# **opentext**<sup>™</sup> | File Dynamics

# **Installation Guide**

Version 24.1

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# **Third Party Systems**

The software is designed to run in an environment containing third party elements meeting certain prerequisites. These may include operating systems, directory services, databases, and other components or technologies. See the accompanying prerequisites list for details.

The software may require a minimum version of these elements in order to function. Further, these elements may require appropriate configuration and resources such as computing, memory, storage, or bandwidth in order for the software to be able to perform in a way that meets the customer requirements. The download, installation, performance, upgrade, backup, troubleshooting, and management of these elements is the responsibility of the customer using the third party vendor's documentation and guidance.

Third party systems emulating any these elements must fully adhere to and support the appropriate APIs, standards, and protocols in order for the software to function. Support of the software in conjunction with such emulating third party elements is determined on a case-by-case basis and may change at any time.

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# **About This Guide**

This installation guide is written to provide network administrators the conceptual and procedural information for installing and configuring File Dynamics 24.1.

### Audience

This guide is intended for network administrators who manage user and collaborative network storage resources.

# 2 - Overview

If you are upgrading from File Dynamics 6.5 to File Dynamics 24.1:

- 1. Proceed with Licensing the Product (page 3).
- 2. Follow the procedures in Upgrading to File Dynamics 24.1 (page 19).

If you are installing File Dynamics 24.1:

- 1. Proceed with Licensing the Product (page 3).
- 2. Follow the procedures in <u>Configuring a SQL Server Instance (page 5)</u> to install a SQL Server instance that File Dynamics supports.
- 3. Complete the installation by following the procedures in *Installing File Dynamics 24.1* (page 21).

# 3 - Licensing the Product

This section provides an overview of license types and procedures for managing the license.

### 3.1 - License Overview

File Dynamics requires a production or evaluation license file that you obtain from OpenText.

For individuals evaluating File Dynamics, you can obtain a full-featured limited-time license of the core product.

#### 3.1.1 - License Version

File Dynamics 24.1 requires a File Dynamics 7.0 license.

# 3.2 - Updating a License

After you have installed File Dynamics, you can update your evaluation license or production license by simply replacing the old license with the new one. For more information, see *Installing or Updating the License (page 24)*.

# 3.3 - Obtaining an Evaluation License

To schedule a product demonstration or obtain an evaluation license for File Dynamics, email support@filedynamicssupport.com.

Upon receiving an evaluation license install it following the instructions at <u>Installing or</u> *Updating the License (page 24)*.

### 3.4 - Obtaining a Production License

#### 3.4.1 - Obtain the Activation Code

In order to obtain a production File Dynamics 24.1 license file, you will first need to retrieve your activation code from the OpenText software license site.



**NOTE:** For instructions on downloading and activating the software, go to <a href="https://sld.microfocus.com/mysoftware/contact/softwareContact">https://sld.microfocus.com/mysoftware/contact/softwareContact</a>. The Quick Start Guide and video links can assist with the steps needed to activate the software.

- 1. In a web browser, go to https://sld.microfocus.com/mysoftware/index.
- 2. Follow the steps required to activate File Dynamics 24.1.

#### 3 - Licensing the Product

3. Once you have the activation key, have it ready for the next steps when obtaining the license file.

#### 3.4.2 - Obtain the License File

- 1. In a web browser, go to <a href="https://filedynamicssupport.com/License">https://filedynamicssupport.com/License</a>.
- 2. Fill out the form providing the required information.
- 3. Be sure to select version **7.0** for the product version and to enter the correct *Forest Root Name* against which this product will be licensed.
- 4. For the *License Type* select **Activation**.
- 5. Enter the Licensed Seats Count.
- 6. Enter the *Activation Code* using the code you obtained from the customer center site earlier.
- 7. After submitting the form, you will receive an email.
- 8. Open the email and click **Download License File**, which will present you access to the license file.
- 9. Install the license following the instructions at <u>Installing or Updating the License (page 24)</u>.

# 4 - Configuring a SQL Server Instance

This section provides procedures for installing a Microsoft SQL Server instance with the settings needed to support File Dynamics.

SQL Server is a fully-featured database service, and as such requires installation and maintenance planning before deployment. While a complete analysis of this maintenance is beyond the scope of this product's documentation, we strongly recommend that you review Microsoft's SQL Server documentation to plan for separation of data and transaction logs, regular database backups, and transaction log and data growth.

# 4.1 - SQL Server Requirements

### 4.1.1 - Supported Versions

File Dynamics 24.1 supports the following versions of SQL Server:

- SQL Server 2022
- SQL Server 2019

### 4.1.2 - Supported Editions

The following editions of SQL Server are supported in production:

- SQL Server Express
- SQL Server Standard
- SQL Server Enterprise

We do not recommend that you install the Engine on the same server running SQL Server. If you will be using SQL Server Express, you can run it on the same server host, but you will most likely experience better performance if they are running on a separate server.

If you do not already own SQL Server, you can use SQL Server Express. You can download a current version of SQL Server Express for free at: <a href="https://www.microsoft.com/en-us/sql-server/sql-server-downloads">https://www.microsoft.com/en-us/sql-server/sql-server-downloads</a>.



**NOTE:** While SQL Server Express is sufficient in many cases, please be aware of its current limits around processing and disk capacity. Some scenarios may require more than the 10GB storage limit that this edition current supports.

#### 4.1.3 - Dedicated Instance

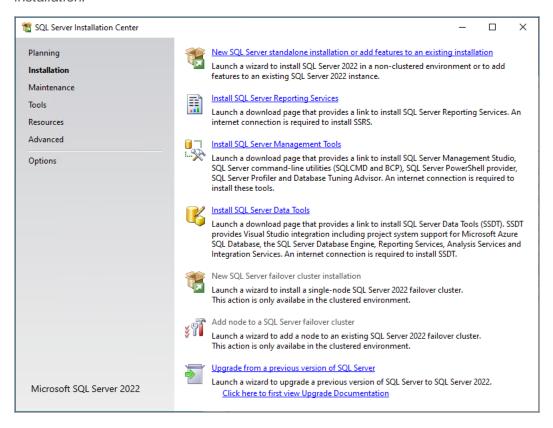
It is strongly recommended that you use configure a dedicated instance of SQL Server for File Dynamics, due to considerations with security and collation.

### 4.2 - Install a New Instance of SQL Server

The following procedures are specific to Microsoft SQL Server 2022. Procedures will vary based on your version of SQL Server.

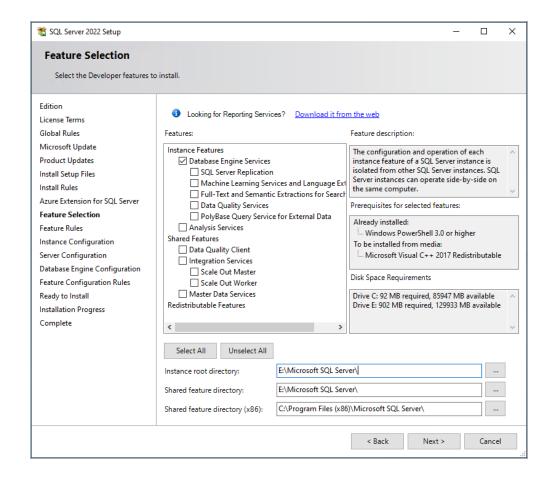
These instructions assume that you are installing a single instance of SQL Server on a Windows Server host with no Azure integration.

- 1. From the Microsoft SQL Server ISO, double-click setup.exe.
- 2. On the SQL Server Installation Center page, click Installation.
- 3. Select New SQL Server stand-alone installation or add features to an existing installation.



- 4. Complete the following forms in the The SQL Server Setup wizard:
  - Edition select the SQL Server edition, enter the product key, select the license option, then click Next.
  - b. License Terms accept the license terms and click Next.
  - c. Global Rules view the results then click Next.

- d. **Microsoft Update** click *Use Microsoft Update to check for updates* then click *Next*.
- e. Install Rules review the results then click Next.
- Azure Extension fro SQL Server uncheck Azure Extension for SQL Server then click Next.
- g. Feature Selection check Database Engine Services.



Review the installation paths then click Next.

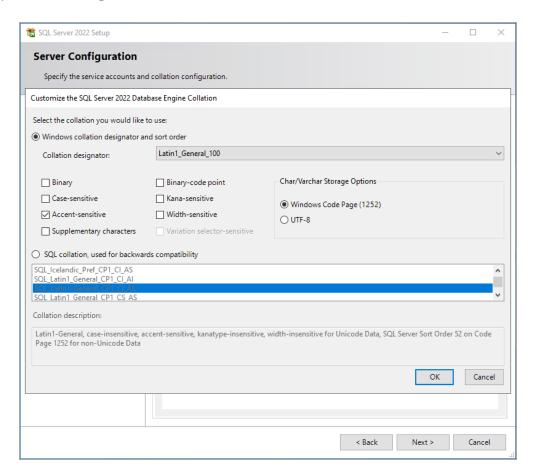


**NOTE:** For larger installations consider installing the SQL Server instance on a separate volume by changing the *Instance Root Directory* path parameter.

h. Feature Rules - review the results then click Next.

#### 4 - Configuring a SQL Server Instance

- i. **Instance Configuration** Select the appropriate instance type, modify the *Instance ID* if desired, then click *Next*.
- j. Server Configuration select the Collation tab then click Customize.



 Select Windows collation designator and sort order then select your desired collation.

If possible select a collation that aligns with the Windows Server hosting the 24.1 Engine.

If you are unsure which collation to use, select *Latin1\_General\_100* which is a safe option for File Dynamics.



**NOTE:** Select one of the \*\_100 or later collations as these offer the best compatibility for advanced options such as *Supplementary characters*.

For more information on collation and locales, refer to this Microsoft document:

https://learn.microsoft.com/en-us/sql/relational-databases/collations/collation-and-unicode-support.



**IMPORTANT:** 24.1 requires the use of a Windows collation. Legacy SQL collations are not supported.

- [Optional] Select Accent-sensitive and Supplementary characters.
- [Optional] Select options for Kana-sensitive, Width-sensitive, and Variation selector-sensitive if you understand their impact with specific Asian character sets.
- · Deselect all other options.
- Select Windows Code Page (1252) for the Char/Varchar Storage Options.



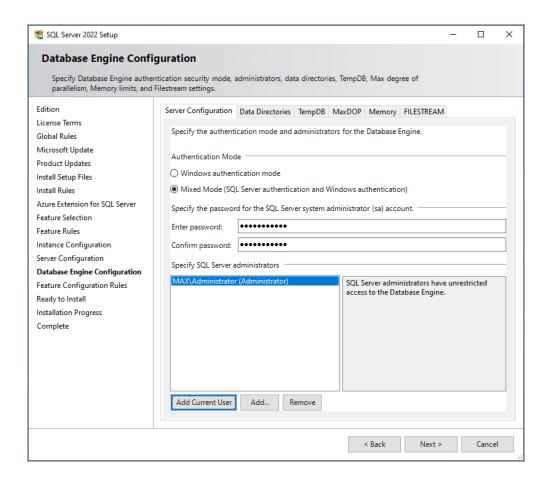
**IMPORTANT:** File Dynamics does not support the use of UTF-8 as a character storage option at this time.

Click OK to close the Collation customization dialog then click Next.

**Database Engine Configuration** - perform the following operations in this panel:

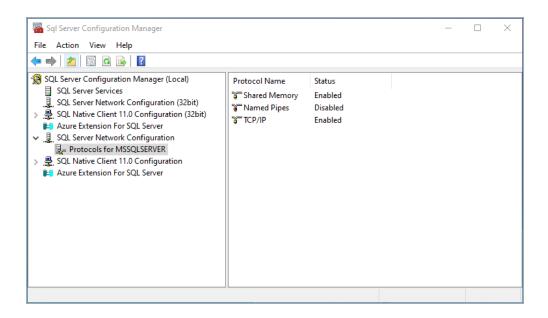
- Select Mixed Mode (SQL Server authentication and Windows authentication).
- Enter a password for the sa account in the *Enter password* and *Confirm password* fields.
- Click Add Current User to add your current account to the SQL Server administrators list.

#### 4 - Configuring a SQL Server Instance



Review your selections then Click Next.

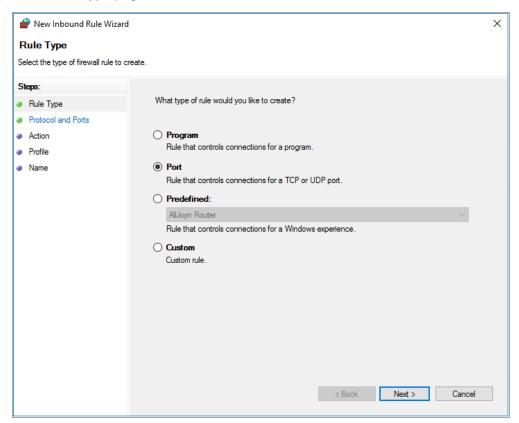
- k. Feature Configuration Roles review any messages then click Next.
- Ready to Install perform a final review of all installation options then click Install.
- m. Complete once the installation is complete click Close to exit the setup wizard.
- 5. From the Windows Start Menu launch SQL Server Configuration Manager.
  - a. In the left pane, expand SQL Server Network Configuration.
  - b. Click *Protocols for MSSQLSERVER* (or the name of the database instance you chose earlier).



- c. Right-click TCP/IP and select Properties.
- d. Click the Protocol tab.
- e. Set the Enabled field to Yes.
- f. Set the Listen All field to Yes.
- g. Click the IP Addresses tab.
- h. Under the IPAII heading at the bottom, set the TCP Port field to 1433
- i. Click OK.
- j. Close the SQL Server Configuration Manager.
- 6. Launch Windows Firewall with Advanced Security.
  - a. From the left column, click Inbound Rules.
  - b. From the Actions column, click New Rule.

#### 4 - Configuring a SQL Server Instance

c. In the Rule Type page, select Port.



- d. Click Next.
- e. In the Protocol and Ports page, enter 1433 in the *Specific local ports* field, then click *Next*.
- f. In the Action page, accept the default setting by clicking Next.
- g. In the Profile page, accept the default settings by clicking Next.
- h. In the Name page, specify a name for the new inbound rule in the *Name* field. For example, SQL Server.
- i. Click Finish.

# 4.3 - SQL Server Post Configuration

Review these points and make any needed adjustments to your SQL database settings before installing and configuring the Engine:

 The SQL Server service must be listening via TCP/IPv4 as the Engine requires it for access.

- Some editions of SQL Server do not have TCP/IP enabled by default. If there are multiple instances, the instance that you just installed and configured might not be listening on the default TCP port of 1433.
- Firewall rules may need updating.

# 5 - Installing CouchDB

Apache CouchDB is the NoSQL database that File Dynamics uses for:

- · Work Log reports
- Security Policy reporting for Notification, Lockdown and Fencing policies
- · Workload reporting

If you do not plan to initially create any of these policies, there is no need to install CouchDB. However, we recommend that you do so anyway so that your system will be ready once you decide to do so.

#### 5.1 - Recommendations

- Disk space requirements depend on a number of variables including the number of policy target paths, the number of files and folders in each target, and the frequency of policy execution.
- We recommend the CouchDB host be a multi-processor system with a minimum of 4 GB of RAM. If you host CouchDB on a server that also hosts the Engine, Event Monitor, or SQL Server, the RAM requirements are in addition to the RAM for those services.
- While CouchDB may be installed on any of its supported platforms, we only support troubleshooting of CouchDB instances installed on Windows or Linux platforms.

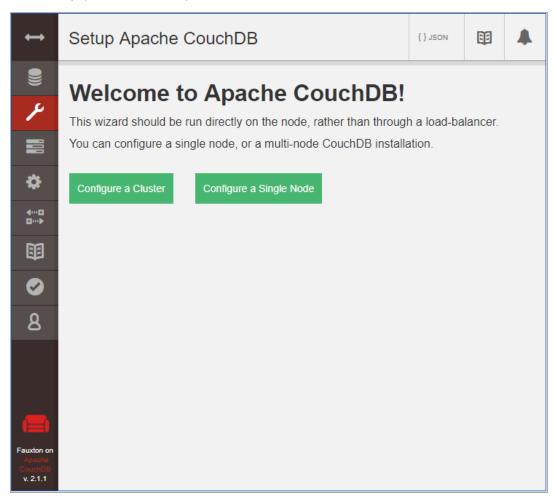
#### 5.2 - Download and Install CouchDB

The following are a minimal set of procedures for installing CouchDB.

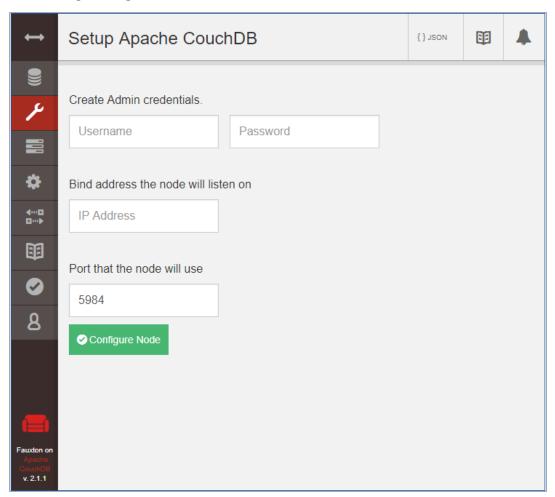
- From <a href="https://couchdb.apache.org/#download">https://couchdb.apache.org/#download</a>, download the latest version of CouchDB for the server that will host the CouchDB database.
- 2. Launch the downloaded installation file.
- 3. Follow the wizard steps to complete the installation. Installation and configuration guides can be found at <a href="https://docs.couchdb.org/en/stable/install/index.html">https://docs.couchdb.org/en/stable/install/index.html</a>.
- 4. Launch Apache CouchDB Fauxton. This launches the Apache CouchDB administrative interface in a web browser.

### 5 - Installing CouchDB

5. Click Setup (the wrench icon).



6. Click Configure Single Node.



- 7. Specify the Admin credentials entered during installation, or create a new administrator username and password.
- 8. Leave the IP address setting open or 0.0.0.0, and leave the Port setting at 5984.
- 9. Click Configure Node.

# 5.3 - Configure CouchDB Integration

Use the File Dynamics Admin Client to configure the CouchDB settings by referring to the appropriate section in the File Dynamics 24.1 Administration Guide

- For Security and Workload policies, see Establishing the CouchDB Settings in the Admin Client.
- For the Work Log, see Establishing the Work Log Database Settings in the Admin Client. Establishing the Work Log Database Settings in the Admin Client.

# 6 - Upgrading to File Dynamics 24.1

File Dynamics 24.1 supports upgrades from version 6.5 or 6.6.

To upgrade from an earlier release, first upgrade to File Dynamics 6.5, then perform the upgrade to File Dynamics 24.1.

# 6.1 - Upgrading from File Dynamics 6.x

Upgrading to File Dynamics 24.1 requires updates to all components.

Due to key changes in communication protocols and backend data structures, all components must be upgraded to 24.1 for this release.

While there is no specific order of upgrade required, we generally recommend upgrading components in the following order:

- Engine / Data Owner Client web service
- Admin Client
- Event Monitor
- File System Agent
- · Phoenix Agent

# 7 - Installing File Dynamics 24.1

This section provides procedures for installing and configuring the Engine, database, Event Monitor, Agents, and Admin Client. For information on how these components work in a File Dynamics deployment, reference the Overview in the *File Dynamics 24.1 Administration Guide*.

You should follow these procedures only after you have performed the prerequisite tasks in <u>Installation Prerequisites</u>, obtained a File Dynamics 7.0 product license as indicated in <u>Licensing the Product (page 3)</u>, and installed a SQL Server instance as specified in <u>Configuring a SQL Server Instance (page 5)</u>

This section also provides procedures for assigning rights and privileges to the Proxy Rights group that is created when you install the Admin Client.

#### 7.1 - Administrator Access

### 7.1.1 - Installing Components on Member Servers

In order to successfully configure the Engine, Event Monitor, Agents, and the Data Owner web service, you must be logged in to the member server with an Active Directory domain account that has local Administrators (BUILTIN\Administrators) membership on that server.

### 7.1.2 - Managing Active Directory Accounts

When configuring the Engine service, you will need to be logged on to the member server with an Active Directory account that has access to create or modify domain groups and a proxy user account. This is in addition to the user also having local Adminstrators group membership.

Typically, having membership in the Domain Admins group of the domain where the Engine server is installed is sufficient. In cases where this is not possible, delegated write and modify access to users and groups in a container may suffice.

# 7.1.3 - Granting Proxy Access to Resource Servers

For Windows servers hosting managed shares but will not have a File System or Phoenix Agent installed, it is necessary to setup the local Administrators membership and privileges for the proxy account. The user setting this up has the same administrator access requirements as someone configuring an agent on that server.

# 7.2 - Accessing the Product Contents

- 1. On the Windows server that will host the Engine, copy to a directory the FileDynamics-24.1.iso file that was made available to you following your purchase of File Dynamics 24.1.
- 2. Mount the FileDynamics-24.1.iso file.

- 3. Note the location of the mounted ISO.
- 4. This is the installation source you will use to install File Dynamics components.

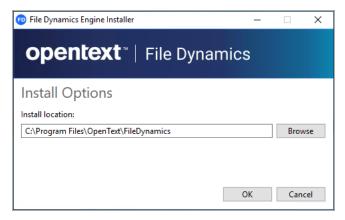
# 7.3 - Installing the Engine

File Dynamics uses only one Engine per forest. The Engine can be installed on host server that meets the following **minimum** requirements:

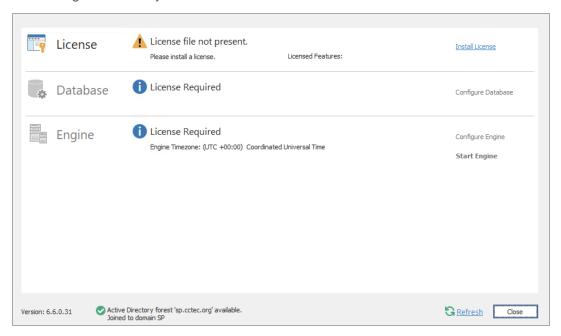
- Microsoft Windows Server 2022 (Member Server)
- Microsoft Windows Server 2019 (Member Server)
- · At least 8 GB RAM
  - · 4 GB for the Engine service
  - · 4 GB for the Data Owner web service installed with the Engine
- For quota management, Microsoft File System Resource Manager (FSRM) must be installed; see File Server Resource Manager in the File Dynamics 24.1 Administration Guide.
- Forest functional level of Windows Server 2003 or later

Other notable information about the Engine:

- The Engine runs as a service that is configured to start by using the Local System account
- The default Engine port is 3009
- · The firewall inbound rule is added during the Engine installation
- 1. At the root of the FileDynamics-24.1.iso image, double-click FileDynamics-Engine-24.1.exe.
- 2. When you are asked if you want to run this file, click Run.
- 3. Agree to the licensing terms and conditions.
- 4. (Conditional) If you want to install the Engine to a location other than the default path, click *Options*.



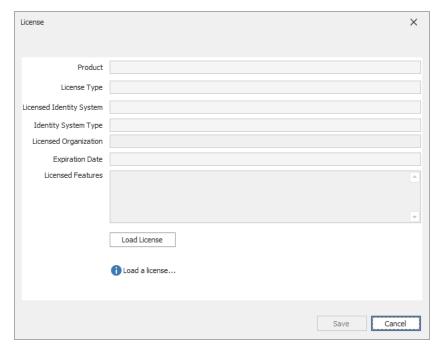
- 5. In the Install location field, specify the new path and click OK.
- 6. Click Install.
- 7. Read the overview on the initial page of the wizard and click Next.
- 8. Click Install.
- 9. Click Finish to close the wizard.
- 10. The Install Successful message indicates that the Engine and Config Utilities were installed successfully.
- 11. Click Run Configuration Utility.
- 12. The Configuration Utility is launched.



# 7.4 - Installing or Updating the License

### 7.4.1 - Installing a New License

- 1. In the Configuration Utility, click Install or Update License.
- 2. The License dialog box appears.



- 3. If no license is found, the license properties will be empty.
- 4. Click Load License, then browse to and select the license file.
- 5. When the confirmation prompt appears, click Yes.
- 6. Examine the license properties to ensure that the license is valid.
- 7. Click Close.

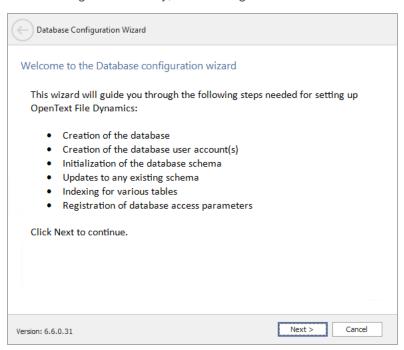
### 7.4.2 - Updating the License

After you have installed File Dynamics, you can update your evaluation license or production license by simply replacing the old license with the new one.

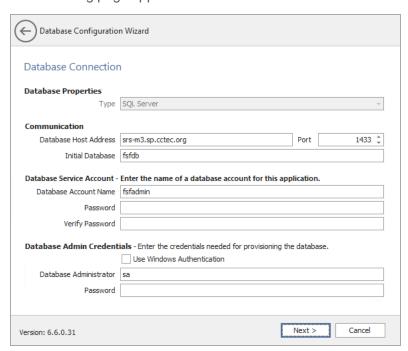
To replace an existing license simply install a new one by following the instructions in the previous section *Installing a New License (page 24)*.

# 7.5 - Configuring the Database

1. In the Configuration Utility, click Configure Database.



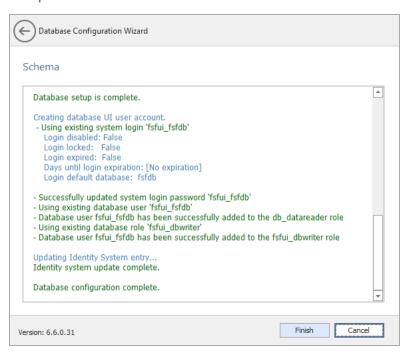
- 2. The page indicates what database configuration tasks are to be completed in this wizard.
- 3. From the wizard page, read the overview of what will be configured and click Next.
- 4. The following page appears:



#### 7 - Installing File Dynamics 24.1

- 5. This page lets you establish the settings needed for the Engine to communicate with the database.
- 6. Database Properties: Displays information on the database.
- 7. **Type:** Displays the supported database.
- 8. Communication: Specifies address, port number, and name of the database.
- 9. **Database Host Address:** Specify the host address of the server where the database is installed.
- 10. **Port:** The default SQL Server port setting is 1433. If there is a port conflict, you can change it.
- 11. Initial Database: The default name of the File Dynamics database.
- 12. **Database Service Account:** Use this region to set authentication information for the database service account, which is the database account that the Engine uses to sign in to the database.
- 13. **Database Account Name:** By default, the database account is fsfadmin, which you can change in this field.
- 14. Password: Specify a password for the service account to connect to the database.
- 15. Verify Password: Specify the password again in this field.
- Database Admin Credentials: Use this region to establish the database administrator name and credentials.
- 17. **Use Windows Authentication:** Selecting this check box specifies that you want to configure the database using the authentication credentials of a Windows network administrator, rather than the credentials of a SQL Server database administrator. Selecting this check box disables the *Database Administrator* and *Password* fields.
- 18. **Database Administrator:** Specify the SQL Server administrator name.
- 19. Password: Specify the SQL Server administrator password.

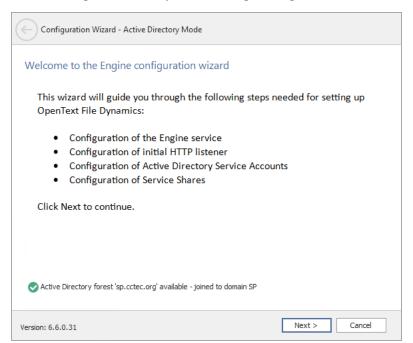
20. Complete the fields and click Next.



21. Review the configuration log and click Finish.

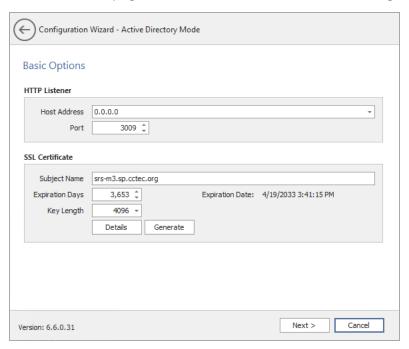
# 7.6 - Configuring the Engine

1. In the Configuration Utility, click Configure Engine.



#### 7 - Installing File Dynamics 24.1

2. From the wizard page, read the overview of what will be configured and click Next.



- 3. This page lets you confirm or change basic Engine configuration settings.
- 4. HTTP Listener: Communication parameters for the Engine.
- 5. **Host Address:** To listen to all addresses, leave the setting at 0.0.0.0. To limit listening to a specific address, enter the address here.
- 6. **Port:** The default port is 3009.
- 7. **SSL Certificate:** Details for the SSL certificate that will be generated.
- 8. **Subject Name:** The name of the certificate that will be generated. The server name is listed by default.
- 9. **Expiration Days:** The life span of the security certificate, which is set at 10 years by default.
- 10. Key Length: The SSL certificate encryption setting, which is set at 2048 by default.
- 11. **Details:** Click the button to view the certificate data.
- 12. **Generate:** If you modify any of the settings in the SSL Certificate region, click this button to generate a new certificate.

Configuration Wizard - Active Directory Mode

Active Directory Service Accounts

Proxy Account
Enter the name of a service account used by the Engine and Agents for all operations.

Proxy Rights Group
Enter the name of a service group used for rights assignments for access to server, share, and file resources. The Proxy Account will automatically be assigned as the initial member of this group.

Admins Group
The Admins Group is used to restrict access to logon and manage OpenText File Dynamics.
Note that the current logged on user SP\Administrator will be added to this group.

13. Edit any needed parameters settings and click Next.

Proxy Account SP\filedynamicsproxy

Proxy Rights Group SP\filedynamicsproxyrights

Admins Group SP\filedynamicsadmins

Accounts Container CN=Users,DC=sp,DC=cctec,DC=org

Version: 6.6.0.31

14. This page lets you establish a name for the Proxy Account, Proxy Rights, and Admins Groups.

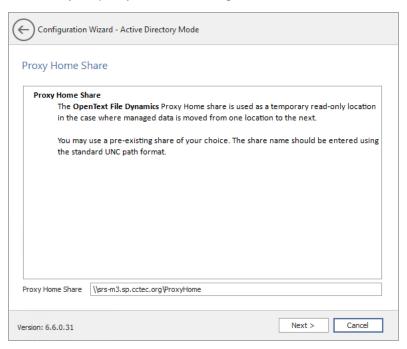
Next >

Browse

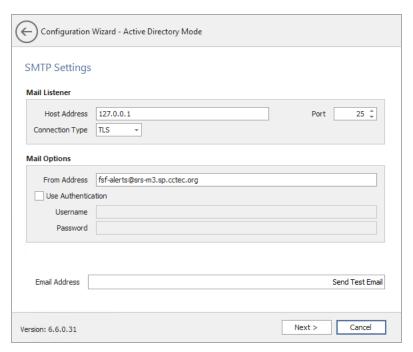
Cancel

- 15. File Dynamics uses proxy accounts so that it can perform tasks necessary for storage management.
- 16. Because you will want to create the proxy objects in an Active Directory container appropriate to your environment, you can specify the container using the *Browse* button.
- 17. In this example, the proxy objects are being created in the Service Accounts container.

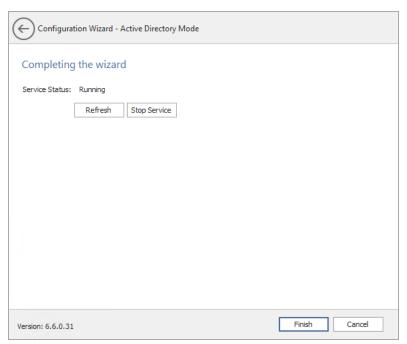
18. Establish your proxy account settings and click Next.



- 19. The Proxy Home Share that you establish in this page is the read-only location where users' managed path attributes are temporarily set when data is moved because of a change in policy.
- 20. Click Next.



- 21. Target-Driven security policies allow for email notifications to be sent to designated recipients. These notifications are sent to your email server to be relayed.
- 22. Completing fields in this page is optional.
- 23. **Mail Listener:** These fields specify information pertaining to the mail server that is sending alerts.
- 24. Host Address: Specify the IP address or DNS name of the mail server.
- 25. Port: Specify the port number for the mail server.
- Connection Type: From the drown-down menu, select the encryption type used by your mail server.
- 27. Mail Options: These fields specify additional mail information.
- 28. From Address: This field specifies the default address where the alerts come from.
- 29. **Use Authentication:** In most cases, SMTP will require authentication. Selecting this check box activates the *Username* and *Password* fields where you can enter the credentials for authenticating to the SMTP server.
- 30. Email Address: Specify an email address for a test alert.
- 31. **Send Test Email:** Click this button to send a test email to the recipient specified in the Email Address field.
- 32. Establish your SMTP settings and click Next.



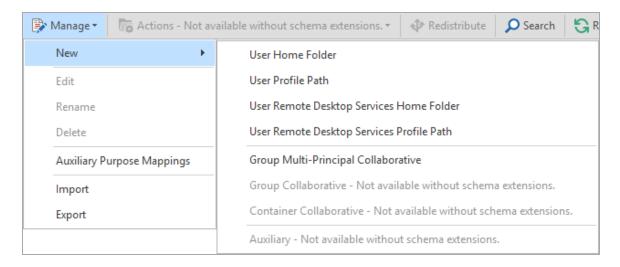
33. Click Finish.

### 7.7 - Active Directory Schema

The Microsoft Active Directory schema contains formal definitions of every object class that can be created in an Active Directory forest. The schema also contains formal definitions of every attribute that can exist in an Active Directory object.

To enable collaborative storage or auxiliary storage management, File Dynamics extends the Active Directory schema to enable File Dynamics attributes. These attributes are specified in Active Directory Schema Extensions in the *File Dynamics 24.1 Administration Guide*.

The dimmed options in the menu in the graphic below display which policy types require that the Active Directory schema be extended.



For example, User Home Folder policies do not require an Active Directory schema extension; Group Collaborative policies do.

### 7.7.1 - Extending the Active Directory Schema

- 1. Log in to the forest or domain as a user with Schema administration privileges.
- 2. You can do this by being a member of the Schema Admins group.
- 3. From the Start menu, select File Dynamics > File Dynamics Schema Utility.

4. When you are asked if you want to run this file, click *Run*.

```
Starting fsfschematool version 6.6.0.31
Attempting to resolve current Domain...
Accessing current schema for AD Forest 'fsf.test.lab'
Obtained handle to schema

Current Forest Mode Level = 7
Current Forest Level 'Windows2016Forest' is good.

Checking for File Management attribute schema extensions...
-> ccx-FSFAuxiliaryStorage : does not exist
-> ccx-FSFManagedPath : does not exist

Checking for existing File Management class schema extensions...
-> ccx-FSFManagedAttributes : does not exist

One or more schema definitions need extending.

Perform File Management schema extensions? [Y/N]:
```

5. Type Y to extend the schema.

```
Starting fsfschematool version 6.6.0.31
Attempting to resolve current Domain...
Accessing current schema for AD Forest 'fsf.test.lab'
Obtained handle to schema
Current Forest Mode Level = 7
Current Forest Level 'Windows2016Forest' is good.
Checking for File Management attribute schema extensions...
-> ccx-FSFAuxiliaryStorage : does not exist
-> ccx-FSFManagedPath : does not exist
Checking for existing File Management class schema extensions...
-> ccx-FSFManagedAttributes : does not exist
One or more schema definitions need extending.
Perform File Management schema extensions? [Y/N]: y
Extending any missing File Management schema...
Successfully added attribute 'ccx-FSFAuxiliaryStorage
Successfully added attribute 'ccx-FSFManagedPath
Successfully added class 'ccx-FSFManagedAttributes'
Setting Attribute Security GUID to: cd55682f-3987-446d-a18e-cfd8d53b95f2
Setting Attribute Security GUID to: cd55682f-3987-446d-a18e-cfd8d53b95f2
All File Management schema successfully extended!
Refreshing schema cache...
Press any key to exit
```

### 7.8 - Granting Access to Managed Storage

For details on the permissions, privileges and group memberships required for management of file shares, see Proxy Rights Group Permissions in the *File Dynamics Administration Guide*.

### 7.9 - Installing the Event Monitor

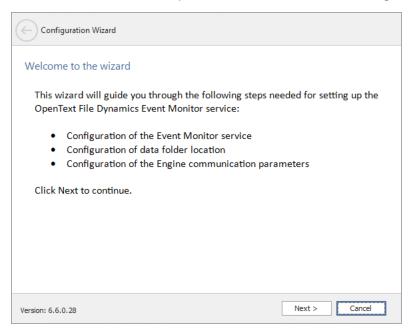
The Event Monitor can be installed on a Windows Server machine that meets the following minimum requirements:

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019 (Member Server)
- · At least 4 GB RAM, more maybe required for larger environments
- · At least 4 processor cores, more maybe required for larger environments
- Forest functional level 2003 or later in native mode

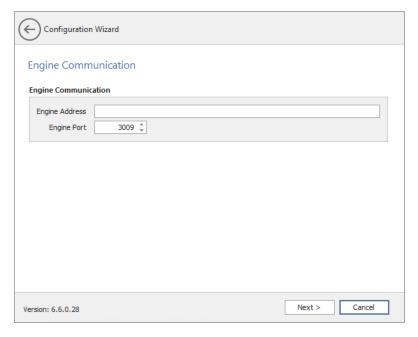
Other notable information about the Event Monitor:

- There is only one Event Monitor per domain
- The Event Monitor runs as a service that is configured to start by using the Local System account
- The Event Monitor must be permitted to make outbound connections through the firewall
- 1. On the Windows server that will host the Event Monitor, copy to a directory the FileDynamics-24.1.iso.
- 2. Mount the FileDynamics-24.1.iso file.
- 3. At the root of the FileDynamics-24.1.iso image, double-click FileDynamics-Event-24.1-xx.exe.
- 4. When you are asked if you want to run this file, click Run.
- 5. Agree to the licensing terms and conditions and click *Install*.

6. When notified that the setup was successful, click Run Configuration Utility.

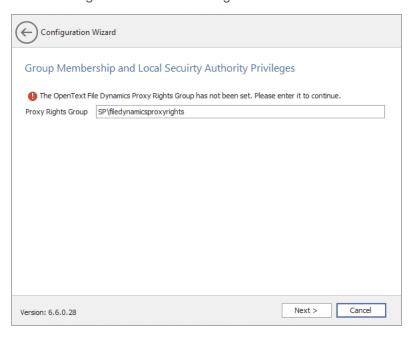


7. From the wizard page, read the overview of the setup steps and click *Next*.

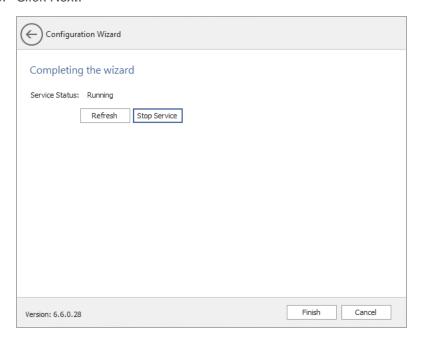


- 8. This page lets you set parameters for the Event Monitor to communicate with the Engine.
- 9. **Engine Address:** Specify the DNS name or IP address to the server hosting the Engine here
- 10. Engine SSL Port: Specify the SSL port for the Engine here.

11. Enter the Engine connection settings and click Next.



- 12. (Conditional) If you chose a name that was not the default name for the Proxy Rights group, enter the name in the *Proxy Rights Group* field.
- 13. Click Next.



- 14. Click Finish.
- 15. The Event Monitor is now installed and running. You must still authorize it using the Admin Client. For procedures, see *Authorizing the Event Monitor (page 45)*.

## 7.10 - Installing File System Agents

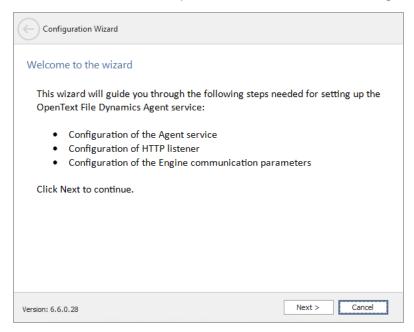
A File System Agent can be installed on a Windows Server machine that meets the following minimum requirements:

- Microsoft Windows Server 2022 (Member Server)
- Microsoft Windows Server 2019 (Member Server)
- Microsoft Windows Server 2016 (Member Server)
- · At least 4 GB RAM
- For quota management, Microsoft File System Resource Manager (FSRM) must be installed
- See File Server Resource Manager in the File Dynamics 24.1 Administration Guide.

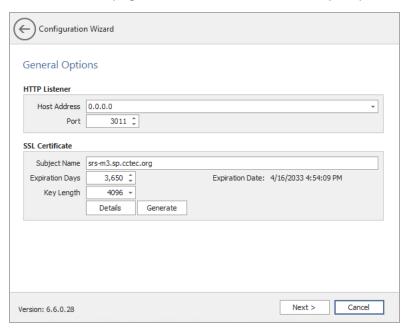
Other notable information about File System Agents:

- A File System Agent runs as a service that is configured to start by using the Local System account
- The default File System Agent port is 3011
- A firewall inbound rule for the File System Agent is created during the installation
- 1. On the Windows server that will host the File System Agent, copy to a directory the FileDynamics-24.1.iso.
- 2. Mount the FileDynamics-24.1.iso file.
- 3. At the root of the FileDynamics-24.1.iso image, double-click FileDynamics-Agent-24.1-xx.exe.
- 4. When you are asked if you want to run this file, click Run.
- 5. Agree to the licensing terms and conditions and click *Install*.

6. When notified that the setup was successful, click Run Configuration Utility.

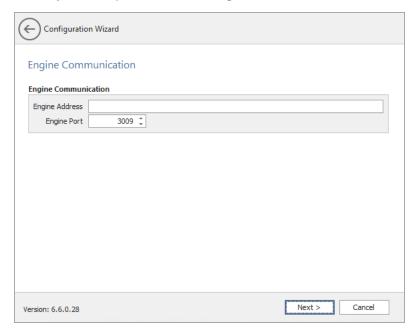


7. From the wizard page, read the overview of the setup steps and click Next.



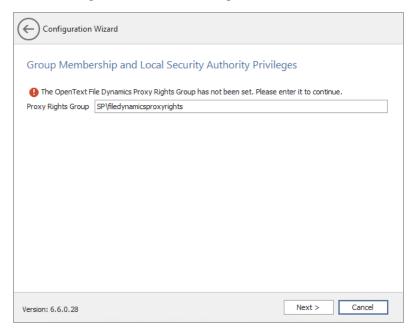
- 8. This page lets you confirm or change basic File System Agent configuration settings.
- 9. HTTP Listener: Communication parameters for the File System Agent.
- 10. **Host Address:** To listen to all addresses, leave the setting at 0.0.0.0. To limit listening to a specific address, enter the address here.
- 11. **Port:** The default port is 3011.

- 12. **SSL Certificate:** Details for an SSL certificate that will be generated.
- 13. **Subject Name:** The name of the certificate that will be generated. The server name is listed by default.
- 14. **Expiration Days:** The life span of the security certificate, which is set at 10 years by default.
- 15. **Key Length:** The SSL certificate encryption setting, which is set at 2048 by default.
- 16. **Details:** Click the button to view the certificate data.
- 17. **Generate:** If you modify any of the settings in the SSL Certificate region, click this button to generate a new certificate.
- 18. Edit any needed parameters settings and click Next.

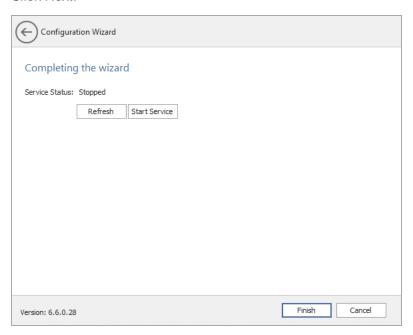


- 19. This page lets you set parameters for the File System Agent to communicate with the Engine.
- 20. **Engine Address:** Specify the DNS name or IP address to the server hosting the Engine here.
- 21. Engine SSL Port: Specify the SSL port for the Engine here.

22. Enter the Engine connection settings and click Next.



- 23. (Conditional) If you chose a name that was not the default name for the File Dynamics Proxy Rights group, enter the name in the *Proxy Rights Group* field.
- 24. Click Next.



25. Click Finish.

26. The File System Agent is now installed, configured, and running. You must still authorize it using the Admin Client. For procedures, see <u>Authorizing the Agents (page 46)</u>.

### 7.11 - Installing Phoenix Agents

Phoenix Agents execute the jobs related to Security Policy scans and enforcement as well as Workload execution. A Phoenix Agent must be either deployed on or associated to (via proxy assignment) each server or NAS device where protected high-value targets are located on the network.

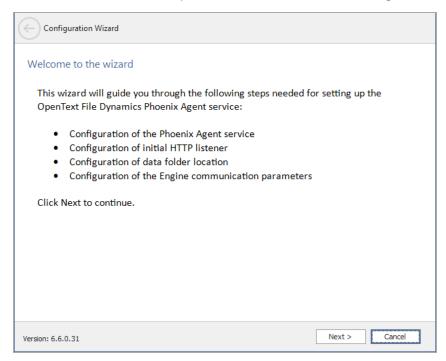
A Phoenix Agent can be installed on a Windows Server machine that meets the following minimum requirements:

- Microsoft Windows Server 2022 (Member Server)
- Microsoft Windows Server 2019 (Member Server)
- Microsoft Windows Server 2016 (Member Server)
- · At least 4 GB RAM

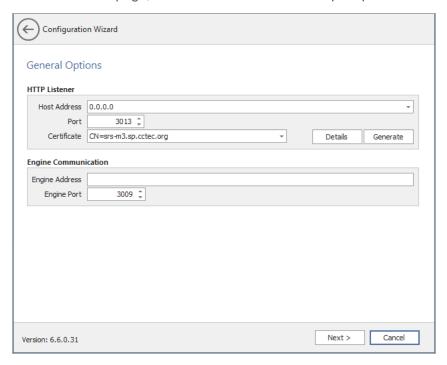
Other notable information about Phoenix Agents:

- A Phoenix Agent runs as a service that is configured to start by using the Local System account
- The default Phoenix Agent port is 3013
- A firewall inbound rule for the Phoenix Agent is created during the installation
- 1. On the Windows server that will host the Phoenix Agent, copy to a directory the FileDynamics-24.1.iso.
- 2. Mount the FileDynamics-24.1.iso file.
- 3. At the root of the FileDynamics-24.1.iso image, double-click FileDynamics-PhoenixAgent-24.1-xx.exe.
- 4. When you are asked if you want to run this file, click *Run*.
- 5. Agree to the licensing terms and conditions and click *Install*.

6. When notified that the setup was successful, click Run Configuration Utility.

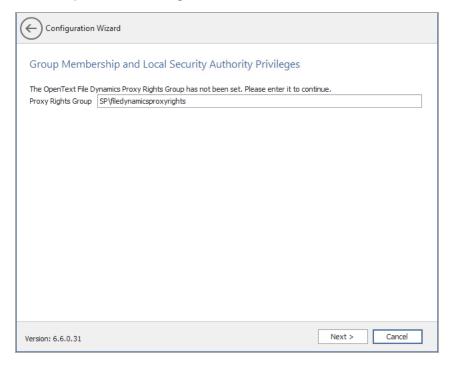


7. From the wizard page, read the overview of the setup steps and click Next.



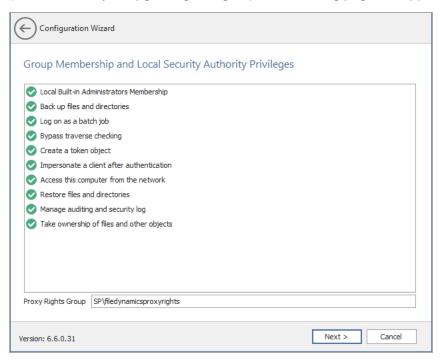
- 8. This page lets you confirm or change basic Phoenix Agent configuration settings.
- 9. HTTP Listener: Communication parameters for the Phoenix Agent.

- 10. **Host Address:** To listen to all addresses, leave the setting at 0.0.0.0. To limit listening to a specific address, enter the address here.
- 11. Port: The default port is 3013.
- 12. **Certificate:** Details for an SSL certificate that will be generated.
- 13. Details: Click the button to view the certificate data.
- 14. **Generate:** If you modify any of the settings in the SSL Certificate region, click this button to generate a new certificate.
- 15. Engine Communication: Communication information for the Engine host.
- 16. **Engine Address:** Specify the DNS name or IP address to the server hosting the Engine here.
- 17. Engine Port: Specify the SSL port for the Engine here.
- 18. Enter the parameter settings and click Next.

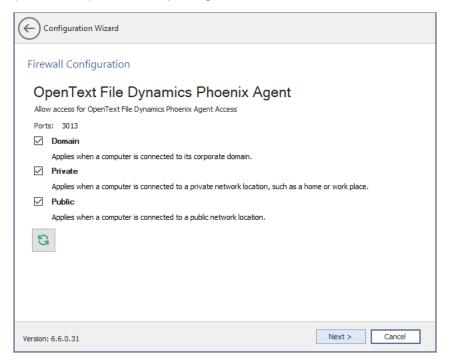


- 19. (Conditional) If you chose a name that was not the default name for the Proxy Rights group, enter the name in the *Proxy Rights Group* field.
- 20. Click Next.

21. (Conditional) If permissions for the Proxy Rights group have already been established (such as when you upgrading an Agent), the following page will appear:



22. (Conditional) Review the privileges and click Next.

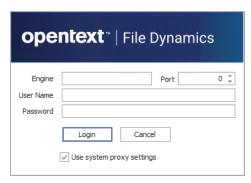


- 23. Set the network profiles according to your organization's security policies and click *Next*.
- 24. The wizard indicates that the Phoenix Agent service is running.
- 25. Click Finish.

### 7.12 - Installing the Admin Client

The Admin Client is the administrative interface for File Dynamics. It can be installed on any Windows platform where .NET 7.0 can run.

- 1. On the Windows server or workstation where you will run the Admin Client, copy to a directory the FileDynamics-24.1.iso.
- 2. Mount the FileDynamics-24.1.iso file.
- 3. At the root of the FileDynamics-24.1.iso image, double-click FileDynamics-Admin-24.1-xx.exe.
- 4. When you are asked if you want to run this file, click Run.
- 5. Agree to the licensing terms and conditions and click *Install*.
- 6. When notified that the setup was successful, click Run Admin Client.
- 7. The Admin Client login dialog box appears.



- 8. In the Engine field, specify the DNS name or IP address.
- 9. In the Port field, specify the secure port number.
- 10. The default setting is 3009.
- 11. Specify the username and password.
- 12. The user must be a member of the File Dynamics Admins group to be able to log in.
- 13. Click Login.

### 7.13 - Authorizing the Event Monitor

- 1. In the Admin Client, click the Home tab.
- 2. Click Event Monitors.
- 3. Select the listed domain.

- 4. Click Authorize.
- 5. When you are asked if you want to authorize the selected event monitor, click Yes.
- 6. When the Results page appears, click Close.

### 7.14 - Authorizing the Agents

- 1. In the Admin Client, click the Home tab.
- 2. Click Agents.
- 3. Select a listed server.
- 4. Click Authorize.
- 5. When you are asked if you want to authorize the selected event monitor, click Yes.
- 6. When the Results page appears, click Close.
- 7. Repeat Steps 3-6 for all File System Agents and Phoenix Agents.

### 7.15 - Configuring Storage Resources

Before File Dynamics can manage and report on your network storage, you must first configure your storage resources and in the process, specify what servers to include for scoping and those to ignore.

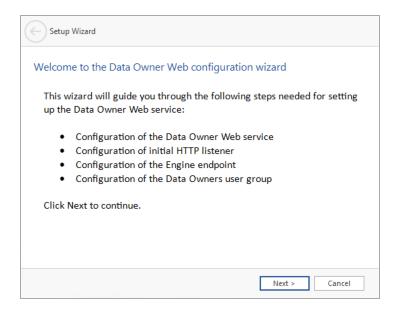
- 1. In the Admin Client, click the Home tab.
- 2. Click Storage Resources.
- 3. In the *Scope* region, browse to locate the containers or servers you want included and drag them to the *Include* frame.
- 4. If you do not specify the containers or servers to include, File Dynamics will process all of the servers on your network, which can affect the ability of File Dynamics to perform management and reporting tasks.
- 5. (Optional) From the *Include* frame, right click a server and select *Share* to view information on the shares of that server.
- 6. Click Save.
- 7. When asked if you want to start the update of the storage resources, click Yes.

### 7.16 - Configuring the Data Owner Web Service

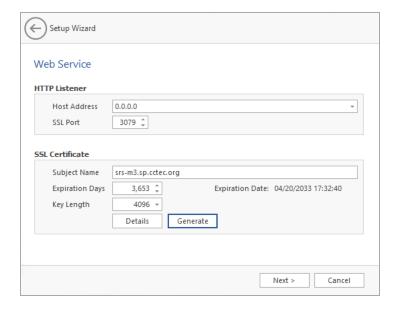
When installing File Dynamics the Data Owner web service is installed as part of the Engine package.

The following section provides procedures for configuring the Data Owner web service.

 Launch the configuration utility from the Windows start menu: Start > File Dynamics > File Dynamics Data Owner Web Config.



#### 2. Click Next.



3. Set any needed parameters for the HTTP Listener.

**Host Address**: Select an IP address the service will use. To listen on all available IP addresses, select the default *0.0.0.0* entry.

**SSL Port**: Use the default port 3079 or enter a different one for the web service.

4. Use the default self-signed certificate or click **Generate** after updating the fields:

Subject Name: DNS name used when accessing the service.

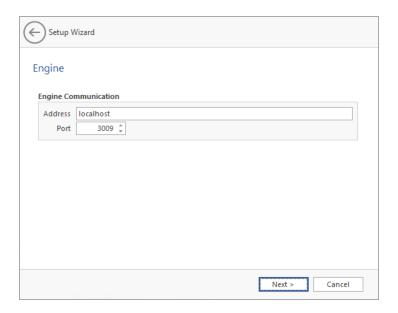
Expiration Days: number of days the certificate will be valid

**Key Length**: specifies the key length for the encryption key



**NOTE:** While a default self-signed certificate is created, we strongly recommend using a proper certificate issued by a trusted Certificate Authority. See *Replacing the Self-Signed Certificate (page 50)* for details on performing this task.

5. Click Next.

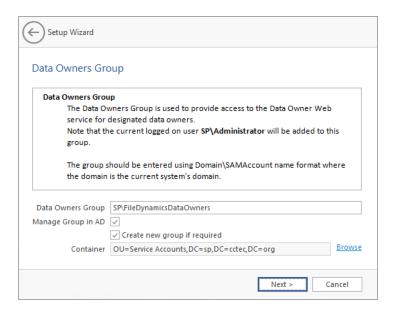


6. Enter the parameters for communicating with the Engine service.

**Address**: Enter the DNS name or IP address where the Engine service is listening. If the Data Owner web service is on the same server, localhost may be used here.

**Port**: Enter the port the Engine service listens on. By default this is 3009.

7. Click Next.



8. Specify the Data Owners group that provides basic access to the web service.

Designated Data Owners must be a member of this group in order to use the Data

Owner web service.

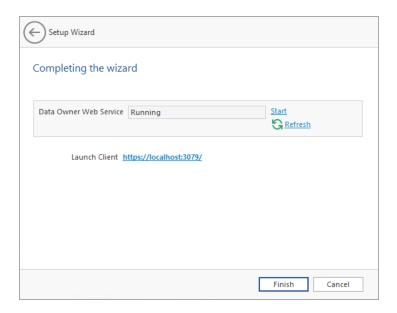
**Data Owners Group**: Enter the name of the group to use or create in Domain\Account name format.

**Manage Group in AD**: select this to update an existing group or create a new one. If this is selected, the current user will be added as a member to the group.

**Create new group if required**: select this to create the group if it does not already exist.

**Container**: click **Browse** to navigate and select the container in Active Directory where a new group if created will be placed.

9. Click Next.



10. The Data Owner web service should now start.

Click Start if the web service is not yet started.

- (Optional) Click the Launch Client URL to open a brower and access the Data Owner web interface.
- 12. Click **Finish** to complete the configuration.

### 7.16.1 - Replacing the Self-Signed Certificate

#### Overview

The self-signed certificate generated during initial configuration provides a quick means for initial administrator setup. Once setup is complete and any DNS names have been appropriately assigned, we recommend replacing the self-signed certificate with a certificated signed by a trusted authority. Using a certificate issued from a trusted Certificate Authority (CA) reduces end-user confusion when accessing a web site with an otherwise untrusted certificate.

Any SSL/TLS certificate issued from a commercial vendor or an organizational CA is sufficient.

#### **Certificate Requirements**

The certificate must be in **PEM** format and should include both the certificate and the private key. Depending on the format of the certificate you acquire, conversion from other formats such **PKCS#12** or **PFX** may be required. Online examples and help for certificate conversion include:

- https://knowledge.digicert.com/solution/SO26449.html
- https://www.ssl.com/how-to/export-certificates-private-key-from-pkcs12-file-withopenssl/
- General search: https://www.google.com/search?q=convert+certificate+pkcs12+to+pem

An example using the **openssl** command line tool to convert a certificate from PFX to PEM format is shown here:

openssl pkcs12 -in my-certificate.pfx -out my-certificate.pem - nodes



**NOTE:** The *-nodes* parameter is required here as the resulting PEM file cannot be password protected.

#### **Updating the Certificate**

Once you have a valid PEM file including the certificate and private key that is not password protected, replace the **server.pem** file found on the server hosting the Data Owner web service here:

%PROGRAMDATA%\
OpenText\FileDynamics\DataOwnerWeb\config\server.pem

Typically this is located at:

C:\ProgramData\
OpenText\FileDynamics\DataOwnerWeb\config\server.pem

- 1. Using the Windows services manager, stop the **fsfdataownerweb** service.
- 2. Replace the **server.pem** file with the updated certificate file, keeping the same name.
- 3. Restart the **fsfdataownerweb** service.

# 8 - Administering File Dynamics

You have now completed the installation of File Dynamics. For administration procedures, refer to the *File Dynamics 24.1 Administration Guide*.