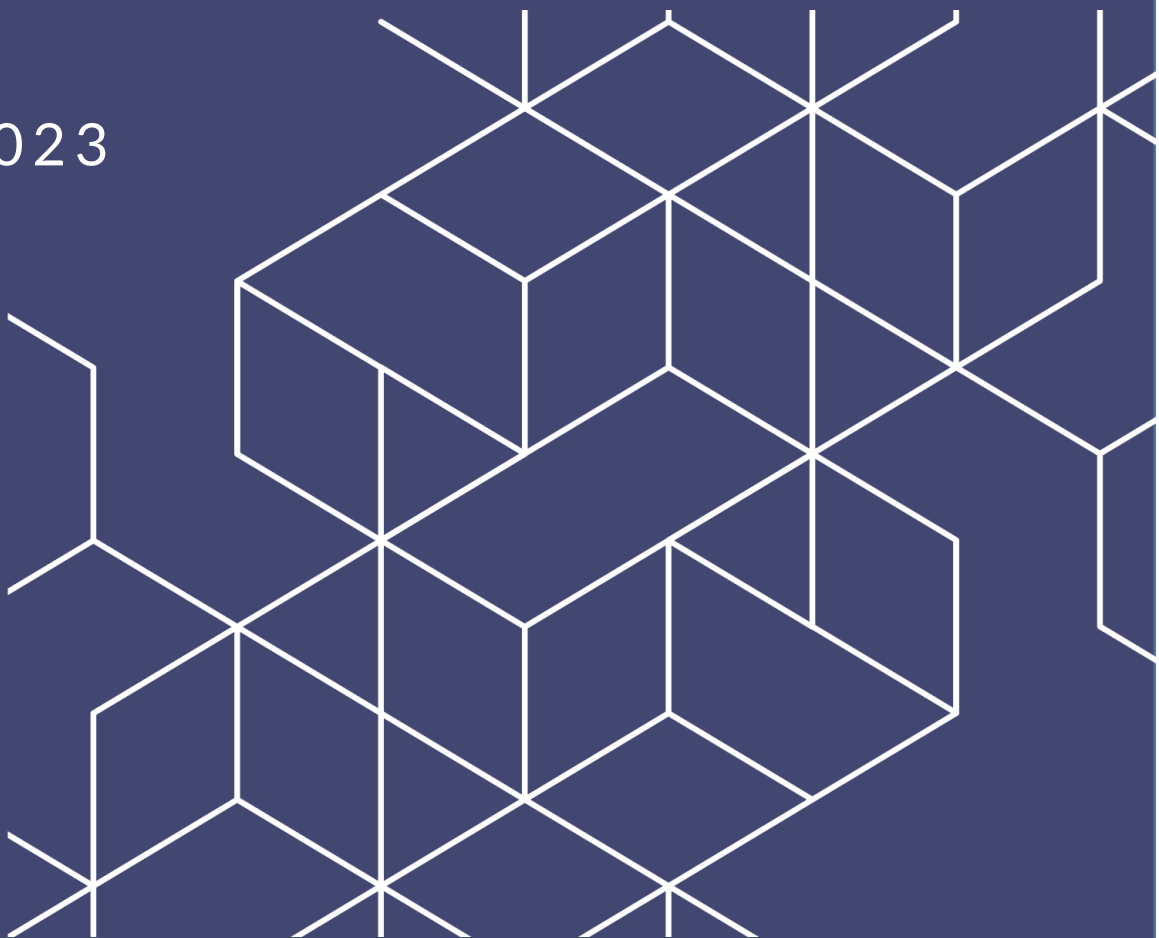
eCASE

OPEXUS

Application Installation Manual

v11.0.0

March 2023



eCase 11.0.0 Application Installation Manual

Notice of Rights

Copyright © 2023, AINS, LLC d/b/a OPEXUS. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the publisher: AINS, LLC. For information on obtaining permission for reprints and excerpts, contact info@opexustech.com.

Additionally, all copyrights, confidential information, patents, design rights and all other intellectual property rights of whatsoever nature contained herein are, and shall remain, the sole and exclusive property of the publisher.

Notice of Liability

The information in this publication is believed to be accurate and reliable. However, the information is distributed by the publisher (AINS, LLC.) on an "As Is" basis without warranty for its use, or for any infringements of patents or other rights of third parties resulting from its use.

While every precaution has been taken in the preparation of this publication, neither the author (or authors) nor the publisher will have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused, directly or indirectly, by the information contained in this publication or by the computer software and hardware products described in it.

Notice of Trademarks

The publisher's company name, company logo, company patents, and company proprietary products are trademarks or registered trademarks of the publisher: AINS, LLC. All other trademarks or registered trademarks are the property of their respective owners.

Non-Disclosure Statement

This document's contents are confidential and proprietary to AINS, LLC. This document cannot be released publicly or outside the purchasing agency without prior written permission from AINS, LLC.

Images in this manual are used as examples and may contain data and versioning that may not be consistent with your version of the application or information in your environment

Additional Notice

Information in this documentation is subject to change without notice and does not represent a commitment on the part of AINS, LLC.

Notwithstanding any of the foregoing, if this document was produced as a Deliverable or other work for hire under a contract on behalf of a U.S. Government end user, the terms and conditions of that contract shall apply in the event of a conflict.

Contents

1 Introduction 6

1.1 Scope 6

1.2 Overview 7

1.3 References 7

1.4 Installation Prerequisites 7

2 Step 1: Creating the Database 9

2.1 SQL Server Database 9

3 Step 2: Installing eCase 19

3.1 Install eCase 19

3.2 Verifying the eCase Installation 25

4 Step 3 (Optional): Installing eCase Add-on Modules 27

4.1 Install eCase PDF Editor 27

4.2 Install eCase OCR Components 31

4.3 Install Document Review Management 36

4.3.1 Enable Find and Redact Feature 42

5 Privileges for eCase Application Server and Services 44

5.1 Required Permissions for ASP .NET Process Identify 44

5.2 eCase Scheduler Configuration 47

5.2.1 Start the eCase Scheduler Service 47

5.2.2 Required Security Permissions for eCase Scheduler Service User 49

6 Configure XAML on User Workstations 51

Appendix A: Sign-On Mode Configuration 53

Configure the Application and Access the Sign-On Mode Tab 53

Change the Sign-On Mode 55

PIV Certificates as Two Factor Authentication 59

System Requirements for PIV Server (Second Server - Optional) 59
Step 1: Take Database backup 59
Step 2: Install the latest Service Pack (if not applied) 59
Step 3: Install PIV Card Authentication Hotfix 60
Step 4.a: Install SSL Certificate and Configure IIS (Single Server Option) 60
Step 4.b: Install SSL Certificate and Configure IIS (Two Servers Option) 61
Step 5: Install SSL Certificate and Configure IIS (Two Servers Option) 62
Step 7: Set the Banner Page location (Two Servers Option) 69
Appendix B: Application Maintenance 70
Appendix C: Cleanup Utility 73
Cleanup 73
Folder Cleanup 74
Case Type Cleanup 76
Application Type Cleanup 78
Choice List Cleanup 80
Documents Cleanup 82
Export Folders 83
Appendix D: eCase Uninstallation 86
Uninstalling the eCase Application 86
Appendix E: Un-installation Steps for eCase Add-on Modules 89
Uninstall eCase OCR Components 89
Uninstall eCase PDF Editor 93
Appendix F: Troubleshooting 97
Syntax error while accessing the Folder Tabs 97
Failed to decrypt using provider 'RsaProtectedConfigurationProvider' 97
Default NTFS Permissions and User Rights for IIS 98
Unable to install application by someone other than Initial Installer 98
Error uploading large attachments 99

1 Introduction

In this installation manual, you will receive step-by-step instructions on how to install eCase, version 11.0.0. If you are a Windows System Administrator, this manual was primarily written with you in mind. However, if you instead hold one of the IT positions listed below, or perform duties related to one or more of those IT positions, then this manual is also intended for you.

- Database Administrator
- Development Manager
- IT Technical Writer
- IT Project Manager
- Software Engineer
- Software Tester

A major goal of the *eCase Installation Manual* — in addition to guiding you through a successful installation — is to provide supplemental information in appendices about eCase that you will find useful and time saving.

This document does not cover the System Requirements, we strongly recommend that you review System Requirements document before installation to understand about eCase deployment architecture and server requirements. The system requirements for the required servers referred in this document are explained in System Requirements document.

1.1 Scope

The information presented in this manual covers how to install eCase Version 11.0.0, onto the Application Server in a Windows Server, Network Operating System (NOS) environment. Given that certain components are essential in completing the installation, topics covered include the following:

- Configuring the database server for use with eCase
- Configuring the file repository server for use with eCase

This manual does not provide instructions about installing Windows Server NOS. For installation details, please consult the appropriate Windows Server installation documentation, or your software vendor.

1.2 Overview

eCase is a robust, web application that helps organizations to create case management applications through low code approach. In other words, eCase helps organizations to automate their business processes by automating the entire lifecycle of a workflow, a process referred to as a case.

1.3 References

The following resources are used as references in preparing this manual:

- eCase System Requirements Manual
- eCase Prerequisites Installation Manual

1.4 Installation Prerequisites

Ensure the following software applications are installed on the server on which you plan to install eCase:

- .NET Framework version 4.8
- IIS version 8.5 or later

Also, ensure that the SMTP server is configured, so that emails can be relayed to intranet and internet domains.

(!!) Note:

Although you can install eCase web application, eCase Admin application, the database, file repository and the scheduler service on the same server, distributing them on separate servers is highly recommended due to their processing demands on the CPU. This installation approach helps eCase and its essential components to achieve higher levels of performance. Please refer to System Requirements document to understand about eCase deployment Architecture.

(!!) Notes:

For information about how to determine which .NET Framework is installed on your server, direct your web browser to the following URL:

https://msdn.microsoft.com/en-us/library/hh925568(v=vs.110).aspx

For information about downloading and installing .NET Frameworks, direct your web browser to the following URL:

https://msdn.microsoft.com/en-us/library/5a4x27ek(v=vs.110).aspx

2 Step 1: Creating the Database

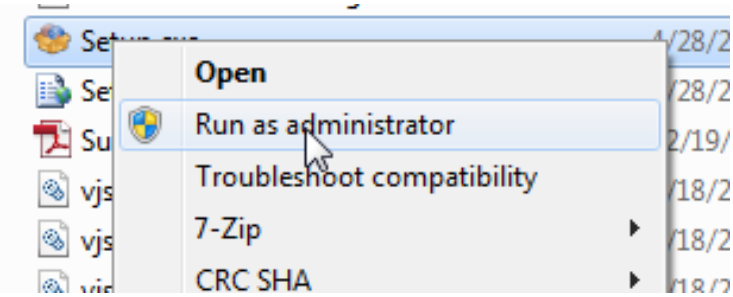
This chapter guides you step-by-step through the process of creating a database for use with eCase. Before you install eCase, carry out the steps in this chapter.

2.1 SQL Server Database

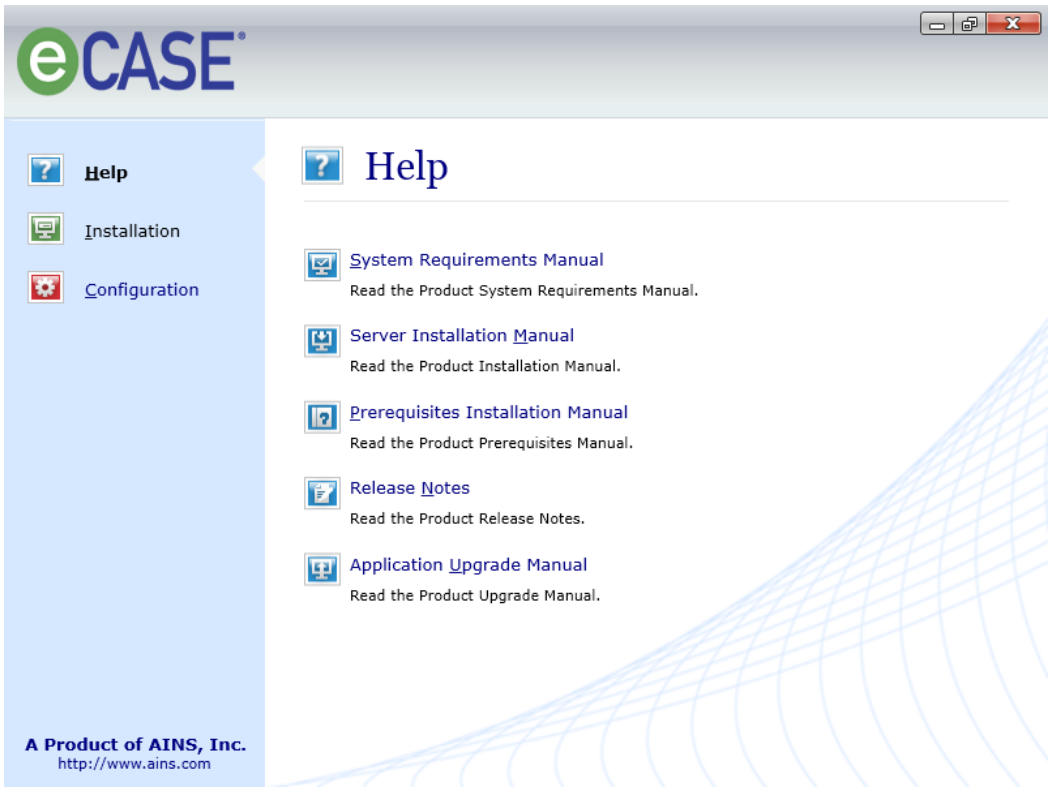
The type of database you will create in this section for use with eCase is a SQL Server Database. Follow the step-by- step procedures outlined below to create the database.

To create the SQL Server Database

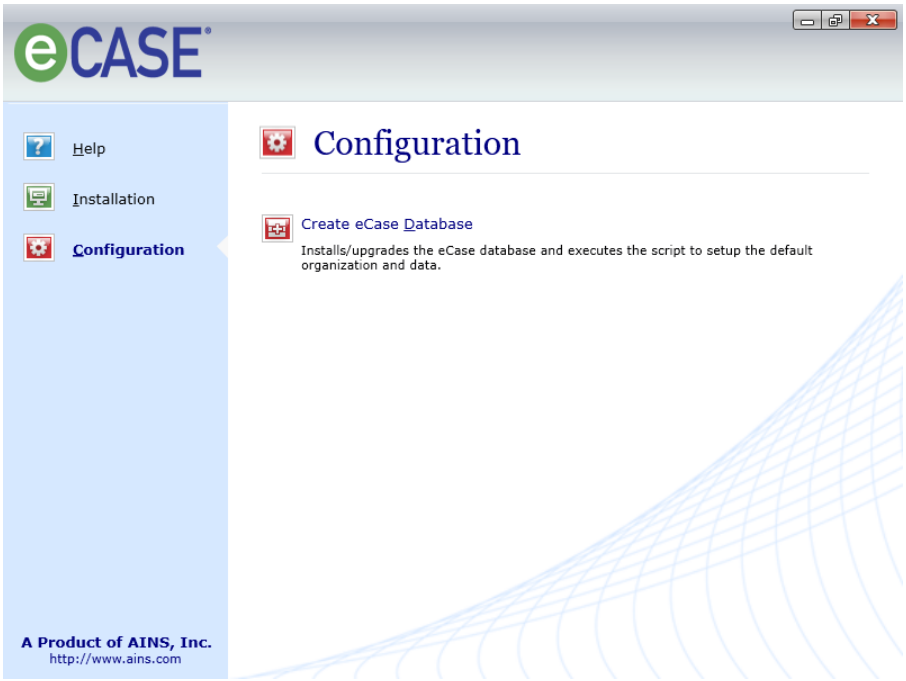
1. Double-click the **eCase** folder, and then double click the **Server** folder.
2. Right-click the **Setup.exe** file, and then click **Run as administrator** on the short-cut menu.



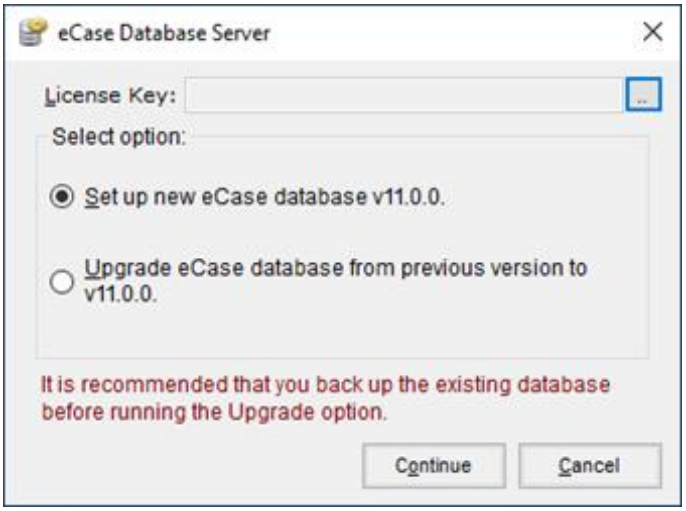
3. The Setup will show the **Help** Window with list of manuals. Click on any link to view the corresponding manual. In left panel, click **Configuration** to setup the database.



4. On the task panel of the eCase **Configuration** window, click **Create eCase Database**, and then click **SQL Server** on the short-cut menu.

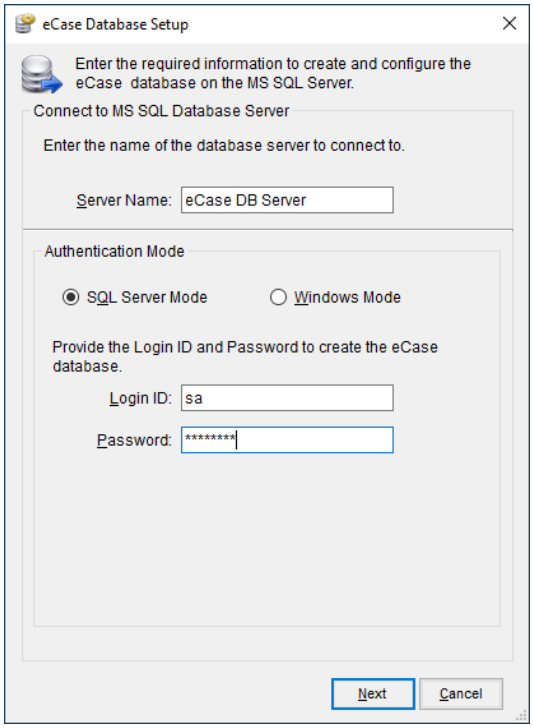


5. In the **eCase Database Server** dialog box, type the license key in the **License Key** box (if this box is empty), and then click **Continue**

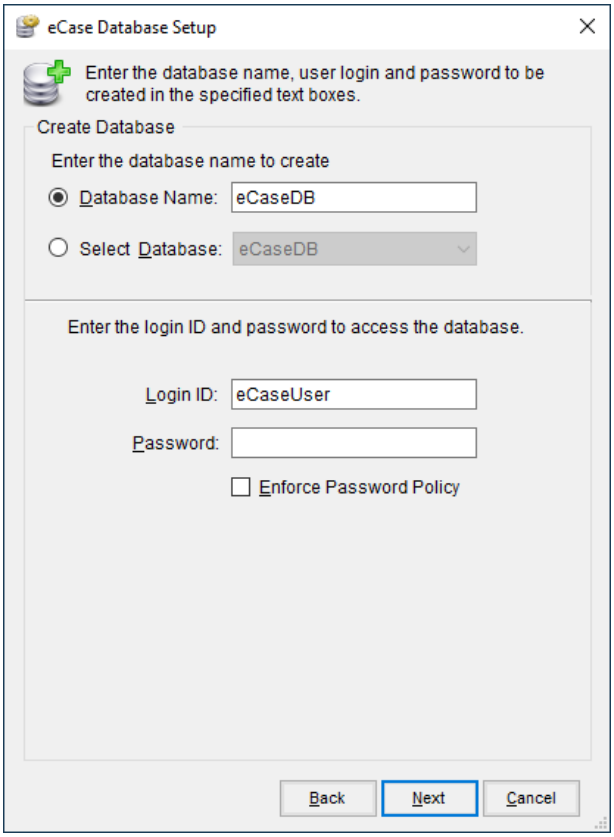


(!!) Note: The license key is in a file included with the set up CD. If this file is in the same folder as the Setup.exe file, the license key will be entered into the License Key box automatically.

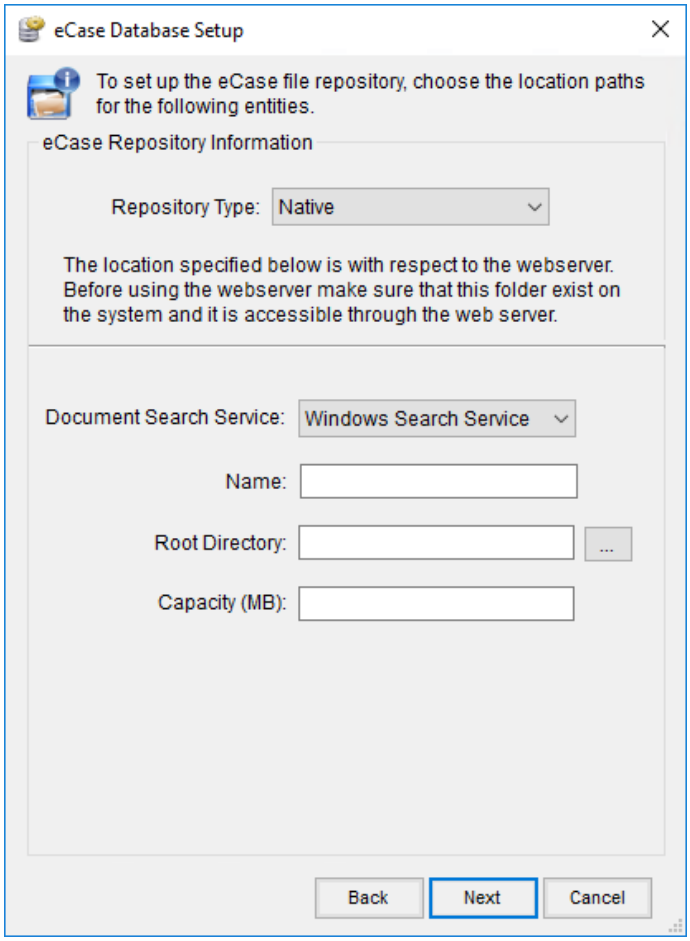
6. In the **eCase Database Setup** dialog box, do the following:
    a. Type the server name in the **Server Name** box
    b. Under **Authentication Mode**, ensure **SQL Server Mode** (default) is checked.
    c. Type your SQL Server login ID in the **Login ID** box, and then type password in the **Password** box.
    d. The SQL Server Login ID is required to have permissions either to create new database for eCase or get the list of databases to select a blank database for eCase.
7. Click **Next**.



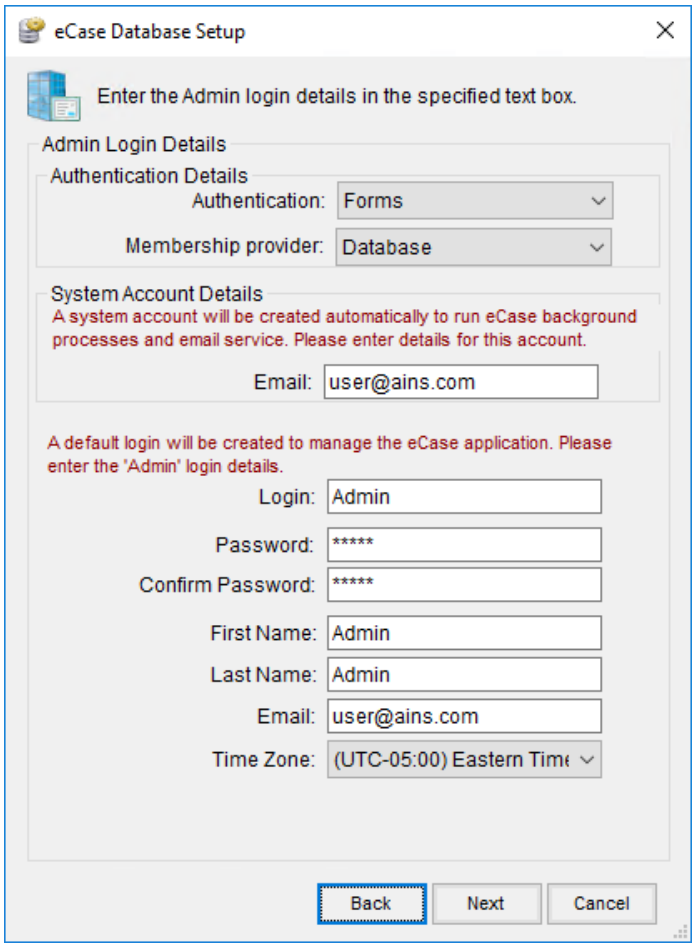
8. If you are creating a new database, do the following:
9. Select “Database Name” option and enter the database name
10. Enter the SQL Server Login ID/Password created and assigned as database owner for new database.
11. Check the Configure Repository check box.
12. Click Next.



13. If you are using an existing blank database, do the following
    a. Select "Select Database" option and select a blank database created by your DBA
14. Click **Next** to configure Repository
15. Please select Repository Type: **Native** or **SharePoint.**



16. Select Document Search Service option for Native Repository.
    a. If **Windows Search Service** selected, you have to install Windows Search Service on eCase Application server and Repository root directory location should be configured on eCase Application Server in local drive (For example, D:\DMS).
    b. If **eCase Search Service** selected, Repository root directory location can be local or a network location (For example, remote file repository location on Server_Name01 will be configured as, \\Server_Name01\DMS)
17. Enter the File Storage Area **Name**, **Root Directory** (local drive or network location as described above) and **Capacity** in MB. If Root Directory is:
    a. **Local Path**: Install eCase Scheduler on eCase Application Server when eCase Search Service selected.
    b. **UNC Path**: Install eCase Scheduler either on eCase Application Server or on a different server. Configure the service with a domain user account and set the **Read, List Folder Contents, Read & Execute** permissions to Repository location. To configure eCase Scheduler Service user account refer the eCase Scheduler Configuration topic.
18. Click **Next** to Configure eCase Authentication and System Account details.

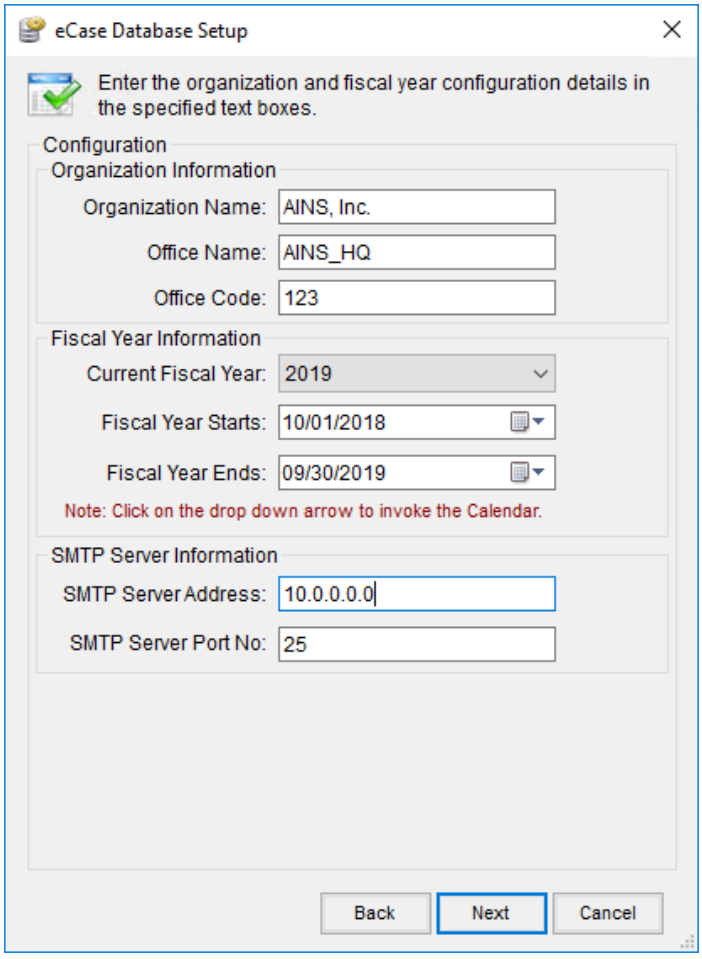


Field Name	Description
eCase Login Mode	Forms – Standard level of access for the eCase application; this is the default option Single Sign On – Allows the user to automatically log into eCase without prompting for credentials eAuthentication – An authentication service provided by a proxy/remote server to other distributed servers, on the internet or an intranet; users must submit requests to obtain login/logout credentials.

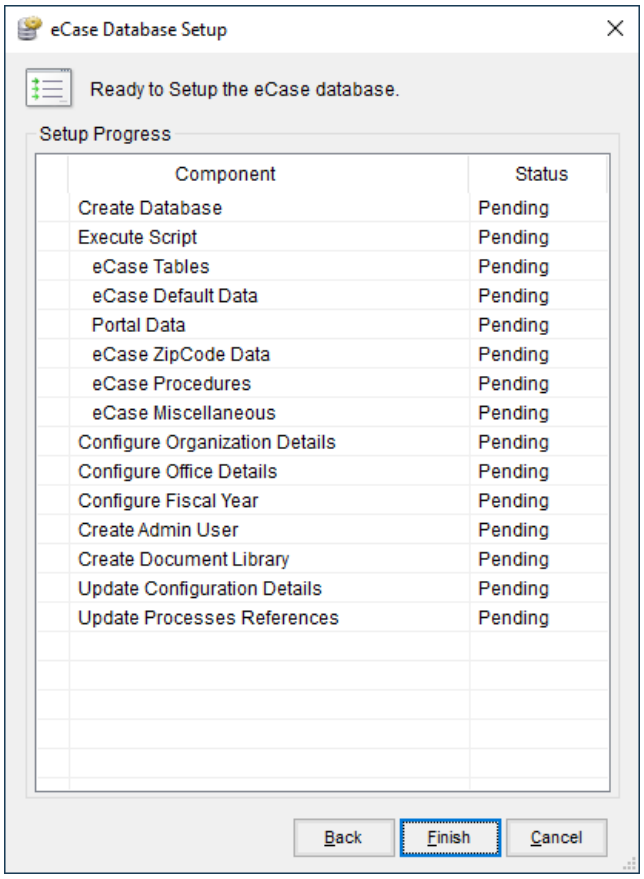
Field Name	Description
Membership Provider	Database – Login credentials will be stored in the eCase database; this is the default option LdapMembershipProvider – Login credentials will be stored and verified by the LDAP server; this option must coincide with the Portal application
Login	The unique identifier that verifies the Admin user's identity; this system administrator user manages the eCase application.
Password	The security credential associated with the Admin user to gain access to the application.
Confirm Password	Same as above
First Name	The first name of the Admin user
Last Name	Surname of the Admin user
Email	Email address for the Admin user
Time Zone	The region that has a uniform standard time; the current time zone is selected by default.
LDAP Server Name	The name of the LDAP server
Service User Name	The identifier given to a user that has access to the LDAP server entered as Server name/User Name
Service User Password	The security credential associated with the Service User

Field Name	Description
Domain	The name of the IP resource to access the database server.
eAuthentication ID	An electronic authentication identifier for the Admin user; the user must submit a request to obtain an ID.
eAuthentication Log Out URL	A URL that logs out an authenticated user from the server with the specified callback method and user state; the user must submit a request to obtain the web address

19. In the **Organization and fiscal year configuration details** dialog box, fill out the boxes with the requested information, and then click **Next**.



20. When you receive the “Ready to Setup the eCase database” message, click Finish.



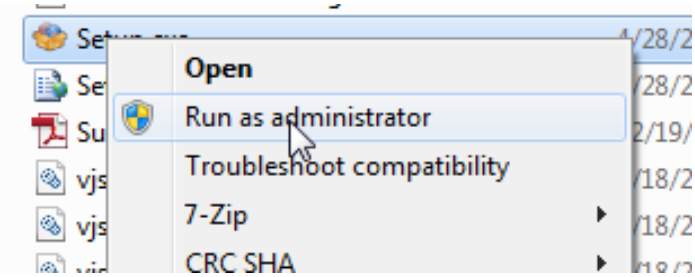
21. When you receive the **“Database Successfully created”** message, click **OK**.

3 Step 2: Installing eCase

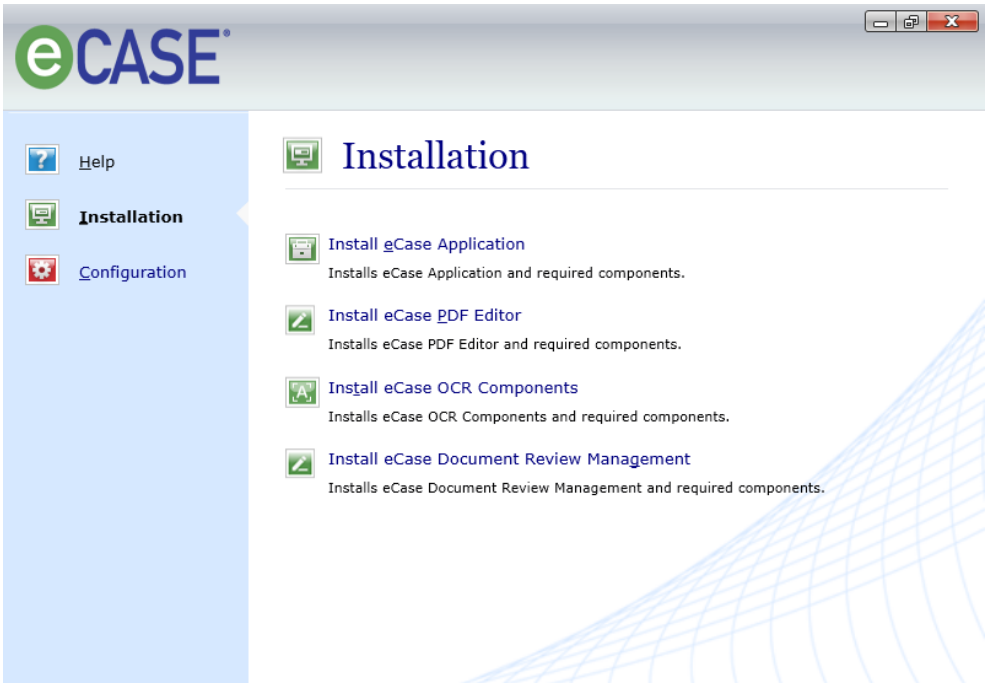
eCase is installed on the Microsoft Internet Information Services (IIS) web server.

3.1 Install eCase

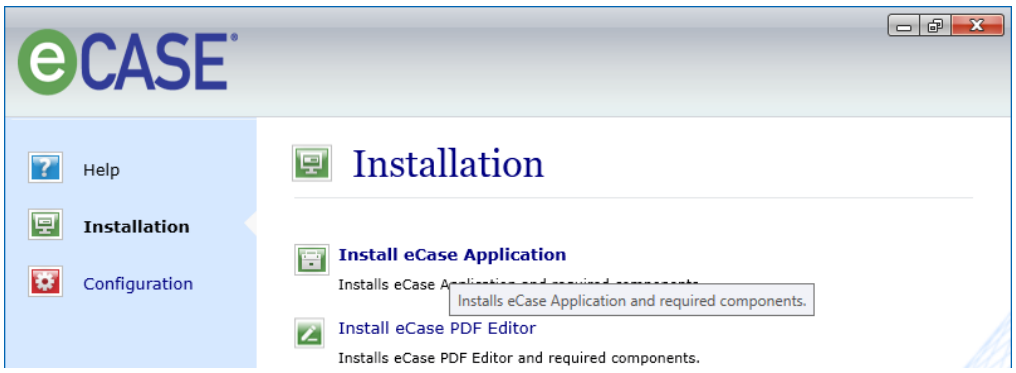
1. Go to **eCase** folder, and then open the **Server** folder.
2. Right-click the **Setup.exe** file, and then click **Run as administrator** on the short-cut menu.



3. On the navigation panel of the eCase **Help** window, click **Installation**.

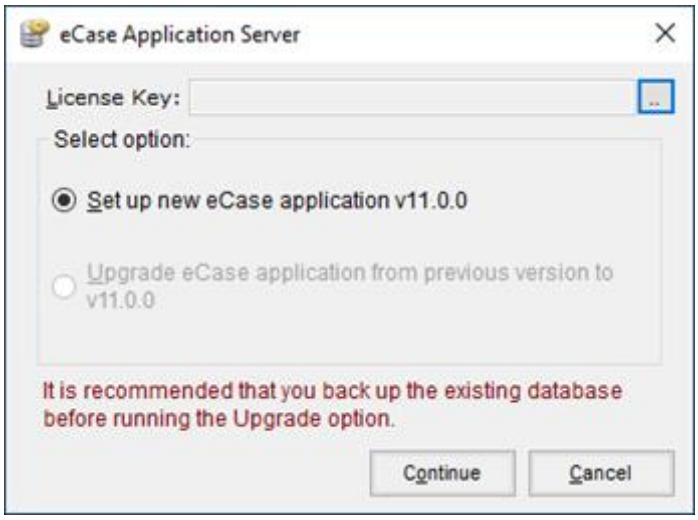


4. On the task panel of the eCase **Installation** window, click **Install eCase Application**.

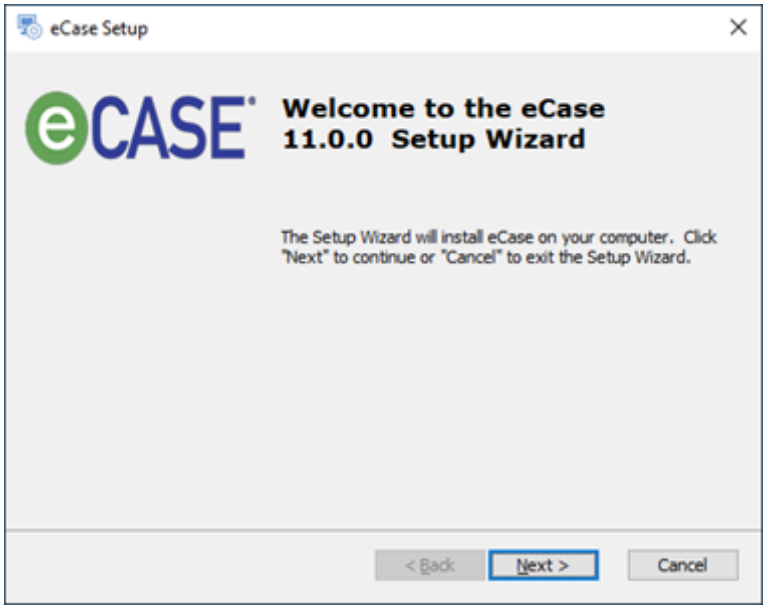


5. In the **eCase Application Server** dialog box, type the license key in the **License Key** box (if this box is empty), and then click **Continue**.

(!!) Note: The license key is in a file included with the set up CD. If this file is in the same folder as the Setup.exe file, the license key will be entered into the License Key box automatically.



6. The **Set up new eCase application** option selected by default.
7. Read the *Welcome to the eCase Installation Wizard* dialog box, and then click **Next**.



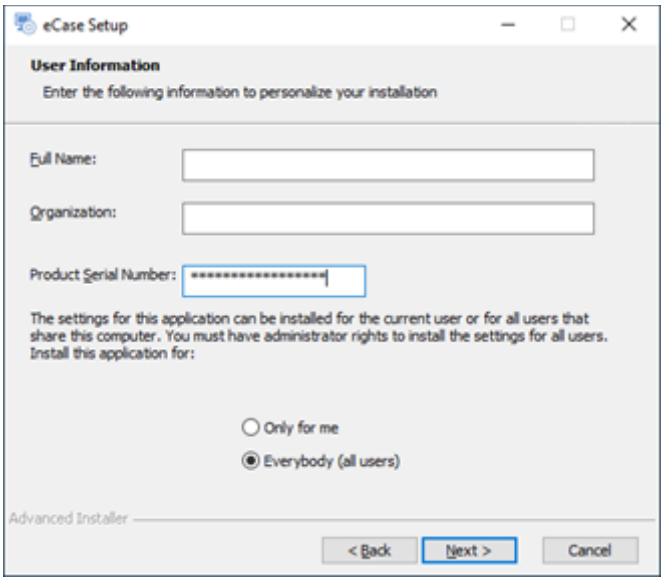
8. Read the Software License Agreement dialog box, then click **I accept the license agreement** (default), and then click **Next**.

(!!) Notes:

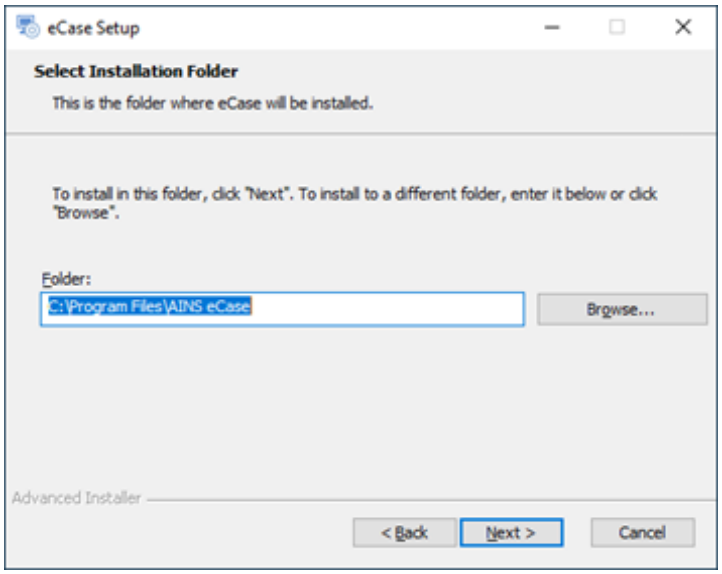
- **The Next button remains disabled until the option to accept the license agreement is selected.**

- **The Reset button sets the default to I do not Accept the License Agreement.**

9. In the **User Information** dialog box, do the following:
    a. In the **Full Name** box, type your first name and last (sir) name.
    b. **Optional:** In the **Organization** box, type the name of the organization that you work for.
    c. In the **Product Serial Number** box, type the eCase application serial number (if this box is empty).

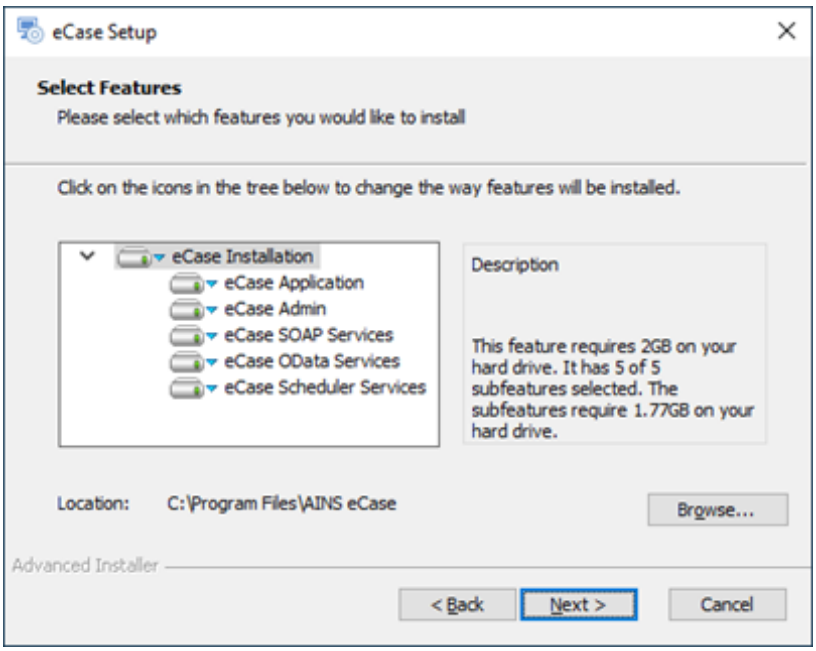


    d. Ensure **Everybody** who uses this computer is checked, and then click Next.

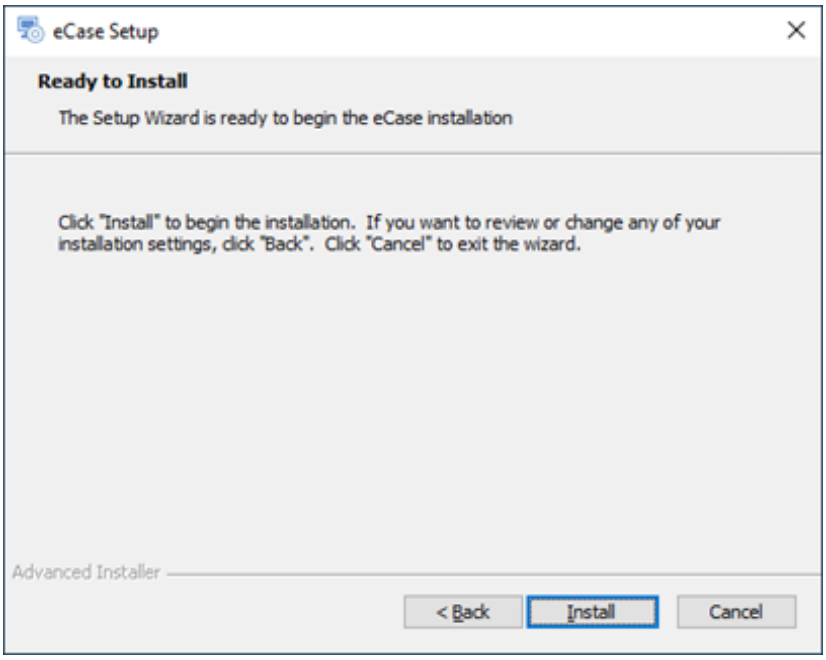


10. In the **Destination Folder** dialog box, click **Next** to accept the default folder in which to install eCase, or click **Browse** to choose a folder of your choice.

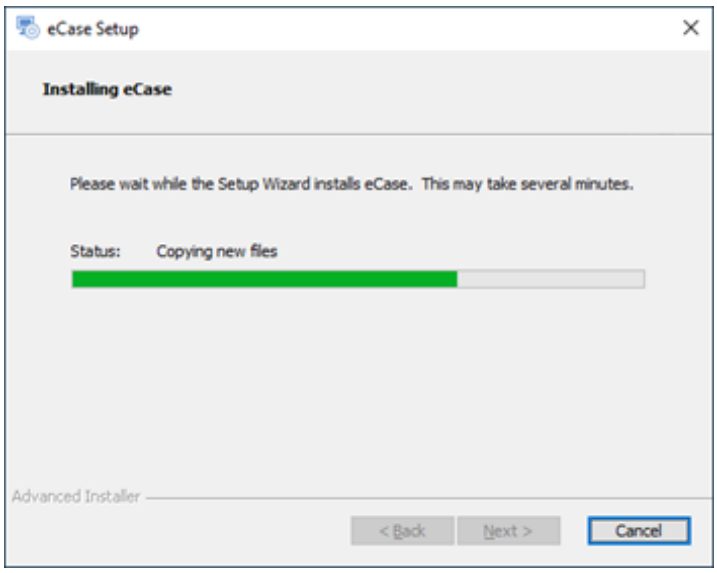
11. In the **Select Features** dialog box, click **Next** to install all features of eCase.
    eCase OData Services and eCase SOAP Services are not required unless integrations with external systems are required. eCase Application, eCase Admin and eCase Scheduler Service are required to be installed. They can be deployed on same server or on different servers in production environments to meet the performance requirements.



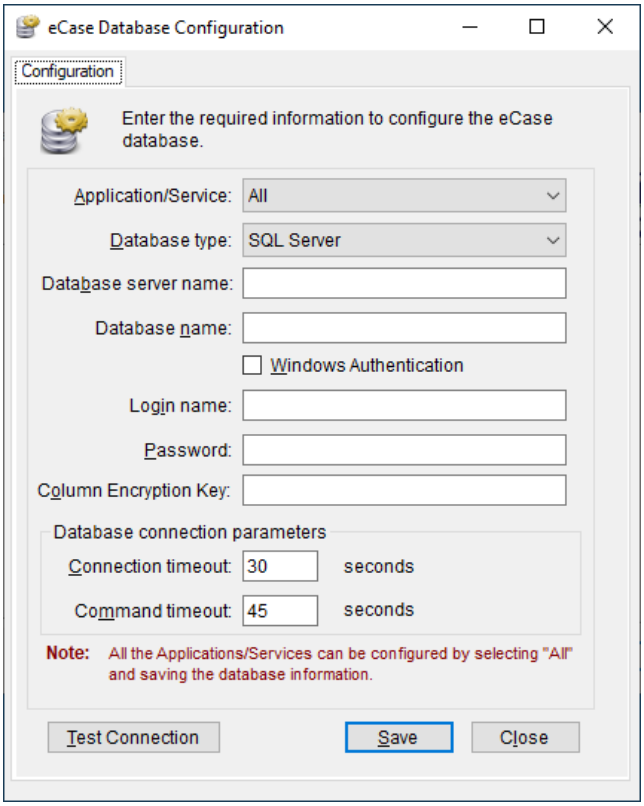
12. In the Ready to Install the Application dialog box, click Next.



13. When the **Updating System** dialog box appears, let the installation process run to completion. (This process could run for several minutes.)

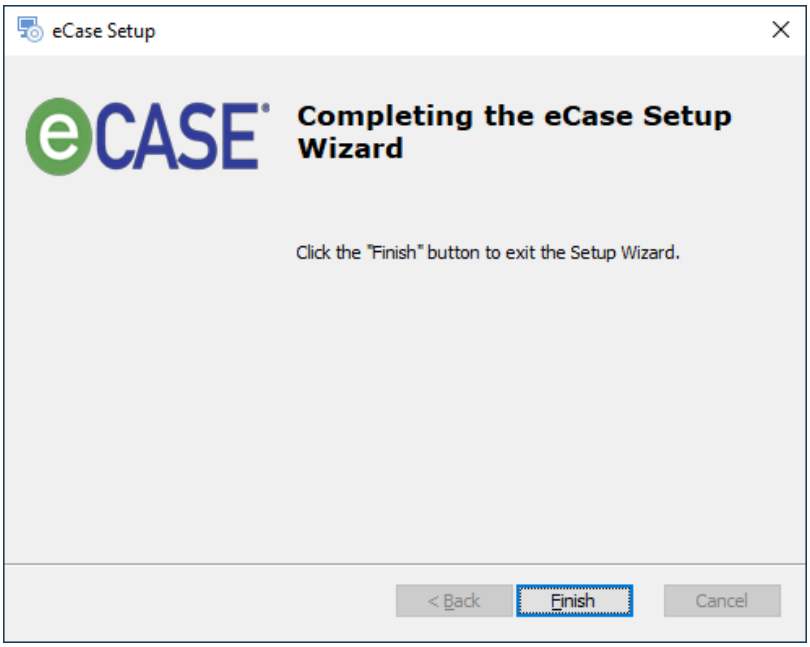


(!!) Note: It is highly recommended that you let the installation process run uninterrupted. For information about uninstalling eCase, see Appendix D.



14. When the **eCase Database Configuration** dialog box appears, click **Close**.
15. The **eCase Database Configuration** dialog box appears if you selected at least one feature shown in step 10 of this chapter during the installation process. You can skip filling out the

eCase Database Configuration dialog box at this time. You can configure the database in the next section. When you receive the **"eCase has been successfully installed."** message, click **Finish.**

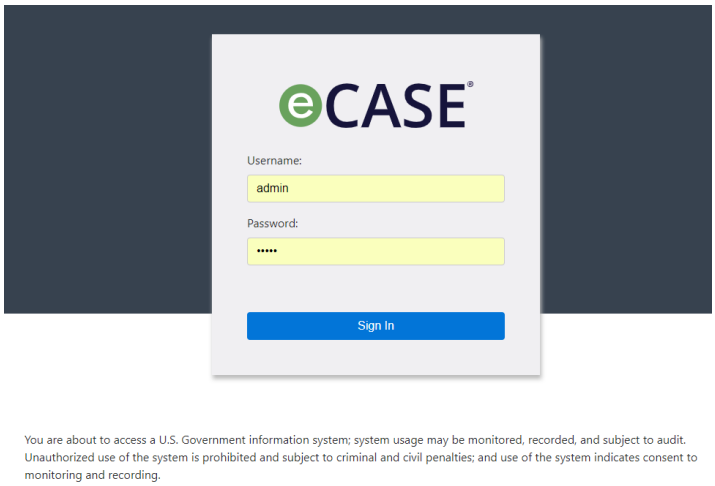


3.2 Verifying the eCase Installation

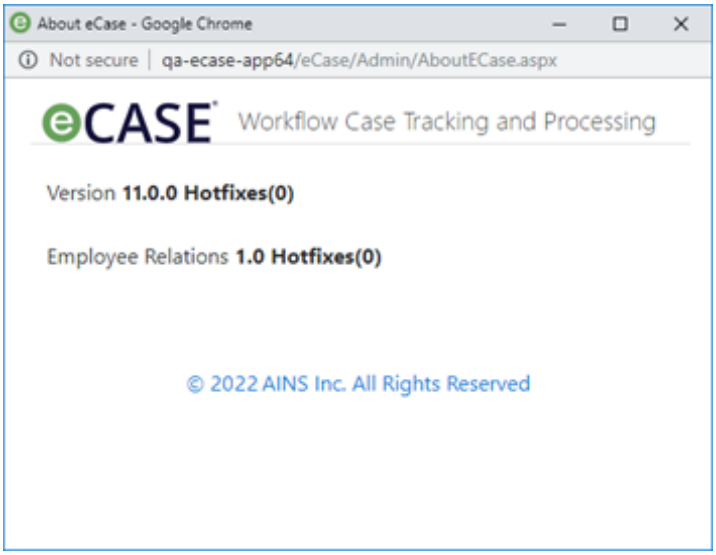
After installing eCase, you must next verify the installation. This chapter guides you through the verification process.

To verify the eCase installation:

1. On the task bar, click **Start > All Programs > Administrative Tools > Internet Information Services (IIS) Manager**.
2. In the Connections panel, Expand the Start Page > Sites > and Default Web Site.
3. **Expand** the **eCase** folder.
4. Locate **Manage Applications** > **Browse Application** on the right side of the screen.
5. Click Browse *:80 (http).
6. In the **eCase Login** dialog box, type your **User Name** and **Password**, and then click **Sign In**.



7. Click **Help > About eCase**.



8. Make sure the version is correct then close the screen.
9. Exit the application. You have successfully installed and configured eCase.

(!!) Note: If you are unable to launch eCase, try to re-create the database and repository again.

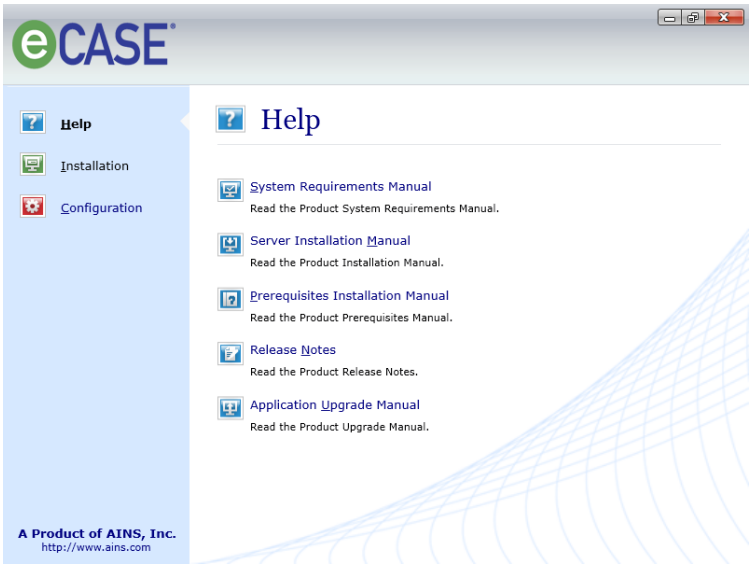
4 Step 3 (Optional): Installing eCase Add-on Modules

eCase add-on modules are not required unless they are required to meet your business requirements. You can skip this optional step when not required.

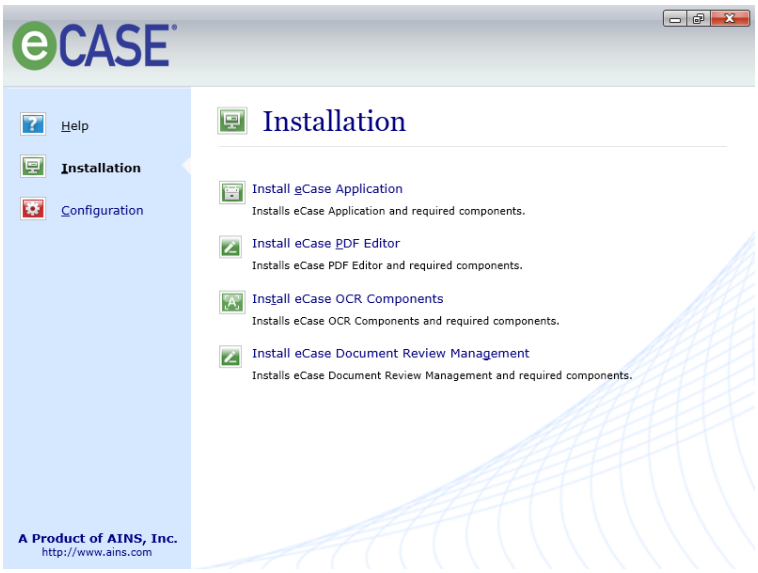
4.1 Install eCase PDF Editor

To install eCase PDF Editor, please make sure eCase application is installed, then follow the steps below.

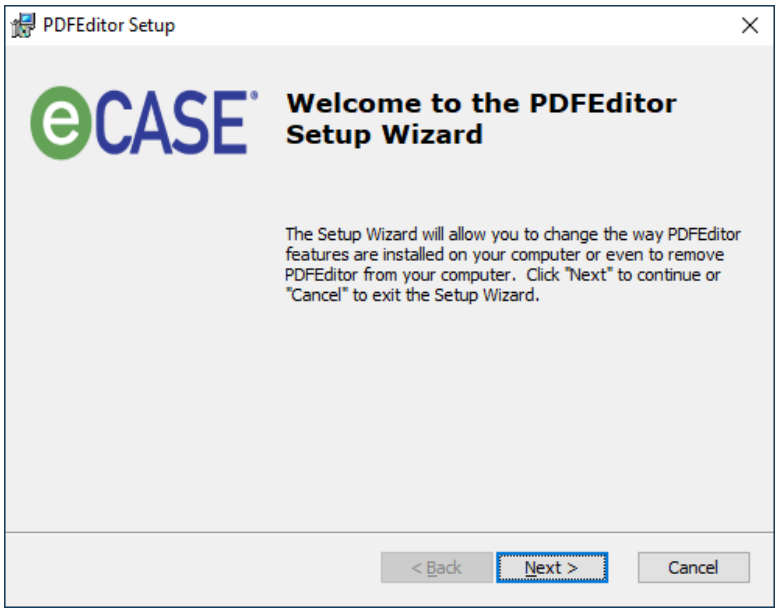
1. Open **Server** folder.
2. Run the **Setup.exe** as run as Administrator.



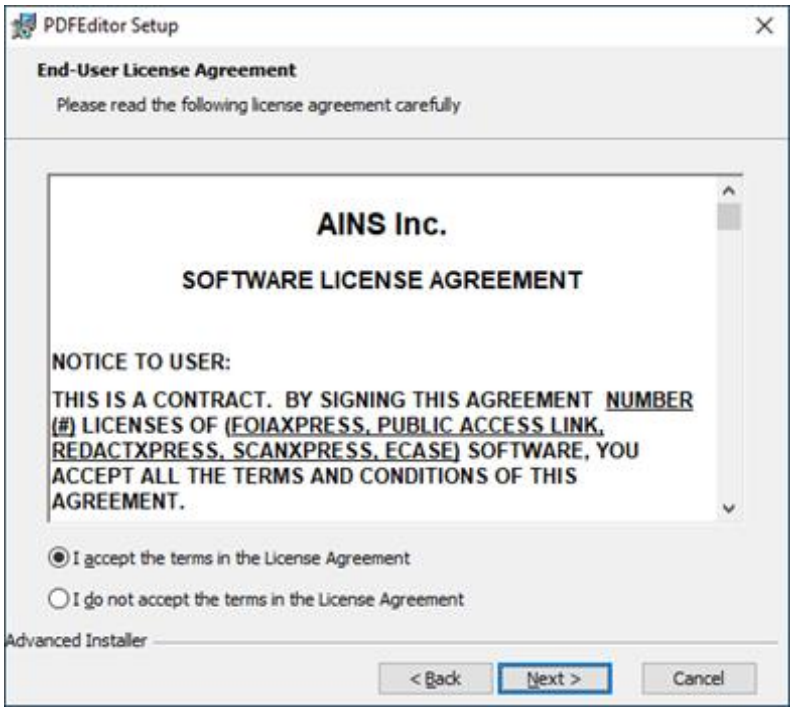
3. Click the Install eCase PDF Editor under Installation section.



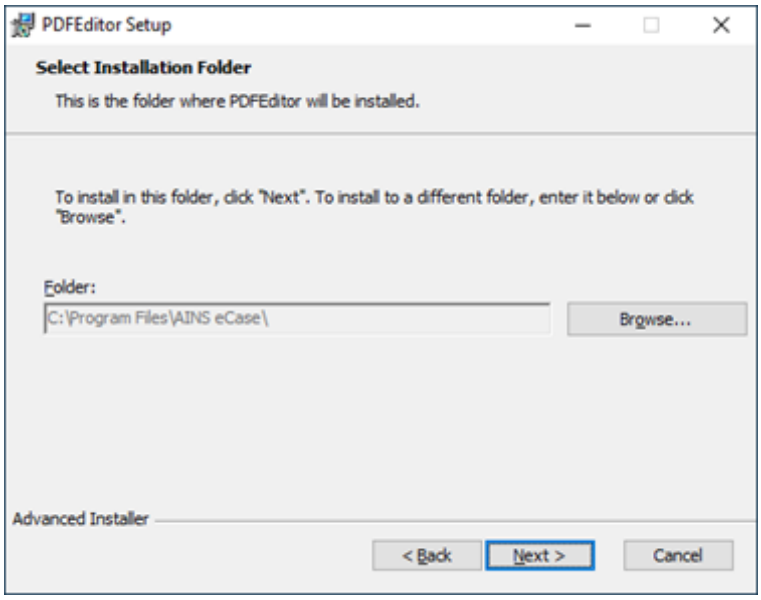
4. eCase PDF Editor **Welcome** screen will appear. Click **Next**.



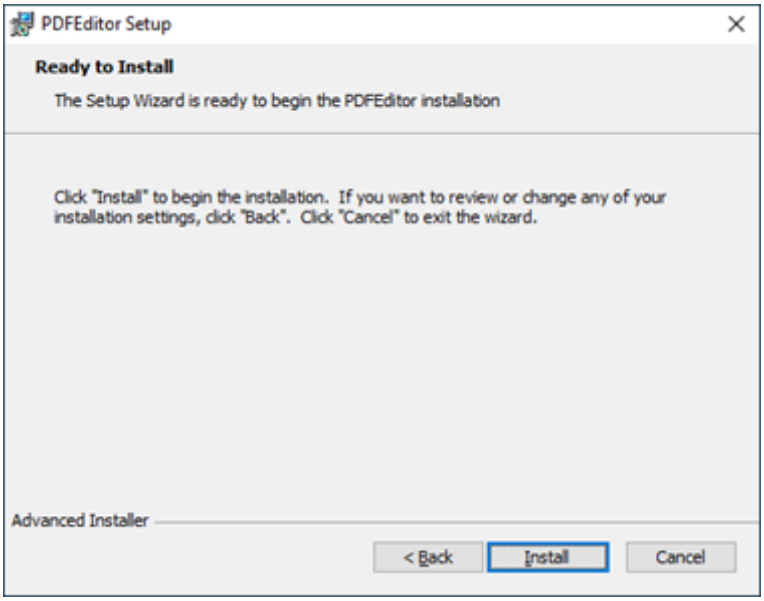
5. In End-User License Agreement, please accept license details and click **Next**.



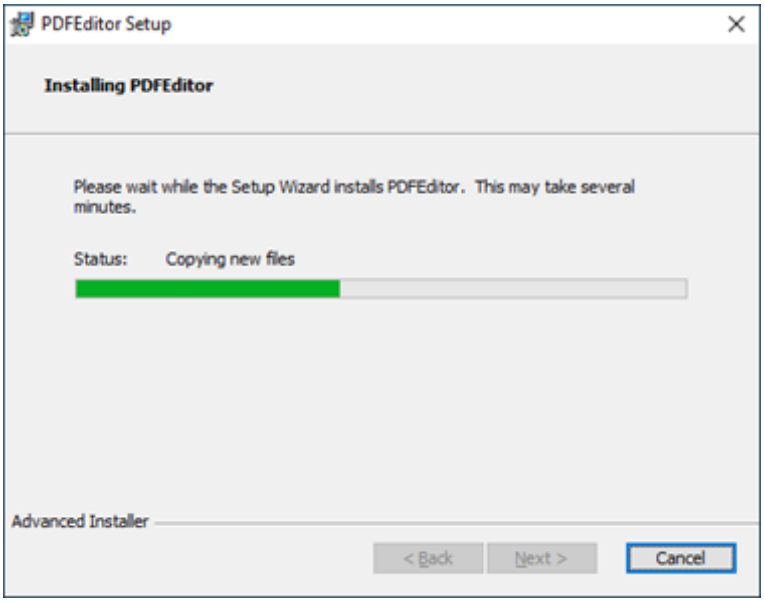
6. In Destination Folder screen, click **Next**.



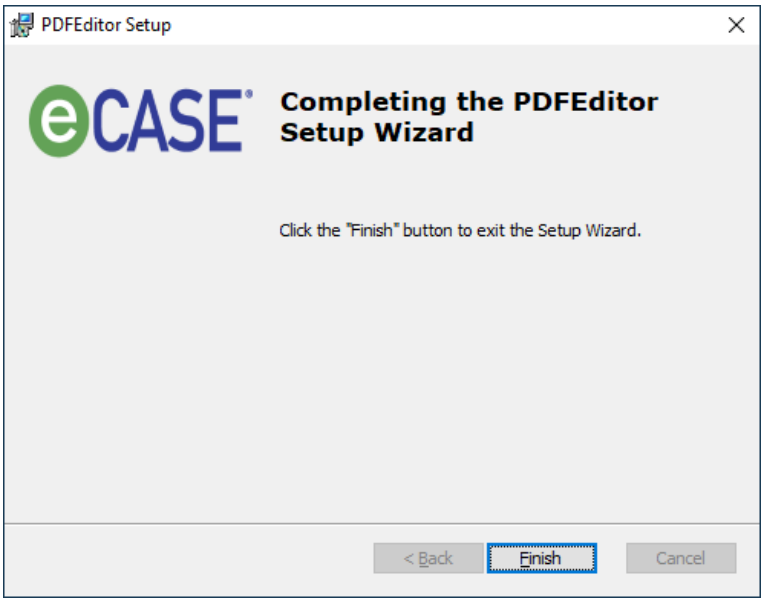
7. Click **Next**.



8. Installation is in progress.



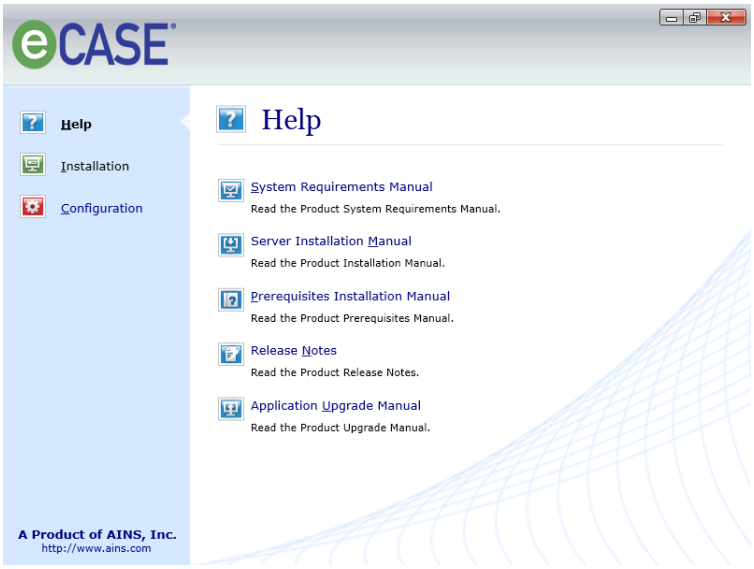
9. Click **Finish**.



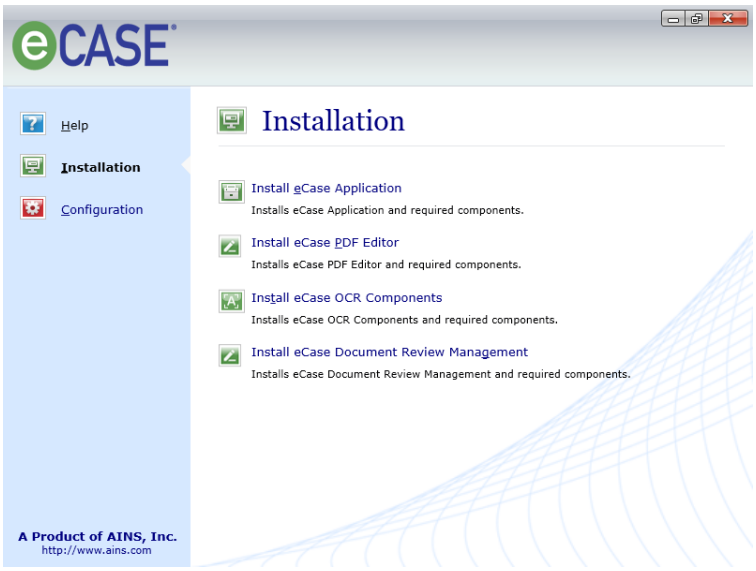
4.2 Install eCase OCR Components

eCase OCR Components should be installed on the same server where eCase scheduler is installed. To install eCase OCR Components, follow the steps below on the eCase Scheduler server.

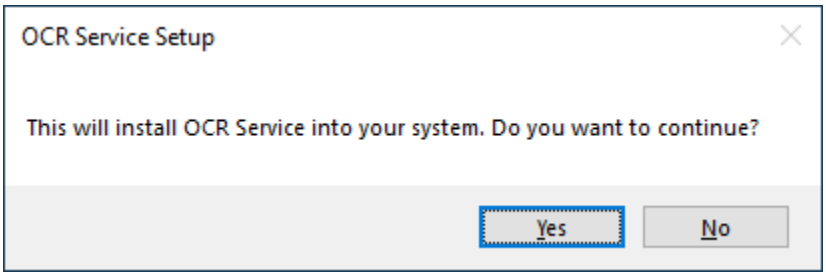
1. Open **Server** folder.
2. Run the **Setup.exe** as run as Administrator.



3. Click on Installation and click on Install eCase OCR Components

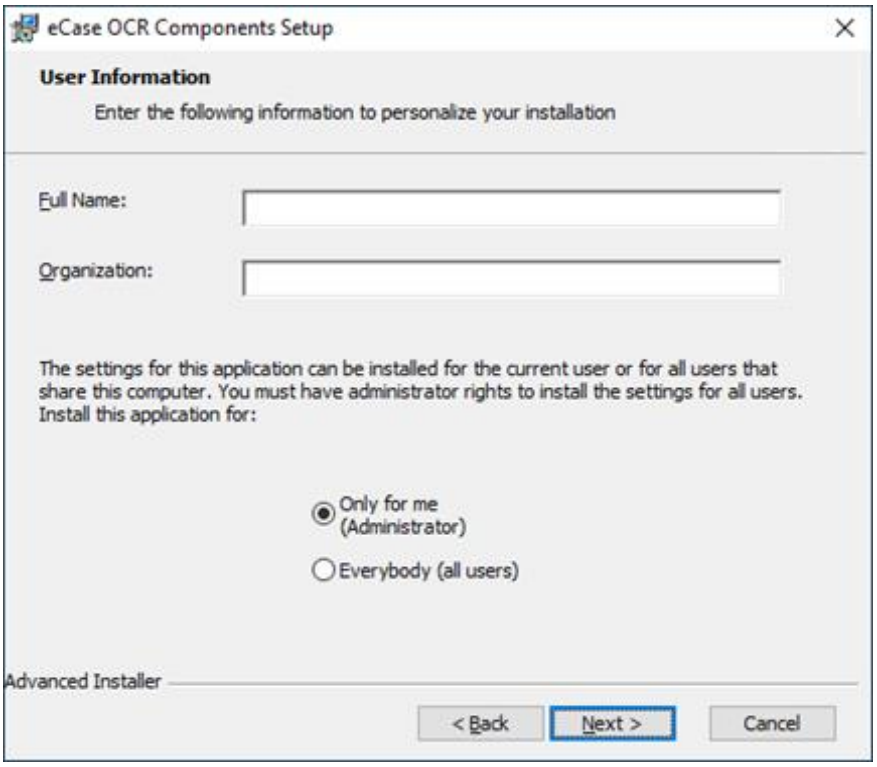


4. The message below appears, click **Yes** to continue.

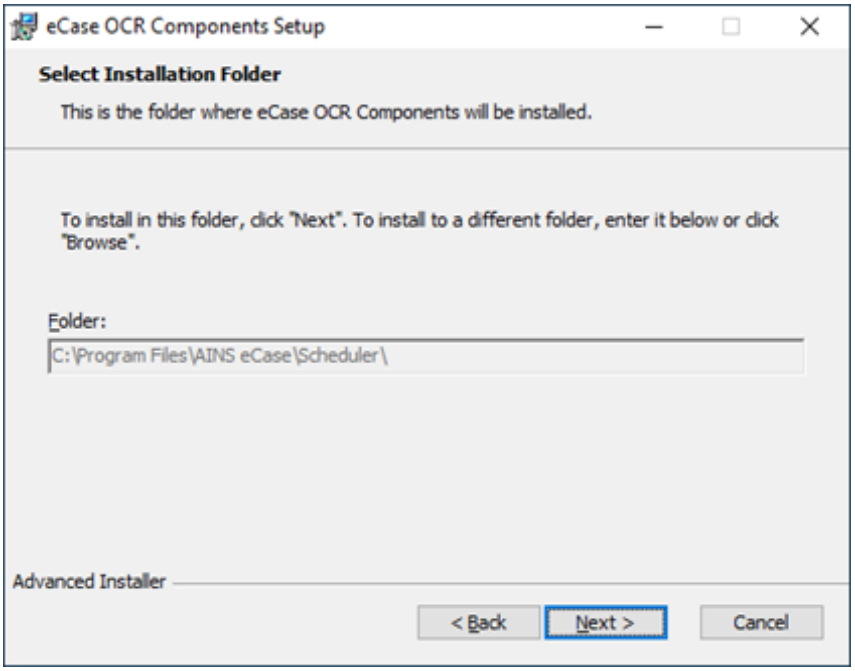


5. eCase OCR Components **Welcome** screen appears. Click **Next**.

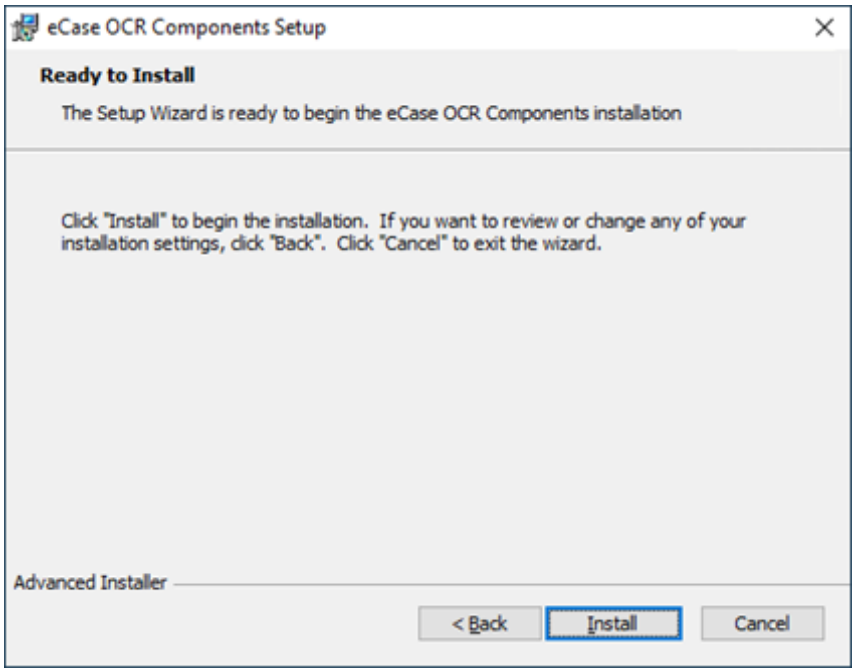
6. In User Information screen, please provide the details and click **Next**.



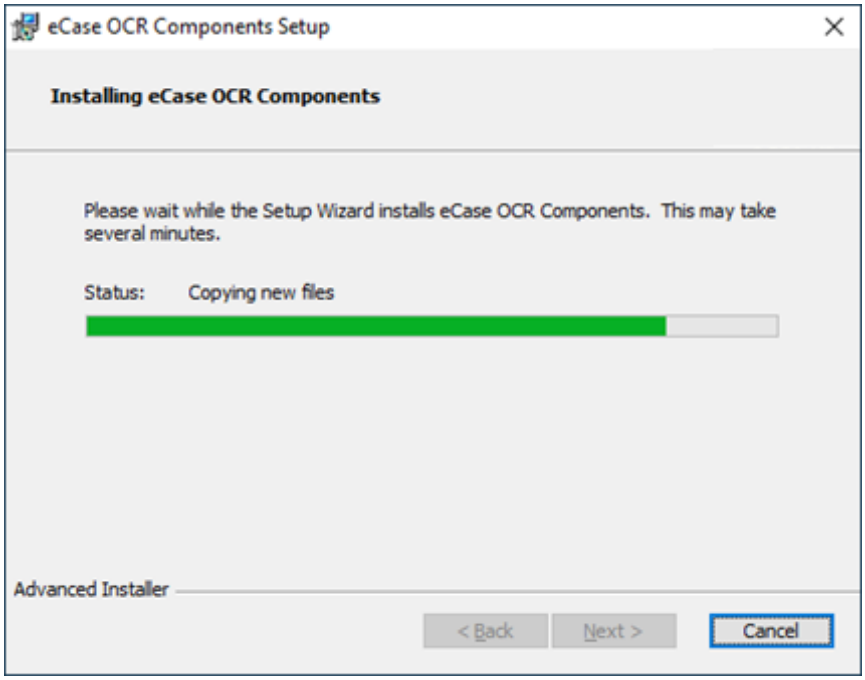
7. In Destination Folder screen, click **Next**.



8. Click Install

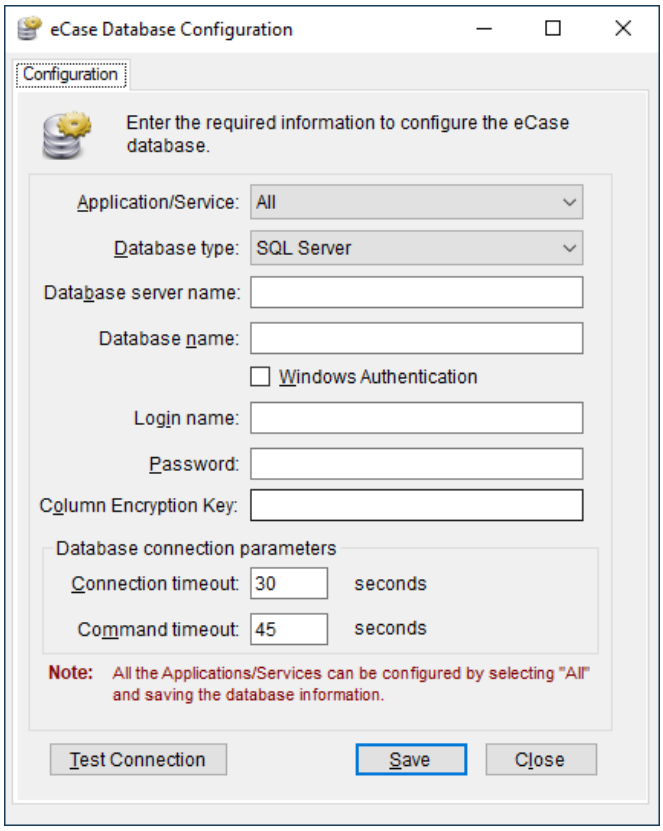


9. Installation is in progress.

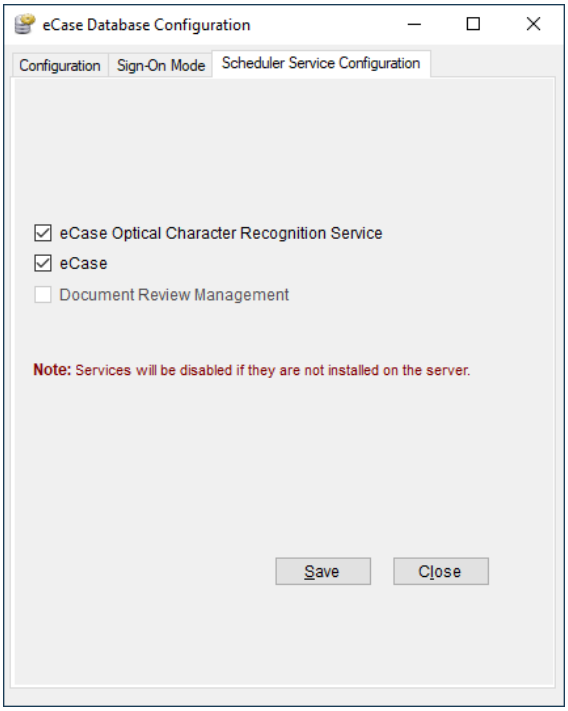


10. Click **Finish**.
11. After successful installation of eCase OCR Components, please Configure the OCR in eCase Scheduler using eCase Database Configuration.

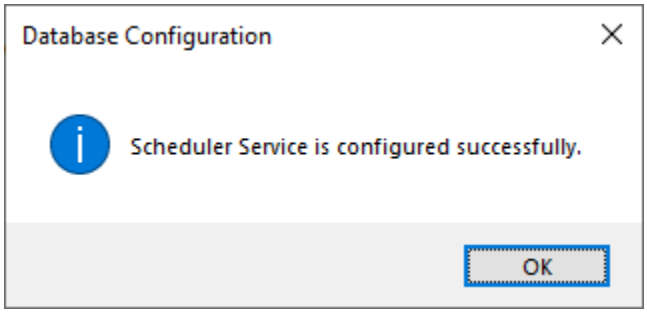
12. Open eCase Database configuration and select **eCase Scheduler Service** in Application/Service drop down box and then **Save** the database configuration.



13. After saving the database details, **eCase Scheduler Configuration** screen will appear. Select **eCase Optical**
14. Character Recognition Service check-box and Save the Configuration and Close.



15. Click **Save** and close.

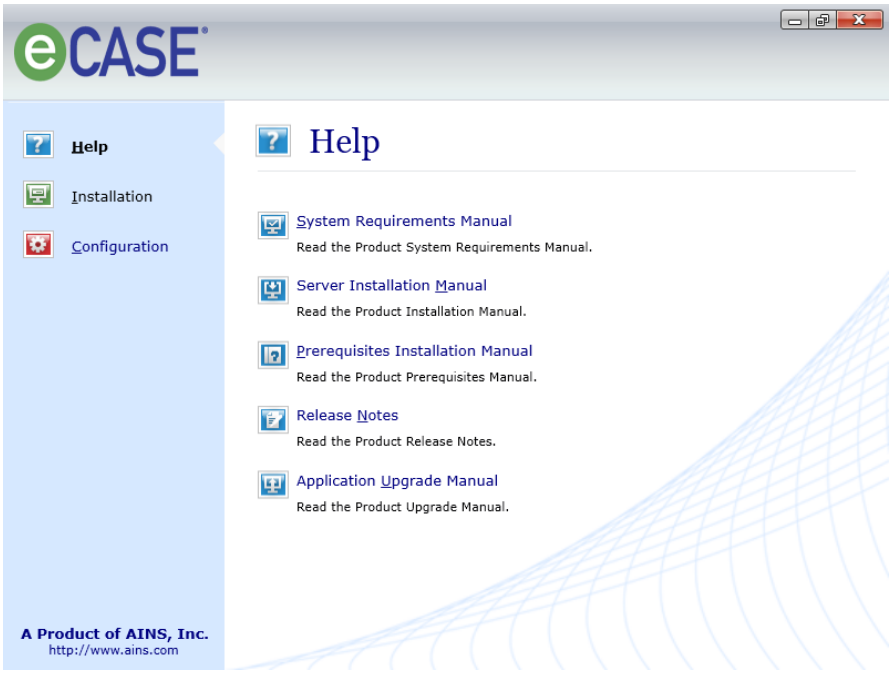


4.3 Install Document Review Management

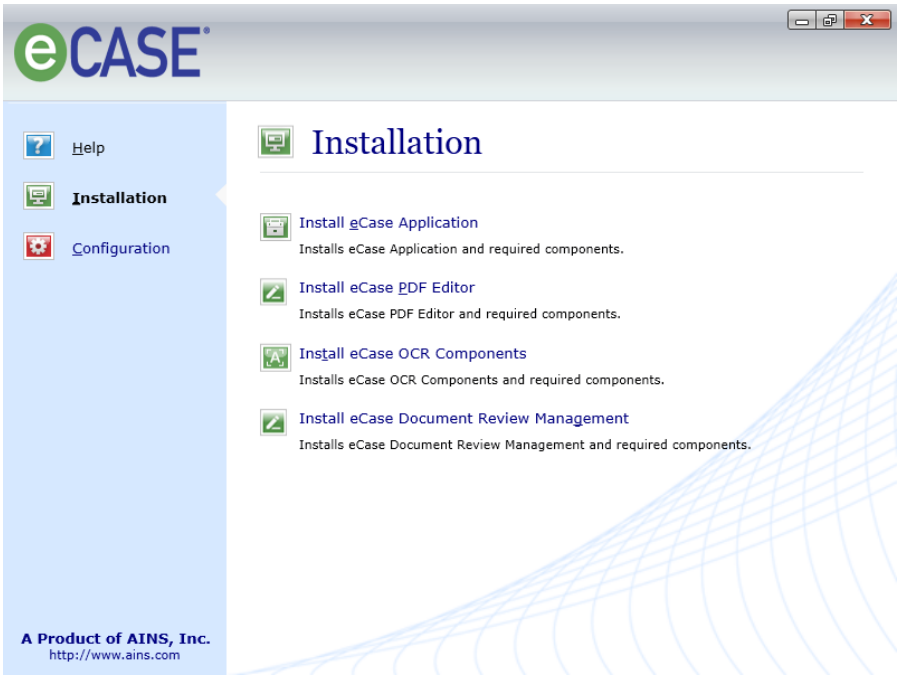
To install eCase Document Review Management, please make sure eCase application and the scheduler is installed.

To install eCase Document Review Management:

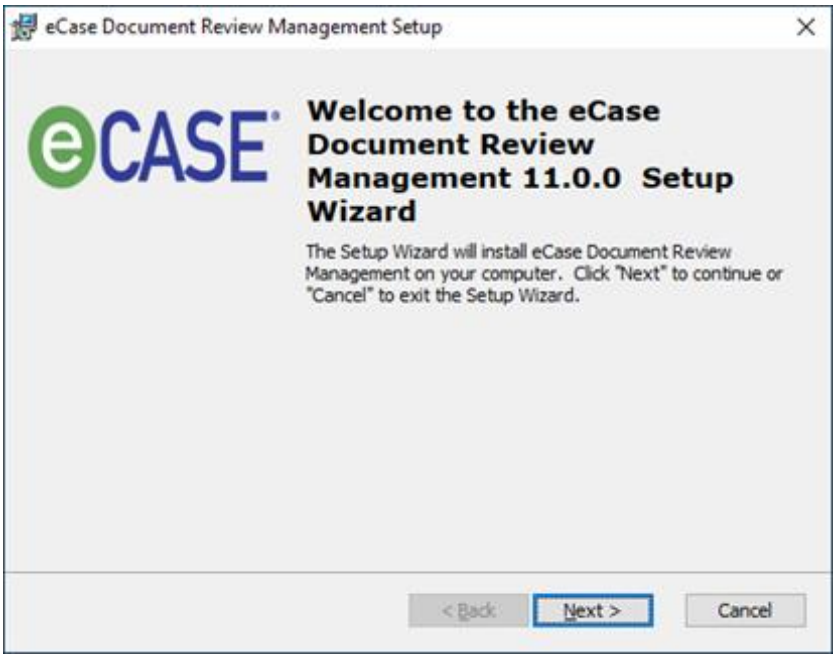
1. Open **Server** folder.
2. Run the **Setup.exe** as run as Administrator.



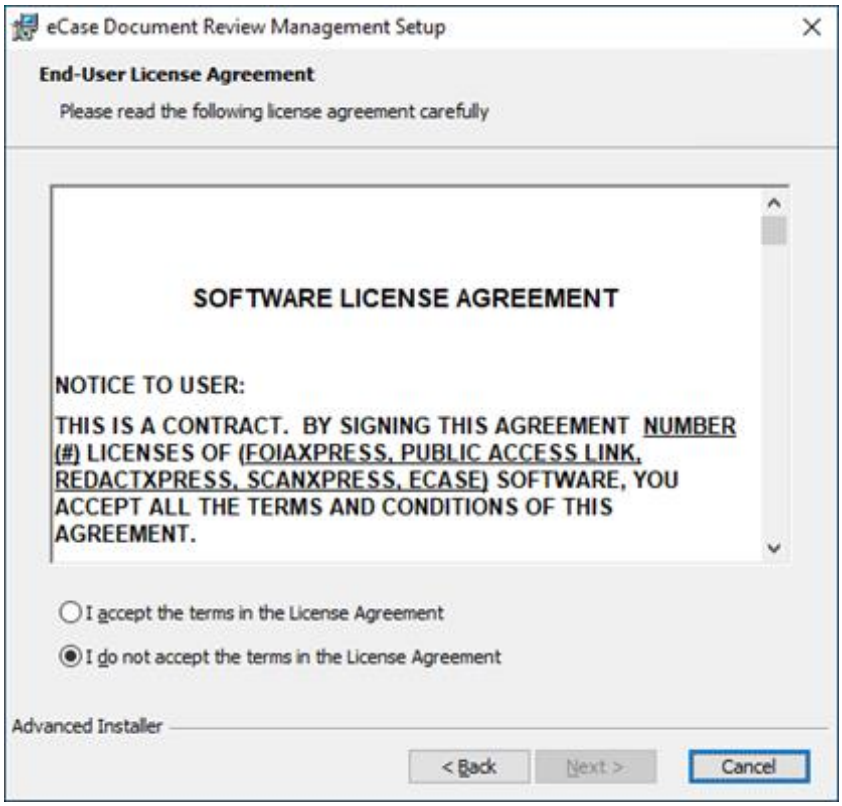
3. Go to Installation and click on Install eCase Document Review Management.



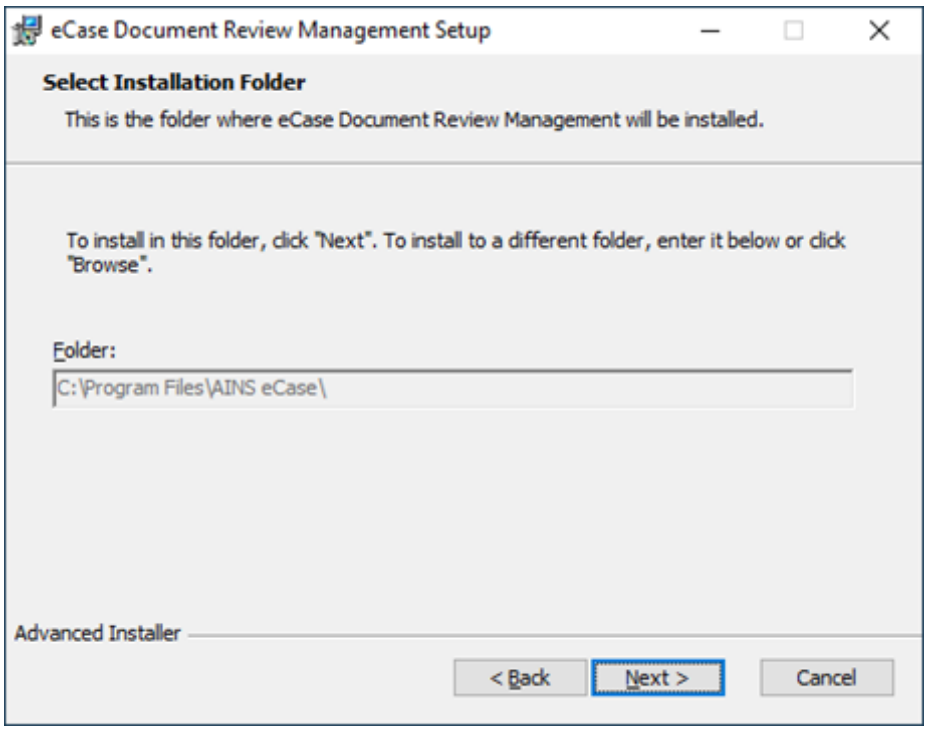
4. Click **Next** to continue.



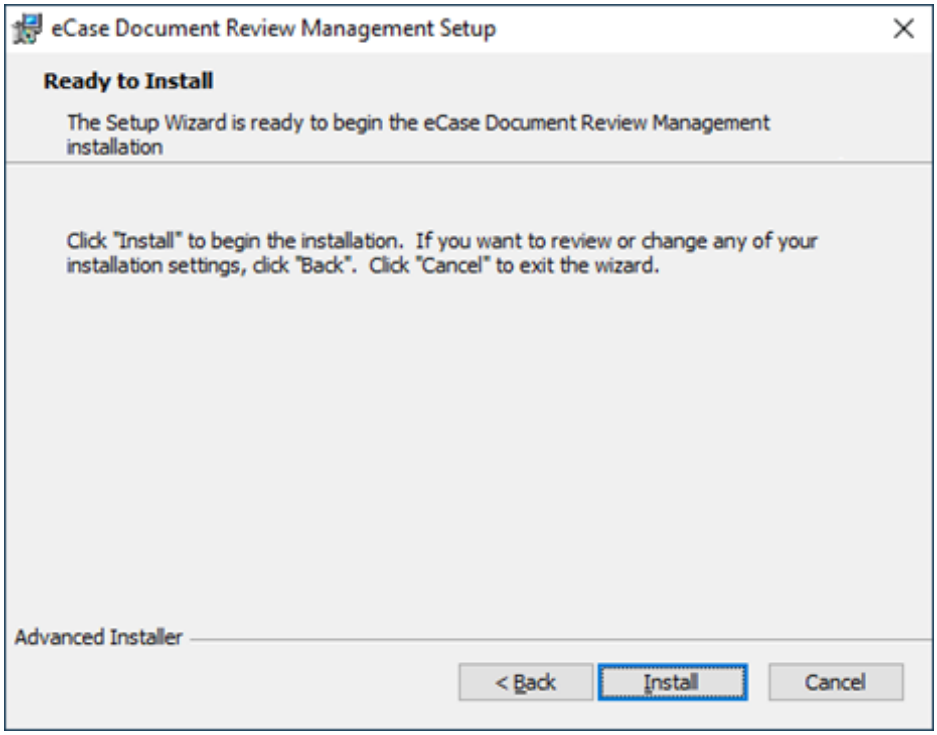
5. Please accept to agreement. Click **Next**.



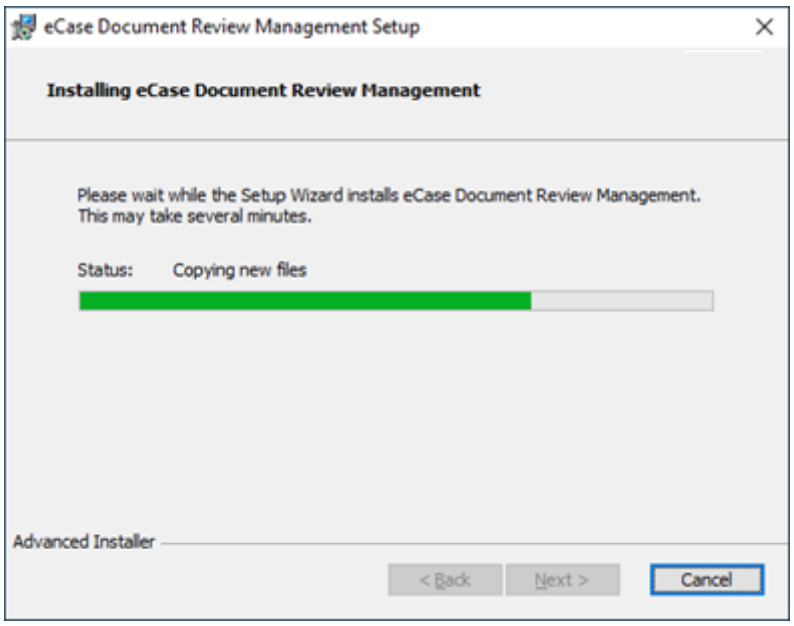
6. In User Information screen, please provide the details and click **Next**.



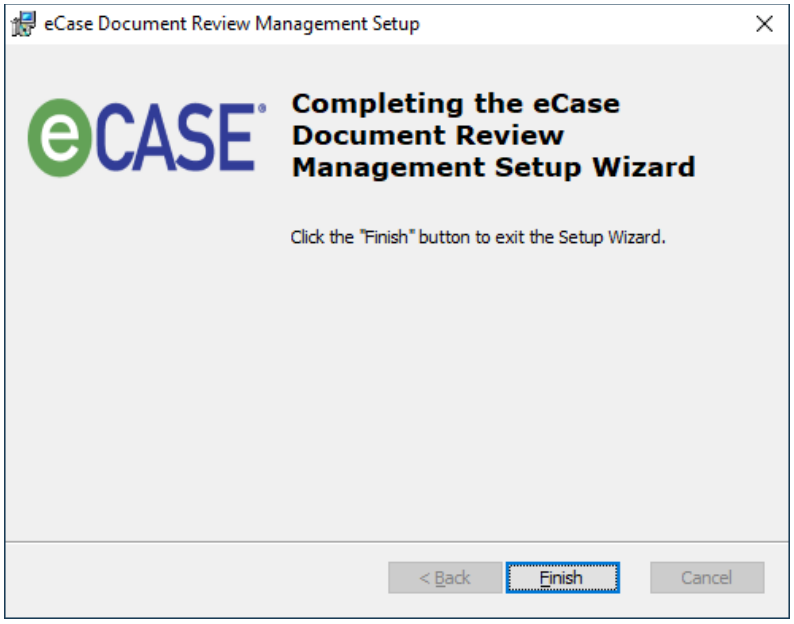
7. In Destination Folder screen, click **Next**.



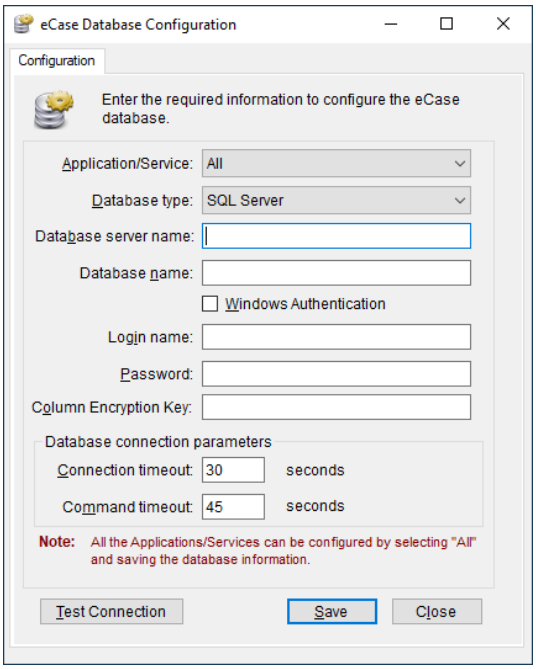
8. Click **Next**.



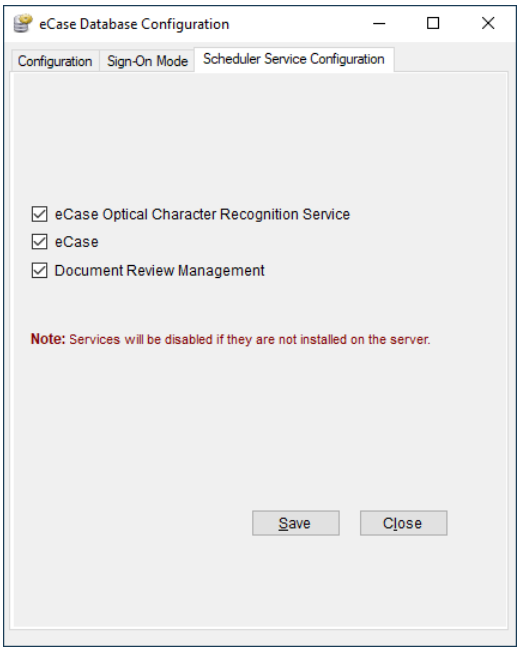
9. After successful installation, click **Finish.**



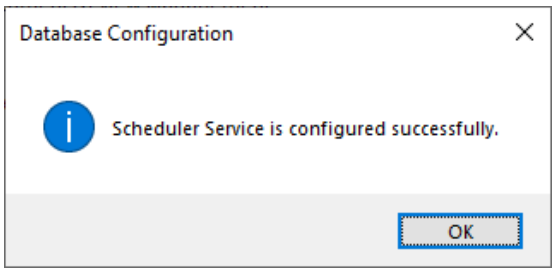
10. Next, please configure the Document Review Management in eCase Scheduler using eCase Database Configuration.
11. Open eCase Database configuration and select **eCase Scheduler Service** in Application/Service drop down box and then **Save** the database configuration.



12. After saving the database details, **eCase Scheduler Configuration** screen will appear. Select **Document Review Management** checkbox and **Save** the Configuration and **Close**.



13. Click **Save** and close.



4.3.1 Enable Find and Redact Feature

To install eCase, follow the steps below.

(!!) Note: Before executing scripts below, please make sure that the OCR is installed and configured.

1. Copy the **FOIAXpress.Utilities.UDFRegExp.dll** into SQL Server machine and place the dll into C:\temp.
2. Then, login to **SQL Server Management Studio** as "SA" and execute the following queries.

```
EXEC sp_configure 'show advanced options' , '1';
GO
reconfigure;
GO
EXEC sp_configure 'clr enabled' , '1'
GO
reconfigure;
GO
```

3. Lastly, register the **FOIAXpress.Utilities.UDFRegExp.dll** assembly within SQL Server using **SQL Server Management Studio** by executing the following queries.

```
GO
CREATE ASSEMBLY RegExP
FROM 'Provide file path'
GO
CREATE FUNCTION dbo.REGEXP_LIKE(@Input nvarchar(max),@Pattern nvarchar(500))
RETURNS nvarchar(max)
```

```
AS
EXTERNAL NAME RegExP.UserDefinedFunctions.REGEXP_LIKE
GO
```

5 Privileges for eCase Application Server and Services

The following section lists all applicable directories and their required permissions for the application to communicate with the file repository and load the assemblies. The privileges outlined in the following sections are relevant to eCase web application and web pages.

5.1 Required Permissions for ASP .NET Process Identify

The security permissions outlined below are specifically for the **ASP.NET Process Identity** (IIS Application Pool Identity). In 8.5, the Application Pool Identity by default is set as the **NETWORK SERVICE** user and as the **Application Pool Identity** user in IIS 8.5 or above.

If eCase configured with Single Sign-On Authentication, both the IIS **Application Pool Identity** users and all the

eCase users must have the permissions on files and folders listed in the table below.

If eCase configured with Forms Authentication, only the IIS **Application Pool Identity** user must have the permissions on the files and folders listed in the table below:.

ASP .NET Process Identify Permissions

Location	Access type	Comments
%SystemRoot%\Microsoft.NET **\Framework\versionNumber** **Temporary ASP.NET Files**	Read, List Folder Contents, Read & Execute, Write	This is the location for dynamically compiled files. Beneath this location, application code generation takes place in a discrete directory for each application.

Location	Access type	Comments
%SystemRoot%\System32	Read, List Folder Contents, Read & Execute	This contains system DLLs loaded by the .NET Framework.
Program Files\AINS eCase\eCase -OR- Program Files\AINS eCase\eCase	Read, List Folder Contents, Read & Execute	This is the location for application files.
%SystemRoot%\Microsoft.NET \Framework\version and subdirectories	Read, List Folder Contents, Read & Execute	ASP.NET must be able to access the system assemblies referenced in the Machine.config file in the CONFIG subdirectory under %SystemRoot%\Microsoft.NET\Framework\version\.
Temporary Path	Modify, Read & Execute, ListFolder Contents, Read, Write	All eCase temporary files are stored in this location.

Location	Access type	Comments
Program Files\AINS eCase\eCase\App_Data -OR- Program Files\AINS eCase\eCase\App_Data	Modify, Read & Execute, List Folder Contents, Read, Write	This location stores dictionary files for Spell Check.
Program Files\AINS eCase\eCase\Images -OR- Program Files\AINS eCase\eCase\Images	Modify, Read & Execute, List Folder Contents, Read, Write	The enterprise logo and eCase application images will be stored in this location.
Program Files\AINS eCase\Reports	Modify, Read & Execute, List Folder Contents, Read, Write	This is the location where temporary application report files are stored when processed in the application
For Client Workstations:		
User profile directory	Modify, Read & Execute, List Folder Contents, Read, Write	eCase controls will store the temporary files before processing to the application.

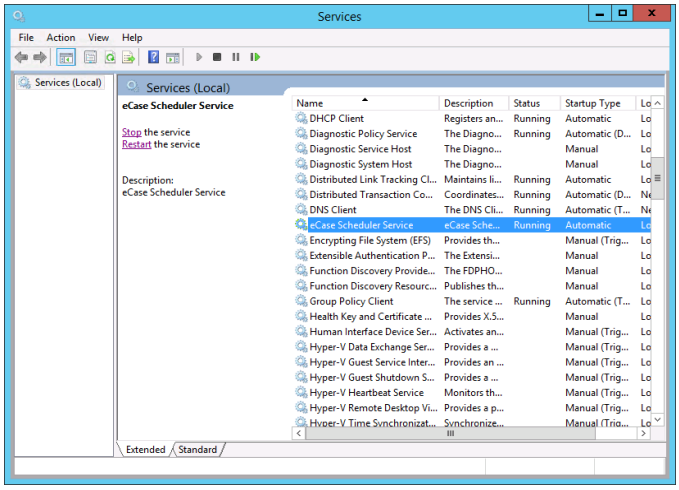
5.2 eCase Scheduler Configuration

If the eCase Database installed with SQL Windows Authentication mode, the eCase Scheduler Service user should be the owner of the database. Make sure to install the eCase Scheduler Service before you start it. The following procedure details how to configure your eCase Scheduler Service to confirm the identity of users before granting access to operate it.

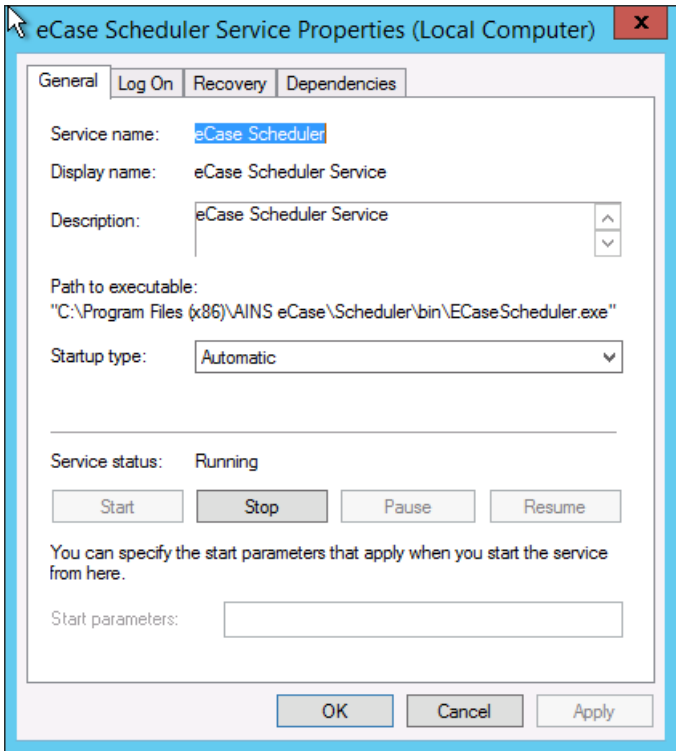
(!!) Note: The eCase Scheduler Service user must be a member of the local or domain Administrator group.

5.2.1 Start the eCase Scheduler Service

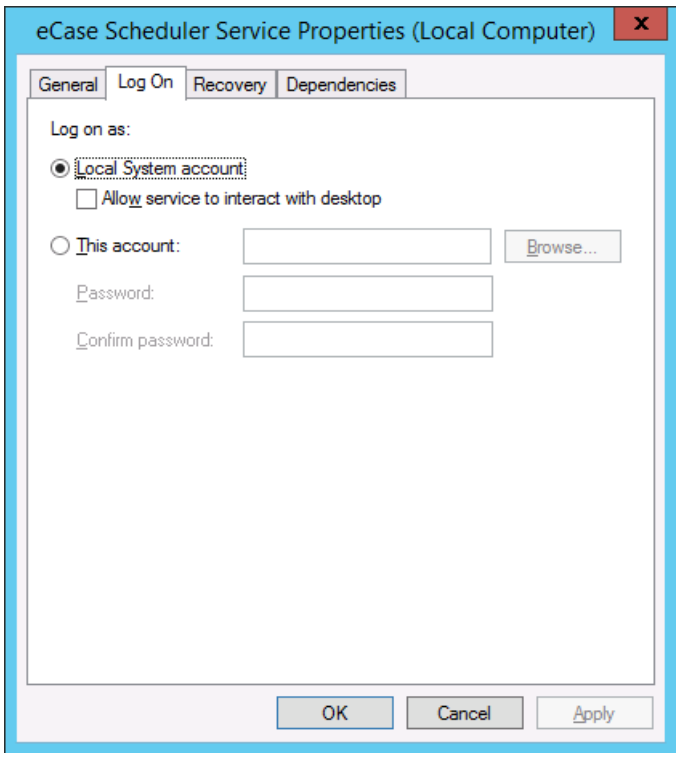
1. Click Start > All Programs > Administrative Tools > Services. The SERVICES screen opens with the EXTENDED tab in view.



2. Locate and select eCase Scheduler Service.
3. Right click eCase Scheduler Service and select Properties. The eCase Scheduler Service Properties window opens with the General tab in view.



4. Click the **Log On** tab then **This Account**. The password fields become enabled.



5. Enter the user name and password for this account then confirm the password.
6. Click **OK**.
7. If service is currently running, the following message appears. Click **OK**.
8. Restart the eCase Scheduler Service.
9. Select **Action Restart** from the menu or right-click the on service name and select **Restart** from the short menu. The **Service Control** window appears detailing the progress to restart the service. The **Status** column should indicate 'Started' once completed.
10. Select **File** > **Exit** to close the **Services** screen.

5.2.2 Required Security Permissions for eCase Scheduler Service User

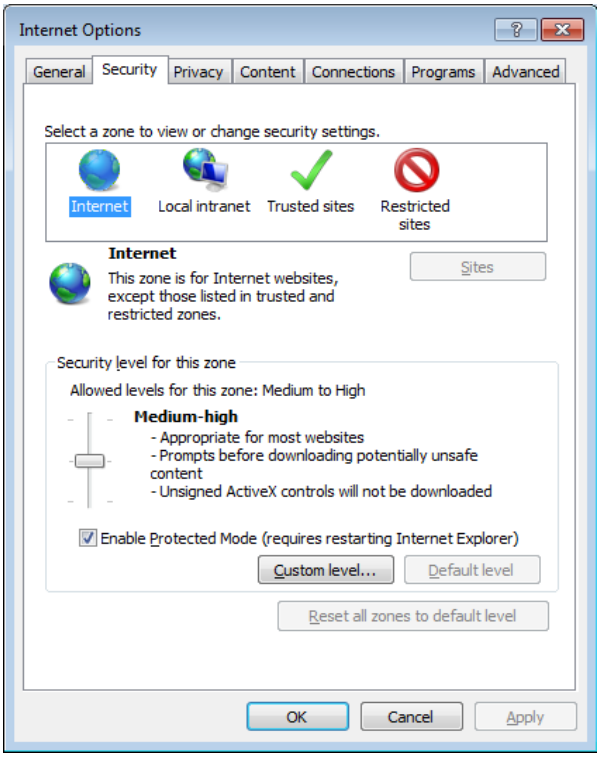
Location	Access type	Comments
%SystemRoot%\ System32	Read, List Folder Contents, Read & Execute	This location contains system DLLs loaded by the .NET Framework.
%SystemRoot%\ Temp	Full Control	This location used for Web services support.
User profile directory	Read, List Folder Contents, Read & Execute, Write	This location stores the cache files of the Report Scheduler Service.

Location	Access type	Comments
%SystemRoot%\ Microsoft.NET\Framework\versio n and subdirectories	Read, List Folder Contents, Read & Execute	ASP.NET must be able to access the system assemblies referenced in the Machine.config file in the CONFIG subdirectory under %SystemRoot%\Microsoft.NET\Framework\version\.
Program Files\ECase\Logs -OR- Program Files\AINS eCase\Logs	Modify, Read & Execute, Read, Write	The application error log and configuration files will be stored in this folder.
Program Files\AINS eCase\eCase\bin -OR- Program Files\AINS eCase\eCase\bin	Full Control	The application error log will be stored in this file.

6 Configure XAML on User Workstations

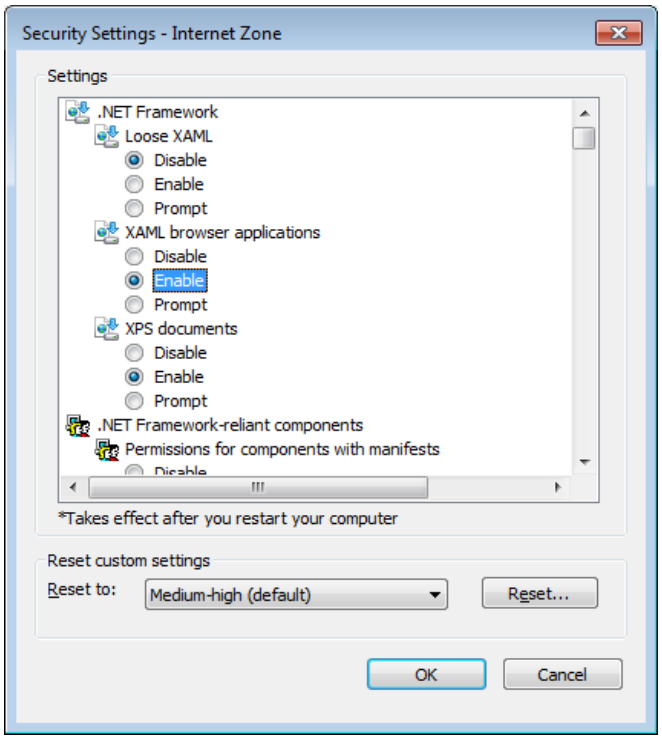
Configure **Internet Explorer** for eCase as follows:

1. Start Internet Explorer, click Tools, and then click Internet options.
2. Click the **Security** tab, and then click **Custom level**. The **Security Settings** window opens.

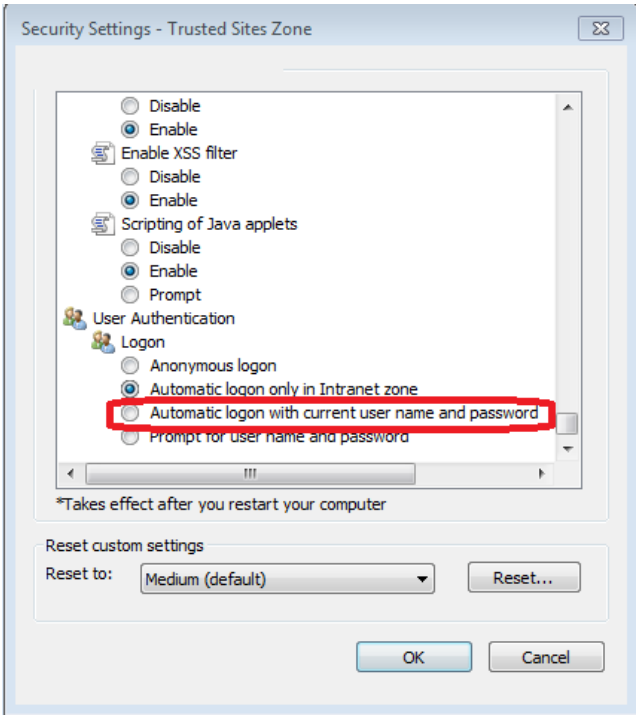


(!!) Note: To work with Scan Control with 64-bit Internet Explorer, make sure Enable Protected Mode (requires restarting Internet Explorer) is unchecked.

3. In the **XAML browser applications** section, select **Enable,** and then click **OK**.



4. Grant read and execute permissions to IIS app pool user on Controls folder if not exist. (App Server)
5. Add the site to the trusted sites.
6. Set custom level to the red highlighted option.

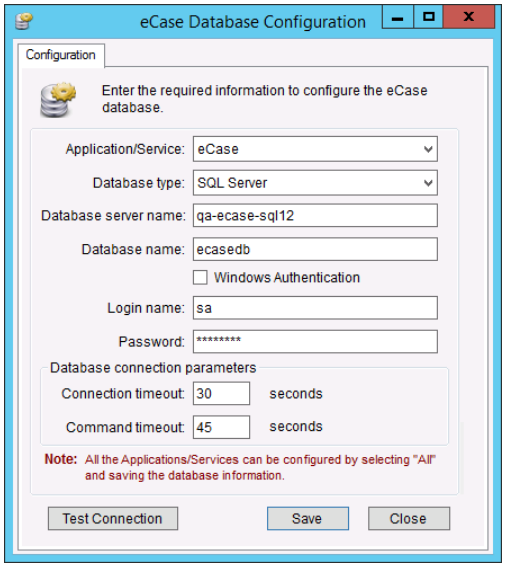


Appendix A: Sign-On Mode Configuration

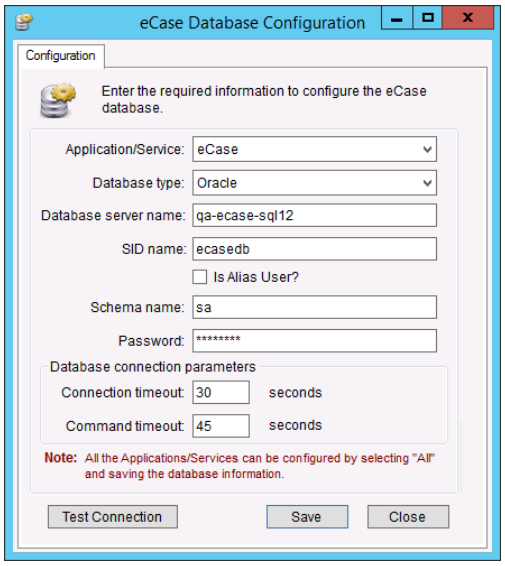
After setting up the application server, you can change the **Sign-On Mode** that you originally chose using the **eCase Database Configuration** utility. The following sections provide instructions on how to change to different Sign-On Modes.

Configure the Application and Access the Sign-On Mode Tab

1. Click Start > All Programs > eCase, right-click eCase Database Configuration and select Run As Administrator. The eCase Database Configuration window appears. Select the database type, enter the required information, then click SAVE.

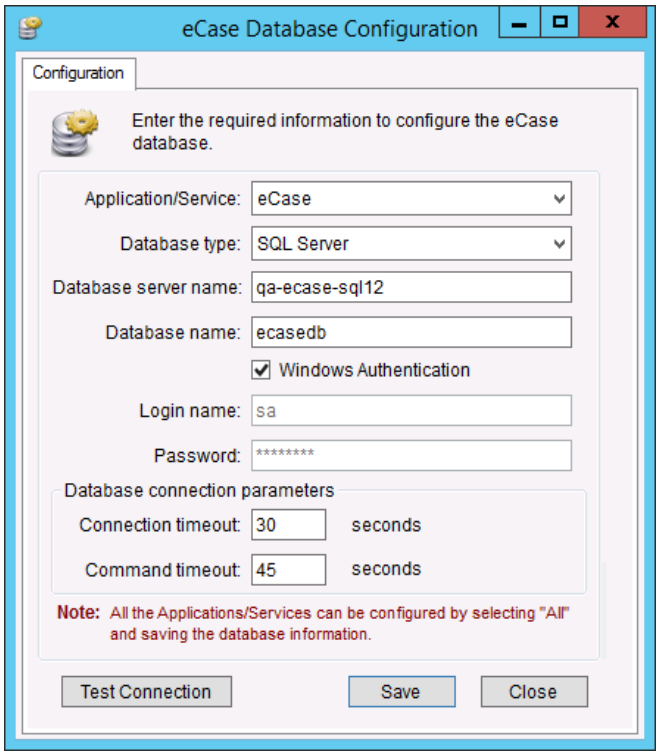


eCase Database Configuration (SQL Server)

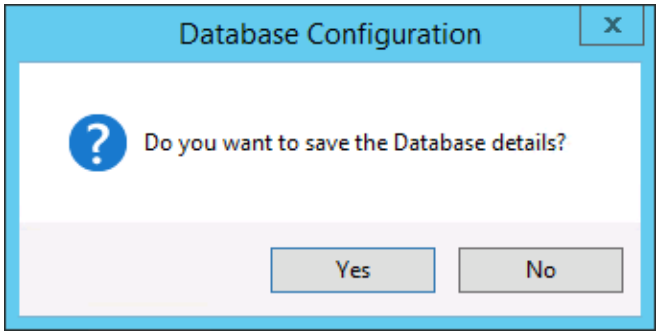


eCase Database Configuration (Oracle)

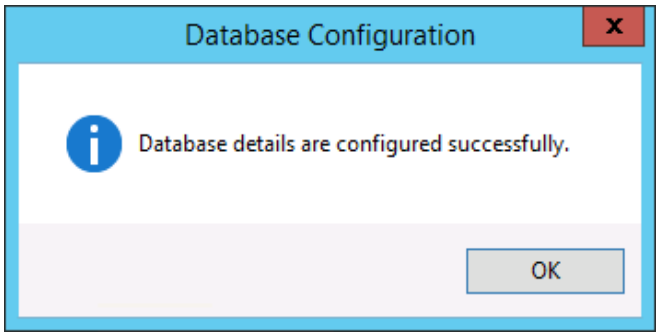
(!!) Note: The Login Name and Password fields are disabled if Windows Authentication is selected for the SQL Server database type.



2. Once you save the required information for either SQL SERVER or ORACLE, the following message appears.



3. Click **Yes** to save the information. A confirmation message appears.

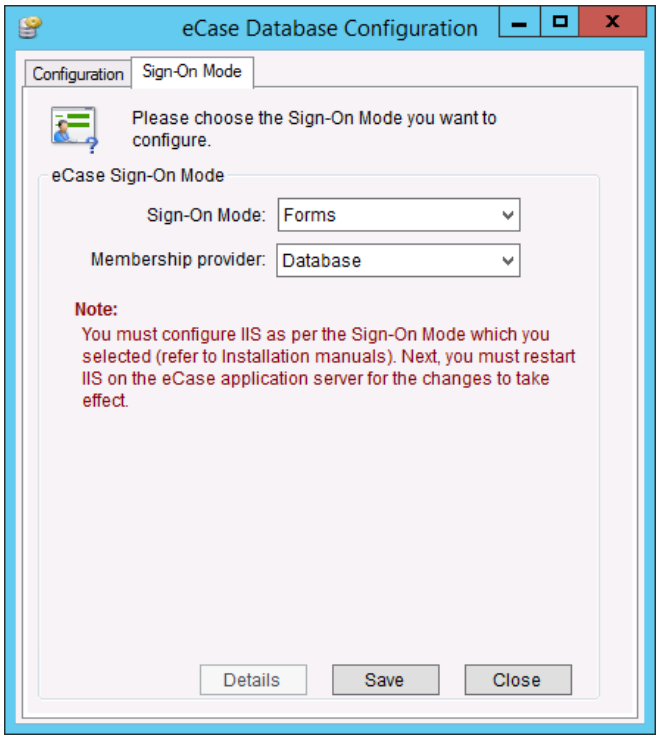


4. Click **OK**. The **Sign-On Mode** tab displays.

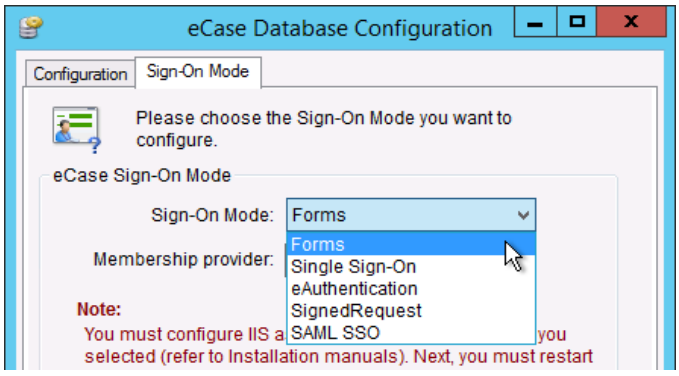
Change the Sign-On Mode

Select the Sign-On Mode tab. The following window appears. It shows the Sign-On Mode options selected during the database configuration.

(!!) Note: The different Sign-On Modes vary on how users will connect to eCase and can range from the default username/password connection to a more secure windows domain authenticated connection.



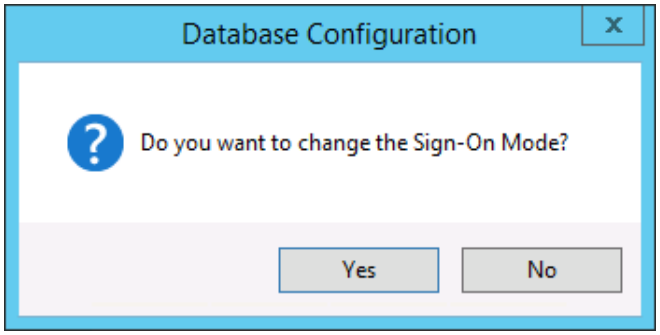
1. Click the **Sign-On Mode** drop-down list and select the desired option. Enter the required outlined in **Error!**



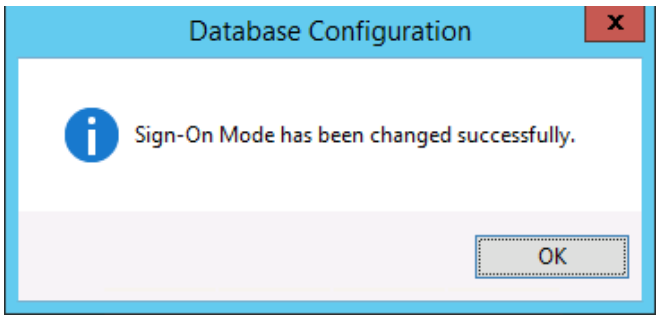
Field Name	Description
Sign On Mode	Forms - Standard level of access for the eCase application. Single Sign On - Allows the user to automatically log into eCase without being prompted for login credentials. eAuthentication - An authentication service provided by one remote server to other distributed servers, on the Internet or an intranet; users must submit requests to obtain login/logout credentials.
Membership Provider	Database - Login credentials will be verified and stored in the eCase database; this is the default option. LdapMembership Provider - Login credentials will be verified and stored on the domain where LDAP server is located.
LDAP Server Name	The name of the LDAP server.
Service User Name	The identifier given to a user that has access to the LDAP server; entered as Server name\User Name.
Service User Password	The security credential associated with the Service User.

Field Name	Description
Two Factor Authentication	Check the Two Factor Authentication check box, which requires users to submit the client certificates along with login and password. It shows when Sign On Mode is forms authentication. When checked, configure IIS to use SSL for eCase web application and select "Require" option for client certificate settings. Additional configuration steps required are explained in section – "PIV Certificates as Two Factor Authentication"
Client Cert Subject Fields	Specify the keys (For example: CN, OU, O) in client certificate subject for two-factor validation. These key values are compared with Authentication ID field for the user.

2. Click **Save**. A message window appears.



3. Click **Yes** to change the Sign-On Mode. A confirmation message appears.



4. Click **OK** to close the message.

5. Click CLOSE to exit the eCase DATABASE CONFIGURATION window.

PIV Certificates as Two Factor Authentication

Please follow the instructions in this document to configure eCase Two Faction Authentication with PIV Card. Some organizations may require to have a different server for all PIV challenges that is different from application server then it is required to setup second IIS server. In second IIS server, do NOT install eCase application. In this document, PIV Server (Second Server) is optional, it is required only when your organization policy requires to have a dedicated server. You should ignore PIV Server (Second Server) sections in this document when you are configuring with Single Server option.

In this document Steps 1, 2 and 3 are same for Single Server and Two Servers configurations. Step 4.a is for single server configuration, Steps 4.b, 5 and 6 are for Two Server configuration.

System Requirements for PIV Server (Second Server - Optional)

- Windows 2016 Server with IIS 8.5 server
- Install URL Rewrite and ARR IIS Modules. You can download these extensions from Microsoft web sites. Try these links: https://www.iis.net/downloads/microsoft/url-rewrite, https://www.microsoft.com/en-us/download/details.aspx?id=47333

Please contact support@opexustech.com *if you need any more information or if you face any problems with hotfix installation.*

Step 1: Take Database backup

1. Access eCase database server.
2. Open Microsoft SQL Server Management Studio.
3. Right-click on eCase database and take backup.
4. Once completed, proceed to Step 2.

Step 2: Install the latest Service Pack (if not applied)

1. Access the application server where eCase is installed Administrator.
2. Copy the “eCase v10.1 Service Pack”.
3. In the main root of the folder, run **Hotfix.exe** as Administrator as shown below.
4. Provide the Backup location to take the backup of the Files.
5. Click **Apply.**
6. Confirm that eCase database is backed up.
7. Installation wizard runs.
8. Once Hotfix is installed successfully, click **OK**.

9. Proceed to Step 3.

Step 3: Install PIV Card Authentication Hotfix

1. Access the application server where eCase is installed as Administrator.
2. Please add the following entries to the web.config file located in eCase installed directory: C:\Program Files\ECase\eCase

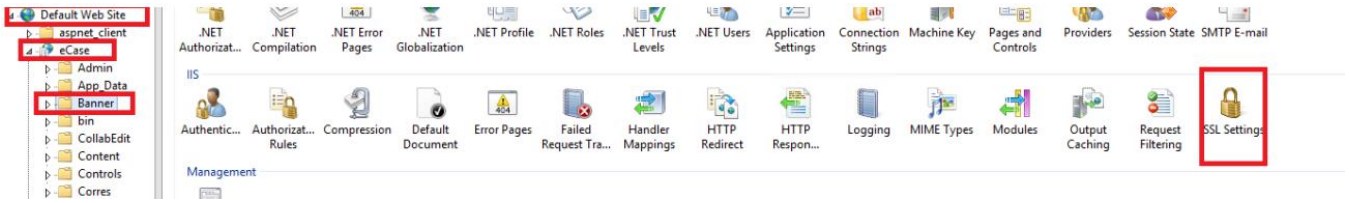
```
<location path="Banner/Disclaimer.aspx">
<system.web>
<authorization>
<allow users="?" />
</authorization>
</system.web>
</location>
<location path="NoPIV.aspx">
<system.web>
<authorization>
<allow users="?" />
</authorization>
</system.web>
</location>
```

3. Thereafter, run eCase Database Configuration Tool as Administrator.
4. Select eCase for under Application/Service.
5. Click **Save.**
6. Go to Sign-On Mode tab.
7. Check the Two-Factor Authentication and provide subject given from the SSL Certificate.
8. Click **Save.**

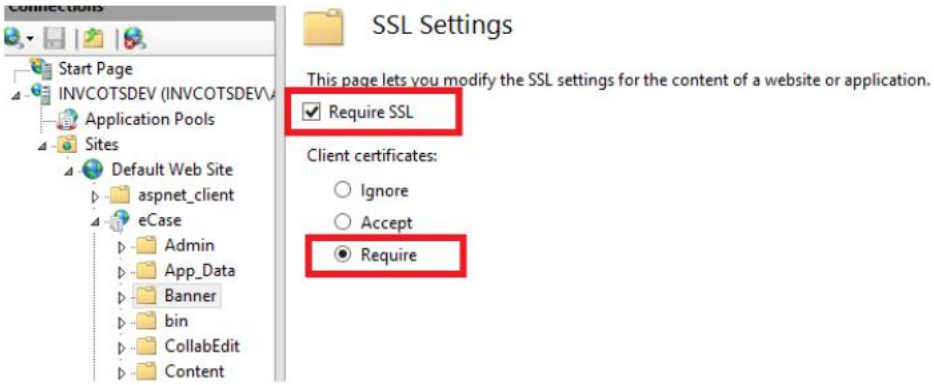
Step 4.a: Install SSL Certificate and Configure IIS (Single Server Option)

1. Install Server Certificate into IIS and configure bindings for HTTPS on eCase Application Server.

2. Open the IIS, and configure the following settings:



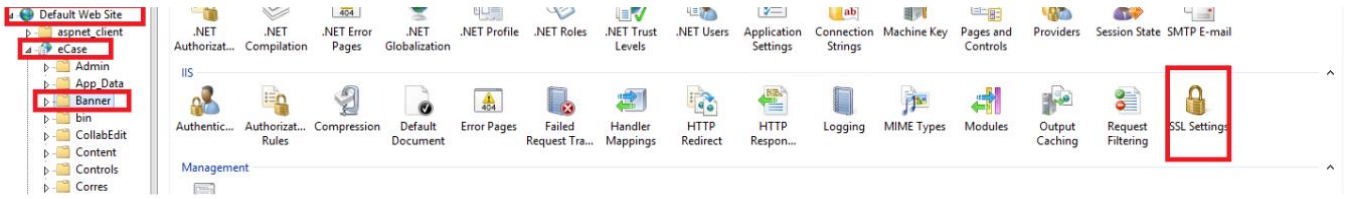
3. Click on SSL option above.



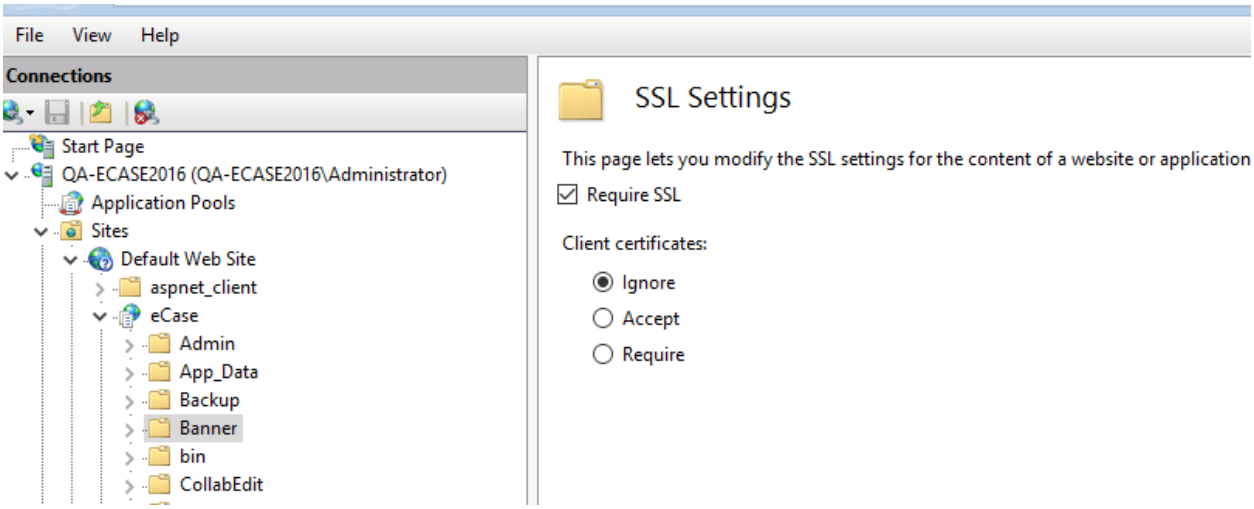
4. Reset IIS.

Step 4.b: Install SSL Certificate and Configure IIS (Two Servers Option)

1. Install Server Certificate into IIS and configure bindings for HTTPS on eCase Application Server.
2. Open the IIS, and configure the following settings:



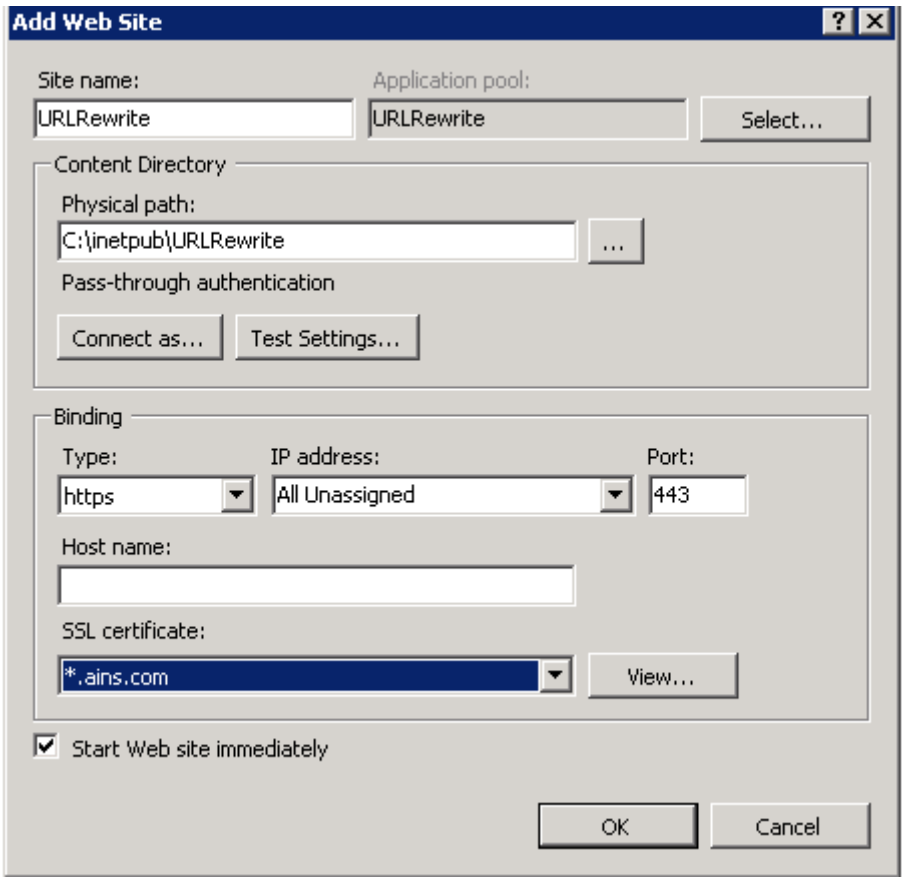
3. Click on SSL option above.



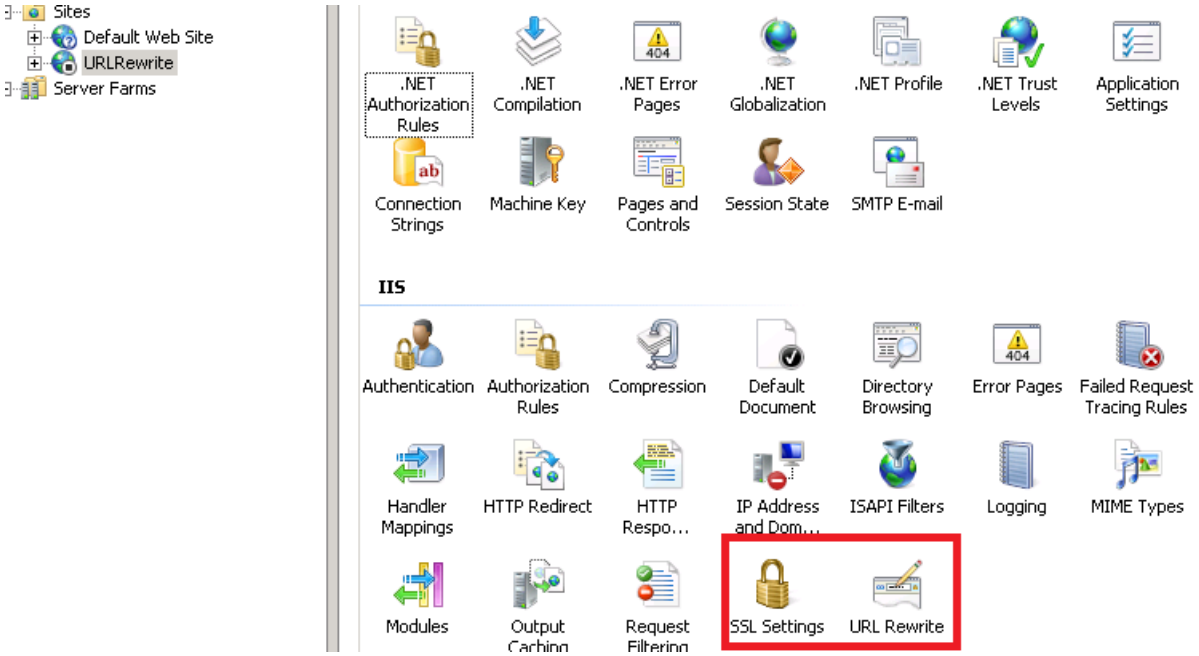
4. Reset IIS.

Step 5: Install SSL Certificate and Configure IIS (Two Servers Option)

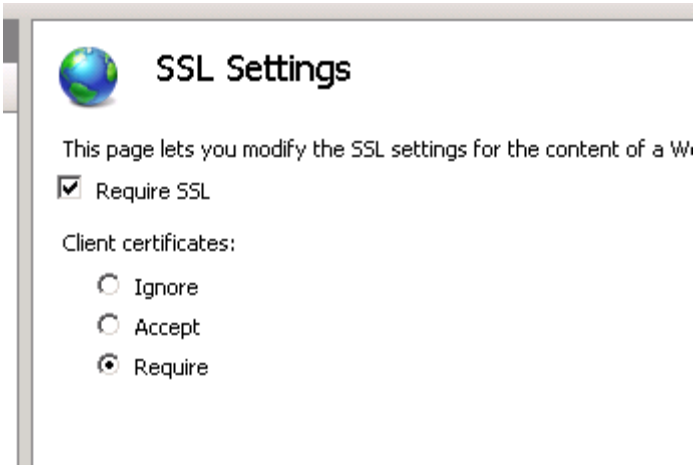
1. Install Server Certificate into IIS and configure bindings for HTTPS on PIV Server.
2. Open the IIS, and create a new web site with name URLRewrite with HTTPS binding



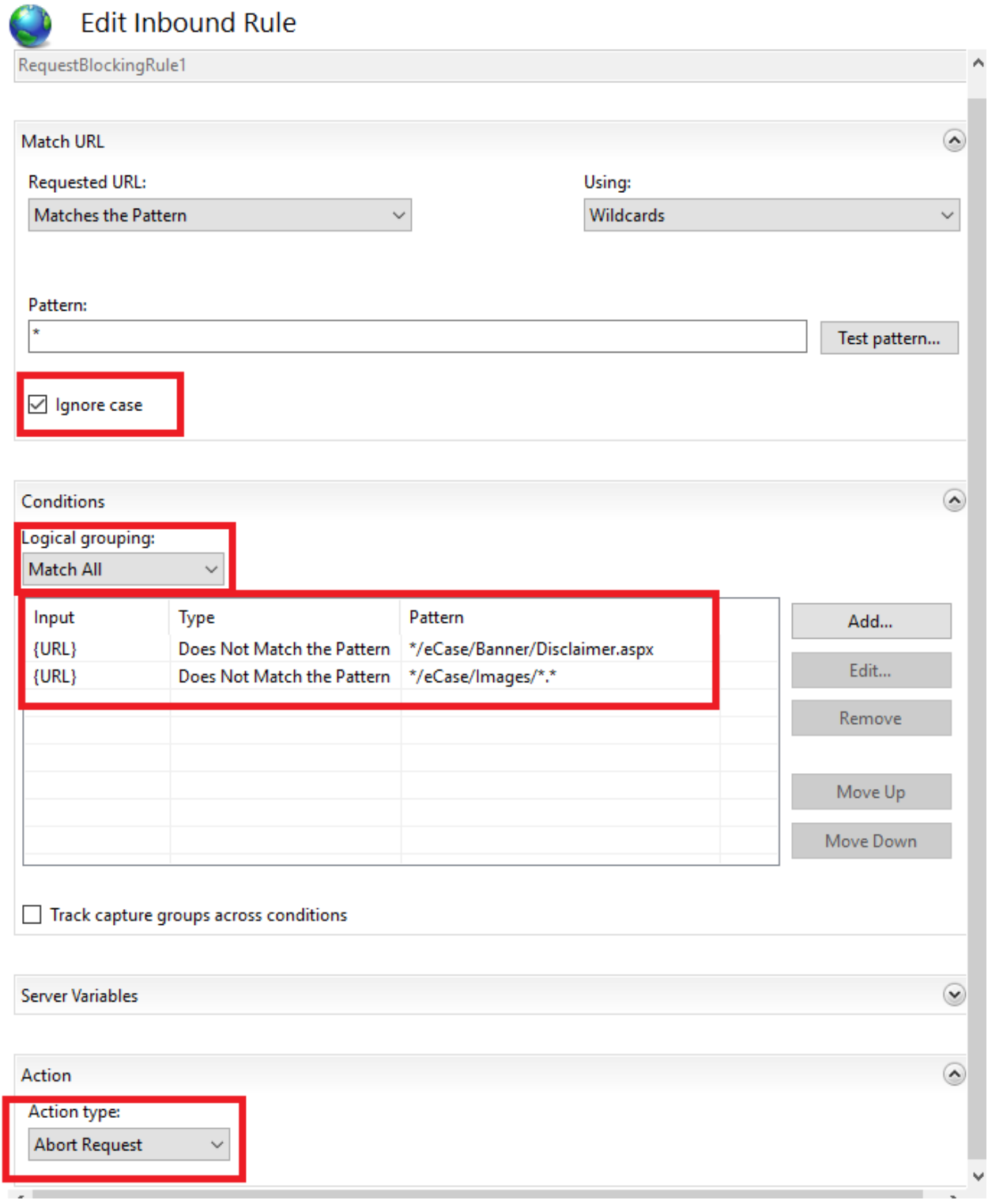
3. Configure the SSL Settings and URL Rewrite rules as follows:



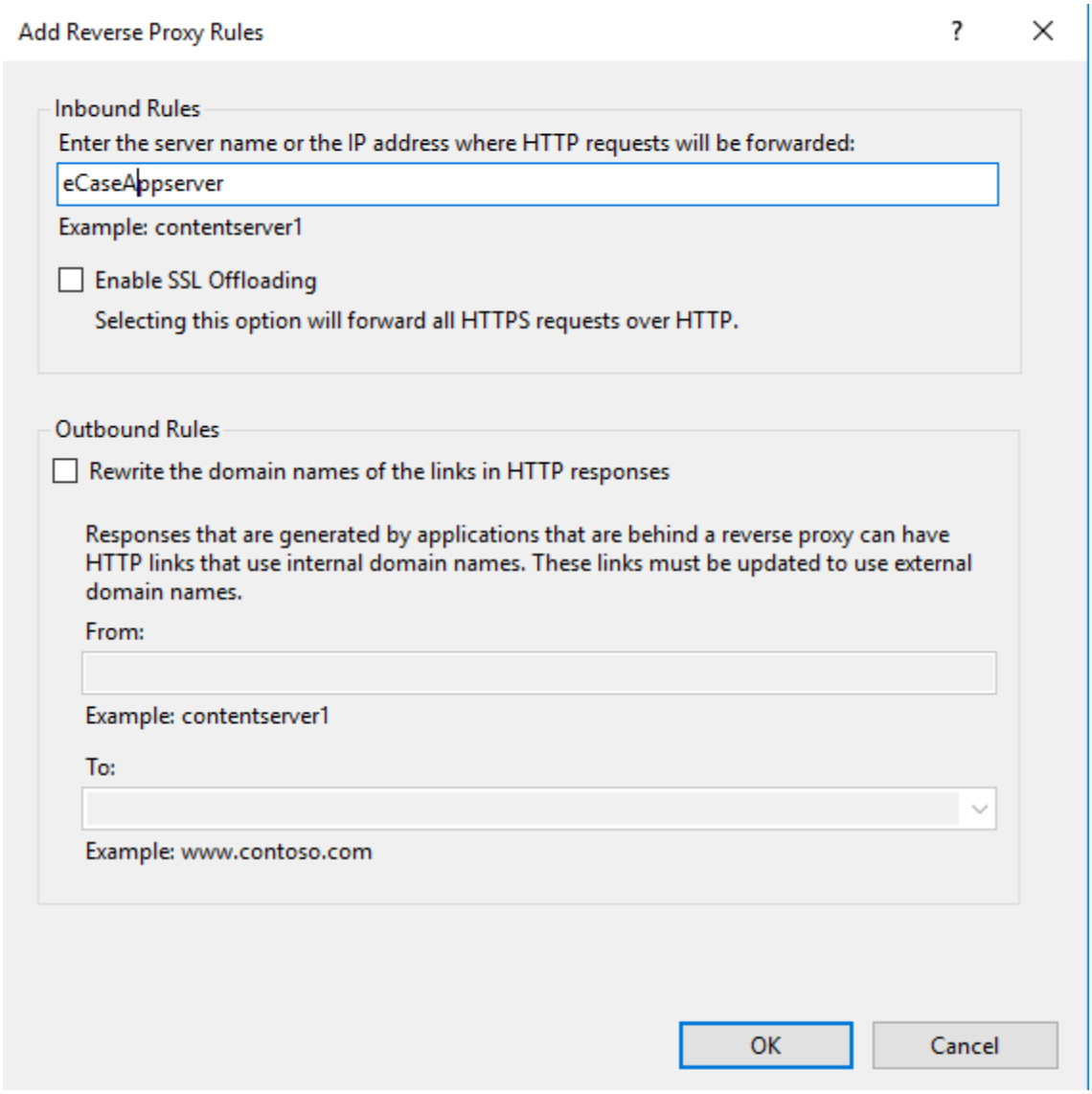
4. Set the SSL Settings and Apply:



5. Add a Rewrite rule with Request Blocking template to abort application related traffic, except Images and Disclaimer.aspx. Configure the URL blocking rules as shown below. Please make sure type, patterns and



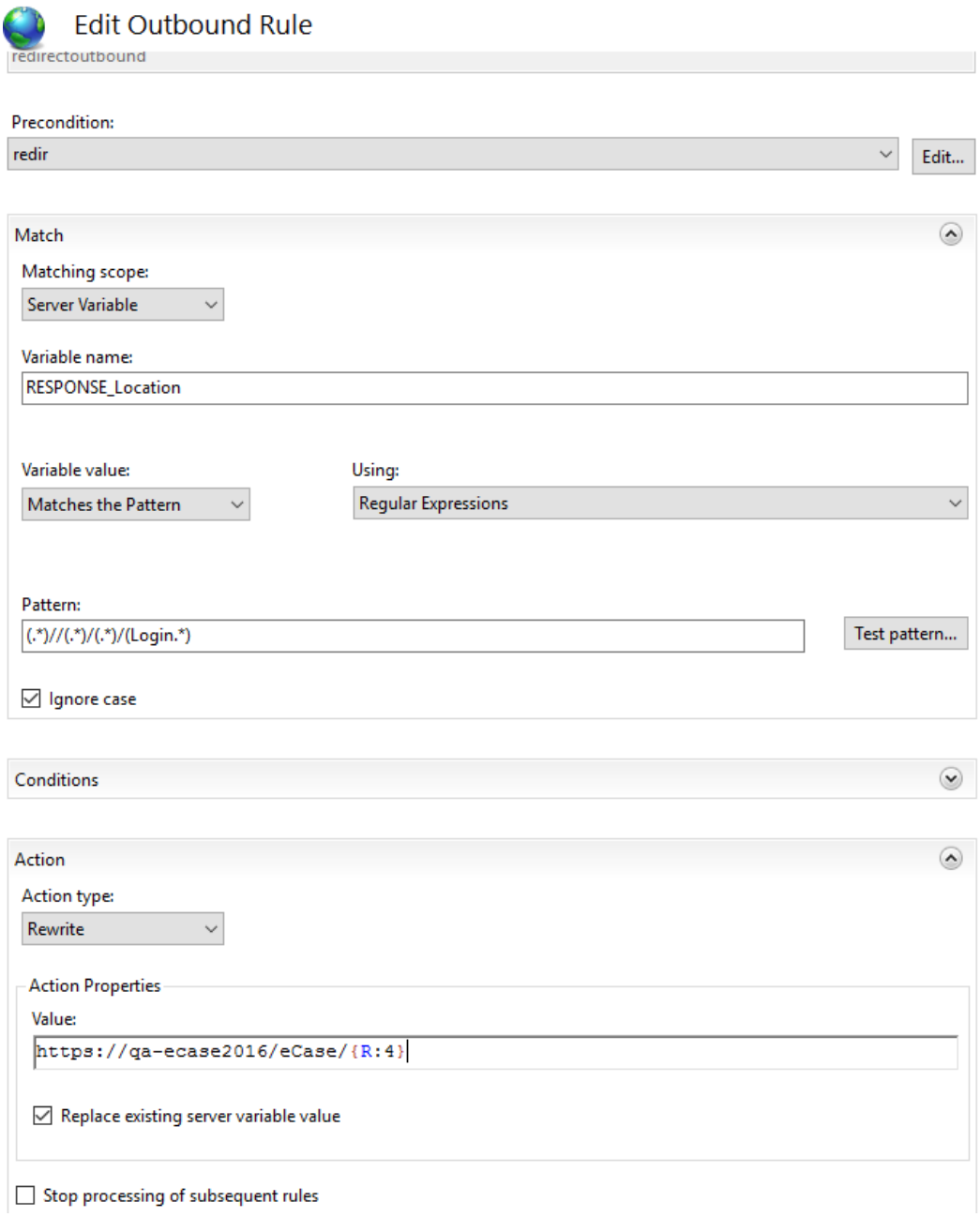
6. Add a Rewrite rule with Reverse Proxy template to rewrite the traffic to application server. Click on Add Rule and enter the application server name to forward request:



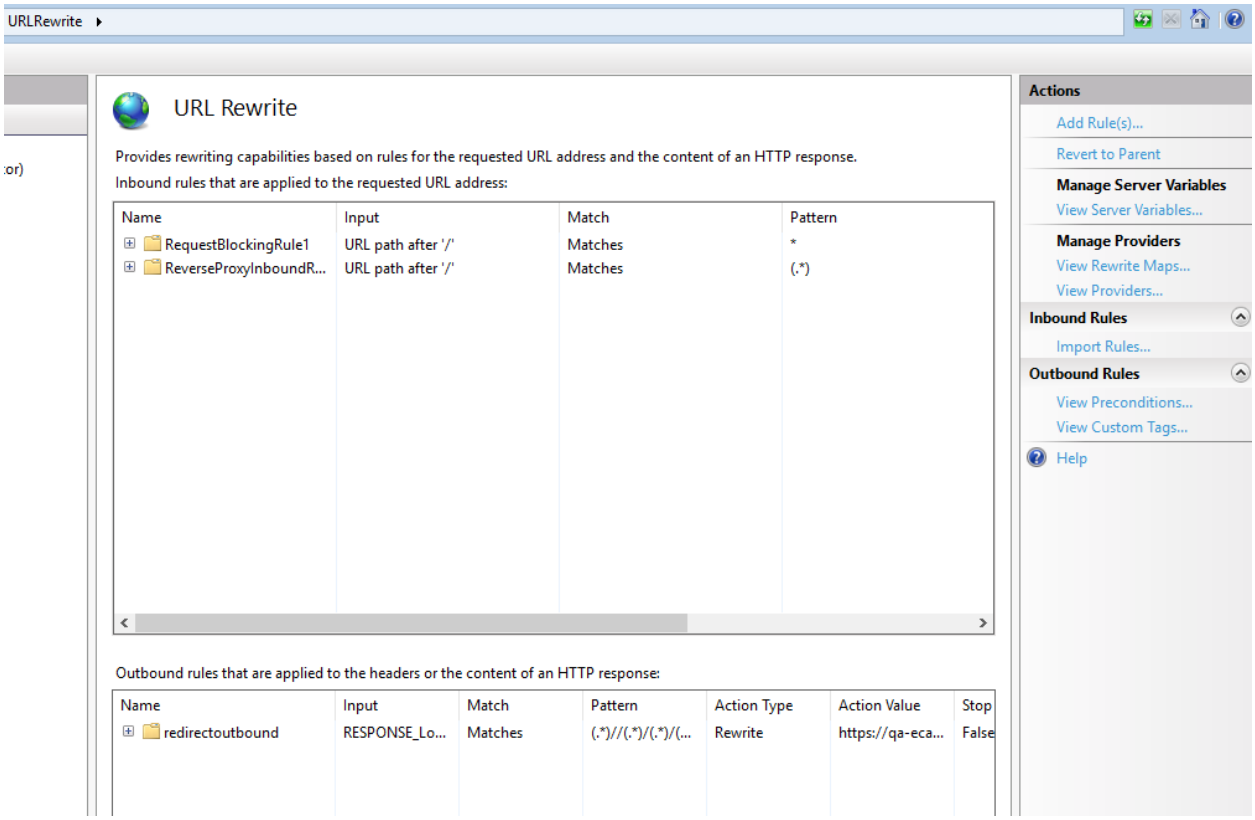
(!!) Note that Request Blocking rule should be before Reverse Proxy rule. These rules will ensure only PIV requests are sent to dedicate PIV server and all application requests are sent to eCase Application server. Second server configuration provides the ability to monitor PIV server traffic and ignore the application traffic.

7. Add a Rewrite rule with outbound blank rule template to rewrite the rewrite the response redirect to eCase app server login.aspx. Click on Add Rule and enter the name of the rule as 'redirectoutbound'.
    a. Select <Create New Precondition…> from the Precondition drop-down.
    b. Click Add in the dialog that appears

c. Enter {RESPONSE_STATUS} in the Condition input field and 3[0-9][0-9] in the pattern field. Click OK.
d. Select Server Variable from the Matching scope drop-down.
e. Enter RESPONSE_Location as the Variable name.
f. In the Pattern field enter regex: (.*)//(.*)/(.*)/(Login.*)
g. In the Action Value box enter the URL: `https://<eCaseAppServer>/eCase/{R:4}`
h. Click Apply
i. Outbound rule should look like as shown below



All three rules should be in the order as shown below:



Step 7: Set the Banner Page location (Two Servers Option)

Run the following sql query in eCase database with proper PIV Server name to set the banner page location:

Update EC_CONFIGURATION

SET CONFIG_VALUE='https://<pivservername>/eCase/Banner/Disclaimer.aspx'

where CONFIG_KEY='BannerPage'

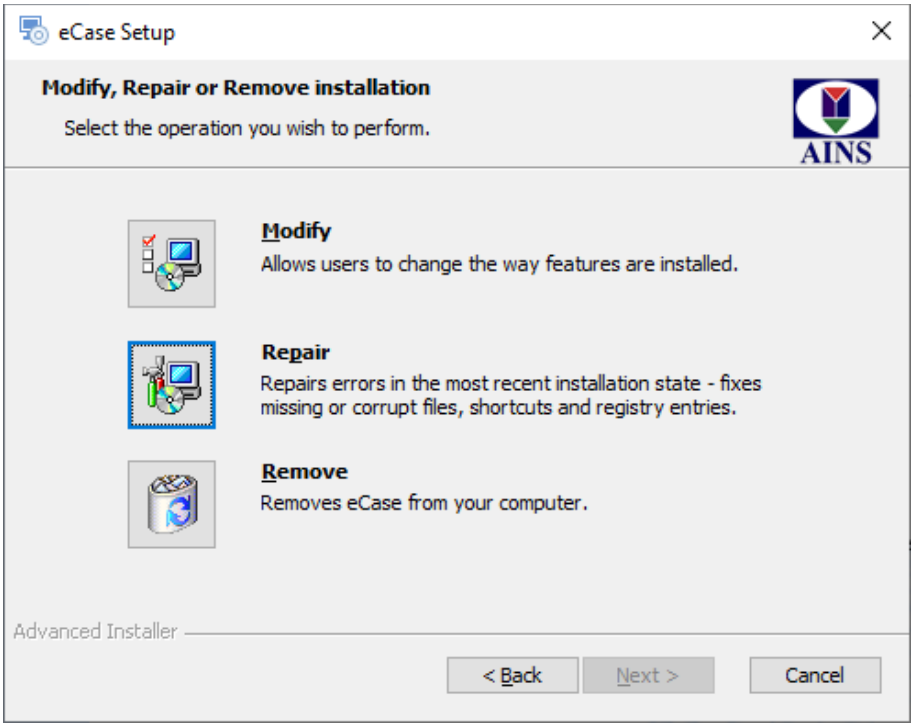
Appendix B: Application Maintenance

This section provides instructions for using the APPLICATION MAINTENANCE REPAIR feature. Application maintenance should be performed on the application server and/or the server where eCase components are installed.

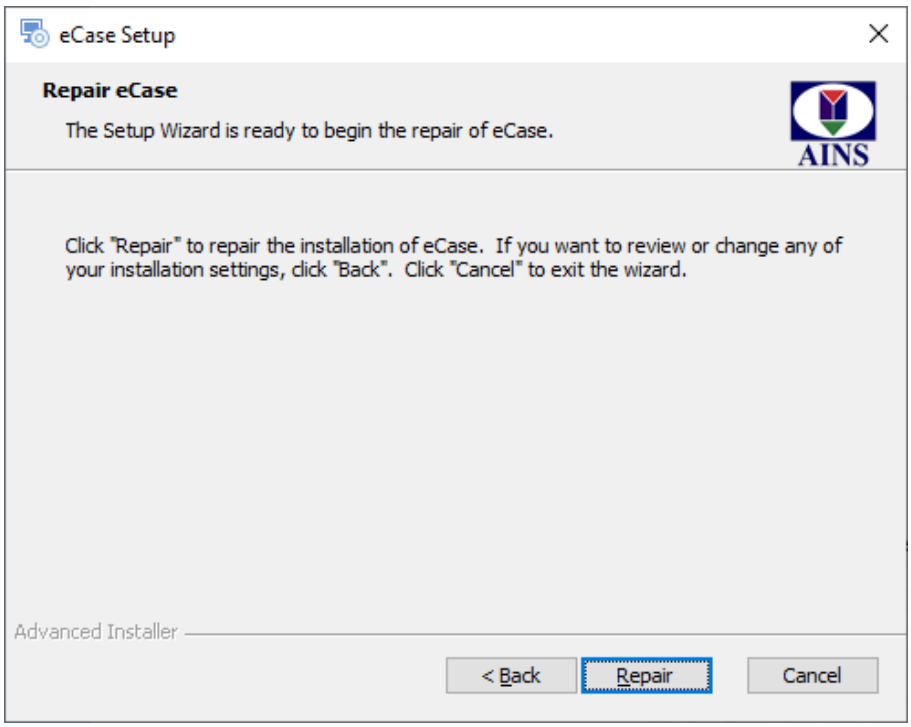
The Repair feature automatically detects missing or corrupt files and copies the missing files or copies the original damaged files into the registry and/or installation destination.

(!!) Note: Preferences stored in the registry may be reset to the default values.

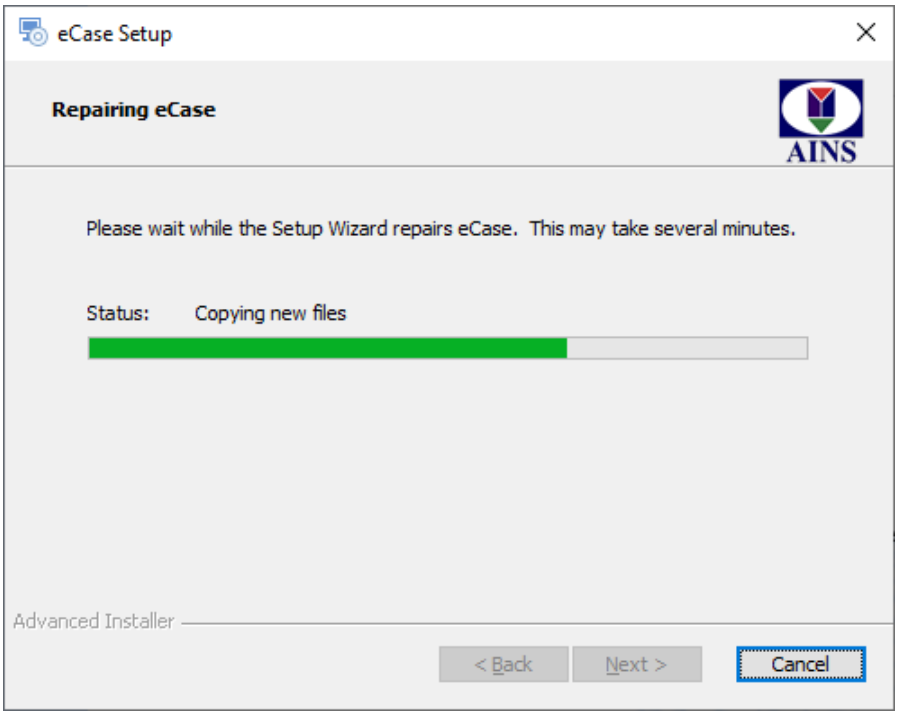
1. Right-click the **SETUP.EXE** file and select **RUN AS ADMINISTRATOR**.
2. Click Installation Install eCase Application. The eCase APPLICATION SERVER window appears.
3. Make sure the **SET UP NEW eCase 10.6 APPLICATION** option is enabled. Locate the License Key file included with the setup CD if the license key is not already populated then click **CONTINUE**.
4. The **APPLICATION MAINTENANCE** window appears with the **MODIFY** option selected. Select **REPAIR** then click
5. NEXT.



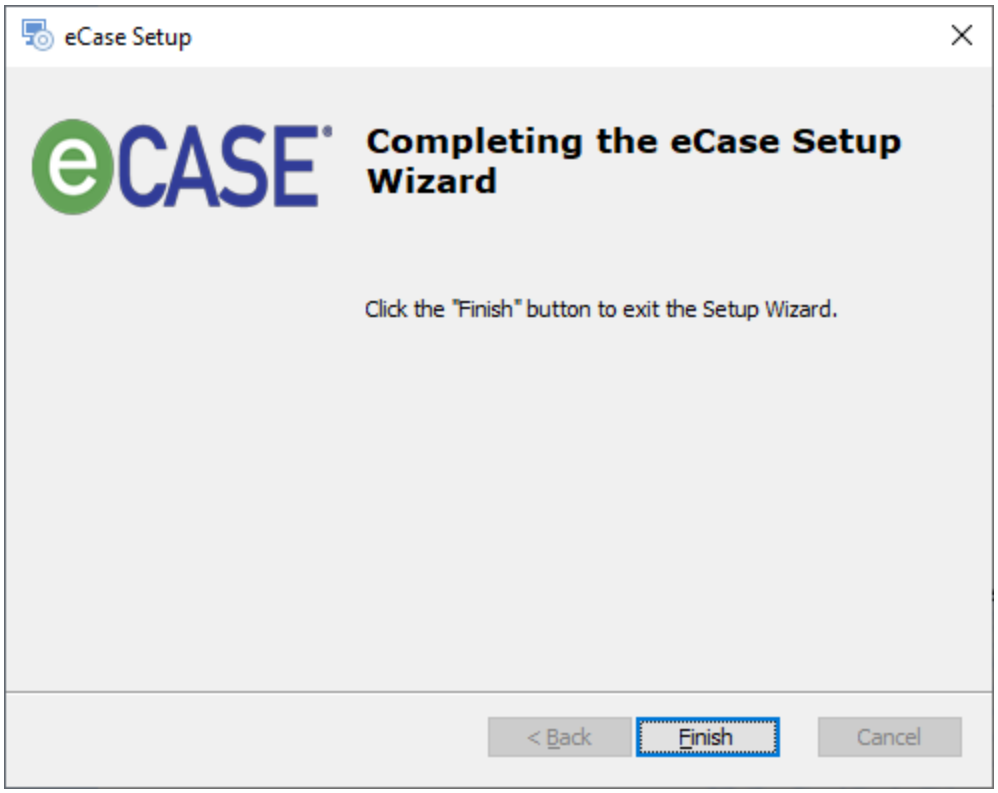
6. The READY TO REPAIR THE APPLICATION window appears. Click Repair to continue.



7. The **UPDATING SYSTEM** window appears and begins the process of repairing and installing components.



8. The following window appears after the update has completed. Click **FINISH** to exit the **SETUP WIZARD**.


eCase Setup
eCASE
Completing the eCase Setup Wizard
Click the "Finish" button to exit the Setup Wizard.
< Back
Finish
Cancel

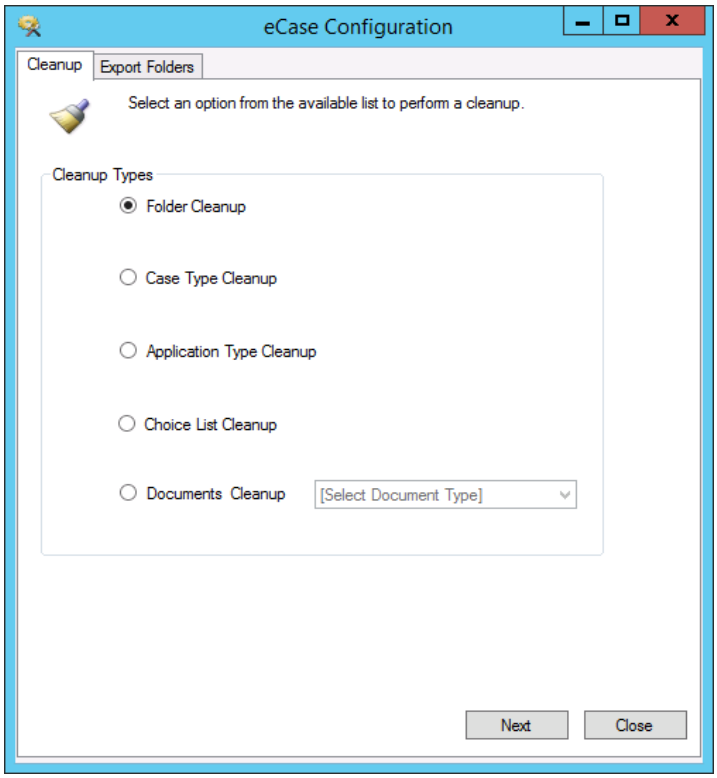
Appendix C: Cleanup Utility

Cleanup

The **CLEANUP** utility allows users to remove folders, case and application types, choice lists, and documents from the **eCase** application. To access the utility, follow the steps below:

1. Click Start > All Programs > ECase.
2. Right-click on eCase CONFIGURATION and select RUN AS ADMINISTRATOR . The eCase CONFIGURATION window appears.
3. Click the **CLEANUP** tab.

(!!) Note: Cleanup is applicable only when a new Repository is configured.



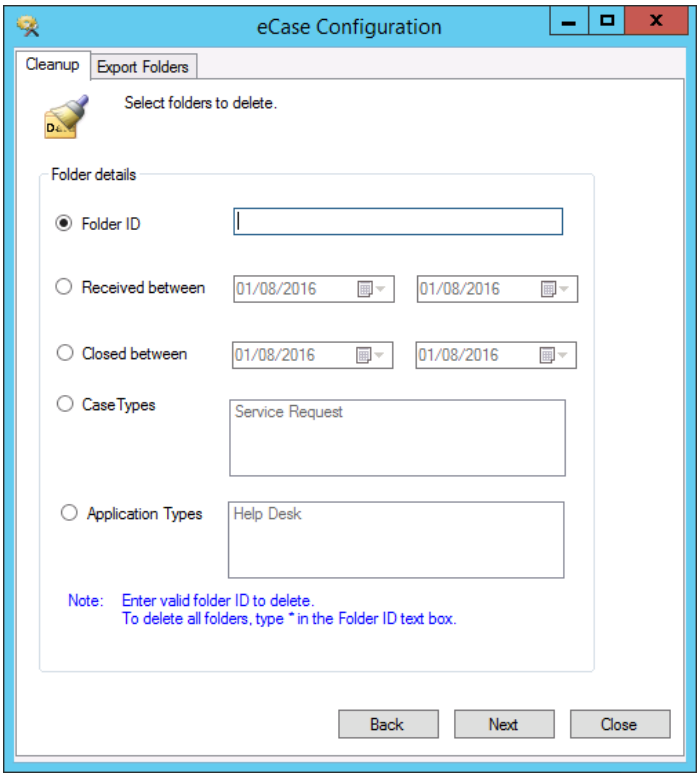
Folder Cleanup

This option will remove folders and data from the eCase application. Because FOLDER CLEANUP is the first option it is also the default option.

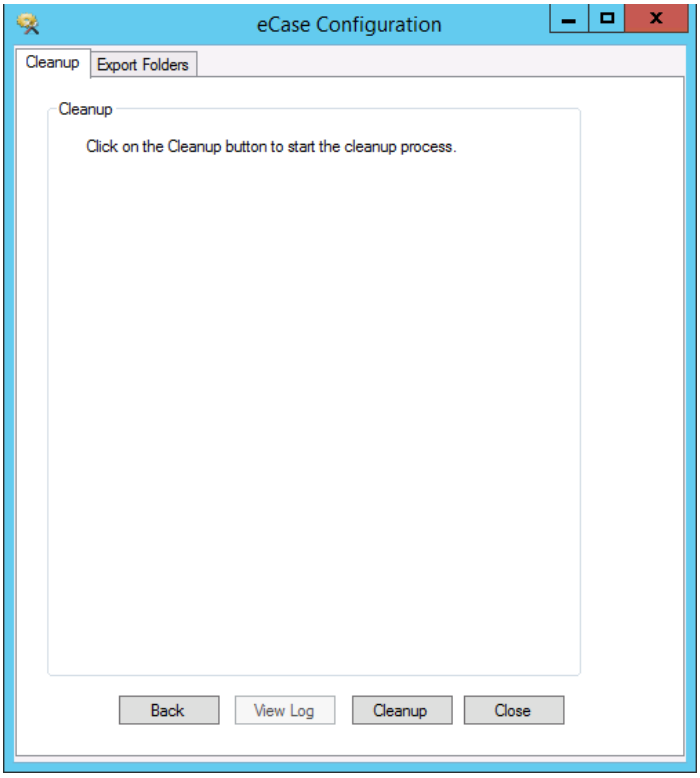
1. Click **Next**.
2. Select one of the options outlined in Table 0-1 then click **Next**.

(!!) Note: This tool will not copy the folders and its related document data.

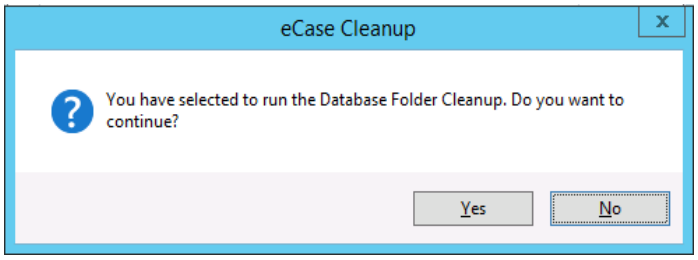
Field Name	Description
Folder ID	The unique identifier for a folder.
Received Between	The beginning and ending dates a task/case was received.
Closed Between	The beginning and ending dates a task/case was closed.
Case Types	The type(s) of requests or documents related to cases/tasks.
Application Types	The type(s) of requests or documents related specifically to the application.



4. Click **CLEANUP** to remove the folder and data contained in the folder.



5. Click **Yes** on the verification message to proceed with the cleanup.

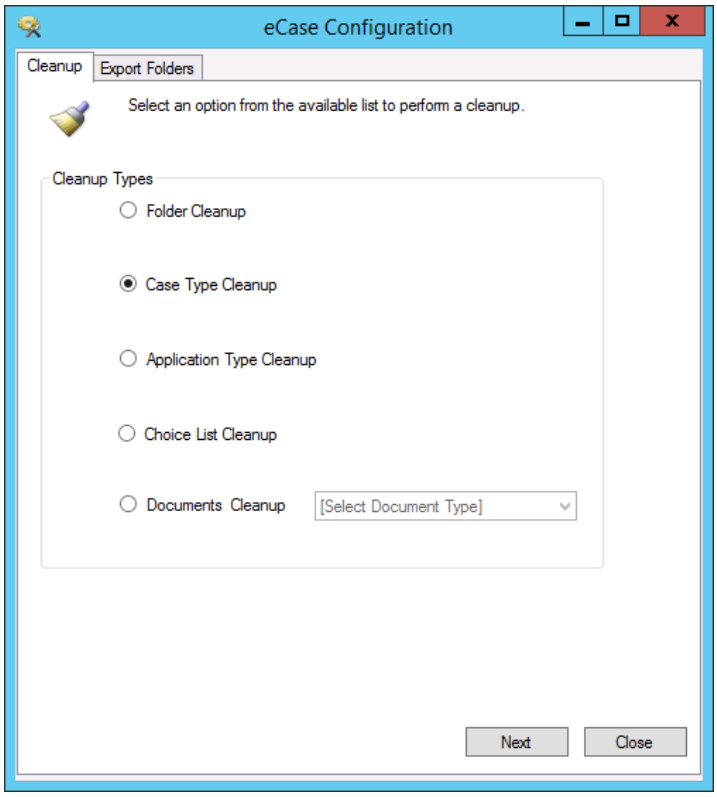


6. The **CLEANUP** tab changes to display messaging regarding the cleanup process.
7. The following message appears once the cleanup process has ended. Click **OK** to close the message.

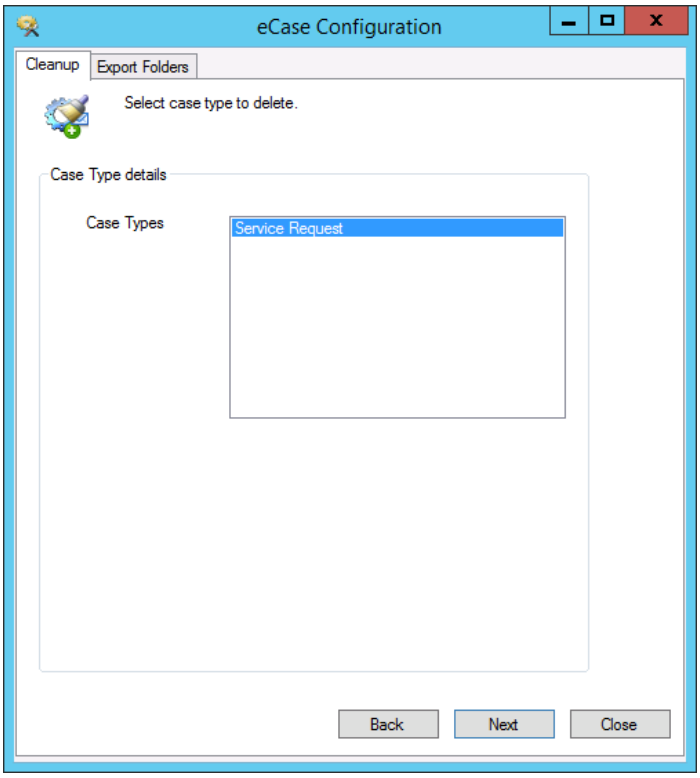
Case Type Cleanup

This option removes Case Types from the **eCase** application.

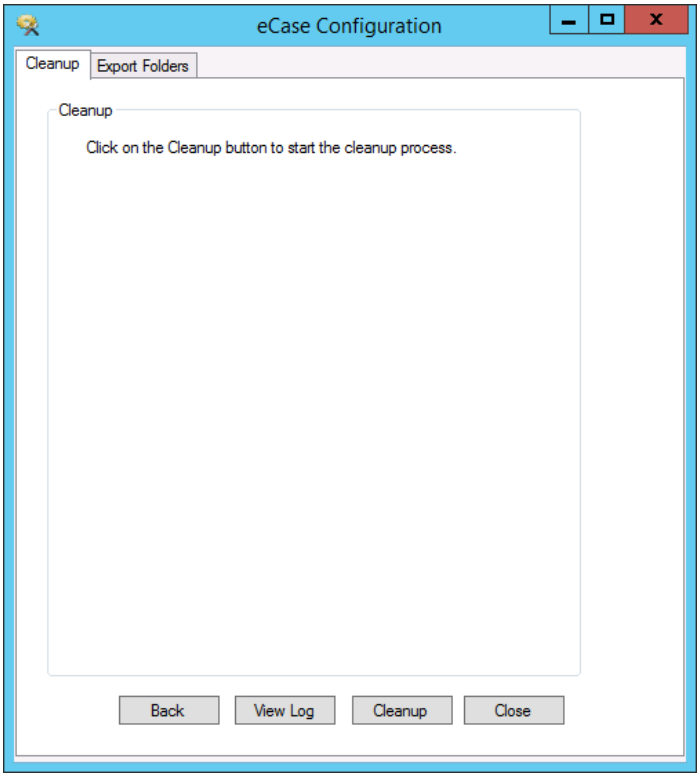
3. Select the CASE TYPE CLEANUP option then click NEXT.



4. Select from the available list then click **Next**.



5. Click **CLEANUP** to clear the selected case types from the application.



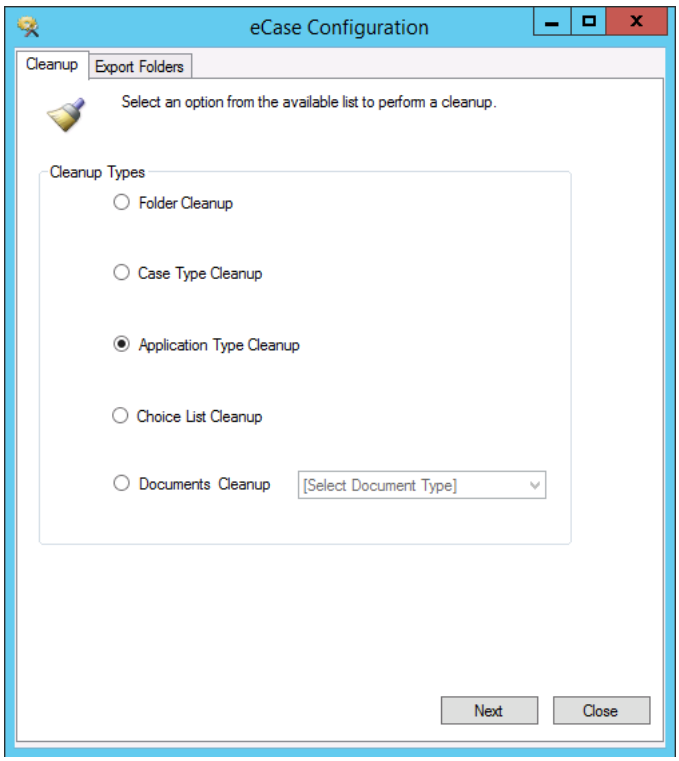
6. Click **Yes** on the verification message to proceed with the cleanup.
7. The **CLEANUP** tab changes to display messaging regarding the cleanup process.

8. Click **OK** to close the message.

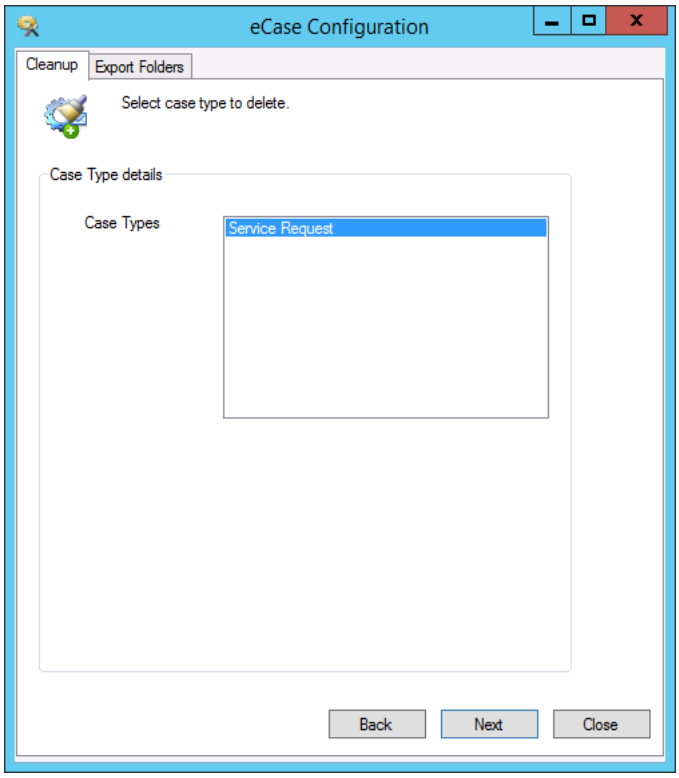
Application Type Cleanup

This option removes Application Types from the **eCase** application.

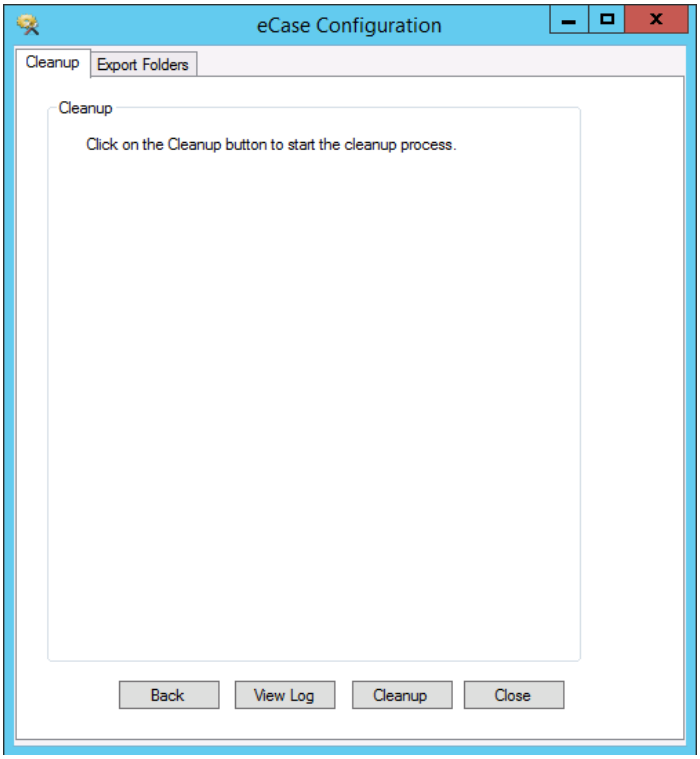
1. Select the **APPLICATION TYPE CLEANUP** option then click **NEXT**.



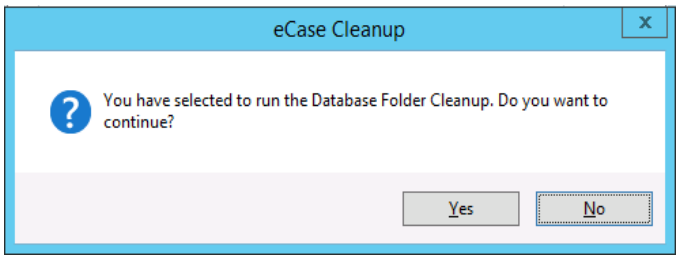
2. Select from the available list then click **NEXT**.



3. Click **CLEANUP** to delete the selected Application Type.



4. Click **Yes** on the verification message to proceed with the cleanup process.

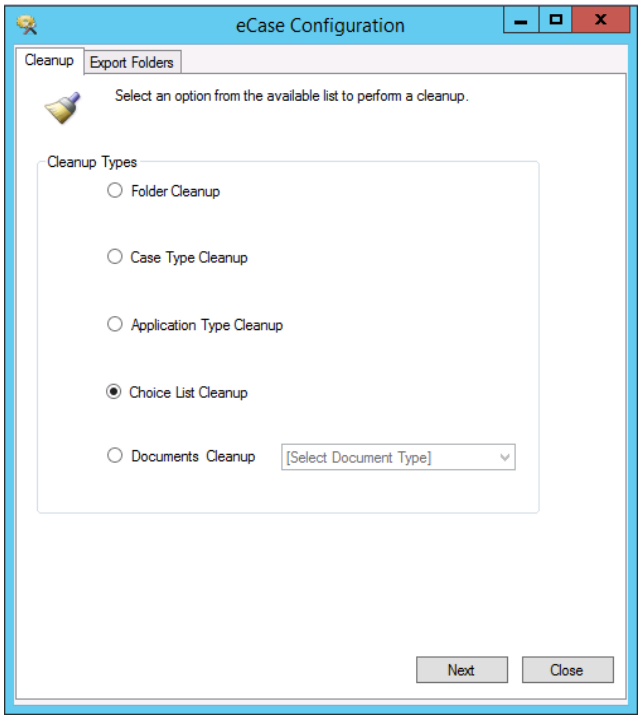


5. The **CLEANUP** tab changes to display messaging regarding the cleanup process
6. A confirmation message appears once the cleanup process has ended. Click **OK** to close the message.

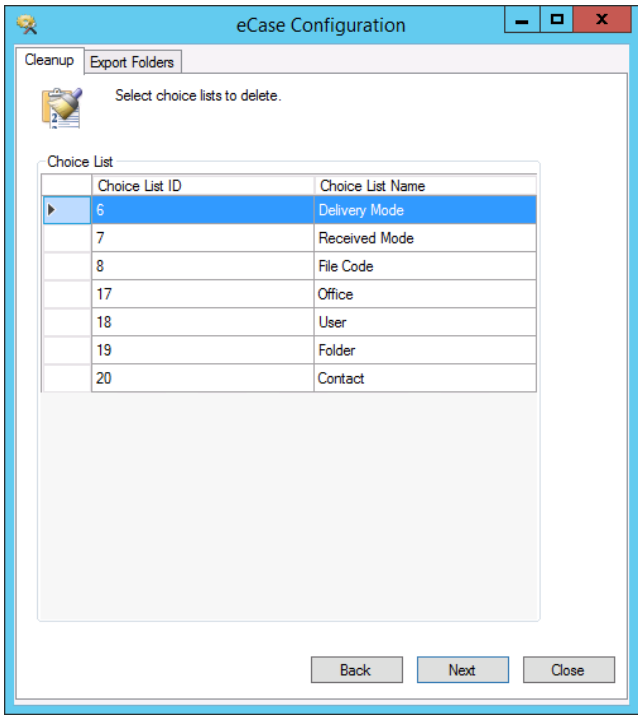
Choice List Cleanup

This option removes Choice List(s) from the eCase application.

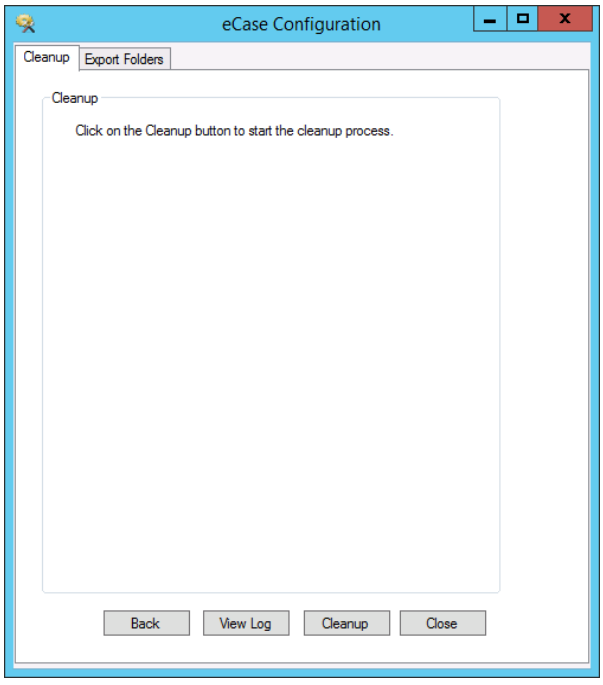
1. Select the CHOICE LIST CLEANUP option and click NEXT.



2. Make a selection from the available list then click NEXT. Use the <Shift> or <Ctrl> keys to make multiple selections.



3. Click CLEANUP to delete the selected choice list.

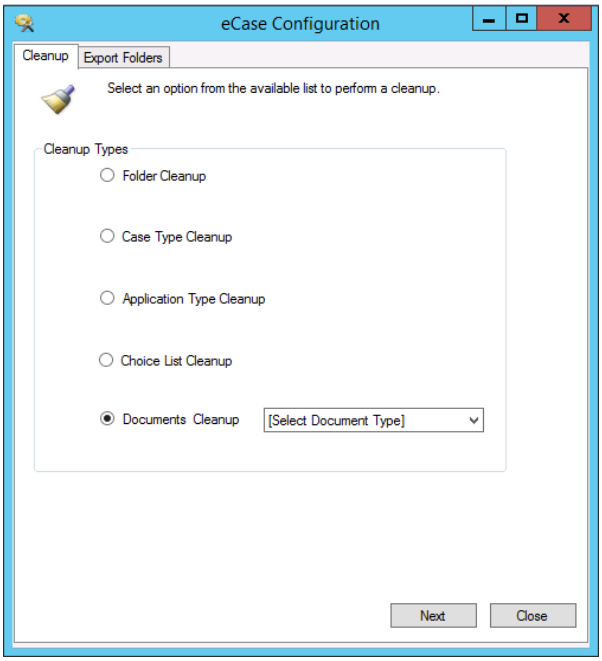


4. Click Yes on the verification message to continue with the cleanup process.
5. The CLEANUP tab changes to display messaging regarding the cleanup process
6. The following message appears once the cleanup process has ended. Click OK to close the message.

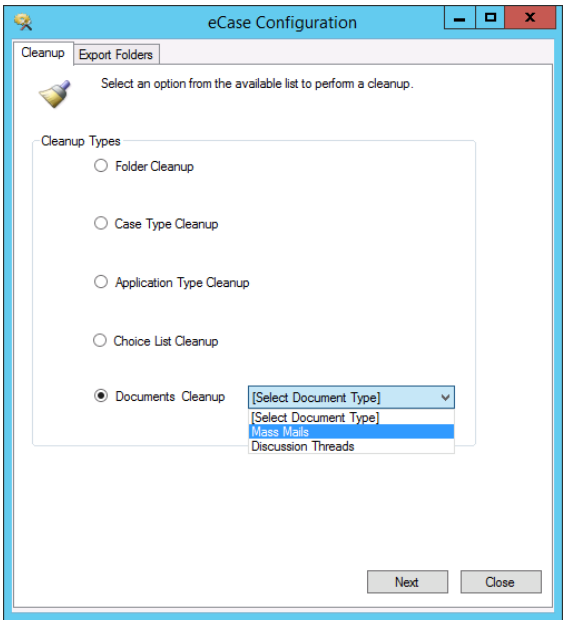
Documents Cleanup

This option removes Documents from the eCase application.

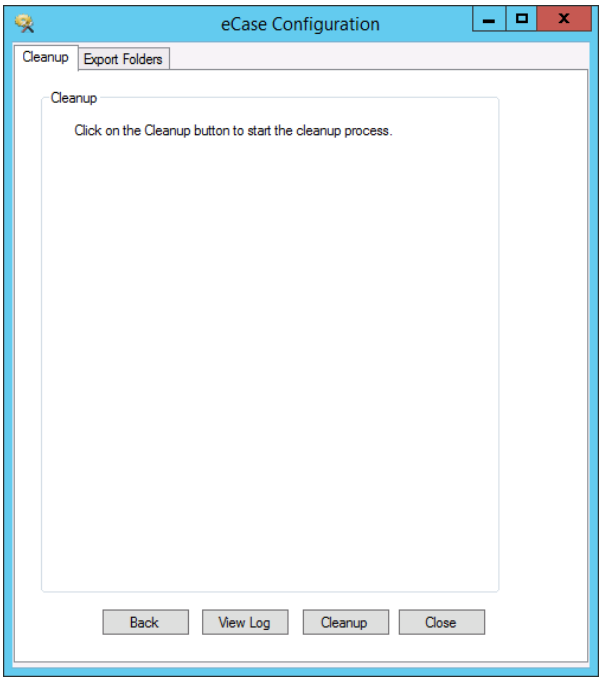
1. Select the DOCUMENTS CLEANUP option. The list box is enabled.



2. Select for the type of document to remove then click NEXT.



3. Click CLEANUP to delete the selected document.



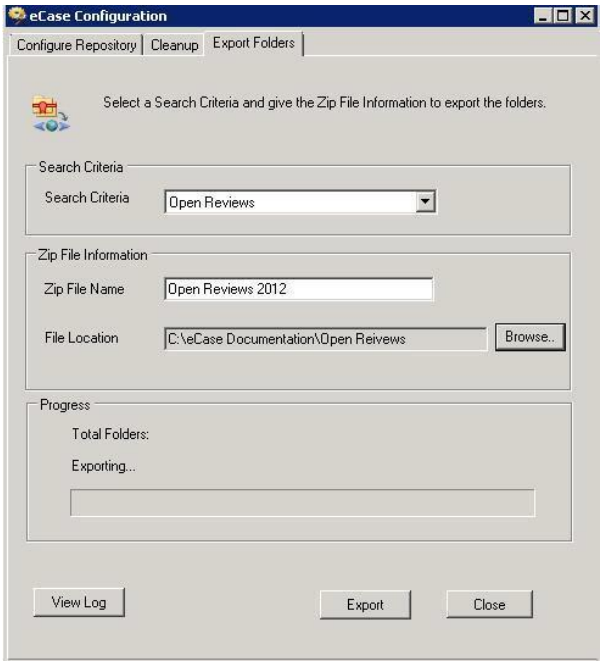
4. Click Yes on the verification message to proceed with the cleanup process.
5. The CLEANUP tab changes to display messaging regarding the cleanup process
6. The following message appears once the cleanup process has ended. Click OK to close the message.

Export Folders

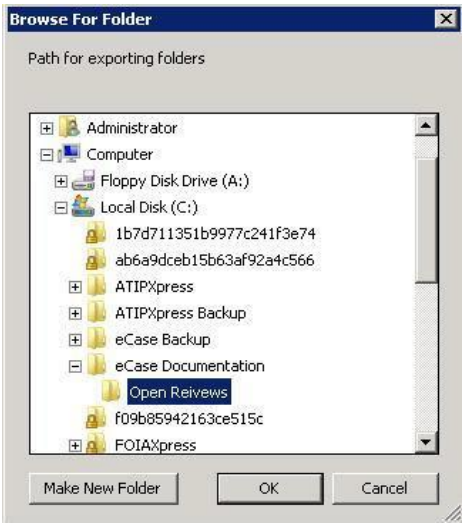
The EXPORT FOLDERS feature provides the user with the capability to transfer folders and attachments into the eCase

system based on search criteria. Large quantify of folders can be exported by batch into the system by compressing the folders and its contents into a ZIP file.

1. Click Start > All Programs > eCase.
2. Right-click on eCase CONFIGURATION and select RUN AS ADMINISTRATOR. The eCase CONFIGURATION window appears.
3. Click the EXPORT FOLDERS tab.
4. Select search criteria from the drop-down list and enter the name of the ZIP file in the available field.

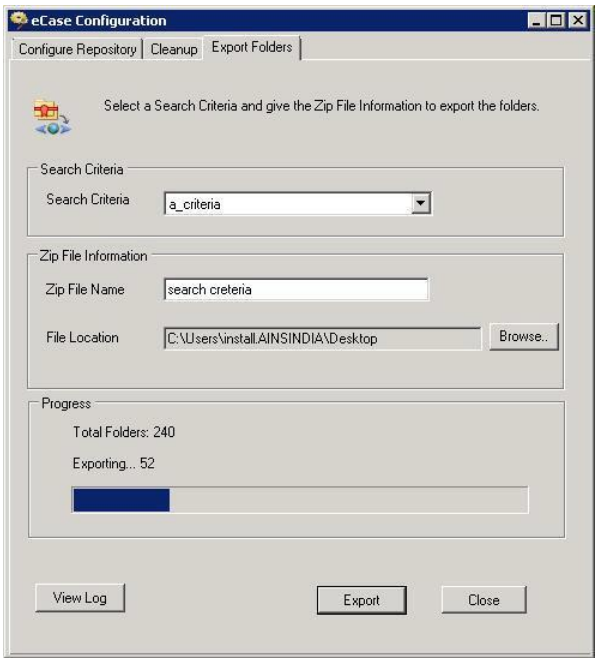


5. Click BROWSE. The BROWSE FOR FOLDER window appears. Select the location to store the ZIP file then click OK.



6. Click Export to continue. A verification message appears indicating the amount of folders to be exported.

7. Click Yes to begin exporting folders to the designated destination. The eCase CONFIGURATION window changes to display the progress of the export.



8. A confirmation message appears once the export is completed.

9. Click OK to close the message and return to the EXPORT FOLDERS tab.
10. Click Close to exit the eCase CONFIGURATION utility.

Appendix D: eCase Uninstallation

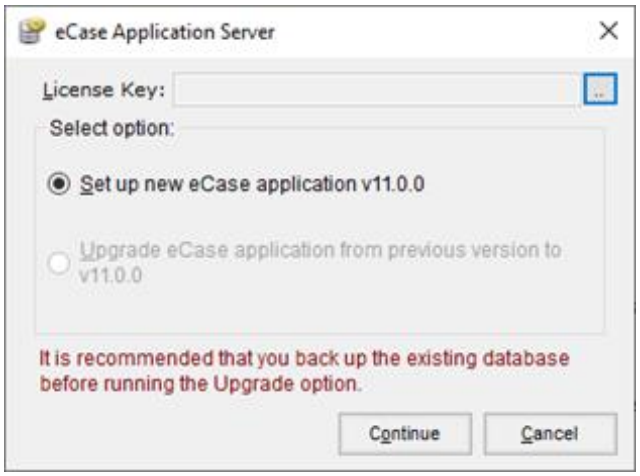
This section provides instructions on uninstalling the eCase Application from the application server.

Uninstalling the eCase Application

The eCase application can be uninstalled manually or by using the eCase SETUP WIZARD. If you attempt to uninstall the application using the setup wizard, it will automatically detect the previous installation and redirect you to uninstall the application. The uninstall process occurs on the application server.

(!!) Note: To manually uninstall the application click Start > All Programs > Control Panel > Programs and Features. Select eCase then click UNINSTALL. The application will be removed from the server.

1. Double-click the eCase > Server folders.
2. Right-click on the SETUP.EXE file and select RUN AS ADMINISTRATOR.
3. Click Installation > Install eCase Application. The eCase APPLICATION SERVER window opens with the SET UP NEW eCase 10.6 APPLICATION option selected.



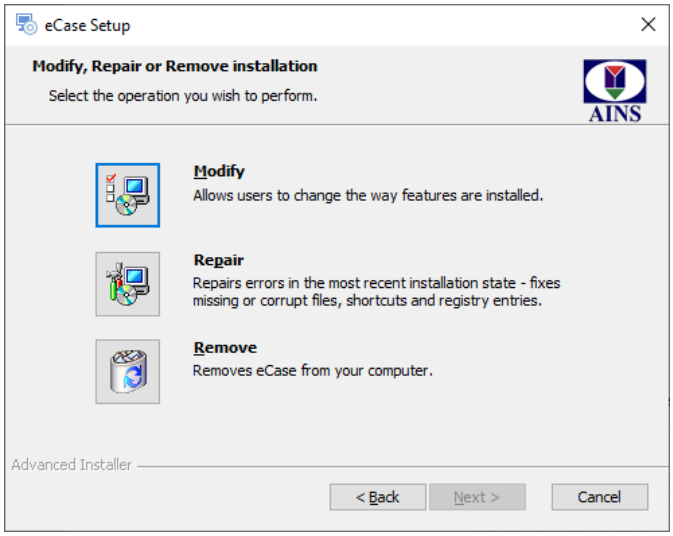
4. Locate the **LICENSE KEY** file included with the setup CD if the license key is not already populated then click CONTINUE.

(!!) Notes:

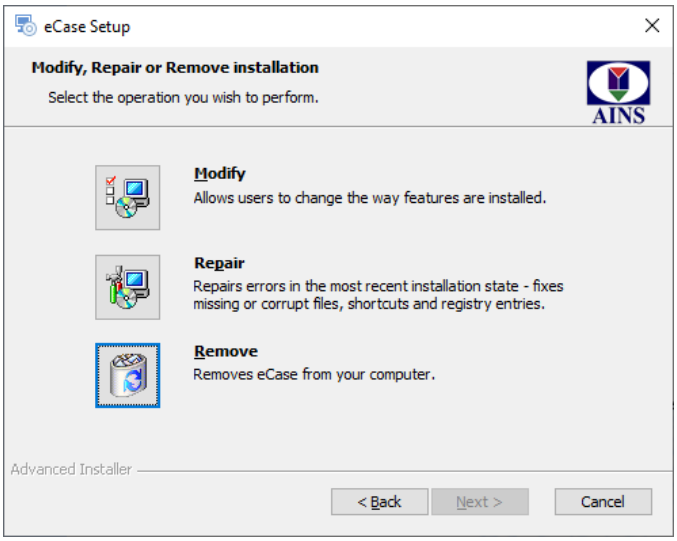
To avoid manual selection of the license key make sure the license key file is in the same folder as the SETUP.EXE file.

If a previous version of eCase already exists a verification message will appear. Click Yes to uninstall the previous version of the application or click NO to exit the uninstall process.

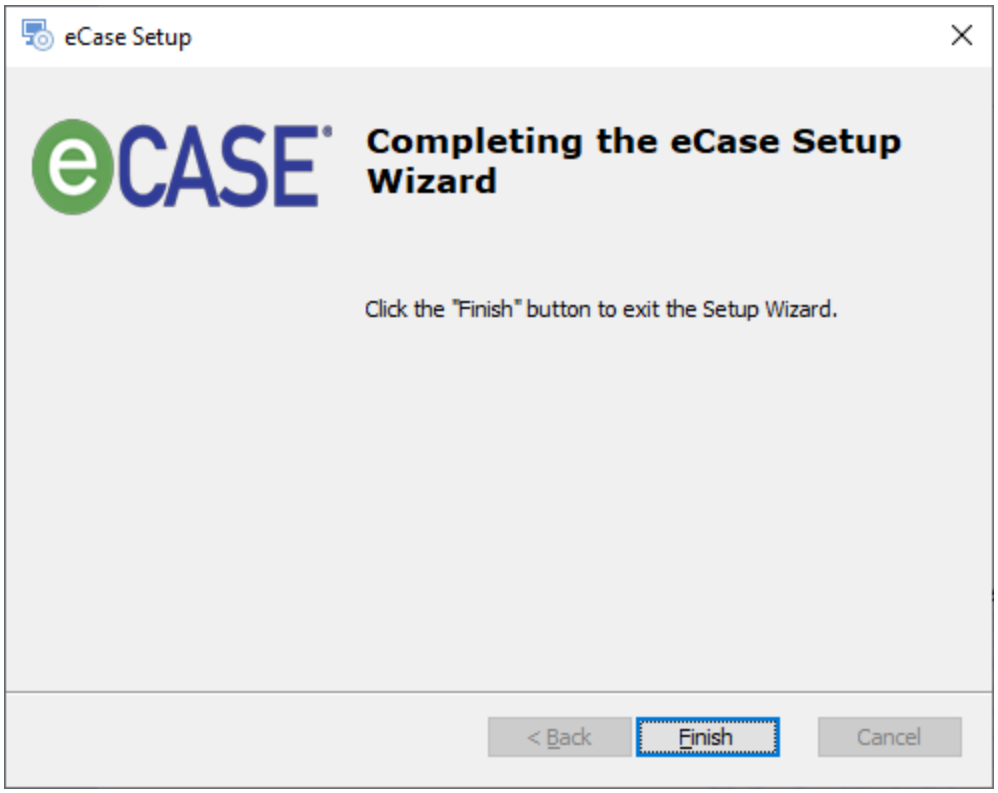
The WINDOWS INSTALLER window appears briefly. After several seconds the eCase SETUP window appears with MODIFY selected as the default.



5. Select **REMOVE** and click **NEXT**. The **eCase UNINSTALL** window appears.



6. Review the information on the window then click **NEXT**. The **UPDATING SYSTEM** window appears.
7. Click **FINISH** to close the **eCase SETUP** window once the application is uninstalled.



(!!) Notes:

The SETUP WIZARD may detect services that are actively running on the server. When this occurs a message window will appear indicating so. Select the appropriate action to close the message window to resume the uninstallation process.

It is highly recommended not to interrupt the Updating System process. If you must, click CANCEL

The eCase SETUP window will appear. Review the information before proceeding then click EXIT

SETUP to stop the uninstall process or RESUME to continue with the uninstallation.

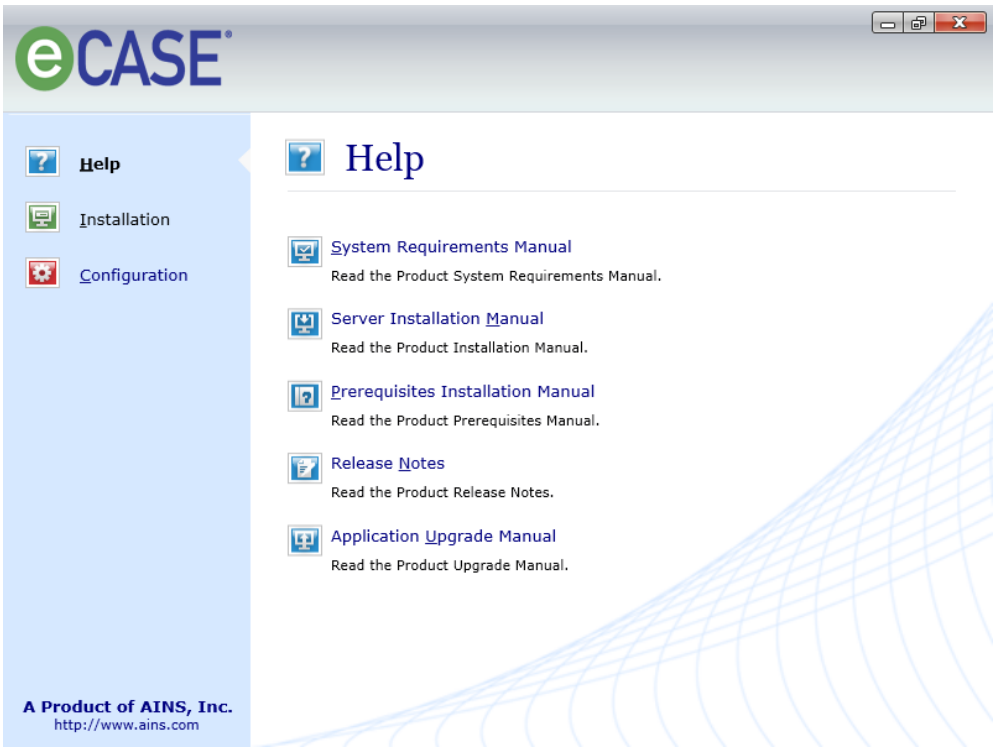
Exiting the uninstall process while the system is updating will not remove the entire application. You must restart the uninstall sequence of steps to completely remove the application from the server.

Appendix E: Un-installation Steps for eCase Add-on Modules

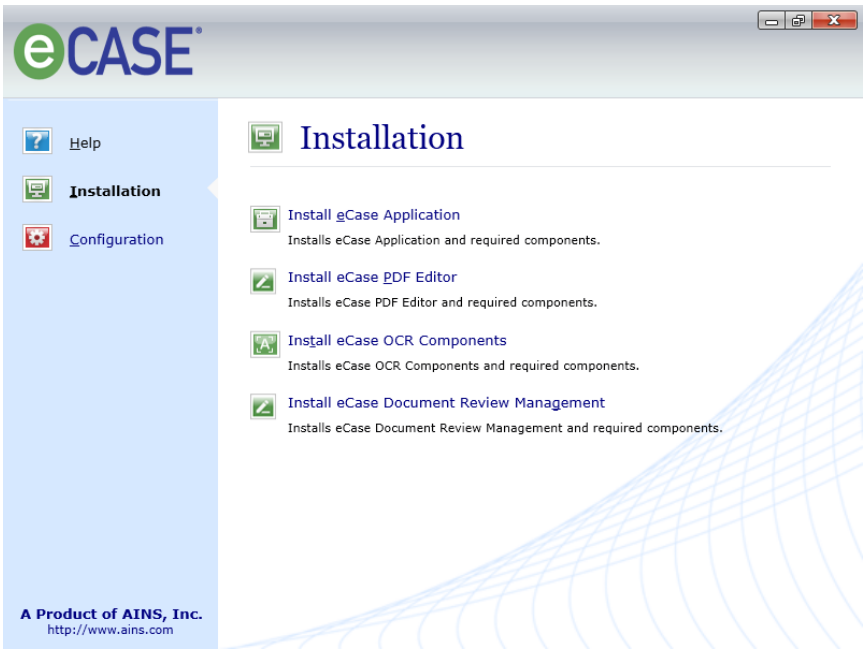
Uninstall eCase OCR Components

To uninstall eCase OCR Components, follow the steps below.

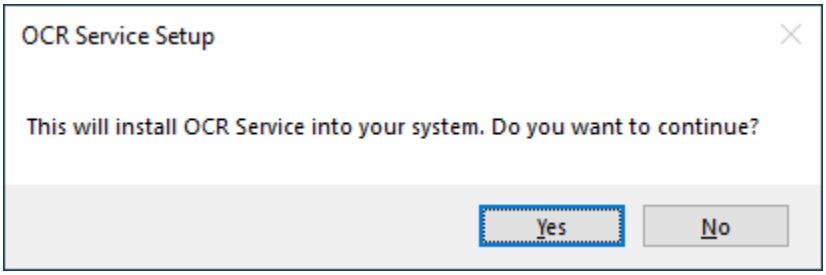
1. Open **Server** folder.
2. Run the **Setup.exe** as Run as administrator.

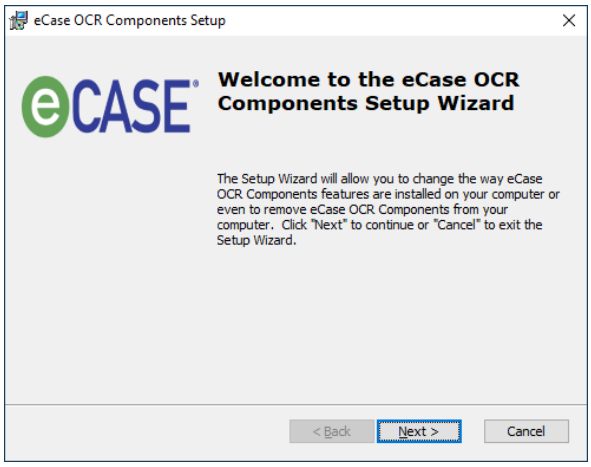


3. Click on Installation and click on Install eCase OCR Components.

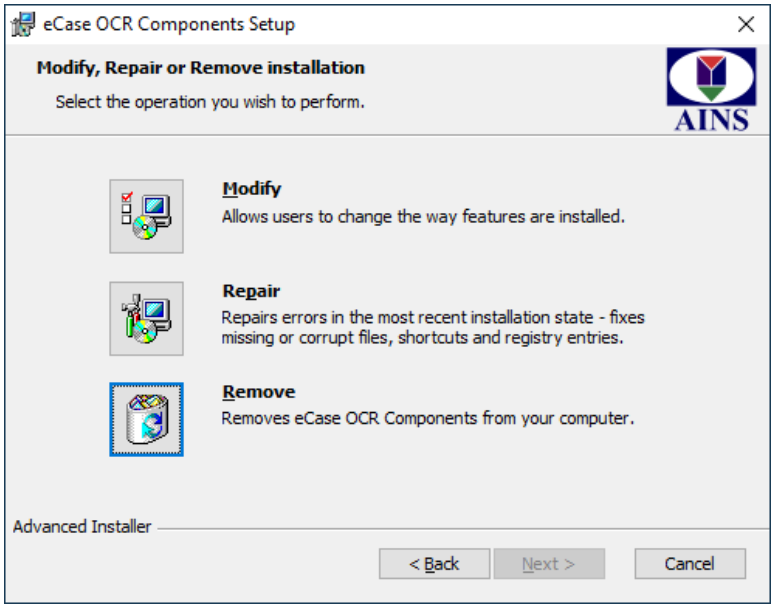


4. Click **Yes** to continue.

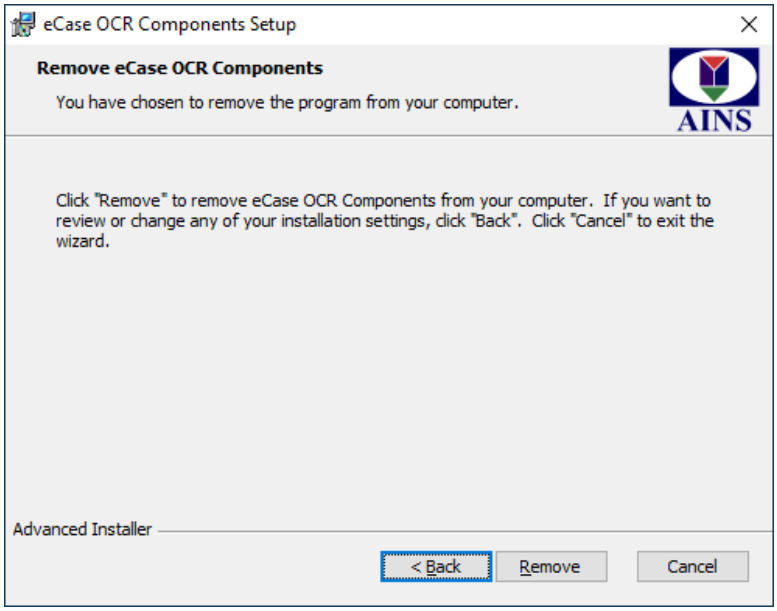




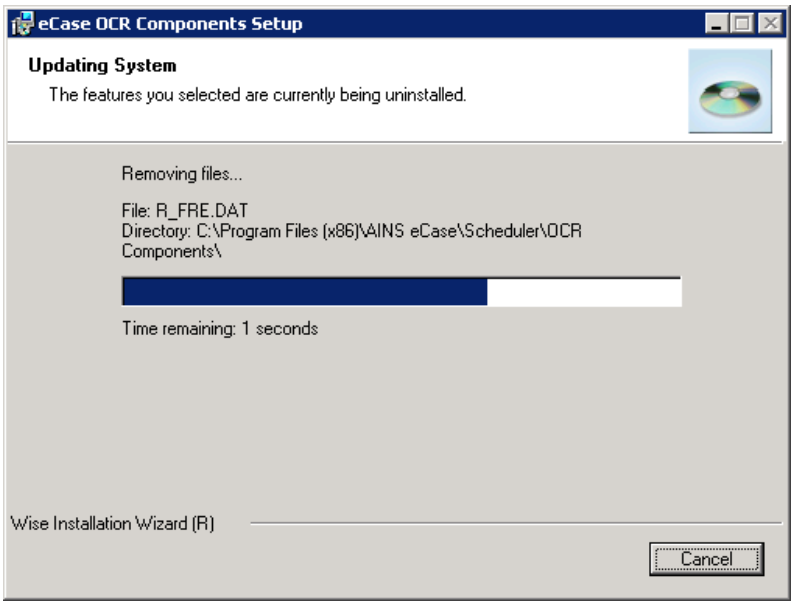
5. Application Maintenance screen will prompt. Select **Remove** and click **Next**.



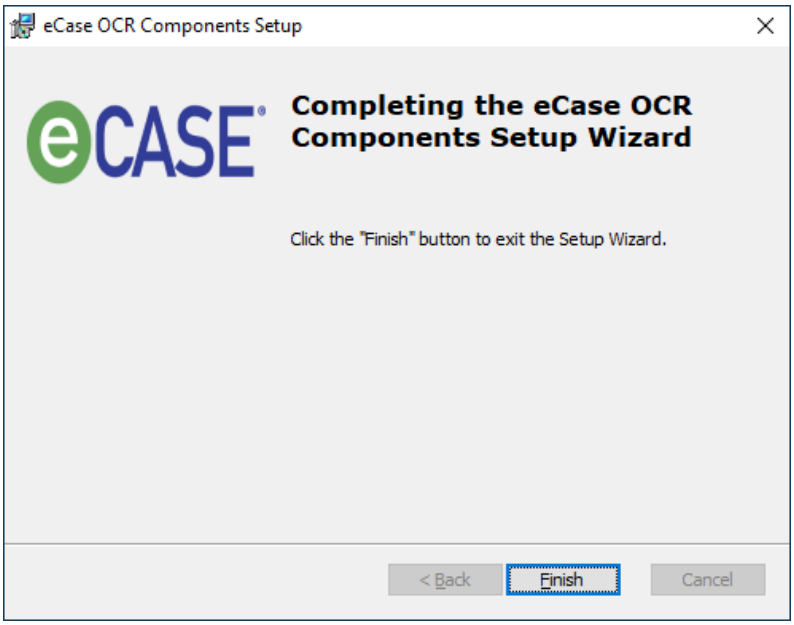
6. Click **Next**.



7. Uninstallation is in progress please wait.



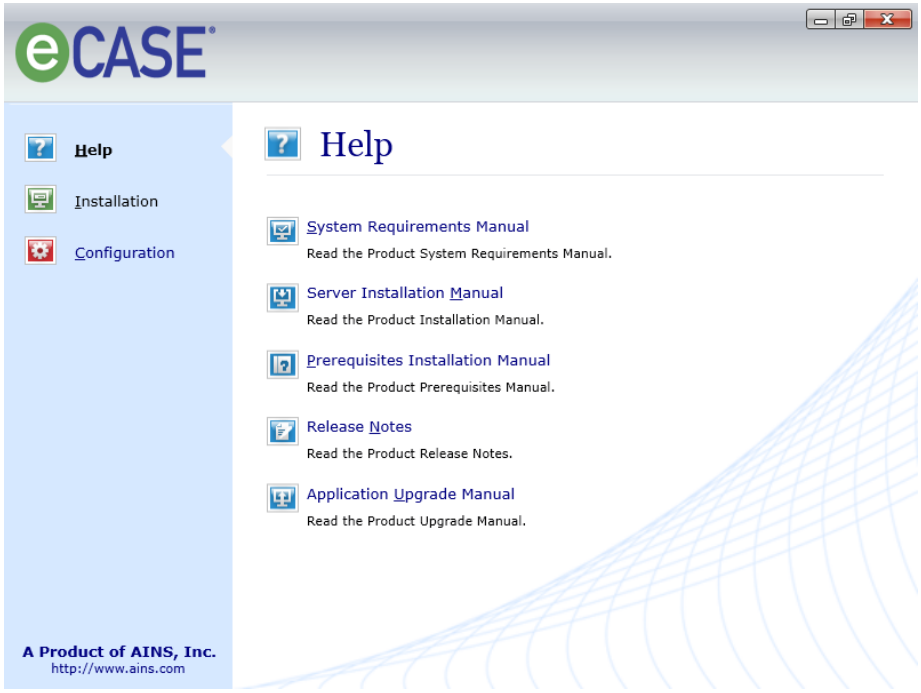
8. Click **Finish**.



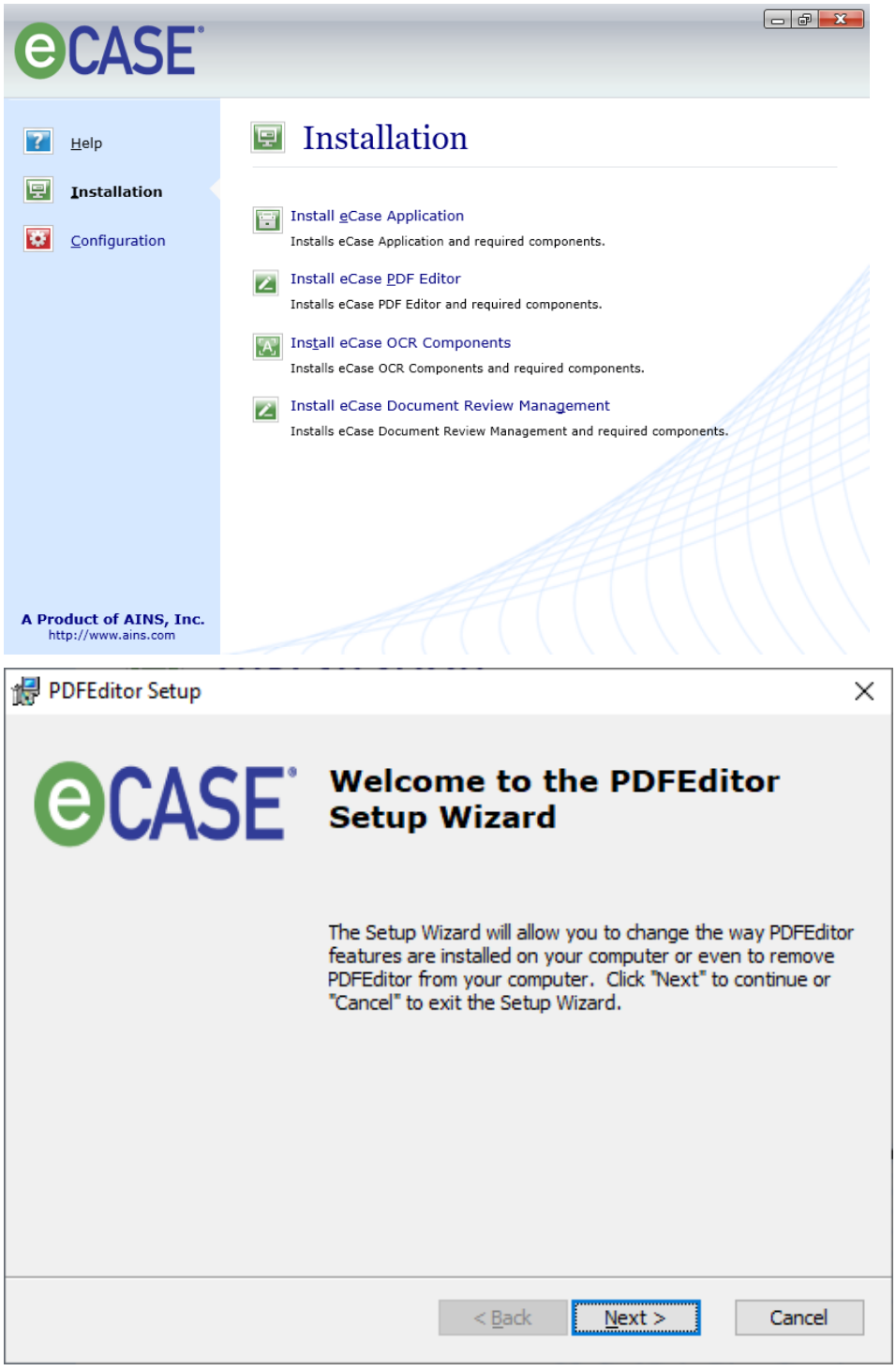
Uninstall eCase PDF Editor

To uninstall eCase PDF Editor, follow the steps below.

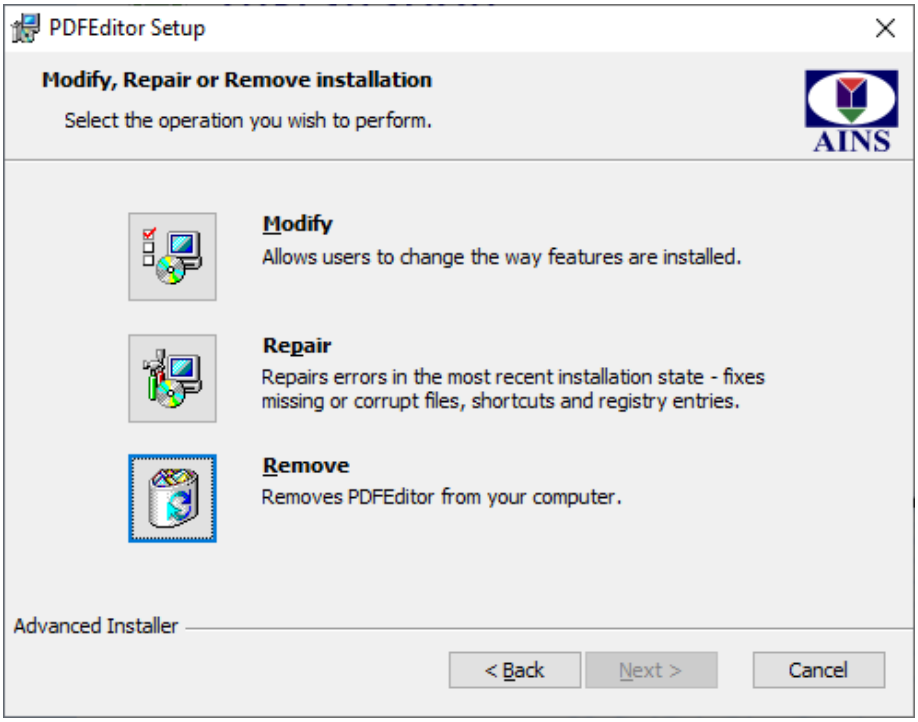
1. Open **Server** folder.
2. Run the **Setup.exe** as Run as administrator.



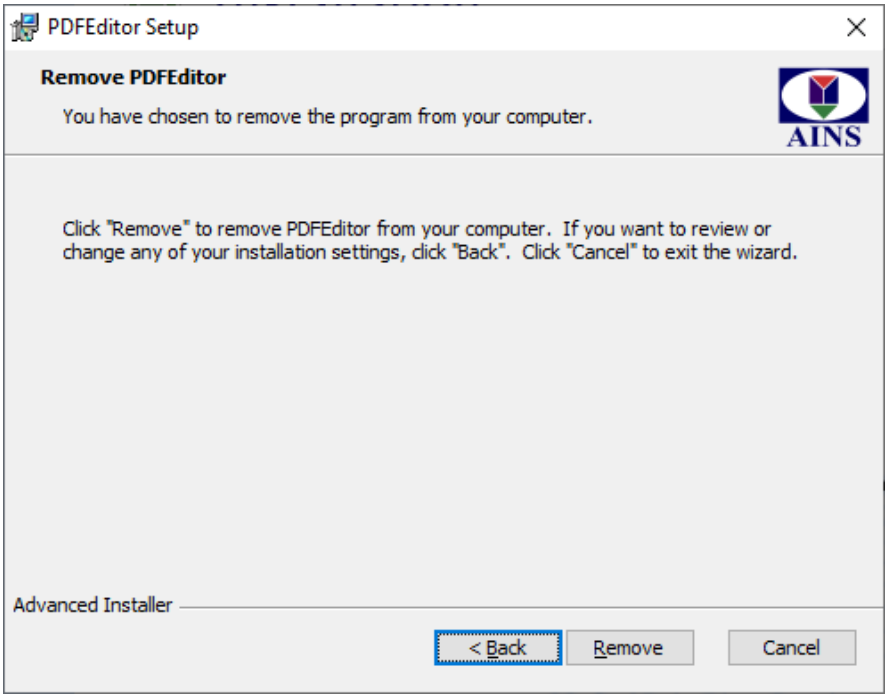
3. Click on Installation and click on Install eCase PDF Editor.



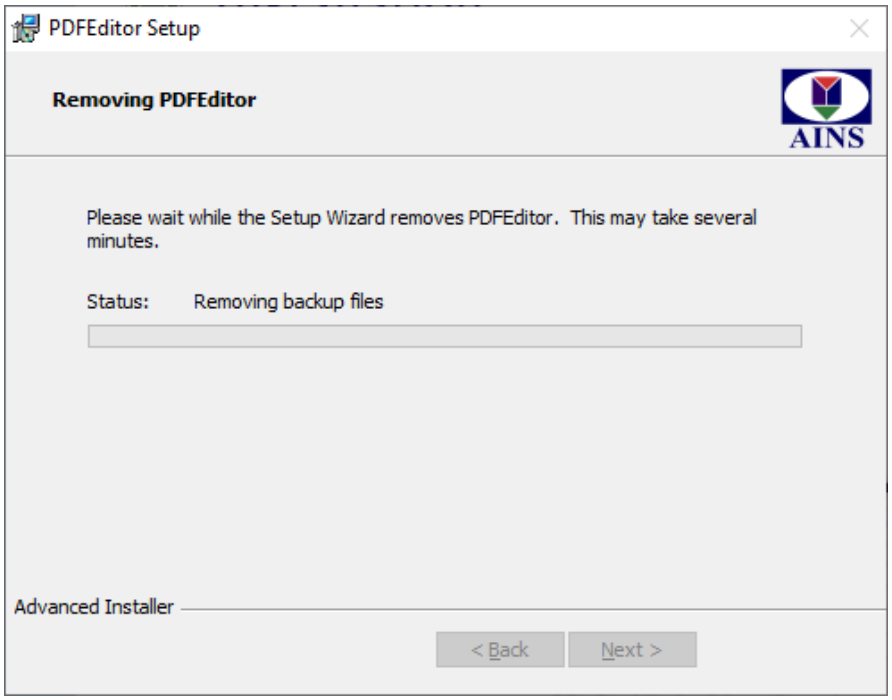
4. Application Maintenance screen will prompt. Select **Remove** and click **Next**.



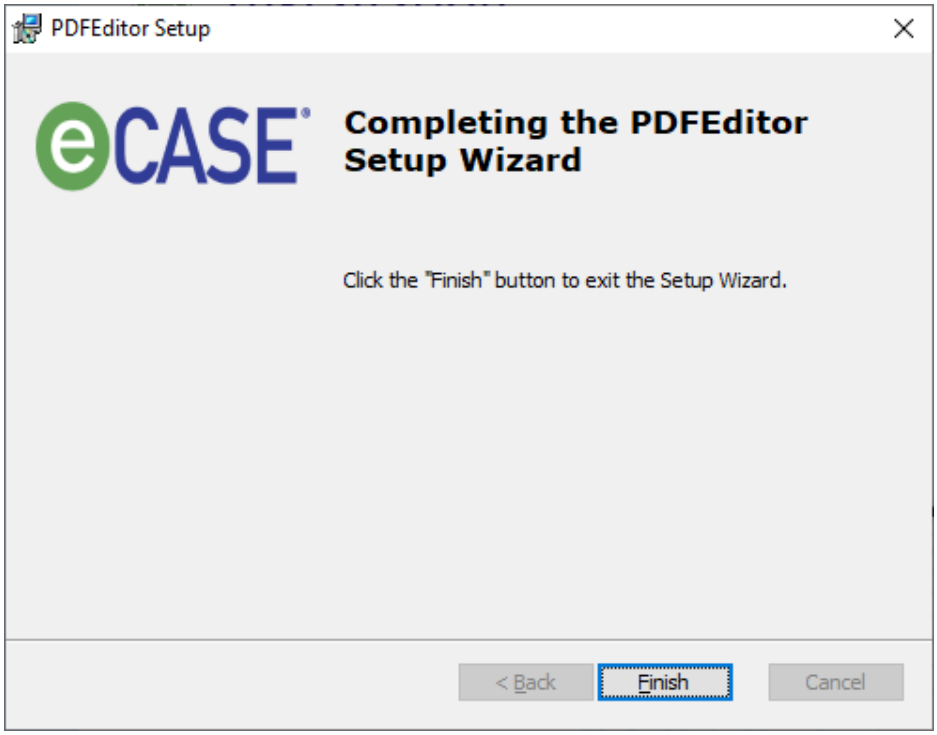
5. Click **Next**.



6. Uninstallation is in progress please wait.



7. Click **Finish.**



Appendix F: Troubleshooting

Syntax error while accessing the Folder Tabs

Problem:

Why is a Syntax error being observed while accessing the Folder Tabs?

Solution:

Reset Internet Explorer settings to their default condition.

To reset **INTERNET EXPLORER** settings follow these steps:

1. Exit all programs, including **INTERNET EXPLORER** (if it is running)
2. Click **START**, type ***inetcpl.cpl*** and press **ENTER**. The **INTERNET OPTIONS** dialog box appears
3. Click the **ADVANCED** tab.
4. Under **RESET INTERNET EXPLORER** settings, click **RESET**. Then click **RESET** again.
5. When Internet Explorer finishes resetting the settings, click **CLOSE** in the **RESET INTERNET EXPLORER SETTINGS** dialog box.
6. Start INTERNET EXPLORER again.

Failed to decrypt using provider 'RsaProtectedConfigurationProvider'

Problem:

Failed to decrypt using provider '**RsaProtectedConfigurationProvider**'. Error message from the provider: The RSA

key container could not be opened.

Solution:

Execute a command to provide the AppPool account of eCase.

1. Open Command prompt
2. Go to C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727
3. Execute aspnet_regiis -pa "NetFrameworkConfigurationKey" "Network Service" by providing the

4. AppPool account of eCase.

* **Network Service** is the AppPool account of **eCase** if the AppPool account is **Windows** Domain User account, you have to provide like DOMAIN\UserName.

In case the issue persists even after following the above-mentioned procedure, provide the Read, Read & Execute, and List Folder Contents permissions for the Network Service User to inherit the permissions from the parent to all its child objects on the following Path.

C:\ProgramData\Microsoft\Crypto\RSA\MachineKeys

Default NTFS Permissions and User Rights for IIS

For default NTFS File System Permissions and User Rights for IIS, please *refer to the link* https://support.microsoft.com/en-us/help/981949/description-of-default-permissions-and-user-rights-for-iis-7.0-and-later

Unable to install application by someone other than Initial Installer

Problem:

A user wants to perform a fresh installation of the application and removes the previous installation using the

Control Panel, Programs and Features Uninstall function. Once the application is removed a warning message appears when attempting to re-install the application: " eCase application version (x.x.x.x) has been initially installed by a different user. Please log out and re-login with the aforementioned user account to continue with the installation of version x.x.x.x." ('x' represents the version number)

Solution:

Manually remove the following keys from the registry:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Installer\UserData\S-1-5-21-

1522637160-2486600271-3587380157-4220\Products\3079D6522DDCB1541B9F9E2910894CB7

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows\CurrentVersion\Uninstall\{256D9703- CDD2-451B-B1F9-E9920198C47B}

Error uploading large attachments

Problem:

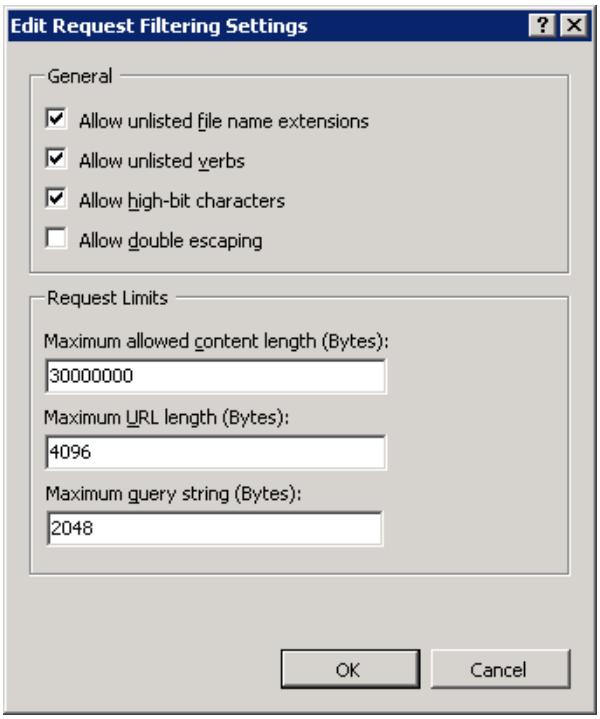
Error while uploading large files as attachments into eCase

Error: System.Net.WebException: The remote server returned an error: (404) Not Found.

Solution:

Follow the steps below to resolve the issue.

1. Open IIS Manager by selecting Start > All Programs > Administrative Tools > Internet Information
2. Services (IIS) Manager.
3. Expand the Server node > **Sites > Default Web Site** and select **eCase**.
4. In FEATURE VIEW, double-click REQUEST FILTERING.
5. In the ACTIONS pane, click EDIT FEATURE SETTINGS….
6. In **EDIT REQUEST FILTERING SETTING** window, change the value of **Maximum allowedcontent length (Bytes)**.By default, 30 MB is the size. You can increase to your desired value. Example: Change the value to
7. 52428800, then application will support up to 50 MB.



(!!) Note: Please restart IIS after you make the required changes.