

# API Gateway based approach to Integrations

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## GLOBAL PRODUCT DATA INTEROPERABILITY **SUMMIT** 2016



ELYSIUM

Parker Aerospace

NORTHROP GRUMMAN

BOEING

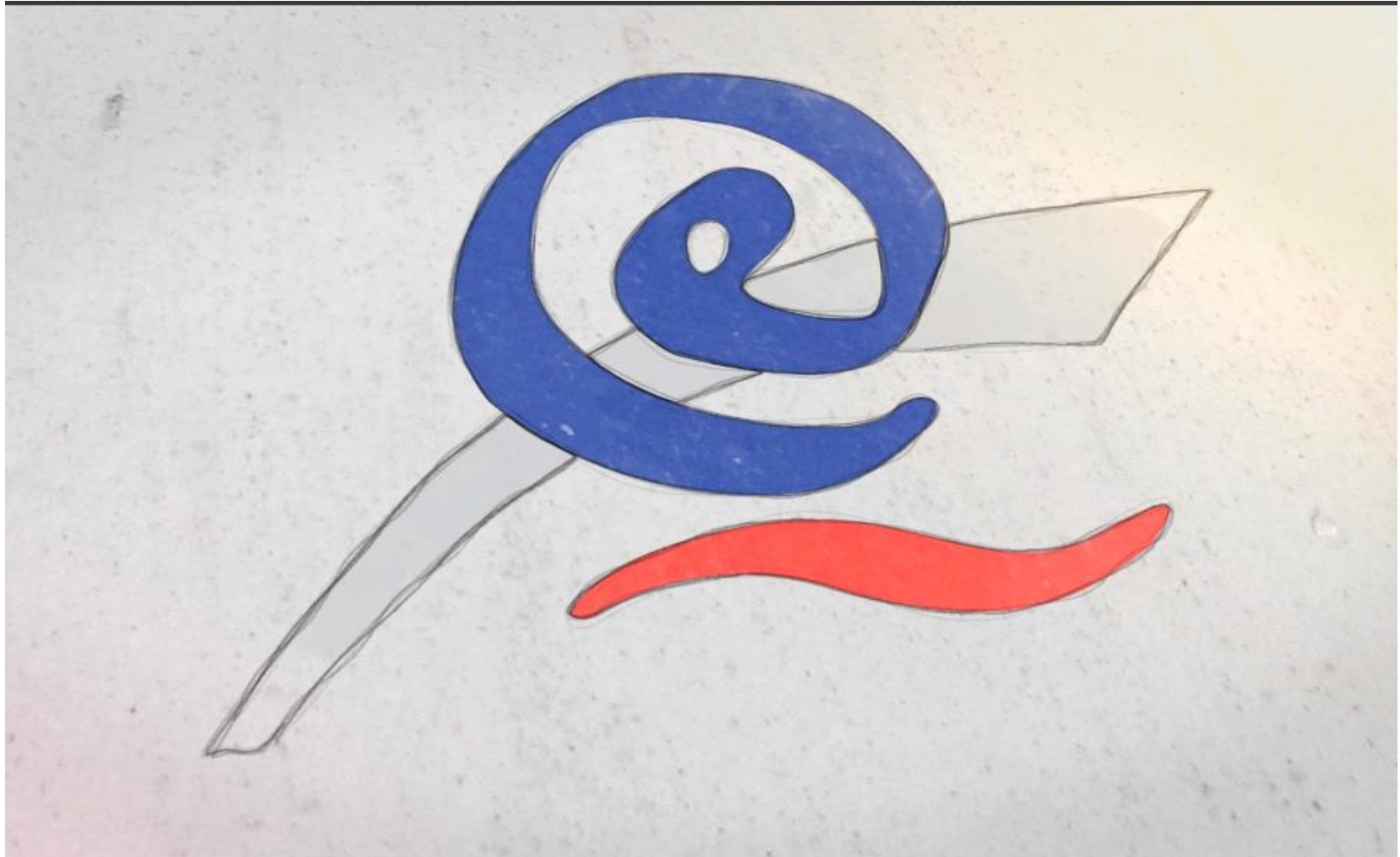


# Agenda

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- **Company and Product overview**
  - About eQ Technologic, Inc.
  - Product overview
  - Brief Architecture
  - Key features
- **API Gateway based Integration approach**
  - Deployment options
  - Demonstrations

- **Responsible for Product technology direction and execution @ eQ Technologic**
- **Over 29 years of experience**
- **Prior experience**
  - **Digital Equipment Corp**
  - **Ford Motor Credit Company**



- **Makers of the eQube Platform**



## Digital Backbone – Actionable Insight

- **eQube®- a platform for Enterprise Information Infrastructure**
  - eQube-MI – for application migration, synchronization, and integration
  - eQube-BI – “Rapid-BI” solution for enterprise-wide visibility with Big Data analytics
  - eQube-DP – for profiling data – data quality assessment, correction, and repair
  - eQube-TM – for transformation modeling – establishes a knowledge-base of simple / complex maps of disparate systems for rule-based transformations
- **World Wide Customer Base**
  - Aerospace & Defense, High-tech, Automotive & Transportation, CPG & Retail
  - Hundreds of large customers worldwide.

eQ is a ISO-27001 certified Company  
Information security management standard for Assets:  
Intellectual property, financial information, business processes,  
project information, employee information, etc.



eQube-BI is also marketed by Siemens PLM as  
Teamcenter Reporting and Analytics

**TEAMCENTER**  
REPORTING & ANALYTICS

eQ is a Siemens PLM Solution Partner for Teamcenter  
integration, synchronization, and migration

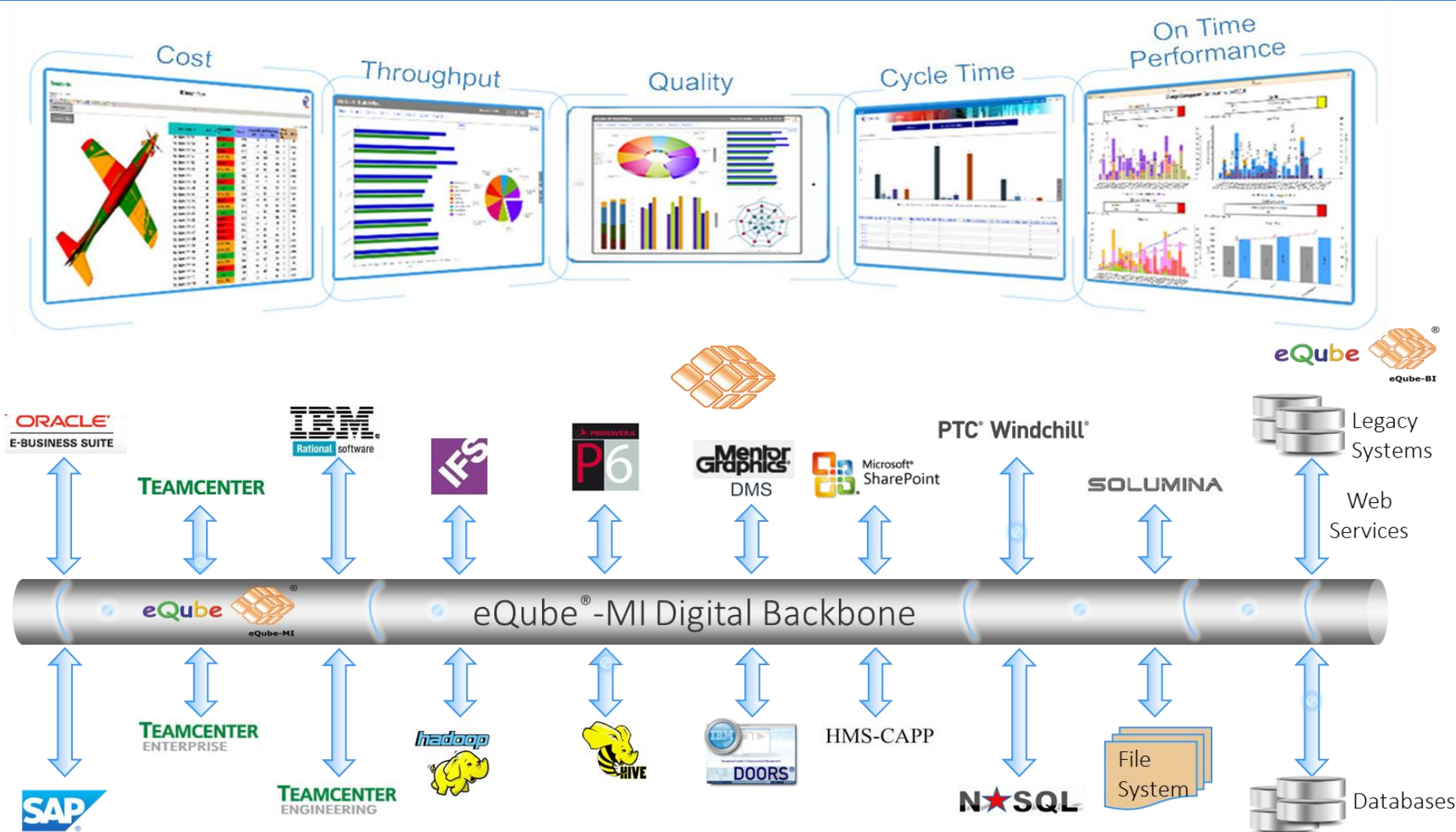


eQube Connector for SAP ERP 6 is certified for  
integration with SAP NetWeaver

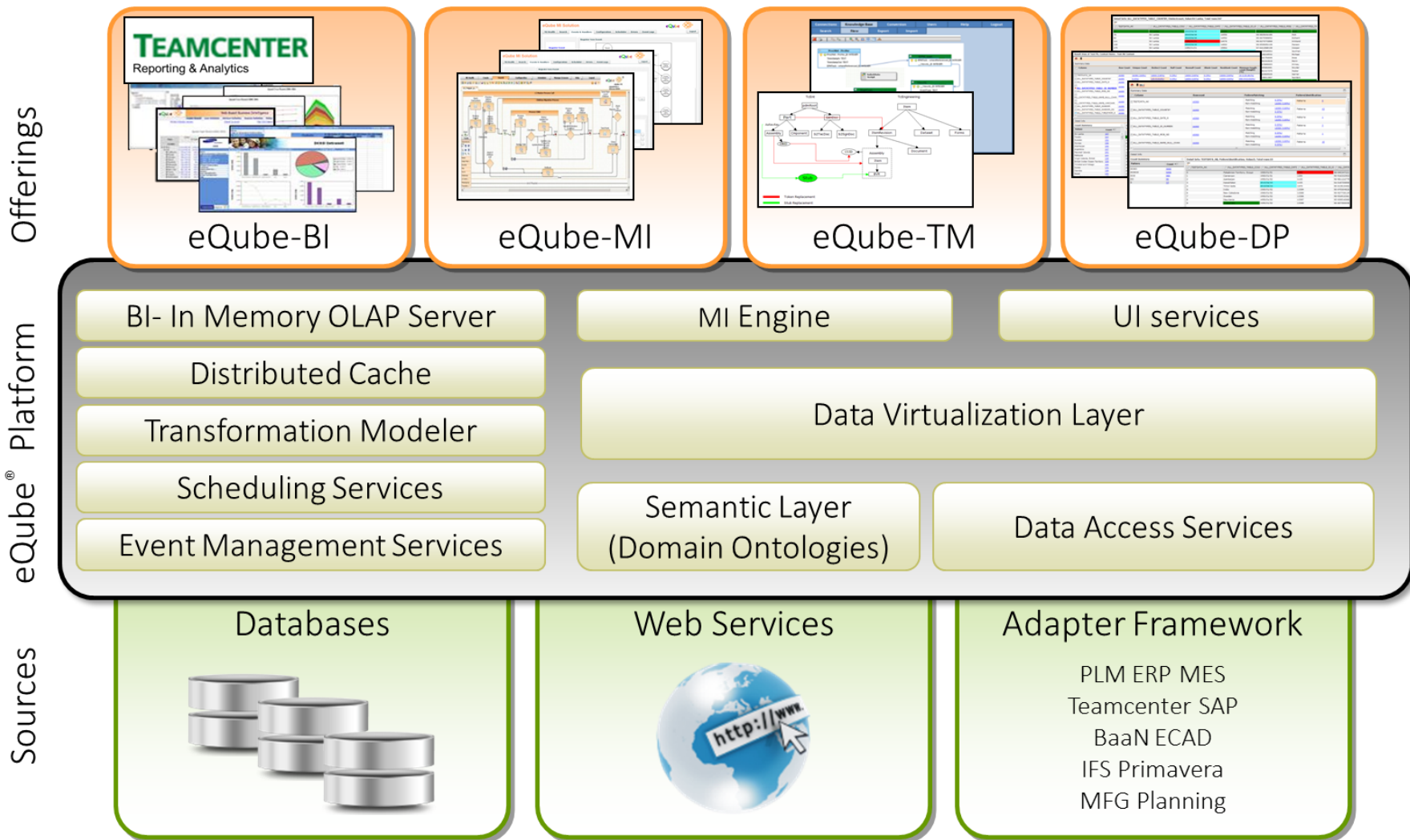
**SAP**® Certified  
Integration with SAP Applications

# Digital Backbone – Actionable Insight

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# eQube platform Key differentiators

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- **Single integrated platform that delivers Solutions**
  - Core common services leveraged by eQube products
- **Pre-built comprehensive eQube Connectors**
  - Maintained by eQ across multiple versions of the underlying application
- **Innovative Data Virtualization layer**
  - Easily aggregates data from multiple applications in-memory
  - No need to have intermediate data mart or data warehouse
- **Semantic layer (leverages domain ontologies)**
  - Further simplifies read & write interactions with the underlying applications
  - Key to our vision of ‘Democratizing BI’
- **No coding required for the “last-mile” connectivity**
  - To develop interfaces for application integration / synchronization
  - To fetch data from multiple sources – data mashups - BI

# eQube-MI – ‘Not only ESB’ architecture

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- **Next generation application integration platform**
  - ‘Not Only ESB’ architecture
- **Single platform for**
  - Application Integration
  - Application synchronization leading to orderly migration
    - Application consolidation and application retirement
- **Supports various integration strategies without having to write code for the “last-mile” connectivity to applications:**
  - ESB type:
    - Message-oriented
    - Service orchestration based
    - Common (canonical) data model based
  - Loosely coupled application-to-application type
  - API Gateway type

# eQube-MI – ‘Not only ESB’ architecture

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- **MI Process for one or more interfaces**
  - **MI Process Designer (integrated business process modeling capability to define a MI Process)**
    - **Activities – Read and Write Activities (MI Process is made up of Activities)**
- **Services oriented integration best practices:**
  - Adheres to various Enterprise integration patterns
  - Common data model based integration
  - Service orchestration based integration
  - Message oriented integration
- **Loosely coupled application-to-application integration**
- **Gateway-centric architecture:**
  - REST API or Web-service
  - Supports Microservices architecture and implementations

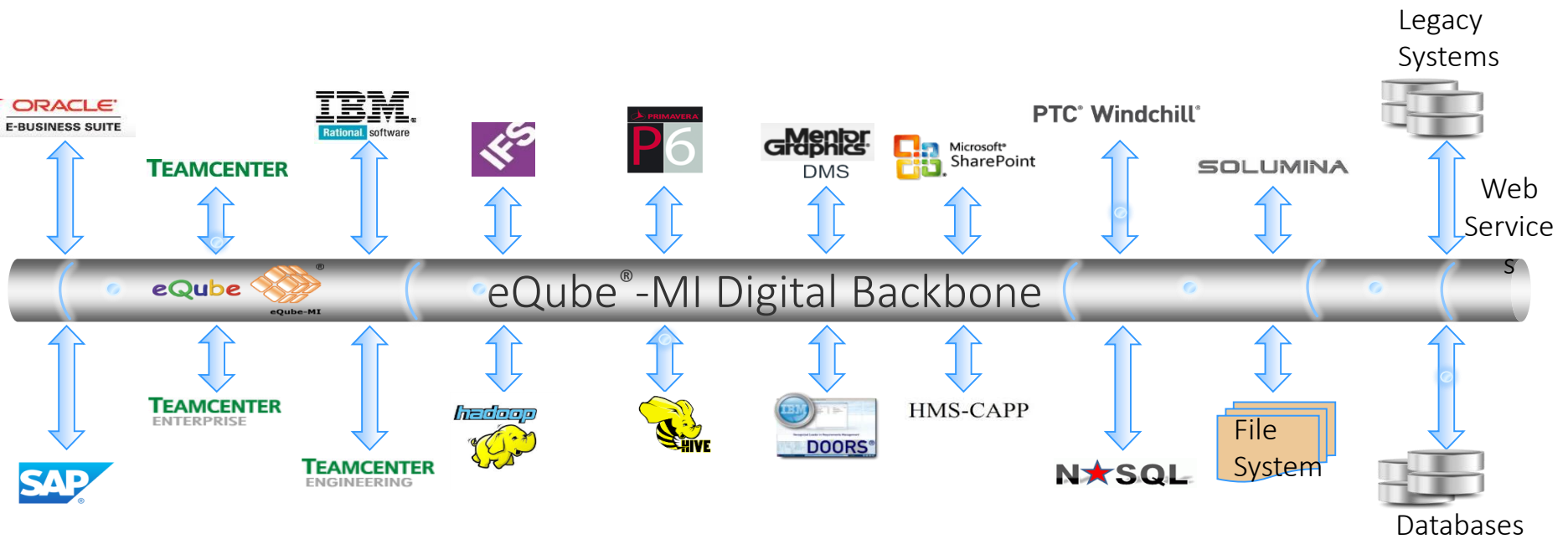
# API Gateway based Integration approach

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- **Agile light weight approach to application integrations using APIs/Microservices**
- **Visually build the business logic using the process designer**
- **Extend the capabilities of the existing applications using the API based approach**
  - **Build easy to use, for purpose Web/mobile applications on existing legacy systems or COTS applications**
- **Flexible deployments**
  - **On premise**
  - **Hybrid**
  - **Cloud deployment**

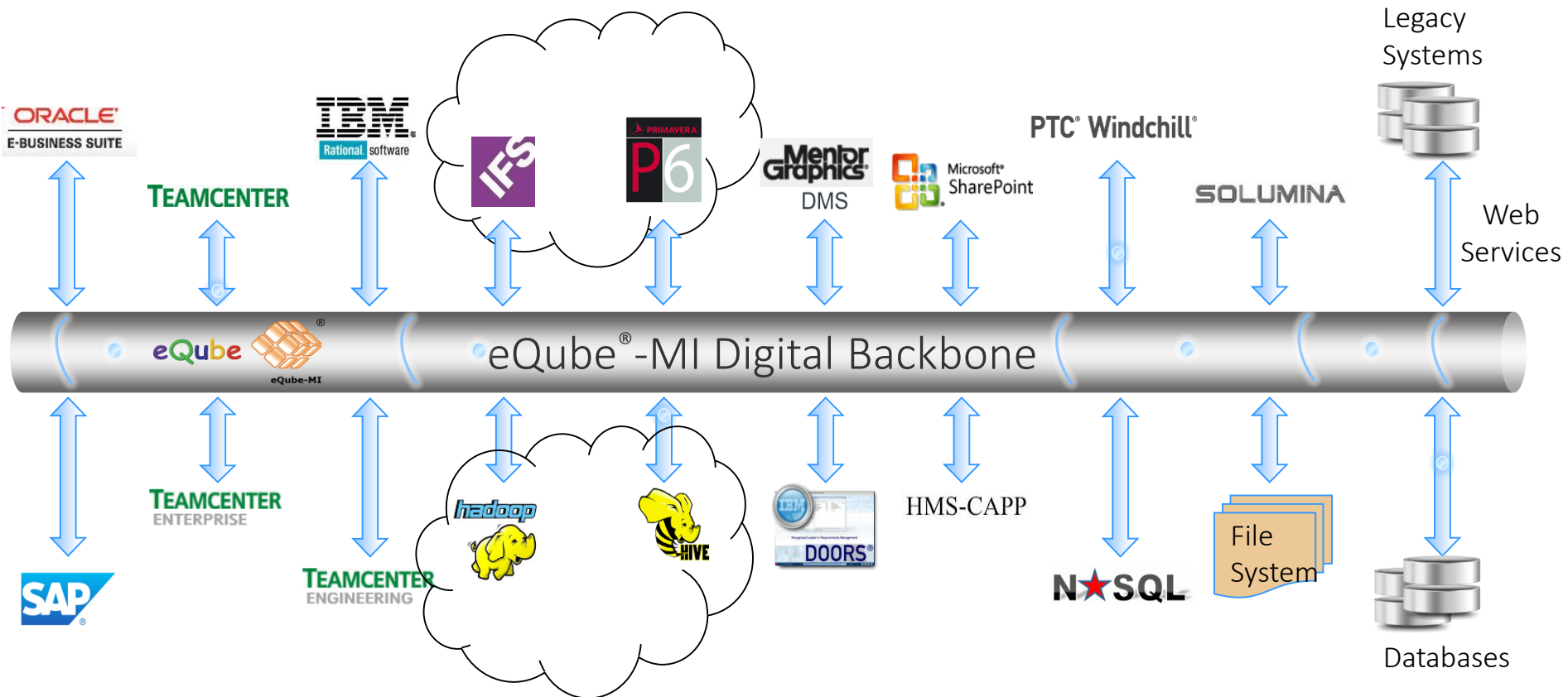
# On Premise deployment

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# Hybrid deployment

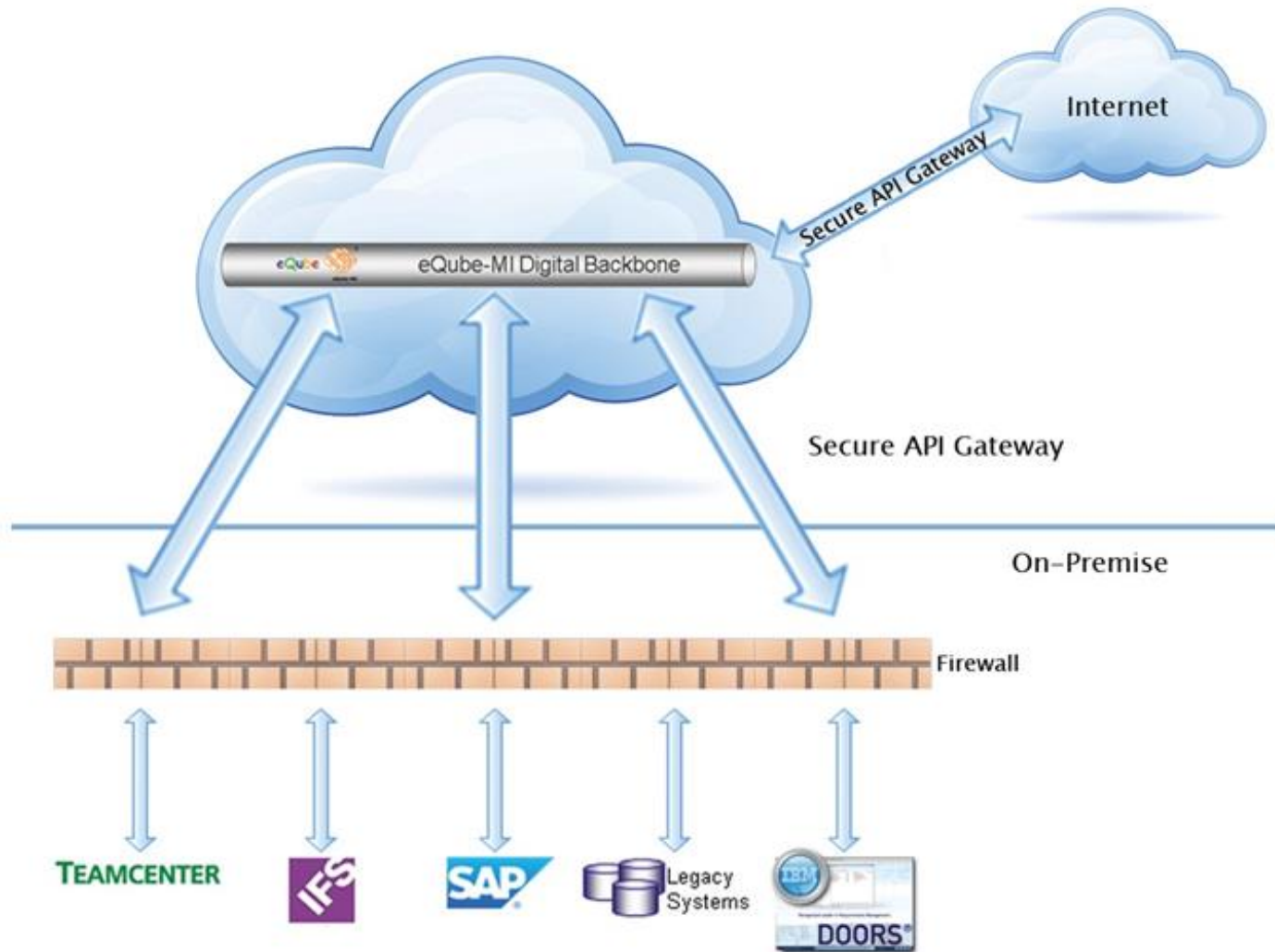
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# Cloud deployment - PaaS

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# Demonstration

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- **For purpose App for simplifying the review process in Engineering Workflow**
  - On premise deployment
  - Exposed to the users through SharePoint Portal as well as through Windows phone
  - [Demo Link](#)
- **Simple Web application built on top of SAP and Teamcenter**
  - Cloud deployment with applications on premise
  - REST APIs based simple Web
  - Demo Link
- **Extending the capabilities of the existing applications**
  - On premise deployment
  - [Display data from SAP within Teamcenter](#)
  - [Add Forecasting Capability to MRO](#)

# Digital Backbone – Actionable Insight



## Thank You