ORACLE MAXIMUM AVAILABILITY ARCHITECTURE

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THOMSON REUTERS DATABASE SCALE

• Oracle Database Environment
  – Over 1200 Databases Deployed
  – Over 2400 Instances Deployed
  – Over 1 PB Of Allocated Storage
  – Over 350 New Instances Deployed Last Year
1. BUILDING BLOCKS

- TR Building Blocks
  - Linux, Intel, Oracle, NAS

- MAA Best Practices
  - Oracle RAC
  - Active Data Guard
  - Oracle GoldenGate
2. STANDARD DEPLOYMENT PATTERNS

- **Content Delivery**
  - Data Feeds
  - Editorial Staff

- **Content Publishing**

- **User Data**
  - Customers
CONTENT PUBLISHING

- Content Systems
  - Acquire/Enhance Content
  - Publish to Content Delivery Systems
  - Minutes of Downtime Tolerable
- Protection from
  - Hardware Failures
  - Site Failure
    - Active Data Guard Role Switch
CONTENT DELIVERY

- Online Systems
  - 7x24x365
  - Zero Downtime for Read

- Protection from
  - Hardware Failures
  - Site Failure (Publishing Downtime)
USER DATA

• Customer Facing Products
  – Enhanced User Experience
  – Device Independence
  – Software as a Service (SaaS)
  – Zero Downtime for Read/Write

• Protection from
  – Hardware Failures
  – Site Failure
SERVICE LEVEL TIERS

**GOLD**
- Zero read-write outage
- Near-zero data loss

**SILVER**
- Zero read outage
- Near-zero data loss

**BRONZE**
- Minutes of downtime
- Near-zero data loss
3. BUILDING SYSTEMS

• Patterns combined to build systems
BRINGING IT ALL TOGETHER