Ecava IntegraXor SCADA
Getting Started Guide

[Revision 6.0.1, 8/15/2017]

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Introduction

Ecava IntegraXor SCADA is a full-fledged web SCADA system that is composed of 4 components:

- IntegraXor Project Configuration File/Folder
- IntegraXor Project Editor
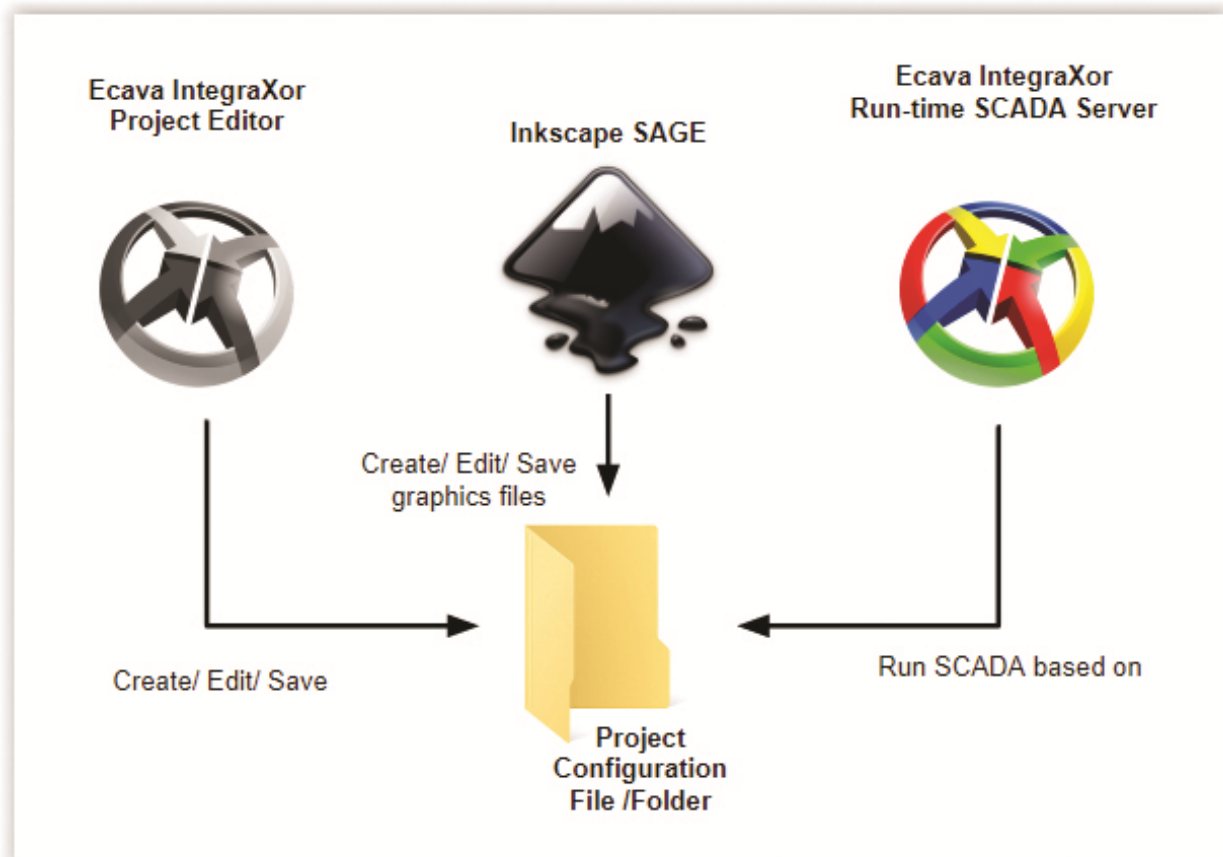- Inkscape SAGE (Graphic Editor)
- IntegraXor SCADA Server

Figure 1: The 4 main components in Ecava IntegraXor SCADA

IntegraXor Project Configuration File/Folder

A project folder is the folder which stores all the resources (For examples, HMI graphics file, web pages, configuration files, etc) for a SCADA project. Project folder can be created using Project Editor. The default project directory is Documents/IntegraXor Projects/. Upon installation, a project named "DEM0" is available in the default project directory for demo purpose.
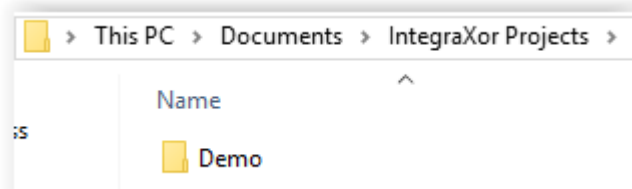
Figure 2: Default project directory path

A project configuration file is a file with a (*.igx) extension. This file can be found in the project folder. This file stores all the project configuration for the specific project. Project configuration file has the naming convention of <PROJECT_NAME>.igx, in which the <PROJECT_NAME> differs from project to project. During run-time, the run-time SCADA server will run the SCADA project based on the project configuration file.
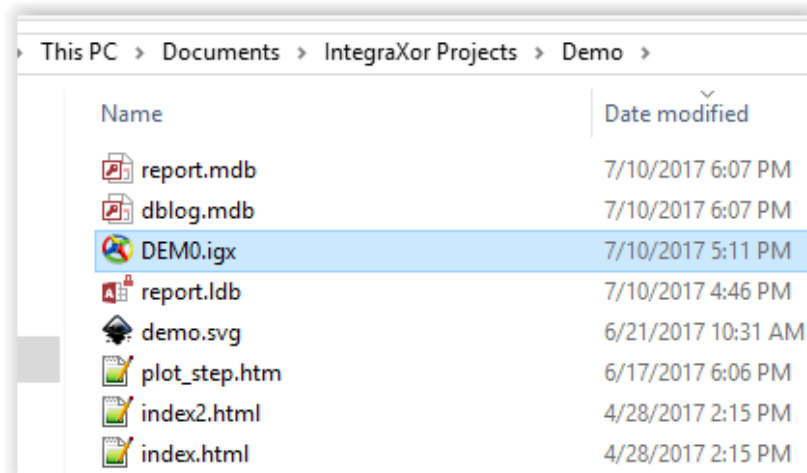
Figure 3: Project configuration file (DEM0.igx) in project folder "Demo"

Note: You can have one or more project file/folder in one PC.
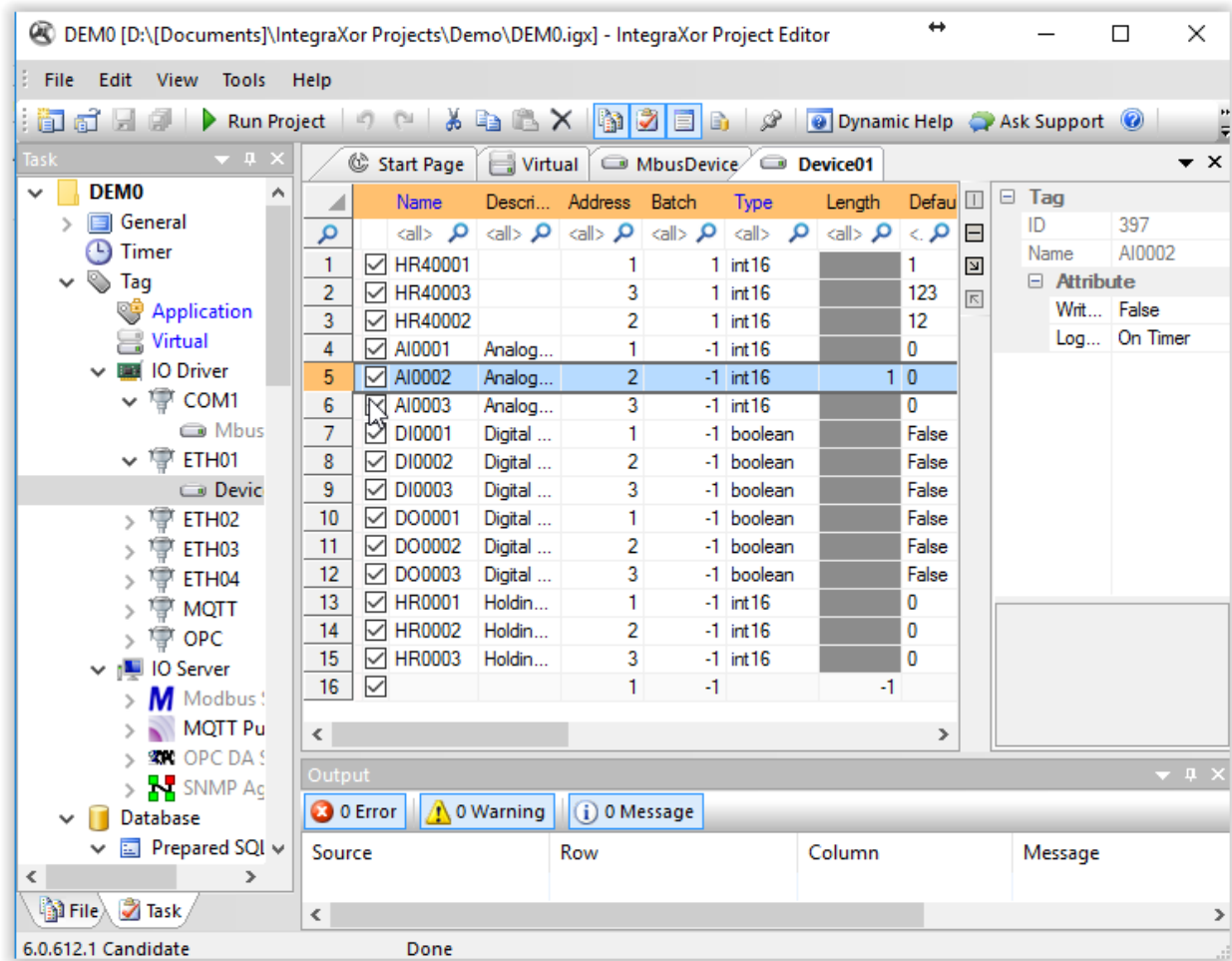
IntegraXor Project Editor

Figure 4: IntegraXor Project Editor User Interface

IntegraXor project editor is the software component that is used to create, edit, and save configuration in project configuration file. IntegraXor Project Editor can be launched by:

- Starting the program from the Windows menu.
- Open the *.igx (project configuration file) with IntegraXor Project Editor by right click and choose "Open with"

Note: You can launch multiple instances of project editor to edit/configure multiple project provided all the project has different name.
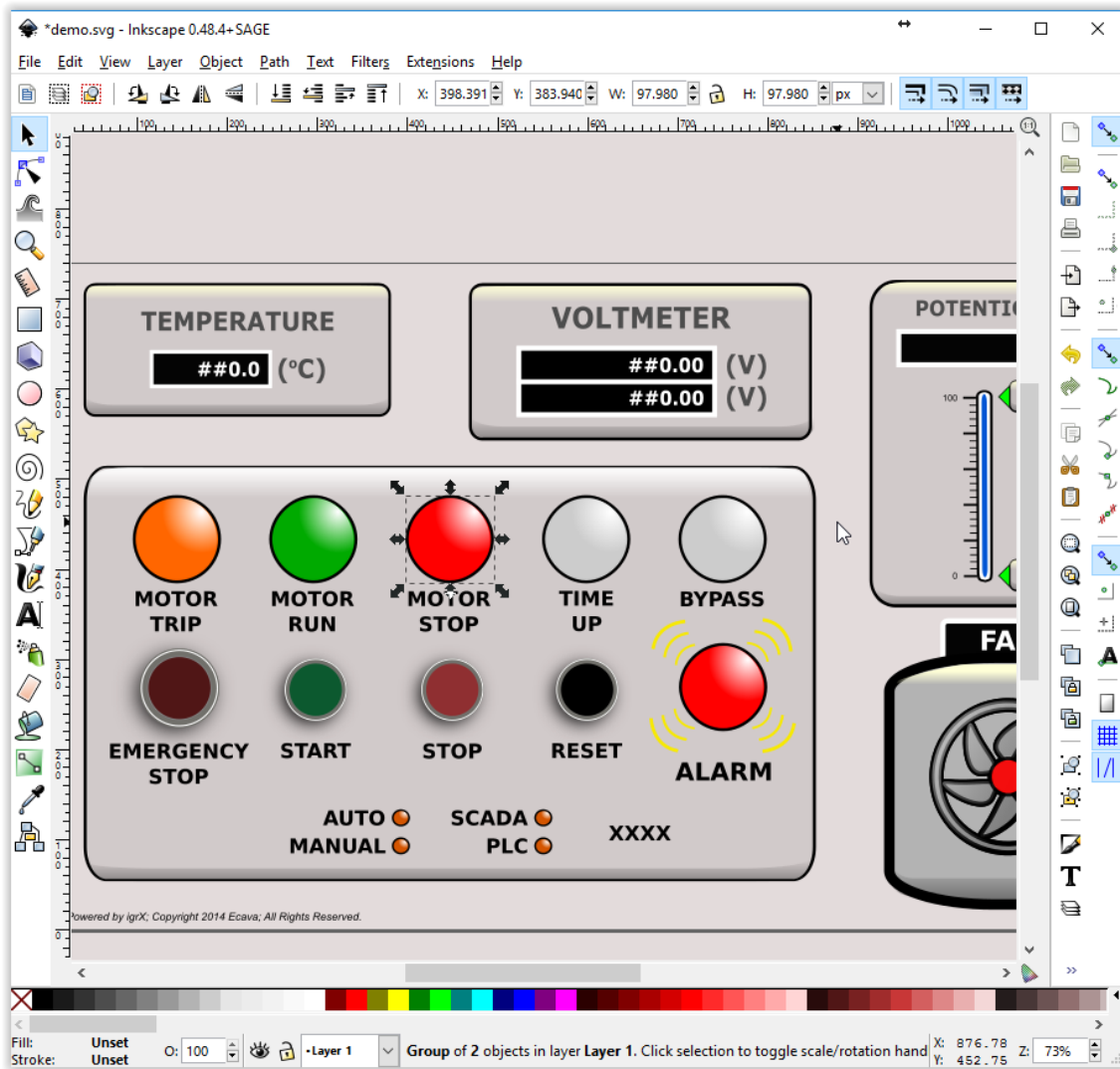
Inkscape SAGE

Figure 5: Inkscape SAGE User Interface

Inkscape is a popular free SVG Image Editor. We developed a plugin named "SAGE" on top of Inkscape to let our user to easily configure and add animation to HMI mimic screen. Hence, Inkscape SAGE is the graphic editing tool for Ecava IntegraXor for adding/ configuring animation in SVG.

Please note that there is a difference between Inkscape and Inkscape SAGE. Inkscape SAGE is the editor with our plugin. You can only use Inkscape SAGE in our system to add/ configure animation.

Note: You can launch multiple instances of Inkscape SAGE to edit multiple SVG graphic file.
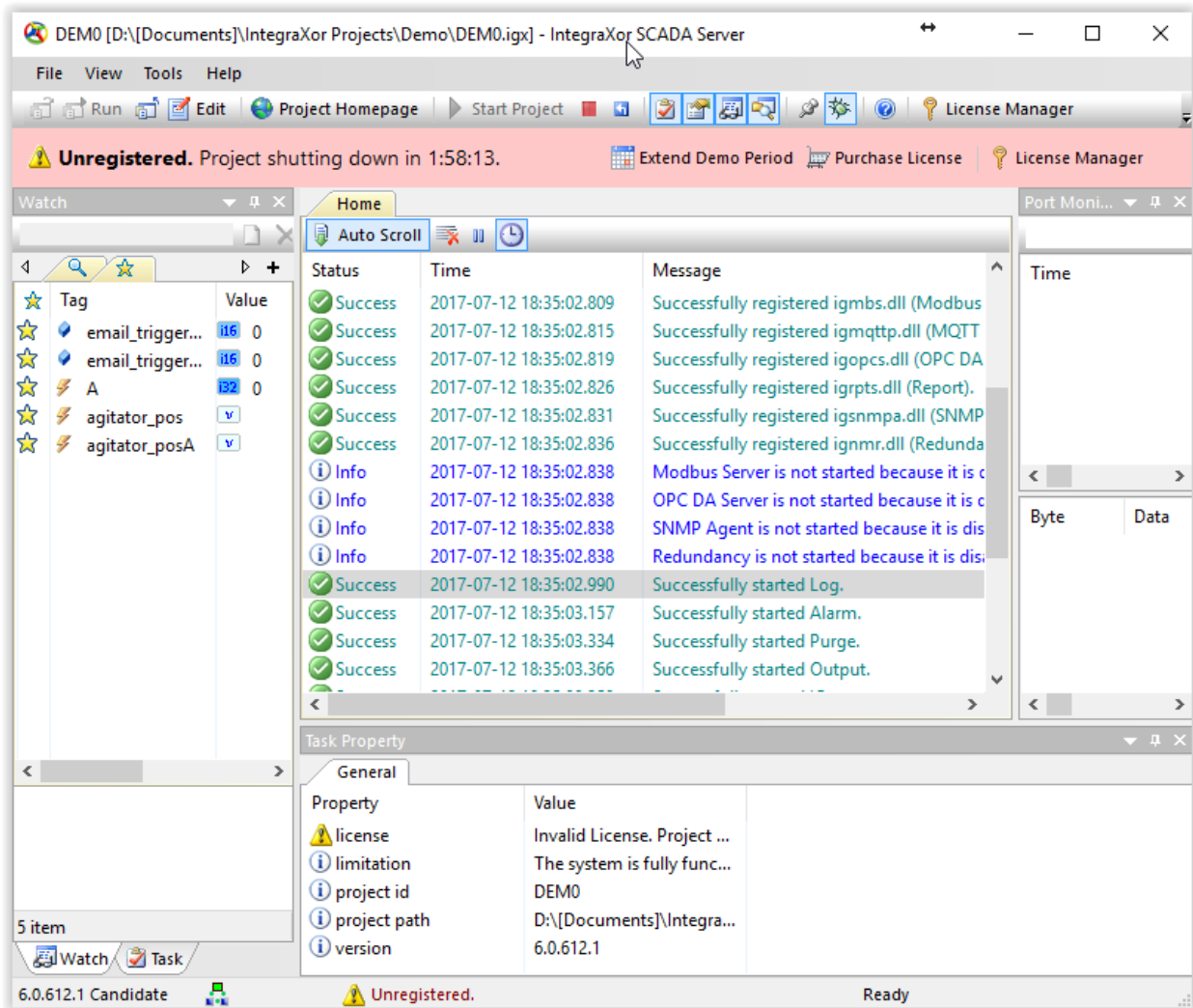
IntegraXor SCADA Server

Figure 6: IntegraXor SCADA Server

IntegraXor SCADA Server is the run-time SCADA engine. This software component has a user interface that let you monitor the run-time tasks such as logging, alarm, IO task, etc. One of the most useful feature in the Run-time SCADA Server is the live tag watch list, this feature allows user to monitor, create and edit tags during run-time.

Note: You can launch multiple instances of run-time SCADA server to run multiple project provided all the project has different name.

Downloads

1. Go to
2. Download:
   a. Run-Time Engine
   b. Development Tool

Figure 7: Download page for Ecava IntegraXor

The run-time engine consist of **IntegraXor Project Editor and SCADA Server.** The development tool is **Inkscape SAGE**.

Installation

Minimum Hardware Requirements:

Minimum CPU for 1024 I/O	Intel © Core ™ 2 @ 1.66 GHz
Minimum RAM for 1024 I/O	3 GB DDR2
Minimum HDD for run-time	30 MB
Minimum HDD for Development	300 MB

## Minimum Operating System Requirements:

Operating System – Server	Windows Server 2008 & 2012 (32/64 bits)
Operating System – Workstation	Windows XP, Vista, 7, 8, 8.1, 10 (32/64 bits)

**Note**: Ecava IntegraXor SCADA is a Windows Application, only can run in Windows.

The installation steps for both Run-Time Engine and Development Tool is very straight forward. Just follow the instruction and default selection to proceed with the installation. At the end of installation for Run-Time Engine, you will be prompt to run the DEM0 project. Choose to run it so that you can see our SCADA in action!
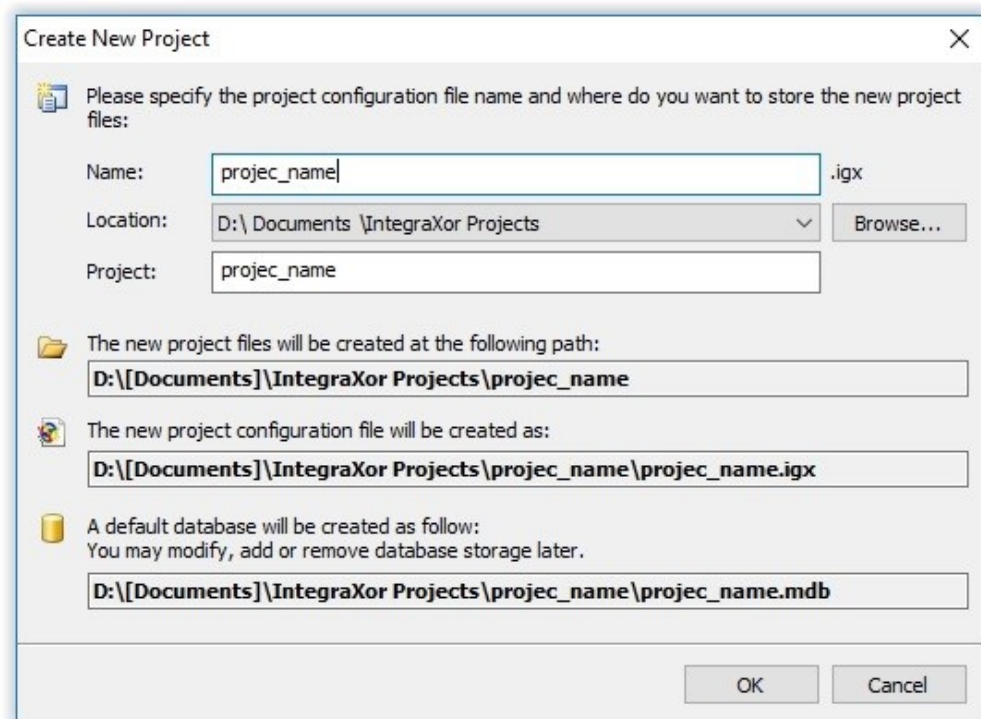
Create and Run Project

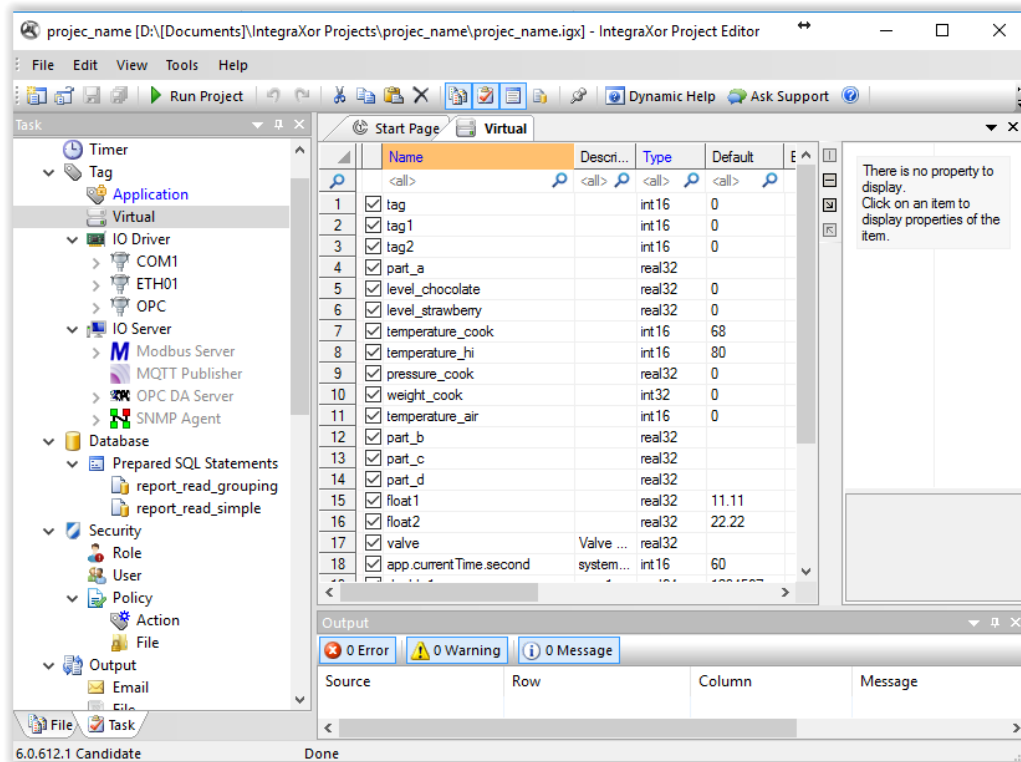1. Launch Ecava IntegraXor Project Editor from the Windows program list.
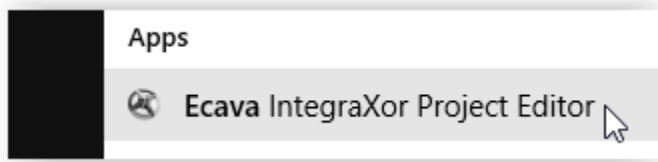
2. In the project editor, choose to **File** > **New Project** to create a new project.
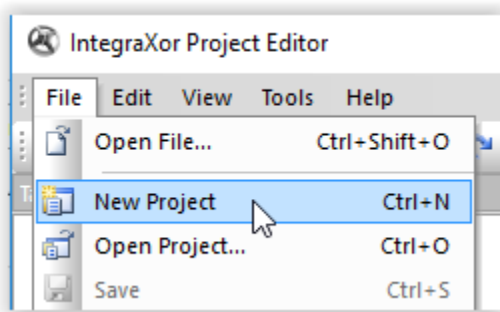

   Enter the name for your project, note that the project folder will be saved in Documents/IntegraXor Projects folder by default. Click OK.

3. The new project will be loaded in the project editor. You can edit and save the configuration using the project editor.


4. To run the project, click the "Run Project" button in the project editor. This will launch the Ecava IntegraXor Run-time SCADA Server and run the project.
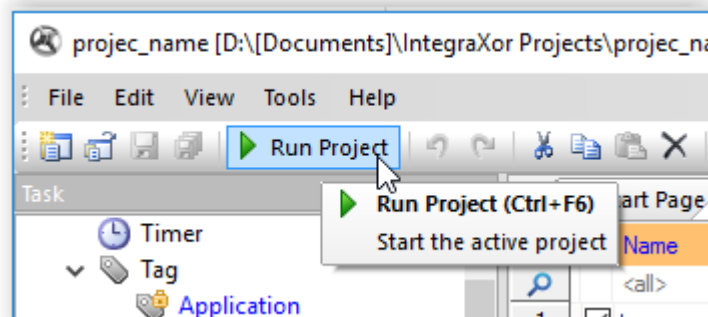
5. When the SCADA server is running a project, you can monitor the live status of the SCADA engine from the Runtime server UI.
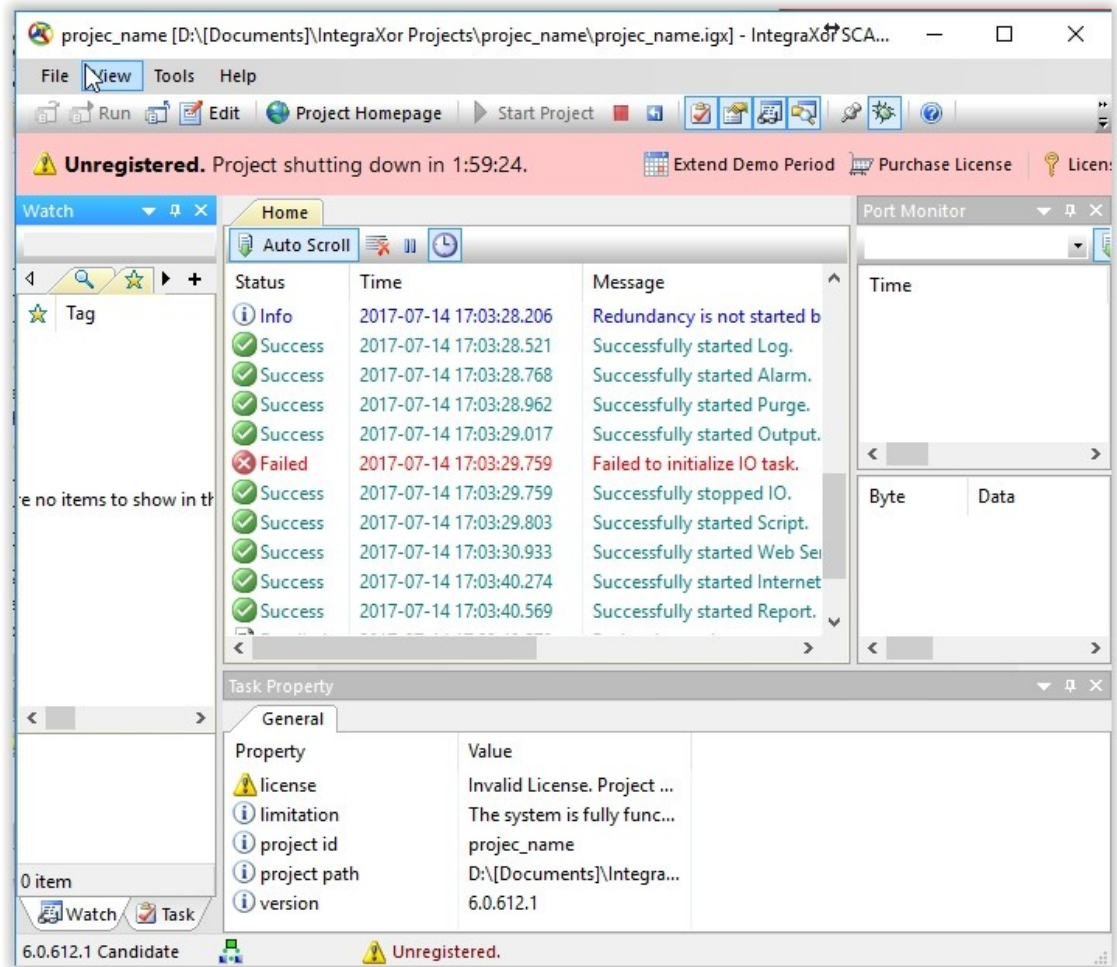
6. By clicking on "Project Homepage" in the SCADA Server, the system will launch your default web browser and show the HMI screens of the SCADA project.
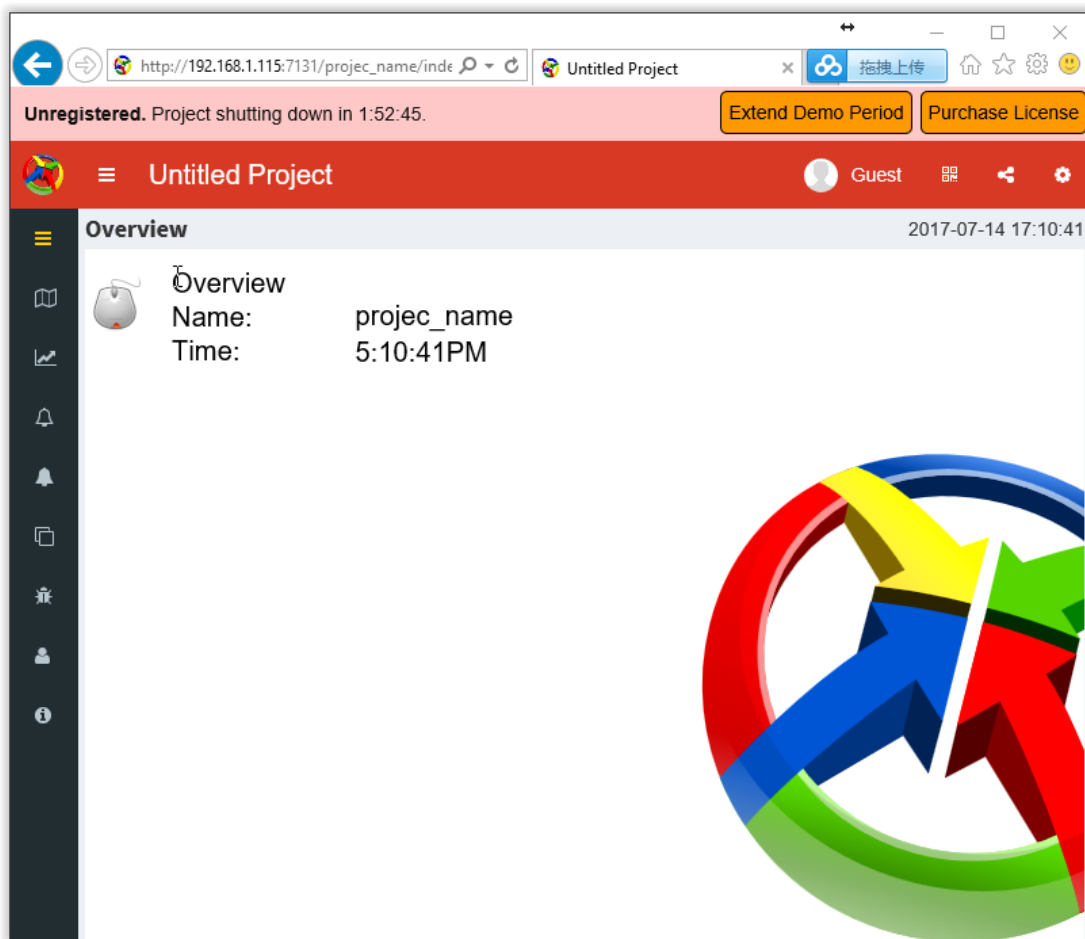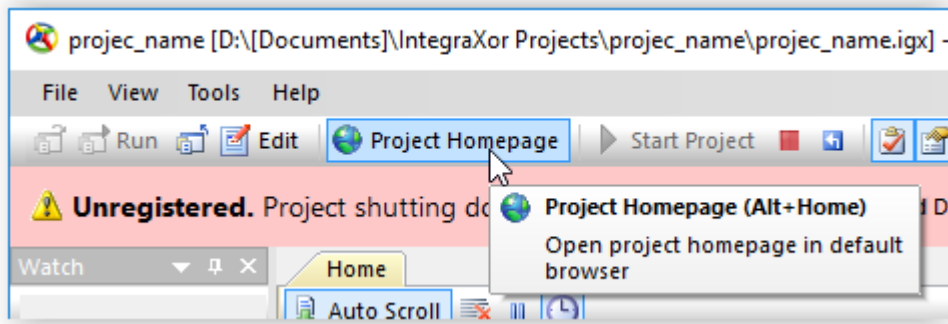
Licensing

License Price

Our software license is tied to the project file/folder. The license fee is dependent on:

1. Number of IO
2. Number of web client
3. Optional Module (Report, Redundancy …)

For more information about the license price, please email to to request for quotation.

Software Component Behavior on Licensed/Unlicensed Project

Opening an unlicensed/ licensed project with each software components will give you different behaviors, as shown in table below.

Software Component	Unlicensed Project	Licensed Project
Inkscape SAGE	It is an open source graphical editing tools with our customized plugin, it is **Free of Charge**.	
Run-time SCADA Server	If you run an unlicensed project with the run-time SCADA Server, the project can only run for 2 hours. *Note: After 2 hours, you can restart the project again to get another 2 hours run-time, you can do this unlimited times.*	If you run a licensed project with the run-time SCADA server, it can run without stopping.
Project Editor	If you edit an unlicensed project with the Project Editor, you will be able to perform all operation without disruption for the first 3 days (evaluation period). After the evaluation period, the software will start popping up dialog to prompt for annual subscription every time you perform any operation. *Note: Even without the subscription, you can still perform any operations despite the constant dialog prompt for subscription.*	If you run a licensed project with the Project Editor, you will not be seeing the popup for annual subscription.