

CASE STUDY

IHI Terrasun Solutions Automated Test Solution



AT A GLANCE

- The client had two main goals with this automation project. They wanted to create a framework that was both scalable and expandable, and they wanted to integrate the framework solution into IHI's existing testing and devops ecosystem. This was all to be completed within a 12-week target schedule.

IHI terrasun

IHI Terrasun Solutions is an energy storage system solutions provider that engaged QA Consultants to aid in the design, implementation, and maintenance of an automated test solution for their Byrd Ranch program. The framework solution tested various simulated pieces of equipment, which represented batteries, inverters, and other equipment that used the implementation.



THE CHALLENGE

The QA Consultants team had to investigate to obtain all the information needed about the scope of the project. Documents required for testing had circular language that did not always specify values, which was an added challenge. Features for security, added by the development team in the testing environments, also required extra demand from the QA Consultants team.



THE SOLUTION

The project goals were accomplished within a 12-week specified timeline – all requirements process issues were identified and documented.





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THE RESULTS

Delivered a documented, scalable, and expandable testing framework.

1

2

Transferred all knowledge to IHI Terrasun testing resources.

Integrated a new framework fully into IHI Terrasun's devops ecosystem.

3

4

Transferred all knowledge to IHI Terrasun testing resources.

OUR DELIVERABLES

Tool selection

Framework solution initial skeleton creation

Proof of Concept design and implementation

Initial battery type (CATL battery simulator) integration

Test Case Management System selection

Defined new test automation framework

Test matrix report generation implemented

Designed the communications simulation

Developed documentation and knowledge transfer documents

