GANEX

OPTIMIZE, PROTECT AND MAINTAIN YOUR INVESTMENT

ICT & OT SERVICES

TOGETHER WE ARE BUILDING THE FUTURE

GANEX

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We offer a wide range of services and products that can be customized to meet your operational needs. From SCADA solutions to corrective and preventative maintenance, monitoring and cybersecurity, we build solutions and implement systems that directly respond to your environment.

We are committed to your success and, as a technology and innovation driven company, we are determined to find groundbreaking and cost effective solutions to maximize your assets performance while minimizing downtime. With many years of experience in the renewable energy industry, our specialists can easily assess your needs and provide valuable insight on the industrial IT,

automation control and cybersecurity services that our team can provide to help your renewable energy plant to operate efficiently.

We also provide exceptional customer service with supportive guidance at every stage. We understand your industry and we can provide effective solutions that suit your reality.

Our teams of experts are professional and responsive. We are ready to help when you need it, and we have the expertise needed to respond to new challenges as they arise. We believe in the power of collaboration and we are proud to be a part of your accomplishments.

Calgary

Gaspe

Ottawa

Chicago
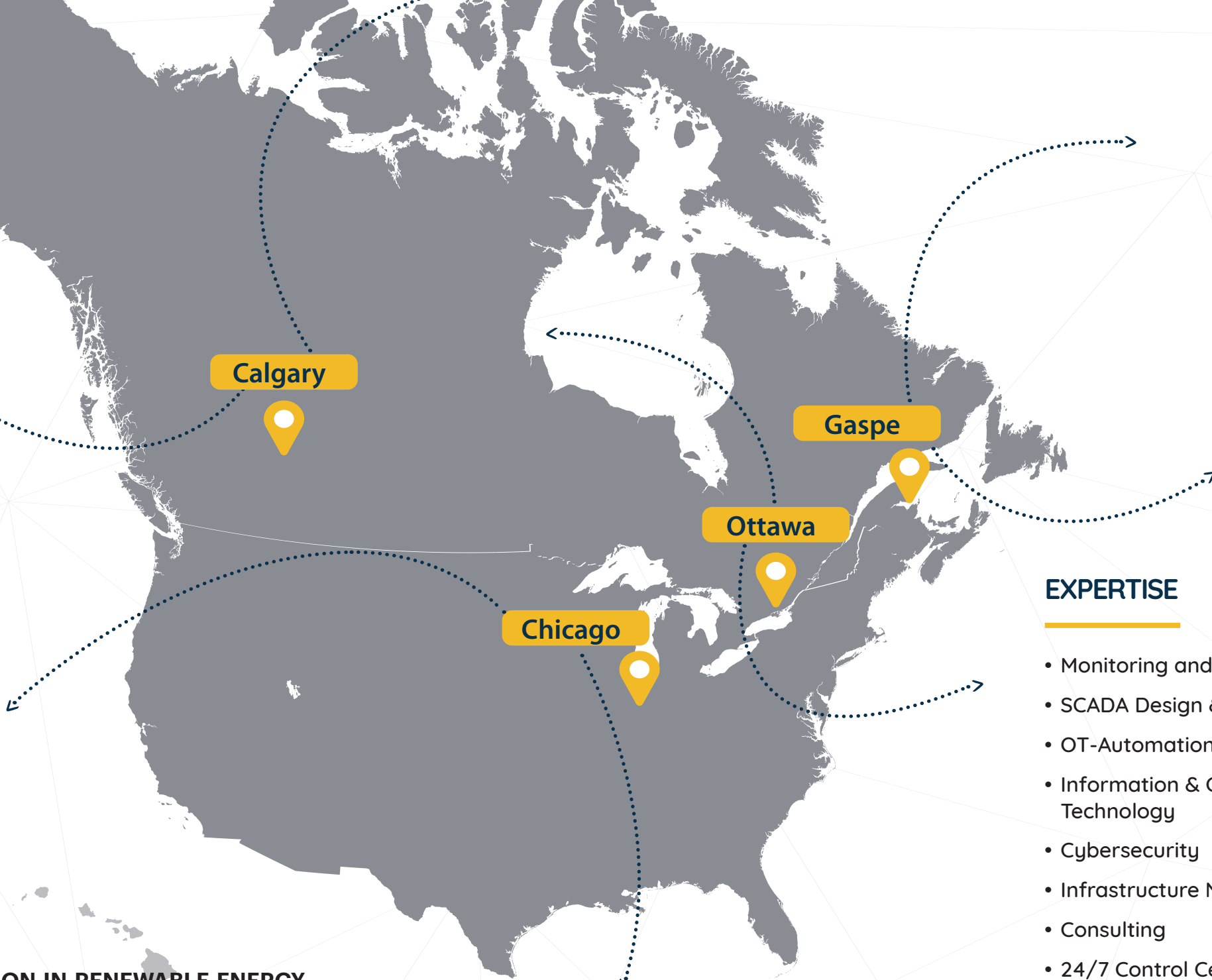
EXPERTISE

- Monitoring and Support
- SCADA Design & Deployment
- OT-Automation & Control
- Information & Communication Technology
- Cybersecurity
- Infrastructure Network
- Consulting
- 24/7 Control Center (GONOCC)

65 + PROJECTS RELATED TO NEW CONSTRUCTION IN RENEWABLE ENERGY

10 GW SOLAR, WIND, HYDRO AND STORAGE

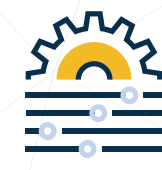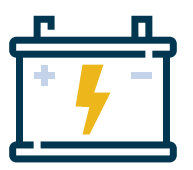**250 +** MAINTAINED AND MONITORED SITES
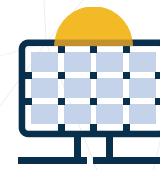
SOLAR ENERGY

WIND ENERGY

WATER AND WASTEWATER

INDUSTRIAL AND MANUFACTURING

BATTERY STORAGE

ICT & OT PROFESSIONNAL SERVICES

ICT/OT Monitoring

Monitoring the connectivity, robustness, reliability, agility, and availability of your systems

- ▶ Monitor for optimal functionality and connectivity
- ▶ Physical health, integrity, performance, and usage metrics analysis
- ▶ Optimizing availability, performance, and lifespan of your equipment and services
- ▶ Monitor critical events and updates
- ▶ Monthly review by our technical team

Site Assessment

Assessment of the IT/Automation & Control infrastructure and plans

- ▶ Device inventory lists
- ▶ Validation of relevant drawings
- ▶ Initial device checks
- ▶ Critical device list with status updates

Consulting

System optimization and high availability solutions for cost-effective business continuity

- ▶ High availability Infrastructure
- ▶ ICT-Automation & Control software
- ▶ System maintenance and optimization
- ▶ Databases and data management
- ▶ Auditing and Technology assessments
- ▶ Compliance and conformance

Data Historian Maintenance

Preservation of data quality and availability

- ▶ Validating data availability
- ▶ Stale data checks
- ▶ Archive status checks
- ▶ Running test reports
- ▶ Verifying and updating software versions
- ▶ Verifying collector nodes and other remote devices

On-site Maintenance

Device and cable maintenance

- ▶ Dust cleaning
- ▶ Fiber loop validation
- ▶ Verifying secure wire connections
- ▶ Updating site inventory lists and drawings
- ▶ Visual inspection

Disaster Recovery Plan

Operation recovery tools and procedures

- ▶ Equipment criticality level assessment
- ▶ Spare parts lists
- ▶ Current software lists
- ▶ Start-up and restart procedures
- ▶ List of recommendations
- ▶ Remote support after a major event
- ▶ Configuration and data base backup

Cybersecurity and Network

Network security monitoring and compliance

- ▶ Vulnerability scanning
- ▶ Firewall patch monitoring
- ▶ NERC assessments and compliance checks
- ▶ Monitoring logs for suspicious activity
- ▶ Phishing tests
- ▶ Critical device list with status
- ▶ Device inventory lists

MONITORING & SUPPORT PLAN

Flexible solution for higher efficiency and peace of mind

We believe there is no universal solution when it comes to protecting and maintaining your infrastructures. Therefore, we have put together an extensive and flexible suite of solutions.

Design your solution

01 **Assess your environment:** The elaboration of an optimal monitoring and maintenance strategy requires in-depth knowledge of the various aspects of your facility, such as performance history, uptime targets, budget, physical equipment, software and business objectives. This step is crucial as it allows you to collect all necessary information and define your specific requirements.

02 **Build your plan:** Using the requirements assessed in the analysis, you can make a selection from our services to build your plan. We offer guidance throughout this selection process to ensure all potential requirements and scenarios are covered.

03 **Set support:** You can establish the promptness of the support response you want to rely on. Plan options are covered more extensively in this brochure.

PLANS AND MONTHLY REPORTS

Your monitoring and maintenance plan and operational delivery will vary according to your bundle selection of services.

Documentation and assessment reports are delivered after onboarding, but are updated regularly as modifications are made to your site computing environment over the years. Bundles with monitoring or maintenance of assets include reports delivered on a monthly basis. A typical report presents a detailed look at all components using data tables and graphs, as well as summaries and analyses of trends.

ICT/OT MONICTORING

"We ensure that your ICT/OT equipment efficiently supports your operating strategies by optimizing its availability, performance and lifespan."

HOW

- Secure and cost-effective monitoring of strategic devices through capacity, performance, and integrity metrics
- Non-intrusive, minimal onsite footprint
- Continuous visibility, keeping an eye on those metrics for our customers
- Share valuable insight through monthly reporting
- Improve detection of early failures, degradation, and end of life issues of the devices and services

We monitor metrics and KPI of :

ICT

- Network devices (switch / router / AP)
- Gateways
- Servers & PC
- Virtual Machines and Hypervisors
- Network Attached Storage
- UPS
- Databases
- Backup services
- Alarm services
- Cloud / Web services
- O/S / Software / Misc. Services

OT

- RTU / PLC
- Met Towers
- Gateways

TELECOM

- Primary and Backup WAN
- Modem
- Fiber optic communication

DETAILS

Our monitoring solution offer a 24/7, continuous view, of ICT/OT critical equipment and services including the evolution of their capacity usage, performance, integrity and availability.

The analysis of the data makes it possible to provide alerts based on dynamic thresholds and trends. Anomaly detection is also built into the platform for various metrics.

Dashboards also allow our technicians to provide effective support with a quick overview of the situation and historical information. Troubleshooting, identifying root cause, problem correlation and time to return to normal operation are enhanced.

The solution is secure by design with outbound communication, encryption, and strict network rules. It's important to note that only metrics about the monitored assets or services are transmitted.

An easy-to-consult, optimized monthly report, produced by our technical team presents the findings and guides you. We are identifying trends and potential issues before they arise.

Our monitoring solutions allow for faster response and optimum recovery time.

- **Boost reliability.** Monitoring your ICT/OT infrastructure is the best way to minimize failure and improve reliability.

- **Early problem detection.** Problems are often preceded by warning signs. Monitoring your infrastructure allows you to notice these hints as they arise, and take the necessary steps to remedy to the situation to avoid or mitigate downtime.

- **Pinpoint bandwidth bottlenecks.** In an environment where bandwidth is limited, processes compete against each other for bandwidth in order to complete their specific tasks. This often leads to the creation of bottlenecks where overall system performance degrades as processes have to wait for others to terminate before they can be executed. Monitoring allows for the identification of intensive processes. Once identified, processes may be prioritized or modified to minimize competition over bandwidth resources.

- **Prevent network outages.** Modifications to your network, whether minor or substantial can impact its normal operation. Monitoring allows you to easily detect issues.

- **Allocate resources more effectively.** Knowing how much processing power, disk space and memory are required to run your system operations allows you to improve your computing resources allocation so that each component has what it needs for optimal operation.

ICT/OT MONITORING BENEFITS

Reactive monitoring tactics simply do not work anymore. It's time to pivot and shift focus to being proactive.

The ICT/OT segment of your infrastructure plays a critical role in the normal operation of your business by enabling people and machines to communicate, and supporting the data flow between users and systems.

The growing complexity of ICT/OT infrastructures increases the number of processes and the interactions between them. Monitoring provides the overview and knowledge required for better management during this fast-paced and constantly evolving environment.

▶ **Prevent performance issues and long-term issues.** Server performance can be threatened by physical issues such as fan failure, server temperature rise, and voltage spikes or drops.

A change in resource needs, an under-provisioned virtual machine or miscellaneous configuration errors can cause long-term problems.

▶ **Lower operating costs.** Our remote monitoring services offer organizations intelligent insights that they can use to optimize asset productivity and reduce operational costs. By enabling device optimization and reducing on-site presence, organizations can leverage monitoring to unlock their predictive strategy potential and achieve greater economic benefits.

▶ **Data for analytics.** Our monitoring service provides conclusions regarding equipment health and recommendations. The monthly reports offer cumulative data which can be used over time to gain insights into improvements that will enhance productivity and reduce operational costs.

▶ **Faster troubleshooting, enhanced user experience and maximized productivity.** Our monitoring solution enables proactive support and faster troubleshooting. Systems that run smoothly increase user adoption and productivity by reducing time losses caused by application malfunctions, data/file losses, task interruptions, etc.

▶ **Reduced Mean-Time-To-Repair (MTTR) and extended Mean-Time-Between-Failure (MTBF).**

▶ **Achieve greater operational efficiency.**

SITE ASSESSMENT

"Our site assessment strategy focusses on producing intelligence to help make your infrastructure more secure and reliable using cost effective solutions."

HOW

- ▶ We update your inventory lists
- ▶ We create or refresh relevant diagrams
- ▶ We perform and document device checks
- ▶ We identify and report critical device list with status

TASK

- ▶ Device inventory (on-site)
- ▶ Update logical communications diagrams
- ▶ Initial device check (on-site)
- ▶ Critical device list including status
- ▶ Available documentation review
- ▶ On site survey
- ▶ Gap analysis and recommendations
- ▶ Solutions and training

DETAILS

The ultimate purpose of a site assessment is to identify potential problems before they occur. The process can be summarized in four steps:

- ▶ **Discovery:** build a deep understanding of the the site's current ICT environment, known problems to be solved and business objectives;
- ▶ **Analysis:** evaluate existing issues and determine the complexity of solutions and investments that may be required;
- ▶ **Define & Develop:** elaborate a vision of the infrastructure end state that aligns with the business requirements and objectives;
- ▶ **Document:** generate a report that includes the following sections: Executive Summary, ICT Assessment (data collected regarding hardware, software and processes, best practices, Gap and SWOT analysis) and Recommandations.

SITE ASSESSMENT BENEFITS

The best way to preventively detect common issues

It makes sense to bring an external professional service provider such as Ganex to assess your ICT/OT infrastructure. We will help you have a more complete view of your operations. It will help identifying operational benefits, identify vulnerability spots, prepare your future infrastructure improvement plan, align your budgets and provide an updated record of your infrastructure.

- ▶ **An essential step in any ICT - Automation & Control project.**
  A site assessment gives you an accurate and in-depth analysis of your computing environment. Whether the assessment is performed before a basic maintenance upgrade, or a complete overhaul of the infrastructure, it helps identify the strengths of your environment, as well as areas that need improvement.

- ▶ **Get a fresh and objective external perspective.** The real value of a site assessment lies in the results of the analysis that is derived from the data collected and not from the data per se. As an OT and IT specialized service company with more than 20 years of experience in the industry, we know what to look for and we provide insightful and objective analysis. In addition, we are entirely vendor agnostic, we can provide the objectivity you are looking for.

- ▶ **Identify vulnerabilities.** Vulnerabilities are not actual issues, they represent eventual problems that may arise sometime in the future. In a way, vulnerabilities indicate the probability of a system to fail; the more vulnerabilities a system has, the higher the risk of outages.

- ▶ **Enable long term planning.** When assessing a site, we make sure that your business plan or strategy is taken into account. By doing so, we deliver guidelines for a flexible infrastructure that will support your actual and future needs.

- ▶ **Effectively assess risk.** Vulnerabilities can only be identified with a thorough investigation. Signs of their existence are often unnoticeable as hints about their existence don't translate into malfunctions until the conditions are met. To achieve an effective risk assessment, it is essential to conduct a detailed and rigorous inquiry that focuses on the devices that represent the main point of risk mitigation interventions.

- ▶ **Get recommendations to mitigate the risk.** The resulting analysis of a site assessment features recommendations that, if implemented, will solve specific issues that could eventually affect the operation of your infrastructure and reduce the risk of your system failing unexpectedly.

CONSULTING

"We use our experience to benefit our clients and assist them with their operation processes."

HOW

- ▶ We help you solve complex problems using realistic and cost-effective solutions
- ▶ We provide superior support and guidance
- ▶ We implement reliable systems to optimize your production and increase operating time
- ▶ We guarantee uninterrupted operations
- ▶ We integrate automation solutions to improve workflow and increase productivity

TASK

- ▶ High availability infrastructure design
- ▶ ICT - Automation & Control software analysis
- ▶ System maintenance and optimization
- ▶ Databases and data management
- ▶ Auditing and technology assessments
- ▶ Compliance and conformance

DETAILS

As an addition to our ICT-Automation & Control support professional services, we offer flexible and customizable consulting services for industrial facilities operating in renewable energies (solar, wind) and water treatment.

We provide specialized consulting services including but not limited to ICT, Automation & Control, cybersecurity, system optimization, etc.

Whether you need counseling for technical or strategic environment, we can be your ICT - Automation & Control backbone and move along with you as your business needs evolves.

CONSULTING BENEFITS

High availability solutions for cost-effective business continuity

Our extended experience of more than 20 years in the industry gives us an edge when facing complex environments where processes continuity is critical. We set high SLA goals, our availability target of 99.999% says a lot about our commitment for excellence.

AVAILABILITY %	CLASS OF NINES	DOWNTIME PER YEAR
99%	Two Nines	4 days
99.9%	Three Nines	9 hours
99.99%	Four Nines	53 minutes
99.999%	Five Nines	5 minutes

Based on available data from Gartner and IDC, small businesses downtime costs are between $137/minute and $427/minute while medium to large businesses have estimated costs starting at $5 600/minute. Note that when downtime results from a security breach, costs can start to skyrocket at an alarming rate.

- ▶ **High availability system specialists.** Our team of ICT-OT Experts come together to elaborate solutions built upon best practices as well as tested and proven strategies.

- ▶ **Cost effective solutions.** We are committed to your success, that's why we're determined to find innovative and cost-effective solutions to maximize your asset performance while minimizing your downtime. With many years of experience in the renewable energy industry, our experts can easily assess your needs and provide valuable insights on the industrial IT, automation and cybersecurity services that will help your renewable energy plant succeed.

- ▶ **Integrated ICT and Automation & Control.** We have built a multidisciplinary team that can perform both ICT and Automation & Control functions which brings many benefits to our clients such as cost reduction through the use of common platforms and resources, risk reduction and better decision making to name a few.

- ▶ **Tap economies of scale and purchasing power.** We achieve greater efficiencies and economies of scale because we have a single focus on ICT and Automation & Control. We consolidated our purchasing power and have access to deep and broad knowledge bases. We complete tasks efficiently. All this translates into real cost savings in terms of both time and money.

- ▶ **Get resources on demand.** Businesses need resource agility to accomplish their projects, support normal operations and act quickly in the event of a problem.

By using a resource from our team of ICT/OT professionals, this flexibility comes easily and without the need to manage employees.

DATA HISTORIAN MAINTENANCE

"Monitor operational critical database metrics and get insights into health and performance."

HOW

- ▶ Data availability validation
- ▶ Stale data checks
- ▶ Archive status checks
- ▶ Run test reports
- ▶ Verify and update software versions
- ▶ Verify collector nodes and other remote devices

Tasks Frequency

TASK	FREQUENCY
Validate data availability	Monthly
Check for stale data	Monthly
Check archive status	Monthly
Execute test report	Quarterly
Verify software version	Bi-Monthly
Update software version	Quarterly
Verify collector (when applicable)	Monthly
Verify physical device and/or back-up storage	Monthly
Back-up and clean database	Yearly

DETAILS

Using remote access through a secure site to site VPN connection, we collect information from your on-site or centralized database (such as AVEVA™ PI System™ or Canary) to verify the health parameters.

We pay special attention to the server components that play a role in your database such as storage or networking devices. Maintaining the health of your database ensures your historical data safety and the detection of issues affecting data quality such as stale and corrupt data.

We also perform routine maintenance to minimize data loss, such as performing a full back-up, cleaning of the database, and updating software versions.

DATA HISTORIAN MAINTENANCE BENEFITS

Gather essential operation metrics to help optimize and tune database processes for high performance

Many of your ICT-Automation & Control tasks rely on a database for storing and accessing information. The speed at which data is read and written is of paramount importance since slowdowns can cause congestion that blocks processes from normal execution.

Databases need continual attention for many reasons. First and foremost, database performance "naturally" degrades over time as it grows in size and inneficiencies are piling up. In addition, modifications to the number of users, available storage space, network load changes, etc. will inevitably reduce data availability and slow down any system depending on it.

- ▶ **Ensure uninterrupted operations**. Many of your operation processes rely on a database (historian) to operate normally or store data. Consequently, database issues translate into broader problems as it can potentially affect a wide range of processes essential to your operations.

- ▶ **Manage inherent size augmentation.** Any database performance will degrade with time as it continuously accumulates data and grows in size. Periodic maintenance eliminates this kind of issues.

- ▶ **Identify root causes and recurring performance issues.** A whole database platform operation and performance can be drastically brought down by a single problematic process. Recurring database performance concerns are more quickly solved when maintenance is performed regularly since past maintenances may reveal key data to the identification of the problem origin.

- ▶ **Leverage trend analysis to plan capacity and upgrades.** Periodic database maintenance let you cumulate data that will help revealing trends regarding critical aspect affecting its performance such as the growing rate and response speed. Those trends are essential to estimate the resource need progression and future upgrade requirements.

- ▶ **Create a throughput baseline against which operations can be measured.** As baselines are built over time like trends, they can be used to create acceptable thresholds for alarms. Any large deviation from usual values would then need investigation.

ON-SITE MAINTENANCE

"Prevent and correct hardware malfunctions and stay up-to-date with your infrastructure inventory."

HOW

▶ We perform physical maintenance and cleaning

▶ We validate fiber loop

▶ We secure wire connections

▶ We verify and update site inventory lists and diagrams

Yearly Preventive Tasks

TASK
▶ Visual Inspection
▶ Dust cleaning
▶ Check wire connections (fiber, ethernet and terminal blocks)
▶ Re-torque terminal block
▶ Update site inventory list and diagrams
▶ Check for device heatspots
▶ Check junction boxes/panels for leaks
▶ Maintenance report/checklist

DETAILS

Most ICT-Automation & Control maintenance tasks can be carried out remotely, but some require an on-site presence. These tasks are often overlooked, but have been proven to be very valuable.

Remote facilities, in particular, will benefit from regular preventive interventions by performing all routine site maintenance in one intervention. This practice reduces mobilization and labour costs. You can also take advantage of the presence of our specialist to realize corrective tasks that can only be executed on-site.

Unplanned hardware replacement can be costly, especially if it affects critical processes of your system. In emergency contexts, many issues may arise regarding weather and availability of parts that could increase the time needed to restore normal operating conditions.

ON-SITE MAINTENANCE BENEFITS

Hardware-oriented outages are occurring at a much higher rate than most would think.

Hardware failures are an example of the few unexpected occurrences that can have a major impact on an organization. Recent analyses of ICT system outage origins show that infrastructure and networking issues are consistently at the top of the list.

▶ **Keep the hardware in optimal operating conditions.** When considering ways to improve performance and increase hardware longevity, the physical components of your infrastructure are often overlooked. Maintenance tasks target cooling efficiency, power management and external signs of degradation.

▶ **Prevent system failures due to hardware malfunctions.** Most conditions that can affect hardware performance and lifespan are induced by the environment in which the material operates. Temperature, humidity, vibrations, power conditioning and dust are the major known conditions that deteriorate electronic equipments. Regular on-site inspections allow you to detect such conditions and implement corrective actions.

▶ **Avoid time loss and issues due to out-of-date information.** The software and hardware components of your system keep changing through its lifespan. Maintenance interventions, whether preventive or corrective, rely on infrastructure plans and the components list. Out-of-date information may considerably slow down technicians' work and troubleshooting.

▶ **Reduce maintenance costs.** On-site preventive maintenance reduces the overall cost of system upkeep. It helps save intervention time, makes your hardware last longer and minimizes losses due to downtime.

DISASTER RECOVERY PLAN

"Build a plan to quickly restore your infrastructure and ensure your processes continuity."

HOW

- ▶ We assess the risks and the level of criticality of the equipment
- ▶ We create spare parts and software lists
- ▶ We write startup and restart procedures
- ▶ We provide a list of recommendations
- ▶ We provide remote assistance after a disaster
- ▶ We back up databases and configurations

TASK

- ▶ Assessment of equipment criticality level
- ▶ Creation of spare parts list
- ▶ Creation of software list
- ▶ Start-up and restart procedure document
- ▶ List of recommendations
- ▶ Remote support after a major event

DETAILS

The DRP (Disaster Recovery Plan) is a central piece of the OCP (Operation Continuity Plan) and should be designed to prevent data loss and enable efficient IT recovery. Our DRPs features the following steps:

- ▶ Strategizing
- ▶ Planning
- ▶ Deploying appropriate technology
- ▶ Continuous monitoring and testing

DISASTER RECOVERY PLAN BENEFITS

If a disaster should occur in your system, would your operations be able to be up and running within a very short time?

There are a broad range of disasters that can be caused by nature, technology and humans that lead to situations where your business needs to recover quickly. Although certain types of disasters may seem improbable, it is still critically important to recognise even the slightest possibility of a disaster to ensure you can rapidly restore daily operations functions even on rare occurrences.

- ▶ **Ensure uninterrupted operations and critical process.** Your critical processes are the main target of the DRP. Their RTO (Recovery Time Objective) will be set individually to an acceptable loss amount by your operation requirements. Minimal RTO (near 0) are used for processes that can't sustain long period of unavailability.

- ▶ **Avoid critical data loss.** As for processes, critical data sources or storage are identified and RPO (Recovery Point Objective) is set according to the criticality of the data.

- ▶ **Drastic reduction of restore times.** The main reason why you need a DRP (Disaster Recovery Plan) is to reduce restore times. The plan features RTO (Recovery Time Objective) and RPO (Recovery Point Objective), two important "loss target indicators" of operation continuity management. RTO represents the amount of time after a disaster in which business operation is retaken or resources are again available for use. On the other hand, RPO can be interpreted as the amount of data loss you can afford in terms of time and amount of information. A well built plan will contribute to the reduction of restore times in many ways by identifying critical operations, using disaster scenarios, communication planification, backups and recovery and finally by testing the plan to evaluate its efficiency.

- ▶ **Comply with industry standards.** Renewable energy sites must comply with many standards such as NERC CIP. This aspect is often overlooked, especially by non specialized service providers, and cause non-compliance issues that can result in financial losses and penalties. Our team is trained on these standards and know how to implement them in your plan.

- ▶ **Prevent potential legal liability.** Your operations may be targeted by lawsuits following an outage that caused financial losses. We strongly recommanded the implemantation of a DRP (Disaster Recovery Plan). The more control you have on the continuity of your processes, the less vulnerable you are to outages and their detrimental consequences.

- ▶ **Steamline your ICT-Automation & Control processes.** Disaster recovery planning contributes to your infrastructure optimization. The plan elaboration procedure entails the analysis of the whole system, therefore may contribute to the elimination of superfluous hardware and improvement to actual strategies.

- ▶ **Minimize financial losses due to outages.** Disaster recovery plan is all about planning for the worse and recover with minimal to no impact on operations. It brings protection to all components, makes business continuity management possible and saves you money by limiting downtime, data loss, support time and also from the optimization of the hardware and software components.

CYBERSECURITY AND NETWORK INFRASTRUCTURE

"Cybersecurity has become one of the industry's biggest challenge, with hacking, supply chain management and ransomware attacks becoming more and more prevalent in the renewable energy industry."

HOW

- ▶ We perform vulnerability scanning
- ▶ We monitor firewall updates and rules
- ▶ We assist with NERC CIP assessments and operational compliance checks
- ▶ We monitor logs for suspicious activity
- ▶ We do phishing and intrusion tests
- ▶ We provide cybersecurity training to your employees

TASK

- ▶ Vulnerability scanning
- ▶ Log check for suspicious activity
- ▶ Verify VPN access list
- ▶ Check firewall rules
- ▶ Patch monitoring
- ▶ Phishing test
- ▶ IT Security training
- ▶ Subscription renewal check
- ▶ Reccurent NERC CIP Compliance checks
- ▶ NERC CIP Assessment

DETAILS

Our cybersecurity hardening services consist of ensuring the application of best practices to prevent cyber incidents and enable rapid recovery in the event of a breach.

The analysis of the security rules of your equipment, their configurations, logs and firmware versions as well as all the weaknesses discovered in your network will be reported to you in a report including an executive summary providing you with clear steps to improve your cybersecurity posture.

Additionally, we offer NERC CIP compliance checks, ensuring that you meet industry standards for cybersecurity across all components in your infrastructure.

It is a well-known fact that employees are the main entry point for cyberattacks, phishing and social hacking. Data shows that over 90% of security breaches are caused by human error. We can educate and train your employees on cybersecurity best practices and show them how to identify and prevent threats.

CYBERSECURITY AND NETWORK INFRASTRUCTURE BENEFITS

Cybersecurity is constantly evolving, look for specialized guidance.

Statistics and reports from around the world indicate that cybersecurity threats are widespread and growing in number and severity. Research results also show that most businesses have unprotected data and inadequate cybersecurity practices in place. It is important to become cybersecurity aware, and to make prevention and security practices a part of your business culture.

- ▶ **Improve visibility and establish a baseline.** It's hard to fix what you don't know exists. Our team will help you establish a baseline of your current cybersecurity posture and suggest improvements to elevate it.

- ▶ **Address security vulnerabilities.** Security vulnerabilities are not actual attacks, they represent weaknesses that may eventually be used to illegally access your network. In a way, vulnerabilities represent the probability that a system will be successfully exploited; the more vulnerabilities a system has, the higher the risk of intrusion.

- ▶ **Minimize data breaches and their impacts.** Monitored infrastructures show better resilience against cyberattacks, reduced data breaches and faster recovery.
Recovering from such breaches can be very costly, and sometimes impossible.

- ▶ **Faster response to attacks.** When an attack occurs, reaction time can make a huge difference in the outcome.
Having a cyber incident response plan that covers a wide variety of scenarios is essential.

- ▶ **Maintain compliance with standards and regulations.** In most countries, industries must comply with various regulation standards during operation. This normally involves regular reporting to document and demonstrate compliance. Our Cybersecurity and Network Infrastructure services includes the necessary tools to comply with certification entities.

- ▶ **Improve remote working security.** Allowing remote access to your business network increases the risk of a security incident. An effective identity and access management strategy teamed with monitoring significantly reduces the risk in this context.

AGNOSTICS ICT/OT PROFESSIONAL SERVICES

Our team can help you close the ITC/OT gap and reap its benefits by employing best practices and providing planning tailored to your situation.

Any of our ICT/OT Professional Services are "manufacturer agnostic". We always design our solutions using the best tools, components and strategies that will provide the upmost outcome for you.

Our services are tailored to the needs of asset owners, asset operators, construction contractors and engineering firms. Our dedication and experience in this area allows us to provide fail-safe systems that increase visibility on production and give you peace of mind.

Alternatively, we can work with you to develop a package to suit your needs. Below are some of the services we provide TO PROTECT YOUR REVENUE, MAXIMIZE AVAILABILITY AND OPTIMIZE YOUR ASSETS.

- SCADA Design & Deployment
- Testing & Commissioning
- Multi-scale Project Management
- ICT
- Virtualization
- On/Off-site Hosting
- Fiber Optic
- Software Leveling
- Firewall & Remote Access
- Data Historian Management
- Performance Optimization
- Training
- Preventive Maintenance

- Corrective Maintenance
- Retrofit
- Disaster Recovery Plan
- 24/7 Control Center
- Cybersecurity & Network Infrastructure
- NERC CIP Compliance
- Risk Based Audit/Assessment
- Secure 24/7 Monitoring
- Fleet Conformance
- Repowerring
- Data Solution Software
- Tailored Asset Monitoring

ANALYSIS, OPTIMIZATION AND CONDITION MONITORING

We also offer a cloud based monitoring solution that allows you to visualize the state of you assets in real time for solar, wind and industrial facilities. Its main features are:

- Real time monitoring of production, assets and network condition
- Alarm monitoring and management

- Weather and production forecasting
- Trip & Events
- Reporting

CONTACT US FOR MORE INFORMATION ABOUT OUR CLOUD BASED SOLUTIONS

CONTACT US TO LEARN MORE ABOUT OUR SERVICES!

Automation & Control (SCADA)

Asset Life Cycle Support

Cybersecurity & Network

24/7 Control Center

Centralized Solution

Virtualization

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