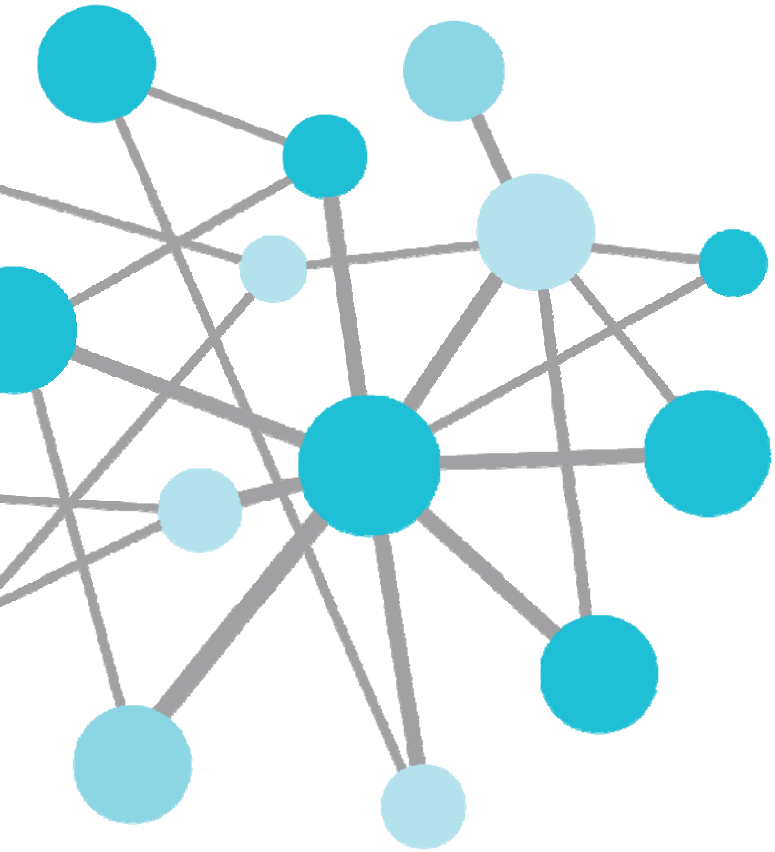

City West Water Enterprise SCADA and Data Platform

Presented by

Steve McCormack, IT Manager
City West Water
Andrew May, Senior Systems Engineer
SAGE Automation

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Enterprise Data Platform

"The Enterprise SCADA and Data Platform is the first stage in our 2020 vision for City West Water."

David Maple

Manager Network Operations

City West Water™

Business Challenge

- Apply standards across the business
- Upgrade legacy plant control and bespoke systems to a single platform
- Single, secure source of truth for operational data
- Proactive visualisation, reporting and data access

Solution

- ClearSCADA for WAN and plant control
- PI System as the single source of truth for all field operational data
- Geographically diverse, fault tolerant, highly available deployment

Results and Benefits

- Successful system cutover
- All historical data migrated
- Broader, secure access to operational data throughout the business
- Platform for future growth and expansion of network control

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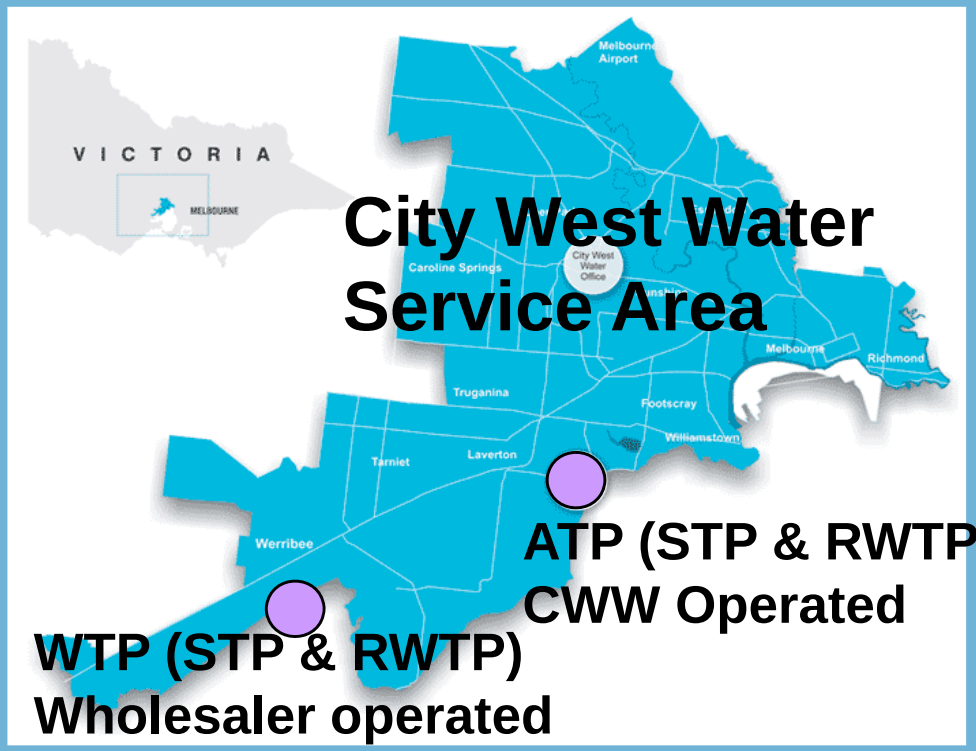
About

- 580 km^2 service area
- Population 850,000
- 320,000 res' customers
- 35,000 non-res' customers
- 90 GL water supplied
- 70 GL sewage collected



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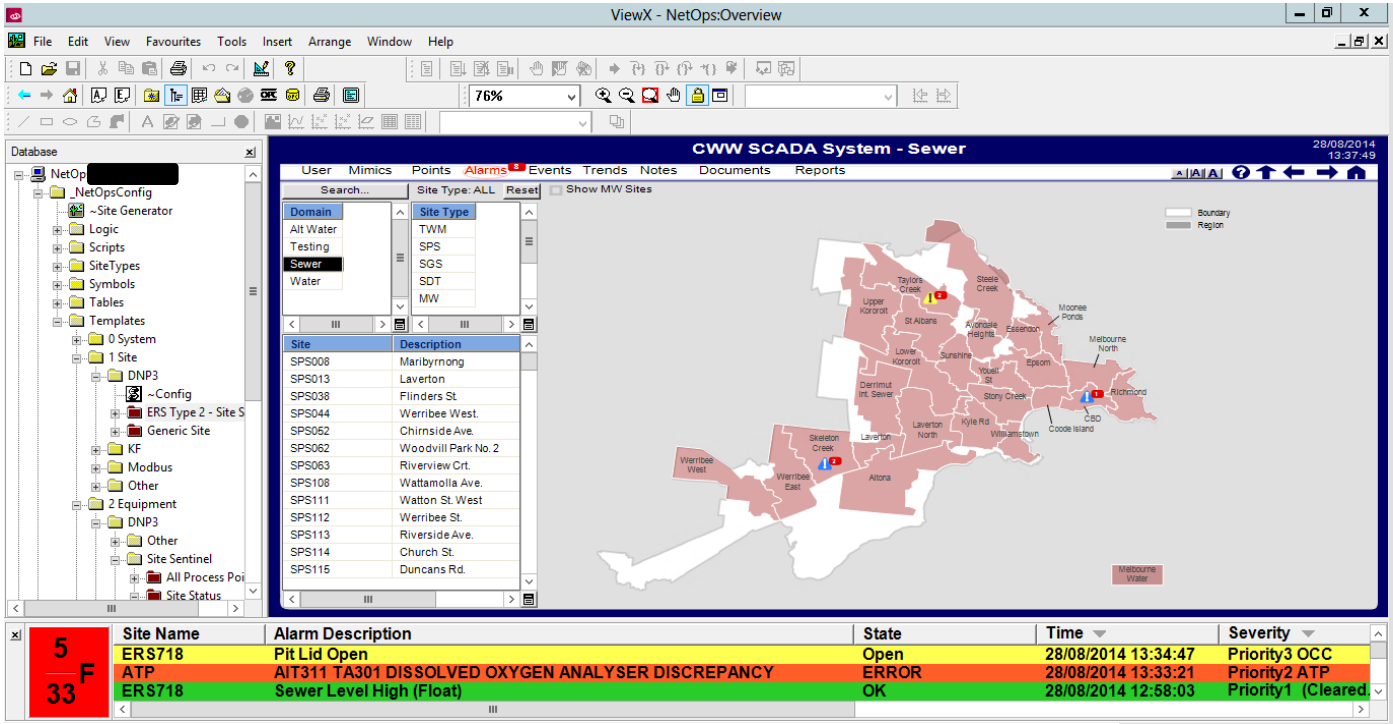
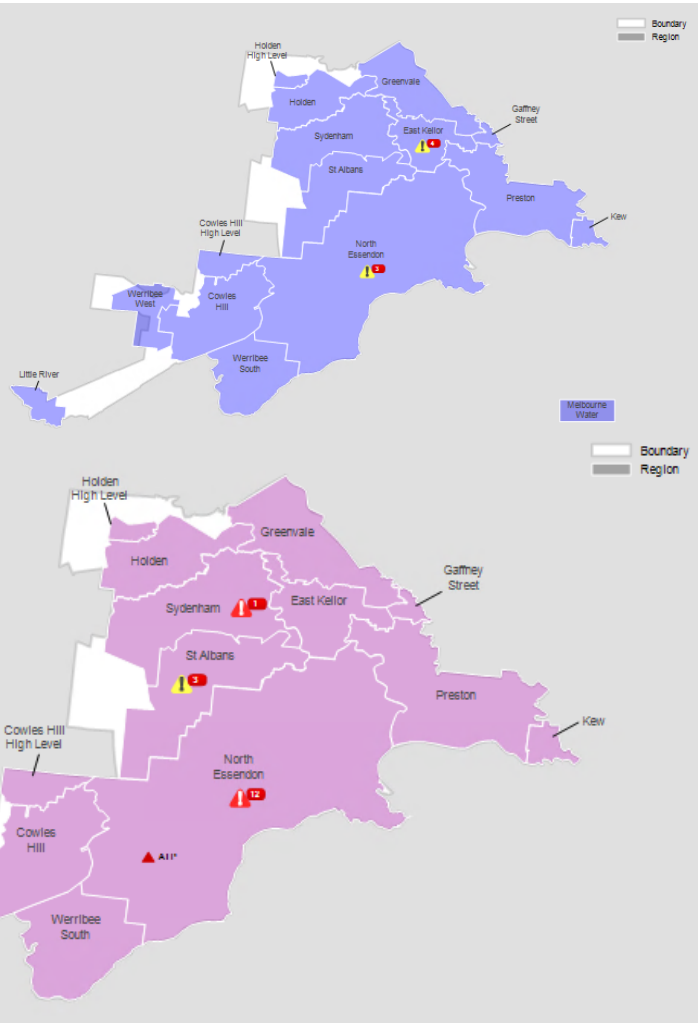
Project Overview





City West Water™

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Agenda

- About
- Legacy Systems
- SCADA
- PI System
- ClearSCADA to PI Synchronisation Tool
- Project Benefits
- Future Plans and Next Steps
- Summary
- Questions

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About

Projects

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Service

Business Optimisation

Training

www.gotoSAGE.com

NSW - NT - QLD - SA - TAS - VIC - WA

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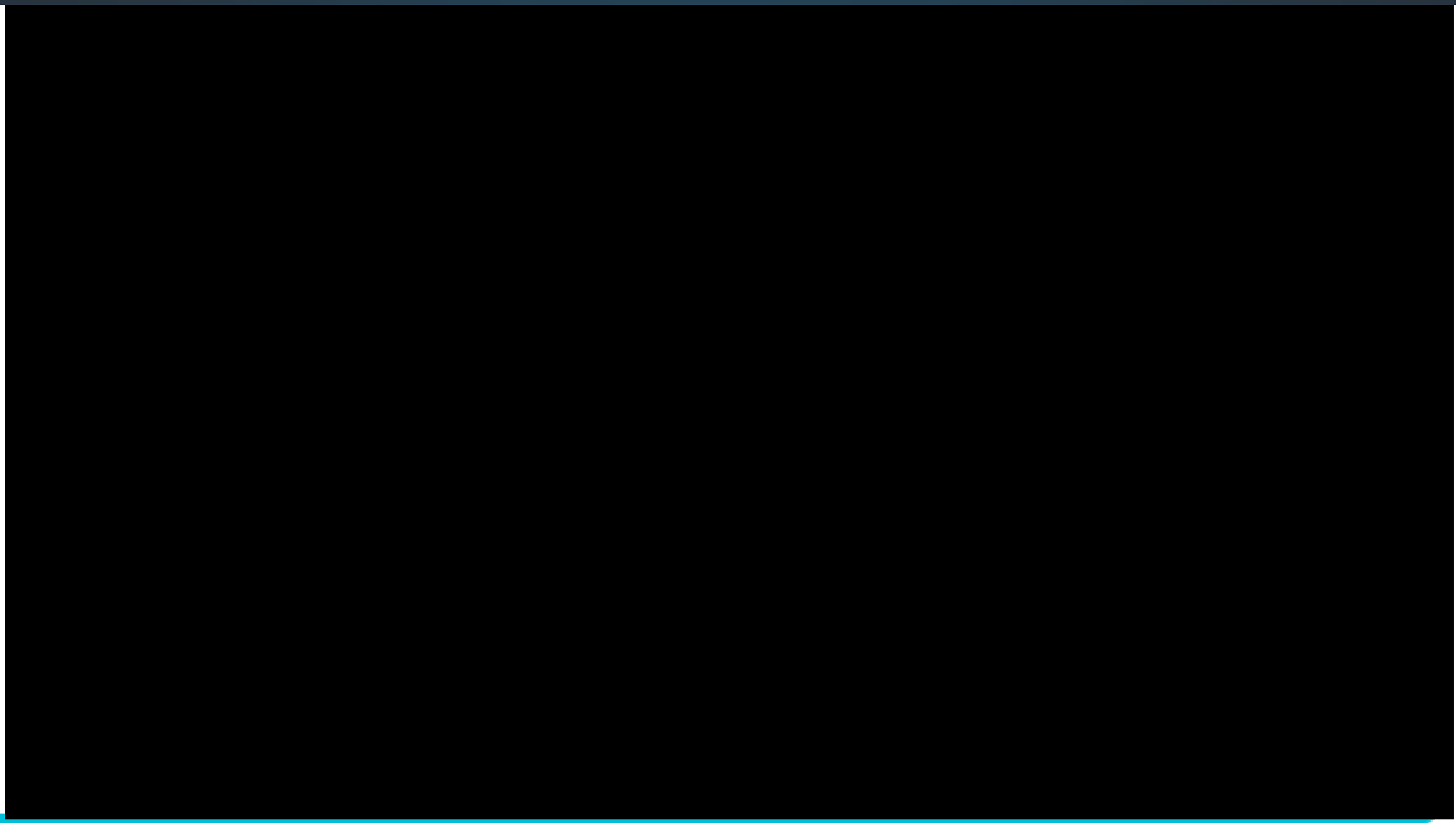

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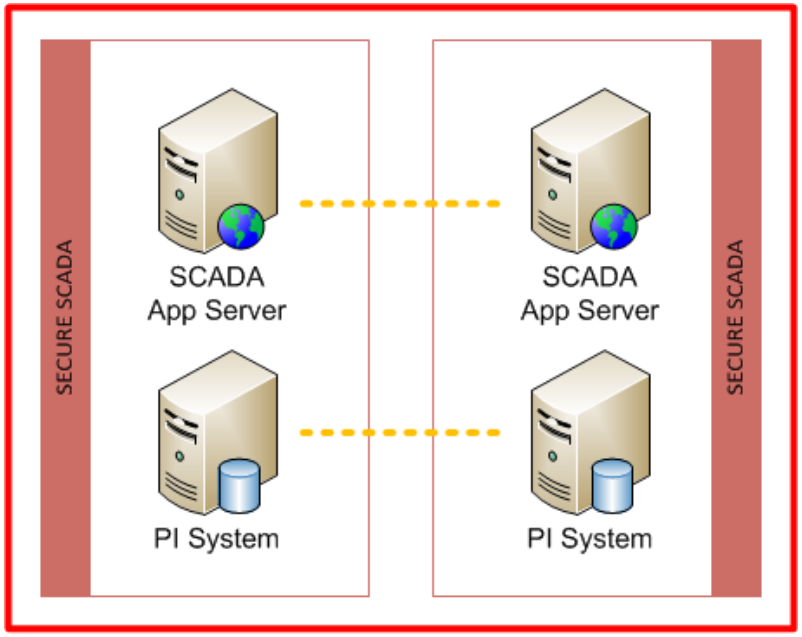
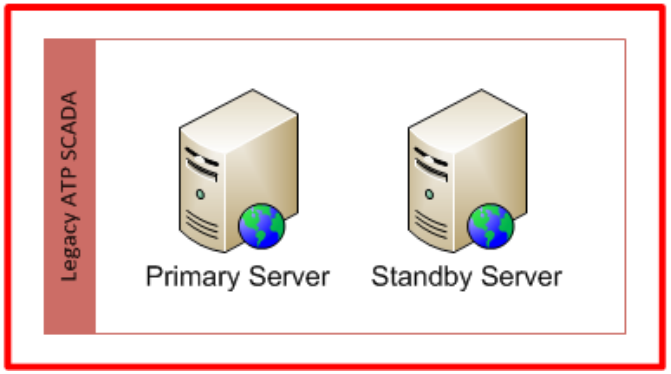
CWW Legacy Systems

- Bespoke
- Security
- Control
- Scalability
- Cost
- Access to data
- Remote Only





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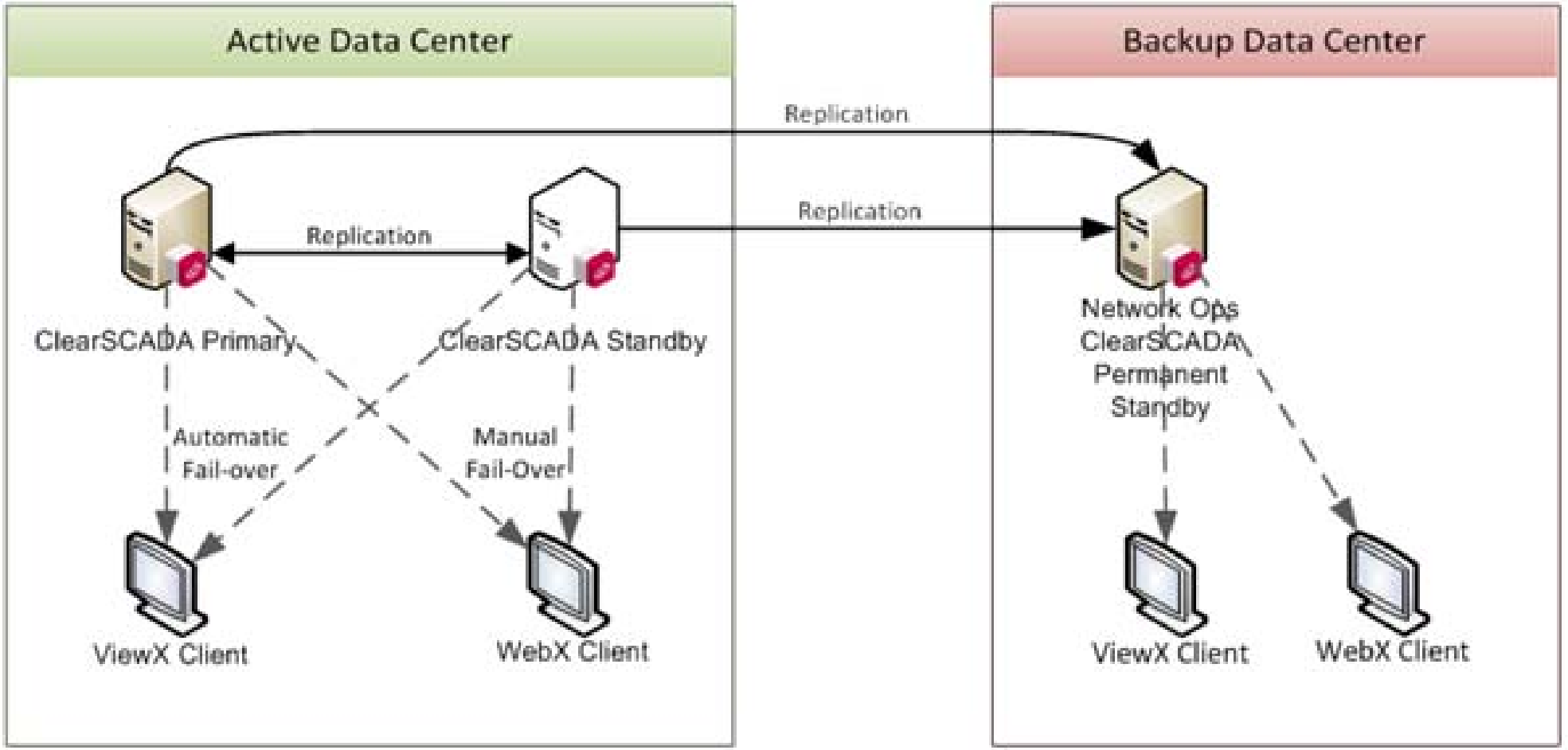
CWW ClearSCADA Solution
Network Operations



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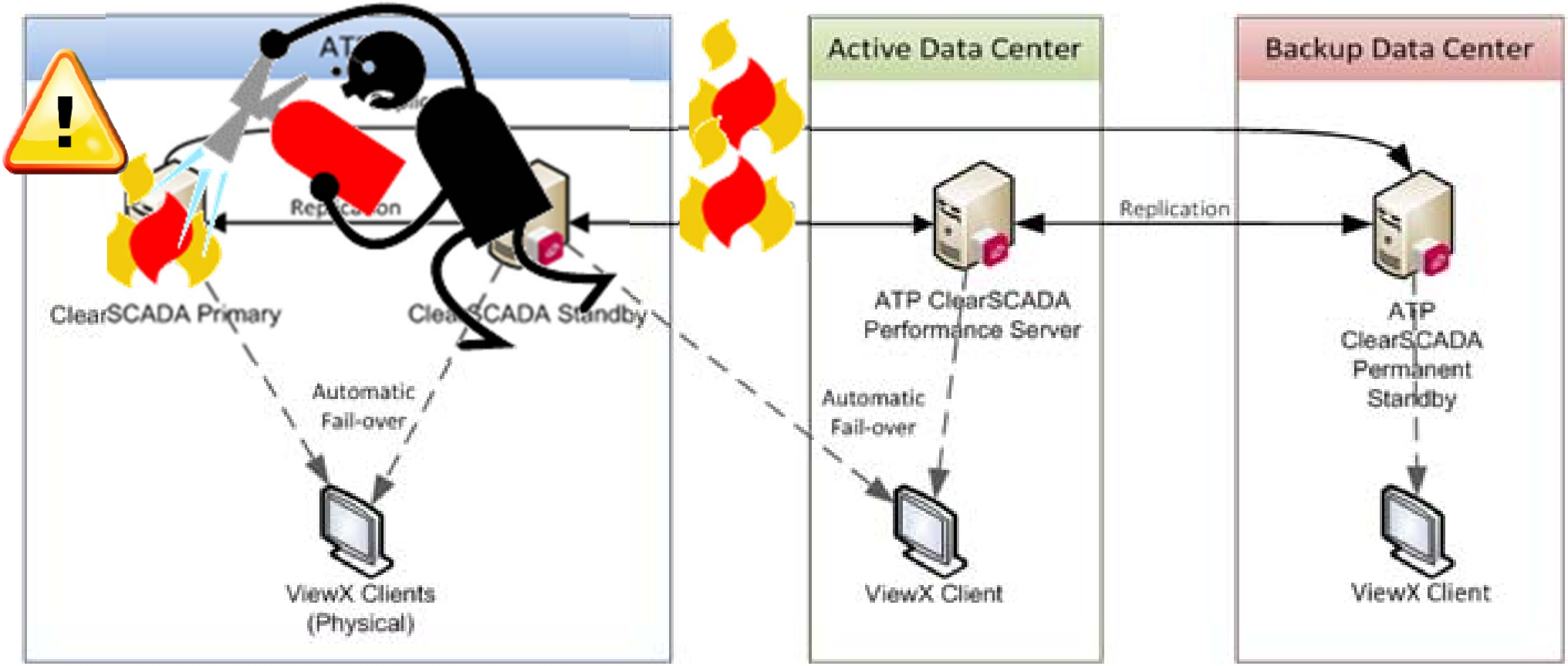
CWW ClearSCADA Solution
Altona Treatment Plant (ATP)



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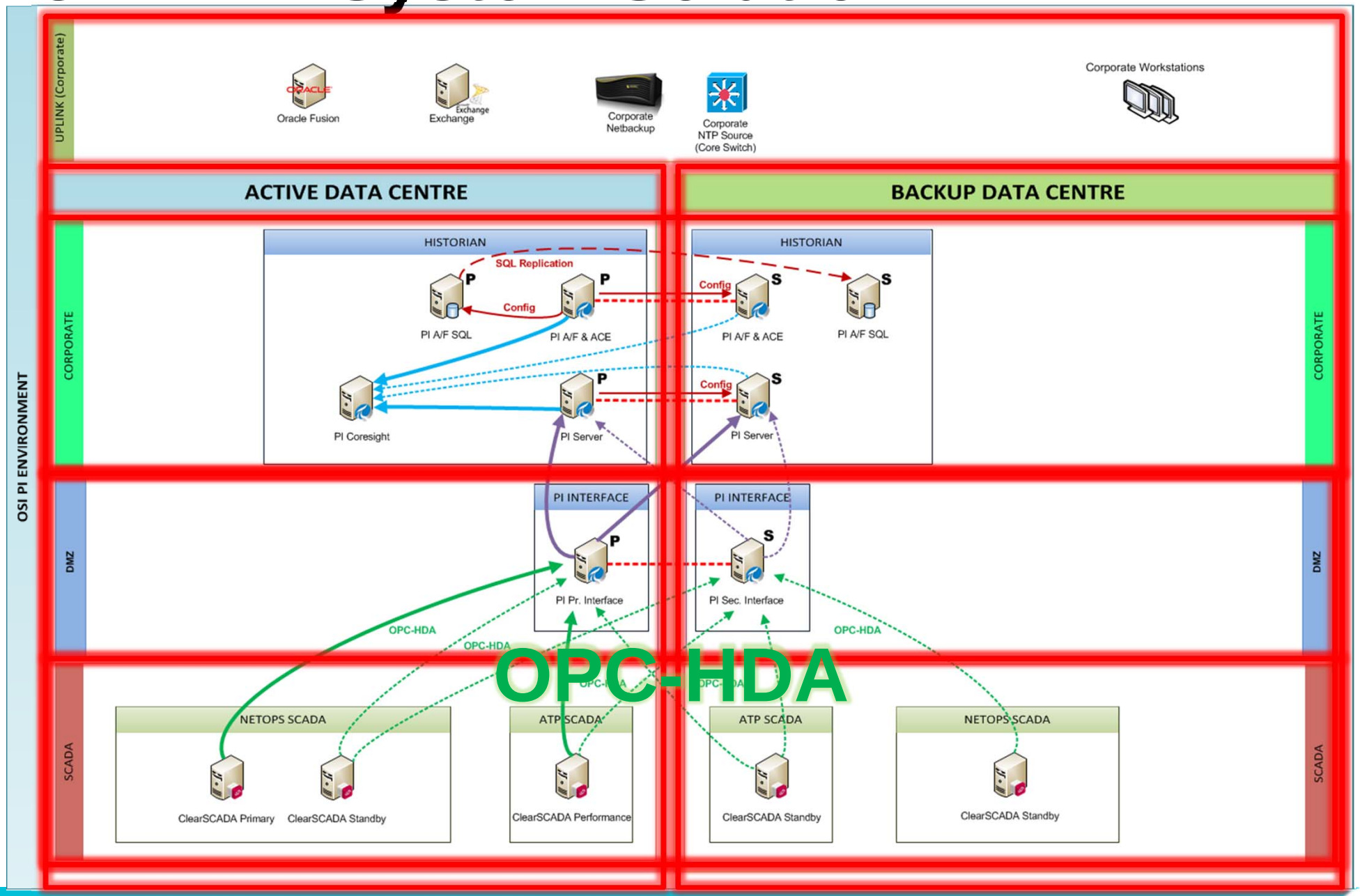
CWW PI System Solution



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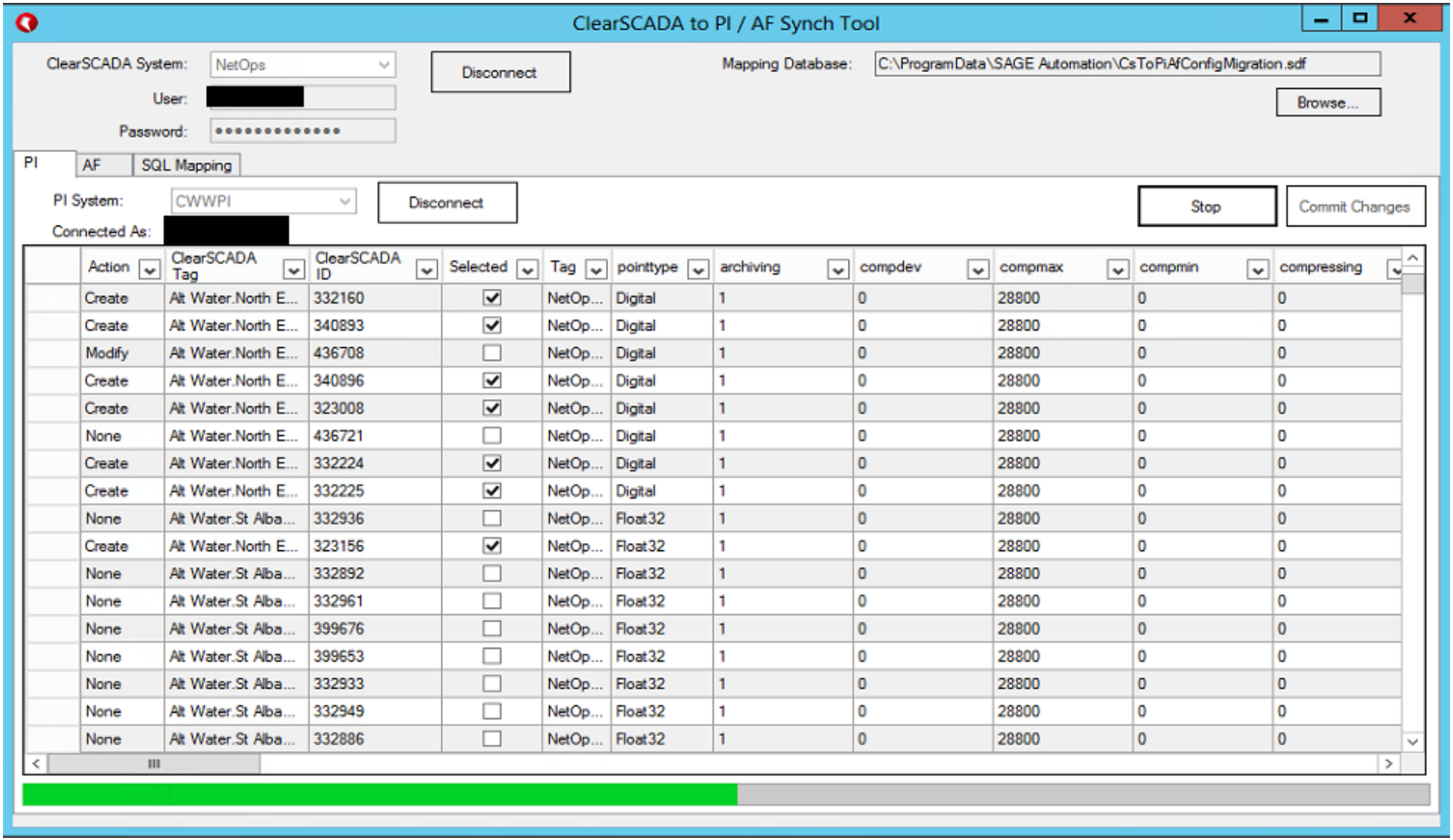
ClearSCADA to PI Synchronisation



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Create	Alt Water.North E...	340893	☑	NetOp...	Digital	1	0	28800	0	0
Modify	Alt Water.North E...	436708	☐	NetOp...	Digital	1	0	28800	0	0
Create	Alt Water.North E...	340896	☑	NetOp...	Digital	1	0	28800	0	0
Create	Alt Water.North E...	323008	☑	NetOp...	Digital	1	0	28800	0	0
None	Alt Water.North E...	436721	☐	NetOp...	Digital	1	0	28800	0	0
Create	Alt Water.North E...	332224	☑	NetOp...	Digital	1	0	28800	0	0
Create	Alt Water.North E...	332225	☑	NetOp...	Digital	1	0	28800	0	0
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None	Alt Water.St Alba...	332961	☐	NetOp...	Float32	1	0	28800	0	0
None	Alt Water.St Alba...	399676	☐	NetOp...	Float32	1	0	28800	0	0
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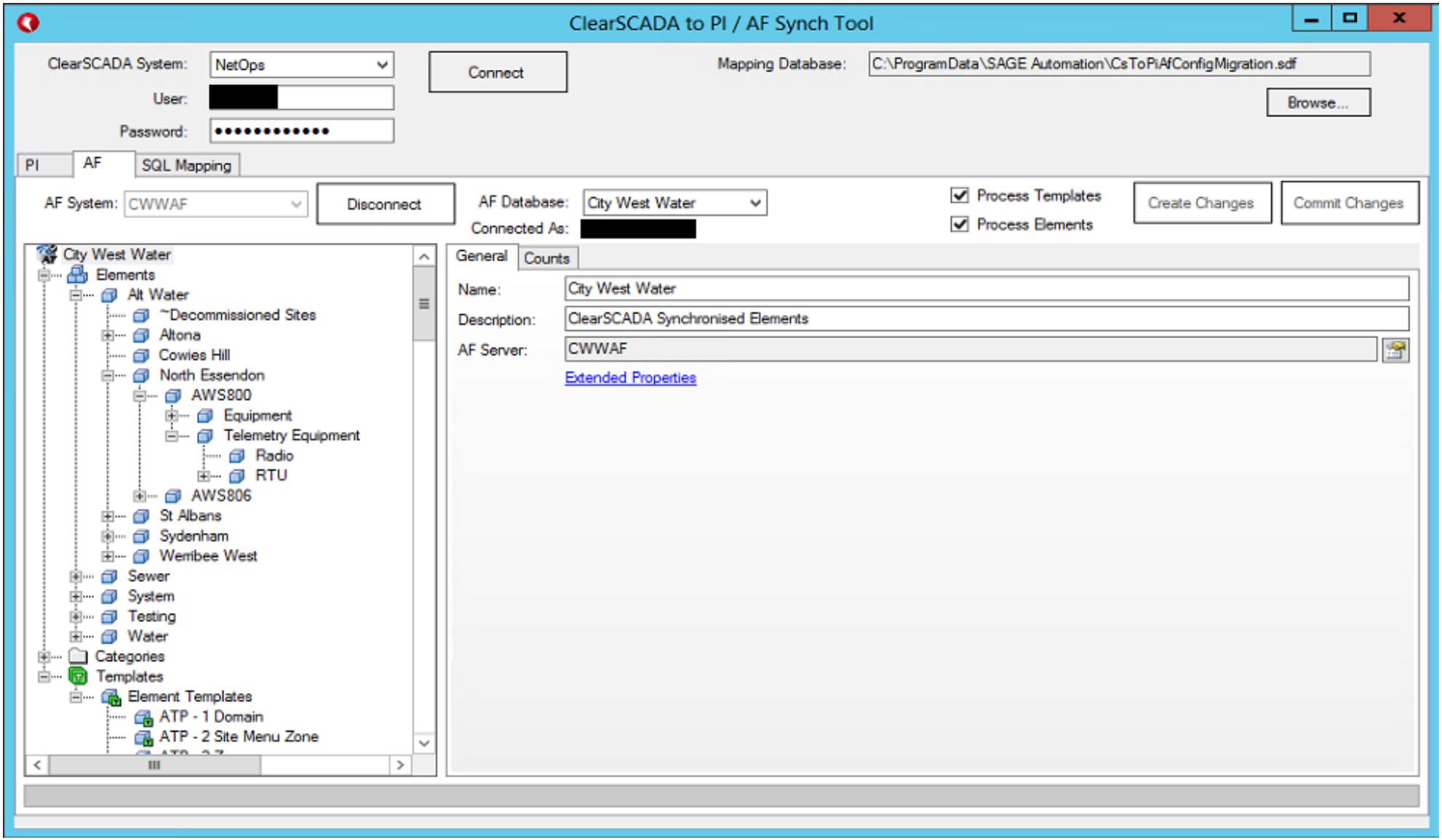
ClearSCADA to AF Synchronisation



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Project Benefits

- Independent and open
- Secure, fault tolerant and highly available
- Improved visibility and reporting
- Superior control
- Faster troubleshooting and site deployment
- Proactive monitoring
- Lower commissioning costs
- Templates
- Fully integrated and scalable
- Aggregation of data

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Future Plans and Next Steps

- Extend the system to include:
  - New field instruments and devices (unconstrained)
  - New sites
  - New treatment plants
- Integrate with Oracle business systems
- Share data more efficiently
- Analysis and predictive modelling
- Reduce reactive elements of the business

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Summary

- Fully integrated business platform
- Widely and easily expandable
- Enabler for future development
- Secure, fault tolerant and highly-available
- SecureDNP capable

- 30,000 PI points and growing
- 240+ sites connected
- 1400+ devices connected
- Projected to grow to 3000 devices by 2020

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THANK YOU

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