

# Weapon System Support Software

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**Client:** Harlan Mitchell, Laurel Enstrom: Northrop Grumman Corporation



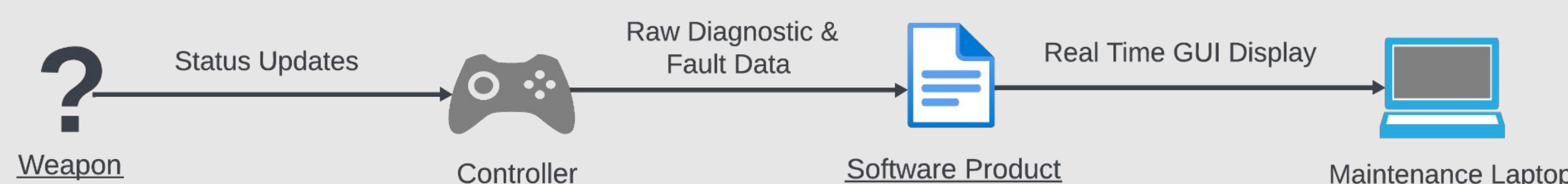
Team Controller



## Motivation

- WHO** Northrop Grumman engineers who are required to travel to diagnose their client's equipment
- WHAT** A desktop application that will allow Northrop Grumman's client's to be able to diagnose equipment without an engineer present
- WHY** This software product will save Northrop Grumman time and money when diagnosing their client's equipment

## Key Features



The software interface consists of several panels:

- EVENTS:** Lists recent events with timestamps and details. Summary: Total Events: 23, Total Errors: 12, Cleared Errors: 10, Active Errors: 2.
- STATUS:** Shows system status (STANDBY, ARMED), Triggers (ENGAGED, N/A), and Total Events (23). Includes a 'feed position' gauge and mode selection (SAFE, SINGLE, BURST, AUTOMATIC).
- ELECTRICAL:** Displays sensor and actuator data:
 

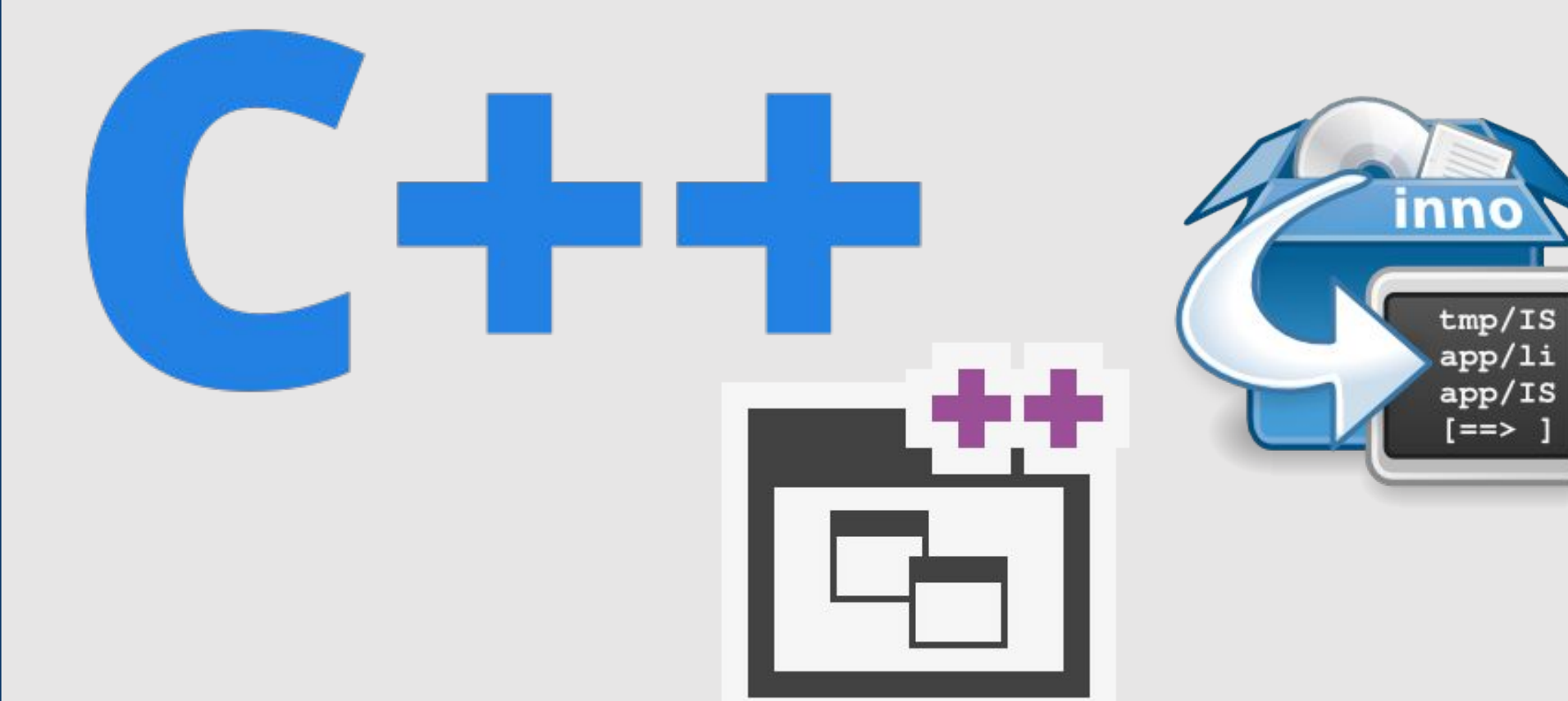
#1: Cooling motor Voltage: 220v Current: 15a	#2: Internal temp sensor Voltage: 12v Current: 20mA
#3: External temp sensor Voltage: 12v Current: 15mA	#4: Hydraulic actuator Voltage: 240v Current: 25a
#5: Servo motor	#6: Pressure sensor
- CONNECTION SETTINGS:** Configurable parameters like Port Name (COM1), Baud Rate (9600), and Stop Bits (1). Includes a DISCONNECT button.

## Inspiration

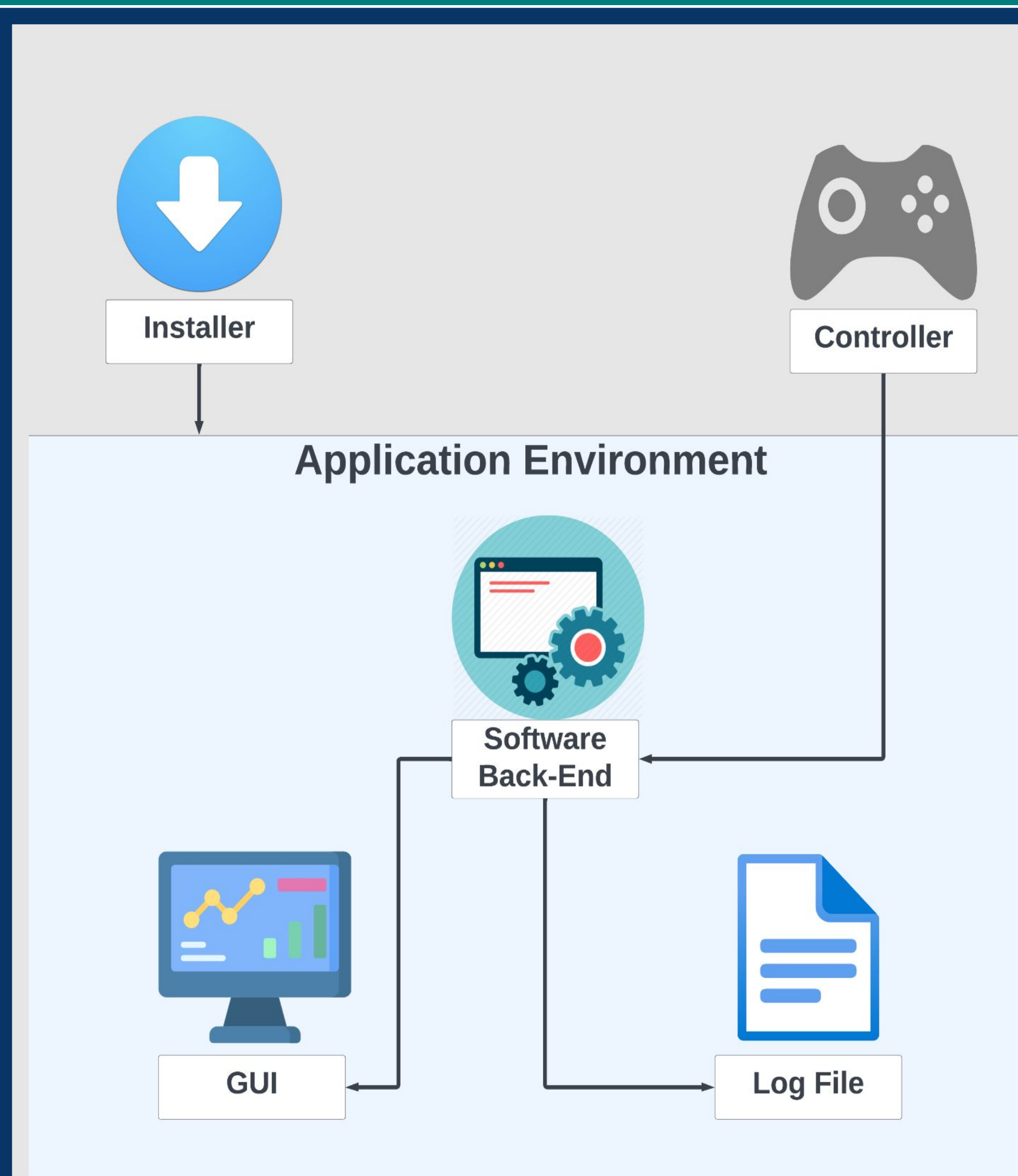


We aim to create a tool akin to an OBD2 Scanner for multi-million dollar military equipment

## Technologies Planned



## Architecture



## Timeline



## Goals

1. Simulate weapon abstracted weapon controller data
2. Send and receive the simulated data to and from the application
3. Develop a GUI to display all faults and statuses
4. Develop an installer that allows for downloads on modern Windows operating systems



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