newgenONE

OmniDocs EasySearch

Installation Guide

Version: 12.1

Disclaimer

This document contains information proprietary to Newgen Software Technologies Ltd. User may not disclose or use any proprietary information or use any part of this document without written permission from Newgen Software Technologies Ltd.

Newgen Software Technologies Ltd. makes no representations or warranties regarding any software or to the contents or use of this guide. It also specifically disclaims any express or implied warranties of merchantability, title, or fitness for any particular purpose. Even though Newgen Software Technologies Ltd. has tested the hardware and software and reviewed the documentation, it does not guarantee or imply that this document is error free or accurate regarding any particular specification. As a result, this product is sold as it is and user, the purchaser, is assuming the entire risk as to its quality and performance. Further, Newgen Software Technologies Ltd. reserves the right to revise this publication and make changes in its content without any obligation to notify any person, of such revisions or changes. Newgen Software Technologies Ltd. authorizes no Newgen agent, dealer or employee to make any modification, extension, or addition to the above statements.

Newgen Software Technologies Ltd. has attempted to supply trademark information about company names, products, and services mentioned in this document. Trademarks indicated below were derived from various sources.

Copyright © 2025 **Newgen Software Technologies Ltd**. All rights reserved.
No part of this publication may be reproduced and distributed without the prior permission of Newgen Software Technologies Ltd.

Newgen Software, Registered Office, New Delhi
E-44/13
Okhla Phase - II
New Delhi 110020
India
Phone: +91 1146 533 200
info@newgensoft.com

Contents

Preface **4**
Revision history 4
Intended audience 4
Documentation feedback 4
Best practices **5**
Installing NewgenONE OmniDocs EasySearch **6**
Prerequisites 6
Installing NewgenONE OmniDocs EasySearch 7
Installing NewgenONE OmniDocs EasySearch on Red Hat JBoss EAP 8 9
Installing EasySearch on WebSphere Liberty 14
Verifying successful installation steps **19**
Installing EasySearch manually **20**
Installing EasySearch manually on JBoss 20
Installing EasySearch manually on WebSphere Liberty 21
Configuring steps for another cabinet **22**
Configuring application server 22
Configuring Elasticsearch server 23
Configuring NewgenONE Easy Search folder 25
Configuring EasySearchIngestion service 28
Uninstalling NewgenONE OmniDocs EasySearch **31**
Frequently asked questions **33**

Preface

This guide explains installing NewgenONE OmniDocs EasySearch 12.1 on Windows and Linux operating systems. It also describes the post-installation activities, verification of successful installation, and the uninstallation procedure of the product. Apart from this, it also contains frequently asked questions (FAQs).

Revision history

Revision date	Description
December 2025	Initial publication

Intended audience

This installation guide is intended for IT system administrators responsible for installing NewgenONE OmniDocs EasySearch. The reader must be familiar with Microsoft Windows Server or Linux operating systems, as required. The reader must also know about databases and running the different application servers on Windows or Linux. The reader must have administrator rights to install, perform post-installation activities, and uninstall the product.

Documentation feedback

To provide feedback or any improvement suggestions on technical documentation, write an email to docs.feedback@newgensoft.com.

To help capture your feedback effectively, share the following information in your email:

- Document name
- Version
- Chapter, topic, or section
- Feedback or suggestions

Best practices

This section describes the best practices you must follow before installing NewgenONE OmniDocs EasySearch 12.1. See the following best practices:

- The application server must be in stop mode.
- NewgenONE OmniDocs Services must be in stop mode.
- Java Development Kit (JDK) version 17 or 21 must be installed on the server computer.
- Elasticsearch 9.1.3 must be installed on the server computer.

  It applies only when installing EasySearch using the "with Elasticsearch" option.

- Elasticsearch services must be in stop mode.
- The signed in user must have administrative rights on the server computer.

Installing NewgenONE OmniDocs EasySearch

This section covers the prerequisites and steps for installing NewgenONE OmniDocs EasySearch 12.1 on Windows and Linux operating systems.

Prerequisites

The following prerequisites are required before installing NewgenONE OmniDocs EasySearch 12.1:

System requirement	Description
Compatible NewgenONE OmniDocs versions	NewgenONE OmniDocs 12.1 must be installed on the application server machine.
Supported operating systems	Same as required for the installed NewgenONE OmniDocs version.
Supported application servers	Same as required for the installed NewgenONE OmniDocs version.
Supported database servers	Same as required for the installed NewgenONE OmniDocs version.
Supported Java Development Kit (JDK) versions	Same as required for the installed NewgenONE OmniDocs version.
Compatible Elasticsearch versions	Elasticsearch is required only when installing EasySearch using the "with Elasticsearch" option in the installer. The compatible version is Elasticsearch 9.1.3.
NewgenONE OmniDocs Text Extraction Manager (TEM)	TEM must be installed and applied on the cabinet on which you install EasySearch. Otherwise, content search and content highlighting remain non-functional. NewgenONE OmniDocs TEM 12.1 is required when using EasySearch without Elasticsearch.
Administrative rights	Make sure you run the installer as an administrator.

System requirement	Description
Disk space and temporary space	**Temporary space**: Requires available temporary space equal to three times the installer size. **Installation space**: Requires available disk space equal to two times the installer size. After the installation completes or you cancel it, the installer releases the temporary space automatically. The installer leaves one directory that contains a single file, *remove.exe* (approximately 35 KB).
Others	• The Elasticsearch service must be in stop mode. This applies only when installing EasySearch using the "with Elasticsearch" option. • The application server must be in stop mode. • OmniDocs services must be in stop mode.

Installing NewgenONE OmniDocs EasySearch

To install NewgenONE OmniDocs EasySearch 12.1, perform the following steps:

1. Launch the NewgenONE OmniDocs EasySearch 12.1 installer.
   For Windows, right-click the *NewgenONEOmniDocsEasySearch12.1.exe* and select **Run as Administrator**. The Introduction screen appears. Proceed to step 2.
   For Linux, perform the following steps:
   a. Open a Linux terminal and change the working directory to the one where the NewgenONE OmniDocs EasySearch 12.1 installer is present.
   b. Execute the following command to give full rights to the NewgenONE OmniDocs EasySearch 12.1 installer:
   ```
   chmod 777 NewgenONEOmniDocsEasySearch12.1.bin
   ```
   c. Execute the following command to launch the installer's Graphical User Interface (GUI):
   ```
   export LD_BIND_NOW=1
   ```
   d. Execute the following command to launch the EasySearch 12.1 installer:
   ```
   ./NewgenONEOmniDocsEasySearch12.1.bin
   ```
   The Introduction screen appears. Proceed to step 2.

2. Click **Next**. The License Agreement screen appears.
3. Select **I accept the terms of the License Agreement**.
4. Click **Next**. The ElasticSearch Selection screen appears.
5. Select the required search type from the following options:
   - **With ElasticSearch**—Upon installing EasySearch with Elasticsearch, OmniDocs utilizes the Elasticsearch engine for conducting searches. Elasticsearch offers advanced search capabilities including fuzzy search, proximity search, Boolean search, and phrase search.
     If you select With ElasticSearch, configure the following options:
     - **Is Semantic Search Enabled?**
       - **Yes**—The following options are available:
         - **ElasticSearch Model**—If selected, provide the model path.
         - **Vector EndPoint**—If selected, provide the URL.
       - **No**—Semantic search is disabled.
     - **Rollover for Elasticsearch**—Select **Yes** or **No** using the radio buttons to enable or disable EasySearch rollover.
   - **Without ElasticSearch**—Upon installing EasySearch without Elasticsearch, OmniDocs conducts searches on its database tables.

   In case of RDBMS (without Elastic search), TEM must be installed.
6. Click **Next**. The Prerequisites screen appears.
7. Select the following prerequisites to proceed with the installation:
   - When installing EasySearch with Elasticsearch:
     - App server should be in Stop Mode.
     - NewgenONE OmniDocs Services should be in Stop Mode.
     - NewgenONE OmniDocs 12.1 is installed on the Server Machine.
     - JDK 17.x or 21.x should be installed on the user machine.
     - Elasticsearch 9.1.3 is installed on the machine.
     - Elasticsearch should be in Stop Mode.
     - Admin Rights should be on the Machine.
   - When installing EasySearch without Elasticsearch:
     - App Server should be in Stop Mode.
     - NewgenONE OmniDocs Services should be in Stop Mode.
     - NewgenONE OmniDocs 12.1 is Installed on the Server Machine.
     - JDK 17.x or 21.x should be installed on the user machine.
     - Admin rights should be on the machine.
     - NewgenONE OmniDocs TEM 12.1 must be installed.
8. Click **Next**. The Primary and Replica Shards screen appears.

9. Enter the following details:
    a. **Primary Shards**—Specify the number of primary shards
    b. **Replica Shards**—Specify the number of replica shards.

    This step does not appear if Without ElasticSearch is selected.
10. Click **Next**. The Application Server screen appears.
11. Depending on your application server, see the relevant section to proceed with the installation:
    - Red Hat JBoss EAP 8
    - IBM WebSphere Liberty

Installing NewgenONE OmniDocs EasySearch on Red Hat JBoss EAP 8

To proceed with the NewgenONE OmniDocs EasySearch installation on JBoss EAP, perform the following steps:

1. On the Application Server screen, select the **Red Hat JBoss EAP 8.0.x** option.
2. Click **Next**. The Choose a Java_Home path screen appears.
3. Click **Choose** and select the Java home folder. The Java home folder refers to the file location where Java is installed.
4. Click **Next**. The Choose JBoss_HOME Location screen appears.
5. Click **Choose** and select the home folder where JBoss EAP is installed.
6. Click **Next**. The Choose OmniDocs Location screen appears.
7. Click **Choose** to browse for and select the OmniDocs installation folder.
8. Click **Next**. The Select Elasticsearch Type screen appears.

    The Select Elasticsearch Type screen doesn't appear with the "without Elasticsearch" option; instead, the App Server details screen appears directly. In that case, proceed to the App Server details screen.
9. Based on your requirements, select either the **On-Premise Elasticsearch** or **Amazon Web Services (AWS) Elasticsearch** option.
    - **On-Premise Elasticsearch**—To proceed with the on-premise Elasticsearch, perform these substeps before proceeding to the main steps:
        a. On the Select Elasticsearch Type screen, select the **On-Premise Elasticsearch** option.
        b. Click **Next**. The Choose Elasticsearch screen appears.
        c. Click **Choose** to browse for and select the Elasticsearch installation folder.

d. Click **Next**. The App Server Details screen appears.
Proceed to the App Server Details screen.

- **AWS Elasticsearch**—To proceed with the AWS Elasticsearch, perform these substeps before proceeding to the main steps:
  a. On the Select Elasticsearch Type screen, select the **AWS Elasticsearch** option.
  b. Click **Next**. The AWS Elasticsearch screen appears.
  c. Specify the following AWS credentials to connect with the Amazon service endpoints:

Field	Description
AWSESDomain URL	The URL for accessing your Amazon Elasticsearch Service (ES) domain.
AWSAccessKey	Your AWS Access Key to access AWS resources.
AWSSecretKey	Your AWS Secret Key to access AWS resources.
AWSRegion	The AWS region such as Asia Pacific where your domain is deployed.

  d. Click **Next**. The App Server Details screen appears.
  Proceed to the App Server Details screen.

10. On the App Server Details screen. Specify the following details:
    - **Enter full computer name of Application Server**—The full computer name where the application server is running. For example, *LPTXXX@abcsoft.com*
    - **Application Server IP**—The IP of the application server computer. For example *192.168.111.123*.
    - **Enter Application Web Port**—The JBoss EAP port number. The default port number is 8080.
11. Click **Next**. The Database Server screen appears.
12. Select the required database server from the following options:
    - Microsoft SQL Server

      When using Microsoft SQL Server, choose between **Server Authentication** or **Windows Authentication** to access the database.

    - Microsoft Azure
    - Oracle
    - PostgreSQL
13. Click **Next**. The Secret Manager Status screen appears.
14. Based on your requirements, select either the **Yes** or **No** option.

- **Yes**—If you have already configured the AWS Secrets Manager or Azure Key Vault and want to use it for storing user credentials, then perform the following steps:
    a. On the Secret Manager Status screen, select the **Secret Manager Y** option and click **Next**. The Secret Manager Type screen appears.
    b. Based on your requirements, select any of the following options:
        - **AWS Secret Manager**—To store user credentials on AWS, select the **Cloud Server Region Name** and the local **Region Name**. Then, click **Next**, and on the ARN Details screen, specify **Amazon Resource Name (ARN)** to allow the installer to access the configured AWS Secrets Manager.
        - **Azure Key Vault**—To store user credentials on Azure, specify **Key Vault Name** and **Secret Name**.
- **No**—If you have not configured the AWS Secrets Manager or Azure Key Vault, then on the Secret Manager Status screen, select the **Secret Manager N** option.

15. Click **Next**. The Database Information screen appears.
16. Specify the database server details as described in the following table:

> This screen varies as per the selected database server. For example, the MSSQL Database Information screen appears for Microsoft SQL Server.

Field	Description
Database Server IP	Enter the IP address or the name of the computer where the database server for OmniDocs is installed. Example: 127.0.0.1 or newgenonesql
Database Server User Name	Enter the database username to access the above database server. Ensure that the user has administrative rights on the database. The Database username field does not appear for the Secret Manager Y option.
Database Server Password	Enter the password associated with the database username. The Database password field does not appear for the Secret Manager Y option.

Field	Description
Database Server Port	Enter the database server port number. The default is 1433 for MS SQL, 5432 for PostgreSQL, and 1521 for Oracle.
Database Service Name	Enter the Oracle database service name. It appears only for the Oracle database.
OmniDocs Cabinet Name	Enter the OmniDocs cabinet name.

17. Click **Next**. The Database Connection Success dialog appears on the successful connection to the database.

    An alert message appears if the specified database information is incorrect. In that case, click **OK** to close the dialog, enter the correct database information, and then click **Next**.

18. Click **OK** to close the dialog. The OAuth screen appears.
19. Select an option for Is OAuth enabled on Cabinet.
    - **Yes**—OAuth is enabled.
    - **No**—OAuth is not enabled.
20. Click **Next**. The OmniDocs Credentials screen appears.
21. Enter the OmniDocs credentials:
    - **Username**—Enter the OmniDocs username.
    - **Password**—Enter the corresponding password.
22. Click **Next**. The DocVeda Status screen appears.
23. Select an option for Is DocVeda enabled.
    - **Yes**—Specify the following details:

Field	Description
Search Endpoint	Enter the endpoint URL for DocVeda search services.
Store Endpoint	Enter the endpoint URL for storing and managing DocVeda data.
Token Generator	Enter the endpoint URL for generating authentication tokens.
LLM Filter	Select **Yes** or **No** from the dropdown to enable or disable the Large Language Model filter.

    - **No**—DocVeda is not enabled.
24. Click **Next**. The Choose Install Folder screen appears.

25. Choose a folder to save the NewgenONE OmniDocs EasySearch 12.1 installation. You can keep the default installation folder for the product or click **Choose** to browse for and select a different folder.

    Ensure there is no space between the characters of the selected path.

26. Click **Next**. The Pre-Installation Summary screen appears. Review the Pre-installation summary before you proceed to the next step.
27. Click **Install**. The Installing NewgenONE OmniDocs EasySearch 12.1 screen appears and shows the installation progress.
    The Start JBoss and Elasticsearch Server dialog appears.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

28. Start JBoss and Elasticsearch Search, and then click **OK**.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

    The product deployment continues.
    The locations of Easysearch files are as follows:
    - Elasticsearch — *<Elastic_server_Home>\bin\elasticsearch.bat*
    - *The JBoss and Elasticsearch Search Server Status dialog appears.*
29. Click **Yes** to confirm that JBoss and Elasticsearch Search servers are started.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

    The product deployment continues.
    Once the deployment activity concludes, the Install Complete screen appears.
30. Click **Done** to complete the installation.

    - After the installation, start the EasySearch Ingestion service by running the *start.bat* file located at: *<NewgenONE OmniDocs EasySearch 12.1 installation directory>\Easysearchingestionservice\start.bat*.
    - Review the installation logs to verify the installation status. The log file gives comprehensive information about the installation, including successful actions, warnings, non-fatal errors, and fatal errors that occurred during the installation. The installation log file is located at the following path: *<NewgenONE OmniDocs EasySearch 12.1 installation directory>_NewgenONEOmniDocsEasySearch12.1_installation\Logs*

Installing EasySearch on WebSphere Liberty

To proceed with the NewgenONE OmniDocs EasySearch installation on IBM WebSphere Liberty, perform the following steps:

1. On the Application Server screen, select the **IBM WebSphere Liberty** option.
2. Click **Next**. The Choose a Java_Home path screen appears.
3. Click **Choose** and select the Java home folder. The Java home folder refers to the file location where Java is installed.
4. Click **Next**. The Choose WebSphere Liberty Path screen appears.
5. Click **Choose** and select the WebSphere Liberty Application Server installation folder.
6. Click **Next**. The WebSphere Liberty User Server Details screen appears.
7. Provide the following WebSphere Liberty user server details:

Field	Description
User Server Name	Enter the WebSphere Liberty user server name.
User Server Path	Enter the WebSphere Liberty user server path.

8. Click **Next**. The Choose OmniDocs Location screen appears.
9. Click **Choose** to browse for and select the OmniDocs installation folder.
10. Click **Next**. The Select Elasticsearch Type screen appears.

> The Select Elasticsearch Type screen doesn't appear with the "without Elasticsearch" option; instead, the App Server details screen appears directly. In that case, proceed to the App Server details screen.

11. Based on your requirements, select either the **On-Premise Elasticsearch** or **Amazon Web Services (AWS) Elasticsearch** option.
    - **On-Premise Elasticsearch**—To proceed with the on-premise Elasticsearch, perform these substeps before proceeding to the main steps:
        a. On the Select Elasticsearch Type screen, select the **On-Premise Elasticsearch** option.
        b. Click **Next**. The Choose Elasticsearch screen appears.
        c. Click **Choose** to browse for and select the Elasticsearch installation folder.
        d. Click **Next**. The App Server Details screen appears.
        Proceed to the App Server Details screen.

- **AWS Elasticsearch**—To proceed with the AWS Elasticsearch, perform these substeps before proceeding to the main steps:
  a. On the Select Elasticsearch Type screen, select the **AWS Elasticsearch** option.
  b. Click **Next**. The AWS Elasticsearch screen appears.
  c. Specify the following AWS credentials to connect with the Amazon service endpoints:

Field	Description
AWSESDomain URL	The URL for accessing your Amazon Elasticsearch Service (ES) domain.
AWSAccessKey	Your AWS Access Key to access AWS resources.
AWSSecretKey	Your AWS Secret Key to access AWS resources.
AWSRegion	The AWS region such as Asia Pacific where your domain is deployed.

  d. Click **Next**. The App Server Details screen appears.
  Proceed to the App Server Details screen.

12. On the App Server Details screen. Specify the following details:
    - **Enter full computer name of Application Server**—The full computer name where the application server is running. For example, *LPTXXX@abcsoft.com*
    - **Application Server IP**—The IP of the application server computer. For example *192.168.111.123*.
    - **Enter Application Web Port**—The WebSphere Liberty port number. The default port number is 9080.
13. Click **Next**. The Database Server screen appears.
14. Select the required database server from the following options:
    - Microsoft SQL Server

      When using Microsoft SQL Server, choose between **Server Authentication** or **Windows Authentication** to access the database.

    - Microsoft Azure
    - Oracle
    - PostgreSQL
15. Click **Next**. The Secret Manager Status screen appears.
16. Based on your requirements, select either the **Yes** or **No** option.

- **Yes**—If you have already configured the AWS Secrets Manager or Azure Key Vault and want to use it for storing user credentials, then perform the following steps:
  a. On the Secret Manager Status screen, select the **Secret Manager Y** option and click **Next**. The Secret Manager Type screen appears.
  b. Based on your requirements, select any of the following options:
     - **AWS Secret Manager**—To store user credentials on AWS, select the **Cloud Server Region Name** and the local **Region Name**. Then, click **Next**, and on the ARN Details screen, specify **Amazon Resource Name (ARN)** to allow the installer to access the configured AWS Secrets Manager.
     - **Azure Key Vault**—To store user credentials on Azure, specify **Key Vault Name** and **Secret Name**.
- **No**—If you have not configured the AWS Secrets Manager or Azure Key Vault, then on the Secret Manager Status screen, select the **Secret Manager N** option.

17. Click **Next**. The Database Information screen appears.
18. Specify the database server details as described in the following table:

> This screen varies as per the selected database server. For example, the MSSQL Database Information screen appears for Microsoft SQL Server.

Field	Description
Database Server IP	Enter the IP address or the name of the computer where the database server for OmniDocs is installed. Example: 127.0.0.1 or newgenonesql
Database Server User Name	Enter the database username to access the above database server. Ensure that the user has administrative rights on the database. The Database username field does not appear for the Secret Manager Y option.
Database Server Password	Enter the password associated with the database username. The Database password field does not appear for the Secret Manager Y option.
Database Server Port	Enter the database server port number. The default is 1433 for MS SQL, 5432 for PostgreSQL, and 1521 for Oracle.

Field	Description
Database Service Name	Enter the Oracle database service name. It appears only for the Oracle database.
OmniDocs Cabinet Name	Enter the OmniDocs cabinet name.

19. Click **Next**. The Database Connection Success dialog appears on the successful connection to the database.

    An alert message appears if the specified database information is incorrect. In that case, click **OK** to close the dialog, enter the correct database information, and then click **Next**.

20. Click **OK** to close the dialog. The OAuth screen appears.
21. Select an option for Is OAuth enabled on Cabinet.
    a. **Yes**—OAuth is enabled.
    b. **No**—OAuth is not enabled.
22. Click **Next**. The OmniDocs Credentials screen appears.
23. Enter the OmniDocs credentials:
    a. **Username**—Enter the OmniDocs username.
    b. **Password**—Enter the corresponding password.
24. Click **Next**. The DocVeda Status screen appears.
25. Select an option for Is DocVeda enabled.
    a. **Yes**—Specify the following details:

Field	Description
Search Endpoint	Enter the endpoint URL for DocVeda search services.
Store Endpoint	Enter the endpoint URL for storing and managing DocVeda data.
Token Generator	Enter the endpoint URL for generating authentication tokens.
LLM Filter	Select **Yes** or **No** from the dropdown to enable or disable the Large Language Model filter.

    b. **No**—DocVeda is not enabled.
26. Click **Next**. The Choose Install Folder screen appears.
27. Choose a folder to save the NewgenONE OmniDocs EasySearch 12.1 installation. You can keep the default installation folder for the product or click **Choose** to browse for and select a different folder.

    Ensure there is no space between the characters of the selected path.

28. Click **Next**. The Pre-Installation Summary screen appears. Review the Pre-installation summary before you proceed to the next step.
29. Click **Install**. The Installing NewgenONE OmniDocs EasySearch 12.1 screen appears and shows the installation progress.
    The Start WebSphere Liberty and Elasticsearch Server dialog appears.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

30. Start WebSphere Liberty and Elasticsearch servers, then click **OK**.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

    The product deployment continues.
    The locations of Easysearch file is *<Elastic_server_Home>\bin\eleasticsearch.bat.*
    The WebSphere Liberty and Elasticsearch Server Status dialog appears.
31. Click **Yes** to confirm that WebSphere Liberty and Elasticsearch servers are started.

    The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

    The product deployment continues.
    Once the deployment activity concludes, the Install Complete screen appears.
32. Click **Done** to complete the installation.

- After the installation, start the EasySearch Ingestion service by running the *start.bat* file located at: *<NewgenONE OmniDocs EasySearch 12.1 installation directory>\Easysearchingestionservice\start.bat*.
- Review the installation logs to verify the installation status. The log file gives comprehensive information about the installation, including successful actions, warnings, non-fatal errors, and fatal errors that occurred during the installation. The installation log file is located at the following path: *<NewgenONE OmniDocs EasySearch 12.1 installation directory>_NewgenONEOmniDocsEasySearch12.1_installation\Logs*

Verifying successful installation steps

To verify that you have successfully installed NewgenONE OmniDocs EasySearch 12.1, perform the following steps:

1. Make sure that the installer is installed successfully without any errors.
2. Start the application server.
3. Start the Elasticsearch server.

   The Elasticsearch server applies only when installing EasySearch using the "with Elasticsearch" option.

4. Start EasySearchIngestion Service.
5. Launch the NewgenONE OmniDocs Web Desktop URL and sign in to the application.
6. Open EasySearch and perform a search.
   If you can search successfully, it means your installation is successful.

Installing EasySearch manually

This section describes the procedure to install NewgenONE OmniDocs EasySearch 12.1 manually from Red Hat JBoss EAP and IBM WebSphere Liberty application servers.

Installing EasySearch manually on JBoss

To install EasySearch 12.1 manually on JBoss server, perform the following steps:

From here on:
- *<JBoss_HOME>* refers to */root/jboss-eap-8.0.x* in the case of Linux and *c\jboss-eap-8.0.x* in the case of Windows.
- *<BASE_SETUP_DIR>* refers to *manualpackage/JBoss/EasySearch* for Linux or Windows.

1. Copy the *Newgen* folder from *<BASE_SETUP_DIR>\AppServer\bin* to *<JBoss_HOME>/bin*.
2. Copy all files located at *<BASE_SETUP_DIR>\AppServer\modules\omnidocs_library\main* to *<JBoss_HOME>\modules\omnidocs_library\main*.
3. Update the following entries in the *module.xml* file located at *<JBoss_HOME>\modules\omnidocs_library\main*:

```
<resource-root path="api-0.34.0"/>
<resource-root path="ODEasy_SearchClient"/>
<resource-root path="pytorch-engine-0.34.0"/>
<resource-root path="pytorch-model-zoo-0.34.0"/>
<resource-root path="tokenizers-0.34.0"/>
```

4. If Elasticsearch is configured, copy the *config* folder from *<BASE_SETUP_DIR>\elasticsearch* to the *<Elastic_Server_Home>*.
5. Copy the *Newgen Easy Search* folder located at *<BASE_SETUP_DIR>\Newgen Easy Search* to the EasySearch user defined installation directory on the server. For example: *c\easysearch*

To create another cabinet, see *Configuring steps for another cabinet section*.

Installing EasySearch manually on WebSphere Liberty

To install EasySearch 12.1 manually on WebSphere Liberty server, perform the following steps:

From here on:

- *<WebSphere Liberty Home>* refers to */root/wlp* in the case of Linux and *c\wlp* in the case of Windows.
- <BASE_SETUP_DIR> *refers to the manualpackage/Liberty/EasySearch for Linux or Windows.*

1. Copy the *Newgen* folder from *<BASE_SETUP_DIR>\AppServer\bin* to the *<WebSphere Liberty Home>/usr/servers/<userserver>*.
2. Copy all files located at *<BASE_SETUP_DIR>\AppServer\lib\global* to the *<WebSphere Liberty Home>/usr/servers/<userserver>\lib\global*.
3. If Elasticsearch is configured, copy the *config* folder from *<BASE_SETUP_DIR>\elasticsearch* to the *<Elastic_Server_Home>*.
4. Copy the Newgen Easy Search folder located at *<BASE_SETUP_DIR>\Newgen Easy Search* to the EasySearch user defined installation directory on the server. For example: *c\easysearch*.

To create another cabinet, see *Configuring steps for another cabinet section*.

Configuring steps for another cabinet

This chapter describes the manual installation steps for NewgenONE OmniDocs EasySearch 12.1.

In Windows, use the \ (backslash), and in Linux, use the / (forward slash) as separators in file paths.

Configuring application server

To configure the application server, perform the following steps:

From here, *<AppServerHome>* refers to the following locations:

- Jboss: *<JBoss_HOME>\bin*
- WebSphere: *<WebSphere Liberty Home>/usr/servers/<userserver>*

1. In the *eworkstyle.ini* file located in the *<AppServerHome>Newgen\NGConfig\ngdbini\custom\<cabinet_name>\ folder*:
   a. Set *EnableEasySearch* to **Y**.
   b. Set *EnableElasticSearch* to **Y** (if using Elasticsearch) or **N** (if not using Elasticsearch).
2. Edit the cluster name in the *EasySearch.xml* file in the *ngdbini* folder.

   By default, the cluster name is elasticsearch.
3. If DocVeda is configured:
   a. Set the *DocVeda* value to true.
   b. Configure the *SearchEndPoint*, *TokenGenerator*, and *LLM Filter* values as required.
4. If ElasticSearchNLP is set to true, configure the following tags:

Tag	Description
ElasticSearchNLP	Enables or disables Elasticsearch NLP search. Set the value to true to enable it.

Tag	Description
ESNLPModelPath	Specifies the path or directory where the NLP model is located.
ESHybridSearch	Enables or disables hybrid search. Set the value to Y to enable it.
ESModelEngine	Defines the NLP model engine type (for example, PyTorch).
VectorApiEndpoint	Specifies the API endpoint for vector generation (for example, *http://test:8080/vector-api*).
ESknnFetchSize	Sets the fetch size of the kNN query. The default value is 20.

5. Set the Fuzziness value.
   Configure the following tag:
   ```
   <Fuzziness>1</Fuzziness>
   ```
   - Valid values are 0, 1, 2, or AUTO.
   - Fuzziness defines the maximum edit distance allowed for matching.
6. Set the BoostedFields value.
   Configure the following tag:
   ```
   <BoostedFields>documentname,content</BoostedFields>
   ```
   - This setting gives search priority to the specified fields.
7. Clear the cache and start the application server.

Configuring Elasticsearch server

To configure the Elasticsearch server, perform the following steps:

1. Uncomment the following in the *elastic.yml* file present in the *<Elastic_Server_Home>\config* directory.
   ```
   cluster.name: elasticsearch
   ```
2. Update the cluster name in the *EasySearch.xml* as mentioned in the Configuring application server section.
3. Uncomment the following in the *elasticsearch.yml* file.
   ```
   bootstrap.memory_lock: true
   ```

4. Add the following in the *elasticsearch.yml* file:
   - xpack.ml.enabled: false
   - http.cors.enabled: true
   - http.cors.allow-origin: "*"
   - network.host: ELASTIC_SERVER_IP
   - discovery.type: single-node
   - node.name: ELASTIC_SERVER_IP
   - http.port: 9200
   - discovery.seed_hosts: ["ELASTIC_SERVER_IP"]
   - xpack.security.enabled: false
   - xpack.security.http.ssl.enabled: false
   - xpack.security.transport.ssl.enabled: false
5. Configure the stop words to remove the unwanted words.
   For example, in an organization, the majority of the documents might contain some common word. In case you search the document using these words through EasySearch, it returns a various set of results. Therefore, by configuring stop words you can exclude such words during the search process. Hence, it helps in getting accurate search results.
   - To set up stop words, define those words in the *english.txt* file in the *<Elastic_Server_Home>\config\stopwords* folder.
     For example,
     - Am
     - This
     - Those
6. Configure the synonyms to increase the flexibility of search capabilities. For example, with minimal configuration, you can associate “Travel” with “Journey” without specifically spelling out new search terms for each word, or you can make “organization” and “organisation” synonymous in Elasticsearch.
   - To set up synonyms, define synonyms in the *english.txt* file in the *<Elastic_Server_Home>\config\synonyms* folder. For example,
     - Travel, Journey
     - Organization, Organisation
     - Insurance, bima
7. Start the Elasticsearch server.

Configuring NewgenONE Easy Search folder

For the configuration of EasySearch, change the following entries in the *ESconfig.ini* file present in the *<NewgenONE OmniDocs EasySearch 12.1 installation directory>\NewgenONEOmniDocsEasySearch12.1\ESConfigurator\conf* folder:

Entries	Values
ESServerIPAddress	Enter the ElasticSearch server IP address (*192.168.x.x*).
ESServerHttpPort	Enter the Port number that is, 9200.
ESClusterName	Enter the <cabinetname>_cluster.
ESServerTCPPort	Enter the ESServerTCPPort that is, 9300.
ESProtocol	Enter the http in ESProtocol.
OdDBIPAddress	Enter the database server IP.
OdDBPort	Enter the database server port.
OdCabinetName	Enter the cabinet name.
OdDBUserName	Enter the database username.
OdDBPassword	Enter the database password in the encrypted form by copying it from the *server.xml*. For example, X-D;Y-D;L-C;N-C;VSJ-C;4T-C;r
OdDBType	Give any of the following server: • sqlserver • oracle • postgre
odDBServiceName	Provide this entry if the OdDBType is Oracle. Else, keep this empty.
EnableWindows Authentication	Set the value of this entry to true if you want to use Windows Authentication.
UseAWSElasticSearch	Set the value of this entry to true if you want to use AWS Elasticsearch. By default, the value of this entry is set to false.
AWSESDomain URL	Enter the URL for accessing your AWS Elasticsearch Service (ES) domain.
AWSAccessKey	Enter your access key to access the AWS resources.

Entries	Values
AWSSecretKey	Enter your secret key to access the AWS resources.
AWSRegion	Enter the AWS region where your domain is deployed. For example: Asia Pacific.
ElasticSearchUserName	Enter the username of Elasticsearch if security is enabled.
ElasticSearchSecret	Enter the password of Elasticsearch if security is enabled.
TrustStorePath	Enter the trust store path of Elasticsearch if security is enabled.
TrustStoreSecret	Enter the trust store password of Elasticsearch if security is enabled.
AppToBeConfigured	You can set the following values: • Elasticsearch – Set this value if you are installing with Elasticsearch. • RDBMS – Set this value if you are installing without Elasticsearch.
UpdateESMapping	Set the value of this entry to Y to update only the Elasticsearch mapping. By default, the value of this entry is set to N.
UpdateESSetting	Set the value of this entry to Y to update only the Elasticsearch settings. By default, the value of this entry is set to N.
KeyVault	Enter the key vault if the secret manager is configured.
VaultName	Enter the vault name if the secret manager is configured.
ESRolloverPolicy	Set this value to Y to enable the EasySearch rollover feature.

After updating the above entries, run the *<NewgenONE OmniDocs EasySearch 12.1 installation directory>\NewgenONEOmniDocsEasySearch12.1\ESConfigurator\run.bat* file for Windows or *run.sh* file for Linux.

Changes to configure in *Settings.json*:

- Configuring shards and replicas with the following entries:

Tag	Description
number_of_shards	Defines the number of primary shards for the index. Each shard stores a portion of the data. Recommended shard size is 10–50 GB to ensure optimal performance and manageability.
number_of_replicas	Specifies the number of replica shards. Replica shards are copies of primary shards and provide redundancy and fault tolerance in case of node failure.

Changes to configure in *RollOverTemplate.json*:

- Configuring shards and replicas with the following entries:

Tag	Description
number_of_shards	Defines the number of primary shards for the rollover index. Recommended size is 10–50 GB per shard.
number_of_replicas	Specifies the number of replica shards for the rollover index. Replica shards ensure data redundancy and high availability.

The Rollover flag must be set to **Y** to allow modification of shard values.

- Update the *cabinet_name* tag with the actual name of the cabinet you created.
- If you want to change the default rollover behavior, configure your custom policy in *RolloverPolicy.json* file. This allows you to define conditions for creating new indices.

Configuring EasySearchIngestion service

For the configuration of the EasySearchIngestion service, change the following entries in the *EasySearchIngestion.xml* file located at: *<NewgenONE OmniDocs EasySearch 12.1 installation directory>\EasySearchIngestionService\Newgen\NGConfig\ngdbini folder*:

To configure the EasySearchIngestion service, perform the following steps:

1. **Set general tags**
   Configure the following tags:

Tag	Description
KeyVault	Name of the Key Vault to use.
VaultName	Specifies the vault name where secrets are stored.
isAuthEnabled	Indicates whether authentication is enabled (true or false).
CabinetName	Name of the content cabinet to connect.
DBType	Type of the database. Supported values: sql, postgres, or oracle.
User	Application user name.
Password	Application password in encrypted format.

2. **Configure database details**
   Set the following tags under DBDetails:

Tag	Description
Host	Database hostname.
Port	Database port number.
User	Database user name.
Password	Database password in encrypted format.

3. **Configure Elasticsearch (if applicable)**
   If you are using Elasticsearch:
   a. Set the *Elasticsearch* tag value to true.
   b. Configure the following tags:

Tag	Description
Host	Specifies the Elasticsearch host.
Port	Specifies the Elasticsearch port. The default value is 9200.
Protocol	Defines the communication protocol to connect to Elasticsearch (for example, http or https).
User	Specifies the username for Elasticsearch authentication.
Password	Specifies the password for Elasticsearch authentication.
TrustStorePath	Specifies the file path to the truststore used for SSL communication.
TrustStoreSecret	Specifies the secret key or password for accessing the truststore.

4. **Configure RDBMS (if not using Elasticsearch)**
   If you are not using Elasticsearch, set the RDBMS value to true.
5. **Configure DocVeda (if applicable)**
   If DocVeda is configured:
   a. Set the *DocVeda* value to true.
   b. Configure the following tags:

Tag	Description
TrainDataUrl	Specifies the DocVeda endpoint used to store data.
TokenGenerator	Specifies the endpoint used for DocVeda authentication.
MaxDocPerFolder	Defines the maximum number of documents stored per folder. The default value is 100.
DocTypes	Specifies the supported document types for DocVeda processing (for example, msg, eml).

6. **Configure ElasticSearchNLP (if applicable)**

   If ElasticSearchNLP is true, configure the following tags:

Tag	Description
ElasticSearchNLP	Enables or disables Elasticsearch NLP search. Set the value to true to enable it.
ESNLPModelPath	Specifies the path or directory where the NLP model is located.
ESHybridSearch	Enables or disables hybrid search. Set the value to Y to enable it.
ESModelEngine	Defines the NLP model engine type (for example, PyTorch).
VectorApiEndpoint	Specifies the API endpoint for vector generation (for example, *http://test:8080/vector-api*).
ESknnFetchSize	Sets the fetch size of the kNN query. The default value is 20.

Uninstalling NewgenONE OmniDocs EasySearch

This section describes the procedure to uninstall NewgenONE OmniDocs EasySearch 12.1 from Red Hat JBoss EAP and IBM WebSphere Liberty application servers.

Prerequisites: The following prerequisites are required before uninstalling EasySearch 12.1:

- The application server must be in stop mode.
- OmniDocs services must be in stop mode.
- The installer must be run as an administrator.

To uninstall EasySearch 12.1, perform the following steps:

1. Go to the EasySearch 12.1 install directory.
2. Open the *Uninstall_NewgenONE OmniDocs EasySearch 12.1* folder.
3. Launch the uninstaller.
   For Windows, right-click *Uninstall NewgenONE OmniDocs EasySearch 12.1.exe* and select **Run as administrator**. If prompted for uninstallation confirmation, click **Yes**. The Uninstall NewgenONE OmniDocs EasySearch 12.1 screen appears. Proceed to step 4.

   For Linux, perform the following steps:
   a. Right-click in the empty area and select **Open in Terminal**.
   b. Execute the following command to launch the Uninstaller GUI:
      ```
      export LD_BIND_NOW=1
      ```
   c. Execute the following command to launch the uninstaller:
      ```
      ./Uninstall\NewgenONEOmniDocsEasySearch12.1.bin
      ```
      The Uninstall NewgenONE OmniDocs EasySearch 12.1 screen appears. Proceed to step 4.
4. Click **Next**. The Please Stop Application Server dialog appears.
5. Stop the application server.
6. Click **OK**. The Uninstall Options screen appears.

7. Select one of the following options:
    - **Complete Uninstall**—Removes all installed features of EasySearch 12.1.
    - **Uninstall Specific Features**—Allows you to choose and uninstall selected components only.
8. Click **Next**. The uninstallation begins. The uninstaller removes the installed features of EasySearch 12.1. The Uninstall Complete screen appears once all the features of EasySearch 12.1 are removed.
9. Click **Done** to complete the uninstallation and close the screen.

Frequently asked questions

1. What are the requirements for installing Easy Search?
   To install the EasySearch, ensure you have all the required prerequisites. For more information, see *Prerequisites*.
2. How to configure OAuth for EasySearch?
   OAuth, an open standard for secure access delegation, is crucial in web and mobile applications, allowing third-party apps access to user data without exposing credentials. Configuring OAuth with search functionality ensures a secure and user-friendly experience, instilling trust in users that their data is handled safely. This is particularly vital when dealing with sensitive information in product-related search functionalities, as it enables controlled and authorized interactions with user data.
   To configure OAuth for EasySearch, perform the following steps:
   a. Go to the EasySearch installation directory.
   b. Open the *EasySearchIngestion.xml* file located at *EasySearchIngestionService\Newgen\NGConfig\ngdbini*.
   c. Specify the *isAuthEnabled* flag value as *Y* to enable the OAuth with EasySearch.
   ```
   <isAuthEnabled >Y</isAuthEnabled >
   ```
3. How to configure Secret Manager for EasySearch?
   Secret Manager is a tool that securely stores and manages sensitive information, such as API keys and credentials, in a centralized and encrypted manner. Configuring Secret Manager with EasySearch enhances security by safeguarding sensitive information, preventing exposure of credentials while searching documents. This is crucial for protecting user data and ensuring a robust and trustworthy product search functionality.
   To configure Secret Manager for EasySearch, perform the following steps:
   a. Go to the EasySearch installation directory.
   b. Open the *EasySearchIngestion.xml* file located at *EasySearchIngestionService\Newgen\NGConfig\ngdbini*.
   c. Specify the *KeyVault* flag value as *true*.
   ```
   <KeyVault>true</KeyVault>
   ```
   d. Specify the vault details as follows:

```
CrawlerConfiguration
SP2ORCAPRIL24_user: <Enter the username>
SP2ORCAPRIL24_password: <Enter the password>
```

Here,
CrawlerConfiguration is the vault name. You can change the vault name through *CrawlerConfig.xml* file from the **VaultName** tag.
SP2ORCAPRIL24 is the EasySearch cabinet name and it must be in uppercase. You can specify the cabinet name according to your working environment.

e. Open the *ESConfig.ini* file located at *ESConfigurator\conf* and specify the following details:

```
ESConfiguration
SP2MARCH03_OdDBUserName: <Enter the username>
SP2MARCH03_OdDBPassword: <Enter the password>
SP2MARCH03_AWSAccessKey: <Enter the AWS access key>
SP2MARCH03_AWSSecretKey: <Enter the AWS secret key>
SP2MARCH03_ElasticSearchUserName: <Enter the ElasticSearch username>
SP2MARCH03_ElasticSearchSecret: <Enter the ElasticSearch secret>
SP2MARCH03_TrustStorePath: <Enter the path to store the user
credentials>
SP2MARCH03_TrustStoreSecret: <Enter the secret details to store in
vault>
```

Here,
ESConfiguration is the vault name. You can change the vault name through *ESConfig.ini* file from **VaultName** tag.
SP2MARCH03 is the EasySearch cabinet name, and it must be in uppercase. You can specify the cabinet name according to your working environment.