Westin Technology Solutions & eRIS
Tim Kruse – Vice President / eRIS Group Leader

tkruse@westindelivers.com || www.erisdelivers.com
Background

• **eRIS** is a **Data Hub** and Web Application that gives clients tools to **Manage, Analyze, and Visualize** enterprise data.

• 90+ customers

Customers of All Sizes

Large
- Denver Water
- City of Minneapolis
- NEORSD (Cleveland OH)
- City of Toronto

Medium
- City of Grand Rapids
- Bonita Springs Utilities
- City of Fort Wayne
- Orange County (FL)

Small
- Saginaw (MI)
- Fairfield-Suisun (CA)
- Petoskey (MI)
The Water Industry and Utilities have a DATA problem.

- Too much or wrong data collected
- Silos
- New sources
- Limited tools

Utilities have access to vast amounts of data, but few use it in a significant way.
The Solution

4 Steps to Achieve the Digital Promise
1 – Connect Everything

- Water Plant
- Meter Data
- Environment
- Maintenance
- Operations
- IT
- Laboratory
- Wastewater Plant
1 – Connect Everything

Benefits

- Connect with Security
  - On premise
  - Read-only
  - Controllable access rights

- Low Risk
  - Dozens of industry connectors
  - No data warehouse
  - No data ownership disputes
  - Easily expandable

- Fast Deployment
  - 1-2 Days
  - Immediate results
2 – Take Control of your Data

Benefits

• Add Focus with Dashboards
  - Cut through the noise of data overload
  - Combine data from siloed systems
  - Limitless combinations and designs

• Take Charge of Manual Data Entry
  - Replace Excel “hell”
  - Store data in secure database
  - Extend reach through mobile app

• Automate Reporting
  - Remove manual touches of source data
  - Flexible delivery methods
  - Online Approval workflows
2 – Take Control of your Data

Benefits

• Achieve Self-Serve Data Mart
  - Saved queries & trends
  - Report library
  - Multiple websites

• Capture Operator Logs Digitally
  - Meet regulatory & compliance guidelines
  - Expand operational awareness
  - Web & Mobile Applications
3 – Use Data to Drive Operational Decisions

Benefits

• Monitoring Events
  - UV lamp replacement triggered WOs
  - Plant incineration autogenous burn control

• Manage by Exception
  - Track Key Performance Indicators
  - Documented feedback loop
  - Integrated workflows

• Analyze & Visualize Information
  - Energy Management
  - Water Balance
  - Leak Detection
4 – Move from Reactive to Predictive

- Leverage Predictive Algorithms
  - Powerful calculation engine
  - Combine data from all systems
  - Limitless possibilities

- Extend to Cloud-based Tools Easily
  - Normalize data sets
  - Validation
  - Merge data
  - Augment or fill gaps
  - Built-in tools for secure data sharing
Return on Investment

1 – Connect Everything
2 – Take Control of your Data
3 – Use Data to Drive Operational Decisions
4 – Significantly Build ROI to Predictive

Exponential ROI
- Reduce OPEX costs
- Build confidence
- Influence CAPEX cost
- Optimize CAPEX
- Reduce GHG emissions
- Sustainability

Significantly Build ROI
- Reduce OPEX costs
- Influence CAPEX cost
- Optimize CAPEX
- Reduce GHG emissions
- Sustainability

Quickly Realize ROI
- Save time
- Reduce mistakes
- Build confidence

Foundation to ROI

ROI Over Time

Investment
## Product Alignment

<table>
<thead>
<tr>
<th>Product</th>
<th>Step 1 Connect</th>
<th>Step 2 Control Data</th>
<th>Step 3 Data Driven</th>
<th>Step 4 Predictive</th>
</tr>
</thead>
<tbody>
<tr>
<td>eRIS•HUB</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eRIS•LOG</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eRIS•CORE</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eRIS•MAX</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>eRIS•NOVA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Our Uniques

Speed of Installation
Shorter projects, with less IT involvement, reduce risk with faster ROI

Our Customers are Our Partners
Collaboration with our Water Partners drives product direction and builds mutual success

From Operator to Executive
Everyone can connect to the information they need using a familiar interface
How can WRF Help?

- Utility Partners interested in developing advanced analytics
- Cloud-based AI/ML or other vendors with data intensive tools
- Regional Utilities who struggle with secure data sharing

<table>
<thead>
<tr>
<th>Advanced Analytics</th>
<th>Cloud / On-Premise Collaboration</th>
<th>Regional Partner Cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtration</td>
<td>No/low-cost pilots</td>
<td>Bidirectional data sharing</td>
</tr>
<tr>
<td>Aeration</td>
<td>Quick and easy setup</td>
<td>Security concerned</td>
</tr>
<tr>
<td>Biosolids</td>
<td>Library of industry connectors</td>
<td>Flexible sharing architectures</td>
</tr>
<tr>
<td>Stormwater</td>
<td>Proven summarization, aggregation, and cleansing tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions?

Westin Technology Solutions, LLC
Tim Kruse – Vice President / eRIS Group Leader
tkruse@westindelivers.com || erisdelivers.com || eris-software.com