




ZERO UNPLANNED DOWNTIME

Precognize is a predictive maintenance software for the process industry, including the chemical, petrochemical, oil and gas, and metallurgy sectors. It detects failures days to weeks in advance and provides early, accurate, and reliable alerts up to 5 times a day.


PROBLEM	SOLUTION
Unexpected machine failures resulting in lost production, significant financial damage, and high maintenance costs. BUT... failures are predictable!	Precognize helps you prevent these failures with a few clear and actionable alerts, a week to days in advance, pinpointing real problems. Using Precognize will enable you to increase plant reliability, and avoid unplanned shutdowns, production loss, and extra maintenance costs.

WHY WE ARE




NO ALERT FATIGUE

Precognize creates up to only 5 accurate and actionable alerts, instead of hundreds a day.



WE SEE THE ENTIRE PLANT

Using both static and rotating equipment, we detect equipment failures, operator mistakes, leakages, and bad sensors, and assess product





TWO-WEEK IMPLEMENTATION



With a swift implementation process that requires no hardware, Precognize can be up and running, analyzing your plant's data and predicting failures.

TRUSTED BY THE WORLD'S PROCESS INDUSTRY LEADERS



Precognize is proud to have been selected by leading chemical, oil and gas, cement, and steel manufacturers. Our solution is also available from our partners, who bring their unique experience and capabilities to the project. For each of these customers we are not just covering a specific piece of equipment, but the entire plant or a significant area therein.



Selected Customers





Selected Partners







WOULDN'T IT BE NICE
TO KNOW IN ADVANCE?

Precognize helps you prevent these failures with a few clear and actionable alerts, a week to days in advance, pinpointing real problems.

BENEFITS AND



Supported Plant Types

- Petrochemical, chemical, refineries, cement
- Dry/Wet, Continuous/Batch

Typical type of failures discovered in advance

- Valve failures, including corrosion
- Sensor errors
- Rotating equipment failures
- Heat exchanger and conveyor failures

Other issues detected by the solution

- Process deviations
- Operator's mistakes

Time prior to failure (learned from detecting historical events)

- 3 weeks to few hours

Number of alert, False alert ratio

- 0-5 alerts a day (depending on the plant's stability)
- 30% of the alerts are attributed to events which are not equipment failure (planned maintenance, new operation method, etc.)
- Corrosion development
- High pressure leakages that develop instantly

YOU HAVE ALREADY
INVESTED IN DATA
COLLECTION...

Most plants have already implemented sensors and are now collecting this data into an historian. Precognize allows you to leverage this investment and gain more from your existing data.

Supported historians (via file transfer)

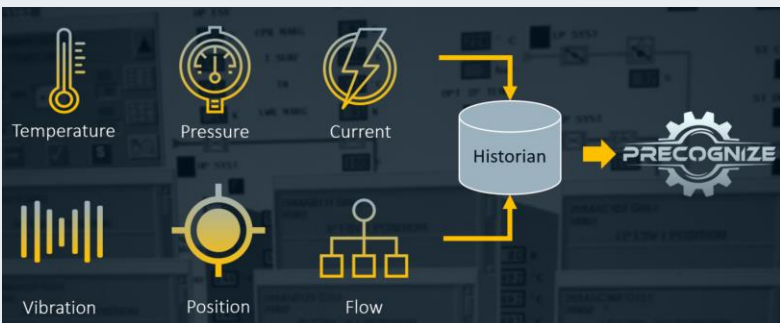
- OSIsoft PI
- Aspentech PIMs
- IBA
- Siemens, GE

Available integration methods

- File transfer
- SQL

Number of tags per plant supported by the solution

- From 100 data points to 10,000 connected points per plant



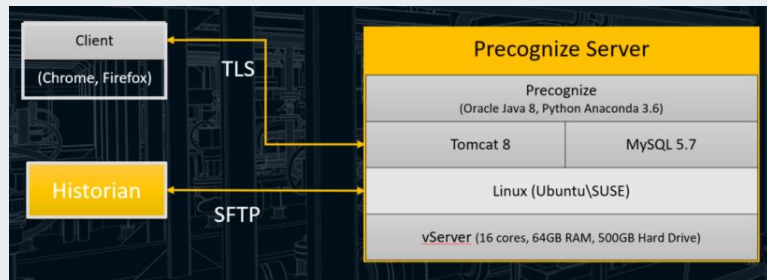
DATA INTEGRATION



ON THE CLOUD OR ON YOUR CORPORATE NETWORK

Precognize can be installed in any Virtual Machine running a Linux operating system. We can provide you with space on our server, free of charge, or install the server on your servers. It's your choice!

HARDWARE REQUIRMENTS



WE KNOW OUR USERS!

Precognize is the favorite tool for process engineers, maintenance engineers, and production managers. It highlights potential problems of the process or equipment at their inception, and dramatically increases work efficiency.

USED BY

Process engineers, maintenance engineers, production managers, and shift leaders

ACCESS

Via web browser (Chrome or Firefox preferred) from their computer

FREQUENCY OF ACCESS

Usually once or twice a day

ALERTS VIA SMS/EMAIL

Available through push to the organization's notification distribution system (subject to acquiring an annual subscription license).

MOST SOPHISTICATED TECHNOLOGY

Precognize's technology combines three disciplines, which are otherwise not connected: sophisticated machine learning, graph analysis algorithms, and system engineering conceptual design techniques. All work seamlessly together, providing you with the most accurate results!

MACHINE LEARNING TECHNIQUES

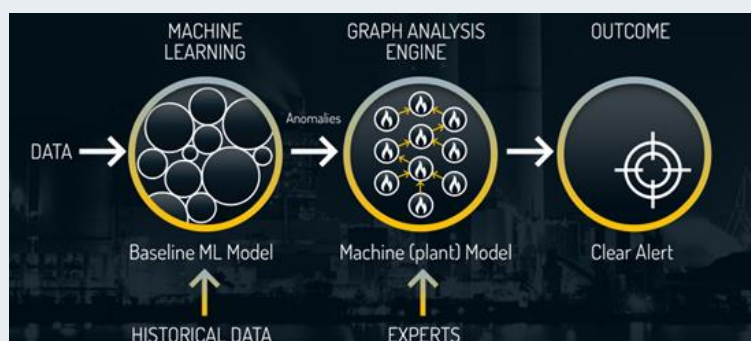
Precognize uses its own machine learning algorithms

GRAPH ANALYSIS TECHNIQUES USED BY THE SOLUTION

Precognize has built sophisticated algorithms based on path, distance, and weight to investigate the graph of the plant, and to come as close as possible to the root cause of the potential problem.

SYSTEM ENGINEERING

Main concepts are known as Object-Process Methodology (OPM)





SMART AND EASY
TOOLS TO IDENTIFY
AND ANALYZE ALERTS

An ocean of data is collected in the systems. Precognize lets the user focus on the real problems, via simple yet powerful tools.

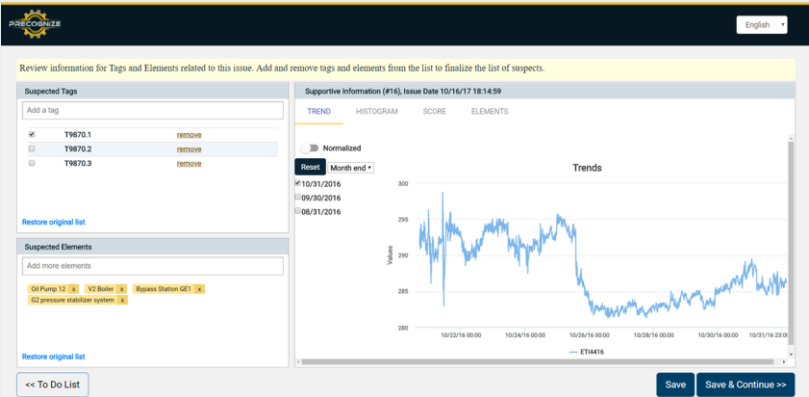
A FEW ALERTS PER DAY INDICATE THE SUSPECTED ELEMENTS

PRECOGNIZE				To Do (4)	In Progress (0)	Closed Issues (0)	English
				To Do Issues (4)			
				Filter by tag name			
ID	Section	Date	Elements in Issues				
13	feed-water	10/16/17 18:14:59	V1 Injection H2O light water flow	Review Issue			
16	feed-water	10/16/17 18:14:59	Oil Pump 12 V2 Boiler Bypass Station GE1 G2 pressure stabilizer system	Review Issue			
17	feed-water	10/16/17 18:14:59	Oil Pump 12	Review Issue			
18	feed-water	10/16/17 18:14:59	V1 Wall burner Backstr Gas Burner side V1 Feed Backstr control valve V1 Wall gas burner 1	Review Issue			

WITH ONE GLANCE YOU UNDERSTAND WHERE THE ALERT



COMPREHENSIVE TOOLS FOR INVESTIGATING THE ALERTS



EVENTUALLY, PRECOGNIZE IS THE BEST SOLUTION FOR THE PROCESS INDUSTRY

JOIN THE INDUSTRY 4.0 REVOLUTION!

Contact us: info@precog.co tel. +1-518-300-3627 www.precog.co