GE_Proficy_Machine_Edition_Vuln

A PoC of GE Proficy Machine Edition 8.0

Proficy Machine Edition is a software that deploys HMI, motion, and multi-target control, providing a common user interface, drag-and-drop editing, and a rich set of development tools, widely used in Industrial Control System.

Reference: Proficy Machine Edition

This repository gives the PoC that crashes the program! If you need the details, please contect me(dliangfun@gmail.com).

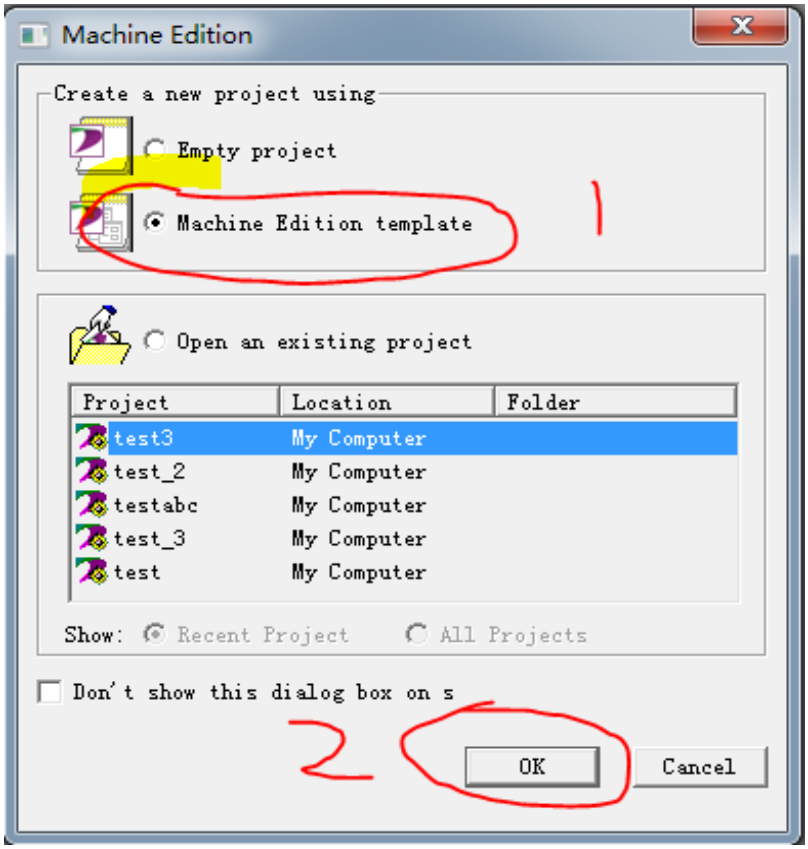
PoC deploy instruction

Proficy Machine Edition run on desktop (eg. Win7), connecting to a device such as `GE RX7i`. Attacker can exploit MITM taking control of communication traffic, but on demostration, attacker was on a role of Proxy. Therefore, `poc.py` is the attacker's program.

Steps

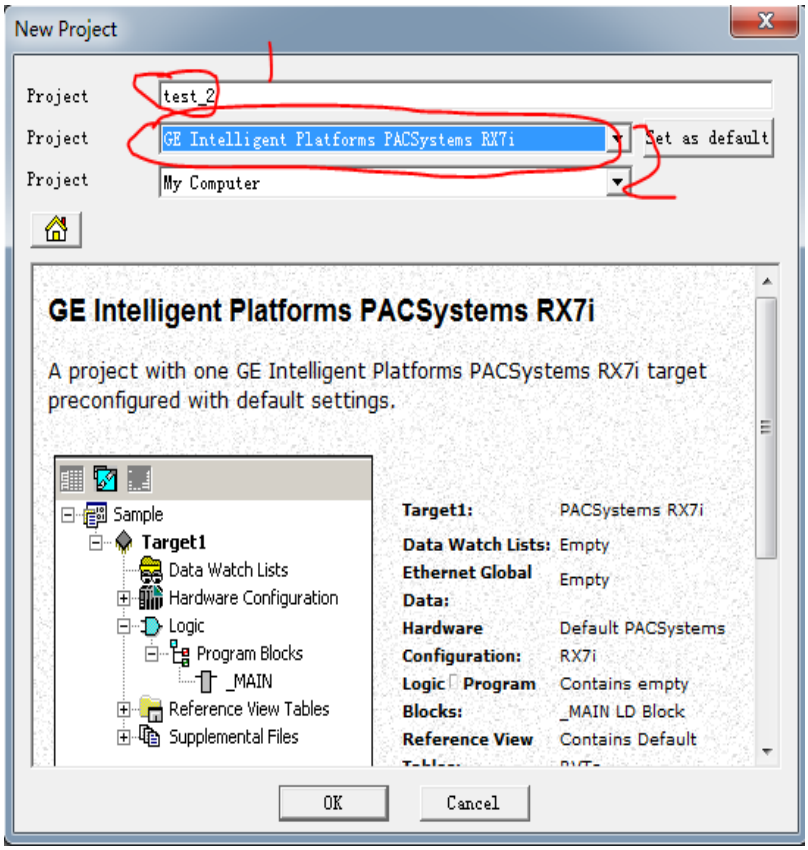
Create a new Project

- 1.Create a new project using `Machine Edition template`



- 2.Name the project as `test_2` and choose device `RX 7i`

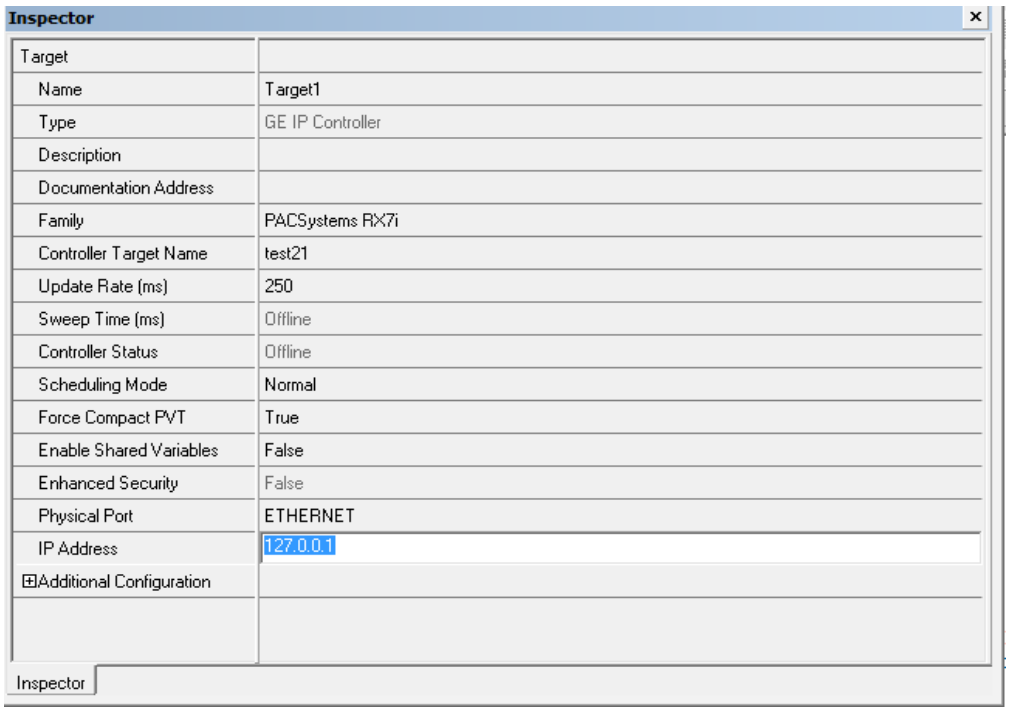
Note that the project name must be named as `test_2` for the correctly reproducing the vulnerability.



- 3.Configure IP address

  Proficy Machine Edition should be configured correct address with proxy program's IP, proxy program is act as a device.

  Set `Physical Port` as `ETHERNET` and `IP Address` as `127.0.0.1`.



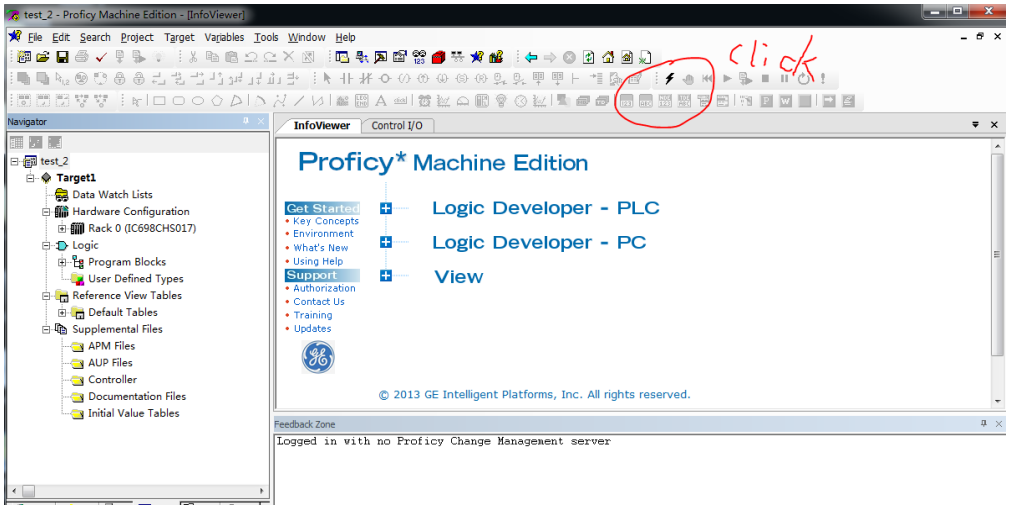
Run the poc.py

- 4.The proxy program poc.py was run, and listen to port 18245

Operate the GUI

- 5.Click the connect button as following

Operation as following:



Finally software will crash as follwoing: