

FTK SUITE 8.2 SP2

AI SERVER INSTALLATION & UPGRADE GUIDE

AUGUST 2025

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About Exterro

Exterro was founded with the simple vision that applying the concepts of process optimization and data science to how companies manage digital information and respond to litigation would drive more successful outcomes at a lower cost. We remain committed to this vision today. We deliver a fully integrated Data Risk Management platform that enables our clients to address their privacy, regulatory, compliance, digital forensics, and litigation risks more effectively and at lower costs. We provide software solutions that help some of the world's largest organizations, law enforcement and government agencies work smarter, more efficiently, and support the Rule of Law.

Purpose of the Document

This guide provides detailed, step-by-step instructions for **installing or upgrading the AI Server** on your infrastructure. It covers both **standalone** and **distributed environments** and includes prerequisites, required software, and configuration steps to ensure smooth deployment.

1 System Prerequisites

1.1 Hardware/Software Requirements

Before starting the installation or upgrade process, make sure your system meets the following prerequisites:

- **Operating System:** Windows 10, Windows 11, Windows Server 2019, 2020, 2022 or later.

Note: Linux OS /PostgreSQL RDS installation with pgvector is not supported by the Exterro release package, but clients can set up a PostgreSQL installation with pgvector by themselves on Linux machines and use it for the AI server.

- **GPU Requirements:**

Note: Only NVIDIA GPU chips are supported.

- **Server GPU Recommendations:**
 - **Minimum:** NVIDIA V100 (16 GB)
 - **Recommended:** NVIDIA A100 (40 GB)
- **Commercial GPU Recommendations:**
 - **Minimum:** GeForce RTX 5060 Ti
 - **Recommended:** GeForce RTX 4090 or higher
- **Recommended instance type:** g5.2xlarge(QA Certified)
- **Hardware:** 16GB of RAM and 8 CPU cores (Minimum required specification).
- **Disk Space:** Minimum 200 GB of available space for AI Server, PostgreSQL, and dependencies.

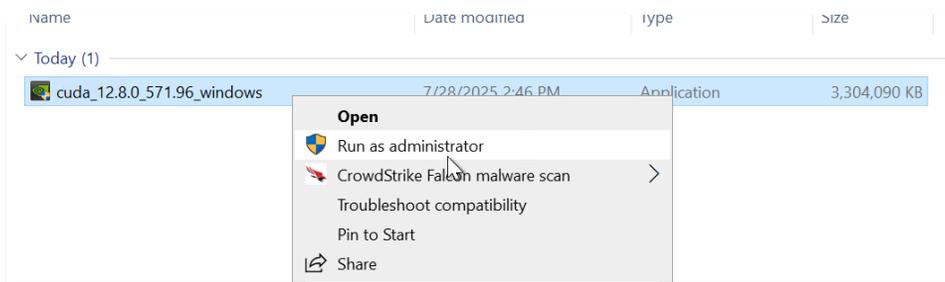
1.2 Required Software for GPU Machine

- **NVIDIA GPU Drivers:** If using a **GPU-enabled server**, make sure to install the **NVIDIA Driver** and **CUDA Toolkit**.
 - **Supported version:** CUDA 12.8.0 and later.

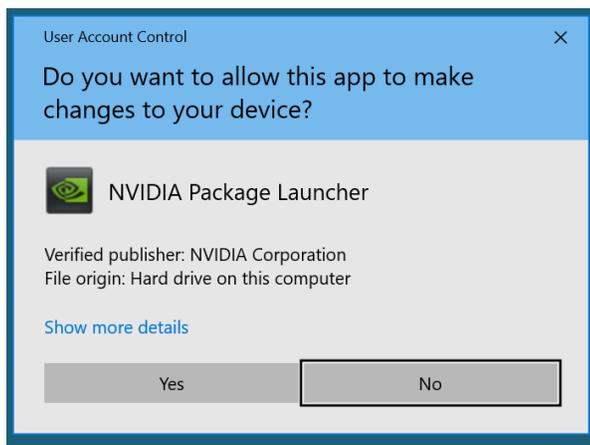
Note: The AI server can also run on CPU-only machines; however, AI jobs are computationally intensive and may take significantly longer (several days for larger volumes of objects) to complete without GPU acceleration.

1.2.1 Installing CUDA Toolkit

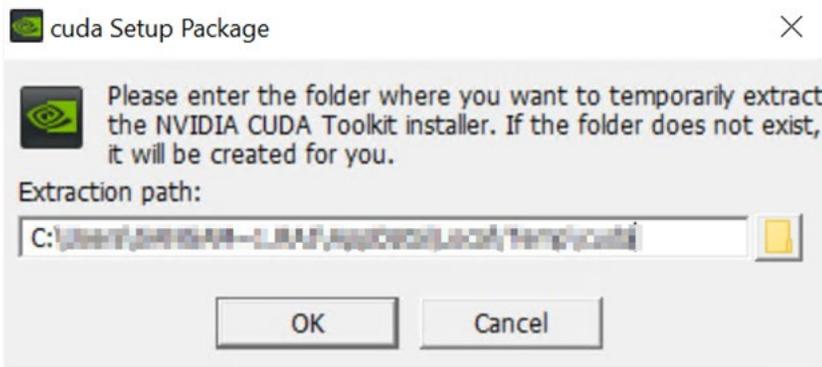
1. Use the link provided below to download the CUDA application.
 - **Driver Download:** [CUDA 12.8.0 for Windows Server 2022](#)
2. Right-click on the downloaded **CUDA** application and select **Run as Administrator**.



3. Click **Yes** when prompted on the User Account Control page.



- The following wizard will be displayed.



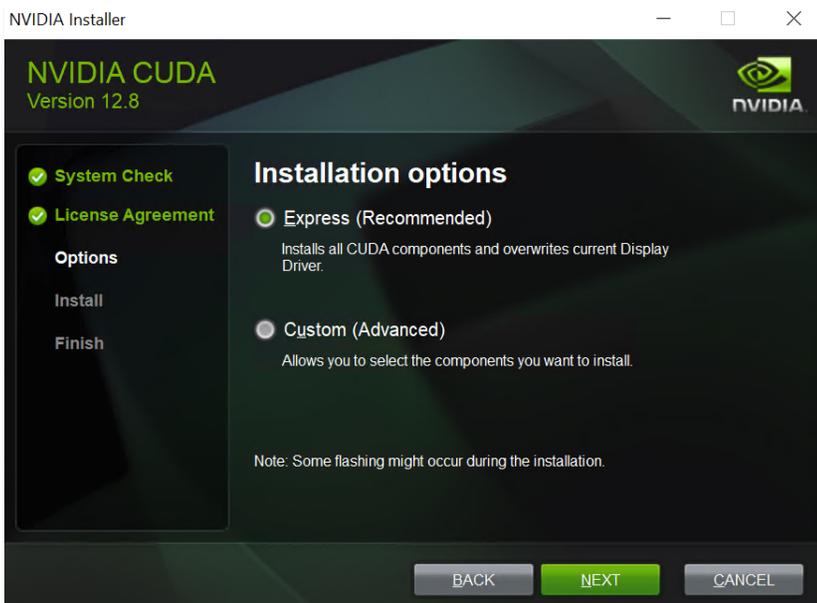
4. Select the Package location for extracting the CUDA Toolkit.

- Once the installer extraction is complete, the following page will be displayed.



5. Read and accept the License agreement by clicking on **Agree and Continue**.

- The following installer page will be displayed.



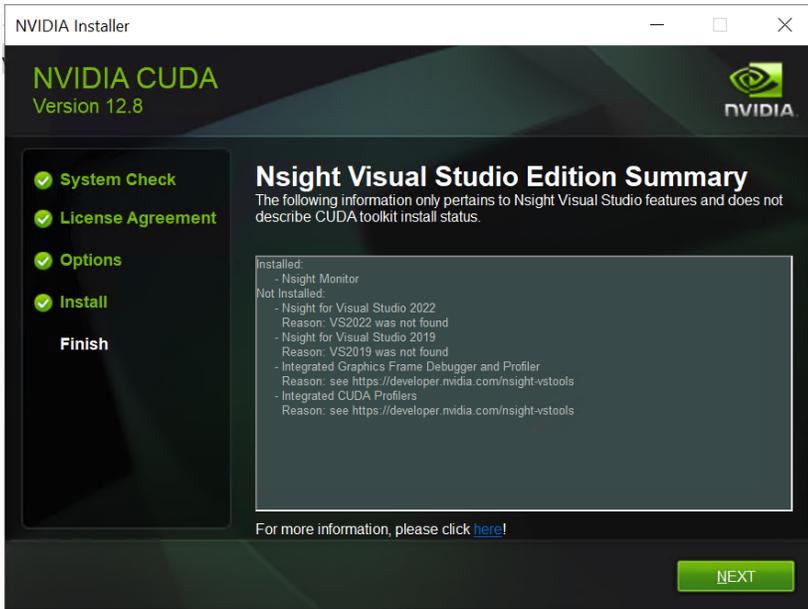
6. Choose the Installation Option as **Express (Recommended)** and click **Next**.

- The following page will be displayed.



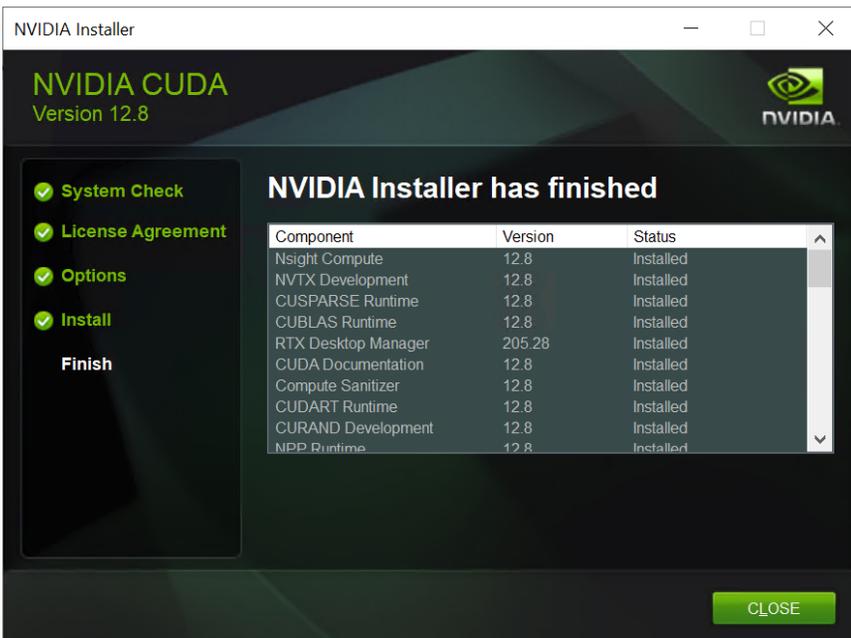
7. Select the 'I understand, and wish to continue the installation' checkbox and click **Next**.

- Once the installation process is completed, the following page will be displayed:



8. Click **Next**.

- The following page will be displayed.



9. Click **Close**.

10. Verify GPU Installation:

- Run the following command to check if the NVIDIA drivers are correctly installed on your system:

Nvidia-smi



```
Microsoft Windows [Version 10.0.22H2.3002]
(c) Microsoft Corporation. All rights reserved.

C:\Users\orlran.appusany>nvidia-smi
Mon Jul 21 11:54:54 2023

+-----+
| NVIDIA-SMI 511.98              Driver Version: 511.98      CUDA Version: 12.0  |
+-----+-----+
| GPU Name           Driver-Model          Bus-Id          Disp.A    Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap     Bus-Id          Memory-Usage  GPU-Util  Compute M. |
|=====================================================================|
| 0  NVIDIA A100      TCC                  00000000:00:1E:0  Off          0K / 40960K    0%        Default  |
| 60C  30C   P0      10W / 300W                    00000000:00:1E:0  Off          0K / 40960K    0%        Default  |
|=====================================================================|
+-----+-----+
| Processes: |
| GPU   GI   CI          PID   Type   Process name          GPU Memory |
| ID   ID   ID           |   |       |                     |  Usage  |
+-----+-----+
| No running processes found |
+-----+-----+

C:\Users\orlran.appusany>
```

2 Installation/Upgrade Instructions

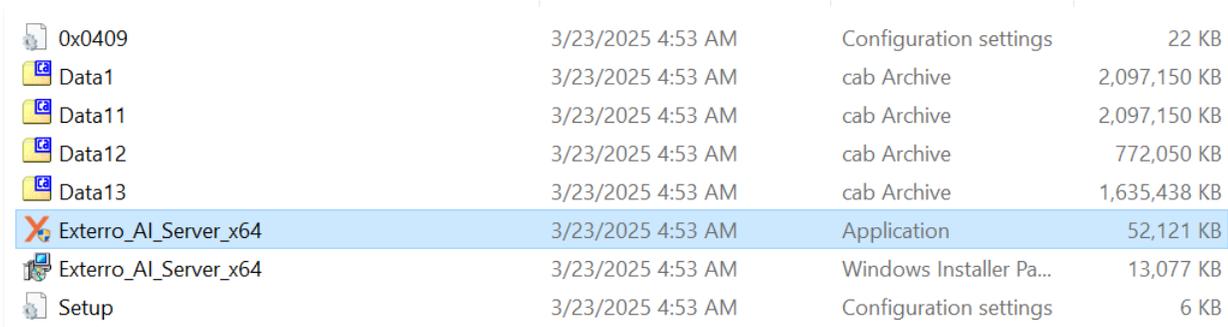
2.1 Pre-installation Checklist

Before starting the installation, follow these steps:

- **Uninstall Previous Versions** (if upgrading): If you are upgrading the AI Server, ensure you first uninstall any existing version of the AI Server using the following steps:
 - Go to **Control Panel > Programs > Programs and Features**.
 - Locate the existing AI Server version, right-click, and select **Uninstall**.
- **Administrative Privileges**: Ensure you have **administrator access** to the server where the installation is taking place.
- **Environment Decision**: Choose whether to deploy a **standalone setup** (where AI Server and PostgreSQL are installed on the same server) or a **distributed setup** (where PostgreSQL is hosted on a different machine).
- **User Setup for Ollama Installation**: Since Ollama is a third-party tool required for the AI Server, it must be installed and uninstalled under the same user account due to its limitations. Ensure to log in as the designated user and perform the AI Server installation or uninstallation from that account to ensure smooth integration with Ollama.
- The AI server service runs on port 5000. Please ensure that no other service or task is using this port.

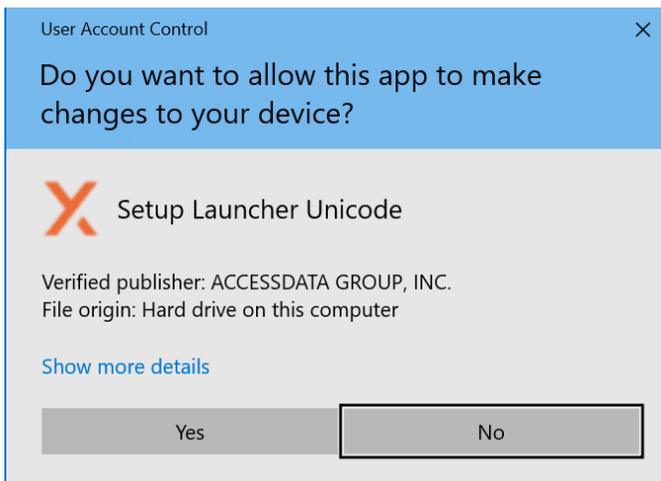
2.2 Launching the Installer

1. Copy the **Exterro AI Server** installation folder to the target server.
2. Right-click on **Exterro AI_Server_x64.exe** and select **Run as Administrator**.



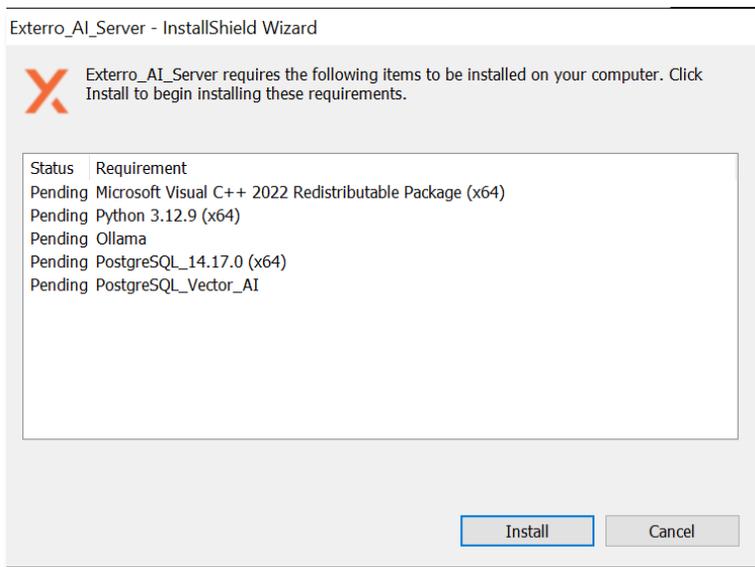
0x0409	3/23/2025 4:53 AM	Configuration settings	22 KB
Data1	3/23/2025 4:53 AM	cab Archive	2,097,150 KB
Data11	3/23/2025 4:53 AM	cab Archive	2,097,150 KB
Data12	3/23/2025 4:53 AM	cab Archive	772,050 KB
Data13	3/23/2025 4:53 AM	cab Archive	1,635,438 KB
Exterro_AI_Server_x64	3/23/2025 4:53 AM	Application	52,121 KB
Exterro_AI_Server_x64	3/23/2025 4:53 AM	Windows Installer Pa...	13,077 KB
Setup	3/23/2025 4:53 AM	Configuration settings	6 KB

3. If prompted by **User Account Control**, click **Yes** to continue.



2.3 Supporting Software Installation

- Upon starting the installer, the following components will be installed automatically:
 - Exterro Visual C++ 2022 Redistributable:** Essential for running various components of the AI Server.
 - Python 3.12.9:** This is the version required by the AI Server for executing scripts.
 - Ollama 0.6.8:** A tool used by the AI Server to perform LLM model inference.
 - PostgreSQL 14.17:** A database server necessary for storing AI Server data.
 - PostgreSQL Vector Extension:** An extension required for AI Server's database operations.
- Click **Install** to proceed with the automatic installation of all dependencies.



Notes:

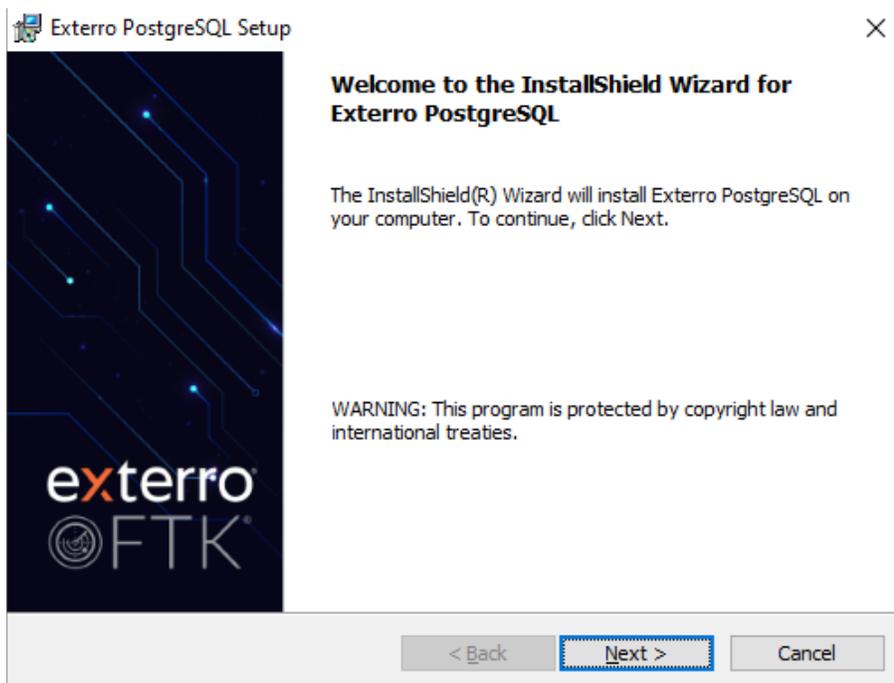
- The PostgreSQL database is used to persist (store) image embeddings generated by multimedia search preprocessing jobs.
- In a distributed AI server environment, do not deploy separate PostgreSQL instances for each server. This is because the AI servers operate solely as processing nodes and must use a centralized PostgreSQL database for storing data and enabling text search.
- FTK Central packages case images and sends them to available AI servers for processing. To maintain data integrity, all image embeddings for a given case must reside in the same PostgreSQL instance. Hence, all AI servers associated with a specific FTK Central deployment must connect to a single, centralized PostgreSQL server.
- *If the AI Server and PostgreSQL DB are in a distributed setup (different machines for the AI server and PostgreSQL), the PostgreSQL Vector Extension provided by Exterro must be installed after the installation of PostgreSQL and requires additional configuration on the AI server to ensure its proper functioning. These details are provided in the [section below](#), which you can refer to for further instructions.*

2.4 PostgreSQL Installation

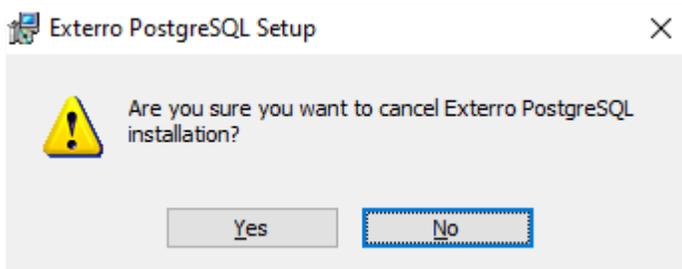
2.4.1 Setting Up PostgreSQL in a Distributed Environment

When PostgreSQL is deployed on a separate server, it is essential to install the PostgreSQL Vector Extension on that server as well. This extension ensures that the database operations required for the AI Server are fully supported and optimized, enabling seamless integration and performance. Follow the instructions given below for the setup.

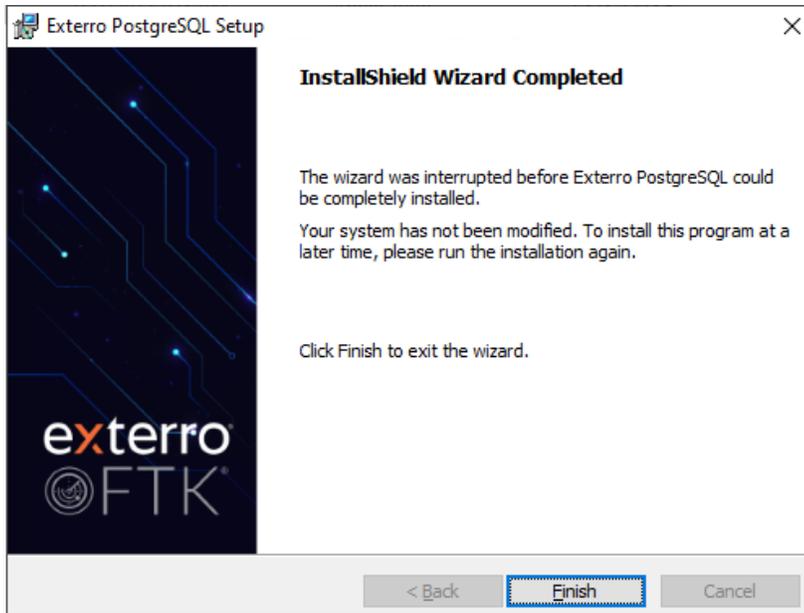
1. When prompted by the AI Server installer to install PostgreSQL, click **Cancel**.



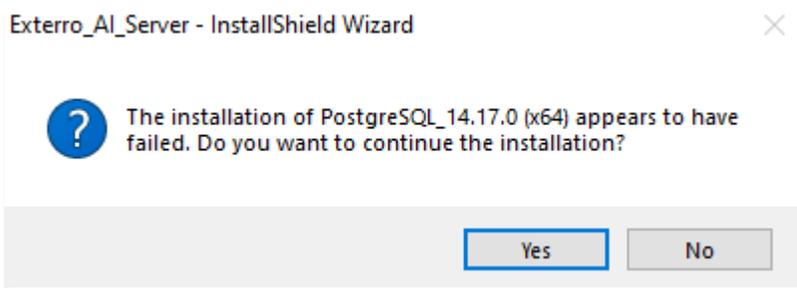
- The below pop-up will be displayed.



2. Click **Yes**.
 - The page below will be displayed.



3. Click **Finish**.
 - The below pop-up will be displayed.



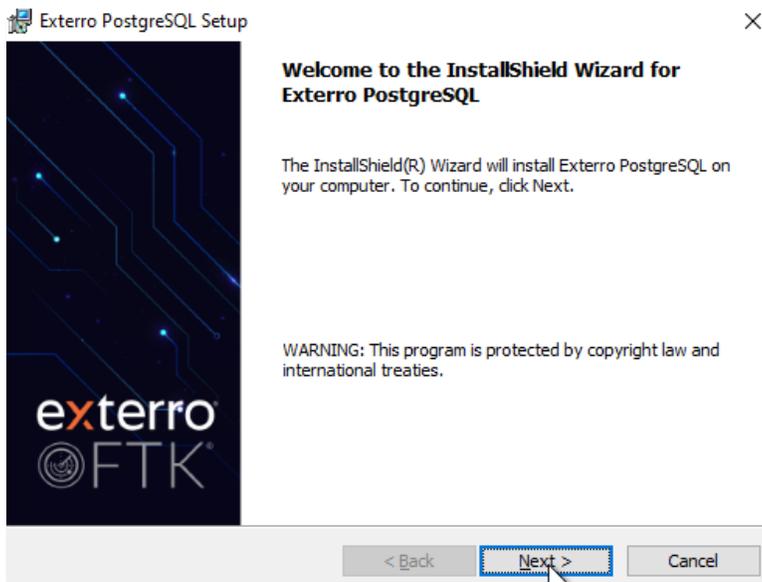
4. Click **Yes**.

2.4.2 Setting Up PostgreSQL on the Same Server

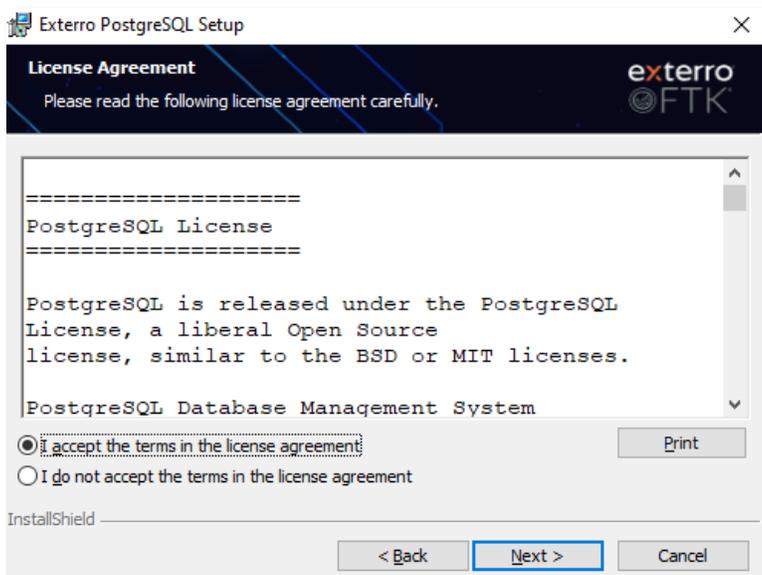
Follow the steps below if you are installing PostgreSQL on the same server where the AI Server is located:

Steps:

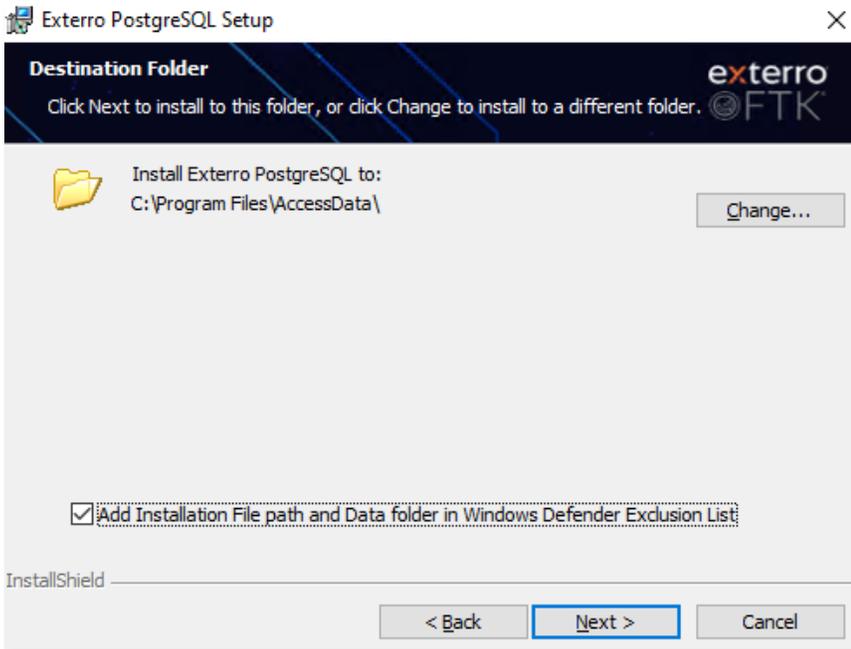
1. When prompted during the AI Server installation, click **Next** to begin PostgreSQL installation.



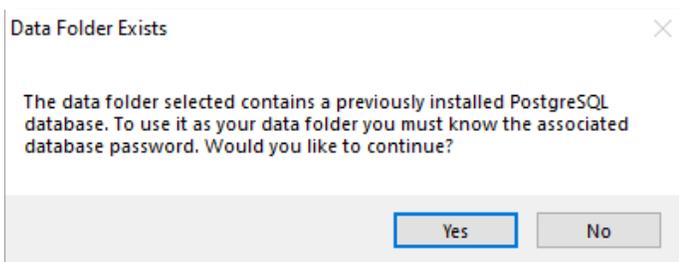
- The page below will be displayed.



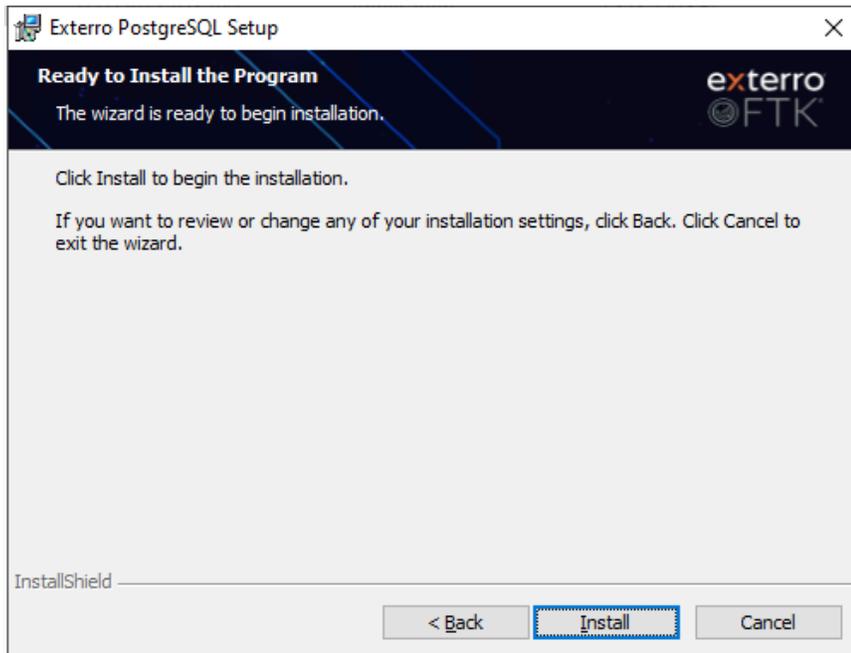
2. Accept the license agreement and click **Next**.
 - The below page will be displayed.



3. (Optional) Select the checkbox 'Add Installation File path to Data folder in Windows Defender Exclusion List'.
4. Click **Next**.
 - The below pop-up will be displayed.

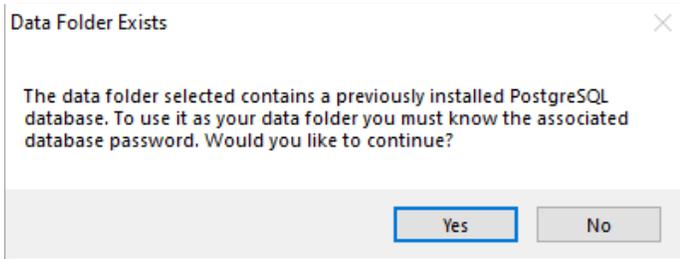


Note: If upgrading PostgreSQL from a previous version (e.g., 14.0 to 14.17), ensure to select **Yes** when prompted. And the installation page below will be displayed for you to proceed with the installation. Click **Install**.

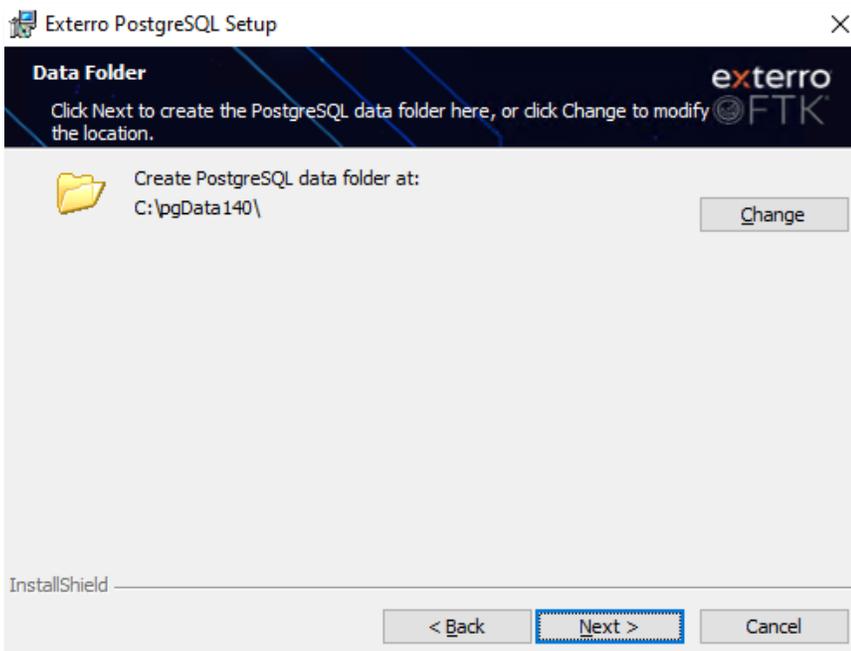


Note: Follow the steps below if you are not upgrading the PostgreSQL version:

- i. Click **No** in this pop-up.

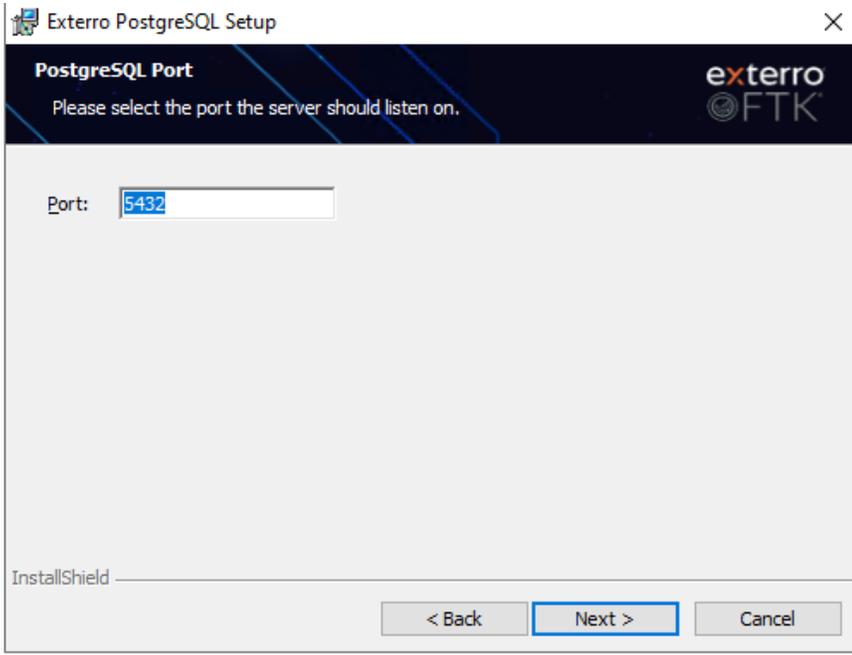


- The page below will be displayed.



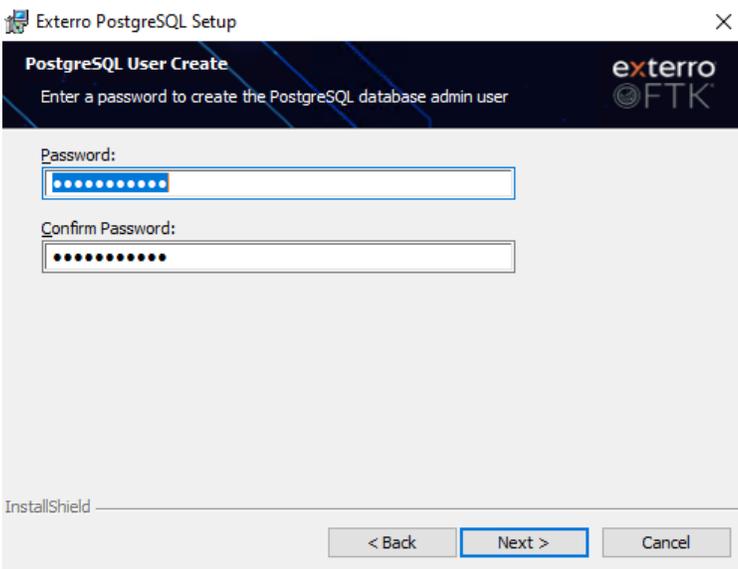
- ii. Click **Next**.

- The below page will be displayed.



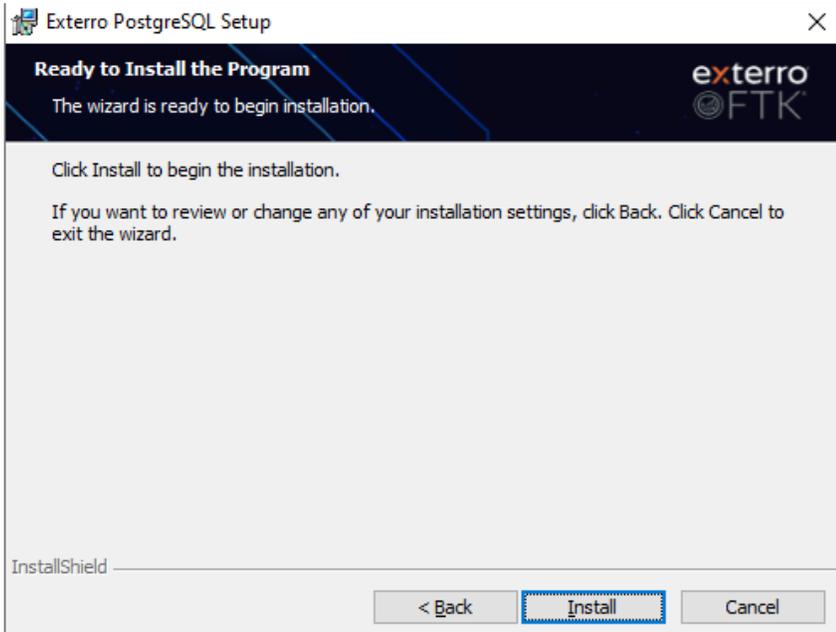
- iii. Enter the port number and click **Next**.

- The below page will be displayed.

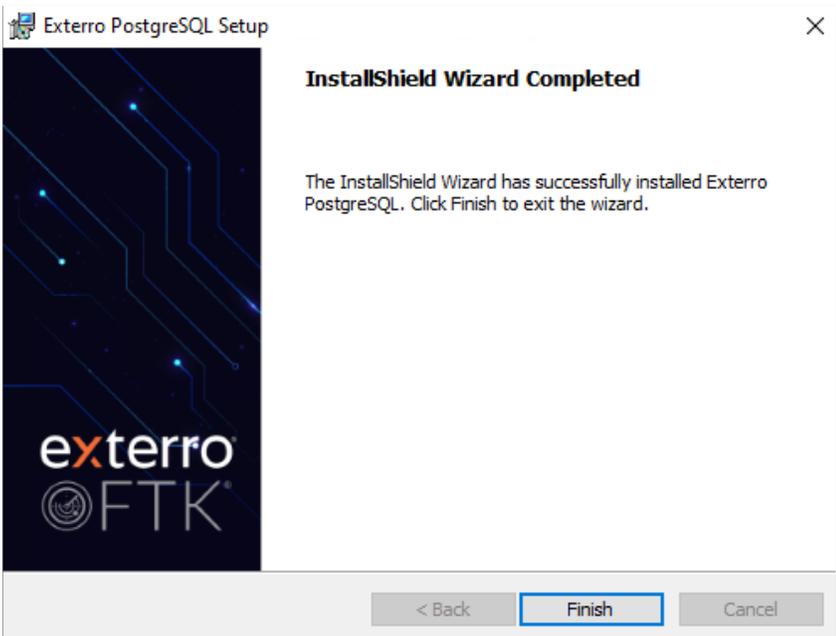


- iv. Enter the desired PostgreSQL Admin Password and click **Next**.

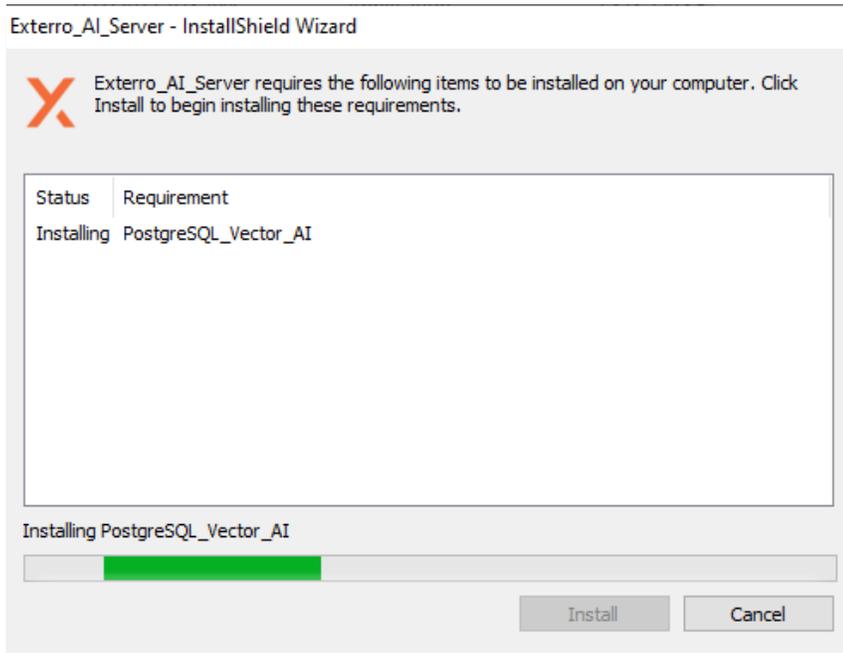
- The below page will be displayed.



- v. Click **Install** and monitor installation progress.
- vi. Once installation is completed, click **Finish**.



Note: Once the installation begins, **PostgreSQL_Vector_AI** will be installed automatically.

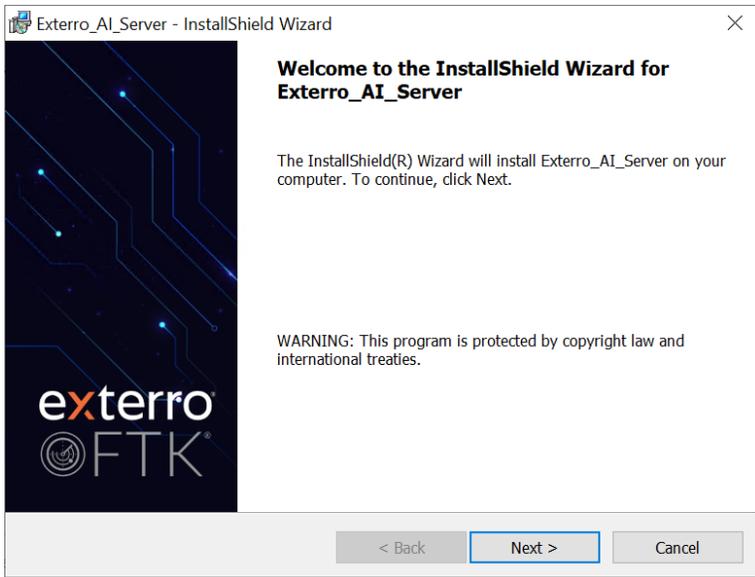


After the PostgreSQL Vector Extension is installed, proceed with the AI Server installation on the main server. See the sections below for further instructions.

3 AI Server Installation

Once all the required components/dependencies are installed for AI Server installation, follow the steps provided below.

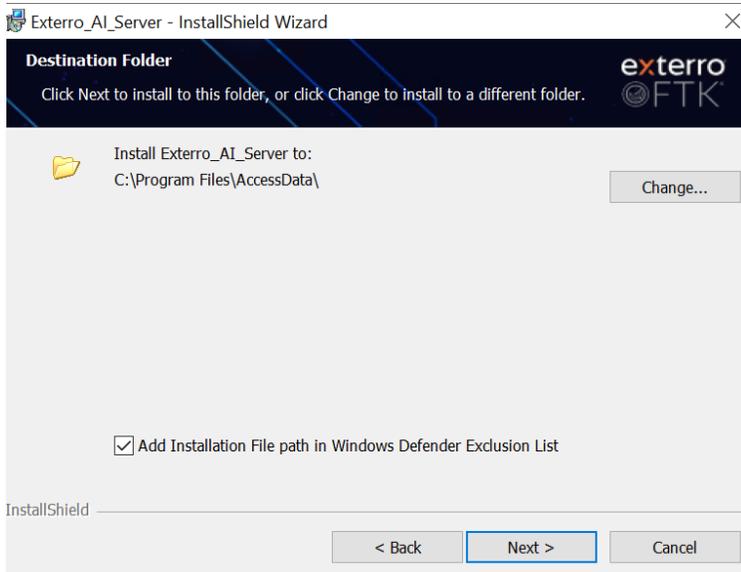
1. Once the PostgreSQL setup is completed, the following prompt will be displayed. Click **Next**.



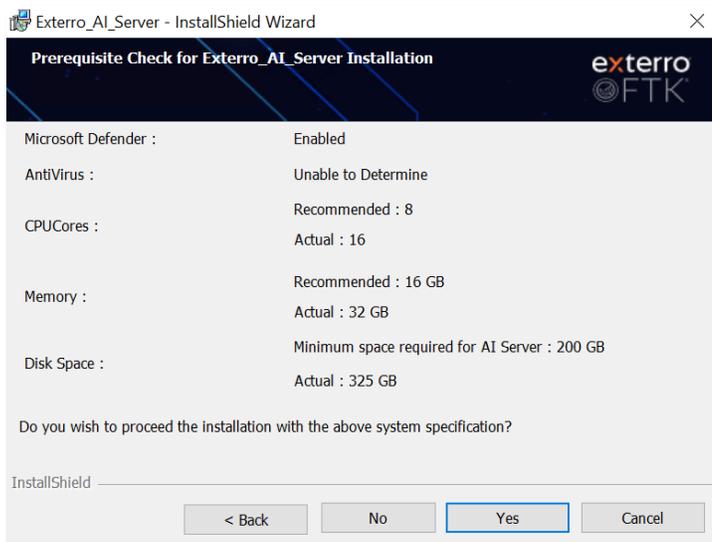
- The page below will be displayed.



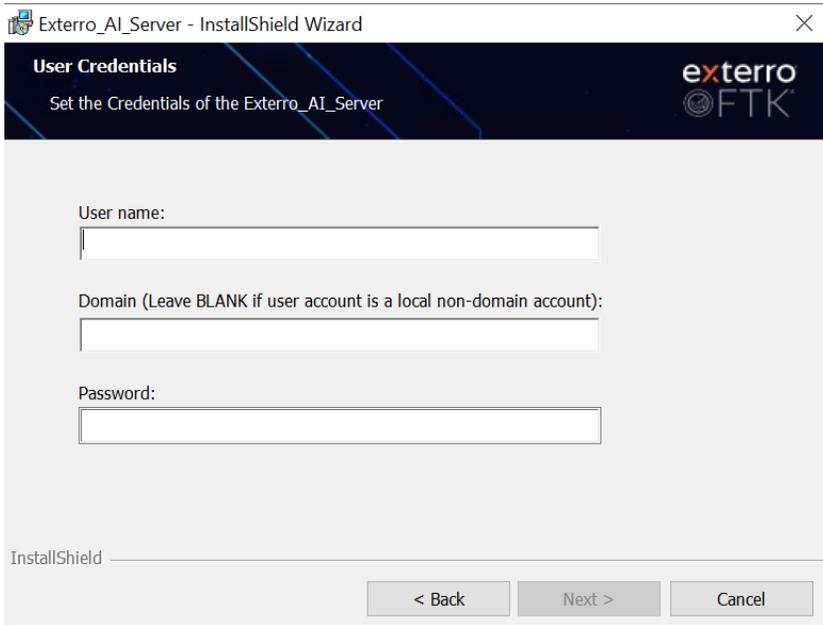
2. Accept the License Agreement and click **Next**.
 - The page below will be displayed.



3. (Optional) You can click on 'Change' and select the required folder to install the AI Server. By default, it will be installed in the following location: **C:\Program Files\AccessData**.
4. (Optional) You can select the checkbox, 'Add the installation file path to the Windows Defender Exclusion List'.
5. The installer will verify if the system meets the minimum hardware and software requirements. Click **Yes** to proceed.



- The page below will be displayed.



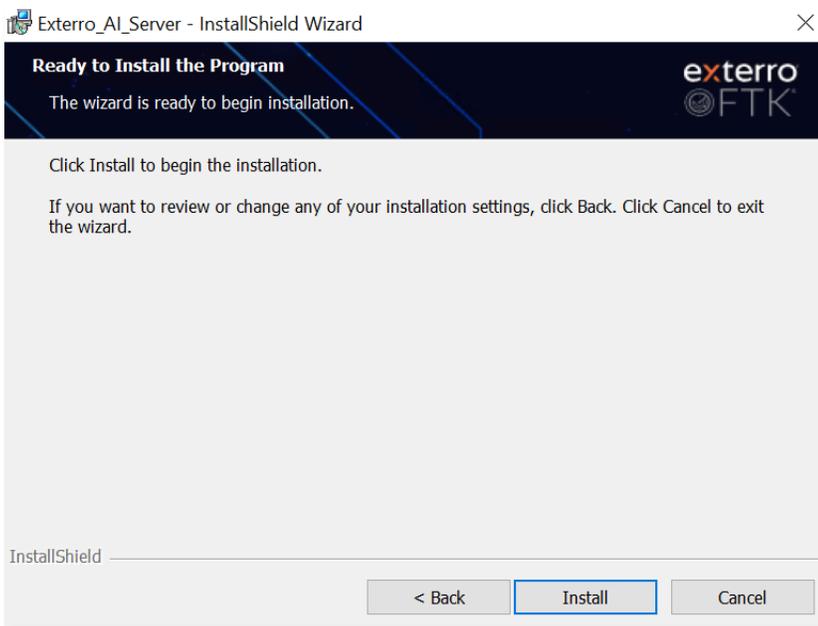
The screenshot shows a Windows-style dialog box titled "Exterro_AI_Server - InstallShield Wizard". The main heading is "User Credentials" with the subtext "Set the Credentials of the Exterro_AI_Server". The Exterro logo and "FTK" are visible in the top right corner. The form contains three input fields: "User name:", "Domain (Leave BLANK if user account is a local non-domain account):", and "Password:". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel". The "InstallShield" logo is in the bottom left corner.

6. Provide the service account credentials and click **Next**.

**Warning:**

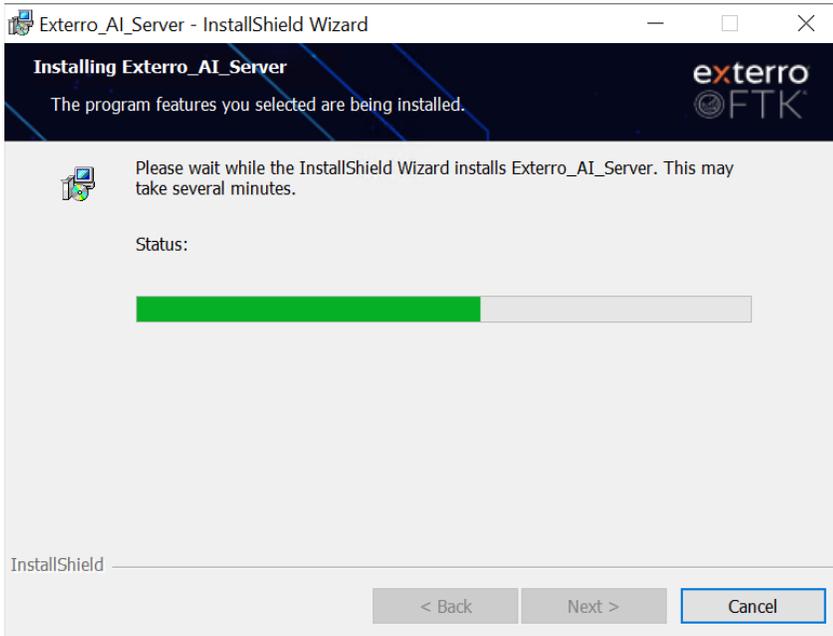
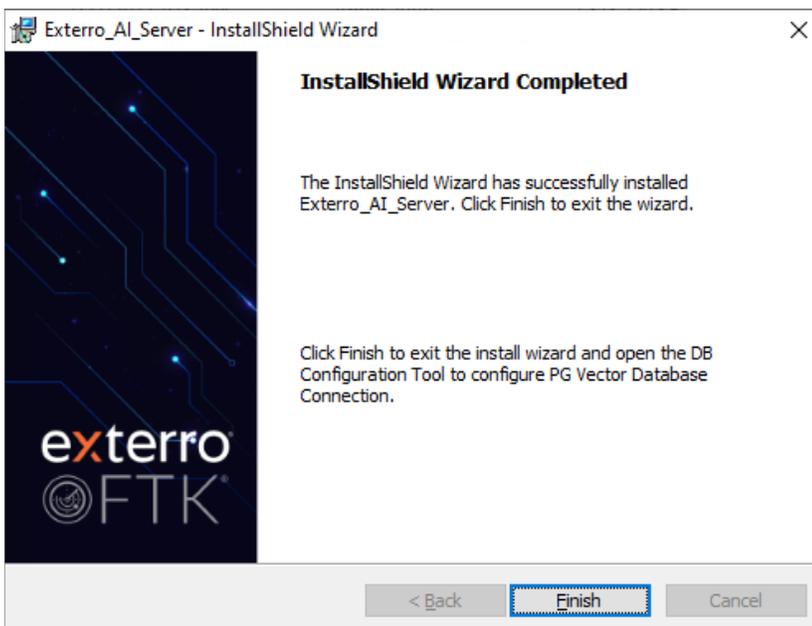
- For single-box installations, ensure login credentials for an account (specifically, a member of the local administrator's group) are available. The "Hostname" is applicable only in off-domain single-box environments and is suitable when using a local system user.
- In multi-box environments, a domain-level account is necessary. This account must possess local administrator permissions for tasks like creating services, placing files in the primary drive, and adding registry values during installation.
- Use a local system account only when all components, case, and evidence storage are consolidated on a single machine.

- The page below will be displayed.

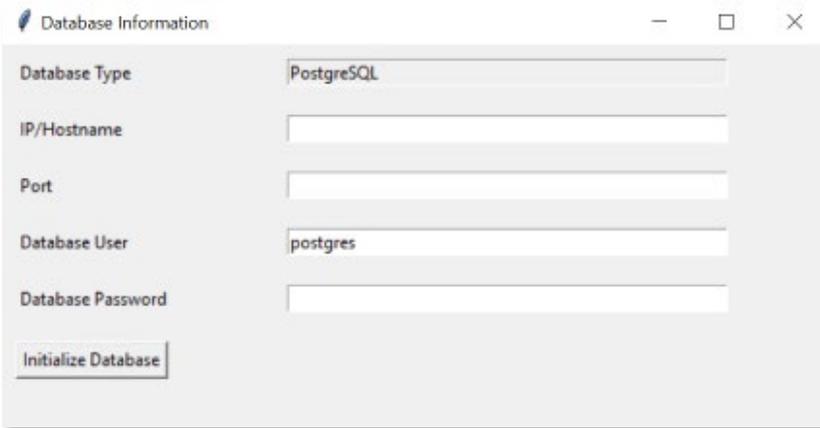


7. Click **Install**.

8. Monitor the installation status.

9. Click **Finish** when prompted.

- The **Database Configuration Tool** will be displayed.



The screenshot shows a window titled "Database Information" with the following fields and values:

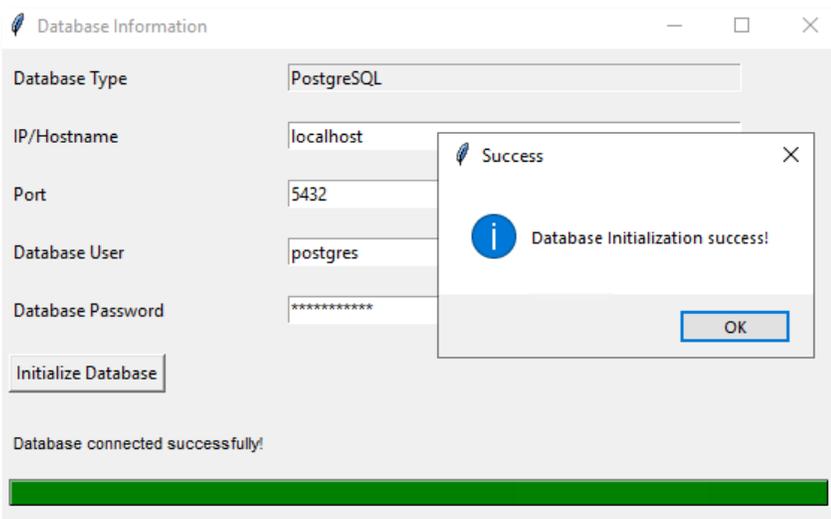
Field	Value
Database Type	PostgreSQL
IP/Hostname	
Port	
Database User	postgres
Database Password	

At the bottom left of the window is a button labeled "Initialize Database".

10. Enter the following details for the PostgreSQL connection:

- Hostname or IP address of the PostgreSQL server.
- Port number (default: **5432**).
- Admin username and password.

Note: The installer allows you to configure the database user and database password. The default database username is **postgres**.



The screenshot shows the "Database Information" window with the following fields and values:

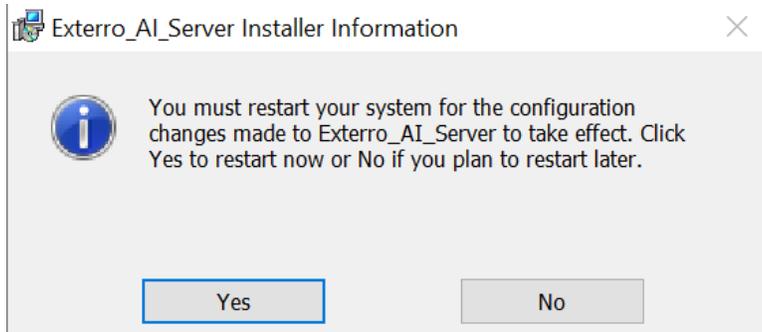
Field	Value
Database Type	PostgreSQL
IP/Hostname	localhost
Port	5432
Database User	postgres
Database Password	*****

A "Success" dialog box is overlaid on the window, displaying the message "Database Initialization success!" with an "OK" button.

At the bottom of the "Database Information" window, the text "Database connected successfully!" is displayed above a green progress bar.

11. Click **Initialize Database**.
12. Once the success message appears, click **OK**.
13. Click **Yes** to restart the system.

Note: It is strongly recommended to restart the **Accessdata AI Service**.

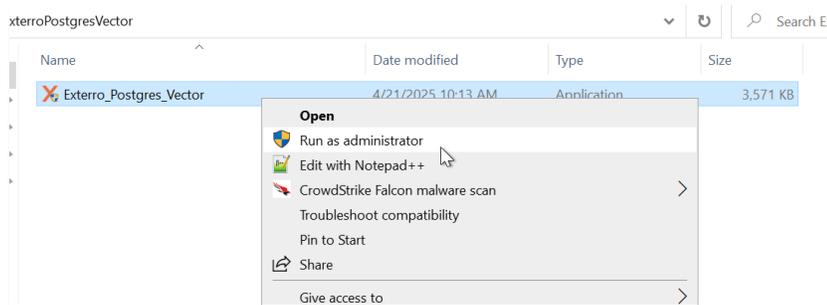


4 PostgreSQL Vector Extension Installation

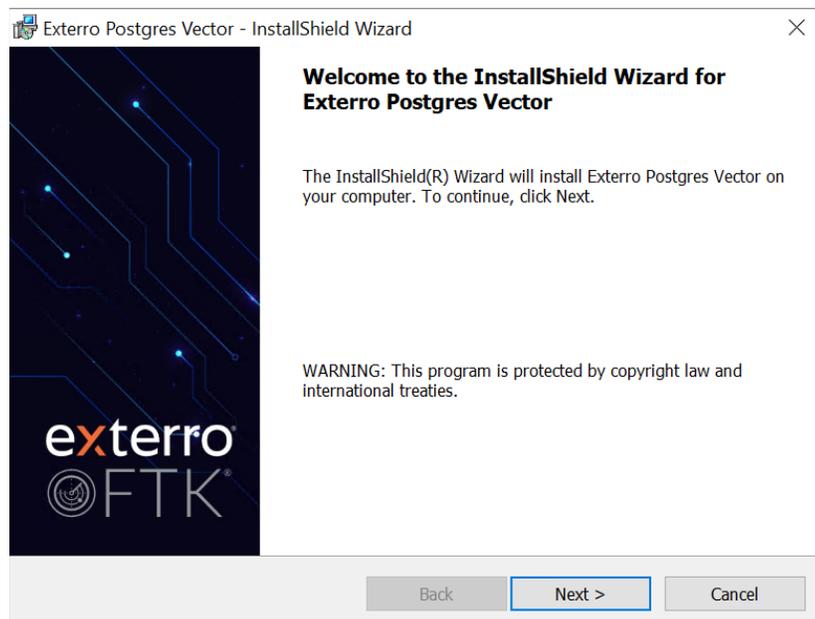
If the machine already has PostgreSQL installed, perform the following steps to install the vector extension on top of the existing PostgreSQL installation. This extension is required for the AI multimedia search functionality.

Follow the steps below to install the PostgreSQL Vector.

1. Download and extract the PostgreSQL Vector Extension from the **Exterro Products Downloads Page**.
2. Right-click and **run as administrator**.



- The following installation wizard is displayed.



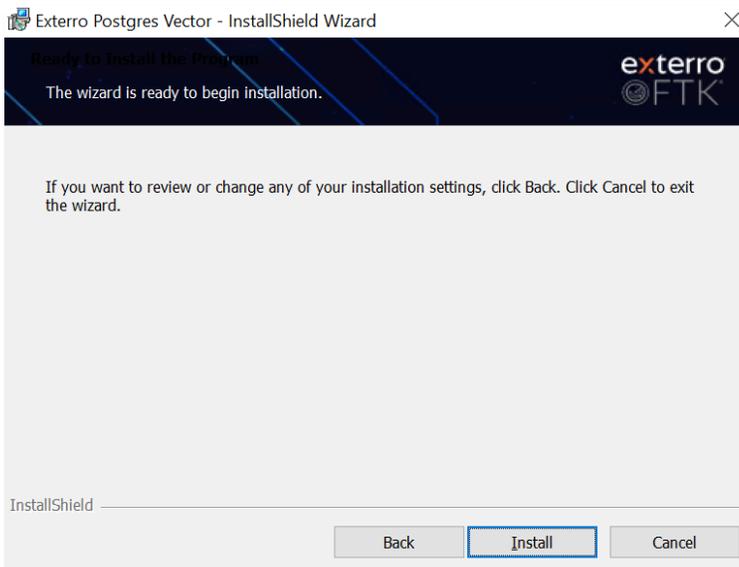
3. Click **Next**.

- The following page is displayed.



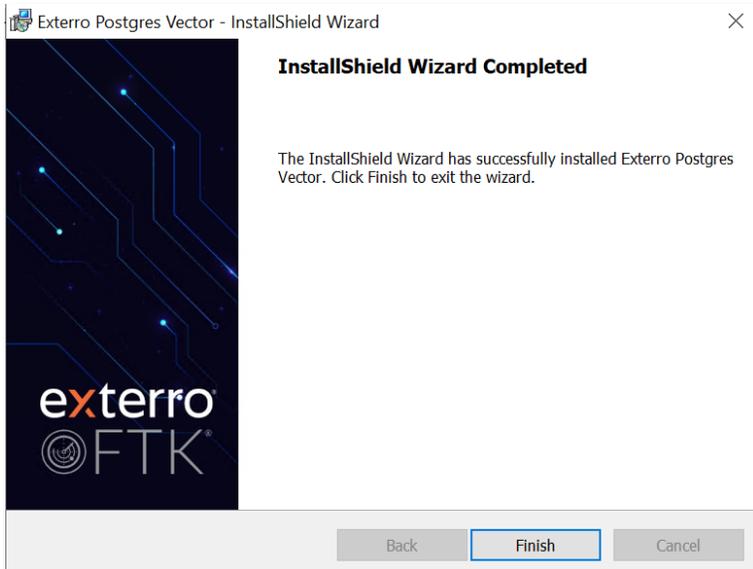
4. Accept the License agreement and click **Next**.

- The following page is displayed.



5. Click **Install**.

6. Once the installation is completed, click **Finish**.



5 Post-Installation Configuration

5.1 Connecting AI Server to FTK Central

Scaling AI servers horizontally distributes processing workloads across multiple machines, improving job throughput and system responsiveness. The FTK Central server manages load balancing among the AI servers configured for the build. FTK Central processes AI jobs in batches rather than sending all selected objects at once.

For each batch, FTK Central first attempts to assign the job to the primary AI server. If that server's GPU resources are unavailable, the batch is forwarded to the next server in the configuration sequence. This selection process continues in a round-robin manner for subsequent batches to ensure an even distribution of workloads. Each AI server processes its assigned jobs independently and operates without awareness of other AI servers.

Follow the steps provided below (Method 1 or Method 2) for connecting AI Servers to the **FTK Central**:

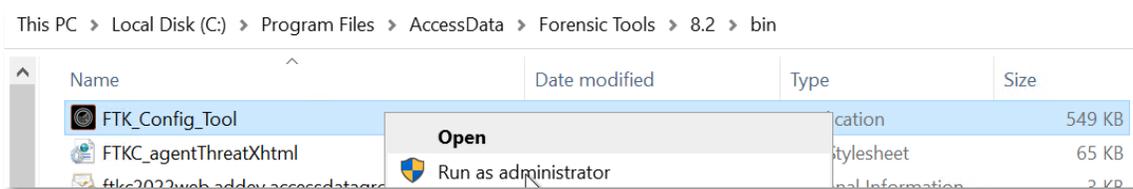
Method 1:

Steps:

1. On the FTK Central server, navigate to:

```
C:\Program Files\AccessData\Forensic Tools\8.2\bin\
```

2. Locate the file named **FTK_Config_Tool.exe**.
3. Right-click on the file and select **Run as administrator**.



4. In the configuration tool interface, locate the field labeled **Tensorflow Server Host**.

The screenshot shows the FTK Configuration Tool interface with the following sections and fields:

- Web Configuration:**
 - Enable Web UI:
 - HTTPS:
 - Port: 443
 - Host: [text field]
 - PFX Certificate: C:\Program Files\AccessData\Forensic Tools\8.2\bin\exterro [Browse...]
 - Product Type: Forensics
 - Authentication Method: Internal authentication only - Forms
 - Min. Password Length: 8
 - Max. Login Attempts: 5
 - Failed Login Lockout Time: 60 minutes
 - Inactivity Expiration Time: 30 minutes
- Site Server Configuration:**
 - Agent Private Certificate: C:\New certs 2021\SelfSignedCert.p12 [Browse...]
 - Agent Public Certificate: C:\New certs 2021\SelfSignedCert.crt [Browse...]
 - Root Site Server Host: [text field]
 - Root Site Server Port: 54321
 - Site Server Sync Interval: 15 minutes
 - AppDB Sync Interval: 60 minutes
- MSSQL Settings:**
 - Recovery Model: Simple Recovery Model
- Collections Configuration:**
 - Use Collections Temp:
 - Collections Temp Folder: C:\ADCollections [Browse...]
 - Connector Service Host: localhost
 - Connector Service Port: 8080
- Mac Collection Configuration:**
 - Agent Check-In Port: 4446
 - Temp Folder: c:\temp
- Additional Services:**
 - Enable the KFF:
 - Cassandra RPC Address: localhost
 - Cassandra Transport Port: 9042
 - Distributed Processing Manager (DPM) Host: [text field]
 - TensorFlow Server Host: http://localhost:5000
- API:**
 - Enable API:
 - Enable Swagger:

Buttons: Reload, Save

5. Enter the endpoints for all AI servers, separated by semicolons.

Example:

```
http://localhost:5000;http://<AI_Server2_IP_or_Hostname>:5000
```

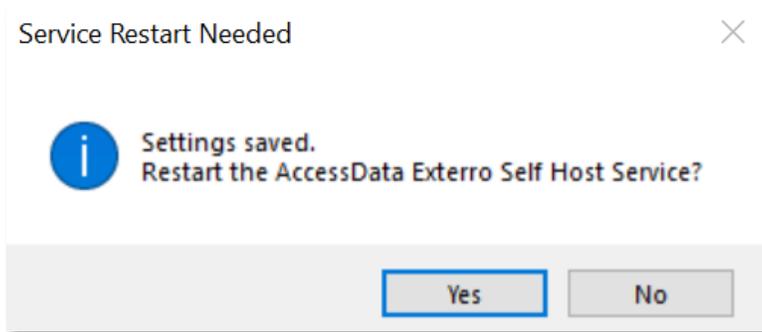
Notes:

- For **multiple AI servers**, enter the endpoints separated by **semicolons (;)**.
- For a **single AI server**, enter the endpoint directly without any semicolon.

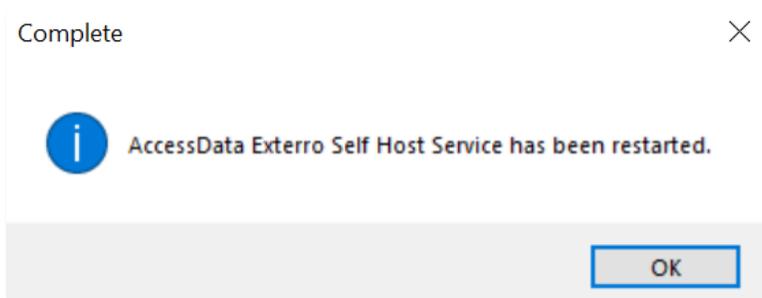
Note: If you are using hostnames in the endpoint URL, follow the steps below to establish successful communication:

- On the servers where FTKC/AI is installed, navigate to the following directory:
C:\Windows\System32\drivers\etc
- Open the **hosts** file using a text editor **with Administrator privileges**.
- Add the required IP addresses and their corresponding hostnames on separate lines in the following format:
<IP Address> <Hostname>
- Save the file and close the editor.

6. Click **Save**.
7. When prompted, click **Yes** to restart the service.



8. Click **Ok**.



9. To ensure each AI server is connected and responsive, open a browser or use a tool like curl to access the following URLs:
 - **AI Server 1:** http://localhost:5000/api/0.1/is_alive
 - **AI Server 2:** http://<AI Server2 IP or Hostname>:5000/api/0.1/is_alive

Note: The success response in the web will be displayed as below:



Method 2:

1. On the **FTK Central** server, navigate to:

C:\Program Files\AccessData\Forensic Tools\bin

2. Open the **ADG.WeblabSelfHost.exe.config** file in a text editor.

3. Locate the key:

```
<add key="TensorFlowUrl" value="..." />
```

4. Update the endpoints of all AI Servers (separate with semicolons):

```
<add key="TensorFlowUrl" value="http://localhost:5000;http://AI_server2:5000" />
```

5. **Verify connectivity** using the following URLs:

- **AI Server 1:** `http://localhost:5000/api/0.1/is_alive`
- **AI Server 2:** `http://<AI_Server2_IP_or_Hostname>:5000/api/0.1/is_alive`

Notes:

- *The AI service operates over HTTP, not HTTPS. Currently, the FTK AI service uses the HTTP protocol for communication instead of HTTPS.*
- *If you are facing any connectivity issues, check the inbound firewall rules to ensure that PostgreSQL, the AI server, and FTK Central are communicating properly.*
- *After saving the changes in the `Adg.weblabselfhost.config` file, open **Services** from the Start menu (`services.msc`), and restart the **AccessData Exterro SelfHost** service.*

Reconfiguring AI Server Database: If you need to **reset or reconfigure** the database connection:

- i. Delete the config file from the following path:

```
C:\ProgramData\AccessData\AI\config.json
```

- ii. Open **C:\Program Files\AccessData\tf\tfs\db_config\db_config.exe** to configure database configurations.
- iii. Configure the new DB configuration and click the **Initialize Database** button to reconfigure the DB configurations.

Firewall Rules: Upon successful installation:

- **Inbound firewall rules** are automatically added for:
 - AI Server on **Port 5000**
 - PostgreSQL on **Port 5432**

Contact Exterro

If you have any questions, please refer to this document, or any other related materials provided to you by Exterro. For usage questions, please check with your organization's internal application administrator. Alternatively, you may contact your Exterro Training Manager or other Exterro account contact directly.

For technical difficulties, support is available through support@exterro.com.

Contact:**Exterro, Inc.**

2175 NW Raleigh St., Suite 110

Portland, OR 97210.

Telephone: 503-501-5100

Toll Free: 1-877-EXTERRO (1-877-398-3776)

Fax: 1-866-408-7310

General E-mail: info@exterro.com

Website: www.exterro.com

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