CYBERSECURITY

A VITAL COMPONENT TO YOUR OPERATION

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HOW TO DEFINE A SUCCESSFUL WWTP OPERATION?

• Maintaining compliance with permits
• High quality treatment and effluent
• Safety of staff
• Energy and cost savings
• Held in high public regard
IT, SCADA & Cybersecurity
Part of the Equation

• Each of these indicators/factors can suffer with a failure of IT, SCADA or cybersecurity
  • Maintaining compliance with permits
  • High quality treatment and effluent
  • Safety of staff
  • Energy and cost savings
  • Held in high public regard
ACRONYMS AND ORGANIZATIONS

• EPA – Environmental Protection Agency
• AWWA – American Waterworks Association
• NSC – National Security Council
• NIST – National Institute of Standards and Technology
• US CERT – Computer Emergency Response Team
• ANSI – American National Standards Institute
• DHS – Department of Homeland Security
• IEC – International Electrotechnical Commission
• ISA – International Society of Automation
• ISO – International Organization for Standards
AWWA has created the Cybersecurity Guidance Tool to help create a prioritized list of ways to mitigate risk that is customized to your utility.
WHO IS TRYING TO HACK YOUR SYSTEM?
# Challenges moving UC to the Cloud

<table>
<thead>
<tr>
<th>Federal Mandates</th>
<th>The Cloud First policy requires government agencies to shift to an available, secure, and reliable FedRAMP-approved cloud option.</th>
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<tbody>
<tr>
<td>Security Requirements</td>
<td>Enterprise-level entities are subject to strict and rigorous security and regulatory requirements driven by FedRAMP.</td>
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<td>Budget</td>
<td>IT leaders must do more with less, while also reducing expenses.</td>
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<td>Culture</td>
<td>Agencies are reluctant to move operations from a server room next door to a data center thousands of miles away.</td>
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<td>Lack Of Skills</td>
<td>IT shops lack in-depth knowledge on how to move premise-based architectures into the cloud.</td>
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<td>Unique Issues</td>
<td>Many agencies face unique issues when trying to modernize IT systems and at the same time, leverage current investments.</td>
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<td>Too Many Choices</td>
<td>IT leaders must consider how to integrate and manage new tools and technologies from multiple partners with legacy systems.</td>
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<td>Ease Of Use</td>
<td>The solution must be as easy to use for the customer as it is for the customer service representative.</td>
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ROLES AND RESPONSIBILITIES

• Test for Success
• Org chart
  • Assigning resource
• Compliance
THE BEST SECURITY

• I bought the best lock for the door

• Where is the key? Oh, under the door mat.
ANSWERS? YES, QUESTIONS TOO!