Kofax eFlow
Installation Guide

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KOFAX

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Preface

This guide includes information you need to successfully install and configure the Kofax eFlow Platform and OCR engines. The eFlow Platform full installation consists of separate installation modules, such as eFlow Platform, Web Front, Web Validate, Web Scan, Fuzzy Service and OCR engines.

If you download the eFlow product package from the Kofax Fulfillment Site, you can extract the files required to perform a full installation.

Product documentation

To access the full Kofax eFlow documentation set online, see the Kofax eFlow Product Documentation page. If the security policy for your organization restricts Internet access, you can access the Kofax eFlow documentation offline. See Offline mode.

Full documentation set

The complete set of Kofax eFlow documentation is included in the following table.

Document	Description
Administrate User's Guide	Details information about how to create en eFlow application, manage eFlow licenses, applications, autorun stations, and generate statistics.
Analyze Recognition User's Guide	Details how to prepare, open analyze recognition, setup, analysis, save, load, remove and compare analysis results.
Client Installation Guide	Provides instructions for installing the Kofax eFlow platform on a client machine and testing the connection from the client machine to the server machine.
Collect User's Guide	Describes the collect station, how to import a collection in the eFlow system, configuration of collections, image enhancement, and optimizing performance.
Configuration Guide	Details information including how to configure eFlow for specific requirements, security mechanisms, recognition, and troubleshooting of common eFlow configuration issues.
Control User's Guide	Describes how to monitor collections through different views and tables, show collections' status at different stations, work with collections, and configure control.
Deliver2ERP User's Guide	Explains Deliver2ERP, and how to import and export a configuration, including the one for SAP. General settings are also described.

Document	Description
Design Free User's Guide	Provides information on how to get started; explains the components of the Design free desktop, global settings, databases, group, fields, tables, and set confidence level.
Design Smart User's Guide	Describes the components of Design Smart desktop; how to create a classification model, analyze classification results, tune a smart model, and the configuration parameters.
Design User's Guide	Explains how to use the eFlow Design module to create, set up, configure, customize, and edit applications for the Kofax system.
Installation Guide	Provides instructions for installing the Kofax eFlow platform in both a standalone and client/server environment. Instructions for Web station installation and OCR installation are also included in this guide.
Layout Designer User's Guide	Details the Layout Designer desktop components and explains how to work with layouts and add controls to layouts. Also describes common scenarios, templates, and themes.
Organize User's Guide	Details the components of the Organize desktop; also describes how to arrange pages and forms, and work with collections, forms, and pages.
Scan User's Guide	Describes scanner configuration and operation, along with image enhancements and filters.
Supervise User's Guide	Provides information about supervise settings, SLA management, different views that a supervisor can use, and tutorials about managing system performance.
Release Notes	Details the list of newly added features, resolved issues, known issues, and changes made since the previous release.
Technical Specifications	Describes the prerequisites including hardware, software, and third-party technologies to ensure proper functionality of the Kofax eFlow application.
Validate User's Guide	Describes how to work with a validate station that includes how to select different layouts, editing modes, and navigation shortcuts organizing a form.
Web Scan User's Guide	Describes how to log in to a Web Scan station using a web browser, scanner settings, basic scanning procedures, and advanced scan commands.
Web Stations Installation Guide	Describes eFlow Web stations and how to install them, along with configuration, customization, and troubleshooting information.
Web Validate User's Guide	Describes how to log in to a Web Validate station using a web browser, navigation, and how to work with collections, tables, and lookup tables.

Offline mode

To make the documentation available for use in offline mode, obtain the documentation files from the Kofax eFlow product package that you downloaded from the Kofax Fulfillment Site. The file you need is KofaxeFlowDocumentation_6.1.0_EN.zip.

1. Extract the contents of KofaxeFlowDocumentation_6.1.0_EN.zip to a folder on your computer.

2. Copy the folder to a location that is accessible while you are working with Kofax eFlow.

Getting help with Kofax products

The Kofax Knowledge Portal repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Kofax Knowledge Portal, go to https://knowledge.kofax.com.

> ℹ The Kofax Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Kofax Knowledge Portal provides:
- Powerful search capabilities to help you quickly locate the information you need.

  Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.

  To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:
- Access the Kofax Community (for all customers).

  On the Resources menu, click the **Community** link.
- Access the Kofax Customer Portal (for eligible customers).

  Go to the Support Portal Information page and click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).

  Go to the Support Portal Information page and click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.

  Go to the Support Details page and select the appropriate article.

Training

Kofax offers both classroom and online training to help you make the most of your product. To learn more about training courses and schedules, visit the Kofax Education Portal on the Kofax website.

Chapter 1

eFlow installation

This step-by-step guide provides detailed instructions for installing eFlow.

Before you start installation, refer to the *Kofax eFlow Technical Specifications* carefully to ensure that all requirements are met.

If you experience any problems with the installation, refer to the "Troubleshooting" section in the *Kofax eFlow Configuration Guide*.

> ⛔ For local installations, you must run Setup as an Administrator. If you install eFlow from a remote share, you must use a domain account that has read and execute permissions on the remote share.

Configure antivirus software

We recommend that you exclude the following eFlow folders from the antivirus scan:

eFlow server side installation folders
- `C:\inetpub\wwwroot\Tis Web Site`
- `C:\inetpub\wwwroot\WebFrontOffice`
- `C:\inetpub\wwwroot\WebValidate`
- `C:\inetpub\wwwroot\WebScan`

eFlow client installation folder
- `C:\Program Files (x86)\TIS\eFlow 6`

eFlow data folder
- `C:\ProgramData\TIS\eFlow 6\AppData`

Before the installation

Kofax eFlow 6.1.0 requires a fresh installation. If you have a previous version of Kofax eFlow, do the following before you install Kofax eFlow 6.1.0.

Remove existing items

Make sure the following existing items are removed, uninstalled or deleted.

- **Remove programs (server and client):**
  - eFlow platform
  - OCR engines
  - WebValidate/WebScan/WebFrontOffice
  - Fuzzy Service

- **IIS (Server):**
  - TIS Website
  - WebValidate
  - WebScan
  - WebFrontOffice

- **Databases (SQL server):**
  - eFlow Management database
  - eFlow Monitor database

- **Physical deletion (Server and Client):**
  - TIS and OCR folders
  - TIS AppData folder

Back up existing data

1. **Back up important data:**
   - **Databases:**
     - eFlow Management database
     - Application workflow databases

   - **Configuration files:**
     - Server and client side \ConfigSources folders
     - All eFlow Web.config files

2. Back up your application CAB.

Download the Kofax eFlow installation package

You can download the eFlow installation package from Kofax Fulfillment Site.

1. Download and unzip the eFlow Platform Installation.
2. To run Web stations, download and unzip the relevant Web station installations.

> ℹ️ It is necessary to unblock cookies in Google on machines running Web Validate, Web Scan or Web Front Office servers.

3. To use the Fuzzy Server, download and unzip the relevant installation.
4. Download and unzip the OCR Engines Installation.

Run the eFlow installation launcher

1. Open the eFlow Installation Launcher.
2. Select the eFlow features you are planning to install on your computer.

    This step is required to decide what prerequisites need to be checked on your computer.
3. Check whether the eFlow software prerequisites are installed properly.

    You can install the prerequisites without leaving the eFlow Installation Launcher.
4. Check that the MS SQL server is valid and accessible.

    This step is only required for server or standalone installations. Skip this step when upgrading an existing installation or using the local SQL server.

Start the eFlow installation

> ⛔ The eFlow full installation consists of separate installation modules. If you select to install several modules on the same machine (for example, the server and one of the Web stations), you must install them one after another. It is not possible to run two installations simultaneously.

eFlow Platform installation

First install the eFlow server and then continue with the installation on client machines.

Decide which client sub-features you want to install on each client machine.

The Automatic Stations Starter feature should always be selected on machines running automatic stations. It installs the service required for running these stations in automatic mode.

Install the eFlow platform and then proceed with the OCR engines installation.

Web Validate server

Install the Web Validate server either on the eFlow server machine or separately, like any other client.

Once the Web Validate server is installed, the Web Validate clients can access it using a web browser.

Web Scan server

Install the Web Scan server either on the eFlow server machine or separately, like any other client.

Once the Web Scan server is installed, the Web Scan clients can access it using a web browser.

Web Front Office server

Install the Web Front Office server either on the eFlow server machine or separately, like any other client.

Once the Web Front Office server is installed, the Web Front Office clients can access it using a web browser.

Fuzzy Service

Install the Fuzzy Service either on the eFlow server machine or separately, like any other client.

Once the Fuzzy Service is installed, the eFlow clients can access the web service that implements the Fuzzy algorithm.

eFlow OCR engines

We recommend installing the OCR engines only after the eFlow platform has been installed. This will ensure that all registry values and configuration paths are set properly.

> ⓘ You can also install any eFlow module from the command prompt. See Command prompt setup for details.

eFlow Installation Launcher

The eFlow Installation Launcher helps to avoid installation errors. It clearly defines the installation steps and checks the eFlow software prerequisites configuration before initiating the platform installation. You can install missing prerequisites directly from the Launcher.

> ⛔ The user performing the eFlow installation should have the local administrator rights and should be present in the SQL server logins with the system administrator rights.
>
> Refer to the "Under the hood: Installation" section in the *Kofax eFlow Configuration Guide* for details about the actions performed during the eFlow installation.

To open the Installation Launcher, perform the following steps.

1. In the eFlow installation folder, open the Installation Launcher folder.
2. Right-click the eFlow Launcher.exe and select **Run as administrator**.
   Navigate between the Launcher tabs to proceed with the installation.

Prerequisites tab

1. Select one or more modules to install. The eFlow prerequisites validation is based on this selection.
   - **Server:** To install an eFlow server.
   - **Client:** To install an eFlow client.
   - **Web Server:** To install Web Front Office, Web Validate, Web Scan or Fuzzy Service.
2. Click **Validate** to start the prerequisites check.
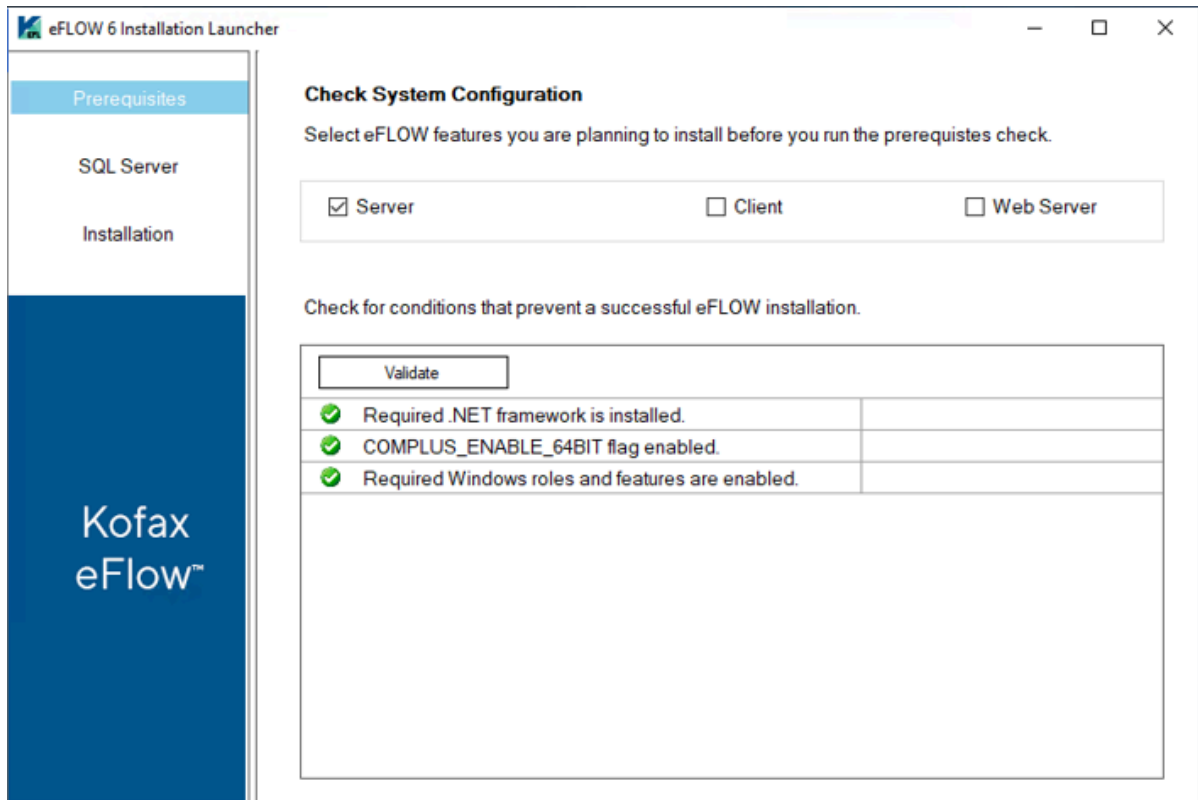
.NET framework validation

The full .NET 4.7.2 framework is required to run eFlow modules. This validation fails if the full .NET Framework 4.7.2 installation is missing.

COMPLUS_ENABLE_64BIT validation

A 64-bit machine is expected to be working in 64-bit mode. This validation checks if the **COMPLUS_ENABLE_64BIT** flag is set.

If the installation fails, perform the following steps.

1. Click **SetWOW 64-Bit flag** in the Launcher to configure the **COMPLUS_ENABLE_64BIT** flag.
2. From the Command Prompt run:
   ```
   C:\WINDOWS\Microsoft.NET\Framework64\v2.0.50727\Ldr64.exe Set64
   ```

> ℹ Repeat the validation after installing the missing prerequisites.

Required Windows roles and features

This validation fails if some of the Windows roles and features required by eFlow are not enabled.

If the installation fails:
1. Click **Enable Windows Features** in the Launcher.
   This launches the batch file that enables the required features.
2. Run the relevant batch file directly from the eFlow Launcher folder.
3. Turn on the required roles and features from the Control Panel.

SQL Server tab

The **SQL Server** tab is enabled only if eFlow server is selected for installation.

The **SQL Server** tab is used for testing purposes only. Unlike the actual eFlow installation, it does not save any configuration parameters. You may decide to skip this test when reinstalling eFlow or connecting a single instance of the local SQL server.

If the **Remote SQL server** check box is selected, the Server name list displays all the available remote SQL servers. If this check box is clear, only the local SQL server instances are listed.

To test the SQL server connection:
1. In the **Server name** list, select the server on which eFlow will be installed.
2. Select either **Authentication** type:
   • **Windows Authentication:** The SQL connection is tested using the current user credentials.
   • **SQL Server Authentication:** You must provide the SQL username and password.
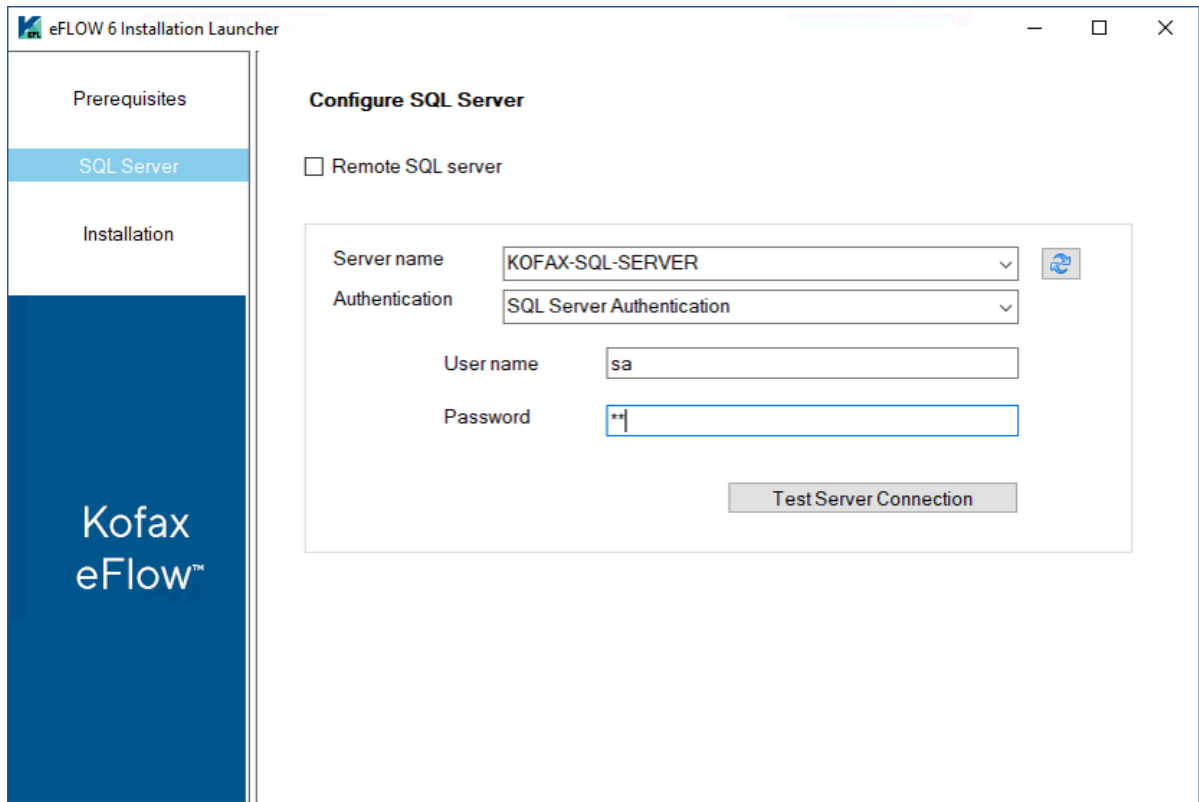
Installation tab

The **Installation** tab contains links for installing the following eFlow installation modules:
- eFlow Platform
- Web Front Office
- Web Validate
- Web Scan
- Fuzzy Service
- OCR Engines

❗ If eFlow Platform is selected for installation, we strongly recommend to start with this module and then proceed with the others. This will ensure the validity of the eFlow configuration.

Select the **Skip Validations** check box, if you do not need to repeat the prerequisites check before starting the installation.

You can install one or more modules on the same machine. You must launch the installations one after another; you cannot run them simultaneously.
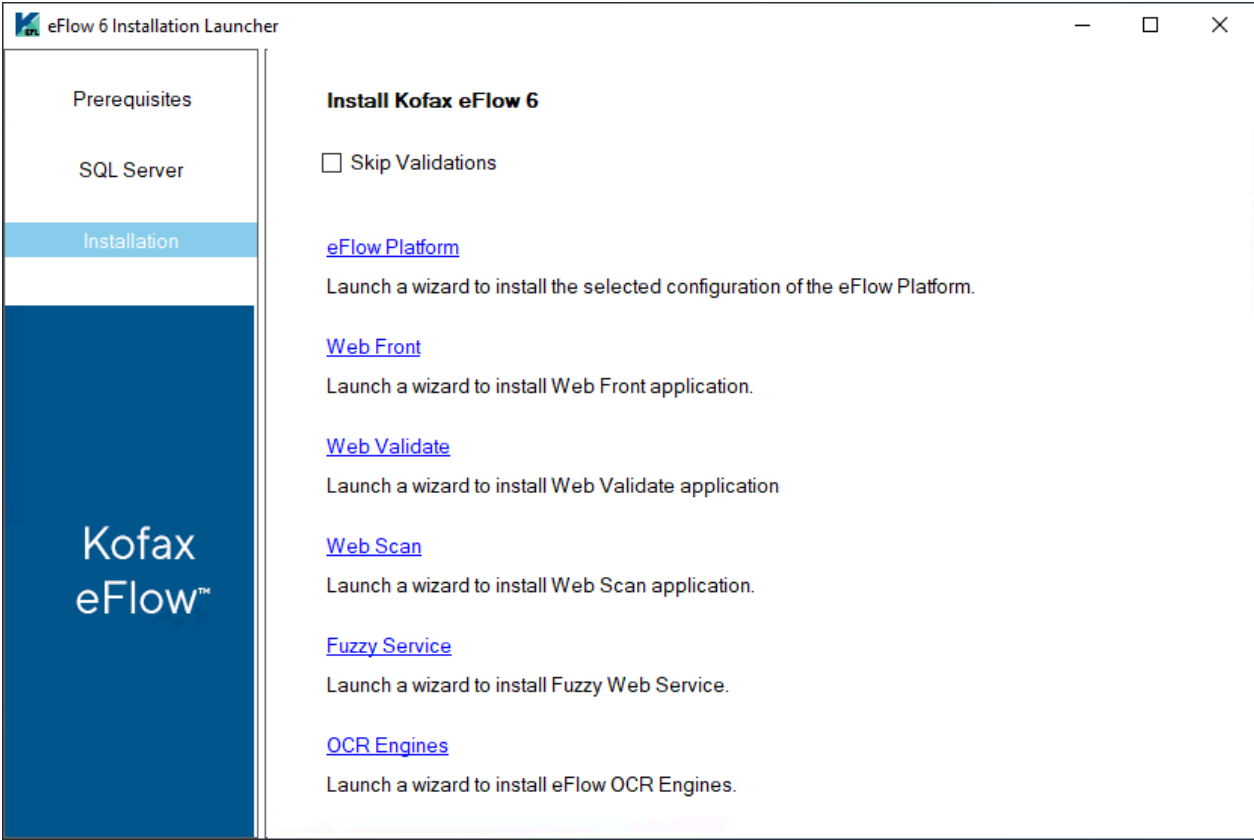
Chapter 3

eFlow installation wizard

This chapter explains how to install a new eFlow Platform instance using the installation wizard.

Run the eFlow Installation Launcher first to check the prerequisites configuration and SQL server connection.

Once all prerequisites are installed, you can start the eFlow Platform installation.

1. Start the Setup Wizard from the **Installation** tab on the Installation Launcher.

2. Read the end user license agreement, and then agree to the terms of the license agreement.
3. Select the installation features.
   By default, both **Server** and **Client** will be installed.
   All the features except **Deliver2EP**, are selected for installation by default.
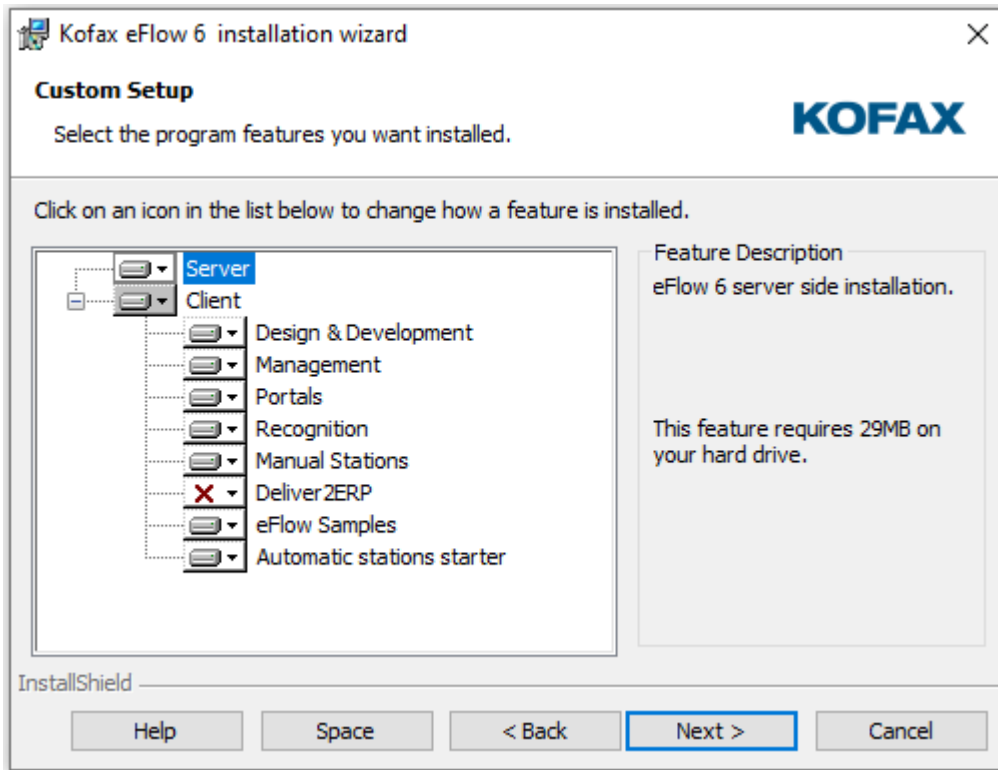
4. Set the installation paths.

The following dialog box may look slightly different depending on the features selected for installation.
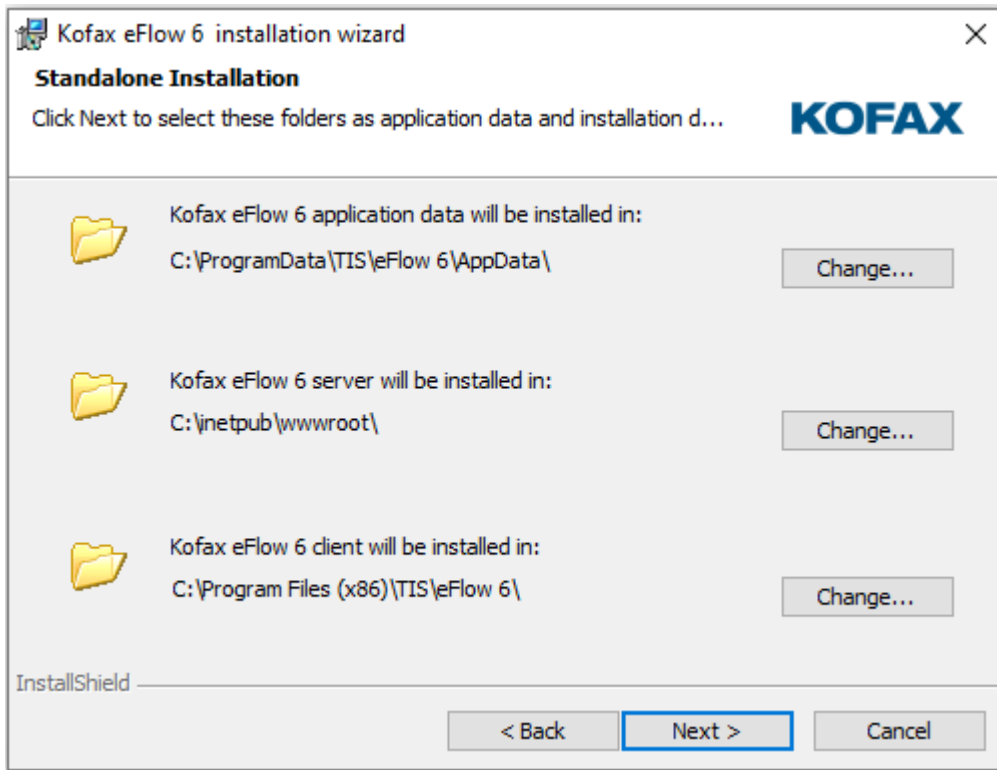
5. Set the communication parameters:
    • Server or Standalone installation
       By default, eFlow uses the HTTPS secure communication protocol.
       We recommend applying default values unless other communication settings are explicitly
       required by the project.
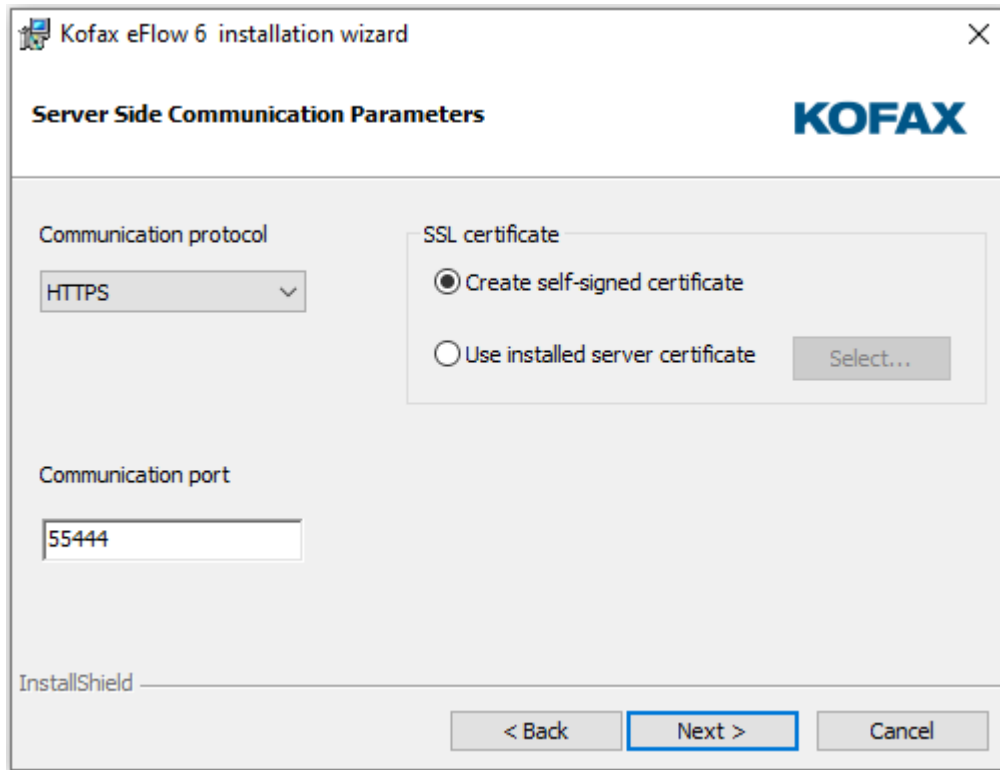
- Client installation

  In the **Select the eFlow server name** field, enter the name of the eFlow server to which the client will connect. You can use either the DNS name or the IP address.

  The **Communication protocol** type and the **Communication port** number should be the same as those set on the eFlow server.

  The **T.i.S. Autorun Stations Starter service login credentials** panel is enabled only if the Autorun Stations Starter service is selected for installation. By default, this service is configured to run under the LocalSystem account. You can use any other account, provided that it has LogonAsService permissions.
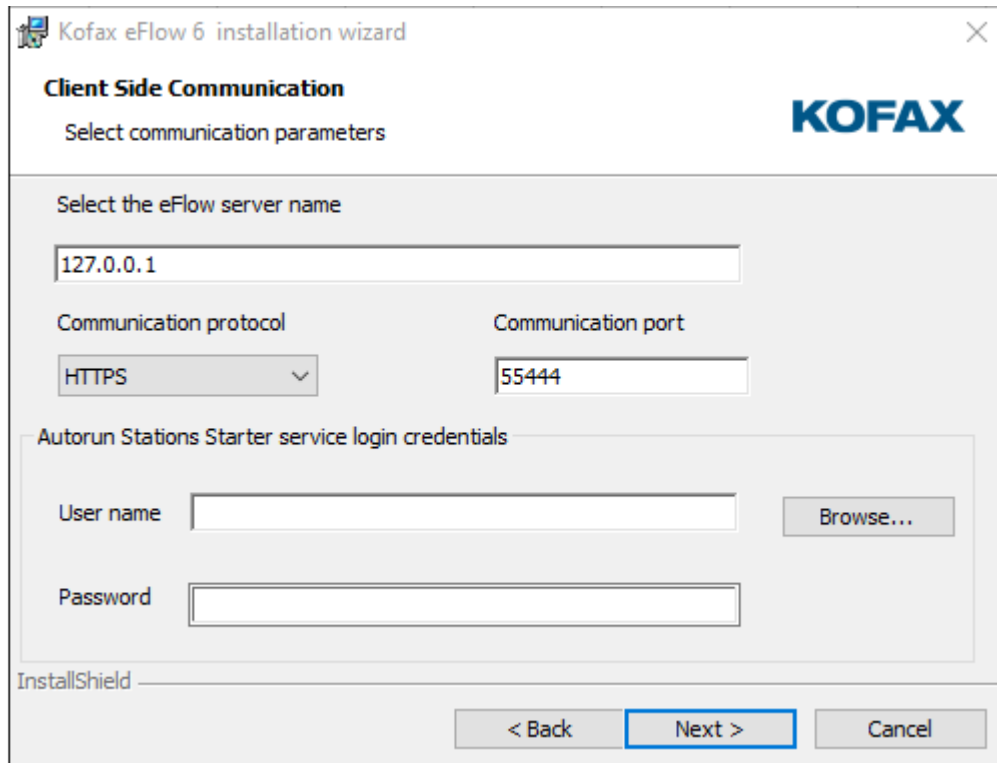
6. Define the IIS Application Pool Identity.

> ⓘ This dialog box appears only during Server or Standalone installations.
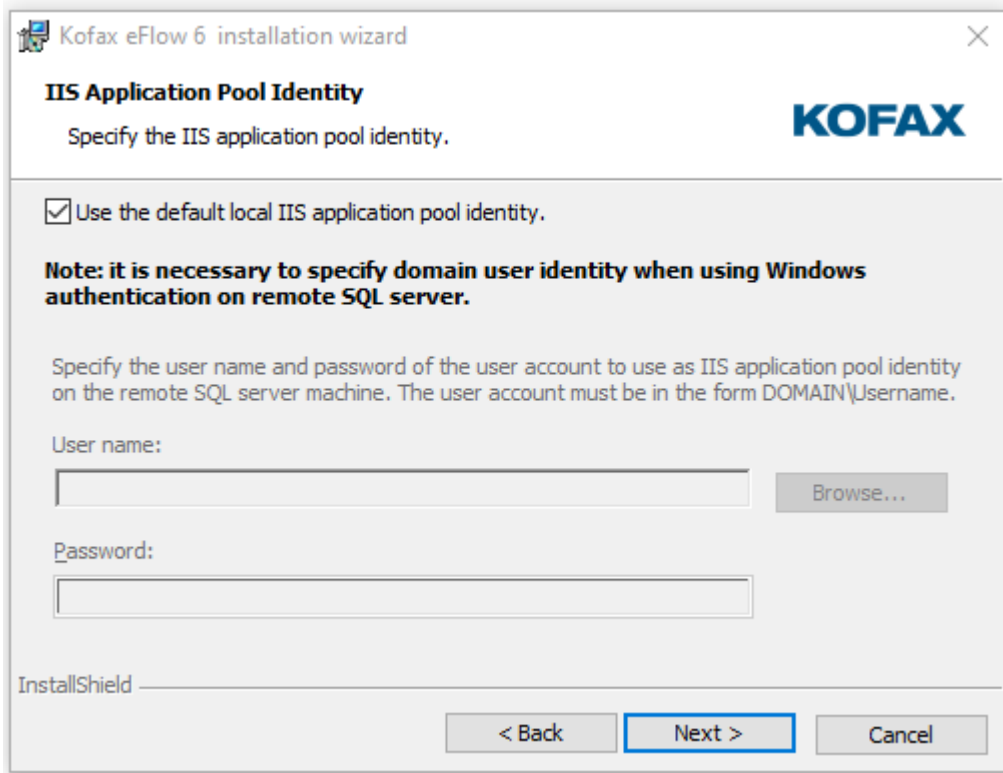
- To use the default IIS application pool Identity, click **Next** without changing anything.

  The virtual user account IIS AppPool\TisAppPool is generated by IIS automatically when the TisAppPool application pool is created.

- To use a specific TisAppPool identity, clear the **Use the default IIS application pool identity** check box, and specify the user name and account.

  ⓘ Make sure that the TisAppPool user is granted all the required operating system permissions. Refer to the "eFlow users" section in the *Kofax eFlow Implementation Guide* for details.

  ⓘ If you are planning to work with remote SQL server and use Windows authentication, the TisAppPool user must be a domain user. The user account name must be written as DOMAIN\USER.

7. Define SQL server connection parameters.
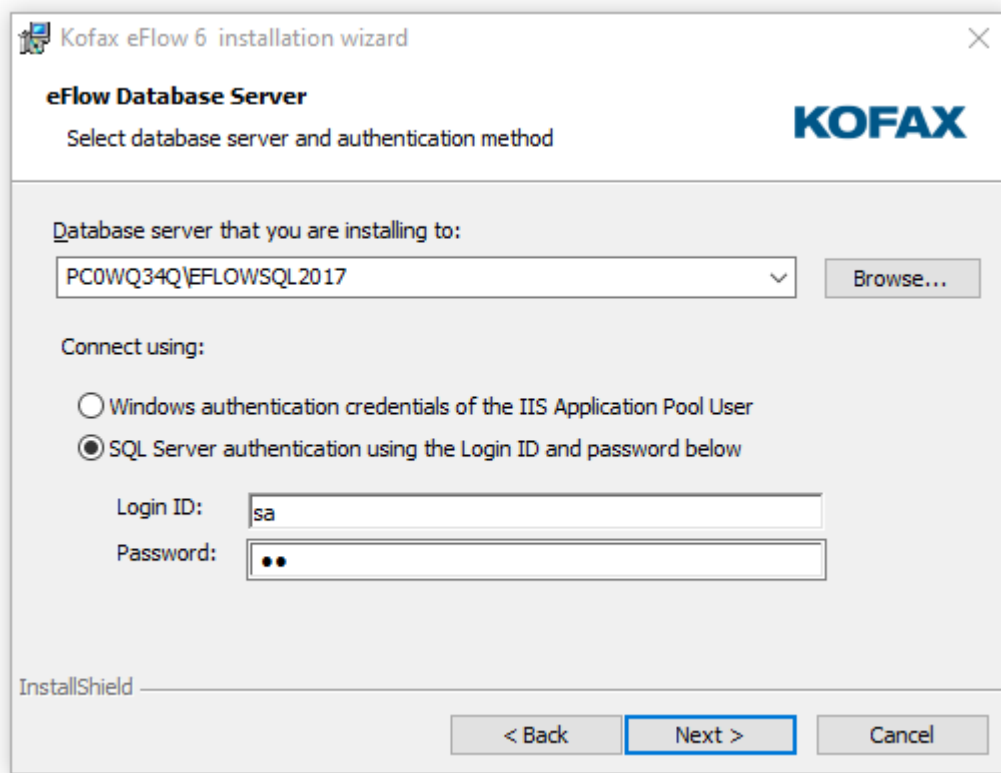
This dialog box appears only during Server or Standalone installations.

Local vs. Remote SQL server: You can work with any available SQL server. The SQL Servers list is populated with the names of the local SQL server instances, and the Browse button opens a list of the SQL servers in the current domain.

Authentication method: eFlow supports both SQL server and Windows authentication.

- Windows authentication:

  The process that connects to the SQL server runs under the TiS Application Pool user credentials.

- SQL server authentication:

  The installation checks the connection string validity.

  > ℹ The installation attempts to create a new SQL server login. Failure to create a new SQL login will not stop the installation, but it will be necessary to create a corresponding login after the installation is finished.

8. Start the installation.

   The **Ready to Install the Program** dialog box gives you a last chance to cancel or change anything that is wrongly configured. Click **Install** to proceed with the installation.
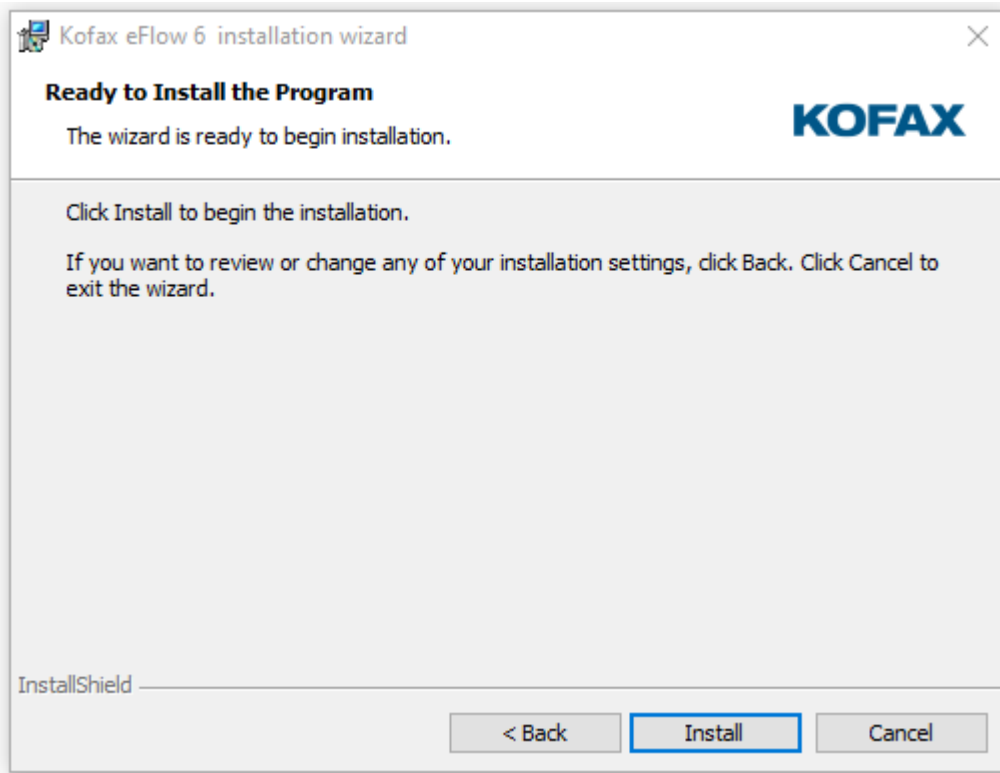
The eFlow platform installation may take between 5 and 15 minutes depending on the features selected, installation media, and so on.

On machines where Microsoft update KB2918614 is installed, the installation can take more time. Refer to "KB2918614 breaks Windows Installer Service" community discussion on the Microsoft website for more information.

Chapter 4

Command prompt setup

Before you run eFlow setup from the command prompt, review the Installation procedure.

Installing a new instance of eFlow from the command prompt enables you to specify the features to install and how they are configured. You can also specify silent, basic, or full interaction with the setup user interface.

eFlow installation parameters

Use the parameters in this table to develop command line installation scripts.

Parameter	Value	Description
INSTALLDIR	String value	Path to the eFlow client side installation.
TIS_WEB_SITE	String value	Path to the eFlow server side installation.
APPDATA	String value	Path to the eFlow server side application data folder.
APPDATA1	String value	Path to the eFlow client side application data folder.
ADDLOCAL	ALL	Installs all eFlow features.
	Server	Installs eFlow server-side features.
	Client	Installs eFlow client-side features. Launch, Deliver, and eFLOWCmd are always installed when you select the Client installation feature.
	Design	Installs Design, Design Free, Design Smart, Analyze Recognition, Design Image Classifier, and View CSM.
	Portals	Installs Scan and Collect.
	Management	Installs Control, Administrate, LaunchPro, Configure, and Analyze Free.
	ERPExport	Installs Deliver2ERP.
	ManualStations	Installs Validate, Escalate, Tile and Organize.
	Sample_Applications	Installs the eFlow sample applications.
	CustomizationSamples	Installs the eFlow customization code samples.

Parameter	Value	Description
	Recognition	Installs the recognition modules (not including OCR engines).
	AutoStarter	Installs the eFlow Autorun Starter Windows service that launches automatic stations.
	Orchestrate	Installs the Supervise station.
COMMPROTOCOL	HTTPS	Default secure communication protocol.
	BasicHTTP	HTTP communication protocol.
	Net.Tcp	Net.Tcp communication protocol.
	Net.Pipe	Net.Pipe communication protocol.
COMMPORT	55444	Default HTTPS port. This is only a recommendation. You can select any port number required by the project.
HTTPS_CERTIFICATE	1	Creates and installs a new self-signed certificate.
	2	Uses the existing SSL certificate.
HTTPS_CERT_NAME	String value	SSL certificate thumbprint (certificate hash). Required by the HTTPS protocol.
INSTALLLEVEL	100	Default installation level.
SERVER_NAME	127.0.0.1	eFlow server name or IP address. Required by the eFlow client installations.
TIS_APPPOOL_IDENTITY	ApplicationPoolIdentity	TisAppPool will run under the default application pool identity.
	SpecificUser	TisAppPool will run under the specific user identity.
IS_NET_API_LOGON_USERNAME	String value	TisAppPool user name. Relevant only if SpecificUser identity is selected.
IS_NET_API_LOGON_PASSWORD	String value	TisAppPool user password. Relevant only if SpecificUser identity is selected.
IS_SQLSERVER_SERVER	String value	SQL server instance name.
IS_SQLSERVER_AUTHENTICATION	0	Windows Authentication.
	1	SQL Server authentication.
IS_SQLSERVER_USERNAME	String value	SQL server login name. The default value is sa.
IS_SQLSERVER_PASSWORD	String value	SQL server login password. The default value for the sa user is sa.
AUTORUN_NAME	String value	eFlow Autorun Starter service user name. Relevant only if the AutoStarter feature is selected for installation. By default, this service runs under the LocalSystem user.

Parameter	Value	Description
AUTORUN_PASSWORD	String value	eFlow Autorun Starter Service user password. Relevant only if the AutoStarter feature is selected for installation. By default, this service runs under the LocalSystem user.

How to use setup parameters

Use the following syntax guidelines to develop installation commands.
- PARAMETER="value" for all single value parameters.
- PARAMETER="value1", "value2", "value3" for all multiple-value parameters.

> ⓘ The use of double quotation marks for values are recommended, but required only if the value contains a space.

Refer to Command-Line Options on the Microsoft website for MSI installer command line options.

Silent installation

Use the /qn parameter to install eFlow from the command prompt in full quiet mode, or use the /qb parameter for quiet basic mode. The /qb switch only shows progress: it does not accept any input, and displays no messages if errors are encountered.

Examples of command line installations

Task	Command line instruction
Install all eFlow features on a 64-bit machine	`msiexec /i "\64Bit\eFlow 6.msi" ADDLOCAL=ALL /l*v "c:\eFlow 6 Install.log" /q`
Install the server only on a 64-bit machine	`msiexec /i "\64Bit\eFlow 6.msi" ADDLOCAL=Server /l*v "c:\eFlow 6 Install.log" /q`
Install all client features on a 64-bit machine	`msiexec /i "\64Bit\eFlow 6.msi" ADDLOCAL=Client,Portals,Design,Management,AutoStarter,ERPExport,ManualStations, Sample_Applications,Recognition,Orchestrate,CustomizationSamples SERVER_NAME="10.0.0.198" /l*v "c:\eFlow 6 Client Install.txt" /qb`
Install the server only and configure TisAppPool to run under the specific user identity	`msiexec /i "eFlow 6.msi" ADDLOCAL=Server TIS_APPPOOL_IDENTITY="SpecificUser" IS_NET _API_LOGON_USERNAME="tistesting\tisuser" IS_NET_API_LOGON_PASSWORD="123456" /qb`

Task	Command line instruction
Install the server only and configure SQL server user authentication	`msiexec /i "eFlow 6.msi" ADDLOCAL=Server IS_SQLSERVER_SERVER="10.0.0.78" IS_SQLSERVER_AUTHENTICATION="0" IS_SQLSERVER_USERNAME="tistesting\tisuser" IS_SQLSERVER_PASSWORD="123456" /qb`
Install both server and client and configure SQL server user authentication	`msiexec /i "64Bit\eFlow 6.msi" ADDLOCAL=ALL IS_SQLSERVER_AUTHENTICATION="1" IS_SQLSERVER_USERNAME="sa" IS_SQLSERVER_PASSWORD="password" IS_SQLSERVER_SERVER="Server name\SQL instance name" INSTALLLEVEL="100" TIS_APPPOOL_IDENTITY="ApplicationPoolIdentity" SERVER_NAME="Server name" DEFAULT_APP_POOL="1" /qn /l*v C:\eflow6_Install.txt`

OCR engine installation

This chapter lists of supported OCR engines, and different methods of installing the OCR engines for use with eFlow.

Plan the OCR engine installation

🛑 Install OCR engines only on machines that run recognition modules. For example, if you plan to run the recognition module on a client machine, install the OCR engines on that client machine.

We recommend installing the eFlow platform first and then the OCR engines. If, for some reason, the installation order was reversed, change the OCR installation path accordingly in the `<AppData>\Configuration\TisConfiguration.xml` file.

The complete OCR engines installation requires more than 4 GB of disk space, so it is important to select only the required features.

ℹ️ OCR engine licenses are checked at runtime only. You will not get any notification during the installation if you select unnecessary OCR engines.

Supported OCR / ICR engines

eFlow supports the following OCR/ICR engines:

ℹ️ The Abbyy engine will be deprecated in a future Kofax eFlow release.

Installation feature	OCR engine name	OCR engine version	Description
Abbyy	Abbyy	11.0	
AToIA	AToIA	3.1	
Charactell	JustICR	4.2 build 594	
Expervision	Expervision	6.1	Machine print engine
Inlite	Inlite	7.0	Barcode recognition engine
IRIS	Iris	15.0	

Installation feature	OCR engine name	OCR engine version	Description
Kadmos	Kadmos	5.0 p	The Kadmos OCR engine installation includes only the commonly used language databases, because the full installation requires more than 6GB of disk space. The following languages are always installed: • English • German • Spanish • French Contact Kofax eFlow support if you need to use other languages.
MediaDrive	MediaDrive	1.0.2.37	Japanese field OCR engine
	MediaDrivePage	9.0.1.0	Japanese page OCR engine
OCE	Oce	16.6 SP1	Replaces the AEG and Recostar engines used previously.
PenPower	PenPower	1.1	Chinese OCR engine
QualitySoft	QSBarcode	4.9	Barcode recognition engine
Ricoh	Ricoh Hand Ricoh Machine	4.1	Japanese ICR engines
ScanSoft	Omnipage	22.0.0.3	Improves accuracy and supports new languages.

Install OCR engines from the installation setup wizard

The OCR Engines installation is straightforward: simply select the root path of the installation and the OCR engines to install.

Install OCR engines from the command prompt

Similar to the eFlow installation, you can also install the OCR engines from the command prompt.

The following example shows how to install selected engines only:

```
msiexec /i "eFlow 6 OCRs.msi" INSTALLDIR="C:\Program Files (x86)\TIS\eFlow
6\OCRs" ADDLOCAL=" ScanSoft,IRIS,Kadmos,OCE" /qb
```

> ℹ️ When installing OCR engines from the command line, always use the Installation feature name, and not the OCR engine name (see Supported OCR/ICR engines); for example, Charactell and not JustICR.