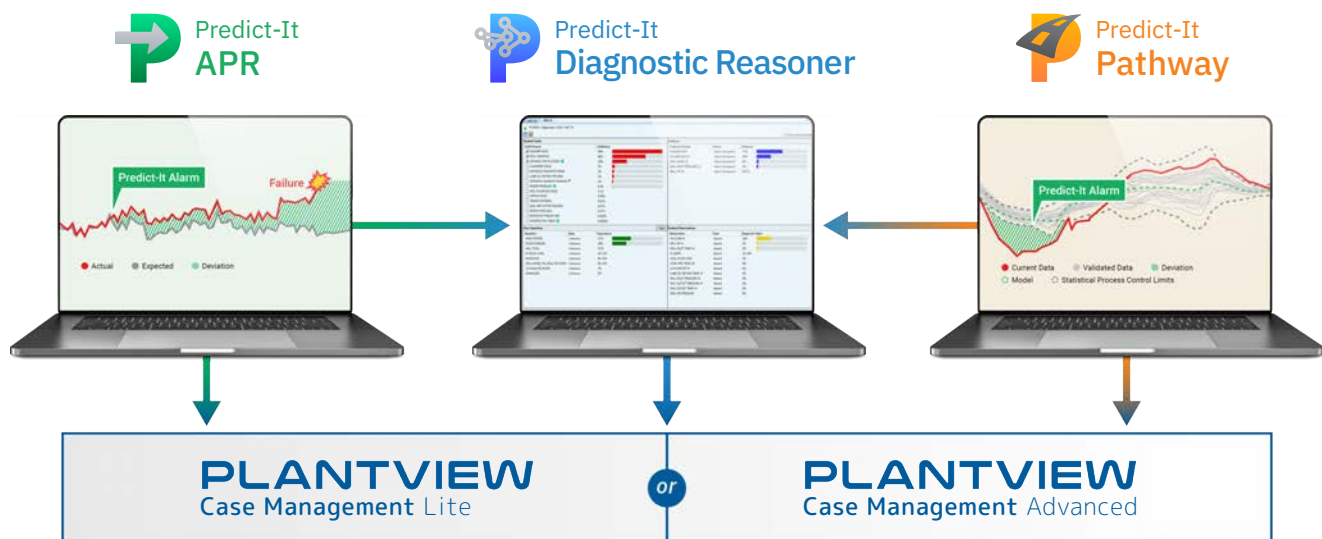




# Predict-It Modules for Equipment Health Monitoring

Predict-It addresses the challenges of analyzing steady state and transient equipment operational data by leveraging ECG's advanced equipment health monitoring and diagnostic technology. Predict-It is configured for AVEVA™ PI System® and ECG's Glance Data Historians incorporating InfluxDB®.



## The Predict-It Advantage

This suite comprises four robust modules that enable users to identify, diagnose, and manage developing equipment malfunctions at the earliest possible stage. These modules also support troubleshooting and management of equipment recovery plans.

Key benefits include:

- **Early Anomaly Detection:** Two anomaly detection modules allow users to identify minor operational changes in critical assets
- **Fault Diagnosis:** Equipment faults can be diagnosed using Bayesian network technology, which provides enhanced intelligence through differential diagnosis
- **Efficient Case Management:** Equipment cases can be managed effectively to streamline operations, reduce costs, and help achieve business goals

Predict-It is designed for straightforward deployment facilitated by automated processes and templates, or through ECG services that utilize scripts for model creation. Predict-It assists organizations in increasing uptime and supporting Condition-Based Maintenance strategies, leading to resource and cost savings. By providing essential asset health and operational metrics, Predict-It empowers users to transform their maintenance approach, protect assets, and positively impact their financial performance.

ECG's Predict-It incorporates extensive industry knowledge, leverages advanced statistical technologies, and reflects ongoing collaboration between ECG and its software users. ECG's dedication to product excellence and client success distinguishes us in terms of customer service, software performance, and custom services.

## Predict-It APR

This module utilizes **Similarity-Based Modeling (SBM)** to detect significant events during normal operation. Its algorithms continuously track trends in process variables, comparing them to historical data. This **Digital Twin Technology** creates a virtual model of an asset, notifying engineers of developing issues when variables exceed expected limits, thereby enabling preemptive actions and preventing unexpected downtime.

## Predict-It Diagnostic Reasoner

Acting as a diagnostic engine, the **Diagnostic Reasoner** utilizes **Bayesian networks** to probabilistically rank all potential faults, using alarms from both APR and Pathway monitoring as evidence. This module captures subject matter expert knowledge, providing a consistent approach to interpreting fault probabilities. The likelihood of a fault is determined based on prior occurrences of a given failure, statistical symptoms, and the causal strength between fault and symptom, ensuring that every likely asset fault is evaluated with consistent metrics.

## ECG's Remote Monitoring Service with Predict-It

ECG provides remote monitoring of critical process equipment, conducted by industry experts who leverage Predict-It's advanced analytics and diagnostics. This service ensures that critical assets are protected by providing timely access to necessary information. The ECG team consists of subject matter experts with backgrounds in operations and monitoring, acting as an extension of your on-site team. This solution offers a cost-effective alternative to establishing and staffing expensive and complex Monitoring & Diagnostic Centers.

## Predict-It Pathway

This module focuses on **transient process** monitoring using **Multivariate Data Analysis**. Pathway establishes a projected ideal path for processes with defined beginnings and ends, based on selected "golden batches". It flags batches, startups, or shutdowns that deviate from allowable limits, enabling quicker interpretation and investigation of processes that undergo rapid variations. Automated monitoring of these states saves labor hours and highlights developing issues that might go unnoticed under standard monitoring conditions.

## PLANTVIEW Case Management

This solution integrates with Power Vision's PlantView® PdM solution.

- **Case Management Lite:** Allows users to track open issues and assess equipment health using specific Predict-It information
- **Case Management Advanced:** Includes the Lite Module offering plus the ability to incorporate additional predictive maintenance data for a more comprehensive equipment health assessment

# Schedule a demo today

Let us show you how Predict-It can help

Visit [www.ecg-inc.com/letstalk](http://www.ecg-inc.com/letstalk)



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