ATLAS
Operational Technologies

Your Operations,
Only Better.

Statement of Qualifications

Electrical, Instrumentation, and Control Engineering, Programming, Integration & Support

Atlas OT's team has over **100 years of engineering and technical services** supporting industrial and building automation and control systems. Atlas OT is your **Master System Integrator** supporting integrations of **all major control platforms** from the factory floor, to the executive dashboard.

Atlas OT advises and deploys systems that at **CapEx Conscious and OpEx Optimized** - ensuring the best ROI of your facility. We are proud to support End-users, Engineering Firms, Contractors on new builds, modernizations, and break fix support.

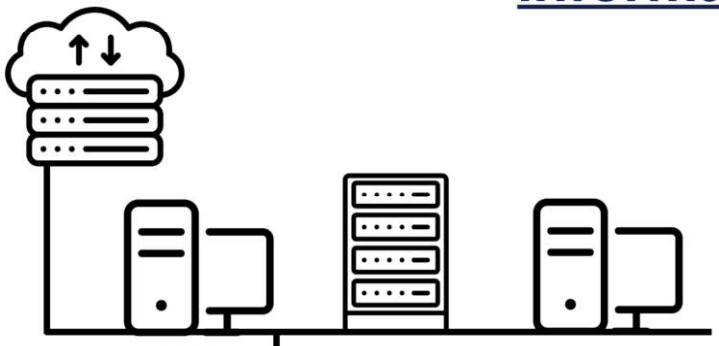
Info@atlas-ot.com
www.Atlas-OT.com
7173 S Havana St Ste 600-81
Centennial, CO 80112

What is Operational Technology?

Operational Technology (OT) to the control systems that monitor and control physical processes and equipment. As a System Integrator, Atlas OT supports design, programming, procurement, and commissioning for these systems as well as long-term onsite and remote support for these assets.

Atlas can also support OT/IT integration with secure data transfers to the IT stack, and providing real-time executive dashboards.

Information Technology (IT)

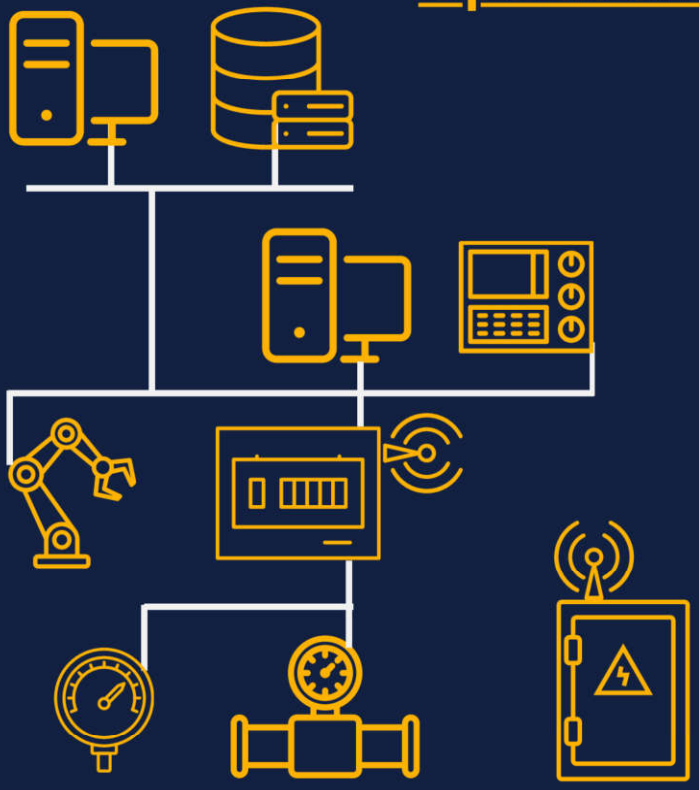


Level 5 — World Wide Web Cloud, Vendor Access

Level 4 — Business Systems, ERP, Modeling

Level 3.5
DMZ - Firewall

Operational Technology (OT)



Level 3 — Batch Management, MES, ERP, Cental Gateways

Level 2 — HMI, SCADA, Local Historian

Level 1 — PLCs RTUs, Intelligent Devices

Level 0 — Phyiscal Layer Devices Sensors, Actuators

Why Atlas OT?

Our **partnership approach** with end-users, engineering firms, contractors, and even competitors promote **win-win outcomes**.

Our experienced staff has **over 100 years** of experience in control systems across platforms and industries.

Atlas OT supports both Capital Expenditure projects and Operational Expenditures for ongoing support such as troubleshooting and updates. Like our clients, we understand the importance of building right the first time, with operations in mind. **CapEx Conscious and OpEx Optimized** to insure the best Return on Investment for projects.

SBE Recognized NAICS

- 541511 - Computer and Robot Programming
- 541512 - System and Network Integration
- 20628 - Computer Systems, Process Control
- 221121 - Electric Power Control

Our Services

- Automation Consulting and Design
- EI&C Drafting and Design
- Industrial Cybersecurity
- Control System Integration
- Control Panel Design and Procurement
- RTU / PLC Programming and Logic Testing
- HMI and SCADA Design and Deployment
- DCS Systems and Integration
- Electrical Gear and Panel Design and Procurement
- Project Management
- Lifecycle support of control systems
- Managed/Hosted SCADA and Telemetry
- Staff Augmentation
- Environmental Data Compliance Integration

Our Leadership

Principal

Aaron Pfeifer

Project Management & Solution Architect

Aaron brings diverse expertise across industries and platforms in industrial control systems, project management, and control and electrical panel manufacturing. A Colorado School of Mines alumnus with a BS in Chemical Engineering, he has a proven track record in system architecture, industrial networks, UL panel fabrication, and modernizing control platforms. His skills span PLCs, SCADA, DCS, ERPs, CMMS, BAS, and custom software development, with deep knowledge of both branded technologies and tailored business system integrations. Aaron is keenly focused on client ROI for their investments, strategic partnerships, and collaborative project execution.

VP of Automation

Tyler Franzen

Principal Controls Engineer

Tyler Franzen is a skilled Automation and Controls Engineer with extensive experience in designing, programming, and implementing control systems across various industries. His expertise began with Emerson DeltaV DCS Implementations and includes engineering design, architecture, programming, and commissioning for PLC, SCADA, BAS, and DCS systems. Tyler has become a leading authority on Emerson FB3000 Flow Computers, developing custom programs for one of the world's largest oilfield producers across dozens of facilities. He is also well-versed in Consent Decree compliance and Advanced Process Control. His key industry expertise spans Energy, Food and Beverage, Life Sciences, and Building Automation.

Technology and Partnerships

As a brand-agnostic integrator, we've built partnerships with the very best industrial automation Original Equipment Manufacturers (OEMs) to provide scalable delivery, special pricing, and technical support directly from manufacturers.

Industries Served

Cross-industry experience has given extensive perspective to the Atlas OT team, giving you access to new technology insights, as well as tried and true best practices.

Oil and Gas Experience:

- Down Stream Refining
- Midstream Compression and Pipeline
- Upstream Wellpad Controls

Water / Wastewater Experience:

- Aquifer Storage and Recovery System
- Water Reclamation Project
- Wastewater Treatment Plant SCADA Upgrade
- Wastewater SCADA Migration
- Headworks Modernization
- Staff Augmentation (Multiple)
- Chemical Precipitation Water Treatment:

Food and Beverage Experience:

- Bun and Muffin Bakery
- Kombucha Fermentation and Bottling
- Brewery Virtualized Distributed Control System and Brewing
- Health Supplement Packager

Specialty Industries:

- Materials Handling
- Building Automation
- Aircraft Brake Manufacturing
- Battery Recycling
- Mining and Industrial Water Treatment

Discipline	OEM Brand	Technology Platform
RTU / PLC	Emerson	Fisher ROC 800 FB 3000 PAC Systems
	Allen - Bradley Rockwell Automation	RS5/500/5000 PLC-5 SLC MicroLogix CompactLogix ControlLogix
	Scheider Electric	Modicon M340, M580, Quantum, 984 SCADAPack
	ABB	TotalFlow SpiritIT
	Siemens	S5 S7 ET200
OIT / HMI / SCADA	Allen-Bradley / Rockwell Automation	FactoryTalk View SE
	Scheider Electric	AVEVA Wonderware InTouch Wonderware System Platform Magellis PanelMate Proface
	Scheider Electric	Modicon M340, M580, Quantum, 984SCADAPack
	ABB	
	Siemens	WinCC
	Inductive Automation	Ignition Vision Ignition Perspective
	Red Lion	Crimson FlexEdge Graphite
	Beijer	iX Developer X2 WebIQ
	Other	Cygnet
DCS	Emerson	DeltaV
	Siemens	PCS 7
	Rockwell Automation	PlantPAx
NETWORK AND DATA CONSOLIDATORS	Beijer Pheonix Contact Red Lion Hirschmann TosiBox Cisco	Protocol Conversion Wireless connectivity Cellular OPC UA, MQTT Modbus, BacNet, Profinet, HART, Fieldbus, DeviceNet
VIRTUALIZATION	VMware ESXI Hyper-V	
CONTROL AND ELECTRICAL PANELS	ISO	9001:2015
	UL	67, 508A, 698A, 891, 1008
	Capabilities	Control, PCBA, Low Voltage Electrical, Switchgear, Panelboards, Sheet Metal Fabrication

Experience:

Oil & Gas

ATLAS Operational Technologies

Downstream Refining:

Extensive experience with DeltaV DCS migrations, upgrades, and support for facilities up to 67,000 barrels/day. Migration to remote IO platform and software updates, including custom open panel design and fabrication in compliance with refinery grounding standards (over 10,000 IO points) over several years.

- Deployment of virtualized control systems for online facility including software upgrades
- Deployment of over 36 nodes utilizing VRTX hardware with Hyper-V virtualization system
- Multiple platform upgrades, preventative maintenance, advanced process control projects, and alarm analysis
- Hardware modernization with over 10,000 points of new IO over three years to deploy latest control hardware and functionality utilizing CHARMs technology to replace antiquated hardware.
- Designed dozens of control panels and remote IO panels with redundant power distribution for line and UPS powered operations
- Plant expansion, with new processing units including system architecture, control panel designs, procurement, fabrication, programming, and commissioning

Midstream: Delivered dozens of pipeline and gas processing projects.

- DeltaV DCS and DeltaV SIS Gas processing facilities, including system architecture, engineering, programming, control panel design, fabrication, commissioning and ongoing support
- Cryogenic Compression facilities with Allen-Bradley Control System integrated with Wonderware Archestra HMI and SCADA. Scalable design and implementation for four process trains
- Design and Implementation of custom High Integrity Pressure Protection System (HIPPS) solutions as a turnkey package, including redundant shut down valves, 2oo3 Transmitter voting, third party SIL 2 certification of system meeting a 2 second close specification. Utilized for several midstream facilities.
- 70 MMcf/d natural gas facility system architecture, engineering and design including utilization of C1D2 control panel designs with remote IO installations.
- System standardization to new Ignition SCADA platform for midstream processing and pipeline. Development of a scalable system with automated tagging for new facilities based on location naming and aliasing for rapid deployment.
- Design and implementation of standardized packages for future expansions including control hardware, LACT packages and SCADA integration
- 200 MMSCFD Cryogenic Separation with Supplemental Rectification Compression (SRC).
- Provided Electrical and I&C Design and coordination for balance of plant as well as panel design, FAT and field support
- Crude Oil Stabilizer Skids including support of PFD, P&ID development, control philosophy Instrument Index, Allen Bradley PLC Programming, HMI Programming, Commissioning, Operator Training and Process Optimization
- Platforms: ABB, Emerson, Rockwell, Red Lion, Beijer, Wonderware, Ignition, and more.
- Specialized in RTU, PLC, and SCADA programming, industrial network design, and telemetry integration.
- Full system architecture and design, control panel design, Consent Decree compliance, as well as RTU, Flow Computer, PLC and SCADA programming and integration
- Telemetry and industrial network design and configuration for store and forward data.

Upstream Wellpad Controls:

Design, engineering, programming and deployment of hundreds of facilities through standardized programs customized across several platforms.

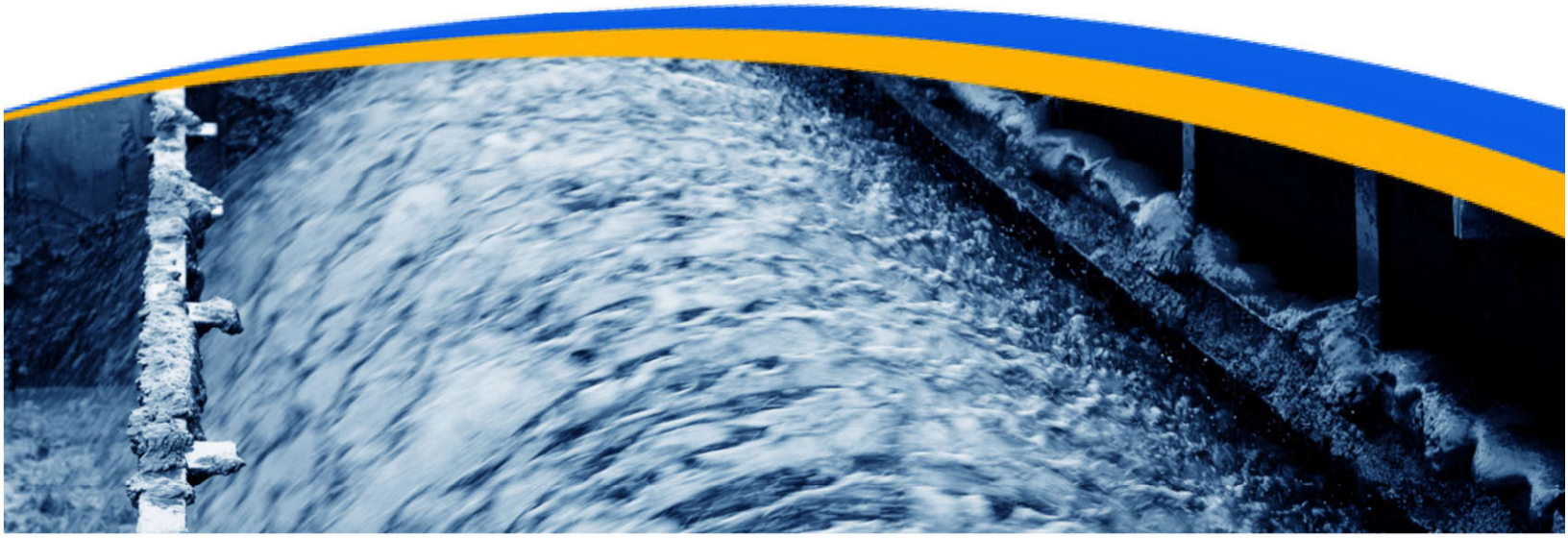
Leading FB3000 Expertise

Atlas OT is a leading expert on Emerson FB3000 Flow Computer, having been a key implementer of the first major rollout of the product line for a major oil producer. We develop custom applications for end-users in collaboration with Emerson technical services to create major program revisions and firmware updates.

Experience:

Water & Wastewater

ATLAS Operational Technologies



Aquifer Storage and Recovery System

2.2M SCADA system using multiple GE RX3I PLC's.\
The city will use a Wonderware Archestra SCADA system to control a surface water treatment plant and distribute water through a pipeline to a network of wells, to either recharge the aquifer or recover the stored water for the city.

Wastewater Treatment Plant SCADA Upgrade

Wonderware development using NAD two SCADA six control stations, and 4 view nodes and a Allen Bradley PLC5 configuration controlling the entire upgraded side of the plant.

All data feeds into a SQL server where reports can be generated per operator and management requests.

Water Reclamation Project

- 250 points RSVIEW SE distributed SLC500 PLC reverse osmosis filter control chemical monitoring, and closed loop control for sodium hypochlorite and all chemicals to control PH.
- Connected the existing plant to the new system.

Wastewater SCADA Migration

- Architect migration plan for conversion from ICONICs SCADA system hosted on Allen-Bradley PLCs to a PlantPAx system. Multi-phase project:
- New virtualized stratus-redundant services to host FactoryTalk system
- Converted ICONICs based screens to FactoryTalk View in PlantPAx style, without PlantPAx logic to facility conversion of SCADA before deployment of upgraded controllers
- After SCADA migration, upgraded SLC and CompactLogix controllers to modern versions with additional memory for PlantPAx objects, then redeployed to the SCADA system.

Headworks Modernization

- Replacement of Headworks SLC500 processor and IO with CompactLogix hardware with a two hour scheduled downtime
- Re-wrote logic in modern IEC 61131-3 programming languages, upgrading power distribution with UPS system
- Deployed the entire system in the field in under two hours while running
- Full system IO checkout, logic testing, and integration to ICONICS SCADA system
- Migration from 120V IO to 24V

Staff Augmentation (Multiple)

- Staff augmentation for project and operational support of EI&C support
- Troubleshooting motor drives, magmeters, blowers, PLCs, SCADA, Flow Computers, wireless, cellular, switches, services and industrial networks
- Further troubleshooting of process logic, P&ID tuning and advanced process control. Supporting systems included Rockwell Automation, ICONICs, Ignition, Phoenix Contact, and others.

Chemical Precipitation Water Treatment:

- Treated 250 gpm of mine water with elevated levels of iron, arsenic, manganese, and magnesium
- Construction management, integration support engineering, and quality assurance review
- Plant commissioning plan development and control philosophy for automation contractor
- Factory and Site acceptance testing of control system for field engineer facility and operations training
- Contract extended for facility operation, upgrades, and development of a remote telemetry system

Experience:

Food & Beverage

Kombucha Fermentation and Bottling

Contract brewing company for dozens of major kombucha tea brands offered across the United States and Canada. The facility utilizes multiple lines for brewing unique recipes, bottling and labeling all products for direct shipment to customers.

Provided integration support for new line commissioning including device re-wiring, communication validation, equipment synchronization and overall tuning support. Ongoing on call support and training for full customer ownership and control of their facility.

Brewery Virtualized Distributed Control System and Brewing

- Brewery customer utilizing the largest virtualized DeltaV DCS in the world at time of installation.
- Deployed several redundant servers, redundant thin client network for dozens of operations, applications, and engineering stations
- Supported system migration without a full facility shut down, allowing for ongoing production during upgrades and migrations.

Health Supplement Packager

- Supplement manufacturer and producer transitioning from branding contracted goods to packaging their own product in house – providing products in powder, pill, and liquid form, requiring separate equipment for each packaging system. Needed support scaling up as they continue to add additional lines each year.
- Provided break fix and commissioning support for each system
- On-going support and engagement with design of new lines including communication integrations, commissioning, and system tuning.

Bun SCADA Batch Replacement and Business System Integration

The Challenges

- Equipment operated independently as standalone systems, lacking integration or visibility
- An outdated batching system caused frequent errors and high maintenance costs
- A lack of SCADA and operational monitoring limited troubleshooting and tracking
- Failing utility system controllers caused inconsistent cooling and heating
- Frequent downtime and inefficiencies in production with proofer, oven, and pan systems

Our Solutions

The Atlas OT team provided a comprehensive solution involving system integration, equipment upgrades, and automation programming. Key initiatives included:

1. SCADA Implementation and Integration

- Parallel system deployment with existing system to test and refine operations for weeks before final cut over.
- Developed a SQL database-driven platform to integrate all facility operations
- Created operator dashboards with remote access, alarm analysis, and troubleshooting tools

2. Batching System Upgrade

- Replaced the proprietary batching system with an open-platform solution with Recipes - on perpetual license
- Upgraded the PLCs and refined batching logic
- Enhanced recipe management, scheduling, and reporting capabilities

3. Network Modernization

- Designed and installed a fiber-optic backbone, connecting previously isolated systems
- Integrated equipment into a centralized control network for improved visibility and troubleshooting

4. Utility System Optimization

- Replaced failing controllers with CompactLogix PLCs
- Redesigned control algorithms for cooling water, glycol systems, and trough temperature management
- Enhanced SCADA integration for monitoring and control

5. Equipment-Specific Improvements

- Proofer and Oven Systems: Implemented temperature-based controls to reduce inconsistencies and optimize utility use
- Pan System: Replaced belts with magnetic systems and added sensors to prevent jams, reducing labor and downtime
- Thermal Oxidizer: Upgraded controls and interfaces to comply with air permitting standards
- Sifter System: Designed redundancy to prevent flour system failures and improve flow consistency

The Results

50% Waste Reduction: Waste decreased from 30% to 15%, cutting production costs
18% Increase in Throughput: Product flow from ovens to bagging improved, increasing output
$100,000 Saved: Eliminated the annual support contract for the proprietary batching system
Improved Reliability: Reduced equipment downtime and minimized manual interventions
Enhanced Operational Visibility: SCADA integration enabled real-time monitoring, troubleshooting, and data-driven decision-making