

OpreX™ Control Improvement Software

## EPMS

The Enterprise Pipeline Management Solution

# The Enterprise Pipeline Management Solution

## Overview

The Enterprise Pipeline Management Solution "EPMS" provides a collection of standard pipeline applications to facilitate the management and operations of gas/liquids pipeline systems. Applications can be seamlessly plugged into the CI Server real-time system platform similar to SCADA monitoring and control environment. EPMS consist of two packages; Gas Enterprise Management Suite and Liquid Enterprise Management Suite.

## Benefit

The EPMS package brings the following benefits based on 30 years of experience in engineering medium to large complex pipeline automations.

### Pipeline Management System Implementation

- Better and faster implementation
- Knowledge centralization, retention and documentation
- Enhanced lifecycle management
- Reliable system using proved functions
- Dedicated consultant and product support

### Cost of Integration

- Prevent application vendor and integration technology lock-in
- Establish a standards-based and IT/Security compliant application platform

### Reduced Cost of Ownership

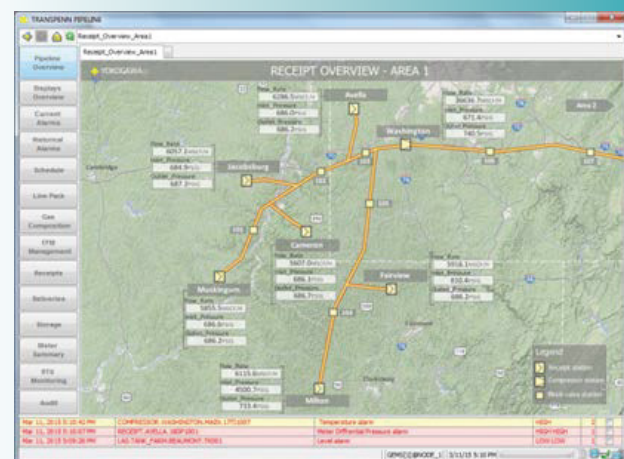
- Standard technology
- Scalable, flexible, reusable
- Lifecycle management

### Industry Standards Support

- Implement best practices from pipeline industry standards
- Provide foundation for regulatory support and compliance

### Future Proof

- IT architecture hedges against disruptive technologies and trends
- Increased process and data variety, volume, and velocity



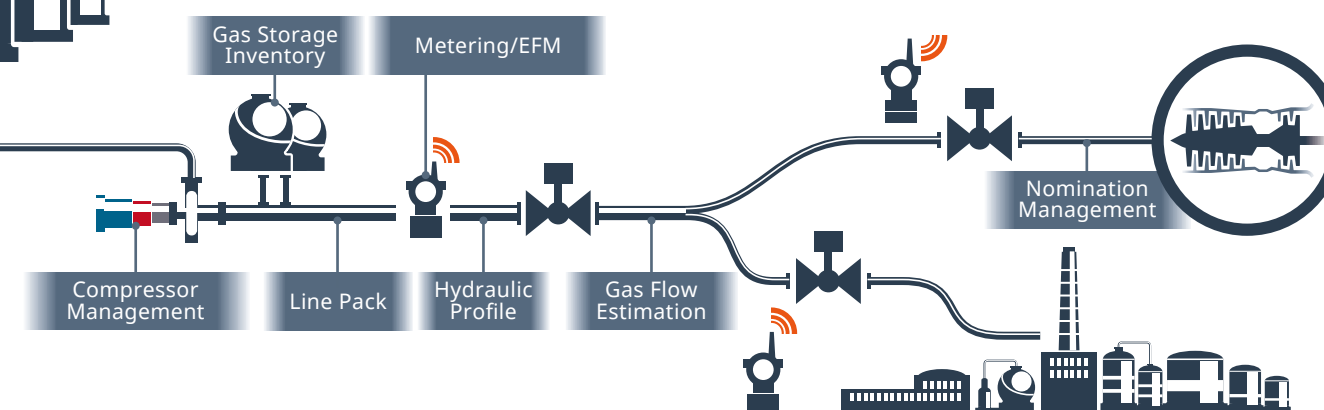
## Functional Specifications

EPMS delivers the following interrelated and integrated functions;

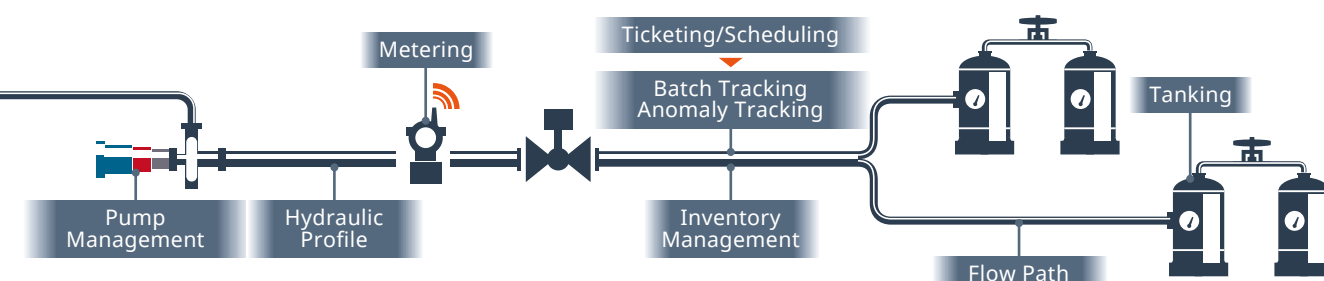
- Processing of meter inputs for accurate measurement and flow calculations
- Management of gas data with the device scheduler and EFM log up-loader
- Schedule and monitor gas nominations
- Monitor the line-pack along the pipelines and segments
- Maximum Allowable Operating Pressure, MAOP, monitoring
- Pipeline balance, storage and inventory calculations
- Schedule and track batches for efficient transportation of liquid products
- Monitor liquid pipelines for leaks, inventory and hydraulic profiling
- Drag reducing agent management and power management on compressors and pumps
- Controlling a manifold with the flow path manager
- Tracking and management of anomalies like pigs/scrapers, merge/hot spots and interfaces

## Gas and Liquid Enterprise Pipeline Suite

Pipeline applications covered by "Gas Enterprise Management Suite"



Pipeline applications covered by "Liquid Enterprise Management Suite"



## System Architecture



EPMS plugs into the CI Server platform and inherits the CI Server advantages in one common environment;

- One system/user management and configuration environment
- Same layout of pipeline displays can be used for process displays
- Same user authorization can be used within the whole application
- Standard features like reporting, history and configuration are available in the same environment

## CI Server Features

### Strong Data Model

- High Performance with Multi-Million Tags Multi-Platform
- Windows and LINUX

### Web-based HMI

- 24/7 Online
- Mobile Device Support

### Scalability and Distributed Control

- Station HMI to Multi-Million Tags
- Redundancy to Quadruple

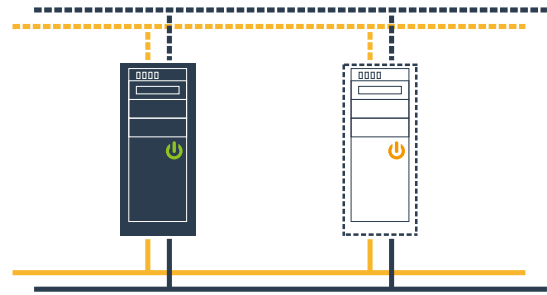
### Report by Exception

- Minimize the CPU Load
- Only 2% to 4% of Total CPU load with 10,000 I/O per Second

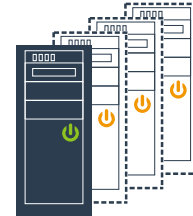
### Regular Upgrade

- Latest Technology Support

The Enterprise Pipeline Management Solution  
<https://www.yokogawa.com/industries/oil-gas/pipeline/>



Redundant Servers  
&  
Redundant Network



Full Redundant up to Quadruple



Automatic Synchronization

**OpreX™** Through the comprehensive OpreX portfolio of products, services, and solutions, Yokogawa enables operational excellence across the enterprise.

#### Yokogawa Electric Corporation World Headquarters

9-32, Nakacho 2-chome, Musashino-shi, Tokyo 180-8750, Japan  
<https://www.yokogawa.com/>

#### Yokogawa Corporation of America

12530 West Airport Blvd, Sugar Land, Texas 77478, USA  
<https://www.yokogawa.com/us/>

#### Yokogawa Europe B. V.

Euroweg 2, 3825 HD Amersfoort, The Netherlands  
<https://www.yokogawa.com/eu/>

#### Yokogawa Engineering Asia Pte. Ltd.

5 Bedok South Road, Singapore 469270, Singapore  
<https://www.yokogawa.com/sg/>

#### Yokogawa China Co., Ltd.

Room 1801, Tower B, THE PLACE, No.100 Zunyi Road, Changning District, Shanghai, China  
<https://www.yokogawa.com/cn/>

#### Yokogawa Middle East & Africa B. S. C. (c)

P.O. Box 10070, Unit A7, Building 1320, Road 1516, Block 115, BIIP, Al-Hidd, Kingdom of Bahrain  
<https://www.yokogawa.com/bh/>

#### Trademarks

The names of corporations, organizations, products and logos herein are either registered trademarks or trademarks of Yokogawa Electric Corporation and their respective holders.

Subject to change without notice.

All Rights Reserved. Copyright © 2024, Yokogawa Electric Corporation

Visit our website at:

<https://www.yokogawa.com/solutions/products-and-services/control-and-safety-system/collaborative-information-server/enterprise-pipeline-management-suite-epms/>



Represented by:

Printed in Japan, 404(KP) [Ed : 02/d]