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Understanding Operational Data Store (ODS) Benefits and Challenges

Part 2 - A Technical Perspective

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Overview

- i What is an ODS?
- i What are the benefits of an ODS?
- i What are the challenges of an ODS?



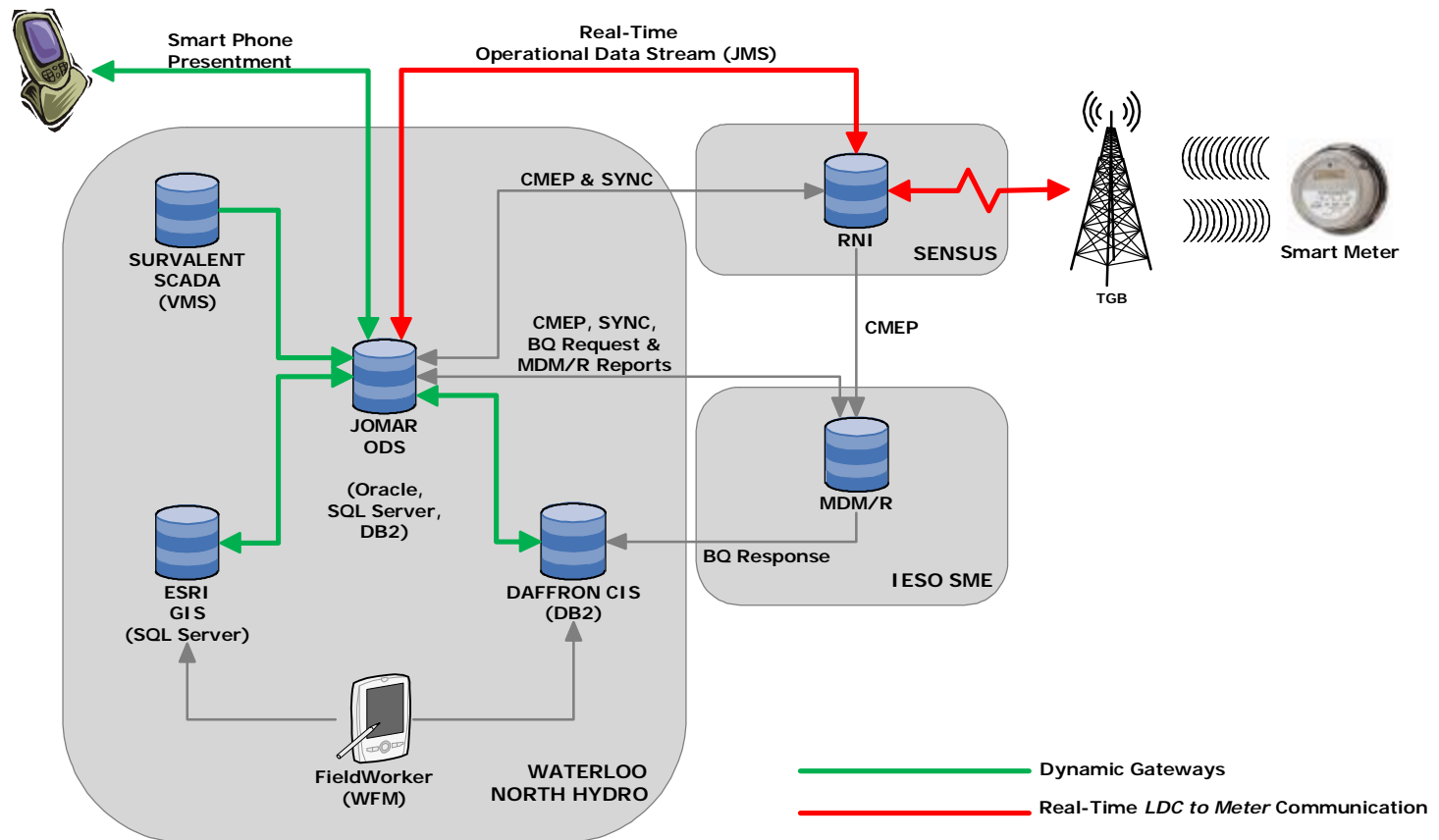
What is an ODS?



What is an ODS?

- ┆ **The Role of the ODS**
 - ┆ Central Repository
 - ┆ Electrical Consumption Data
 - ┆ **Real-time** Operational Alarms & Events
 - ┆ Voltage Information (Min, Max, Avg)
 - ┆ The 'Hub' of the LDC Smart Meter Information Processing with 'Dynamic Gateways' for Integration with Internal & External Systems
 - ┆ AMCC / MDMR / CIS / GIS / SCADA
 - ┆ Tool to Allow Implementation of Streamlined Business Processes

ODS Overview





Benefits of an ODS



Benefits of an ODS

- i Three Main Benefits:**
 - | Meter & Network Health**
 - | Seamless Integration with MDM/R**
 - | Integrated Outage Management System**



Benefits of an ODS

i **Meter & Network Health**

- | Provides for Monitoring of AMI Meter/Network Health
- | Ability to Verify Network Integrity through Daily Compliance (SLA levels met)
- | **Real-time** Monitoring of Operational Data Stream
- | Assists Staff in Troubleshooting Problems by Grouping into one of 4 Problem Areas (Service, Communication, Outage & Billing)
- | On-Demand Meter Consumption & Alarm Data Via Operational Data Stream



Benefits of an ODS

i Seamless Integration with MDM/R

- | Automatic Reconciliation of MDM/R Feedback with ODS Repository
- | Integrated Monitoring of Events in the CIS System to Proactively Manage MDM/R Exceptions.
- | Streamlined Delivery of Missing Intervals & Reads via the Operational Data Stream to MDM/R
- | Facilitates SYNC, USDP & Billing Quantity Requests with MDM/R
- | Provides for Integrated Billing Inquiries (By Cycle)
 - i Detects and Colorfully Depicts Unscaled and Scaled Estimates as well as Valid Consumption Data



Benefits of an ODS

i **Integrated Outage Management Processes**

- | **Facilitates Timely Resolution of Operational Alarms & Outage Events**
- | **Integration with CIS Service Orders to Provide Dynamic Access to Field Activity**
- | **Integration with GIS: Meters à Transformer à Feeder Level for Outage Management**
- | **Assists with Infrastructure Planning via Load Analysis & Trending**



Challenges of an ODS



Challenges of an ODS

i Major Challenges

- | Understanding the True Potential and Role of an ODS
- | ODS Dynamic Gateway Technology to facilitate smooth integration between LDC's Systems
- | **Realtime Operational Data Stream**
- | Establishing New Business Processes that are Smart, Efficient and Automated across Systems
- | Processing Large Volumes of Information in a Timely and Effective Manner to Make Data Useable
 - i Data Organization / Dashboard Presentation
 - i **User Configurable Business Rules** for Automatic Generation of Exception Events



Thank You
Any Questions?

