

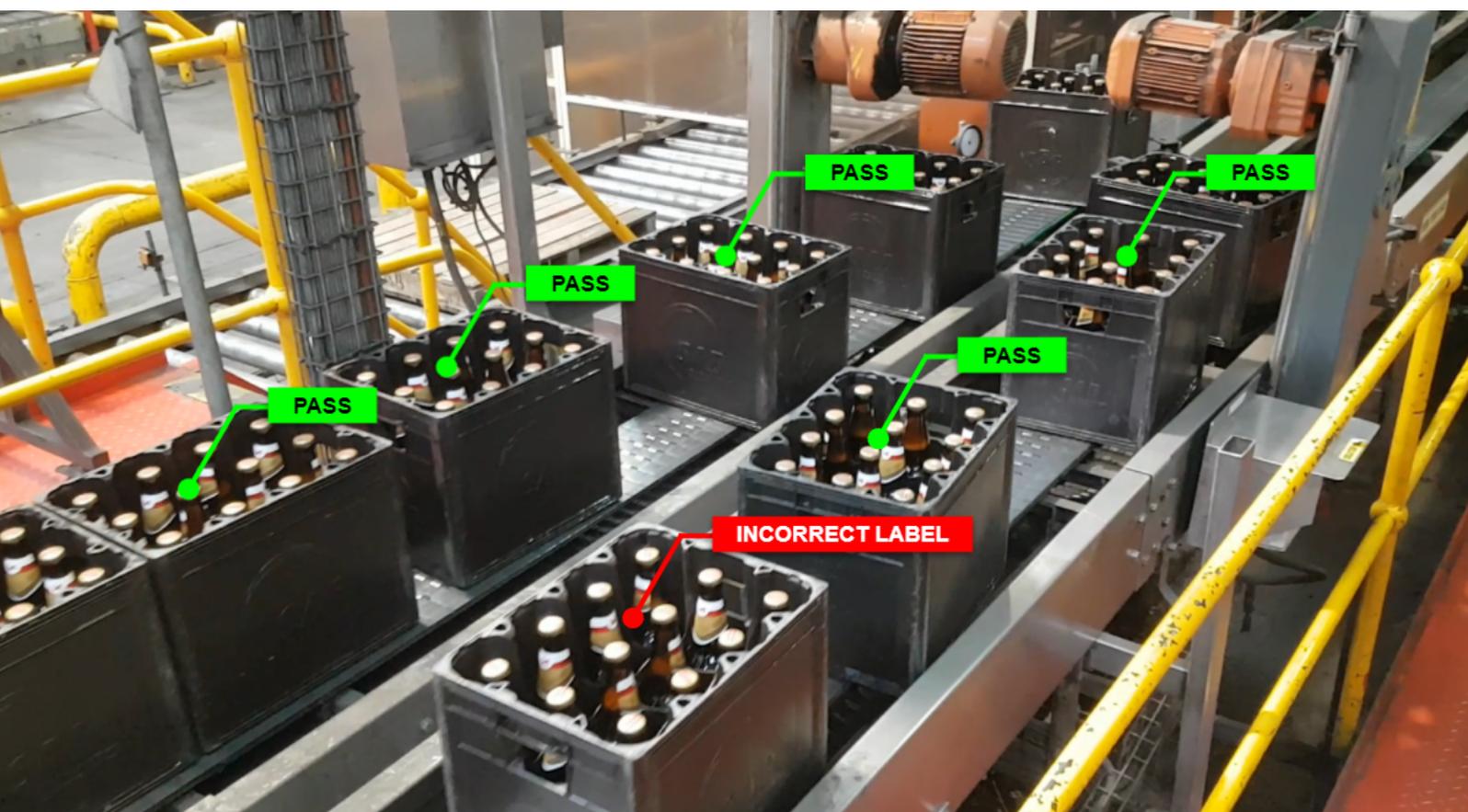
FirstStep.ai

IoT Server Application

Installation Guide

Product Version: 2021

Document Revision: 2021-10-27



A) Installation: FirstStep IoT Server

Step 1: Download the latest Server application for Windows (exe). Contact sales@firststep.ai for a download link.

Step 2: Double-click to install, we recommend using the default settings.

Step 3: After installation, the following 1 x icon should appear on your desktop. Installation is now complete.

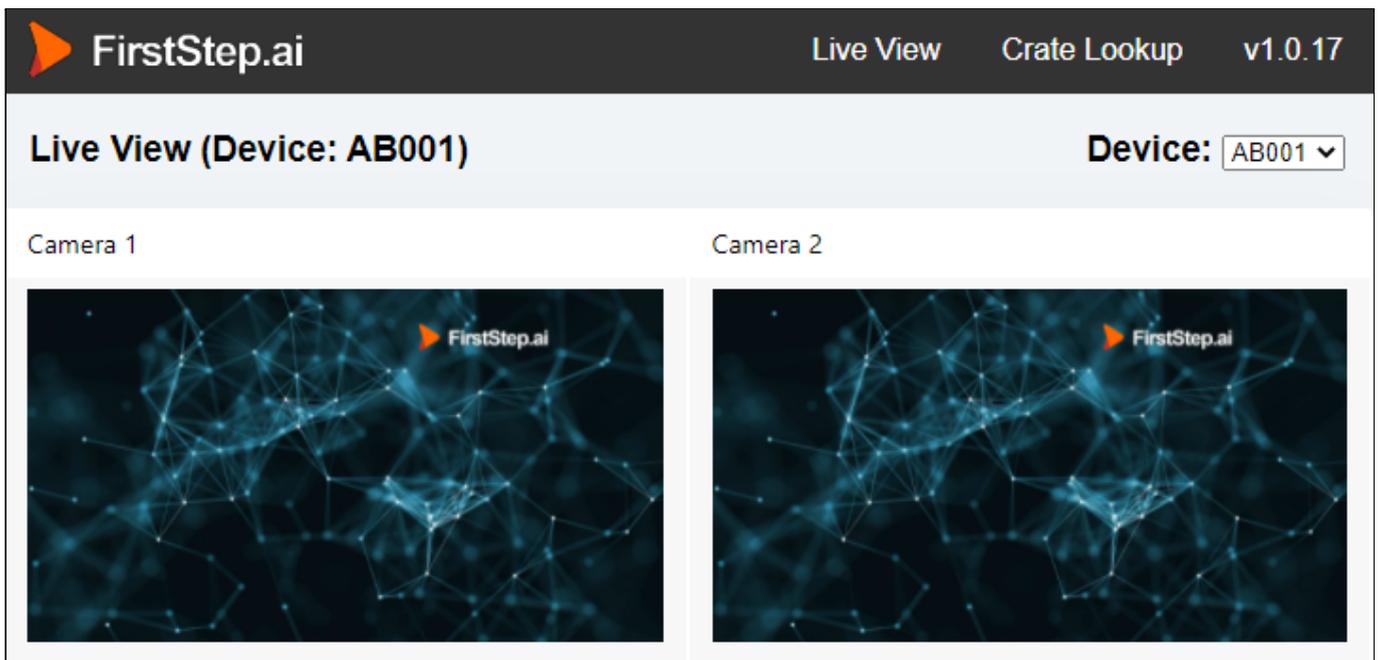


B) Running the FirstStep IoT Server

Step 1: The FirstStep.ai IoT server will appear as a Windows Service, set to start automatically after installation, and after system reboot (delayed start).

Name	Description	Status	Startup Type
 FirstStep.ai IoT Server	FirstStep.ai IoT Server	Running	Automatic (Delayed Start)

Step 2: To run the Web Interface, double-click "FirstStep Web Interface". This will open a web browser.



C) Database Support

FirstStep.ai AI Inspection Application for Production Lines supports the following databases:

1. SQLite (default)
2. Microsoft SQL Server Express

Installation: SQLite

Note: SQLite is a free database that is shipped with the software. The server application will create a database, which can be found at the following location (default location):

- C:\Program Files (x86)\FirstStep.ai IoT Server\database\dev_database.db

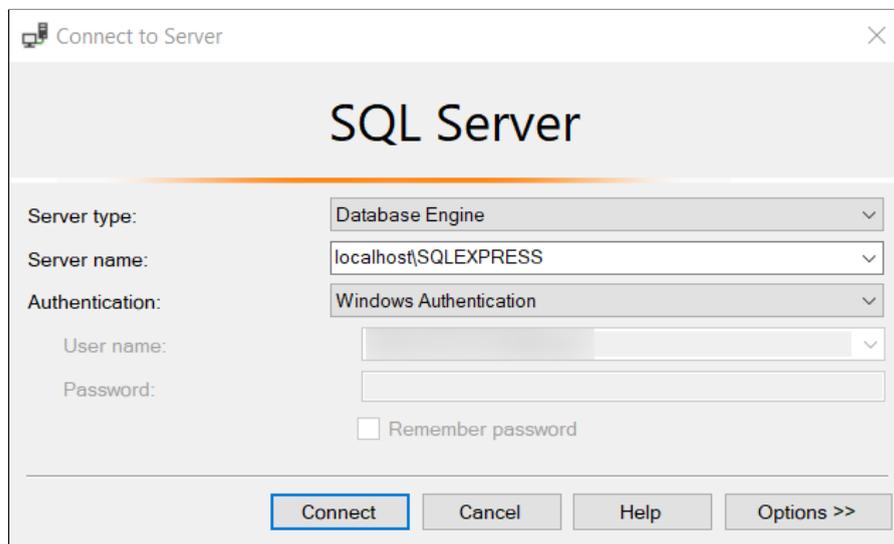
Installation: Microsoft SQL Server Express

Step 1: Download and install Microsoft® SQL Server® 2017 Express. ([download link](#))

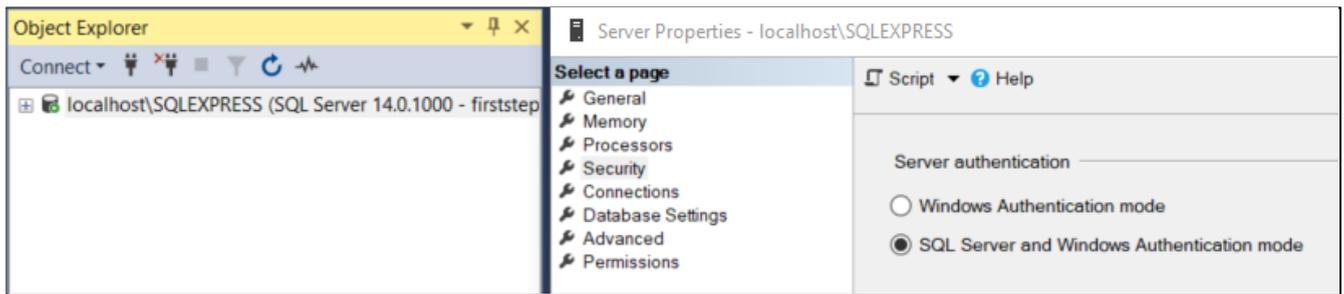
Step 2: Create a SQL Server Database (example name: localhost\SQLEXPRESS)

Step 3: Download and install SQL Server Management Studio (SSMS) 18.9.2 ([download link](#)) (642 Mb)

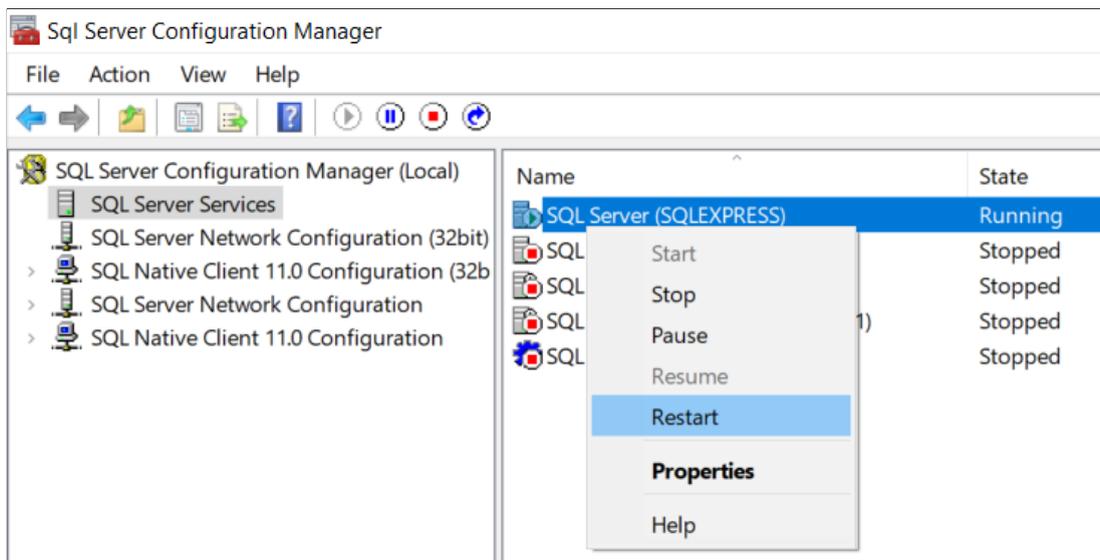
Step 4: Open SSMS and connect to the SQL Server created in Step 2.



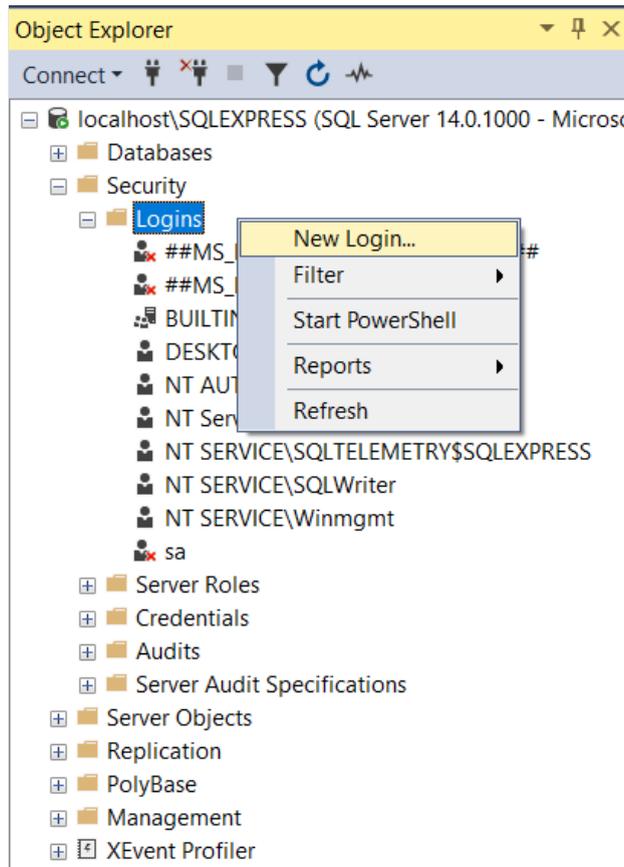
Step 5: Right-click the connection, select Properties > Security. Select “SQL Server and Windows Authentication mode”.



Step 6: Open SQL Server Configuration Manager. Navigate to SQL Server Services, and restart SQL Server.

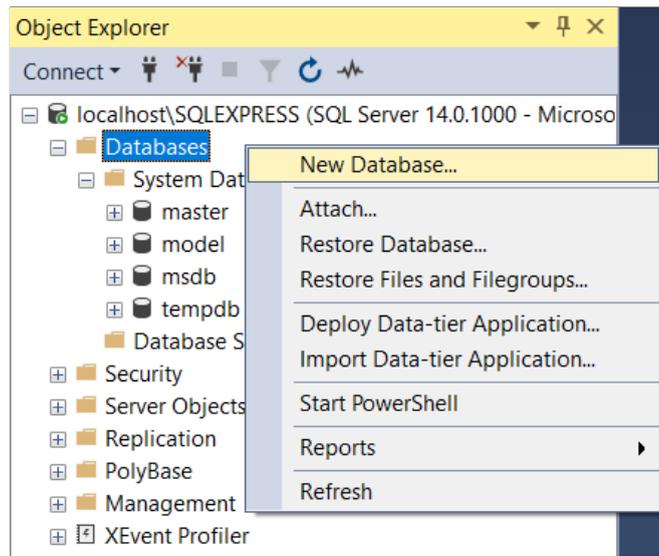


Step 7: Open SSMS. For your chosen server, open Security > Logins, right-click and select “New Login...”



Step 8: Create a new login. Recommended username: **firststep**, and password: **firststep**, and click **OK**.

Step 9: Open Databases, right-click and select “New database...”



Step 10: Give the database a name (suggested: firststep_prod) and set the Owner to the firststep Login you created in Step 5 & 6.

Database name:	<input type="text" value="firststep_prod"/>
Owner:	<input type="text" value="firststep"/> ...

Step 11: SQL Server Express database setup is now complete.

Switching from SQLite to SQL Server Express Database

By default the FirstStep IoT server will use the SQLite database. To switch the FirstStep IoT server from the SQLite database to the SQL Server Express database:

Step 1: Start the FirstStep Server application (e.g. <http://192.168.2.3:5001/>)

Step 2: Navigate to configuration by adding “/config” to the URL (e.g. <http://192.168.2.3:5001/config>).

Step 3: Select Configuration > Config File.



Step 4: Change the “db_type” from “sqlite” to “odbc” (see yellow above)

Step 5: Update the “odbc_server” to the same servername used to login to SSMS. (see green above)

Step 6: Update the “odbc_database” to the name of the database. (see green above)

Step 7: Update the “odbc_user” to the login name created. (see green above)

Step 8: Update the “odbc_password” to the password for the login name created. (see green above)

Step 9: Click “Save & Restart Server” for changes to save and reflect.

Step 10: If the save and restart was successful, the following success message should show.

Save & Restart Server Saved. Server re-started.

D) Development vs Production Servers

For development purposes, we recommend setting the “drop_and_recreate” flag to **true**. This will drop and re-create the database every time the server is restarted.

For production purposes, we recommend setting the “drop_and_recreate” flag to **false**.

```
Database > db_type options: sqlite / odbc
{
  "Database": {
    "db_type": "odbc",
    "sqlite_filename": "database/dev_database.db",
    "odbc_driver": "ODBC+Driver+13+for+SQL+Server",
    "odbc_server": "localhost\\SQLEXPRESS",
    "odbc_database": "firststep_prod",
    "odbc_user": "firststep",
    "odbc_password": "firststep",
    "schema_filename": "database/dev_database.schema",
    "db_datetime_format": "%Y-%m-%d %H:%M:%S.%f",
    "drop_and_recreate": true
  },
  "Server": {
    "post_datetime_format": "%Y-%m-%d %H:%M:%S.%f",
    "filename_datetime_format": "%Y%m%d-%H%M%S-%f",
    "logfile_datetime_format": "%Y%m%d-%H%M%S",
    "upload_dir": "upload",
    "save_all_processed_images": true,
    "max_num_images": 200,
    "ip_address": "192.168.2.3"
  }
}
```

More Information

For more information visit firststep.ai or contact: sales@firststep.ai