FOIAXpress

PAL Deployment Manual

v11.8.0 October 2024



FOIAXpress v11.8.0 PAL Deployment Manual

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1 FOIAXpress PAL Deployment Introduction

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

FOIAXpress PAL facilitates the submission of Freedom of Information Act (FOIA) requests over the internet and allows information to be published to the Electronic Reading Room. FOIAXpress 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 FOIAXpress PAL and all its components, however it is highly recommended to configure separate servers for the FOIAXpress application, database, and repository due to the processing demands of the CPU.

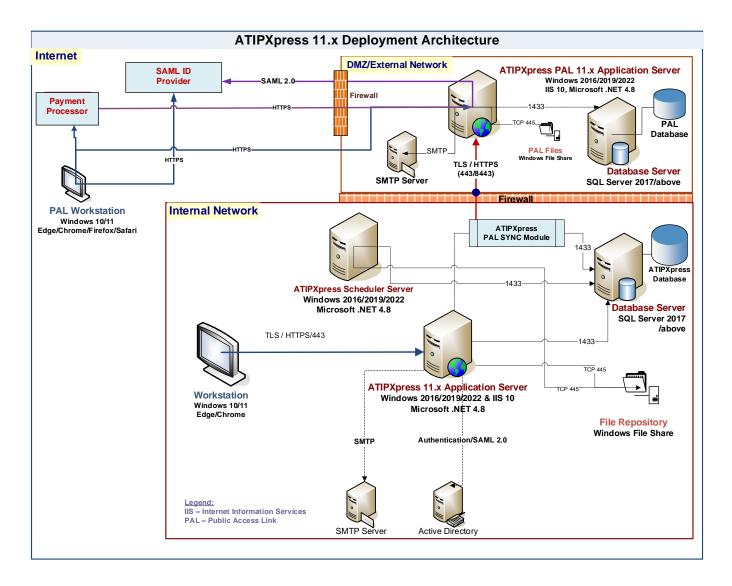
1.1 Standard FOIAXpress and PAL Deployment Architecture

The PAL application URL will be accessible by the public for submitting FOIA 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 FOIAXpress Application, FOIAXpress 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 FOIAXpress.

The figure below shows the standard FOIAX press PAL installation.

(!!) Note: The diagram below reflects the available FOIAXpress integrations and may not reflect your specific environment.



2.1 FOIAXpress-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 FOIAX press PAL. The SMTP server must be configured to relay e-mail messages to other domains.
- Before installing the FOIAXpress 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 2016/2019/2022
URL Rewrite	Install the Microsoft IIS URL Rewrite extension, available via <u>https://www.iis.net/downloads/microsoft/url-rewrite</u>

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: <u>https://dotnet.microsoft.com/en-us/download/dotnet-</u> <u>framework/net48</u>
SqlPackage	The SqlPackage must be downloaded and installed. It can be downloaded and installed from the following location: <u>https://learn.microsoft.com/en-us/sql/tools/sqlpackage/sqlpackage- download?view=sql-server-ver16#windows-net-framework</u>
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 FOIAXpress PAL Database Account Requirements

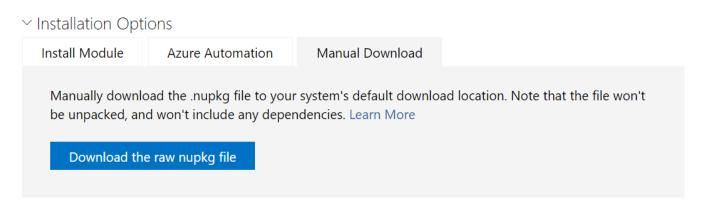
There are three accounts which must provisioned to configure the application, database, and repository servers. The table below outlines the type of accounts, their purpose, and their requirements.

Account	Purpose	Requirement
Application Setup	This user installs and configures the FOIAXpress 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.
FOIAXpress 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): dbcreator securityadmin
FOIAXpress PAL Database User	This user performs all FOIAXpress PAL database transactions required for the FOIAXpress PAL Application.	This account must be assigned as a member of the db_owner database role for the FOIAXpressPAL 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: <u>https://www.powershellgallery.com/packages/Sqlserver/21.1.18256</u>
- 2. Under Installation Options, select Manual Download:



- 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:

🗹 📜 <mark>sqlserver.</mark>21.1.18256

- 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:

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

Server N	√anager ∙ Dash	board					• © I	r∾	lanage	Tools	View	Help
Dashboard Local Server		1 Cor	figure this local serv	/er								
■ All Servers ■ File and Storage Services ▷	QUICK START	2 A	dd roles and features 🤞									
IIS		3 A	dd other servers to mana	ige								
	WHAT'S NEW	4 0	Freate a server group									
		5 0	Connect this server to clou	d services								
	LEARN MORE										Hide	
	ROLES AND SERVER		eal-1									
	ROLES AND SERVER Roles: 2 Server group File and Sto	s: 1 Servers to		1	Local Server	1	All S	ervers		1		
	ROLES AND SERVER	s: 1 Servers to rage 1			Local Server Manageability	1		ervers		1		
	ROLES AND SERVER Roles: 2 Server group File and Sto Services Manageabilit Events	s: 1 Servers to rage 1	IIS Manageability Events		 Manageability Events 	1	Mana Event	ageability ts		1		
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	ROLES AND SERVER Roles 2 Server group File and Sto Services (*) Manageabilit Events Services Performance	s: 1 Servers to rage 1	IIS Manageability Events Services Performance		 Manageability Events Services Performance 	1	Mana Event Servia Perfo	ageability ts ces rmance		1		
	ROLES AND SERVER Roles: 2 Server group File and Sto Services Manageabilit Events Services	s: 1 Servers to rage 1	IIS Manageability Events Services		 Manageability Events Services 		Mana Event Servie Perfo BPA r	ageability ts ces rmance results		1		
	ROLES AND SERVER Roles 2 Server group File and Sto Services (*) Manageabilit Events Services Performance	s: 1 Servers to rage 1	IIS Manageability Events Services Performance		 Manageability Events Services Performance 	Ac	Mana Event Servix Perfo BPA r tivate Wil	ageability ts ces rmance results ndows	anel to a			S
	ROLES AND SERVER Roles 2 Server group File and Sto Services (*) Manageabilit Events Services Performance	s: 1 Servers to rage 1	IIS Manageability Events Services Performance		 Manageability Events Services Performance 	Ac	Mana Event Servie Perfo BPA r	ageability ts ces rmance results ndows	anel to a		Windows	S.

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

	Add Roles and Features Wizard		•
Before you begin		NATION SERV box.ains-inc.c	
Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	 This wizard helps you install roles, role services, or features. You determine which roles, in features to install based on the computing needs of your organization, such as sharing denoting a website. To remove roles, role services, or features: Start the Remove Roles and Features Wizard Before you continue, verify that the following tasks have been completed: The Administrator account has a strong password Network settings, such as static IP addresses, are configured The most current security updates from Windows Update are installed If you must verify that any of the preceding prerequisites have been completed, close the complete the steps, and then run the wizard again. To continue, click Next. Skip this page by default	ocuments, d	
	< Previous Next > Install	Cance	4

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

elect installatio	DN type DSTINATION SERVER TW-Sandbox.ains-inc.com
Before You Begin	Select the installation type. You can install roles and features on a running physical computer or virtua machine, or on an offline virtual hard disk (VHD).
Installation Type	
Server Selection	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-bas or session-based desktop deployment.
	< Previous Next > Install Cancel

- 4. Select **Role-based** or **Feature-based** installation using the radio buttons.
- 5. Click **Next**. The Select Destination Server pop up window appears.

Before You Begin			to install roles and features.	
Installation Type Server Selection	 Select a server fro Select a virtual ha 	-		
Server Selection	Server Pool			
Features				
	Filter:			
	Name	IP Address	Operating System	
	TW-Sandbox.ains-in	c.com 192.168.0.85	Microsoft Windows Server 20	12 R2 Standard
	1 Computer(s) found			
			dows Server 2012, and that have fline servers and newly-added se	
		nplete are not shown.	mile servers and newly added se	areas nom which due

- 6. Select a server or a virtual hard disk using the radio buttons.
- 7. Click Next. The Select server roles pop up window appears.

B	Add Roles and Features Wizard	_ D X
Select server roles Before You Begin	Select one or more roles to install on the selected server.	DESTINATION SERVER TW-Sandbox.ains-inc.com
Installation Type Server Selection Server Roles Features Confirmation Results	Active Directory Certificate Services Active Directory Domain Services Active Directory Federation Services Active Directory Federation Services Active Directory Rights Management Services Application Server DHCP Server DHCS Server Fax Server Pile and Storage Services (2 of 12 installed) Hyper-V Network Policy and Access Services Print and Document Services Remote Access Remote Desktop Services 	Description Active Directory Certificate Services (AD CS) is used to create certification authorities and related role services that allow you to issue and manage certificates used in a variety of applications.
	< Previous Next	t > Install Cancel

- 8. Click **Features** from the left-hand menu, then select **Windows Search Service**.
- 9. Click Next. The Confirm installation selections pop up window appears.

Add Roles and Features Wizard				
Confirm installa	Confirm installation selections			
Before You Begin Installation Type Server Selection	To install the following roles, role services, or features on selected server, click Ir Restart the destination server automatically if required Optional features (such as administration tools) might be displayed on this page	e because they have		
Server Roles Features Confirmation	been selected automatically. If you do not want to install these optional features their check boxes. Windows Search Service	s, click Previous to clear		
Results				
	Export configuration settings Specify an alternate source path			
	< Previous Next >	nstall Cancel		

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

L	Add Roles and Features Wizard	_ 🗆 X
Installation progre	SS	DESTINATION SERVER TW-Sandbox.ains-inc.com
Before You Begin	View installation progress	
Installation Type	i Feature installation	
Server Selection		
Server Roles	Installation started on TW-Sandbox.ains-inc.com	
Features	Windows Search Service	
Confirmation		
	You can close this wizard without interrupting running tasks. View tas page again by clicking Notifications in the command bar, and then Ta Export configuration settings	
	< Previous Next >	Close

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

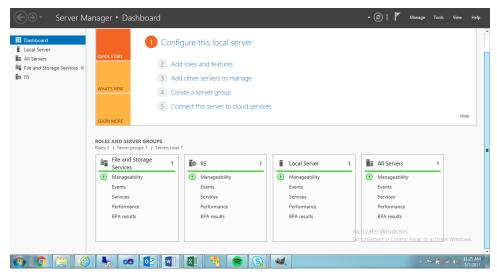
Installation progre	255	DESTINATION SERVER TW-Sandbox.ains-inc.com
	View installation progress	
	i Feature installation	
	Installation succeeded on TW-Sandbox.ains-inc.com.	
	Windows Search Service	
Confirmation		
Results	You can close this wizard without interrupting running tasks. View task	
	Image again by clicking Notifications in the command bar, and then Tage Export configuration settings	;k Details.
	< Previous Next >	Close Cancel

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

2.5 Enable TIFF files in Windows Search Service

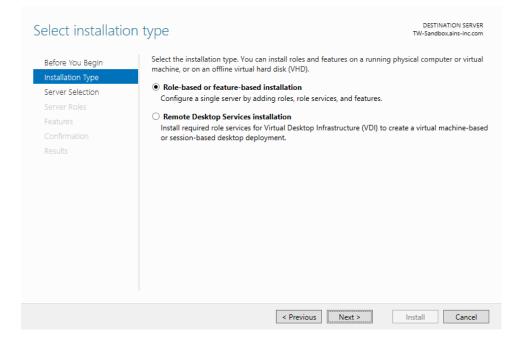
TIFF is a file format for storing images. TIFF files are not enabled for search by default; therefore, you must enable the Windows TIFF IFilter feature in order to search TIFF files.

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



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

3. Click Next.



- 4. Select Role-based or feature-based installation.
- 5. Click Next.

Before You Begin	Select a server or a virtual hard disk on which to install roles and features.
Installation Type	Select a server from the server pool
Server Selection	Select a virtual hard disk
Server Roles	Server Pool
Features	
	Filter:
	Name IP Address Operating System

- 6. Select from the available options.
- 7. Click Next.

B	Add Roles and Features Wizard	
Select server roles Before You Begin Installation Type Server Selection	Select one or more roles to install on the selected server.	DESTINATION SERVER TW-Sandbox.ains-inc.com Description Active Directory Certificate Services
Server Roles Features Confirmation Results	Active Directory Certificate Services Active Directory Domain Services Active Directory Federation Services Active Directory Lightweight Directory Services Active Directory Rights Management Services Active Directory Rights Management Services Application Server DHCP Server Fax Server Fax Server Piel and Storage Services (2 of 12 installed) Hyper-V Network Policy and Access Services Print and Document Services Remote Access Remote Desktop Services	
	< Previous Ne	ext > Install Cancel

- 8. Select Features.
- 9. Select Windows TIFF IFilter.
- 10. Click Next.

a	Add Roles and Features Wizard	_ □ ×
Confirm installat	ion selections	DESTINATION SERVER TW-Sandbox.ains-inc.com
Before You Begin	To install the following roles, role services, or features on selected server, click Ir	ıstall.
Installation Type	Restart the destination server automatically if required	
Server Selection	Optional features (such as administration tools) might be displayed on this page	
Server Roles	been selected automatically. If you do not want to install these optional features their check boxes.	s, click Previous to clear
Features		
Confirmation	Windows TIFF IFilter	
Results		
	Export configuration settings Specify an alternate source path	
	< Previous Next >	nstall Cancel

11. Click Install.

B	Add Roles and Features Wizard	_ _ X
Installation progress	S	DESTINATION SERVER TW-Sandbox.ains-inc.com
Before You Begin	View installation progress	
Installation Type	1 Feature installation	
Server Selection	Installation started on TW-Sandbox.ains-inc.com	
Server Roles Features		
Confirmation	Windows TIFF IFilter	
Results		
	You can close this wizard without interrupting running tasks. View task	
	page again by clicking Notifications in the command bar, and then Ta	sk Details.
	Export configuration settings	
	< Previous Next >	Close Cancel

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

Installation progre	225	DESTINATION SERVER TW-Sandbox.ains-inc.com
Before You Begin Installation Type	View installation progress	
	Installation succeeded on TW-Sandboxains-inc.com.	
	Windows TIFF IFilter	
Results		
	You can close this wizard without interrupting running tasks. View tas page again by clicking Notifications in the command bar, and then Ta Export configuration settings	
	< Previous Next >	Close Cancel

13. 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 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: <u>ftp://ftp.adobe.com/pub/adobe/acrobat/win/9.x/</u>.
- 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.

File Action View						
File Action View Help						
Services (Local)						
	Windows Search	Name 🔺	Description	Status	Startup Type	Log ^
		🔍 Windows Encryption Provid	Windows E		Manual (Trig	Loc
	Stop the service	🤹 Windows Error Reporting Se	Allows error		Manual (Trig	Loc
	Restart the service	鵒 Windows Event Collector	This service		Manual	Net
		🎑 Windows Event Log	This service	Running	Automatic	Loc
	Description:	🎑 Windows Firewall	Windows Fi	Running	Automatic	Loc
	Provides content indexing, property	🔍 Windows Font Cache Service	Optimizes p	Running	Automatic	Loc
	caching, and search results for files, e- mail, and other content.	虊 Windows Installer	Adds, modi		Manual	Loc
		🌼 Windows Management Inst	Provides a c	Running	Automatic	Loc
		鵒 Windows Modules Installer	Enables inst		Manual	Loc
		🎑 Windows Presentation Fou	Optimizes p		Manual	Loc
		鵒 Windows Process Activatio	The Windo	Running	Manual	Loc
		虊 Windows Remote Manage	Windows R	Running	Automatic	Net
		😘 Windows Search	Provides co	Running	Automatic (D	Loc
		🐝 Windows Store Service (WS	Provides inf		Manual (Trig	Loc
		🍳 Windows Time	Maintains d	Running	Manual (Trig	Loc
		鵒 Windows Update	Enables the	Running	Manual (Trig	Loc
		🔍 WinHTTP Web Proxy Auto	WinHTTP i	Running	Manual	Loc
		🎎 Wired AutoConfig	The Wired		Manual	Loc
		🔍 WMI Performance Adapter	Provides pe		Manual	Loc
		C Workstation	Creates and	Running	Automatic	Net
		🔍 World Wide Web Publishin	Provides W	Running	Automatic	Loc
		<	Ш			>
	Extended Standard					

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



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

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

lndexing Options			×
864 its	ems indexed		
🚕 Indexi	ng complete.		
Index these locations:			
Included Locations		Exclude	
Start Menu			
📜 Users		AppData; AppData; App	Data
Modify	Advanced	Pause	
How does indexing affe	ct searches?		
Troubleshoot search an	d indexing		
			Close

- 6. Click **Modify** to add the Reading Room root folder.
- 7. Add the electronic reading room root path to the included locations (e.g. C:\PALRepo\AFXWERR\):

lndexed Locations	×
Change selected locations	
Local Disk (C:) azagent backup backup Palbuild PALBuild PALBuild PACREPO AFXWERR PerfLogs PerfLogs Program Files Program Files (x86) PS Temp Summary of selected locations	~
Included Locations AFXWERR Start Menu Users	Exclude AppData; AppData; AppData
Show all locations	OK Cancel

8. Click Advanced. The Advanced Options pop up window appears.

lndexing Options	×	-
910 items indexed		✓ ひ Search Control F
Indexing in progress. Search	Advanced Options	×
	Index Settings File Types	ralli
Index these locations:	File Settings	
Included Locations AFXWERR Start Menu	Treat similar words with diacritics as differen	nt words
Users	Troubleshooting	
	Delete and rebuild index	Rebuild
	Troubleshoot search and indexing	
	Index location	
	Current location:	
	C:\ProgramData\Microsoft	
	New location, after service is restarted:	
		Select new
Modify Contract Modify		
How does indexing affect searches? Troubleshoot search and indexing	Advanced indexing help	
	O	Cancel

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



10. 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.

æ	Indexing	Options		x
139 items indexed Indexing speed is reduced due to user activity.				
Induded Loca	xplorer History (TW-SANDBOX	Exclude AppData; AppData		
	king affect searches? earch and indexing	Pause	Close	

- 11. Click **Close** to exit the Indexing Options feature.
- 12. Close the Control Panel window.

3 Download the Installation Package

The FOIAXpress installation package contains the files needed to install FOIAXpress PAL. Contact OPEXUS support at support@opexustech.com for your installation package.

After downloading the package, follow the steps below to unzip the file:

- 1. Locate the downloaded .zip file, then right click it and select **Properties**.
- 2. On the *General* tab, select **Unblock**, then click **Apply**.
- 3. Next, unzip the contents of the folder. The contents of the package appear as shown in the following example:

Name ^	Туре	Date modified
dbscripts	File folder	2/24/2023 8:26 PM
FOIAXpress	File folder	2/24/2023 8:27 PM
installscripts	File folder	2/24/2023 8:20 PM
inputs.json	JSON File	2/24/2023 8:20 PM
👜 install	Windows PowerShell Script	2/24/2023 8:20 PM
👜 uninstall	Windows PowerShell Script	2/24/2023 8:20 PM

3.1 Verify the Integrity of the Installation Package

Steps to verify the integrity of the installation package.

- 1. Open Windows Powershell ISE.
- 2. Use the command below to verify the integrity of installation package:

Test-FileCatalog -CatalogFilePath "<<catalog file path(with extension of .cat) from downloaded artifact>>" -Path "<< folder that should be validated against the catalog file >>"

3. It will show as valid, as shown in the following example:



3.2 About the Installation Package

There are two primary files you'll interact with during installation:

Name
dbscripts
FOIAXpress
installscripts
📄 inputs.json 🕧
📓 install
👜 uninstall

- 1. *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.
- 2. *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

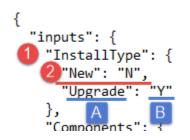
The Inputs.json file located in the root directory of the extracted deployment package zip file drives the installation of the different components of the FOIAXpress PAL system. The file is in a standard json format and needs to remain a valid json file post updates prior to the installation.

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:

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.



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 FOIAXpress PAL Application in this installation procedure. This should be a "Y" value for new installations.
DB	Include the FOIAXpress 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 FOIAXpress 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 FOIAXpress application,

4.5 Database Settings

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

```
"DB": {
    "DBServer": "PROJ-FX-SQL01",
    "DBName": "FXPALDB_ASHOK_0216231",
    "CreaterDBUserId": "sa",
    "CreaterDBUserPassword": "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 FOIAXpress data
DBName	Name given to the specific database used for FOIAXpress
CreaterDBUserID	Database User ID to be used for this installation. The CreaterDBUserId should have admin rights with the ability to create a new database or database object on the specified Database server
CreaterDBUserPassword	Password associated with the account used in the "CreaterDBUserID" 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 AgentAcount 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

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 FX 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 FOIAXpress PAL Application in this upgrade procedure.
DB	Include the FOIAXpress 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 FOIAXpress 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": "PR0J-FX-SQL01",
    "DBName": "FXPALDB_ASHOK_0216231",
    "CreaterDBUserId": "sa",
    "CreaterDBUserPassword": "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 FOIAXpress data.
DBName	Name given to the specific database used for FOIAXpress.

Setting	Description
CreaterDBUserID	Database User ID to be used for this installation. The CreaterDBUserId should have admin rights with the ability to create a new database or database object on the specified Database server.
CreaterDBUserPassword	Password associated with the account used in the "CreaterDBUserID" 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.

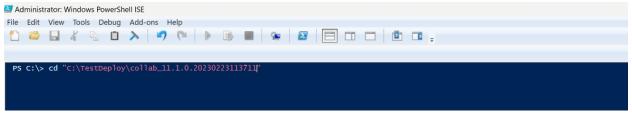
6 Install PAL

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 FOIAXpress PAL Installation package.
- Configure the Inputs.json file for your installation.

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

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



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



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 FOIAX press 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 FOIAXpress Sync Service, ensure that the PAL Database has been created.
- The Download Document location is with respect to the FOIAXpress Sync Service only if you are using database configuration for your Sync Service. The configured user of the FOIAXpress 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 FOIAXpress PAL application and the Download Document folder path (local or UNC) is accessible by the IIS user on the system where the FOIAXpress PAL application is installed. The path for the Download Document folder should be accessible by creating the virtual directory (DOWNLOADDOCUMENTS) on the FOIAXpress 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 FOIAXpress PAL application, the Electronic Reading Room folder path (local or UNC) is accessible to the system on which the FOIAXpress PAL application is installed. The path for the Electronic Reading Room folder should be accessible by creating the virtual directory (ELECTRONICREADINGROOMDOCUMENTS) on the FOIAXpress PAL application server.

To configure FOIAXpress Sync Service, perform the following steps:

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



3. 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.

* FOIAXpress Sync. Service Configuration				x	
Enter the database server information to creation Sync. Service application.	ate the configuration file for the FOIAX	press			
Database Server Information					
Connect PAL Using WebService					
Public Access Link Database Server	Dashboard				
Server Type: MS SQL Server 🗸 🗸	Sync. Interval (Minutes):				
Public Access Link Database Information					
Server Name:	Auto Merge Requester Profile				
Database Name:	When Requester Address is Updated, Updated	•			
Windows Authentication	Requests None	~			
Login ID:	Addresses None	~			
Password:					
SMTP Server Information					
SMTP Server: SI	MTP Port Number:				
Reprocess Failed Jobs for every Send E-mail Alert for every Hour(s). Sync. Service Interval (Minutes): 5 Contact E-mail: Download Documents Location: PAL Reading Room Location: The Download Document location is with respect to the FOIAXpress Sync. Service. The configured user for this service should have Full Permissions on the above specified download document location.					
Before accessing FOIAXpress PublicAccess Link, make sure that the same location is accessible to the system where FOIAXpress PublicAccess Link is installed and it is configured in the Modules section of FOIAXpress PublicAccess Link configuration URL.					
FOIAXpress Failed Requesters	Public Access Link Failed Reques				
FOIAXpress Failed Requests	Public Access Link Failed Reque				
Note: Please restart the FOIAXpress Scheduler Service for the configuration changes to be effected. Logged-in user must have full control on 'Configuri' file located in 'C:\Program Files (x86)AINS FOIAXpress\Schedulerbin'.					
Configure	Cancel				

Field Name	Description
Server Type	MS SQL Server.

Field Name	Description
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, FOIAAgent).
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 FOIAXpress 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 FOIAXpress 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 FOIAXpress 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.
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.

Sync Service (PAL)

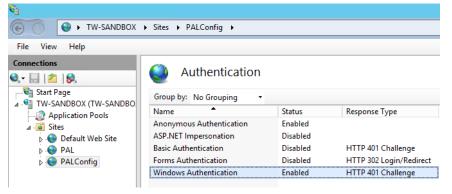
Field Name	Description
Send E-mail Alert for every	A time interval to send an email alert for failed jobs.
Sync Service Interval (Mins.)	The time gap after which the synchronization process starts again and will process all jobs within the queue. Effectively, this is the sleep time between which the synchronization service stops and resumes another cycle of the sync process. When the sync process starts, the FOIAXpress PAL database is updated with the latest requesters and request information. 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.
Contact Email	The electronic mail address where failed job notifications will be sent.
Download Document Location	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 FOIAXpress Sync Service. (For example: \\systemname\foldername) The Download Document Folder must be shared prior to installing the sync service so it is available for selection during the configuration process.
PAL Reading Room Location	This location stores the electronic reading room documents and must be on a remote system, which is accessible to the FOIAXpress Sync Service.

7.2 Using the WebService to Connect to PAL

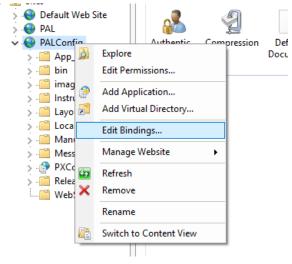
Using the WebService to connect to PAL does not require database access. However, you must configure the WebService in IIS to have a successful connection.

(!!) 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.



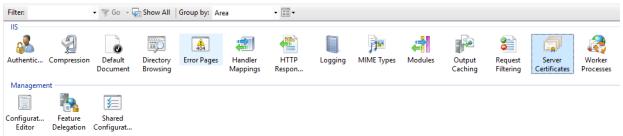
6. Add the **HTTP Secure Socket Layer** port assignment. Click **Add**. The *Add Site Binding* window appears.

Site Bindi	ngs		? ×
Туре	Add Site Binding	?	×
http	Type: IP address: Port: http All Unassigned 80 Host name:		6
	ОК	Cancel	

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

Add Site Binding			? ×
Type: https	IP address: All Unassigned	Port:	
Host name:	ne Indication		
SSL certificate: pal		✓ Select	View
		ОК	Cancel

- 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 FOIAXpress Sync Service *Configuration* window.
- (!!) Note: This should be done on the server where the FOIAXpress Sync Service is installed.
- 11. Provide the PAL WebService URL in the **URL** field. For example: <u>https://palserver/webservices/syncservice.svc</u>.
- (!!) 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.

*	FOIAXpress Syn	c. Service Con	figuration	_		x
Sync. Service		create the conf	iguration file for the FO	IAXpress		
Database Server Informat						
Connect PAL Using	WebService					
WebService Configura	tion	Dashboar Sync. In	d iterval (Minutes):			
Login:		Auto Mer	ge Requester Profile			
Password:			ster Address is Updated, Up	date		
		Requests	None	~		
	Test Connection	Addresses	None	¥		
SMTP Server Informatio	n					
SMTP Server:		SMTP Port Numi	ber:			
	Reprocess Failed Jobs for every Send E-mail Alert for every Hour(s). Sync. Service Interval (Minutes): 5 Contact E-mail:					
FOIAXpress Failed Reque FOIAXpress Failed Reque			ublic Access Link Failed Req ublic Access Link Failed Ret			
Logged-in user	Note: Please restart the FOIAXpress 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 FOIAXpress\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 FOIAXpress Failed Requests and Requesters

Within the FOIAXpress Sync. Service Configuration window, you can view the number of FOIAXpress 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 FOIAXpress and/or PAL respectively. You must click the links on the bottom-left of the FOIAXpress Sync Service Configuration window in order to view the failed jobs.



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

Retry Select All Deselect All View Export Failed Jobs to Log Close				
ID	Request ID	Requester Name	Error Description ^	
157	2017-FOI-00053-BK	Krusinger, Rebecca	Error From WCF : ProcessFXTransa.	
279	2018-VPRT-YA AO- AO-A	Yerramaneni, Akhila	Error From WCF : ProcessFXTransa.	
508	2017-APP-MARAD OC-D	Kyle, Mills	Error From WCF : ProcessFXTransa.	
546	KN-AO-AI-17-00011	Beherendorff, Jason	Error From WCF : ProcessFXTransa.	
549	2017-FOI-00212-	Beherendorff, Jason	Error From WCF : ProcessFXTransa.	
551	2017-APP-YA AO- AO-AY	Yerramaneni, Akhila	Error From WCF : ProcessFXTransa.	
564	KN-AO-AI-17-00012	Beherendorff, Jason	Error From WCF : ProcessFXTransa, ~	
<			>	

- 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)

	FOIAXpres	ssFailedRequests - Notepad	X
ile Edit Format View He	le .		
157 2017-F0I-00053 Inclosed quotation mai at SyncService.Proc 279 2018-VPRT-YA J Inclosed quotation mai at SyncService.Proc 508 2017-APP-MARAJ Inclosed quotation mai at SyncService.Proc 546 KNI-AO-AI-17-00 Inclosed quotation mai at SyncService.Proc 551 2017-APP-YA AJ Inclosed quotation mai at SyncService.Proc 552 2017-APP-YA Inclosed quotation mai at SyncService.Proc 553 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 554 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 559 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 559 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 559 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 551 2017-F0I-0024 Inclosed quotation mai at SyncService.Proc 5521 2017-APP-HQ Ti Inclosed quotation mai at SyncService.Proc	1-BK Krusinger, Rebecca k after the character string cessFXTnansactions(String strl 10- AO-AY-00002 Yerramaneni k after the character string cessFXTnansactions(String strl 10- CO-M-00064 Kyle, Mills k after the character string cessFXTnansactions(String strl 101 Beherendorff, Jason k after the character string cessFXTnansactions(String strl 10- AO-AY-00067 Yerramaneni k after the character string cessFXTnansactions(String strl 10- AO-AY-00067 Yerramaneni k after the character string cessFXTnansactions(String strl 10- AO-AY-00067 Yerramaneni k after the character string cessFXTnansactions(String strl 1- AB Beherendorff, Jason k after the character string cessFXTnansactions(String strl 1-RA Norton, Bess Err k after the character string cessFXTnansactions(String strl 2-AM Beth, Jaura Err k after the character string cessFXTnansactions(String strl 3-AM Beth, Jaura Err AM Beth, Jaura	<pre>nvoicesXml, String strInvoiceDetailsXm , Akhila Error From WCF : ProcessF:). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransac'). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransactor). nvoicesXml, String strInvoiceDetailsXm Akhila Error From WCF : ProcessFXTransactions :S). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransactor). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransactor). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransactor). nvoicesXml, String strInvoiceDetailsXm or From WCF : ProcessFXTransactions :S '). nvoicesXml, String strInvoiceDetailsXm or From WCF : ProcessFXTransactions :S '). nvoicesXml, String strInvoiceDetailsXm or From WCF : ProcessFXTransactions :S '). nvoicesXml, String strInvoiceDetailsXm Error From WCF : ProcessFXTransactions :S ').</pre>	<pre>l, Stri XTransactions :System.Exc. l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri ystem.Exception: Incorrec l, Stri tions :System.Exception: l, Stri ystem.Exception: Incorrec l, Stri ystem.Exception: Incorrec l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri tions :System.Exception: l, Stri</pre>
Inclosed quotation man	k after the character string	·)·.	
			3

7.4 Public Access Link Failed Requests and Requesters

You must click the links on the bottom-right of the FOIAXpress Sync Service Configuration window 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.

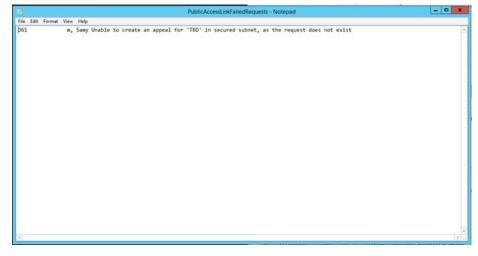
1. After clicking the **Public Access Link Failed Requesters/Requests** link, the *Public Access Link Failed Requests* window appears.

	NAME OF A DECK				
	Public Access Link failed Requests				
Retry S	Select All Deselect All	View Export Failed Jobs to Log	Close		
ID	Request ID	Requester Name	Error Description		
361		m, Samy	Unable to create an appeal for 'TB		
Di la al					
	e list of Public Access Link fa / Requests will be sent for Sy	iled Requests and take the necessary acti nc process again.	on such as Retry for the failed Requests.		

- 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.

Faile	d Job Description
Close - Public Access Link Failed Rec	juest Details
Request ID	361
Requester Name	m, Samy
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 FOIAXpress PAL Application Server

The following section lists the directories that are relevant to FOIAXpress 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 2016/2019/2022 and Internet Information Services (IIS) 7.5/8/10, the ASP.NET process runs in the application pool for the Web application. FOIAXpress 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 FOIAXpress PAL Web application (Network Service User/configured impersonate user).

Location	Access Type	Comments
C:\Program Files	Full Control	Used by the PAL application.
%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).

Location	Access Type	Comments
%SystemRoot%\System32	Read, List Folder Contents, Read & Execute	This location contains system DLLs loaded by .NET Framework.
%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 FOIAXpress PAL electronic reading room documents are stored in this location.
Download Documents Location	Read, List Folder Contents, Read & Execute, Write	All FOIAXpress PAL download documents are stored in this location.
Inetpub\wwwroot\ PublicAccessLink\PAL\imag es	Modify, Read & Execute, List Folder Contents, Read, Write	This location stores the images of the PAL website.

Location	Access Type	Comments
Inetpub\wwwroot\ PublicAccessLink\PALConfi g\ images	Modify, Read & Execute, List Folder Contents, Read, Write	This location stores the images of PAL Config website.
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 document locations) are located on another server other than the FOIAXpress PAL application server, set the required security and sharing permissions for the FOIAXpress PAL application server account (network service user). Example: palserver\$.

General Sharing Security Previous Versions Customize		
Network File and Folder Sharing		
PAL Shared		
Network Path: \\Qa-sandbox\pal Share		
Advanced Sharing Set custom permissions, create multiple shares, and set other		
advanced sharing options.		
Close Cancel Apply		
📕 PAL Properties 🗙		
General Sharing Security Previous Versions Customize		
General Sharing Security Previous Versions Customize		
General Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: Compared to the second to the		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: Comparison of the second se		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: City of the security of the securety of the security of the security of the		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: Circle Control Customize Image: System Image: Circle Customize Image: System Customize Customize Image: Circle Customize Image: Circle Customize Customize Image: Circle Customize Image: Circle Customize Customize Image: Circle Customize Image: Circle Customize Customize Image: Circle Customize Image: Circle Customize Customize Customize Image: Circle Customize Image: Circle Customize Customize Image: Circle Customize Image: Circle Customize Customize Customize Image: Circle Customize Image: Circle Customize Customize Image: Circle Customize Image: Circle Customize Customize Customize Image: Circle Customize Image: Circle Customize Customize Customize Customize Image: Circle Customize Image: Circle Customize Customize Customize Customize Image: Custom		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM SYSTEM NETWORK SERVICE S.1.5.21.110.8777/220.3128536810.3/630/3823.7889 Image: Signal State To change permissions, click Edit.		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM Image: System <		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM Image: System <		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM Image: System <		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names:		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM Image: System <		
General Sharing Security Previous Versions Customize Object name: C:\PAL Group or user names: Image: SYSTEM Image: SYSTEM To change permissions, click Edit. Edit Permissions for Everyone Allow Deny Full control Image: System Image: System Modify Image: System Image: System Read Image: System		

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 FOIAXpress Sync Service Required Privileges

The following table shows which type of file and folder permissions the user must have 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.

Location	Access Type	Account	Comments
AFXWDOFL	Read & Execute, List Folder Contents and Read	Service User	All FOIAXpress original documents are stored in this location.
AFXWERR	Full Control	Service User	All FOIAXpress electronic reading room documents are stored in this location.
Program Files\AINS\\ FOIAXpress\bin -OR- Program Files (x86)\AINS \FOIAXpress\bin	Full Control	Service User	Installed application files will be stored in this location.
Program Files\AINS\\Logs -OR- Program Files (x86)\AINS \Logs	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.

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 FOIAXpress 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 <u>FOIAXpress Sync Service</u> <u>Configuration</u>.
- The folders \AFXWDOFL and \AFXWERR are the FOIAXpress File Repository folders.
- The folder %SystemRoot% is the Microsoft Windows installation folder.