The Vortex Edge PMQ Industrial Server (Industrial Server) is a ruggedized industrial server preconfigured to support the development of PMQ predictive models and results deployment in harsh environments.

Many organizations lack both visibility and predictability into their assets’ health and performance. Vortex Edge PMQ enables organizations to address this problem head-on by providing an integrated approach to optimization of physical assets, operations, and processes.

Vortex Edge PMQ uses information collected about products, processes and assets to optimize maintenance schedules, production processes and product quality by:

- Minimizing unplanned asset downtime
- Predicting the best time to perform maintenance on a monitored asset
- Uncovering process deficiencies that can affect product quality
- Identifying the root causes of asset failures

Vortex Edge PMQ can process multiple data sources in real-time to predict asset failure or quality issues, helping organizations avoid costly downtime by developing the optimal maintenance strategy. Driven by predictive analytics running on edge compute nodes and/or in a data center, the solution can be used to detect even minor anomalies and failure patterns to determine the assets and operational processes at greatest risk of problems or failure. This early identification of potential concerns helps companies deploy limited resources more cost effectively, maximize equipment uptime, and enhance quality and supply chain processes.

The Industrial Server is a pre-integrated combination of ADLINK’s ruggedized SETO-1000 server platform for deployment in the harshest environments and IBM’s Predictive Maintenance and Quality (PMQ) analytics software. PrismTech’s Vortex provides secure and reliable real-time data connectivity, integrating the multiple data feeds from the equipment and sharing the data with the IBM PMQ Server (either on premise or in the cloud). Vortex is also used to deliver predictive model updates to the distributed Vortex Edge PMQ Smart Gateways. The Industrial Server is based on Intel® Xeon® processors for maximum processing performance.

The Industrial Server consumes data from your connected things and creates predictive models focused on key maintenance and quality use cases. PMQ solutions for quality management and maintenance optimization, combined with business intelligence applications for the automotive, oil/gas, industrial, semiconductor and energy industries help you increase the performance of your operations and maximize return on asset investment. Capturing data and deploying results to where they have greatest value is key to a successful implementation.
Hardware Features

- Single/Dual Intel® Xeon® Processor E5-2400 v2 series
- Six memory sockets support VLP RDIMM DDR3-1333/1600 REG/ECC up to 96GB
- Intel® C604 Chipset
- Dual 10G SFP+ ports
- Dual 10/100/1000 BASE-T ports
- IP65 water and dust proof
- Conduction cooled, aluminum chassis

Integrated Software

- Operating Systems
  - Red Hat Enterprise Linux
- Predictive Analytics
  - IBM WebSphere® Application Server
  - IBM SPSS® Collaboration and Deployment Services
  - IBM SPSS Modeler Server
  - IBM Solution Publisher
  - IBM SPSS Modeler Server Premium
  - IBM SPSS Data Access Pack
  - IBM SPSS Modeler Collaboration and Deployment Services Adapter
  - IBM SPSS Decision Management
  - IBM SPSS Statistics Server
  - IBM SPSS Statistics Collaboration and Deployment Services Adapter
  - IBM DB2® Client
- Business Intelligence
  - IBM WebSphere® Application Server
  - IBM HTTP Server
  - IBM Cognos® Business Intelligence
  - IBM DB2 Client
- Connectivity and Integration
  - Vortex Cloud
  - Vortex DDS to Integration Bus Connector
  - IBM WebSphere MQ
  - IBM Integration Bus
  - IBM Integration Explorer
  - IBM Integration Bus C00C Database Extender
  - IBM DB2 Client
- Database
  - IBM DB2 Enterprise Server Edition

Use Cases

- Industrial / Automotive / Smart Factory / Industrie 4.0
- Underground Mine Equipment Monitoring
- Intelligent Wireless Tower Management
- Manufacturing Quality Early Warning
- Central Utilities Equipment Optimization
- Rail Equipment Performance Monitoring

For further information regarding the Vortex Edge PMQ Industrial Server please e-mail: info@prismtech.com or visit: http://www.primtech.com/contact-us