Kofax eFlow
Web Stations Installation Guide

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KOFAX

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Preface

This guide explains how to install, configure and customize Kofax eFlow stations that are accessed via web browsers.

Since eFlow web stations are clients of the eFlow server, they are configured in the eFlow Visual Designer, like any other station in the application workflow.

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.

> ⓘ 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.

About the eFlow Web stations

There are three eFlow Web stations:
- Web Validate
- Web Scan
- Web Front Office

Web Validate

Web Validate is the web version of the Validate station.

Web Validate receives data from the Recognize station. The exact data it receives depends on the Visual Designer definitions in the eFlow Design module, with an emphasis on invalid or unrecognized data. When the user manually types in a letter to correct an unrecognized value, Web Validate automatically suggests alternatives via masks and lookup lists to accelerate the completion process.

You can customize the graphical user interface for each individual form and/or Web Validate station instance.

Web Scan

Web Scan is the web version of the Scan station. It provides the possibility to scan paper documents via a web browser.

You can customize the graphical user interface for each Web Scan station instance.

Web Front Office

The Web Front Office web application combines the functionality of the Validate and Organize stations.

This station is an enhanced version of the Web Validate station. In addition to basic validation, you can organize forms, scan pages, and so on.

You can customize the graphical user interface for each individual form and/or Web Front Office station instance.

Installation

This chapter explains how to perform the eFlow Web station server-side installation.

Supported operating systems

eFlow Web Validate, Web Front Office and Web Scan servers can be installed on any Windows operating system from Windows Vista and later.

Refer to the *Kofax eFlow Technical Specifications* for a full list of supported operating systems.

eFlow Web clients can run on any Windows operating system from Windows 8.1 and later.

These Web stations support the Following web browsers:
- Microsoft Edge
- Google Chrome

> ℹ Cookies should be enabled in the Google Chrome browser.

- Firefox

> ℹ eFlow web servers work both on 32-bit and 64-bit machines, but in production environments, we recommend using 64-bit machines only, to ensure the best possible performance. You can still use 32-bit machines for development and testing purposes.

Software prerequisites

Before starting an eFlow Web station installation, you must check the presence of all the required software prerequisites. You can easily do this using the eFlow Installation Launcher. Refer to the *Kofax eFlow Installation Guide* for more information on the Installation Launcher.

Make sure the system meets the following requirements:
- Full installation of .NET Framework 4.7.2
  Refer to "What's new in .NET Framework" on Microsoft Website for more information.
- Required Windows Roles and Features.
  Refer to the *Kofax eFlow Technical Specifications* for more information.

Installation procedure

The eFlow Web stations are provided as separate installation packages. All eFlow Web station setup wizards share the same user interface, so the steps below are relevant for all of them.

We recommend installing the eFlow Web station servers using the eFlow Installation Launcher.

1. In the eFlow installation folder, in the Installation Launcher subfolder, run eFlow Launcher.exe as an administrator.

2. Click **Prerequisites** and perform the prerequisites check, if necessary.

3. Click **Installation** and select the eFlow station type you want to install.
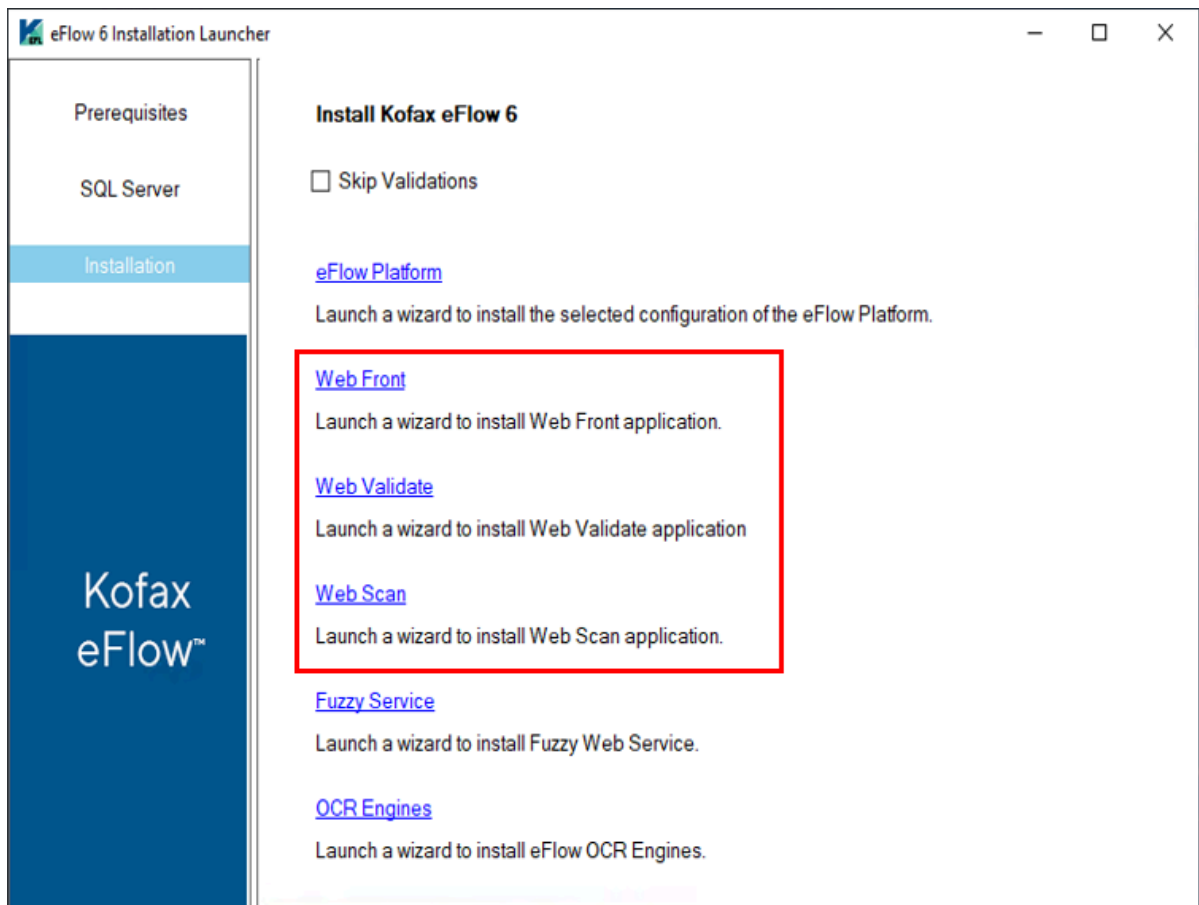
The installation wizard for the selected Web station appears.

4. Click **Next** to start the installation.

5. Accept the license agreement and click **Next**.

6. Select the installation folders.

> ⓘ Usually eFlow web applications are created under the default web site, but of course you can configure them according to project requirements.
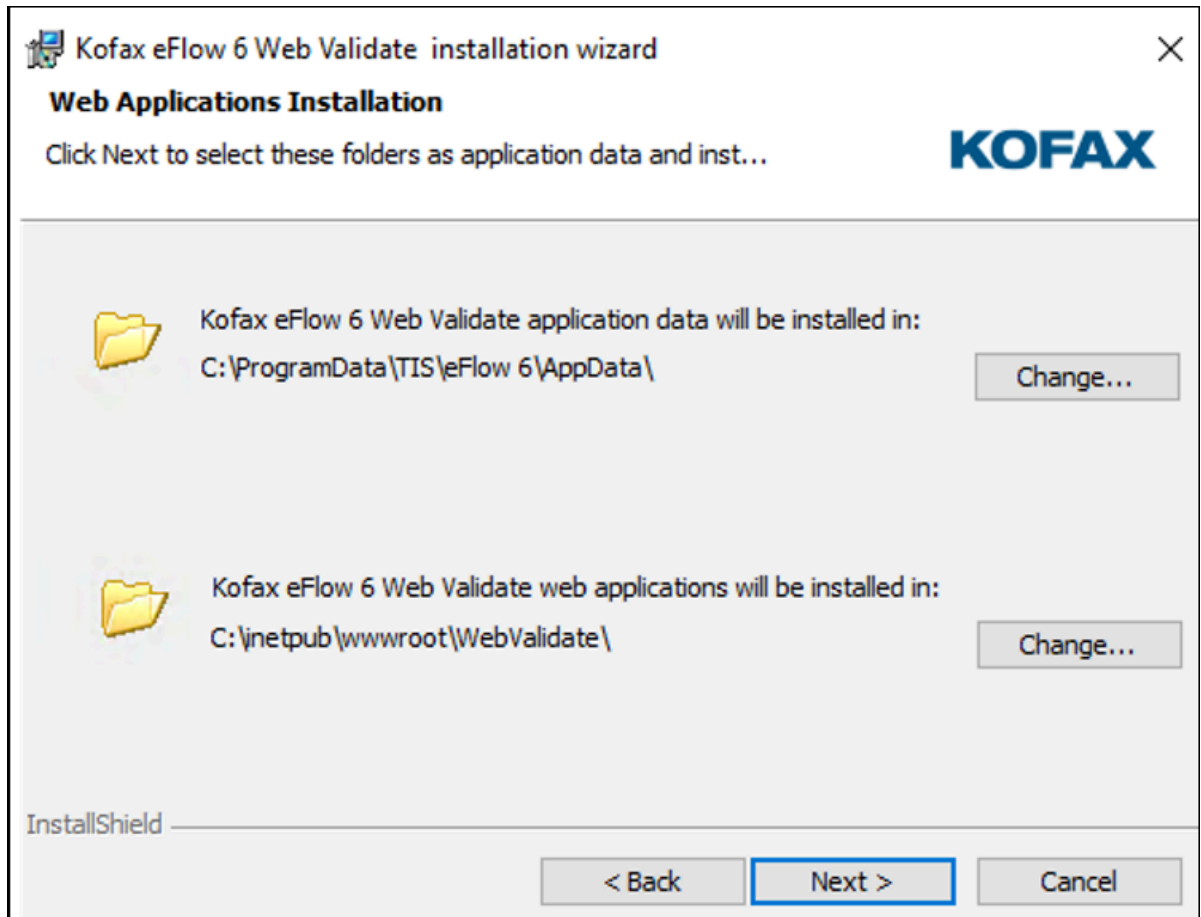
7. Select the eFlow server name and communication parameters.

   This step is required by any eFlow client installation. We recommend using the default communication parameters unless you are sure that these values need to be changed.
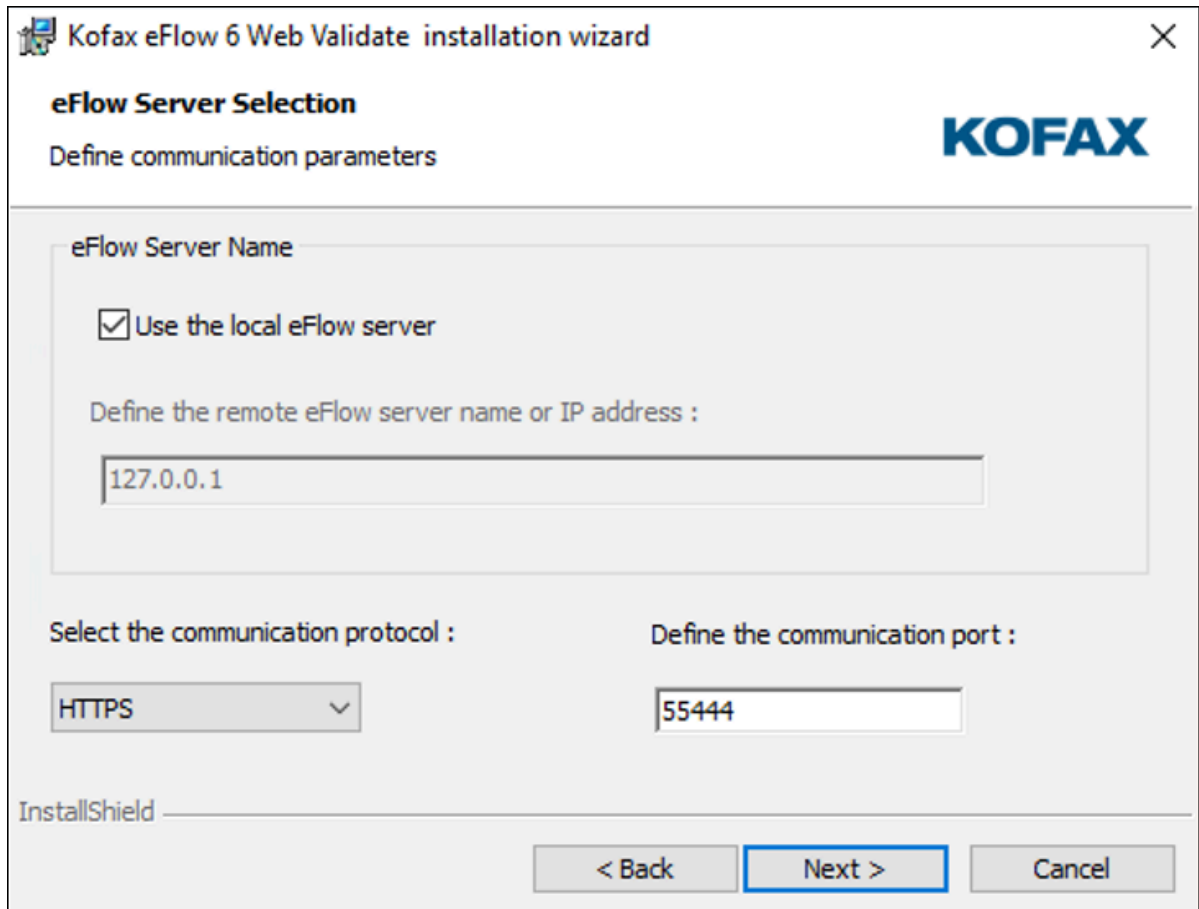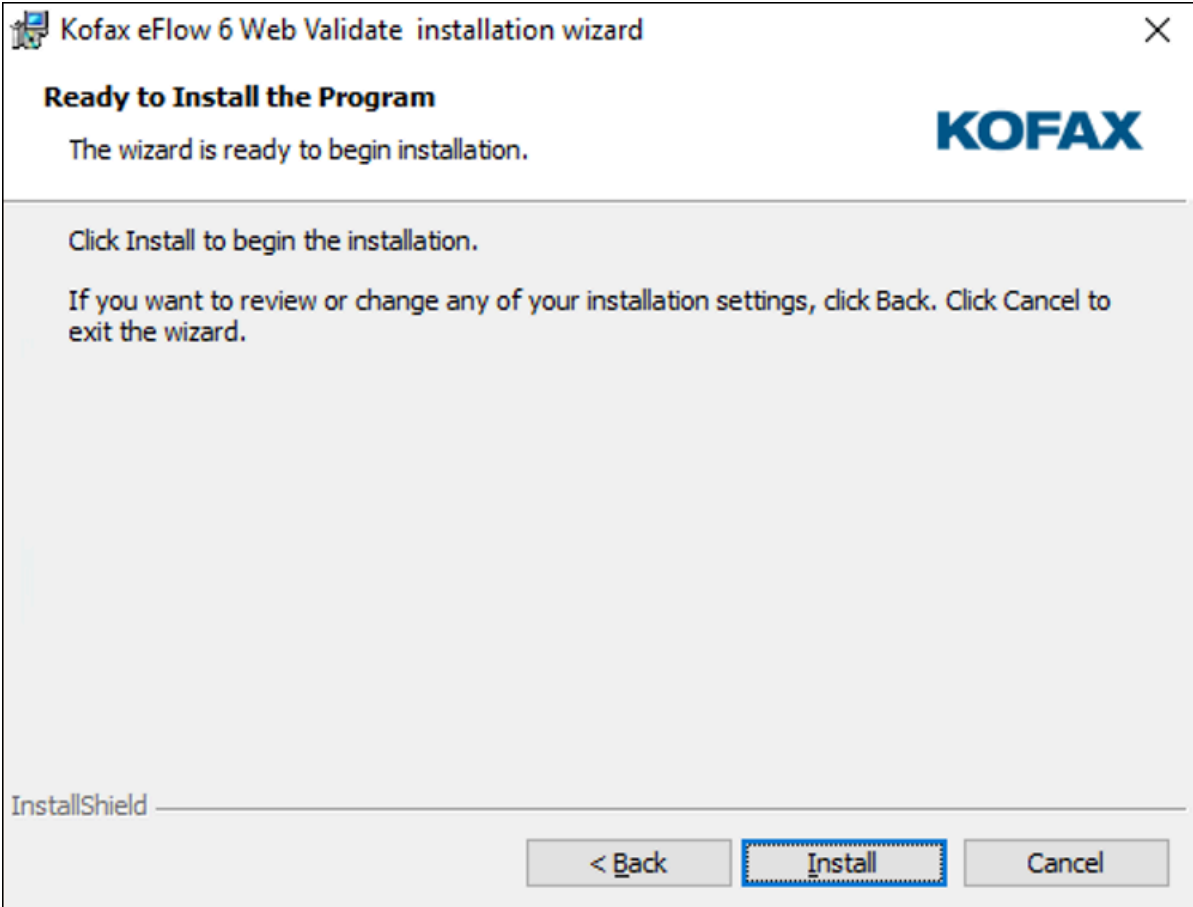
8. Configure the application pool identity.

   By default, all eFlow web application pools are configured to run under the AppPoolIdentity created by IIS, but you can select another application pool identity according to project requirements.
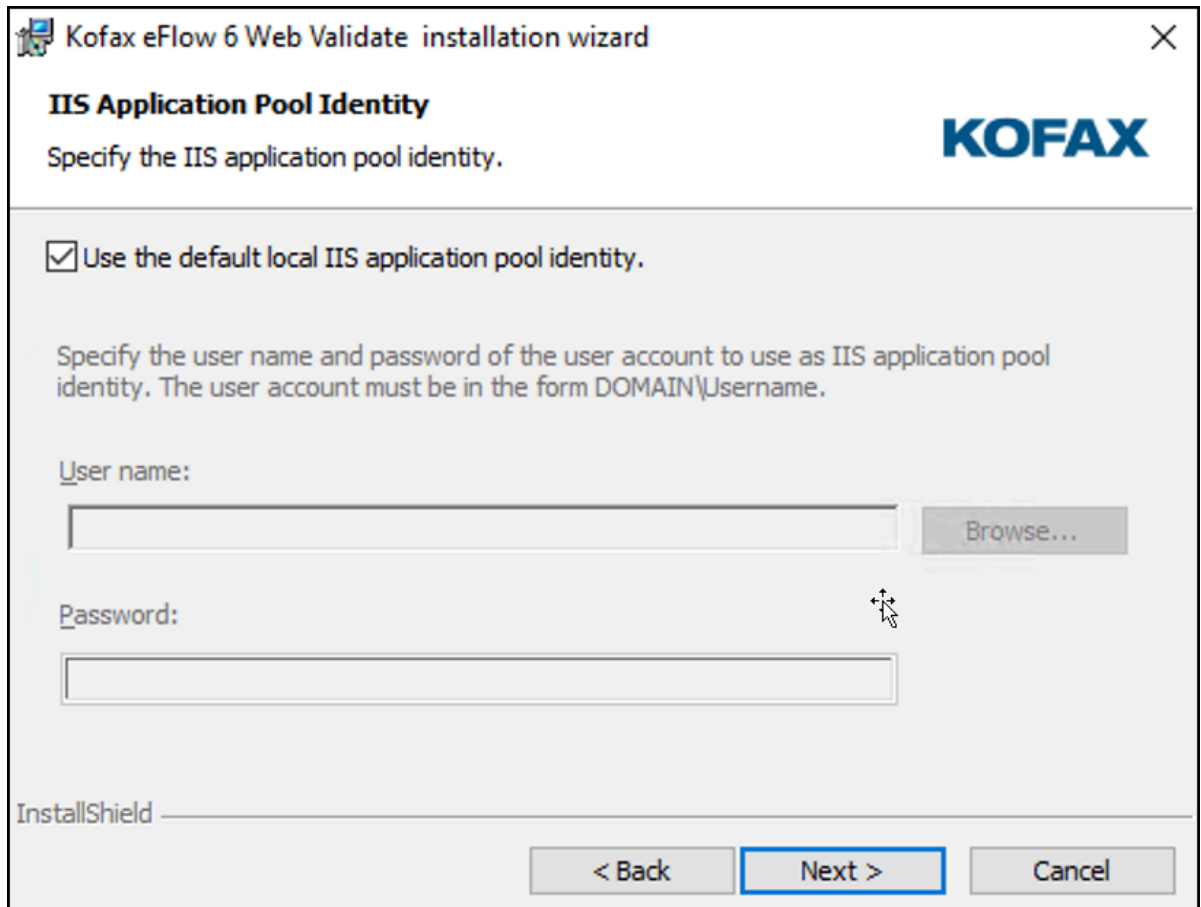
9. Click **Install** to begin the installation.

Chapter 3

Configuration

This chapter describes various aspects of the eFlow Web station configuration.

Authentication modes

By default, the eFlow Web stations are configured to work in Forms Authentication mode. It is also possible to work in Windows Authentication mode. This section describes how to switch between authentication modes.

> 🛈 Regardless of whether the Web station is configured to work in Forms Authentication or Windows Authentication mode, the station user should be defined in the STS. If the TIS default STS is used, the `...AppData\Server\System\Setup\DomainSecurity.xml` file should contain the relevant user definitions. Refer to the *Kofax eFlow Configuration Guide* for more information on STS.
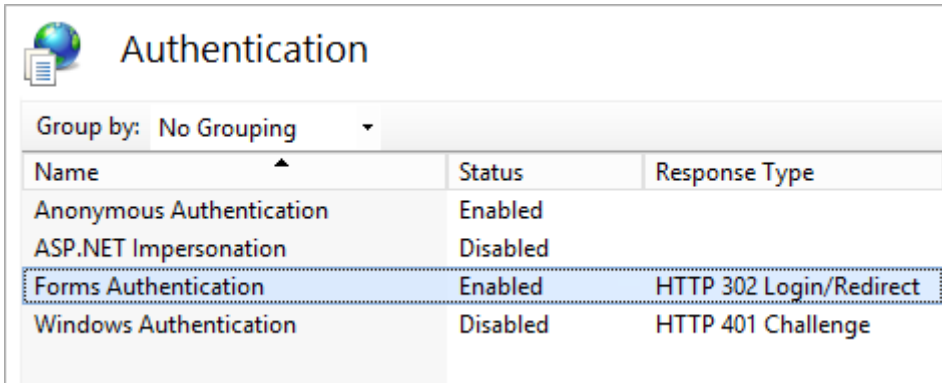
To learn more about IIS 8 authentication, refer to "Configuring Authentication in IIS 8", on Microsoft website.

Forms Authentication

This is the default eFlow web applications authentication mode. Authentication is performed by eFlow internal security mechanisms, and the user need not to be an Active Directory member.

> 🛈 eFlow Web stations are fully configured to work with Forms Authentication after the installation. Normally, there is no need for configuration changes if the station user is already defined in STS.

If an eFlow web application uses Forms Authentication, then Anonymous Authentication should also be enabled. Anonymous Authentication allows visiting of public pages and Forms Authentication is used to hide the pages from those not logged into an eFlow web application. By setting a loginUrl in Web.config, you allow anonymous users to visit the login page. If the user tries to visit a page other than the loginUrl, they will be redirected to the loginUrl.

The <authentication> section in the station's Web.config should look as follows:

```
<authentication mode="Forms">
 <forms name="valid" loginUrl="~/Management/Login" timeout="2880" />
 </forms>
</authentication>
```

Windows Authentication

Windows authentication is used when you want clients to authenticate using the NTLM or Kerberos protocols. To learn more about IIS 7 Windows authentication, refer to "Configure Windows Authentication (IIS 7)" on Microsoft website.

Switching to Windows Authentication mode requires the following changes in configuration files and network settings.

Active Directory Management

1. Open the eFlow server machine properties in the Active Directory management tool.

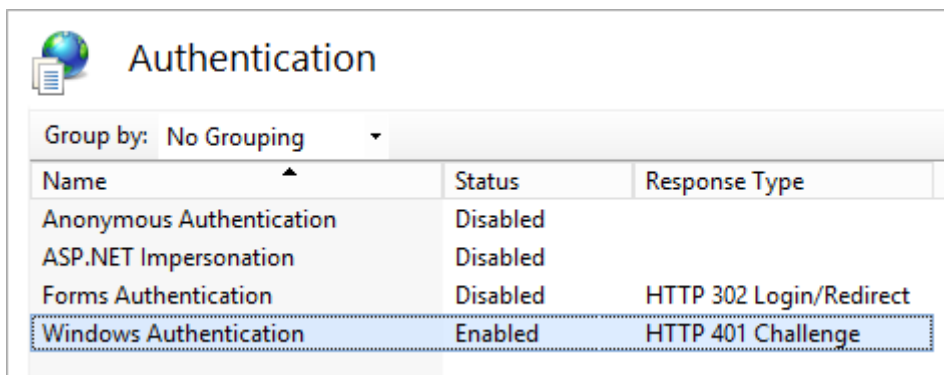2. Set **Trust this computer for delegation to any service (Kerberos only)**.

eFlow Server Authentication

Make sure that **Anonymous Authentication** is enabled for **Tis Web Site**.
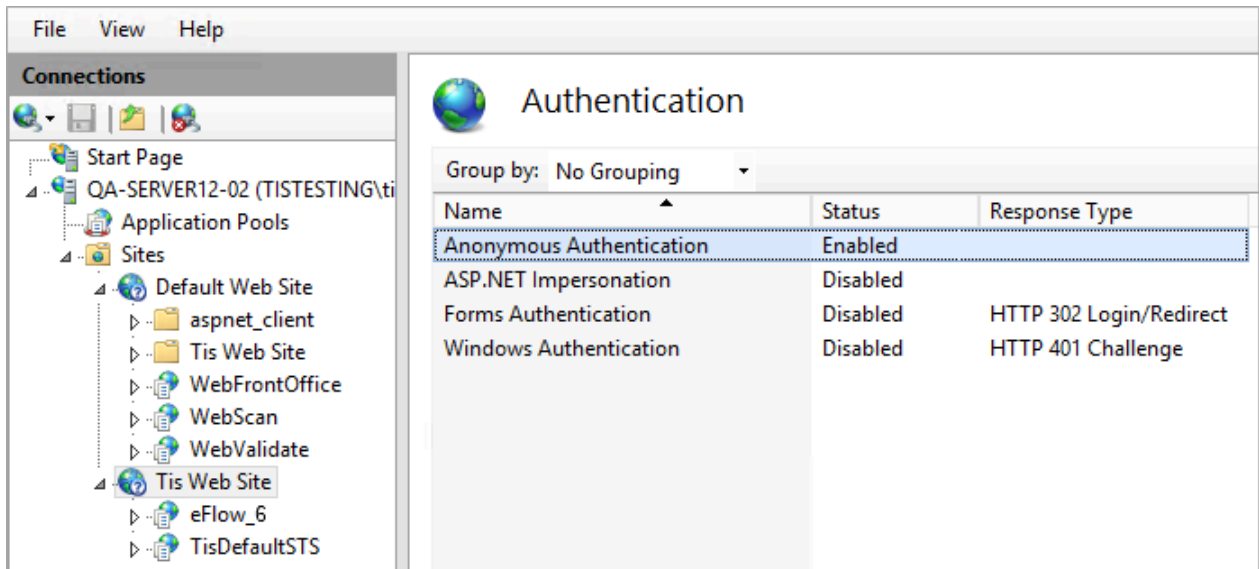
eFlow Web Station Server Authentication

Enable Windows Authentication for the eFlow web station and disable other authentication types.

The following section will appear in the station's Web.config file:

```
<authentication mode="Windows">
```

ClaimsService configuration

Edit the ClaimsService configuration in `C:\inetpub\wwwroot\[Web Station Name]\bin\ConfigSources\BindingSection.config`.

Instead of:

```
<bindingConfiguration="ws2007eFlowSts_Windows" >
<identity>
<dns value="localhost"/ >
</identity>
```

Use:

```
<bindingConfiguration="ws2007eFlowSts_Windows">
 <identity><servicePrincipalName value="host/[eFLOW SERVER NAME]" />
</identity>
```

ⓘ The configuration should contain the eFlow server name and not its IP address.

Web Station URL

When accessing the eFlow Web stations from the client browser, the URL should contain the computer name and not the IP address, such as http://Kofax-QA-777/WebScan.

Web Validate and Web Front Office setup

eFlow Web stations are configured in the eFlow Design module, like any other eFlow client. This section explains how to configure the eFlow Web Validate and Web Front Office stations. Refer to the *Kofax eFlow Design User Guide* for more information on the Design module.

ⓘ Both Web Validate and Web Front Office are based on the Validate station type and share the same configuration in Design.

To configure Web Validate or Web Front Office station, perform the following procedures.

Application workflow

To add Web Validate or Web Front Office stations to the application workflow:

1. Open the eFlow Design module.

2. Click **Workflow Designer** 🖫.

3. Click the **Manual** tab and add a new Validate station to the workflow or select the existing one.

4. In the station properties, select the **Enable WEB** check box.

    This property differentiates between desktop Validate and Web Validate (or Web Front Office) stations. It must be set to make the station accessible via an Internet browser.

5. Click in the **Station Configuration** field, then click the ellipsis ⊡ to open the station configuration.

    In addition to the standard Validate configuration properties, the Web Validate and Web Front Office station configuration dialog box contains the **Web Settings** and **Web Commands** tabs.

    The **Web Settings** tab contains properties that are relevant for web stations only.

Property	Description
Layout scenario	The name of the selected Web Validate layout scenario.
AutoGetPut	Set this property to **True** to get the next available collection automatically after saving the current one.

| Property	Description
CustomJsFile	The name of the custom JavaScript file attached to Web station. Custom code examples can be found in `\Scripts\Customer.js` in the Web Validate deployment folder. See Customization for more information.

The **Web Commands** tab contains a list of default commands that are ready for use by typists. You can do the following:

- Add or remove commands from the toolbar.
- Make commands invisible or disable them.
- Change the default command shortcuts.

Web layouts

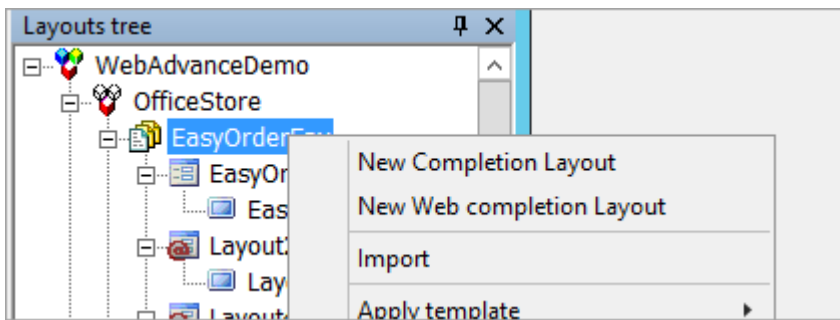To create a new Web Validate or Web Front Office layout:

1. Open the eFlow Design module.

2. If necessary, click **Application Designer** .
   By default, the Application Designer is displayed when you open the eFlow Design module.

3. In the Application tree, right-click on the relevant form and select **Edit Screen Layout**.
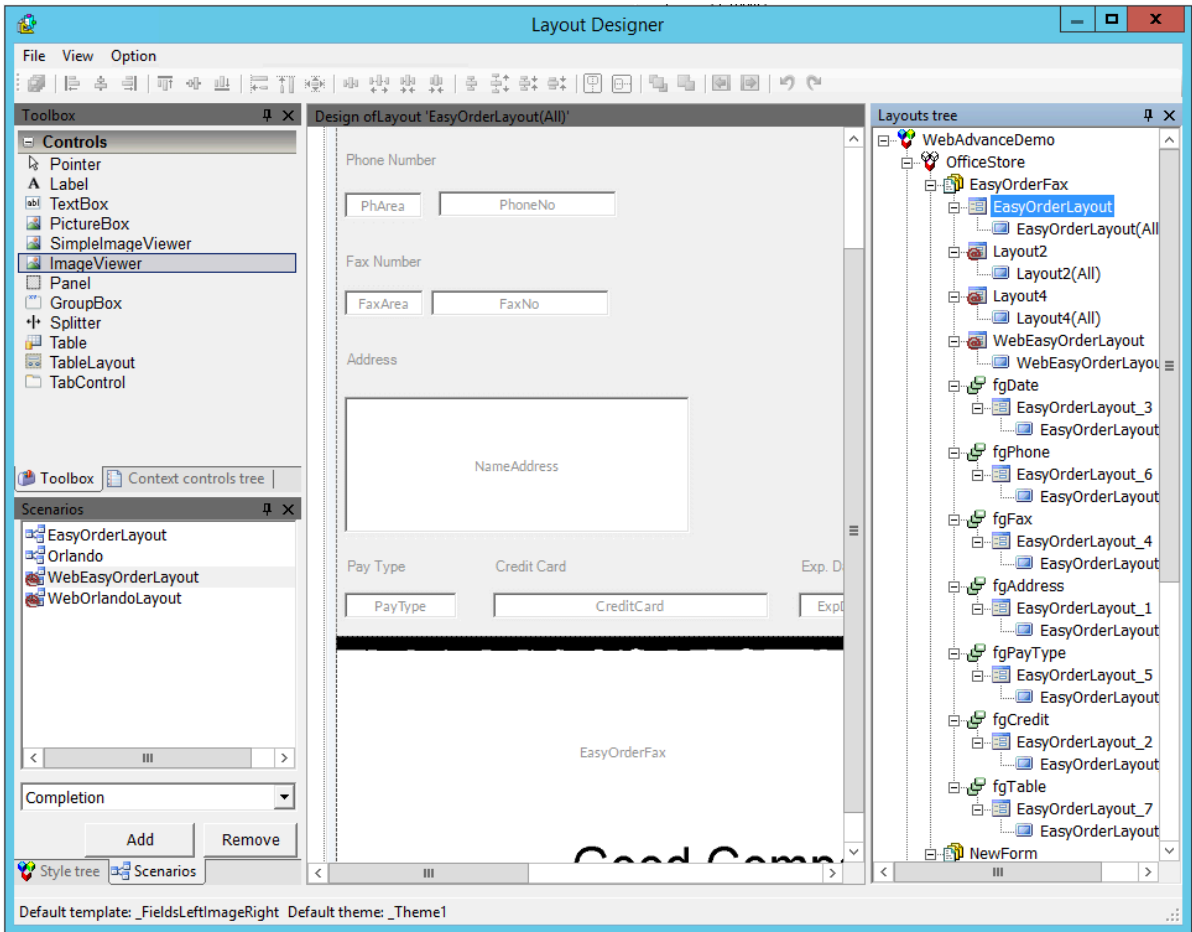
4. In **Layouts tree**, set **_WebTheme1** as the default theme.
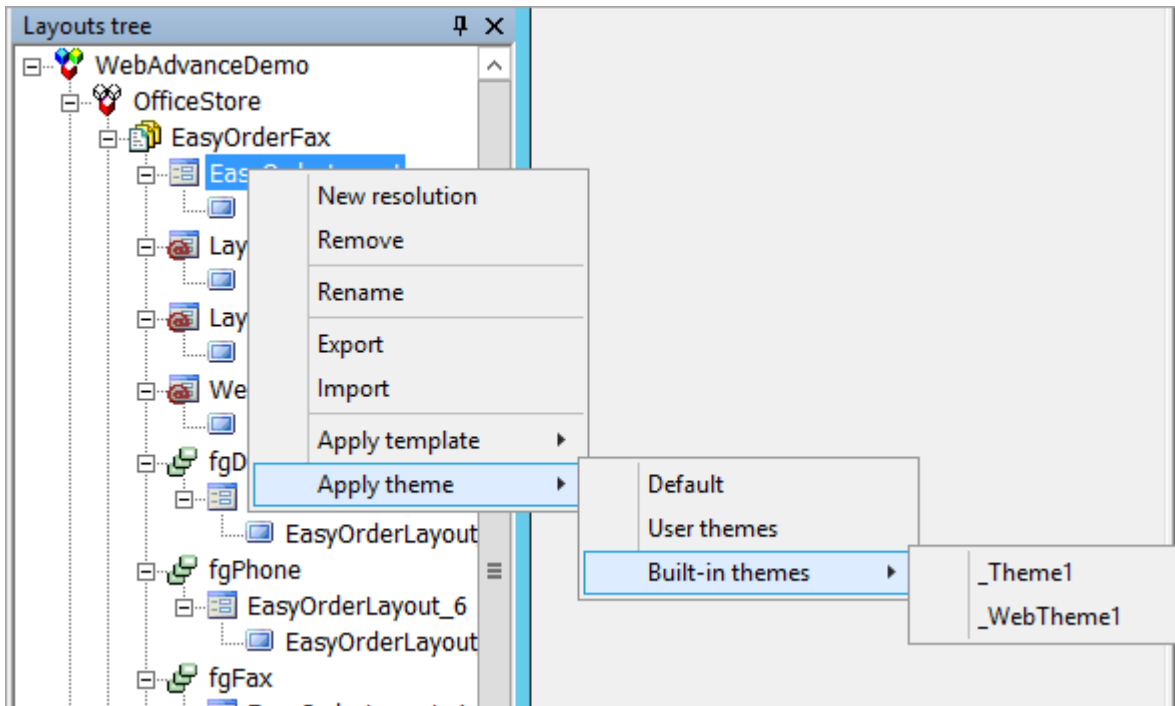
5. Add a new **Web Completion** layout. This is like a standard Validate layout, but in addition you can add multiple tab controls per layout, as well as buttons and check boxes.

6. Edit the layout. This layout can be opened both by Web Validate and Web Front Office stations.

   ⓘ It is possible to create different layouts for these stations, but there is no option to block the usage of a layout designed for the Web Validate in the Web Front Office station, and vice versa.
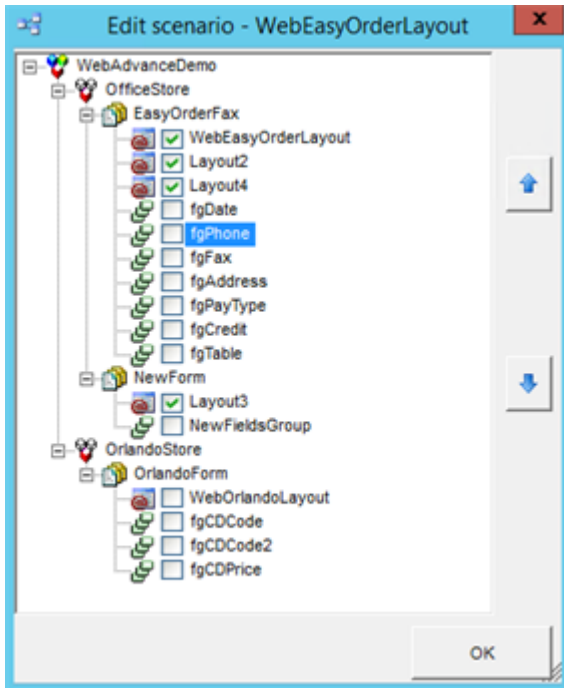
7. Save the layout.

Web layout scenarios

To add a new Web Validate layout to the Web Scenarios:

1. In the **Scenarios** pane, in the selection list, select **Web Completion**.

2. Click **Add**.

3. Add the new **Web Validate** layout to the **Web Completion** scenarios.

   Use the arrow buttons to set the order of the layouts.

Web Scan setup

This topic explains how to configure an eFlow Web Scan station.

> ℹ️ Since the Web Scan station is the simplified version of the Scan station, it is not expected to fully duplicate its functionality.

To configure Web Scan, perform the following procedures.

Application workflow

eFlow Web stations should be configured in Visual Design exactly as any other eFlow client. To configure the Web Scan station as a part of the application workflow:

1. Open the eFlow Design module.

2. Click **Workflow Designer** 🖼️.

3. In the **Portal** tab, to add a new scan station to the workflow, click **Scan** ▰, or select the existing one.

4. In the **Properties** tab, select the **Enable WEB** check box.

This property differentiates between desktop Scan and Web Scan stations. If must be set to make the station accessible via an Internet browser.

5. Click in the **Station Configuration** field, then click the ellipsis ⬚ to open the station configuration.
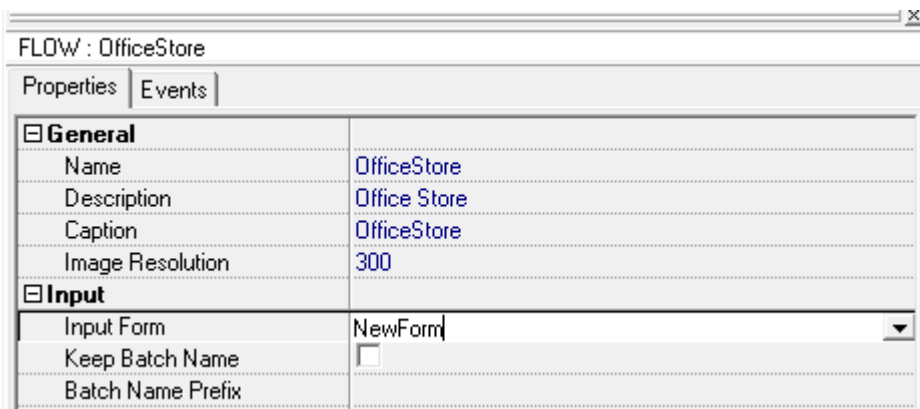
The only property that is used by Web Scan is **Show Input Form Before Batch**. This property defines whether an input form will be shown before or after scanning. By default, the input form is shown before scanning.

Input form

An input form is a virtual form that is filled by the scan station user and contains generic information about the collection. For example, the input form can contain the name of the scanner, or the date when the document was scanned.

To define an input form:

1. Open the eFlow Design module.

2. If necessary, click **Application Designer** ⬚. By default, the Application Designer is displayed when you open the eFlow Design module.

3. Create a new form and add a new page.

4. Create a layout for the new page, but do not attach an EFI.

5. In the Application tree, click on the flow.

6. In the flow properties, in the **Input Form** field, select the new form from the list.

ⓘ An input form can perform all validations supported by the Validate station, but it does not support JavaScript client-side customization.

Batch and form separation

Web Scan does not apply any batch or form separation settings.

It always creates one-page forms and collections are created when the user decides to send the scanned pages to the scanner.

Customization

The eFlow Web stations can be customized according to project requirements. You can apply both Web station server-side and client-side customizations.

eFlow Web Validate or Web Front Office server-side customization

The eFlow Web Validate / Web Scan stations support server-side customizations like any other eFlow client.

Customization DLLs are saved on the eFlow server as part of the eFlow setup and are copied to the Web Station server when required.

Server-side customization DLLs should be written in C#.

Customization DLLs should be attached to relevant events in Visual Designer.

The following events are supported:
- OnLogin
- OnLogout
- OnPreGetCollections
- OnPostGetCollections
- OnPreSaveCollections
- OnPostSaveCollections
- OnPreDiscardCollections
- OnPostDiscardCollections
- OnPrePutCollections
- OnPostPutCollections
- OnPreQuery (lookup tables event)
- OnPostQuery (lookup tables event)

eFlow Web Validate or Web Front Office client-side customization

Web client-side customizations must be written in JavaScript. Knowledge of Web technology for developers is essential for writing client-side custom scripts.

Refer to "Web technology for developers" on developer.mozilla.org for more information.

The eFlow Web stations support several techniques for creating client-side customizations. To select the customization method that suits the requirements of the specific project in the best possible way, carefully read the descriptions of the available customization methods described below.

Single JavaScript customization file

Web station customization based on a single JavaScript customization file is used in simple projects that do not require extensive customizations.

> ℹ Single file JScript customization will be applied to all eFlow applications running the relevant eFlow Web station.

Each eFlow web application folder has a Customer.js file in the Scripts folder. This file contains customization samples that can be reused with minor changes.

You can also create a new JScript customization file instead of modifying the existing Customer.js.

To apply customizations in the Web Validate / Web Front Office station, perform the following steps:

1. Prepare your customization file:

   a. Make changes in Customer.js or create your own JavaScript file.

   b. Make sure that your customization file is in the Scripts folder in the relevant web application physical location. For example, the Web Validate application is installed by default in the location:

      ```
      C:\inetpub\wwwroot\WebValidate\
      ```

2. Add the customization definition to the setup:

   a. Open the eFlow Design module.

   b. Click **Workflow Designer** 🖼.

   c. Click in the **Station Configuration** field, then click ellipsis ⚏ to open the station configuration.

   d. In the **Web Settings** tab, set the full path to the customization file as a CustomJsFile property value.

   e. Save your changes.

HTML customization file with multiple customization links

Advanced customization can be implemented using another mechanism that allows you to link multiple customization files.

In this case, the customization file in CSHTML format (Razor view file) is created per eFlow application or station in the folder `\Views\Customer\{ApplicationName}\{StationName}`.

> ⓘ CSHTML customizations will be applied at the application or station level, depending on the location of the file.

You can add any HTML/JS/CSS reference to this file, and it will be a part of the application HTML of the specific station. Below is an example of the Customer.cshtml file that contains links to CSS and JScript files:

```
<!--Adding a new CSS style -->
<link href="@Url.Content("~Views\Customer\SimpleDemo\ScanPortal\Content\MyCss.css")"
 rel="stylesheet" type="text/css" />

<!--Adding a new JScript -->
<script src="@Url.Content("~Views\Customer\SimpleDemo\ScanPortal\JS\MyJavaScript.js")"
 type="text/javascript"></script>
```

Troubleshooting

This chapter explains how to diagnose and fix common eFlow Web stations problems.

IIS configuration

The Web stations installation creates the relevant web applications and application pools, and defines the required permissions and settings.

If, for some reason, the server-side of one of the eFlow Web stations does not work as expected, you must make sure that the IIS configuration is correct.

Open the IIS manager and perform the following troubleshooting instructions to pinpoint the problem.

- Check that the relevant application pool is defined properly and running. If the application pool is required to run under the specific user identity, make sure that the **Identity** property is set correctly.
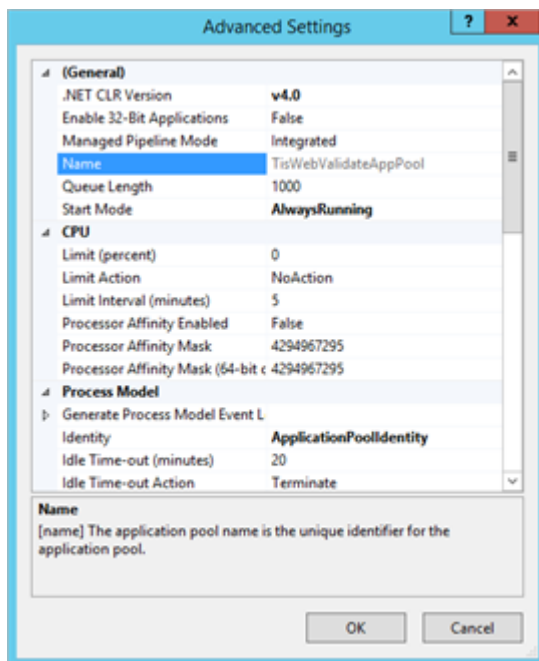
- Check that the relevant eFlow web application is installed on the server.
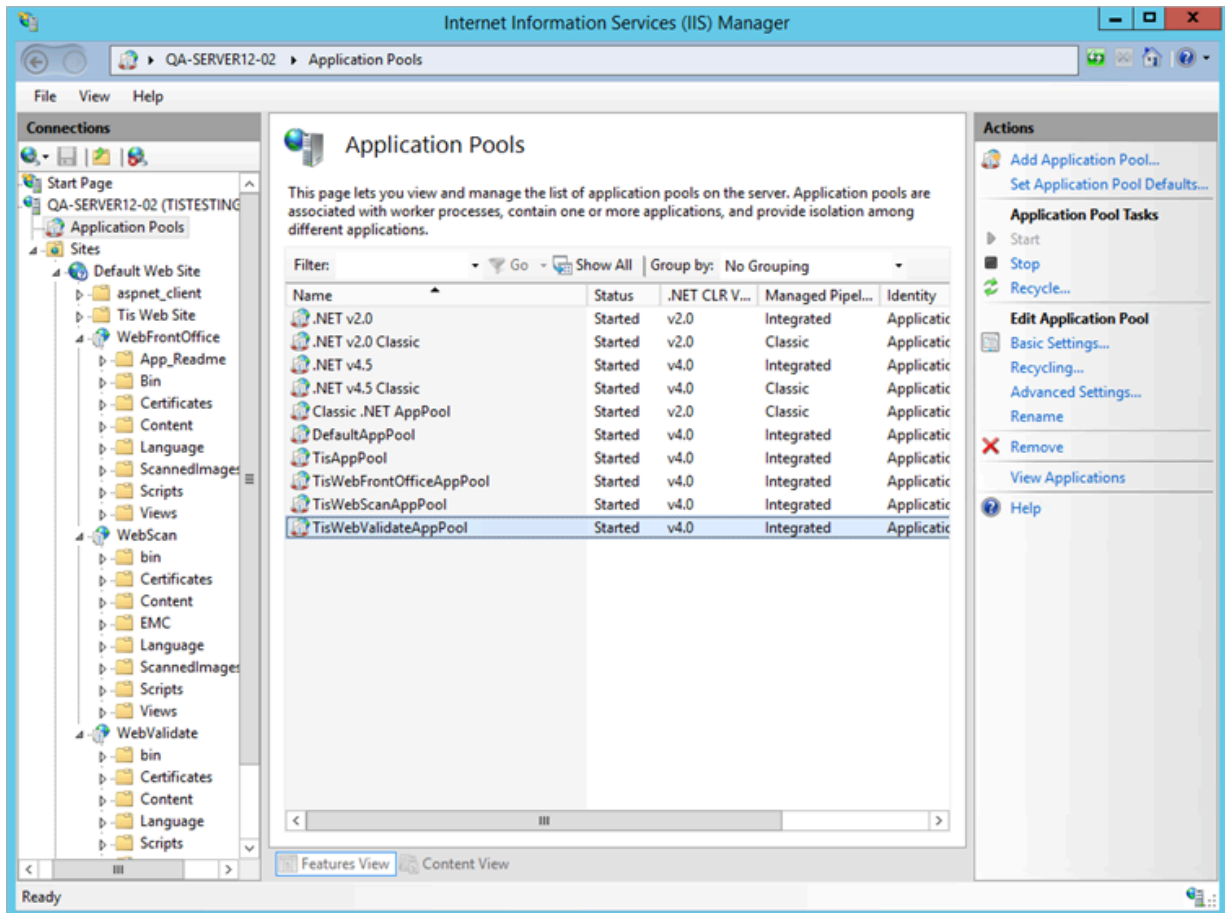
- Check the application configuration: select **Application** > **Manage** > **Advanced Settings**. Each eFlow web application should be connected to its own application pool.
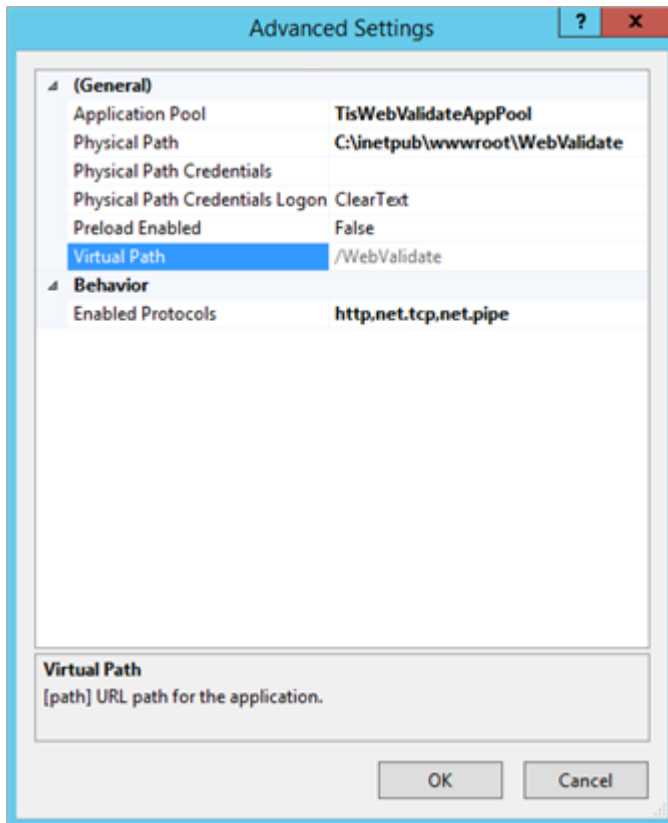
Firefox browser settings

When using Windows authentication, the Firefox browser may sometimes return the message "You are not authorized to login".

In this case, you must change the Firefox preferences to allow NTLM automatic authentication, as described in "How to configure Firefox for NTLM SSO (Single-Sign-On)?" on the StackExchange website.