

# The Role of the Industrial Historian





## What's in a Name?

The canary bird is particularly sensitive to toxic gases. These birds were often used by miners as an early warning device to detect toxic gases that escaped the human senses.

Any sign of distress from the canary was a clear signal that the conditions underground were no longer safe. Using the canary to evaluate safety conditions enabled miners to safely evacuate the mines when conditions became harmful.





## What's in a Name?

The Canary System gives operators and engineers access to data and information that is not easily detected, providing early warning alerts to problems that can be resolved before they become disasters.

Since 1985, our mission has been centered on developing software that allows companies to make the most of their time-series process data.



# Why Canary Exists

## It's All About the Data

Store and retrieve vast amounts of data, enabling better organization, advanced analytics and real-time monitoring.

Canary helps users gain actionable insights from their operations, leading to improved decision-making and efficiency.

## Seamless Integration

As companies embrace IoT technologies like MQTT and UNS architectures, the Historian serves a vital role in connecting data with other systems and platforms. Canary remains platform agnostic.



# What Works Best?

## Open

Break free from platform lock and choose the tools and applications that make sense for your company.

## Secure

Data integrity matters. Canary follows best practices that will make your IT team happy and give you peace of mind.

## Adaptable

You call the shots. Configure just about any architecture and purchase the software as a perpetual, subscription, or SaaS license.



# The Canary System

## Performant

NoSQL database with loss-less compression algorithm means functionality without data interpolation.

## Scalable

Single server capable of more than 2 million tags. Historians can be clustered to handle tens of millions of tags.

## Flexible

Edge, Site, Enterprise, or Cloud. Your data can flow without restriction and fit the system architecture you need.

## Dependable

Users in every major industry have trusted Canary for 40 years. We continue to grow and support the solution.



## Step One

### Collect & Store Your Data

Collect data from all your devices and store it with loss-less compression.

## Step Two

### Assign Context to Your Data

Transform your complex data into clear, easy to understand information.

## Step Three

### Put Your Data to Work

Analyze your data and seamlessly integrate with other system applications.



## Step One

# Collect & Store Your Data

Collect data from all your devices and store it with loss-less compression.





## Step Two

### Assign Context to Your Data

Transform your complex data into clear, easy to understand information.

### Define Assets

Organize your tags into Asset Models and adjust the tag naming structure via Virtual Views.

### Calculations

Create calculated tags and transform raw data into aggregated values with the Canary Calculation Server.

### Automate Workflow

Event Monitoring helps you create condition-based rules and apply them to your Asset Model.



## Step Three

### Put Your Data to Work

Analyze your data and seamlessly integrate with other system applications.

### Analyze in Axiom

Canary's visualization tool gives users the ability to build trend charts, applications, and run automated reports.

### Use Data in Excel

Move data directly from the Canary Historian into Excel with our Excel Add-In.

### Integrate Your Data

Canary Data Connectors can use MQTT Sparkplug, ODBC, or the Web API to publish your data to 3<sup>rd</sup> party applications.



# The Canary Module for Ignition

## Free to Download

Available from Ignition's  
Module Showcase.

## Log Data Natively

Write data from Ignition  
projects to Canary using  
the Tag Historian Module.

## Publish to Ignition

Send data back to  
Ignition via MQTT.

## Transform Your Data

Build asset models,  
create calculations, and  
set up event monitoring  
that can be used directly  
with Ignition.



# Things to Remember

## Foundation is the Key

Companies at different stages on their digital transformation journey gain peace of mind knowing an industrial historian can scale to meet their future needs.

## Canary Meets Critical Needs

Canary clients represent private, public, and government entities in all major industries, including defense and critical infrastructure environments.

## Trusted & Proven

Clients are turning to Canary when seeking an alternative to their current historian. We can provide tools and resources to make the migration process smooth and complete.



# Canary Enables Data-Driven Decisions

“What I love most about the Canary System is the versatility it provides. Whether I’m an equipment operator looking for when my next maintenance items need to be performed or a data analyst running regression models on years of data, Canary can serve both and nearly everything in between!”

**NICK BRADY**  
DIGITAL OPERATIONS SUPERVISOR  
EVOLUTION WELL SERVICES





# canary

Industrial Database Technology