ABB Condition Monitoring Solutions

Vernon Smith – Turbine Account Manager

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Today's Purpose

Goal

–Implement an Integrated Monitoring System for Rotating Machinery

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Agenda

Topics of Discussion

- System Overview
- 800xA Integration
- MCM800
- WiMon Sensors
- Analyst Software
- Applications
- Fault Diagnosis

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Benefits of Upgrade

Why ABB?

- Integration with 800xA
- Evolution Without Obsolescence
- Flexibility
- Avoid Temporary Walkaround Data Capture
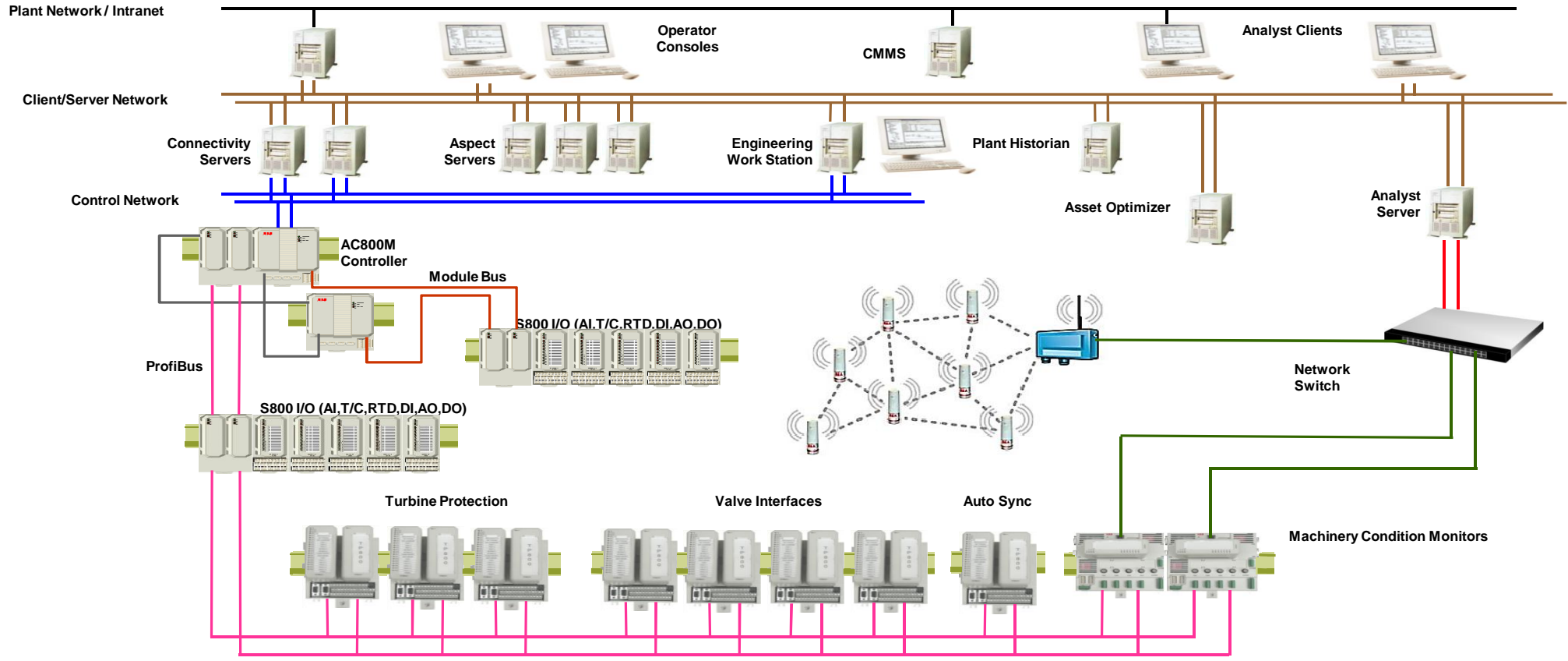- Continuous Improvement

800xA System Overview

Plant Network / Intranet

Operator Consoles

CMMS

Analyst Clients

Client/Server Network

Connectivity Servers

Aspect Servers

Engineering Work Station

Plant Historian

Control Network

Asset Optimizer

Analyst Server

AC800M Controller

Module Bus

S800 I/O (AI,T/C,RTD,DI,AO,DO)

ProfiBus

S800 I/O (AI,T/C,RTD,DI,AO,DO)

Network Switch

Turbine Protection

Valve Interfaces

Auto Sync

Machinery Condition Monitors

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800xA Integration

Features

– Custom Built MCM Library

– Hardware Definition Files for CI854 Communication
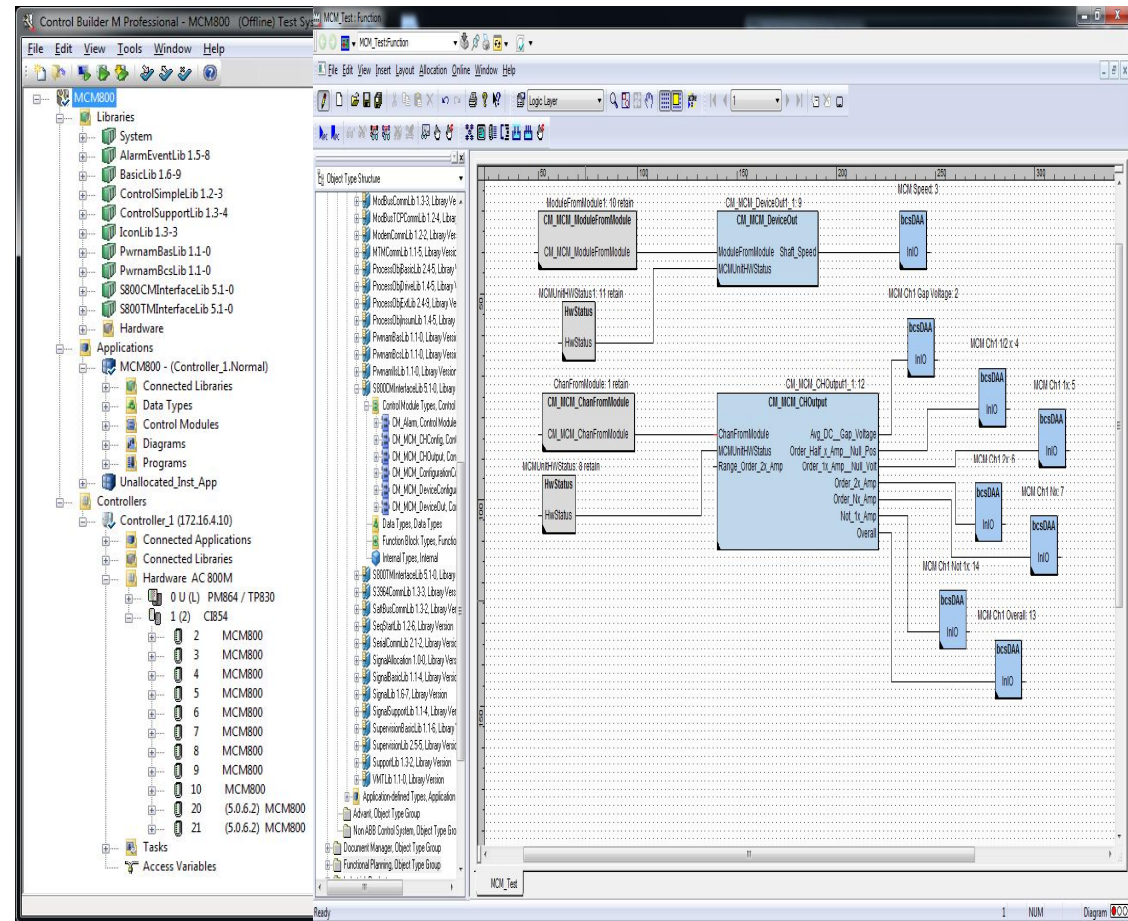
– Waveform Triggers

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MCM800

Features and Benefits

- Universal All in One Module

- 4 Sensor Inputs

- Waveform Collection for High Level Diagnostics

- Various Communication Methods
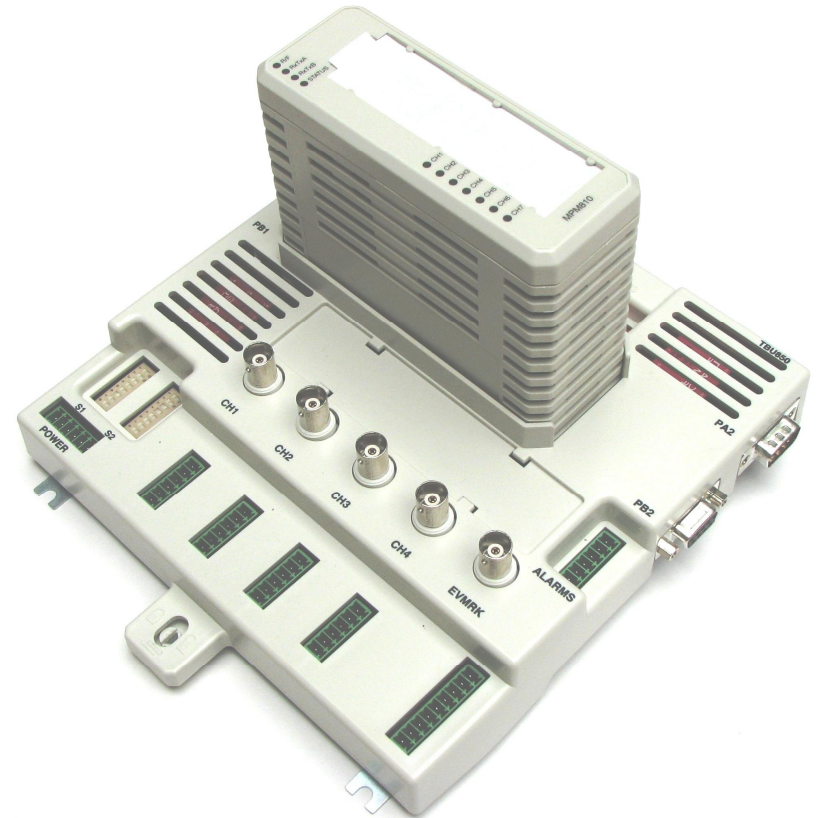
- Standalone Capability

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WiMon 100 Sensor

Features and Benefits

- 5 Year Battery Life
- Dual Vibration and Temperature
- Mesh Wireless Network
- Reduced Installation Costs
- Different Mounting Options
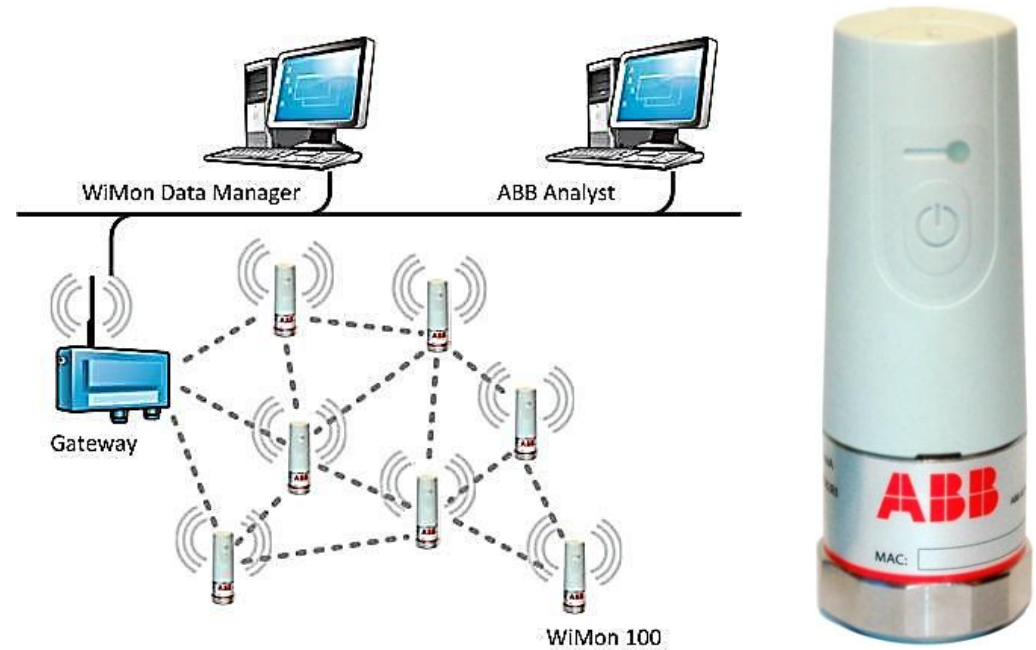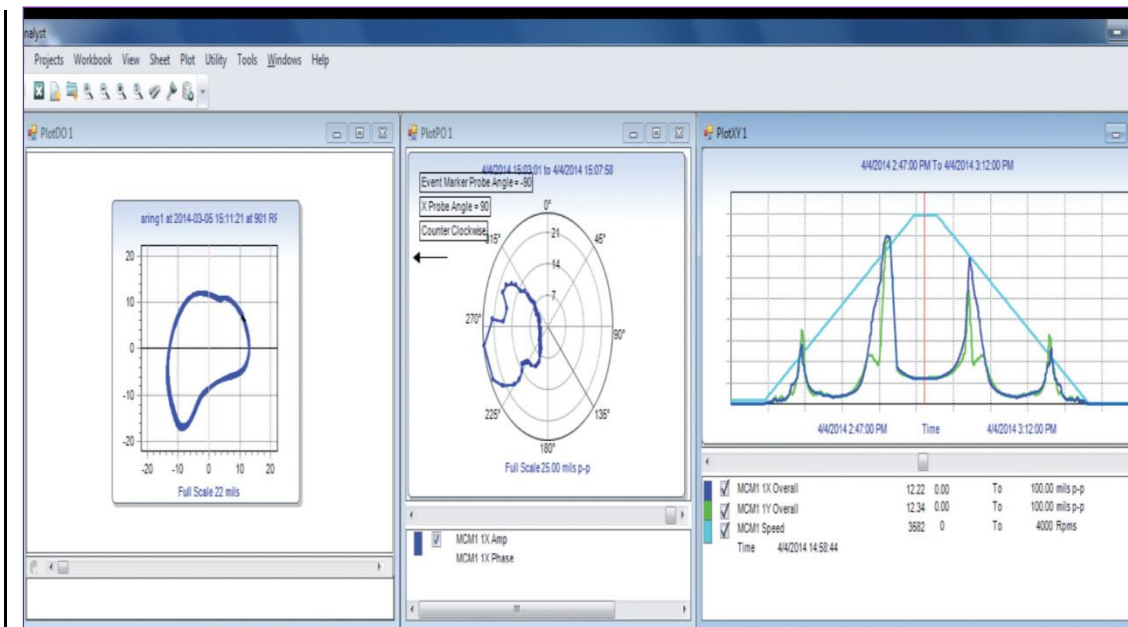- Enables Monitoring in Hazardous Areas (IP66 Compliant)

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Analyst Software

Features and Benefits

- Graphical Interface for Predictive Maintenance

- 16 Different Plot Types

- Compare Present to Past

- Online Configuration of MCM Parameters
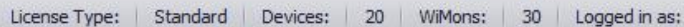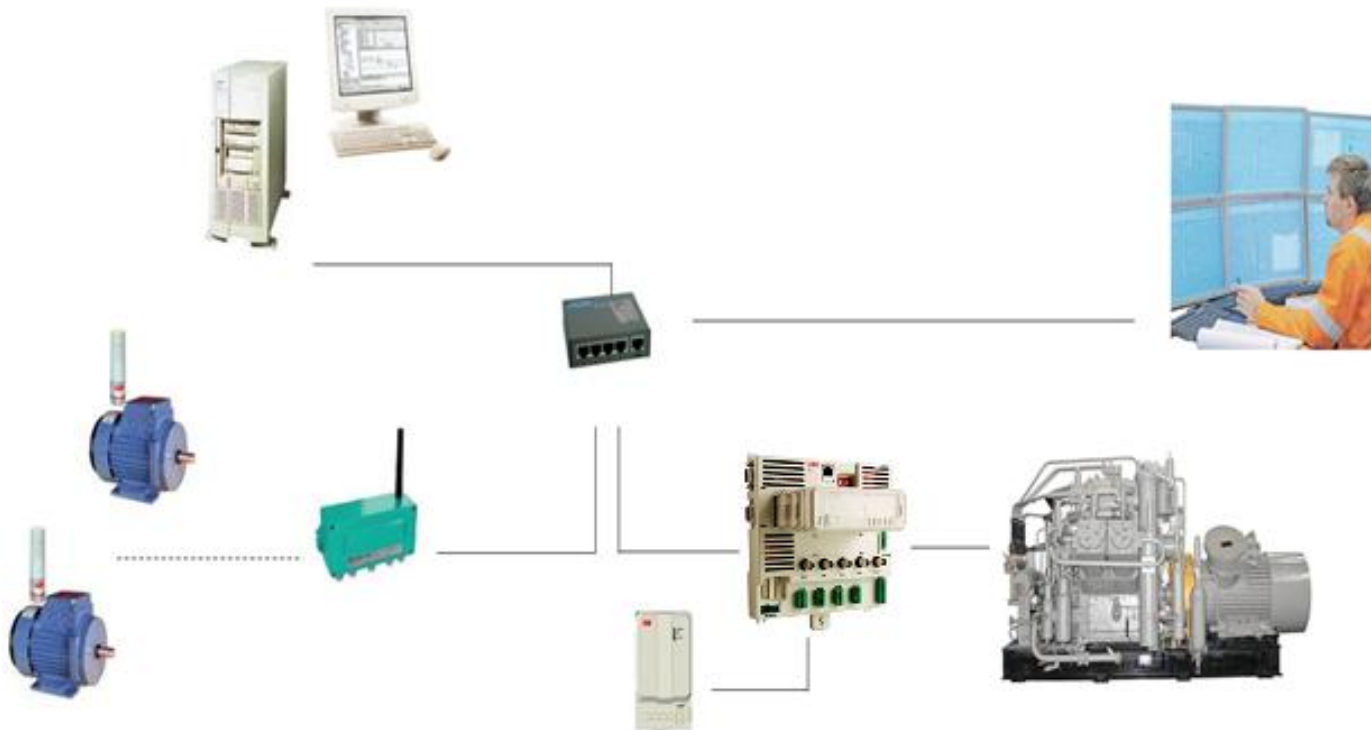
- Standalone Capability

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Applications

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Fault Diagnosis Demo

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