

# Leader in Energy Industry Improves CMMI Level by 1.5 Points

## About the Client

A global provider of equipment and components for oil and gas drilling and production operations has embarked on a digital transformation journey to reduce costs, streamline operation, and increase organizational agility. The company has over 37,000 workers globally and \$7.3 billion in annual revenue, making it a significant player in the energy industry.

The organization has a huge range of hardware devices operated and controlled using software. A thorough software testing was needed to ensure that hardware devices and software systems are working as expected. This requires evaluation of existing software testing methods and identify gaps to streamline and automate them.

## Solving Manual and Inconsistent Testing Challenges

The organization faced challenges with inconsistent testing processes across multiple teams working on different products. Reliance on manual testing made it difficult to maintain consistent releases and ensure high quality.

“**During our discovery call, we uncovered that while testing was being conducted, it was largely manual, inconsistent, and lacked standardization. Each product team followed a different process, and fundamental elements such as standard templates for test case development, defect tracking, and test script creation were missing.**”


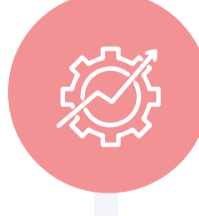






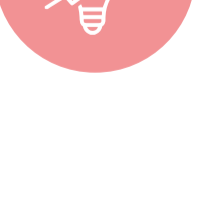
- Murali Venkata Pyla, Director of Delivery & Practices at Enhops

The organization realized the need for a dedicated QA partner to support their test automation initiatives and standardize testing processes across the organization. Enhops addressed these needs by implementing the right testing frameworks and tools and establishing a Testing Center of Excellence.

## Key Initiatives to Build a Centralized and Automated QA Framework

Enhops experts spearheaded a comprehensive 6-week discovery phase and gap analysis, blending technical assessments with in-depth stakeholder interviews. "We didn't just want to patch up the issues," says Murali Venkata Pyla, Director of Delivery & Practices at Enhops. "Our goal was to create a testing ecosystem capable of scaling with their ambitions."

The solution was twofold: implementing test automation and establishing a Testing Center of Excellence (TCoE). This approach not only addressed immediate challenges but also laid the foundation for long-term success. Key initiatives included:

- 
**Collaborating closely with their QA teams** to understand current testing activities, frameworks, and help them adopt advanced testing practices.
- 
**Implementing standardized processes and documentation** for bug tracking, test life cycles, and test automation.
- 
**Deploying matrix frameworks to monitor SLAs and KPIs** through an advanced dashboard.
- 
**Conducting regular workshops to guide teams** in adopting standardized QA processes.
- 
**Implementing standard tools** for consistent testing across the organization.
- 
**Adopting new tools such as Zephyr** for enhanced test management and reporting, and TestComplete for automation across various teams.
- 
**Incorporating Behavior-Driven Development (BDD)** to align testing with business outcomes.
- 
**Integrating test automation into CI/CD pipelines** to streamline processes.
- 
**Developing automated test** suites for both sanity and regression testing.

## Benefits of a Quality-First Approach

Through its partnership with Enhops, the organization has advanced its quality maturity and transformed its approach to automation. The strategic solutions provided by Enhops, coupled with regular upskilling and empowerment of their resources, have equipped the organization to scale confidently while maintaining compliance and enhancing their quality posture.

The organization has realized several key benefits from this collaboration with Enhops, including:




- 1 Standardization of Quality Assurance Processes:** This has led to improved communication among key stakeholders.
- 2 Improved CMMI Level:** Their CMMI level increased from 2 to 3.5 within six months, demonstrating substantial improvements in process quality and efficiency. This advancement has boosted end-user trust in the products and improved customer satisfaction scores.
- 3 Stakeholder Buy-in for Quality Excellence:** Leadership's consideration of CMMI certification demonstrated strong support for quality initiatives, potentially enhancing credibility with clients and stakeholders.
- 4 Streamlined Testing Lifecycle:** Implementation of sanity and regression test automation across teams resulted in -
  - Early identification and rectification of defects
  - Standard processes for better knowledge management
  - Significant time and costs reduction
- 5 Monthly QA Reports with Revised Matrix Frameworks:** Including SLAs and KPIs dashboards.
- 6 Happy and Productive Teams:** QA teams feel empowered with comprehensive training on new tools and processes. With Testing Center of Excellence, they have a ready go-to-resource for all their queries around adopting best practices, frameworks, and more.

## Standard Processes Drive Improvement in the Client's CMMi Levels

**After six months of close collaboration** with their engineers, Enhops successfully guided the adoption of testing best practices and standards, leading to a significant improvement in their **CMMi level—from level 2 to 3.5.**

As a result, they are now considering quality certification for improved test maturity levels.

The key test automation practices introduced include:

-  **JIRA with Zephyr for improved traceability:** This integration has strengthened the relationship between test cases, defects, and user stories. Zephyr, a feature-rich tool, is now used to extract data and create QA dashboards, complete with metrics and reports.
-  **Transition to test automation:** With Enhops' guidance, they moved from manual testing to automated processes.
-  **Implementation of TestComplete:** By adopting this automation tool across all products, the organization has realized significant time and cost savings in testing.

## About Enhops, A ProArch Company

*Enhops works at the forefront of Quality Engineering and Software Product Engineering solutions to suit the most unique business needs. Enhops was established in 2015 with a vision of driving Digital Disruption across industries through 'Quality-Engineering', 'Automation-First', and 'Smart Testing'. Our philosophy has always been to partner with our clients in their Digital Transformation journey.*

*Blending Enhops' Quality Engineering capabilities and ProArch's two decades of expertise in Software Product Engineering, we are a true partner who delivers value-based outcomes.*

**enhops**  
A proarch company

marketing@enhops.com · enhops.com

United States  
Atlanta, Georgia  
Rochester, New York

Europe & Asia  
London, United Kingdom  
Bangalore, India  
Hyderabad, India