VROC OASIS is an IoT Platform, for real-time monitoring, remote operations and automation.

OASIS Standard Product Features

- Standard SCADA functionality and dashboard interface allowing customers to monitor and control remote assets
- Web SCADA HTML5 interface for viewing on any browser
- Mobile, Tablet and PC responsive
- Similar to legacy desktop SCADA applications
- Local operator panel with basic controls
- Track moving or stationary assets on a map view
- Visualize a process flow
- Email/SMS alerts and alarms with escalations
- User-configurable daily email reports
- Easy access to historical data and reports
- Full audit logs for traceability of user actions
- Granular permission system with user groups for different user types and equipment/facilities/access
- Configurable dashboards and analytics. Dashboards can be easily templated or shared across the organization
- Users with sufficient permissions can add equipment (pumpstations, cameras or other equipment)
- Single sign-on authentication
- On-line chat and ticket management for remote operations teams

OASIS Product Specifications

- Microservices within VROC's big data processing cluster providing ease of portability from VROC's Datacentre to the customers cloud (either private or public cloud)
- High system availability with automatic fall over in the event of hardware failure or increased system load
- OASIS combines Industrial IoT (IIoT) big data ingestion and processing capabilities combined with artificial intelligence for advanced real-time analytics
- OASIS supports over 30 industry standard protocols including Modbus and BACNet
- OASIS also supports OPC DA which is an open standard for communications with industrial devices, allowing for the easy incorporation of additional equipment and infrastructure
- VROC has in-house developers that can code custom integrations with other equipment and vendors as required.

OASIS System Integrations

OASIS is designed to be interoperable with your existing systems:

All infrastructure, including but not limited to
- Small Package Plants
- Water Management: Waste, Desalination, Processing
- Facilities: Lighting, HVAC, Lifts, BMS, Access, Security
- Renewables: Solar farms, Wind turbines
- Power Generation: Pipelines, Compressor Stations.

Real time and historical data import sources:
- Active Directory services for user authentication

Customer system integrations for the export of data and analytics
- ERP
- CMMS
- EMMS
- Power BI
- APM
- Digital Twin Visualizations

VROC System integrations:
- OPUS – for no-code AI modelling
- DataHUB4.0 – for data visualization and dashboarding

Advanced Control Features & Use Case

- Advanced control allows OASIS to use all available data to provide real-time recommendations or perform actual control functions.
- Advanced controls allow OASIS to carryout tasks such as dynamically adjusting lighting levels or the timing of equipment operating (such as HVAC and water pumping) to maximize the use of renewable energy while still ensuring that the purpose of the equipment is maintained
- Use Cases: HVAC still provides the level of comfort while reducing power consumption. Water is pumped at specific times of day to ensure there is no risk of overflow but the power cost is minimized.
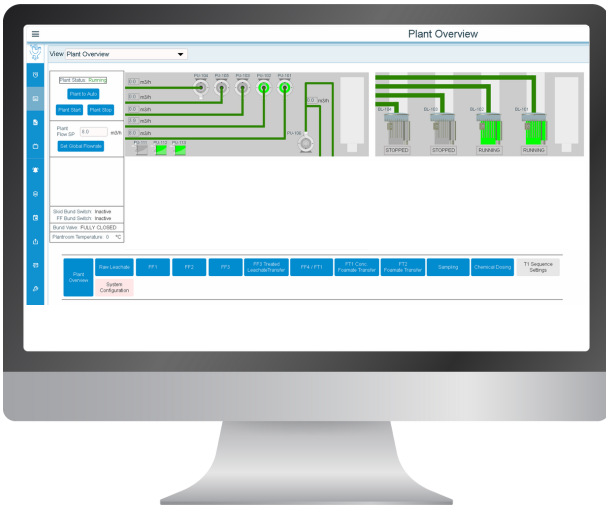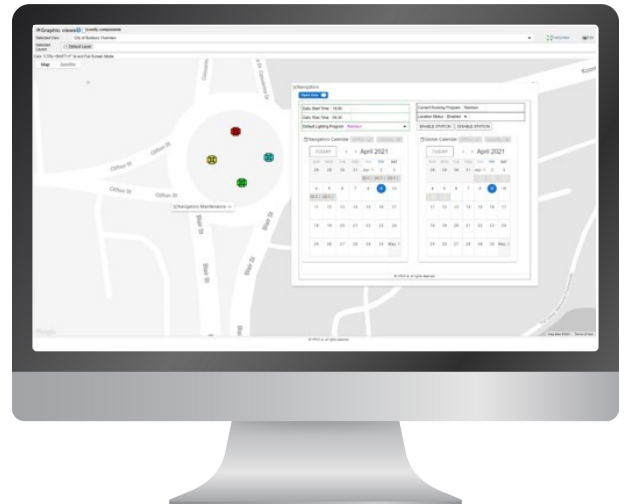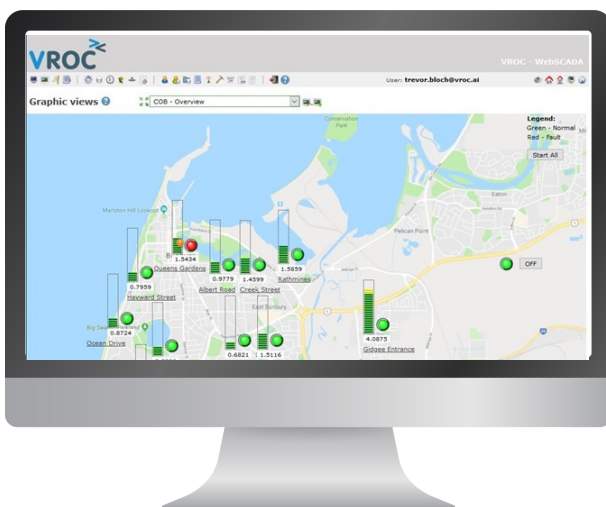
Plant Overview

Image showing Train 1: Chemical Dosing

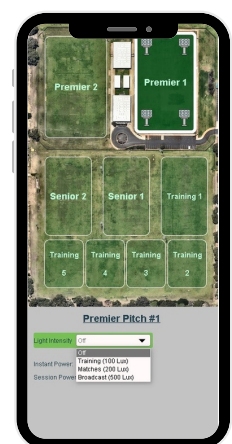Process flow showing details of the condition of each asset

Interface for scheduling decorative lighting sequences

Maps view showing stormwater pumps and their current status

Mobile view of interface to control sporting field lights

Mobile view of interface to control lighting intensity at sporting field

For a quote to deploy OASIS within your enterprise, contact the team at VROC.AI