



**ENTERPRISE
AUTOMATION**
A TETRA TECH COMPANY

PROJECT PROFILE

Automating System Platform Configuration

Sentinel Peak Resources

Client background

Sentinel Peak Resources (SPR) is an upstream oil and gas company responsible for heavy oil development and extraction. They have many sites each with numerous process areas and are geographically distributed across hundreds of miles. One of their chief priorities is leveraging technology to drive efficiency and uptime.

A key part of SPR's business is the acquisition of existing production assets, often coming with their own controls systems. However, these acquired assets sometimes lack in physical and cyber security due to their geographically remote nature.

Project background

With one such acquisition, SPR identified a widespread misconfiguration. Anyone with physical access to a touchscreen in the field access could potentially disrupt the System Platform SCADA system. These misconfigured access control settings could affect over 300,000 attributes in their AVEVA System Platform galaxy.

Even in an optimal scenario, an audit and reconfiguration on this scale would have taken a full-time employee over 4 years to accomplish. To hire out the work could have accelerated the timeline to close the vulnerability faster, but would have cost over \$2,000,000.

EA solution

Automating these 300,000+ manual configuration tasks would be the only way to make a project commercially viable. Engineers used AVEVA GRAccess toolkit to develop a custom software that would enable automated logging, validation, and updating of security configurations.

GRAccess is a developer-focused software development kit for AVEVA System Platform; it provides deep access for generating or modifying System Platform configurations at scale. GRAccess securely exposes the Galaxy object model for programmatic access to change users, groups, scripts, templates, objects, attributes, among other configurations.

Using this tool, the team went from conception to deployment of this program in under a month. Ultimately, this solution eliminated the need for manual intervention, reduced the risk of human error, and cut configuration time by over 98%.

Project Manager



**Paul
Rahmanian**

Project Technical Lead



**Joberto
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Key Insights:

- Saved the client \$2 million+ by implementing a custom program to execute cybersecurity measures
- Cut configuration time by over 98%

Key Technologies:

- AVEVA System Platform
- AVEVA GRAccess
- C#