



REUTERS/Lee Jae Won

# ORACLE MAXIMUM AVAILABILITY ARCHITECTURE

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THOMSON REUTERS

# THOMSON REUTERS DATABASE SCALE

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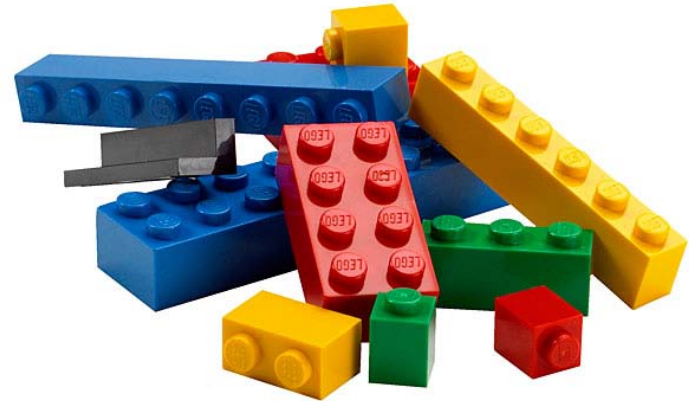
- Oracle Database Environment
  - Over 1200 Databases Deployed
  - Over 2400 Instances Deployed
  - Over 1 PB Of Allocated Storage
  - Over 350 New Instances Deployed Last Year



# 1. BUILDING BLOCKS

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- TR Building Blocks
  - Linux, Intel, Oracle, NAS
- MAA Best Practices
  - Oracle RAC
  - Active Data Guard
  - Oracle GoldenGate

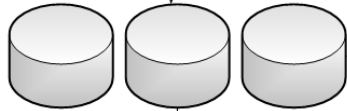


## 2. STANDARD DEPLOYMENT PATTERNS

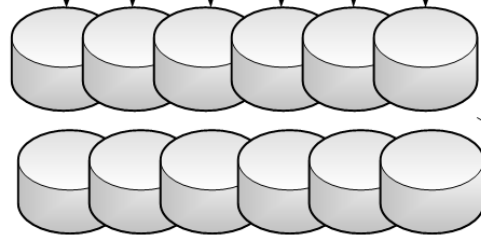
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Content  
Publishing

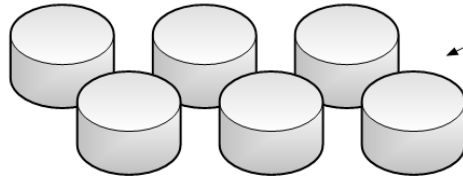
Data Feeds



Content  
Delivery

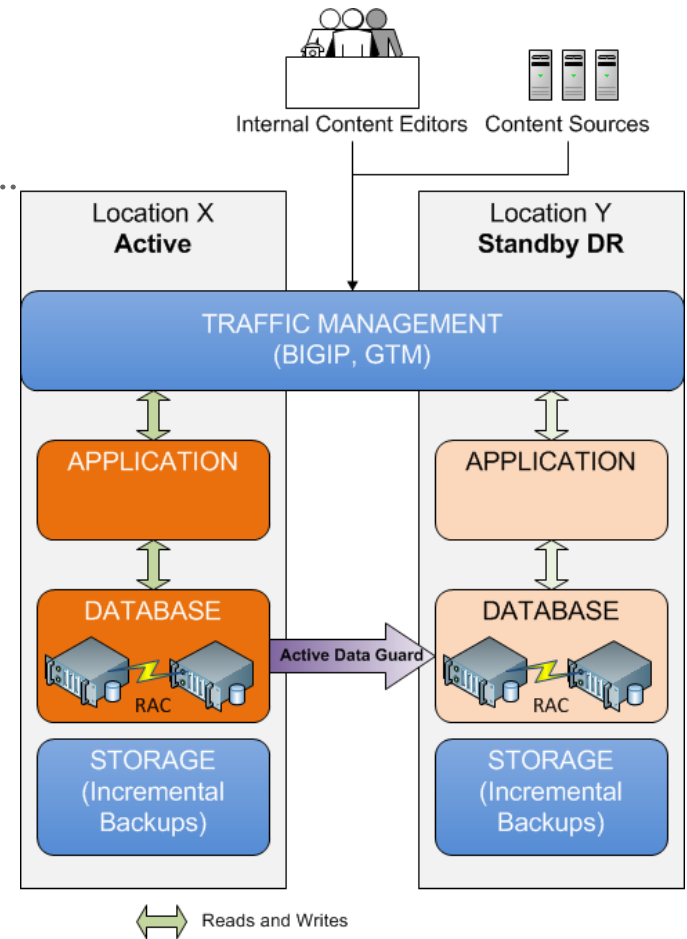


User  
Data



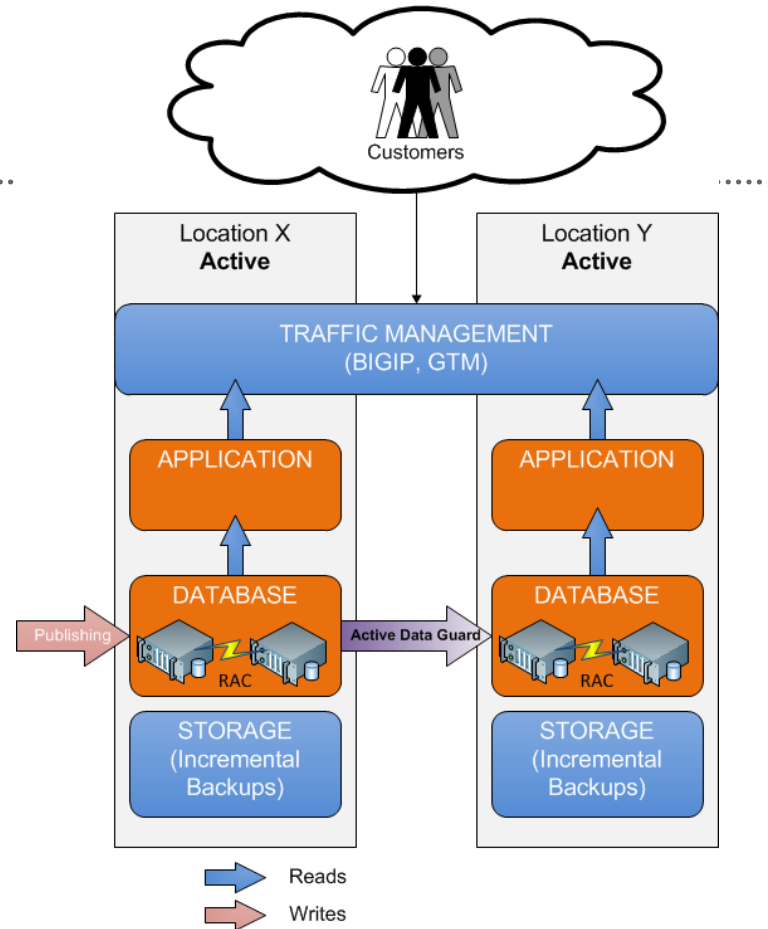
# CONTENT PUBLISHING

- 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



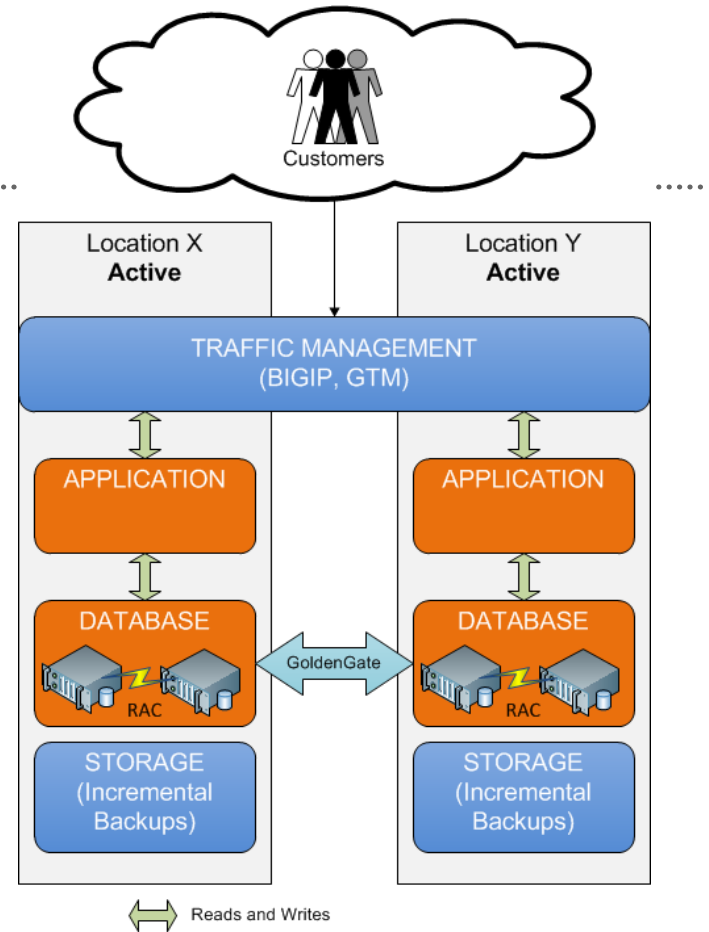
# CONTENT DELIVERY

- 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

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**GOLD**

Zero read-write outage  
Near-zero data loss

User  
Data

**SILVER**

Zero read outage  
Near-zero data loss

Content  
Delivery

**BRONZE**

Minutes of downtime  
Near-zero data loss

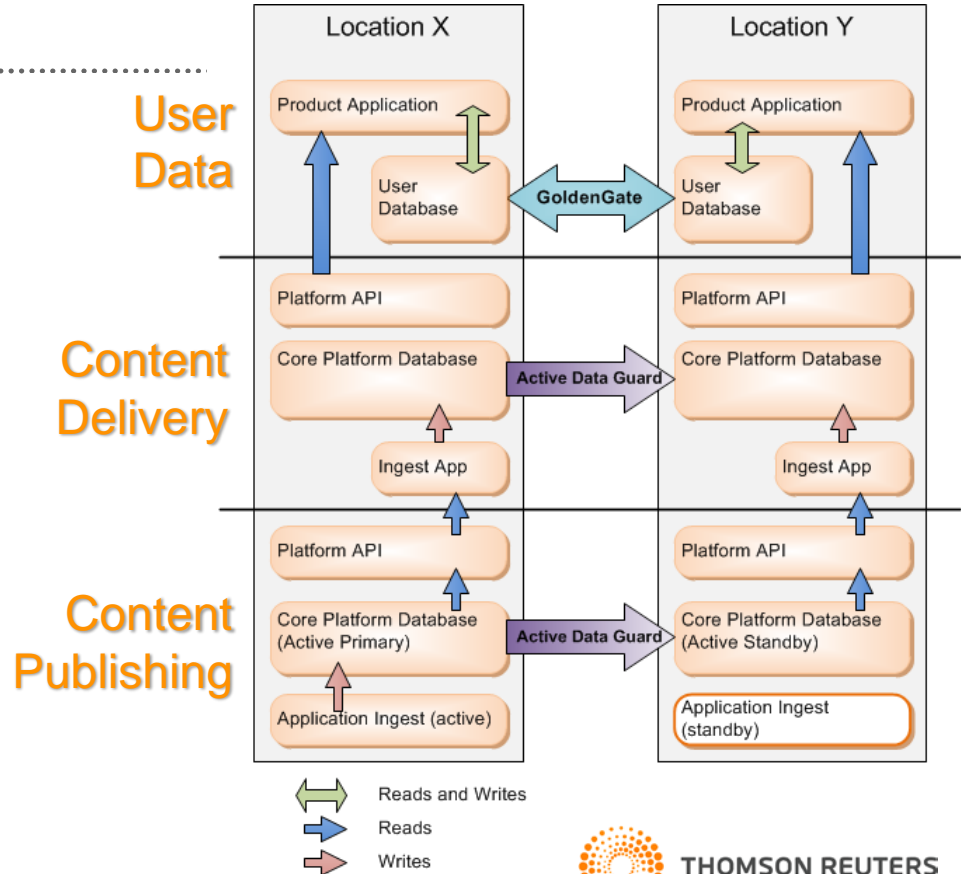
Content  
Publishing





# 3. BUILDING SYSTEMS

- Patterns combined to build systems



# BRINGING IT ALL TOGETHER

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1. Building Blocks + 2. Patterns + 3. Systems =



Simple.

