



SirajPower's Comprehensive Monitoring Solution: Leveraging the Power of Niagara Framework with O-Insights Workspace

OVERVIEW

In recent years, software platforms and remote monitoring solutions have become increasingly important in the UAE's energy sector. These technologies have revolutionized the way that energy is monitored and managed, allowing for greater efficiency, cost savings, and improved sustainability.

SirajPower is one of the leading distributed solar energy providers in the GCC region that has leveraged software platforms and remote monitoring solutions to provide comprehensive solar solutions. By incorporating these technologies into their services, SirajPower has been able to improve the monitoring, efficiency, and performance of its systems, while also offering greater transparency and control for its customers. Through their use of advanced software platforms and remote monitoring solutions, SirajPower is leading the way in sustainable energy management in the region. This case study will highlight the benefits of these technologies in the context of a leading UAE provider of distributed solar energy work, showcasing how they are transforming the energy landscape in the region.

SirajPower is a locally owned company in the UAE that specializes in providing a full range of solar solutions, making them the first and only such company in the region. With licenses and certifications for Project Development, Engineering, Procurement, Construction (EPC), O&M, Tech Solutions, and Financing, they offer a comprehensive suite of services under one roof. They have pioneered the innovative concept of providing comprehensive financed solar solutions in the region and have established themselves as the leading distributed solar energy provider with the largest portfolio of more than **100MWp** solar assets installed, financed, and under operation. With over **190 Facilities** under operations and maintenance, SirajPower is rapidly expanding to become the regional Green Champion.

As strategic partners, Green Optima and O-Insights collaborated on a project involving off-grid hybrid power solutions for SirajPower. Green Optima, a leading system integrator and the preferred choice in the region specializes in energy savings and smart building integration. Leveraging their expertise, the team had the opportunity to work on a platform for monitoring the off-grid power station, which was based on Tridium's Niagara Framework.

SCOPE

The scope of the project undertaken by Green Optima was to provide remote monitoring power solutions and integrate them into a single platform, which was the native Niagara-based Workspace for O-Insights. The platform, based on Tridium's Niagara Framework, included features such as dashboards, widgets, history views, analytics, trends, weblinks, alarm console, alarm trends, and reporting services.

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OBJECTIVES

- To provide remote monitoring power solutions for SirajPower
- To integrate the power solutions onto a single platform: the O-Insights Workspace
- To include various features in the platform such as dashboards, widgets, history views, analytics, trends, weblinks, alarm console, alarm trends, and reporting services
- To enable effective monitoring, optimization, and performance of the off-grid power station
- To improve the efficiency and sustainability of the power systems through advanced software platforms and remote monitoring solutions

To achieve these goals, the project team used Tridium Niagara Framework.

SOLUTION

Green Optima provided the solution for SirajPower's off-grid hybrid power project by leveraging their expertise in energy savings and smart building integration. Through SirajPower's collaboration with O-Insights, a leading software provider, they were able to integrate the off-grid hybrid power solution into the O-Insights Workspace, which is based on Tridium's Niagara Framework. The platform provides remote monitoring solutions, such as dashboards, widgets, history views, analytics, trends, weblinks, alarm console, alarm trends, and reporting services. The off-grid hybrid power solution combines solar and battery power, and if both are down, a diesel generator is used as a backup. With this comprehensive platform, Green Optima, and O-Insights were able to provide effective monitoring, optimization, and performance of the off-grid power station, improving the efficiency and sustainability of the power systems through advanced software platforms and remote monitoring solutions.

THE RESULTS

The project yielded positive results, highlighting the effectiveness of the comprehensive solution provided by Green Optima, O-Insights, and Tridium. Through this innovative solution developed for SirajPower's off-grid hybrid power project, the team was able to optimize the operations performance, and efficiency of the power systems by using advanced software platforms and remote monitoring capabilities.

The integration of various features such as analytics, trends, and reporting services enabled effective monitoring and maintenance of the off-grid power station resulting in significant energy savings and a reduced carbon footprint for SirajPower. This success further solidified Green Optima, O-Insights and Tridium's position as a key players in the region. The innovative approach has set a new standard for the industry, highlighting the potential for advanced software platforms and remote monitoring solutions to drive sustainability and energy efficiency.

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FAST FACTS:

Project Type: Software Platform Implementation
Client: SirajPower, UAE's leading distributed solar energy provider in the GCC region
System Integrator: Green Optima
Partner: O-Insights
Completion Date: July 2022
Key Technologies: Tridium- Niagara Framework



“ Green Optima and Tridium have proven to be invaluable partners in SirajPower's journey, standing as one of our earliest collaborators in the successful implementation of Hybrid Dashboard Solutions for our projects on O-Insights Workspace. Over the years, their support has consistently expanded, marked by their commitment to delivering high-quality service and their continuous introduction of new and advanced technologies.

We, at SirajPower, the UAE's leading distributed solar energy provider in the GCC region, wholeheartedly endorse their services and eagerly look forward to collaborating with them on future opportunities. Their unwavering commitment to excellence and their ability to consistently deliver results make them an ideal partner for any venture. ”



Gagan Barjatya
Scada-IoT Solutions Architect- SirajPower

ABOUT SirajPower

SirajPower is a UAE-based company established by a respected local family with a strong heritage. SirajPower offers innovative solar solutions to businesses, government agencies, and commercial, industrial, and educational institutions of all sizes in the GCC. SirajPower provides comprehensive turnkey solutions combining the development, financing, construction, and operation of solar solutions. SirajPower solar energy solutions provide a one-stop solution for all energy needs and pioneered the innovative concept of offering comprehensive financed solar solutions in the region. SirajPower offers comprehensive solar energy solutions, including an On-Grid distributed solar business, an Off-Grid Power business that uses solar, diesel, and battery hybrid systems to reduce fuel consumption and operating costs, and an On-Demand Solar Energy solution, HYPR, which is the first of its kind on-demand transportable lithium-ion batteries in the UAE. SirajPower is the only locally owned company in the UAE licensed and certified to offer under the same umbrella both Engineering, Procurement, Construction (EPC), O&M, and financing solutions. For more information on SirajPower, please visit: www.sirajpower.com



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ABOUT GREEN OPTIMA

Green Optima is a well-known Platinum Tridium Partner in the UAE and an experienced system integrator delivering innovative, high-quality, economically integrated building management solutions. Founded in 2006, their experienced team has continuously delivered customized solutions embedded with the latest technologies to achieve high-performing energy and cost-saving results through advanced control and monitoring automation sequences. Green Optima is actively involved in successfully implementing integrated automation solutions in the government and private sectors for retrofit and ESCO companies. It has proven ability to deliver BMS solutions with speed, tech-savvy flexibility and cost-efficiency as evidenced by its impressive project portfolio. Additional information about Green Optima is available at www.greenoptima.ae

ABOUT TRIDIUM

For over 20 years, Tridium has led the world in business application frameworks — advancing truly open environments that harness the power of the Internet of Things. Our products allow diverse monitoring, control, and automation systems to communicate and collaborate in buildings, data centers, manufacturing systems, smart cities, and more. We create smarter, safer, and more efficient enterprises and communities — bringing intelligence and connectivity to the network edge and back. Additional information about Tridium is available at www.tridium.com

ABOUT O-Insights

O-Insights for Niagara is a comprehensive software solution that offers dynamic reporting, an agile workspace, alarm monitoring, and analytics capabilities. Specifically designed to work with Niagara N4 and Niagara Analytics, O-Insights provides powerful visualization and essential insights into building management system data. The platform's advanced features, such as real-time data monitoring and reporting, enable building managers to make informed decisions and quickly address issues. With its user-friendly interface and customizable dashboards, O-Insights offers a seamless experience, making it a preferred choice for building management solutions. Its advanced analytics and reporting capabilities enable building managers to optimize performance, reduce costs, and improve energy efficiency, making it a critical tool for the energy management sector. Additional Information about O-Insights is available at www.conexaotechsolutions.com

Green Optima
PO Box 115858
Dubai, UAE

Phone: +971 4 5667544
E-mail: bms@greenoptima.ae
Web: www.greenoptima.ae



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