

ATIPXpress



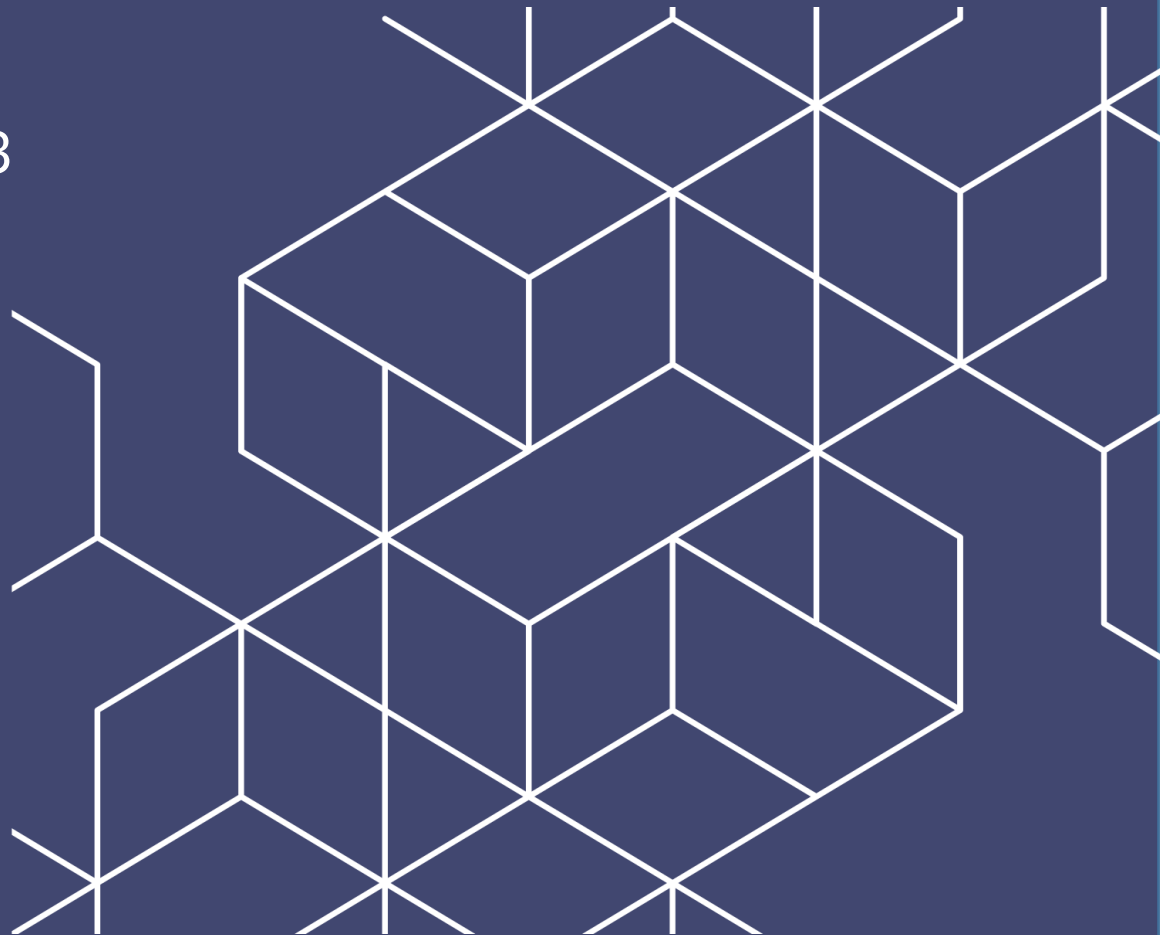
OPEXUS

PAL Deployment Manual

Version 1.2

v11.1.0

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AX 11.1.0 PAL Deployment Manual

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Version History

| # | Date | Description |
|-----|-----------|--|
| 1.0 | 3/1/2023 | New document for v11.1.0 |
| 1.1 | 4/10/2023 | Updated the Deployment System Requirements to specify compatibility with only Windows 2016 and 2019. |
| 1.2 | 5/3/2023 | <ul style="list-style-type: none">• Updated <i>Install SQL Server Module</i> (2.3) to include steps to unblock the .zip file.• Added the <i>Download the Installation Package</i> (3) section, as well as steps to unblock the .zip file. |



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1 ATIPXpress PAL Deployment Introduction

The purpose of this document is to provide instructions for creating the ATIPXpress Public Access Link (PAL) database and installing the ATIPXpress PAL application.

ATIPXpress PAL facilitates the submission of Freedom of Information Act (ATIP) requests over the internet and allows information to be published to the Electronic Reading Room.

ATIPXpress PAL supports SQL Databases.

(!!) Notes:

- **This document does not provide instructions for installing windows server or Microsoft .net. Please consult your software vendor for further details concerning these installations.**
- **A single server can be used to install ATIPXpress PAL and all its components, however it is highly recommended to configure separate servers for the ATIPXpress application, database, and repository due to the processing demands of the CPU.**

1.1 Installation Option 1: External PAL Database

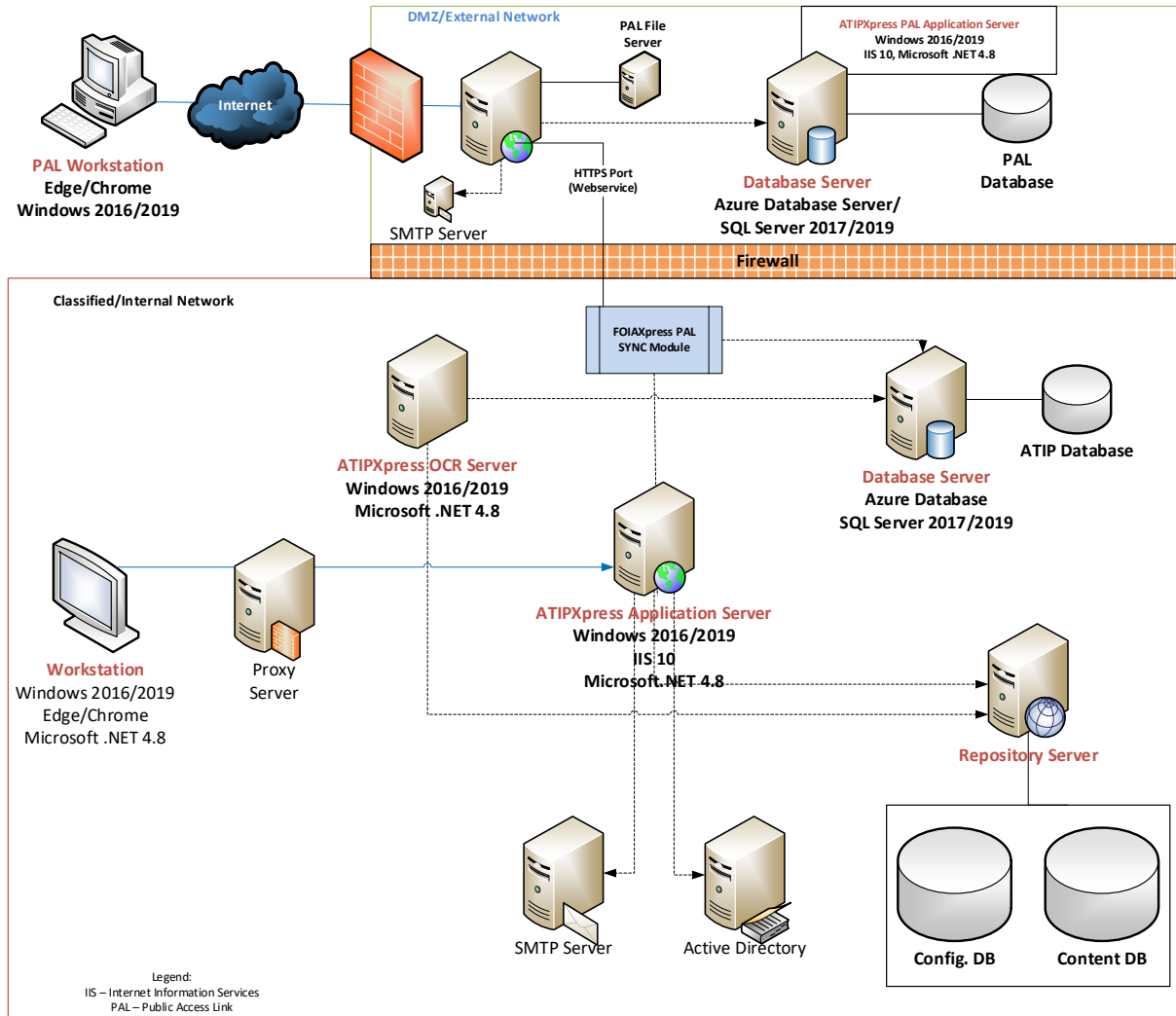
The PAL application URL will be accessible by the public for submitting ATIP requests to your agency. However, the web server and database server must remain secure. Installation option 1 includes the following configuration:

- The PAL Database, PAL Application, and PAL File Server are installed in the External network (DMZ).
- The ATIPXpress Application, ATIPXpress Database, and all applicable services are installed in the local intranet.
- The Database Port and HTTPS port are enabled to allow the PAL modules to communicate with ATIPXpress.

The figure below shows a diagram of Installation Option 1.



ATIPXpress PAL Deployment Introduction



1.2 Installation Option 2: Intranet PAL Database

The PAL application URL will be accessible by the public for submitting ATIP requests to your agency. However, the web server and database server must remain secure. Installation Option 2 includes the following configuration:

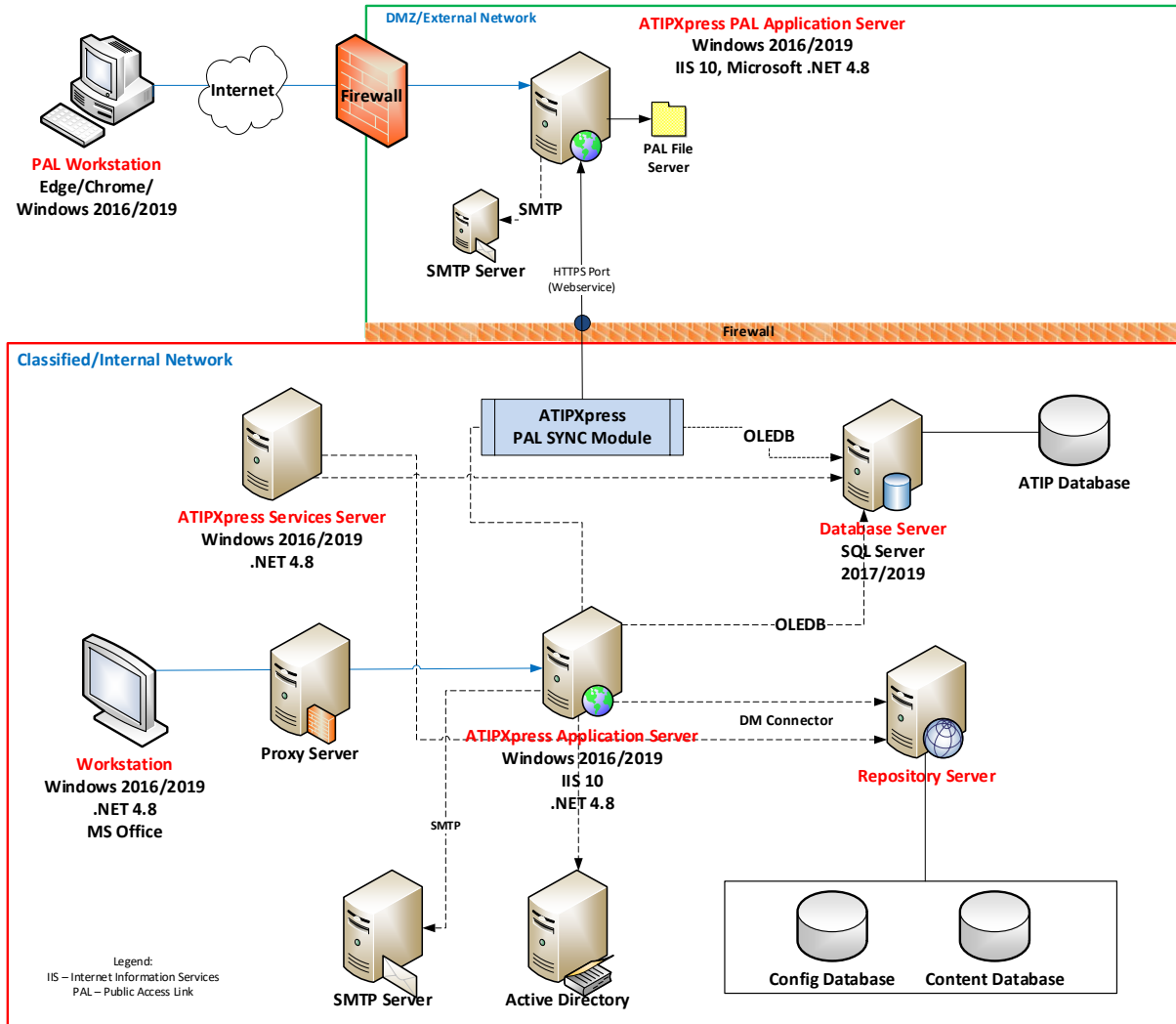
- The PAL Application and PAL File Server are installed in the External network (DMZ).
- The PAL Database, ATIPXpress Application, ATIPXpress Database, and all applicable services are installed in the local intranet. This option offers more security on the PAL database side.
- The HTTPS port is enabled to allow the PAL File Server to communicate with ATIPXpress.

The figure below shows a diagram of Installation Option 2.



ATIPXpress PAL Deployment Introduction

ATIPXpress PAL Installation Option 2



2 PAL Installation Prerequisites

2.1 ATIPXpress PAL Deployment System Requirements

Before proceeding with the installation, it is necessary to do the following:

- Install Microsoft SQL Server 2017/2019 on the database server.
- Configure the SMTP Server to relay email to the email server while using ATIPXpress PAL. The SMTP server must be configured to relay e-mail messages to other domains.
- Before installing the ATIPXpress PAL database, make sure SQL Server collation is configured for case-insensitive.

The installation package must be deployed from the application server, which must meet the requirements outlined below:

| Requirement | Description |
|-------------------------------|--|
| Location | Deployment scripts can be executed from Application server. The script must be executed from application server if the Application or Scheduler are installed. |
| User Permissions | The logged-in user should have the local administrator permissions. |
| Operating System Requirements | Windows 2016/2019 |
| URL Rewrite | Install the Microsoft IIS URL Rewrite extension, available via https://www.iis.net/downloads/microsoft/url-rewrite |



| Requirement | Description |
|---|---|
| Microsoft .NET Framework 4.8 Runtime | Microsoft .NET Framework 4.8 Runtime must be downloaded and installed. It can be downloaded and installed from the following location: https://dotnet.microsoft.com/en-us/download/dotnet-framework/net48 |
| SqlPackage | The SqlPackage must be downloaded and installed. It can be downloaded and installed from the following location: https://learn.microsoft.com/en-us/sql/tools/sqlpackage/sqlpackage-download?view=sql-server-ver16#windows-net-framework |
| SqlServer | The SqlServer module must be downloaded and installed on the application server. See the <i>Install SQL Server Module</i> section for steps. |
| PowerShell Version | PowerShell 5.1.22621.963 must be installed for deployment using auto deployment. https://www.microsoft.com/en-us/download/details.aspx?id=54616 |

2.2 ATIPXpress PAL Database Account Requirements

There are three accounts which must be provisioned in order to configure the application, database, and repository servers. The table below outlines the type of accounts, their purpose, and their requirements.



| Account | Purpose | Requirement |
|---|--|--|
| Application Setup | This user installs and configures the ATIPXpress PAL application and its components. | This account is set up as a Domain/Local User and is a member of the Administrators on server groups. |
| ATIPXpress PAL Database Creation | This user sets up the PAL database user account and grants any required permissions. | This account is added to the following SQL Server security roles for the user that will create the database either in SQL Server (Windows User) or Windows Authentication Mode (NT User): <ul style="list-style-type: none"> • dbcreator • securityadmin |
| ATIPXpress PAL Database User | This user performs all ATIPXpress PAL database transactions required for the ATIPXpress PAL Application. | This account must be assigned as a member of the db_owner database role for the ATIPXpressPAL SQL Server database. |

2.3 Install SQL Server Module

Follow the steps below to install the SQL Server Module on the application server:

1. Navigate to the following link:
<https://www.powershellgallery.com/packages/SqlServer/21.1.18256>
2. Under *Installation Options*, select **Manual Download**:



Installation Options

Install Module

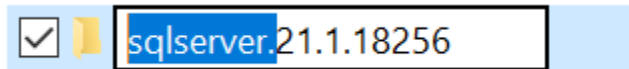
Azure Automation

Manual Download

Manually download the .nupkg file to your system's default download location. Note that the file won't be unpacked, and won't include any dependencies. [Learn More](#)

Download the raw nupkg file

3. Click **Download the raw nupk file**. The SQLserver .nupkg file downloads.
4. Locate the downloaded "SQLserver" file, then right click it and select **Properties**.
5. On the *General* tab, select **Unblock**, then click **Apply**.
6. Next, edit the "SQLserver" file extension from .nupkg to **.zip**.
7. Extract the .zip package in the downloaded location. After the folder is extracted, remove "sqlserver." from the folder name:



8. Navigate to `C:\ProgramFiles\WindowsPowerShell\Modules` and create a folder called **SqlServer**.
9. Copy the renamed .zip folder from the downloaded location to the *SqlServer* folder created in the previous step (`C:\ProgramFiles\WindowsPowerShell\Modules\SqlServer`)

2.4 Enabling Windows Search Service

Windows Search Service allows users to perform search operations on the server. This service is required to perform content searches on documents located in the PAL Reading Room.

(!!) Notes:

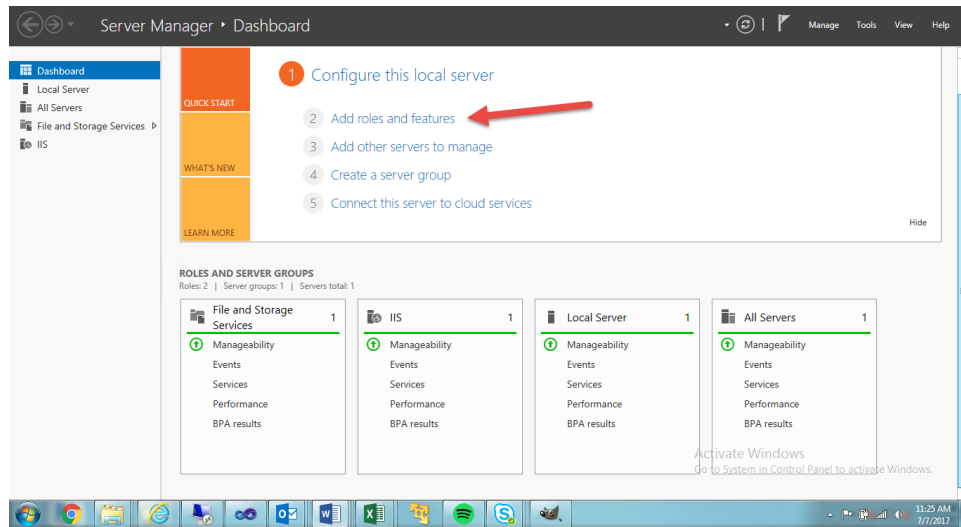
- **Administrators are not be able to install windows search services if the indexing service is installed on the server. They must uninstall the indexing service then install the windows search service.**
- **This service must be enabled on the application server.**

Follow the steps below to enable Windows Search Service:

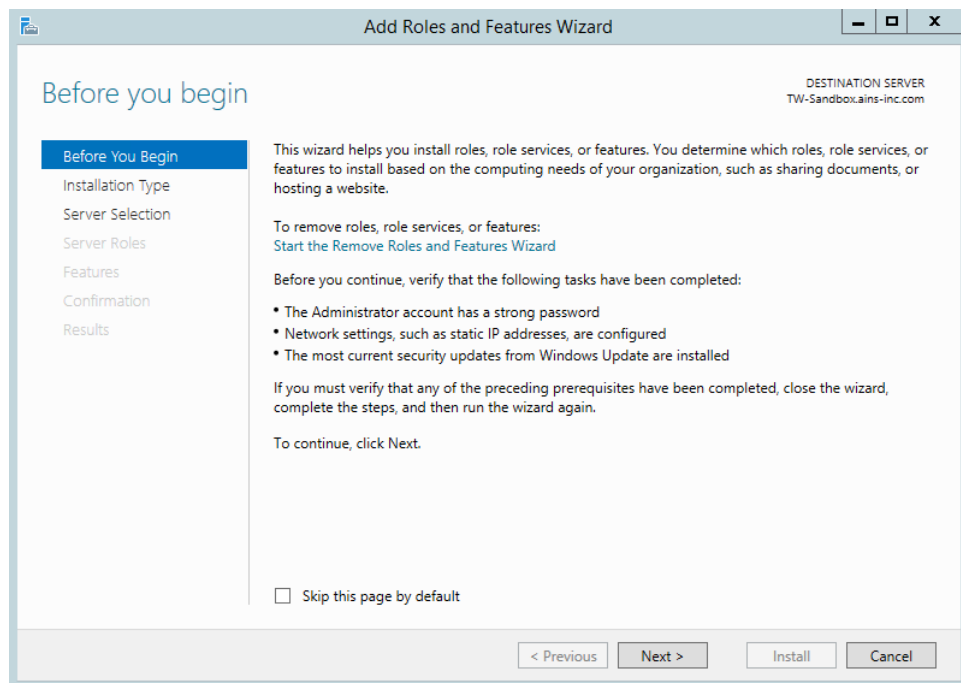
10. Click **Start > Server Manager**. The *Server Manager* application appears.



PAL Installation Prerequisites



11. Click **Add roles and features**. The *Add Roles and Features Wizard* pop up window appears.



12. Click **Next**. The *Select installation type* window appears.



PAL Installation Prerequisites

The screenshot shows the 'Select installation type' window. On the left is a navigation pane with links: 'Before You Begin', 'Installation Type' (highlighted), 'Server Selection', 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main area has the title 'Select installation type' and a subtitle 'DESTINATION SERVER TW-Sandbox.ains-inc.com'. Below the title is a paragraph: 'Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD)'. There are two radio buttons: 'Role-based or feature-based installation' (selected) and 'Remote Desktop Services installation'. The 'Role-based' option has a description: 'Configure a single server by adding roles, role services, and features.' The 'Remote Desktop Services' option has a description: 'Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.' At the bottom are four buttons: '< Previous', 'Next >' (highlighted), 'Install', and 'Cancel'.

13. Select **Role-based** or **Feature-based** installation using the radio buttons.

14. Click **Next**. The *Select Destination Server* pop up window appears.

The screenshot shows the 'Select destination server' window. On the left is a navigation pane with links: 'Before You Begin', 'Installation Type', 'Server Selection' (highlighted), 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main area has the title 'Select destination server' and a subtitle 'DESTINATION SERVER TW-Sandbox.ains-inc.com'. Below the title is a paragraph: 'Select a server or a virtual hard disk on which to install roles and features.' There are two radio buttons: 'Select a server from the server pool' (selected) and 'Select a virtual hard disk'. Below the radio buttons is a section titled 'Server Pool'. It contains a 'Filter:' text box and a table with the following data:

| Name | IP Address | Operating System |
|-------------------------|--------------|---|
| TW-Sandbox.ains-inc.com | 192.168.0.85 | Microsoft Windows Server 2012 R2 Standard |

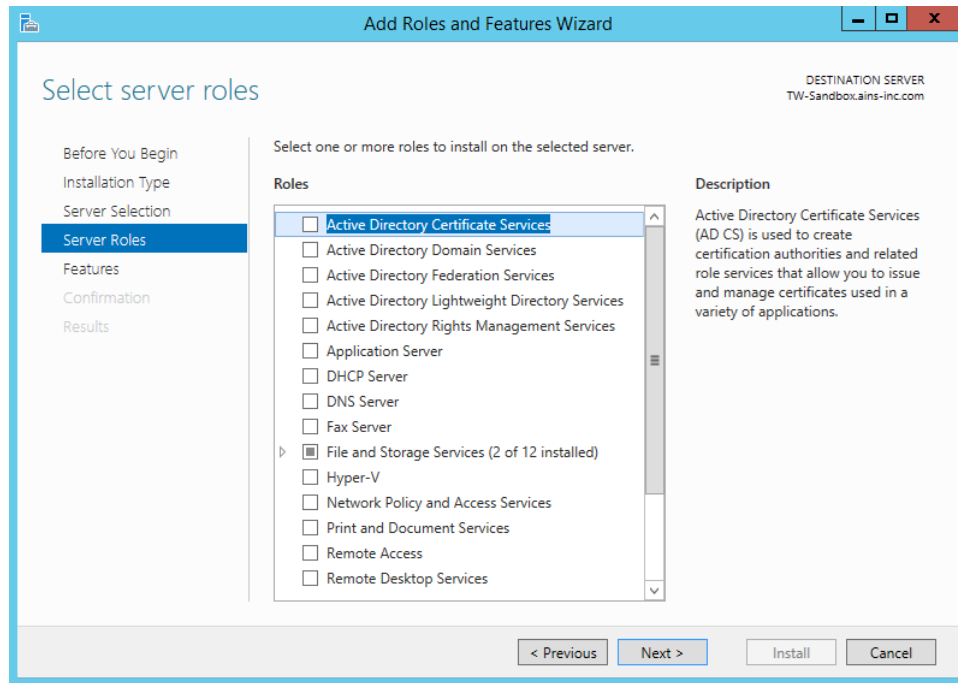
Below the table, it says '1 Computer(s) found'. A note at the bottom states: 'This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.' At the bottom are four buttons: '< Previous', 'Next >' (highlighted), 'Install', and 'Cancel'.

15. Select a **server** or a **virtual hard disk** using the radio buttons.

16. Click **Next**. The *Select server roles* pop up window appears.

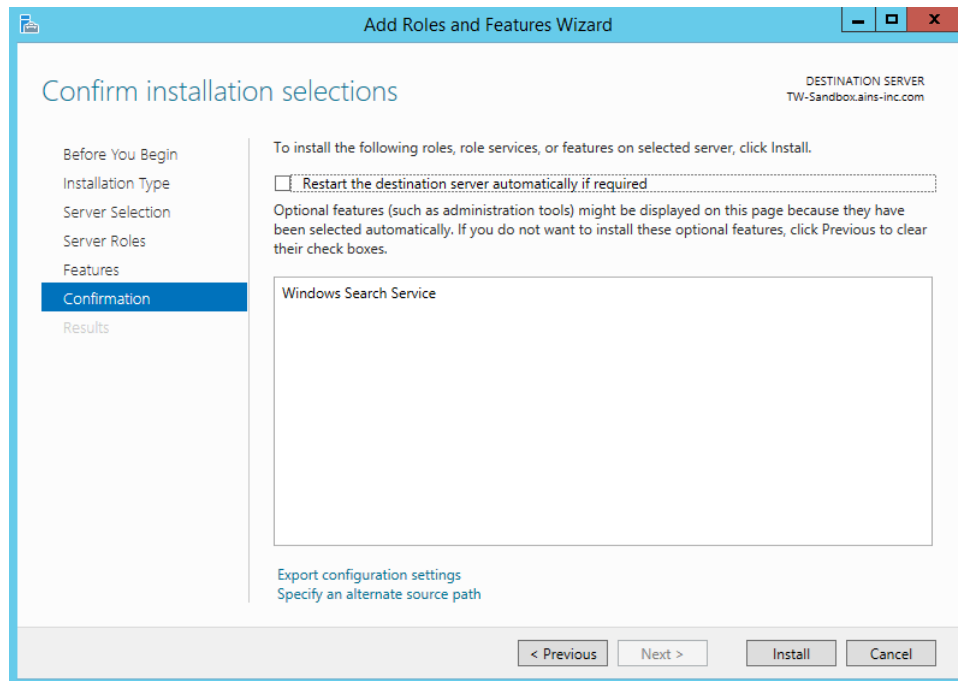


PAL Installation Prerequisites



17. Click **Features** from the left-hand menu, then select **Windows Search Service**.

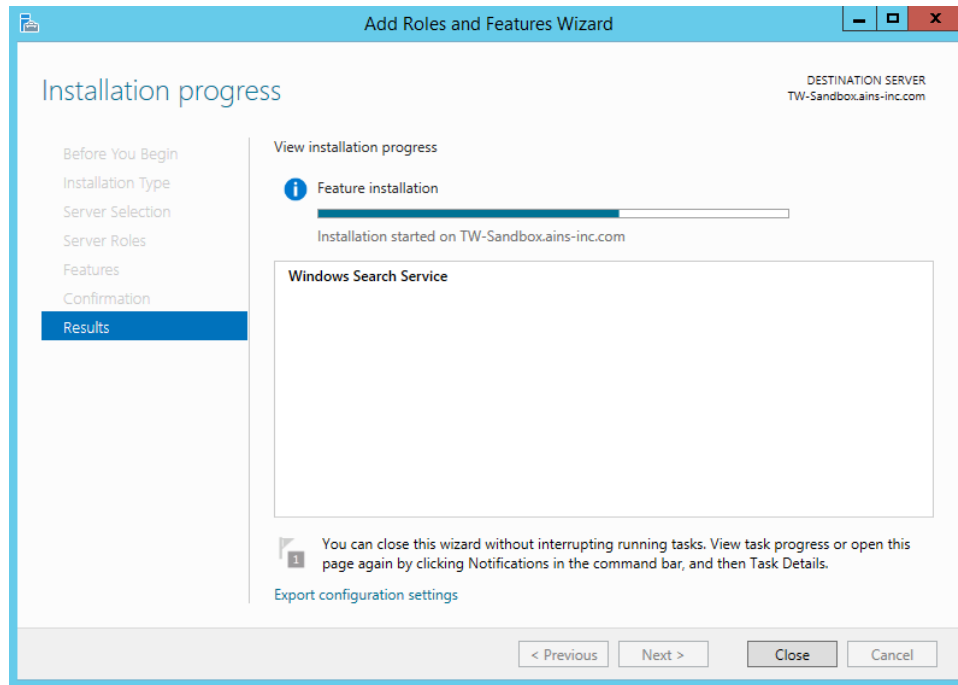
18. Click **Next**. The *Confirm installation selections* pop up window appears.



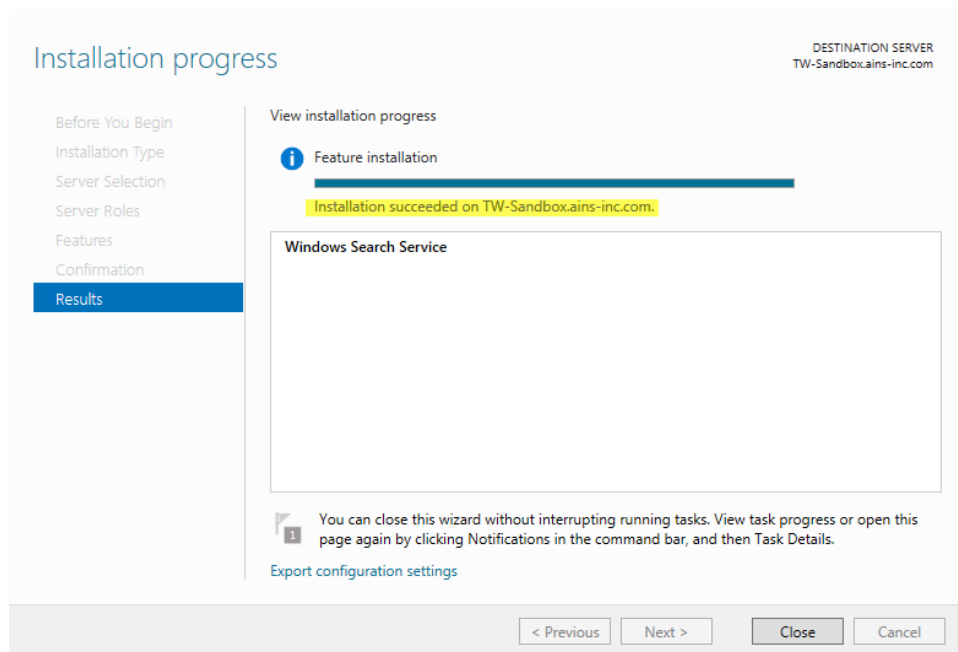
19. Click **Install** to start the installation process. The *Installation progress* pop up window appears:



PAL Installation Prerequisites



20. The installation process begins. This may take a few moments. After the installation completes a confirmation window appears.



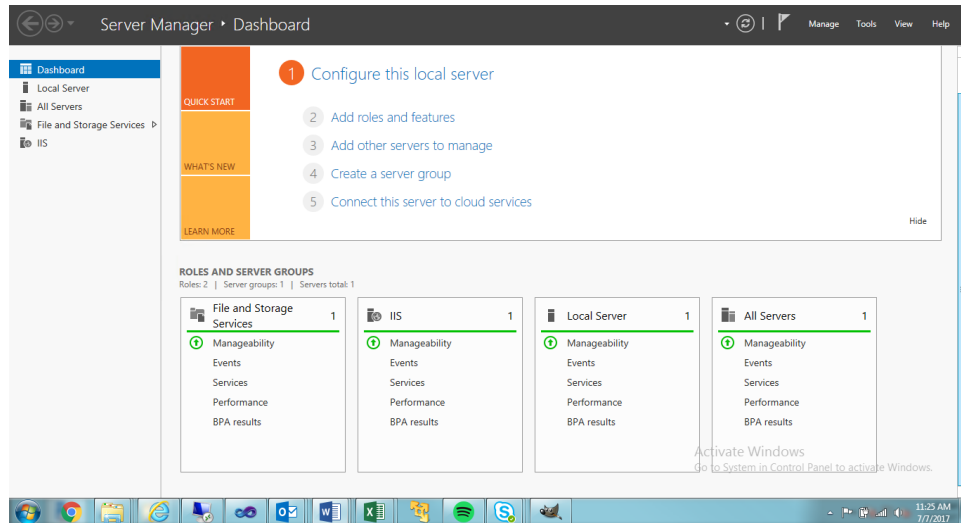
21. Click **Close** to exit the *Add Roles Wizard*.



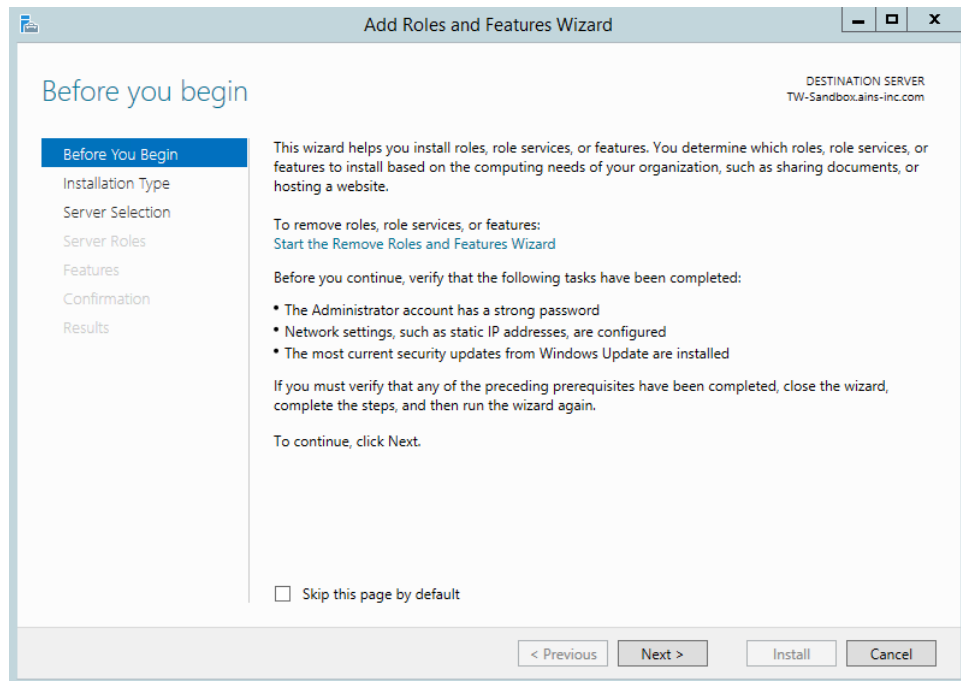
2.5 Enable TIFF files in Windows Search Service

TIFF is a file format for storing images. TIFF files are not enabled for search by default; therefore you must enable the Windows TIFF IFilter feature in order to search TIFF files.

22. Click **Start > Server Manager**. The *Server Manager* application launches, as shown below.



23. Click **Add roles and features**. The *Add Roles and Features Wizard* pop up window appears.



24. Click **Next**.



PAL Installation Prerequisites

Select installation type

DESTINATION SERVER
TW-Sandbox.ains-inc.com

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

☒ **Role-based or feature-based installation**
Configure a single server by adding roles, role services, and features.

☐ **Remote Desktop Services installation**
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

< Previous Next > Install Cancel

25. Select Role-based or feature-based installation.

26. Click **Next**.

Select destination server

DESTINATION SERVER
TW-Sandbox.ains-inc.com

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select a server or a virtual hard disk on which to install roles and features.

☒ Select a server from the server pool
☐ Select a virtual hard disk

Server Pool

Filter:

| Name | IP Address | Operating System |
|-------------------------|--------------|---|
| TW-Sandbox.ains-inc.com | 192.168.0.85 | Microsoft Windows Server 2012 R2 Standard |

1 Computer(s) found

This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.

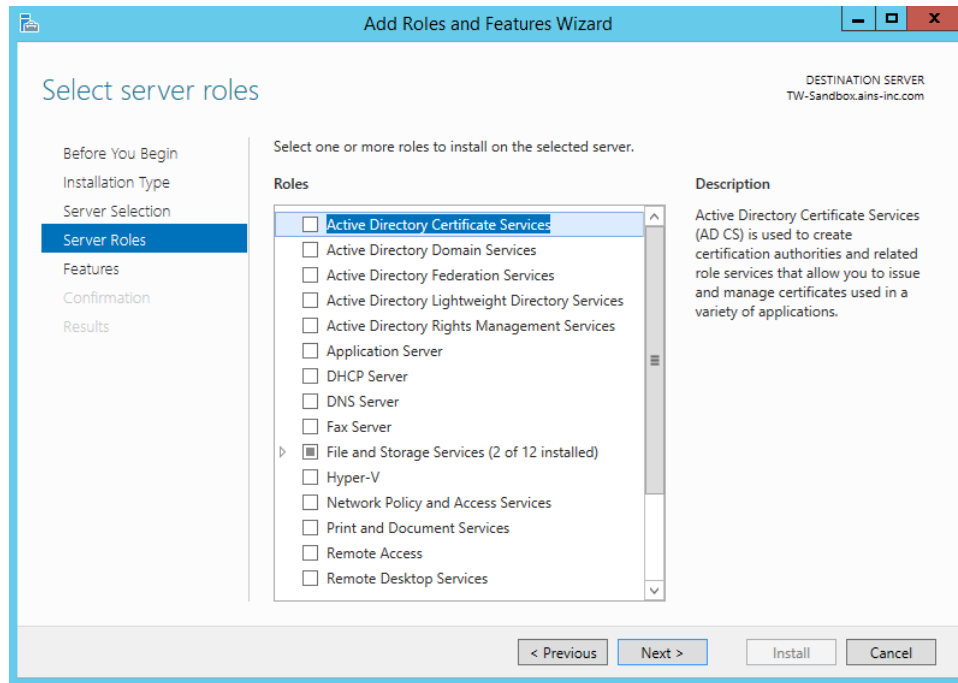
< Previous Next > Install Cancel

27. Select from the available options.

28. Click **Next**.



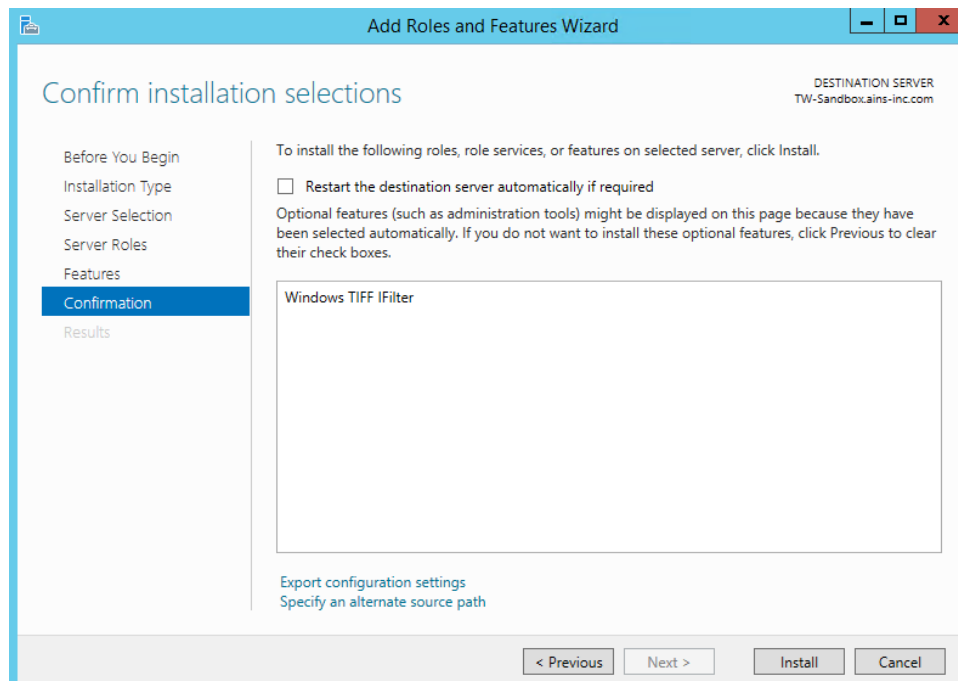
PAL Installation Prerequisites



29. Select **Features**.

30. Select Windows TIFF IFilter.

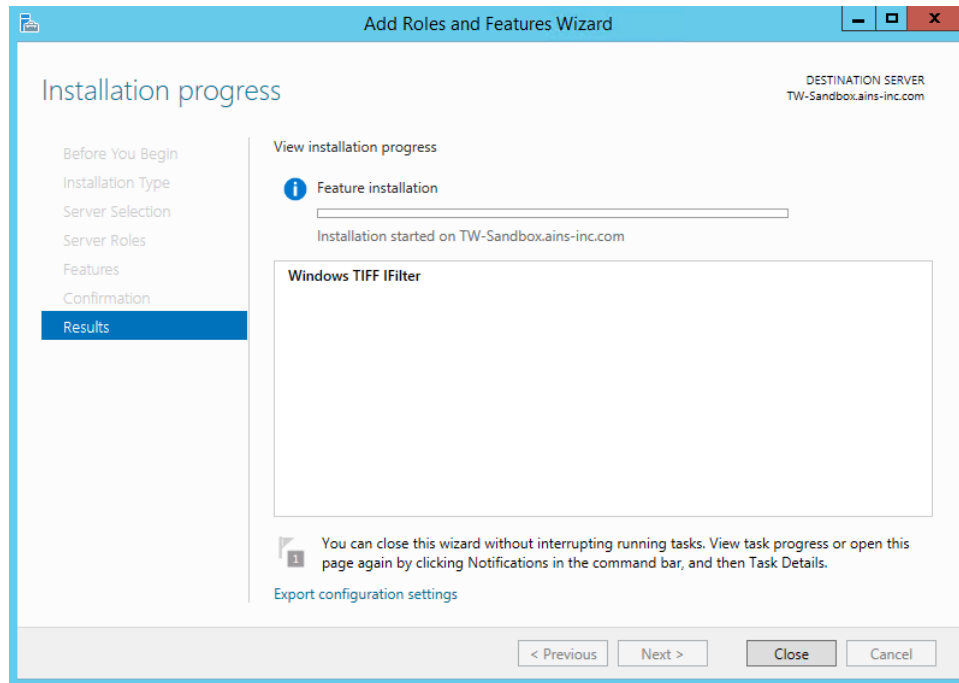
31. Click **Next**.



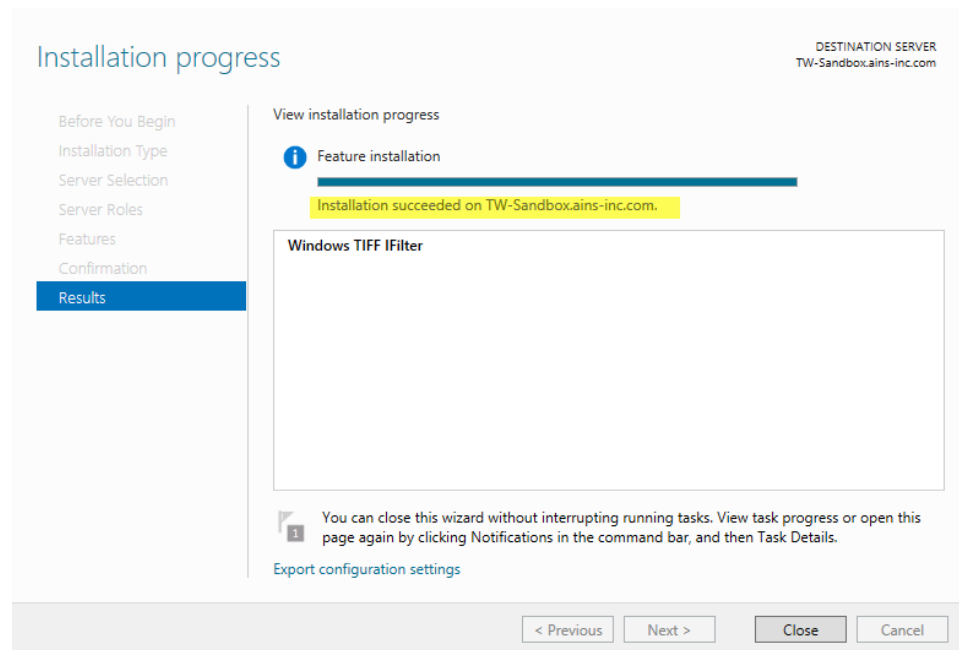
32. Click **Install**.



PAL Installation Prerequisites



33. The installation process continues. This may take a few minutes. On conclusion, an installation confirmation appears:



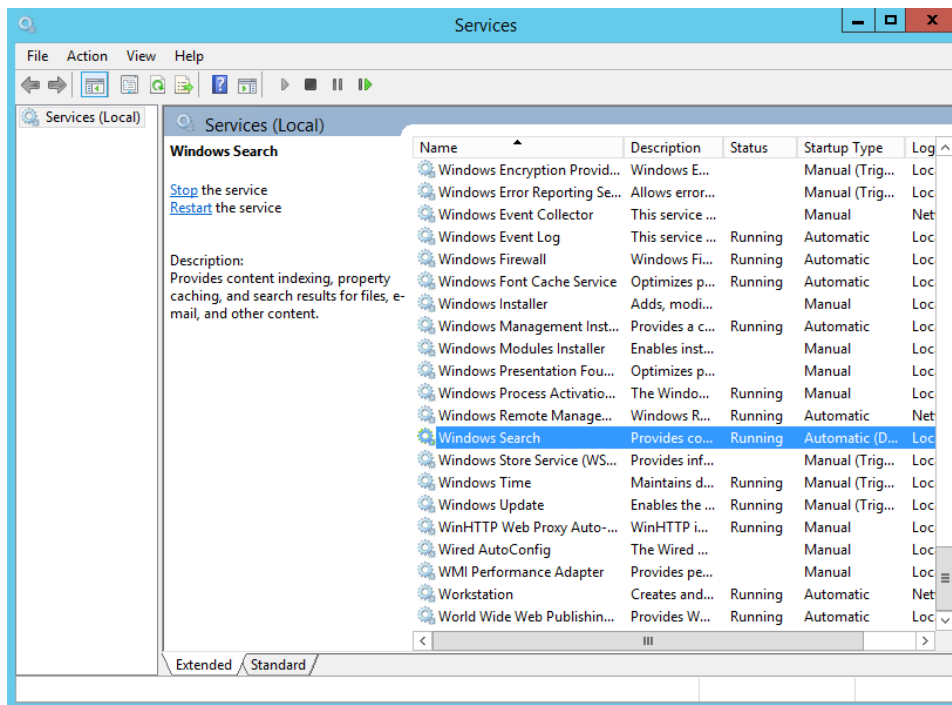
34. Click **Close** to exit the *Add Roles Wizard*.



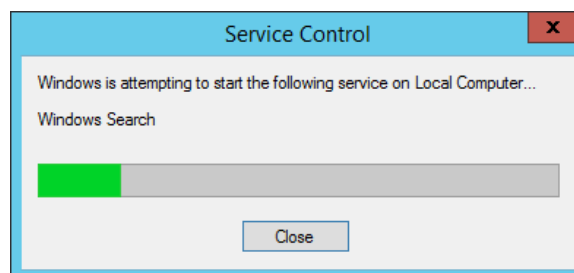
2.6 Enable PDF in Windows Search Service

PDF files are not enabled for search by default; you must install the Adobe PDF IFilter feature in order to search PDF files. Follow the steps below to enable PDF in Windows Search Service.

1. Download and install Adobe PDF IFilter 9 from the following link:
<ftp://ftp.adobe.com/pub/adobe/acrobat/win/9.x/>.
2. Restart the Windows Search Service after installing Adobe PDF IFilter 9/11:
 - a. Click **Start > Administrative Tools > Services**. The *Services* application launches.
 - b. Scroll down and select **Windows Search**.



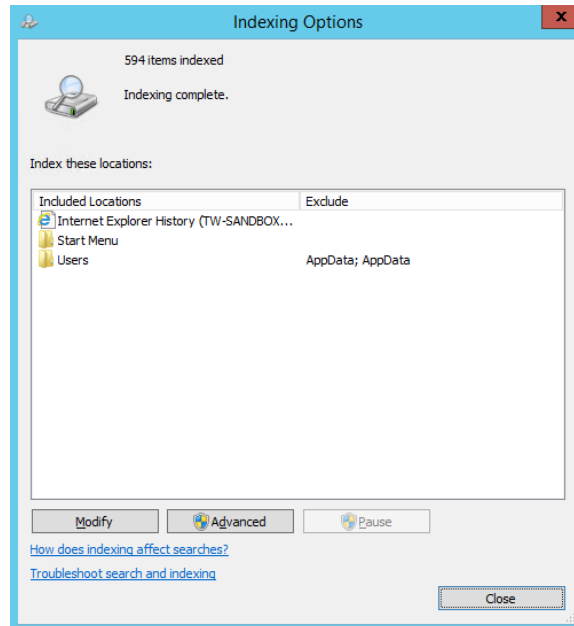
3. Click **Action > Restart**. The *Service Control* pop up window appears.



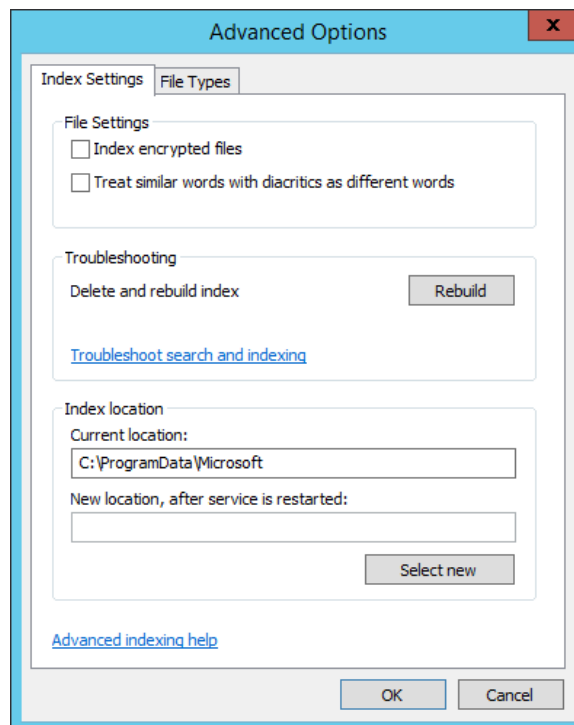
4. Select **File > Exit** to close the *Services* application.

PAL Installation Prerequisites

5. Click **Start > Control Panel > Indexing Options**. The *Indexing Options* pop up window appears.



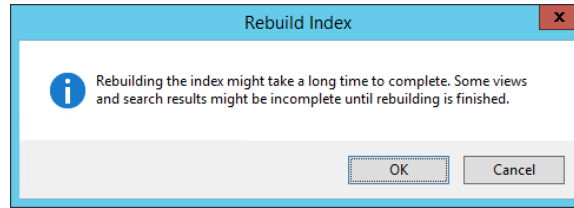
6. Click **Advanced**. The *Advanced Options* pop up window appears.



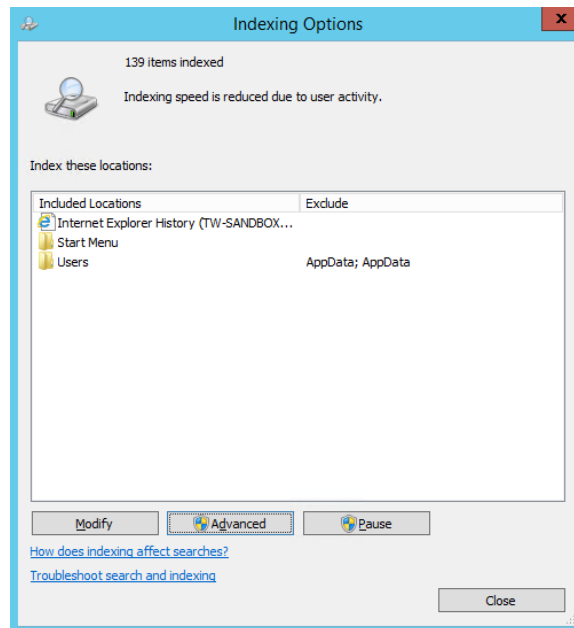
7. Click the **Rebuild** button located in the *Troubleshooting* section. The *Rebuild Index* pop up window appears.



PAL Installation Prerequisites



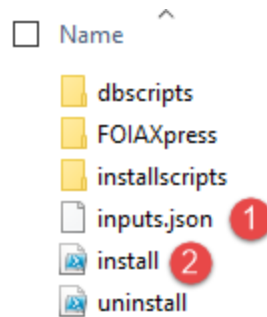
8. Click **OK**. The *Indexing Options* window changes to display the rebuild progress. This may take several minutes to complete. Once the rebuild is completed, the *Indexing Options* window will indicate the total number of items rebuilt.



9. Click **Close** to exit the Indexing Options feature.
10. Close the *Control Panel* window.



PAL Installation Prerequisites



4. *Inputs.json*: Drives the installation of the FOIAXpress system components. The file is in a standard json format and needs to remain a valid json file for successful installation.
5. *Install.ps1*: The executable file you will run to deploy the installation package with the parameters configured in the Inputs.json file.



4 Inputs.Json Settings for New Installations

4.1 About the Inputs.json File

The Inputs.json file located in the root directory of the extracted deployment package zip file drives the installation of the different components of the ATIPXpress PAL system. The file is in a standard json format and needs to remain a valid json file post updates prior to the installation.

The settings are grouped into sections, each addressing settings which may or may not require configuration, depending on your specific installation. The following subsections in this chapter describe each section of the Inputs.json file.

The parent node is the 'inputs' section. This section appears as follows:

```
{
  "inputs": {
    "InstallType": {
      "New": "N",
      "Upgrade": "Y"
    },
    "Components": {
      "APP": "Y",
      "DB": "N"
    }
  },
}
```

Each section has parameters you can adjust to configure your installation. An example section is shown below, with an explanation for how it works:

Each (1) *Section* ("InstallType" in this example) includes various (2) *Settings* ("New" in this example) to configure.

```
{
  "inputs": {
    1 "InstallType": {
      2 "New": "N",
      "Upgrade": "Y"
    },
    "Components": {
      "APP": "Y",
      "DB": "N"
    }
  },
}
```

A **B**

For each (A) Setting ("Upgrade" here), you can edit the (B) text in quotations ("N" here to indicate "No") to configure the settings for your installation. This might include adding a file path, user name, password, or simply a "Y" or "N" depending on the field you are configuring.



The first section under the parent node is the Install Type. See the following section for details on configuring your install type, with the remaining sections following in the order they appear in the Inputs file.

4.2 Install Type

Use the “InstallType” section to determine if this is a new installation, or an upgrade for an existing system:

```
"InstallType": {  
  "New": "N",  
  "Upgrade": "Y"
```

| Setting | Description |
|----------------|--|
| New | Determine whether this is a new installation. For new installations this should be a “Y” value |
| Upgrade | Determine whether this is an upgrade for an existing application. For new installations this should be a “N” value |

4.3 Install Components

The “Components” section allows you to determine which components to include with this installation. To include a component with your installation, be sure to assign the component a “Y” value on the corresponding line.:

```
},  
"Components": {  
  "APP": "Y",  
  "DB": "N"
```



| Setting | Description |
|------------|--|
| APP | Include the ATIPXpress PAL Application in this installation procedure. This should be a “Y” value for new installations. |
| DB | Include the ATIPXpress PAL Database in this installation procedure. This should be a “Y” value for new installations. |

4.4 Application and Scheduler

The “APPANDSCHEDULER” section has settings related to the ATIPXpress PAL application and scheduler installations. A value must be set for all values in this section to successfully install the application:

(!!) Note: any files paths specified must have two backslashes where a path in windows explorer requires a single backslash.

```
"APP": {
  "InstallLocation": "C:\\\\Program Files",
  "BackupLocation": "C:\\\\Backup",
  "SSLCert": {
    "CertPath": "<<CERTIFICATE PATH>>",
    "CertPassword": "<<CERTIFICATE PASSWORD>>"
  },
  "PALSSLCert": {
    "SSLPort": "<<PAL SSL PORT>>",
    "DnsName": "PAL"
  },
  "PALConfigSSLCert": {
    "SSLPort": "<<PAL CONFIG SSL PORT>>",
    "DnsName": "PALConfig"
  },
  "AppPool": "PALAppPool"
```

| Setting | Description |
|------------------------|--|
| InstallLocation | Specify a path for the application installation. Note this must be a file path for the .json file the execute. |



| Setting | Description |
|-------------------------|---|
| BackupLocation | Specify a path for the application backup location. Note this must be a file path for the .json file the execute |
| SSLCert | The following lines contain the SSL Certificate information. No data is required on this line. This is the grouping for SSL Certification settings to be used for the installation. |
| CertPath | Specify a path where the .pfx certificate file is located. Note this must a file path for the .json file to execute |
| CertPassword | Enter the password associated with the certificate linked in the "CertPath" field |
| PALSSLCert | The following lines contain the PAL SSL Certificate information |
| SSLPort | The network port designated for PAL's secure communications using SSL |
| DnsName | DNS name associated with the PAL application |
| PALConfigSSLCert | The following lines contain the PAL Configuration SSL Certificate information |
| SSLPort | The network port designated for PAL Configuration to communicate securely using SSL |
| DnsName | DNS name associated with PAL Configuration |
| AppPool | Enter the name of the application pool associated with your ATIPXpress application, |



4.5 Database Settings

The “DB” section contains the settings for installing or upgrading your ATIPXpress PAL database. In case of a new installation, an agent account will be created.

```
"DB": {
  "DBServer": "PROJ-FX-SQL01",
  "DBName": "FXPALDB_ASHOK_0216231",
  "CreatorDBUserId": "sa",
  "CreatorDBUserPassword": "Ains$400",
  "IntegratedSecurity": "N",
  "AgentAccount": "<<AGENT NAME TO CONNECT PAL DB>>",
  "AgentAccountPassword": "<<AGENT PWD>>",
  "AgentAccountIntegratedSecurity": "N"
```

| Setting | Description |
|------------------------------|--|
| DBServer | Name assigned to the server responsible for storing, retrieving, and managing ATIPXpress data |
| DBName | Name given to the specific database used for ATIPXpress |
| CreatorDBUserID | Database User ID to be used for this installation. The CreatorDBUserId should have admin rights with the ability to create a new database or database object on the specified Database server |
| CreatorDBUserPassword | Password associated with the account used in the “CreatorDBUserID” field |
| IntegratedSecurity | The Integrated Security property instructs the SQL Client to connect to SQL Server using Windows Authentication through the Security Support Provider Interface (SSPI). Use “Y” or “N” to determine if you are using Integrated Security in this installation. |



| Setting | Description |
|---------------------------------------|---|
| AgentAccount | The SQL server login account to be created in case of a new database install or the login already setup for the database being upgraded |
| AgentAccountPassword | The SQL server Agent Account password specified in the AgentAccount setting |
| AgentAccountIntegratedSecurity | Whether integrated security should be used when connecting to the database, default is "N" |

4.6 Configuration Settings

Settings to configure the PAL Administration user details as well as the basic Organization details.

```

"Configuration": {
  "AdminUser": {
    "FirstName": "Admin",
    "LastName": "Admin",
    "Email": "<<EMAIL ID>>",
    "Login": "Administrator",
    "Password": "<<PASSWORD>>"
  },
  "Organization": {
    "Name": "<<ORGANIZATION NAME>",
    "Email": "<<ORG EMAIL ID>>"
  }
}

```

| Setting | Description |
|------------------|---|
| AdminUser | Fields to configure the PAL Administration admin user details |
| FirstName | First name for the PAL Admin user |
| LastName | Last name for the PAL Admin user |



Inputs.json Settings for New Installations

| Setting | Description |
|--------------|--|
| Email | Email ID associated with the PAL Admin user |
| Login | Login ID for the PAL Admin user |
| Password | Password associated with the Login ID provided above |
| Organization | Details about the organization as configured for PAL |
| Name | Organization name |
| Email | Email ID associated with the organization |



5 Inputs.json Settings for PAL Upgrade

This section discusses the inputs.json settings used when upgrading an existing AX PAL environment. For information on using the inputs.json file, see the *About the Inputs.json File* section of this manual.

(!!) Note: Some fields that would be required for a new installation should be left as-is for an upgrade. It is important to not edit or remove these fields as this could compromise the integrity of the inputs.json file. These are described where appropriate in the following sections.

5.1 Install Type

Use the “InstallType” section to determine if this is a new installation, or an upgrade for an existing system:

```
"InstallType": {  
  "New": "N",  
  "Upgrade": "Y"
```

| Setting | Description |
|---------|---|
| New | Determine whether this is a new installation. For upgrades this should be a “N” value |
| Upgrade | Determine whether this is an upgrade for an existing application. For upgrades this should be a “Y” value |

5.2 Install Components

The “Components” section allows you to determine which components to include with this upgrade. To include a component with your upgrade, be sure to assign the component a “Y” value on the corresponding line:



```

    },
    "Components": {
      "APP": "Y",
      "DB": "N"
    }
  },

```

| Setting | Description |
|------------|---|
| APP | Include the ATIPXpress PAL Application in this upgrade procedure. |
| DB | Include the ATIPXpress PAL Database in this upgrade procedure. |

5.3 Application and Scheduler

The “APPANDSCHEDULER” section only requires input in the InstallLocation and BackupLocation fields.

(!!) Note: All fields not listed above can remain as-is during an upgrade.

```

"APP": {
  "InstallLocation": "C:\\Program Files",
  "BackupLocation": "C:\\Backup",
  "SSLCert": {
    "CertPath": "<<CERTIFICATE PATH>>",
    "CertPassword": "<<CERTIFICATE PASSWORD>>"
  },
  "PALSSLCert": {
    "SSLPort": "<<PAL SSL PORT>>",
    "DnsName": "PAL"
  },
  "PALConfigSSLCert": {
    "SSLPort": "<<PAL CONFIG SSL PORT>>",
    "DnsName": "PALConfig"
  },
  "AppPool": "PALAppPool"
}

```



| Setting | Description |
|------------------------|--|
| InstallLocation | Specify a path for the application installation. Note this must be a file path for the .json file the execute. |
| BackupLocation | Specify a path for the application backup location. Note this must be a file path for the .json file the execute |

5.4 Database Settings

The “DB” section contains the settings for installing or upgrading your ATIPXpress database. In case of a new installation, an agent account will be created.

(!!) Note: You do not need to edit the AgentAccount fields during an upgrade, these can remain as-is.

```
"DB": {
  "DBServer": "PROJ-FX-SQL01",
  "DBName": "FXPALDB_ASHOK_0216231",
  "CreatorDBUserId": "sa",
  "CreatorDBUserPassword": "Ains$400",
  "IntegratedSecurity": "N",
  "AgentAccount": "<<AGENT NAME TO CONNECT PAL DB>>",
  "AgentAccountPassword": "<<AGENT PWD>>",
  "AgentAccountIntegratedSecurity": "N"
```

| Setting | Description |
|-----------------|---|
| DBServer | Name assigned to the server responsible for storing, retrieving, and managing ATIPXpress data |
| DBName | Name given to the specific database used for ATIPXpress |



| Setting | Description |
|------------------------------|--|
| CreatorDBUserID | Database User ID to be used for this installation. The CreatorDBUserId should have admin rights with the ability to create a new database or database object on the specified Database server |
| CreatorDBUserPassword | Password associated with the account used in the “CreatorDBUserID” field |
| IntegratedSecurity | The Integrated Security property instructs the SQL Client to connect to SQL Server using Windows Authentication through the Security Support Provider Interface (SSPI). Use “Y” or “N” to determine if you are using Integrated Security in this installation. |

5.5 Configuration Settings

Settings to configure the PAL Administration user details as well as the basic Organization details.

(!!) Note: These fields can remain as-is during the upgrade.



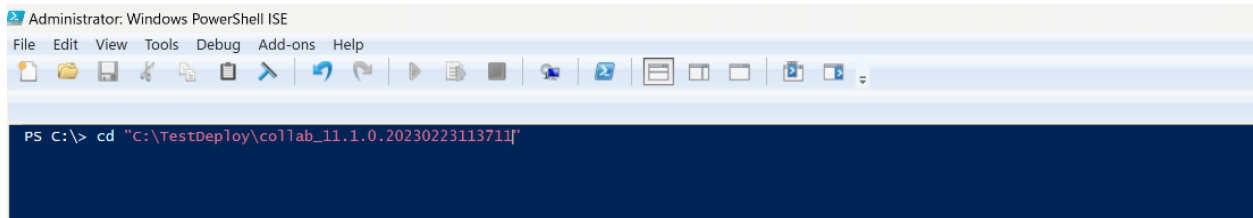
6 Install PAL

Before you are ready to run the Install.ps1 file, review the steps below to verify you've completed all the steps to this point:

- Make sure you have connectivity to the servers where the software is being installed.
- Complete the procedures described in the PAL Installation Prerequisites section.
- Download, verify, and extract the ATIPXpress PAL Installation package.
- Configure the Inputs.json file for your installation.

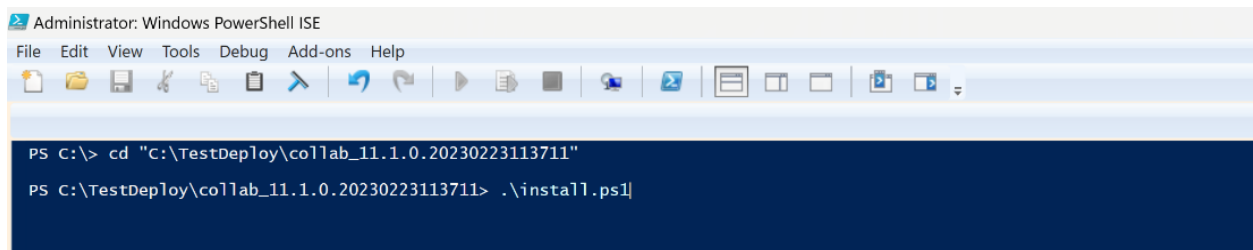
Once the above prerequisites are complete, follow the steps below to deploy the ATIPXpress PAL Installation package.

1. Open Windows Powershell ISE
2. Use PowerShell to navigate to the location where you extracted the installation package:



The screenshot shows the Windows PowerShell ISE interface. The title bar reads "Administrator: Windows PowerShell ISE". The menu bar includes File, Edit, View, Tools, Debug, Add-ons, and Help. The command bar contains various icons for file operations. The console area displays the command: `PS C:\> cd "C:\TestDeploy\collab_11.1.0.20230223113711"`

3. Type `.\install.ps1` for either install or upgrade



The screenshot shows the Windows PowerShell ISE interface. The title bar reads "Administrator: Windows PowerShell ISE". The menu bar includes File, Edit, View, Tools, Debug, Add-ons, and Help. The command bar contains various icons for file operations. The console area displays the command: `PS C:\> cd "C:\TestDeploy\collab_11.1.0.20230223113711"` followed by `PS C:\TestDeploy\collab_11.1.0.20230223113711> .\install.ps1`

4. If the inputs.json file is in same location as the extracted installation files, simply click enter to execute the installation. Alternatively, if you have file in different location provide this file location, then execute the script.



7 Sync Service (PAL)

This section provides instructions to configure the ATIPXpress Sync Service (PAL) and permissions. This section is relevant only if PAL is installed on your Web server.

7.1 Public Module Database Server and Database Information

(!!) Notes:

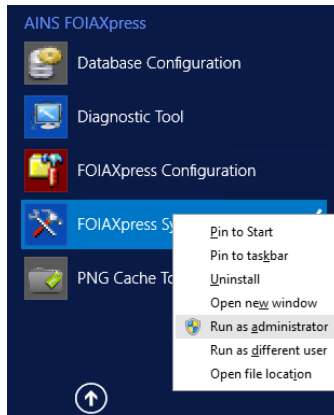
- Prior to configuring ATIPXpress Sync Service, ensure that the PAL Database has been created.
- The Download Document location is with respect to the ATIPXpress Sync Service only if you are using database configuration for your Sync Service. The configured user of the ATIPXpress Sync Service should have Full Control Security permissions on the Download Document location.
- The Download Document folder should be manually created on the local or remote system. Ensure that the ATIPXpress PAL application and the Download Document folder path (local or UNC) is accessible by the IIS user on the system where the ATIPXpress PAL application is installed. The path for the Download Document folder should be accessible by creating the virtual directory (DOWNLOADDOCUMENTS) on the ATIPXpress PAL application server.
- The Electronic Reading Room folder should be manually created on the local or remote system. Ensure that before the IIS user accesses the ATIPXpress PAL application, the Electronic Reading Room folder path (local or UNC) is accessible to the system on which the ATIPXpress PAL application is installed. The path for the Electronic Reading Room folder should be accessible by creating the virtual directory (ELECTRONICREADINGROOMDOCUMENTS) on the ATIPXpress PAL application server.

To configure ATIPXpress Sync Service, perform the following steps:

1. Select **Start > All Programs > AINS ATIPXpress**.
2. Right-click **ATIPXpress Sync Configuration** and select **Run as administrator**.



Sync Service (PAL)



- The *Sync Service Configuration* window will appear with the fields described in the table below based on the database server type (**MS SQL Server**) you configured earlier. Enter the required information and click **Configure**. The screen below uses MS SQL Server.

ATIPXpress Sync. Service Configuration

Enter the database server information to create the configuration file for the ATIPXpress Sync. Service application.

Database Server Information

☐ Connect PAL Using Webservice

Public Access Link Database Server

Server Type: **MS SQL Server**

☐ Dashboard

Sync. Interval (Minutes):

Public Access Link Database Information

Server Name:

Database Name:

☐ Windows Authentication

Login ID:

Password:

☐ Auto Merge Requester Profile

When Requester Address is Updated, Update

Requests: **None**

Addresses: **None**

SMTP Server Information

SMTP Server:

SMTP Port Number:

☐ Reprocess Failed Jobs for every Sync. Service Interval (Minutes): **5**

☒ Send E-mail Alert for every Hour(s).

Contact E-mail:

Download Documents Location:

PAL Reading Room Location:

The Download Document location is with respect to the ATIPXpress Sync. Service. The configured user for this service should have Full Permissions on the above specified download document location. Before accessing ATIPXpress Public Access Link, make sure that the same location is accessible to the system where ATIPXpress Public Access Link is installed and it is configured in the Modules section of ATIPXpress Public Access Link configuration URL.

ATIPXpress Failed Requesters: Public Access Link Failed Requesters:

ATIPXpress Failed Requests: Public Access Link Failed Requests:

Note: Please restart the ATIPXpress Scheduler Service for the configuration changes to be effected. Logged-in user must have full control on 'Config.ini' file located in 'C:\Program Files (x86)\AINS\ATIPXpress\Schedulr\bin'.

Configure **Cancel**

| Field Name | Description |
|---|---|
| Server Type | MS SQL Server. |
| Server Name | The title given to the server where the PAL database resides. |
| Database Name | The title given to the PAL database during creation. |
| Login ID | The unique identifier of the database owner (for example, ATIPAgent). |
| Password | The password associated with the database owner ID. |
| Dashboard | When selected, allows you to set the sync interval in number of minutes. |
| Auto Merge Requester Profile | When selected, automatically merges a requester's ATIPXpress profile data with a newly created requester's profile in PAL. |
| When Requester Address is Updated, Updated | Determines whether to update the requester's address in PAL if it is modified in the ATIPXpress application. The system will update the address for Open , Closed , Open and Closed , or None of the requests. If the Billing/Shipping address is modified in the ATIPXpress application, the system will update the Billing , Shipping , Billing and Shipping or None of the addresses in PAL. |
| SMTP Server | The title given to the SMTP server. |
| SMTP Server Port No. | The number assigned to the SMTP Server port. By default, the port number is 25. |



| Field Name | Description |
|--|---|
| Reprocess Failed jobs for every | How often and at what interval failed jobs will be reprocessed. The field specifies a unit of time and frequency (how often the reprocess has to be invoked). If the process fails, it automatically is reprocessed. |
| Send E-mail Alert for every | A time interval to send an email alert for failed jobs. |
| Sync Service Interval (Mins.) | <p>The time gap after which the synchronization process starts again and will process all jobs within the queue. Effectively, this is the sleep time between which the synchronization service stops and resumes another cycle of the sync process. When the sync process starts, the ATIPXpress PAL database is updated with the latest requesters and request information.</p> <p>If the sync process interval time is more than the number of jobs to be processed in a synchronization process, the cycle will also increase, and vice versa. The sync service must be set to a number greater than zero.</p> |
| Contact Email | The electronic mail address where failed job notifications will be sent. |
| Download Document Location | <p>This location stores the requested documents where the requested delivery mode is 'PAL.' This location must be on a remote system that is accessible to the ATIPXpress Sync Service. (For example: \\systemname\foldername)</p> <p>The Download Document Folder must be shared prior to installing the sync service so it is available for selection during the configuration process.</p> |



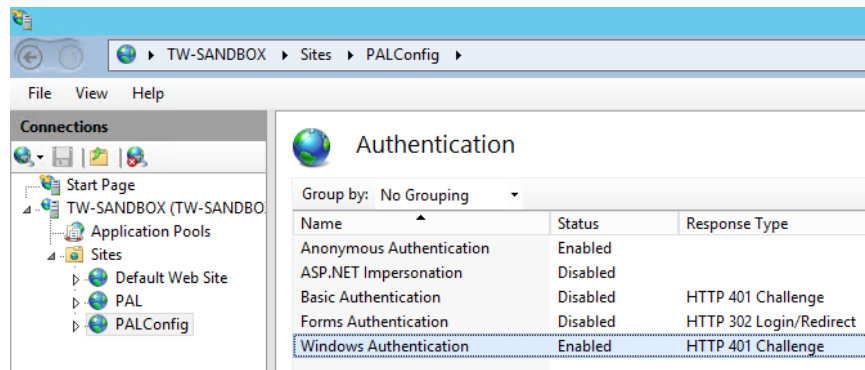
| Field Name | Description |
|----------------------------------|--|
| PAL Reading Room Location | This location stores the electronic reading room documents and must be on a remote system, which is accessible to the ATIPXpress Sync Service. |

7.2 Using the WebService to Connect to PAL

Using the WebService to connect to PAL does not require database access. However, you must configure the WebService in IIS in order to have a successful connection.

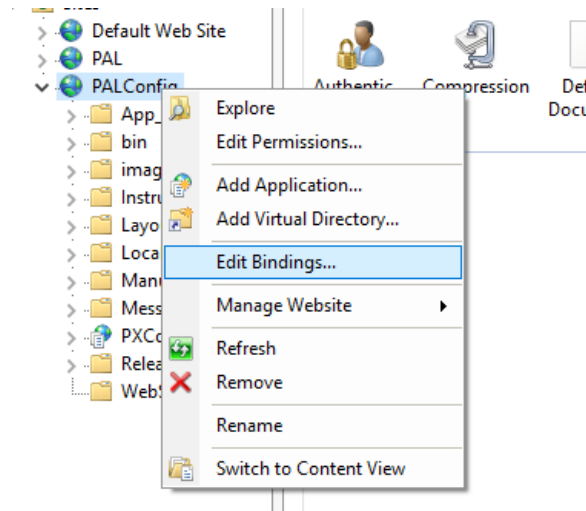
(!!) Note: The below steps should be taken on the server where PAL is configured.

1. Click **Start > Administrative Tools > Internet Information Services (IIS) Manager**.
2. Expand **Start Page > Sites > PALConfig** and select the **WebServices** folder.
3. Double-click **Authentication** in the middle pane and enable **Windows Authentication**.

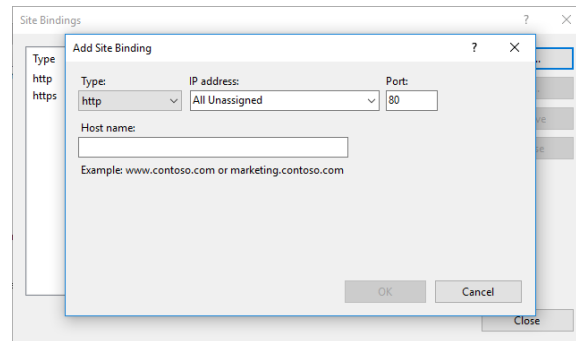


4. Click the **WebServices** folder on the **Connections** pane to return to the WebServices Home screen.
5. Right-click the **PALConfig** node and select **Edit Bindings**.

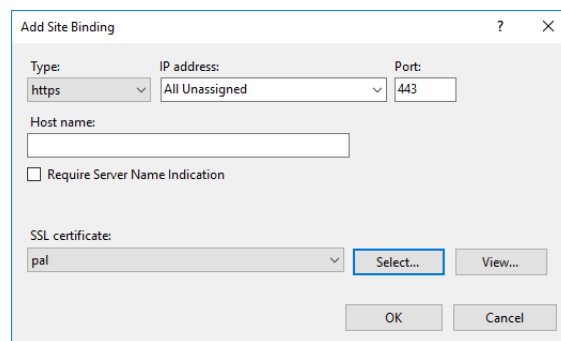
Sync Service (PAL)



6. Add the **HTTP Secure Socket Layer** port assignment. Click **Add**. The *Add Site Binding* window appears.



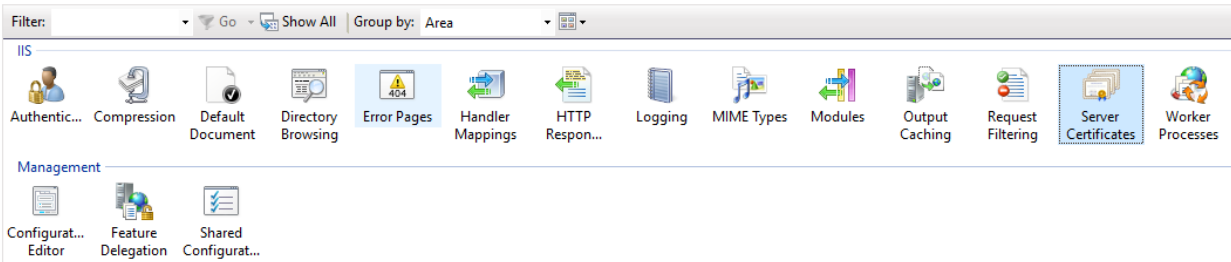
- a. Select **https** from the *Type* dropdown menu.
- b. Select the **SSL Certificate** provided in the drop-down list. For example, WMSvc-TW-AINSDOCSAX.



- c. Click **OK** to retain the settings or click **Cancel** to exit from the *Site Bindings* window.
7. Add the SSL Certificate. If a certificate is not available in the **SSL Certificate** drop-down list:
 - a. Select the Start Page (name of the server).



- b. Click the **Server Certificates** option in the middle pane.



- c. Click **Create Certificate Request** in the *Actions* pane. For further instructions, go to <http://technet.microsoft.com/en-us/library/cc732906.aspx>.
 - d. Click **Complete Certificate Request** in the *Actions* pane. For further instructions, go to <http://technet.microsoft.com/en-us/library/cc771816.aspx>.
8. Configure SSL Settings:
- a. Double-click **SSL Settings**.
 - b. Select the **Require SSL** checkbox.
 - c. Accept **client certificates**.
 - d. Click **Apply** in the *Actions* pane.
9. Click the **PALConfig** node in the *Connections* pane to return to the home page.
10. Click the **Connect PAL Using WebService** option on the *ATIPXpress Sync Service Configuration* window.

(!!) Note: This should be done on the server where the ATIPXpress Sync Service is installed.

11. Provide the PAL WebService URL in the **URL** field. For example:
<https://palserver/webservices/syncservice.svc>.

(!!) Note: The palserver portion of the URL above needs to reflect your PAL server name.

12. Enter the **Windows Login ID** and **Password** for the PAL Server.



Sync Service (PAL)

ATIPXpress Sync. Service Configuration

Enter the database server information to create the configuration file for the ATIPXpress Sync. Service application.

Database Server Information

☒ Connect PAL Using WebService

WebService Configuration

URL:

Login:

Password:

Test Connection

☒ Dashboard

Sync. Interval (Minutes):

☐ Auto Merge Requester Profile

When Requester Address is Updated, Update

Requests:

Addresses:

SMTP Server Information

SMTP Server: SMTP Port Number:

☒ Reprocess Failed Jobs for every Hour(s). ☒ Send E-mail Alert for every Hour(s).

Sync. Service Interval (Minutes): Contact E-mail:

ATIPXpress Failed Requesters (0) Public Access Link Failed Requesters (0)

ATIPXpress Failed Requests (0) Public Access Link Failed Requests (0)

Note: Please restart the ATIPXpress Scheduler Service for the configuration changes to be effected.
Logged-in user must have full control on 'Config.ini' file located in
'C:\Program Files (x86)\AINS\ATIPXpress\Scheduler\bin'.

Configure Cancel

13. Enter the required information, and click **Configure**.

14. A confirmation message appears once the information is accepted. Click **OK**.

7.3 ATIPXpress Failed Requests and Requesters

Within the ATIPXpress Sync. Service Configuration window, you can view the number of ATIPXpress failed requests and requesters, and Public Access Link failed requests and requesters. Based on this information, you can take an appropriate action, such as retrying failed jobs. These fields are represented as links that will be enabled only when there are failed requesters and/or requests of ATIPXpress and/or PAL respectively. You must click the links on the bottom-left of the ATIPXpress Sync Service Configuration window in order to view the failed jobs.

FOIApress Failed Requesters Public Access Link Failed Requesters

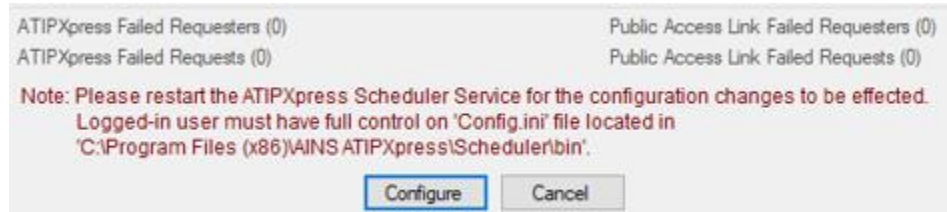
FOIApress Failed Requests Public Access Link Failed Requests

Note: Please restart the FOIApress Scheduler Service for the configuration changes to be effected.
Logged-in user must have full control on 'Config.ini' file located in
'C:\Program Files (x86)\AINS\FOIApress\Scheduler\bin'.

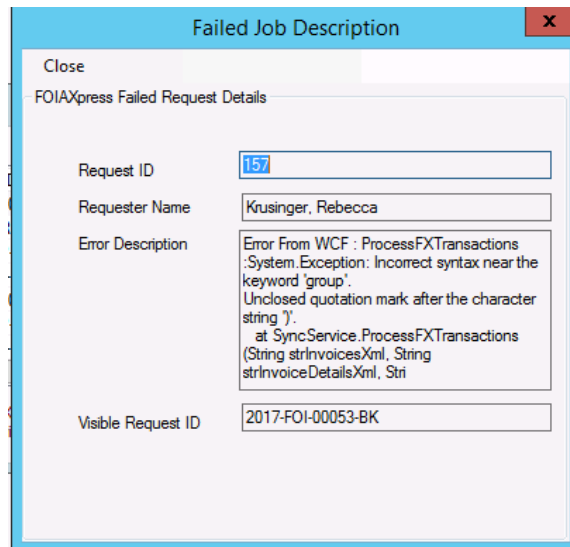
Configure Assignments Configure Cancel



1. After clicking the **ATIPXpress Failed Requesters/Requests** link the *ATIPXpress Failed Requests* window appears.

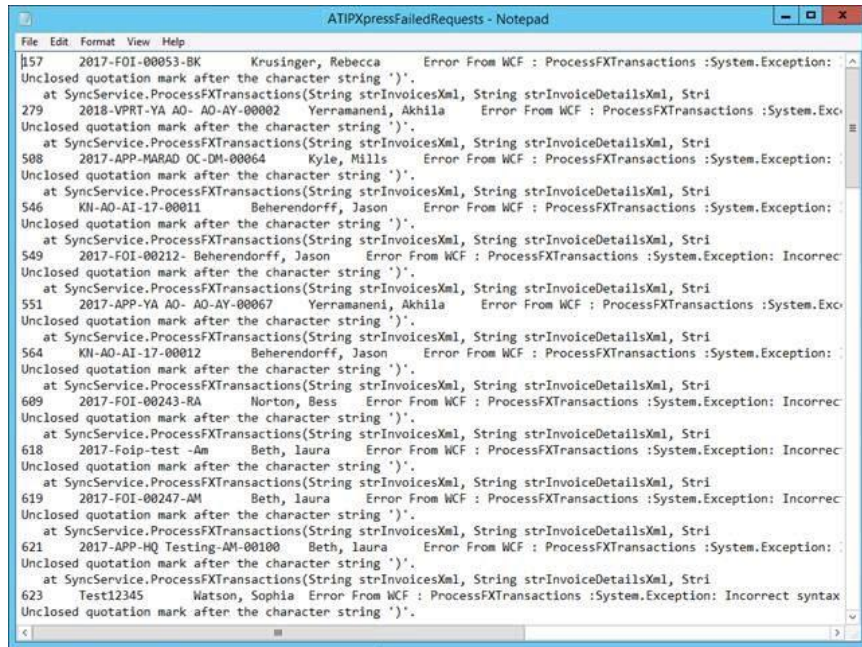


2. To retry the failed requests/requesters, select the checkbox for each job and click **Retry**.
(!!) Note: All failed jobs will be sent to the sync service.
3. To view the details of the failed jobs, select a job and click **View** or double-click the selected job.



4. To export failed jobs to a log file, click **Export Failed Jobs to Log**.

Sync Service (PAL)



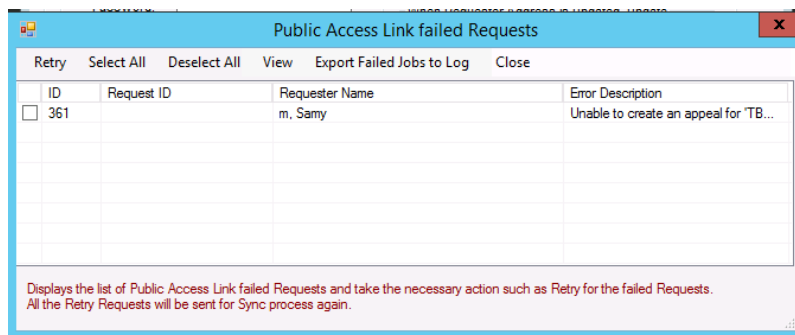
```
File Edit Format View Help
157 2017-FOI-00053-BK Krusinger, Rebecca Error From WCF : ProcessFXTransactions :System.Exception:
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
279 2018-VPRT-YA AO- AY-00002 Yerramaneni, Akhila Error From WCF : ProcessFXTransactions :System.Exc
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
508 2017-APP-MARAD OC-DM-00064 Kyle, Mills Error From WCF : ProcessFXTransactions :System.Exception:
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
546 KH-AO-AI-17-00011 Beherendorff, Jason Error From WCF : ProcessFXTransactions :System.Exception:
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
549 2017-FOI-00212- Beherendorff, Jason Error From WCF : ProcessFXTransactions :System.Exception: Incorrect
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
551 2017-APP-YA AO- AY-00067 Yerramaneni, Akhila Error From WCF : ProcessFXTransactions :System.Exc
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
564 KH-AO-AI-17-00012 Beherendorff, Jason Error From WCF : ProcessFXTransactions :System.Exception:
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
609 2017-FOI-00243-RA Norton, Bess Error From WCF : ProcessFXTransactions :System.Exception: Incorrect
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
618 2017-Foip-test -Am Beth, Laura Error From WCF : ProcessFXTransactions :System.Exception: Incorrect
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
619 2017-FOI-00247-AM Beth, Laura Error From WCF : ProcessFXTransactions :System.Exception: Incorrect
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
621 2017-APP-HQ Testing-AM-00100 Beth, Laura Error From WCF : ProcessFXTransactions :System.Exception:
Unclosed quotation mark after the character string ''.
at SyncService.ProcessFXTransactions(String strInvoicesXml, String strInvoiceDetailsXml, Stri
623 Test12345 Watson, Sophia Error From WCF : ProcessFXTransactions :System.Exception: Incorrect syntax
Unclosed quotation mark after the character string '');
```

7.4 Public Access Link Failed Requests and Requesters

You must click the links on the bottom-right of the *ATIPXpress Sync Service Configuration* window in order to view the failed jobs.

(!!) Note: The below screenshots show the Public Access Link Failed Requests screens, however, the Public Access Link Failed Requesters screens look very similar.

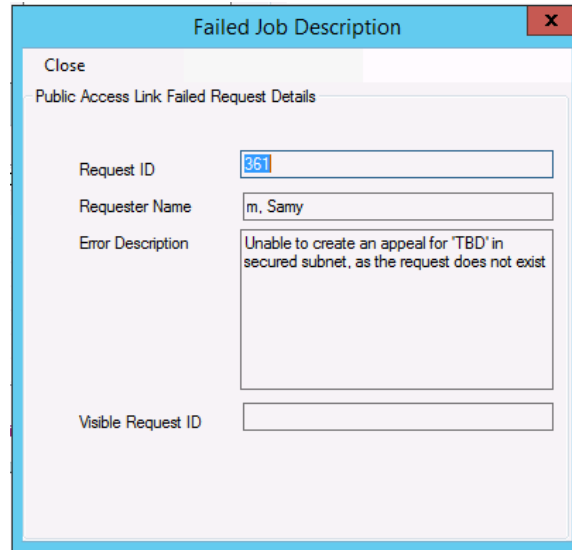
1. After clicking the **Public Access Link Failed Requesters/Requests** link, the *Public Access Link Failed Requests* window appears.



2. To retry the failed requests/requesters, select the checkbox for each job and click **Retry**. All failed jobs will be sent to the sync service.
3. To view the details of the failed jobs, select an **ID** and click **View** or double-click the selected job.



Sync Service (PAL)



A dialog box titled "Failed Job Description" with a close button (X) in the top right corner. Below the title bar, there is a "Close" button. The main area is titled "Public Access Link Failed Request Details". It contains four fields: "Request ID" with the value "361", "Requester Name" with the value "m, Sammy", "Error Description" with the text "Unable to create an appeal for 'TBD' in secured subnet, as the request does not exist", and "Visible Request ID" which is empty.

| | |
|--------------------|---|
| Request ID | 361 |
| Requester Name | m, Sammy |
| Error Description | Unable to create an appeal for 'TBD' in secured subnet, as the request does not exist |
| Visible Request ID | |

4. To export failed jobs to the log file, click **Export Failed Jobs to Log**.



8 Required Privileges for ATIPXpress PAL Application Server

The following section lists the directories that are relevant to ATIPXpress PAL as well as the level of permissions that should be applied to these directories.

8.1 Required Permissions for Network Service User (ASP.NET Process Identity)

On a Web server running Microsoft Windows Server 2016/2019 and Internet Information Services (IIS) 7.5/8/10, the ASP.NET process runs in the application pool for the Web application. ATIPXpress PAL setup will set the application pool identity as NETWORK SERVICE account by default.

The file and folder permissions listed in table below must have the ASP.NET Process Identity of ATIPXpress PAL Web application (Network Service User/configured impersonate user).

| 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. |
| %SystemRoot%\assembly | Read, List Folder Contents, Read & Execute | This is the location of the <u>global assembly cache</u> (GAC). |
| %SystemRoot%\System32 | Read, List Folder Contents, Read & Execute | This location contains system DLLs loaded by .NET Framework. |



Required Privileges for ATIPXpress PAL Application Server

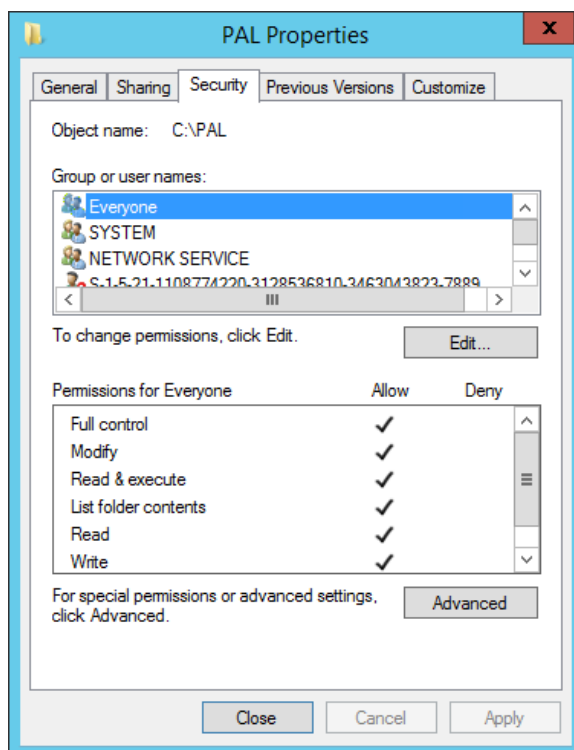
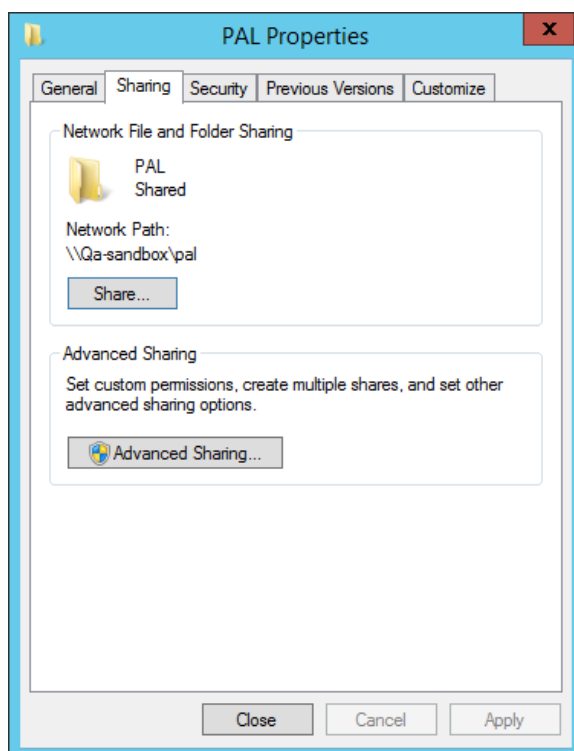
| Location | Access type | Comments |
|--|---|--|
| %SystemRoot%\Temp | Full Control | This location is used for Web services support. |
| User profile directory | Read, List Folder Contents, Read & Execute, Write | This directory is used by the GAC cache lock files and the security configuration caching mechanism of the common language runtime. If the user profile directory for the account does not exist, ASP.NET uses the default user profile directory. |
| Electronic Reading Room Documents Location | Read, List Folder Contents, Read & Execute, Write | All ATIPXpress PAL electronic reading room documents are stored in this location. |
| Download Documents Location | Read, List Folder Contents, Read & Execute, Write | All ATIPXpress PAL download documents are stored in this location. |
| Inetpub\wwwroot\PublicAccessLink\PAL\images | Modify, Read & Execute, List Folder Contents, Read, Write | This location stores the images of the PAL website. |
| Inetpub\wwwroot\PublicAccessLink\PALConfig\images | Modify, Read & Execute, List Folder Contents, Read, Write | This location stores the images of PAL Config website. |

Required Privileges for ATIPXpress PAL Application Server

| Location | Access type | Comments |
|---|--|--|
| Inetpub\wwwroot\ PublicAccessLink\ PALConfig\App_Data | Modify, Read, & Execute, List Folder Contents, Read, Write | This location contains dictionary file information |
| Program Files\PAL\pallog.txt -OR- Program Files (x86)\PAL\pallog.txt | Modify, Read & Execute, List Folder Contents, Read, Write | This file records the error log information for PAL. |
| Program Files\PAL\Errorlog.txt -OR- Program Files (x86)\ PAL\Errorlog.txt | Modify, Read & Execute, List Folder Contents, Read, Write | This file records the error log information for PortalXpress |

(!!) Note: If file repository folders (Download Documents and Electronic Reading Room documents locations) are located on another server other than the ATIPXpress PAL application server, set the required security and sharing permissions for the ATIPXpress PAL application server account (network service user). Example: palserver\$.

Required Privileges for ATIPXpress PAL Application Server



The File Repository folder located on the file server should have the Read and Write permissions for File Sharing and Full control for Security permissions. Please refer to the above screenshots to view the permissions.

8.2 ATIPXpress Sync Service Required Privileges

The following table shows which type of file and folder permissions the user must have in order to function properly.

| Location | Access Type | Account | Comments |
|--|---|--------------|--|
| %SystemRoot%\assembly | Read, List Folder Contents, Read & Execute | Service User | This is the location of the global assembly cache (GAC). |
| %SystemRoot%\System32 | Read, List Folder Contents, Read & Execute | Service User | This location contains system DLLs loaded by the .NET Framework. |
| User profile directory | Read, List Folder Contents, Read & Execute, Write | Service User | This location stores the cache files of the Sync Service. |
| %SystemRoot%\Microsoft.NET\Framework\version and subdirectories | Read, List Folder Contents, Read & Execute | Service User | 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. |

Required Privileges for ATIPXpress PAL Application Server

| Location | Access Type | Account | Comments |
|---|---|--------------|---|
| AFXWDOFL | Read & Execute, List Folder Contents and Read | Service User | All ATIPXpress original documents are stored in this location. |
| AFXWERR | Full Control | Service User | All ATIPXpress electronic reading room documents are stored in this location. |
| Program Files\AINS\ATIPXpress\bin -OR- Program Files (x86)\AINS\ATIPXpress\bin | Full Control | Service User | Installed application files will be stored in this location. |
| Program Files\AINS\Log -OR- Program Files (x86)\AINS\Log | Modify, Read & Execute, Read, Write | Service User | The application error log and configuration files will be stored in this folder |
| Documents Download Location | Full Control | Service User | This is provided in the Sync Service configuration. If request delivery mode is set to web download, the documents will be stored in this location. |

Required Privileges for ATIPXpress PAL Application Server

| Location | Access Type | Account | Comments |
|----------------------------------|--------------|--------------|--|
| Electronic Reading Room location | Full Control | Service User | This is provided in the Sync Service configuration. The documents published from ATIPXpress will be stored in this location. |

(!!) Notes:

- The above specified Download Document Location and Electronic Reading Room Location should be the same as the location specified in the [ATIPXpress Sync Service Configuration](#).
- The folders \AFXWDOFL and \AFXWERR are the ATIPXpress File Repository folders.
- The folder %SystemRoot% is the Microsoft Windows installation folder.