Server\\_Side\\_TLS#Modern\\_compatibility](https://wiki.mozilla.org/Security/Server_Side_TLS#Modern_compatibility)

OpenSSL Cipher Suite Name	RFC/IANA Cipher Suite Name
ECDHE-ECDSA-AES256-GCM-SHA384	TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
ECDHE-RSA-AES256-GCM-SHA384	TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
ECDHE-ECDSA-CHACHA20-POLY1305	TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256
ECDHE-RSA-CHACHA20-POLY1305	TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256
ECDHE-ECDSA-AES128-GCM-SHA256	TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
ECDHE-RSA-AES128-GCM-SHA256	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
ECDHE-ECDSA-AES256-SHA384	TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
ECDHE-RSA-AES256-SHA384	TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
ECDHE-ECDSA-AES128-SHA256	TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
ECDHE-RSA-AES128-SHA256	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256

Fixed Issues	Description
<b>CES-49025</b>	When using <code>TrayMode=Numbered</code> to place a background on a PDF input file, the background may fail to appear if the PDF input file or the background PDF file has free objects in the cross reference table. This has been corrected.

Fixed Issues	Description
<b>EVA-2594</b>	Vault loader was incorrectly calculating the length of some PDF objects which could result in ERROR 50042. This has been corrected.
<b>EVA-2597</b>	Vault emulation of AFPDS GOCA fill orders could result in corrupted area fills in certain cases. This has been corrected.
<b>EVA-2620</b>	Unfiltered searches could access shared structures without acquiring the necessary lock. This could cause searches to fail with unpredictable results. This has been corrected.
<b>CES-49496</b>	The Java API released with 7.4.1.9 would only allow the use of TLS 1.0 for secure socket communications. This has been corrected.
<b>CES-44763</b>	If ODBC export delete is configured and the export columns are not correctly defined, the loader may produce unnecessary ODBC error messages during unexport. This has been corrected.
<b>EVA-2578</b>	Under certain scenarios, a misleading error message could be written to the log file when a license file could not be accessed. This has been corrected.
<b>EVA-2544</b>	The error handling for Unix signal failures could cause unpredictable behavior, including crashes and deadlocks. This has been corrected.
<b>EVA-2525</b>	Negative character increments were not being handled correctly for certain Thai fonts. This has been corrected.
<b>EVA-2523</b>	An error that occurred during a directory rename by the resource deduplication functionality was not being properly detected. This has been corrected, and the resource deduplication process will now fail if the directory rename fails.
<b>EVA-2514</b>	If externally constructed AFP data with inline resources is presented to the Vault reprint process, the loader may crash under certain circumstances. This has been corrected.
<b>EVA-2454</b>	In the .Net client API, the host-name and port-number was not being properly propagated for some search use cases. This has been corrected.  Rendering very large documents could cause memory depletion. The method of reading from the socket has been modified to minimize the memory usage when rendering large documents.
<b>EVA-2466</b>	During the Vault audit processing, the fields computed for a file date during the audit process could produce an incorrect result. This could trigger if a log event from the audit process itself is generated at a certain point. For example if the audit cannot open a file because it is in used by another process. Between the time the fields are extracted and the time they are used, the log event overwrites the file year/month/day fields. This results in the file being assigned the wrong date which in turn affects the pages-per-month license checking. This has been corrected.

Fixed Issues	Description
<b>EVA-2473</b>	Mass deletes can cause the Indexer as a Service to fail when a node with one or no keys is split. This has been corrected.
<b>EVA-2491</b>	The Vault Web Soap Service (E2VaultWS) was not correctly reporting the "more" flag for some searches. This has been corrected.
<b>EVA-2500</b>	The Vault reprint process could create AFP IOCA objects where the Begin Resource fields were of the incorrect type, and this could cause the resource to not print correctly or be missing altogether. This has been corrected.
<b>CES-37038</b>	The collections load process could create compressed files over 4GB which would not function correctly during document retrieval. The collections load process now stops with an error when this condition occurs.

## Errata

- The desktop client will not correctly encrypt a PDF file if the PDF password is encrypted using the Vault password encryption model.

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