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S308817
Oracle Communications Service Delivery Overview and Product Direction
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Session Summary

Key Takeaways
- Customer behavior is driving service evolution, not technology
- Business Model flexibility is driving new applications
- Oracle Service Delivery has a proven track record
  - Increased revenues
  - Reduced cost
  - Faster time to market

Oracle Applications discussed
- Oracle Communications Converged Application Server
- Oracle Communications Services Gatekeeper
- Oracle Communication Marketing & Advertising
Introduction
### Check out these upcoming Communications sessions

<table>
<thead>
<tr>
<th>Date / Time</th>
<th>Session ID</th>
<th>Title</th>
<th>Location</th>
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<tbody>
<tr>
<td>10/13 5:30pm</td>
<td>S308827</td>
<td>Communications Business Model Expansion with Service Delivery Platform, <em>Featuring Telecom Italia</em></td>
<td>Palace Hotel, Pacific Heights</td>
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<tr>
<td>10/14 10:15am</td>
<td>S308827</td>
<td>Securely and Scalably Monetizing Third-Party Content, <em>Featuring O2 UK</em></td>
<td>Palace Hotel, Pacific Heights</td>
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<td>10/14 7:00pm</td>
<td>FUN</td>
<td>Customer Appreciation Event, <em>Featuring Aerosmith</em></td>
<td>Treasure Island</td>
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The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle’s products remains at the sole discretion of Oracle.
Current Environment and Trends

Industry Pressures and Trends

Hyper Competition
- Increased competition from new entrant IT players and over the top services drives requirements for more agility and differentiation

Convergent Services
- Increased sophisticated devices and consumer expectations together with new communication behaviours push for new converged applications

Customer Centricity
- As markets saturate, customer churn is increasingly important factor. Services need to be personal and targeted

Next-Gen Networks
- Support next-gen services and IMS ready
  - Deploy new service-oriented architectures, with flexible, low cost IT infrastructure
  - Provide mechanisms to evolve customers and services from legacy networks

Industry Consolidation
- Consolidate back office operations to drive cost savings
- Support new business models and services
Impacts to Value Chain

- Consumers reducing non-essential spending
- Ever expanding ‘content zoo’ drives competitive threats
- Lack of customer relationship
- More rigid SLAs with operators to ensure fair network usage/QoS

3rd Party Provider

- Forecasted revenue decline
- OPEX & CAPEX reduction
- Drive more efficient network utilisation
- Business Process Optimization
- Threat from ‘over the top’ providers
- New Revenue Streams

Network Operator

- Threat of loosing brand value to new entrants
- Subscriber retention
- Impact of mobile device subsidies
- Real-time Credit Control (Online Charging)

Service Provider

- Price Sensitivity
  - Reduced spending on non-essential services?
- Greater User Control
  - ‘Cord Cutting’
- Consumer

- Enterprise

- Price Sensitivity
  - Multimedia Conferencing
  - Departmental Spending Controls
Be Competitive……

Embrace Innovation……

Deliver Efficiency……
Be Competitive…

Leverage the Carrier
- Touch the network when required
- Rich powerful interfaces represent value
- Leverage internet to attract customers

Stickiness
- Encourage new Service revenues
- Brand awareness
- Prevent Churn
- Personalization

New Business Models
- Embrace new revenue streams
- Offset cost of free services
- Appeal to a targeted demographic
Embrace Innovation…

- **Many Application Partners**
  - Leverage the long tail
  - Enhance the foundations
  - Innovation happens elsewhere
  - App Stores

- **Social Interaction**
  - Facebook, Twitter, Zembly
  - Multitude of converged communication channels
  - Phone a tool not the key driver for application usage

- **Modern Applications**
  - OpenTable, SayNow, TV Everywhere
  - Web 2.0 approach to openness
  - Restful API’s harness the developer skill set
Deliver Efficiency…

**Integration Servers**
- Legacy applications executing over IP/SIP
- Consolidated real time billing integrations
- IMS/NGN over LTE/4G

**Upgrade Applications**
- Reduce TCO
- ONS, VPN, VCC, Prepaid
- Customizable interfaces
- Bring agility to NGIN

**Future Proof**
- Cheaper, faster, better
- Converged SIP/HTTP
- J2EE and OSGi
- Leverage the cloud
- Lightweight frameworks
Oracle Communications: Footprint
Oracle Communications: Service Delivery
Service Delivery Product Line
Product Family Overview

- Oracle’s carrier-grade, service delivery product line
- Portfolio of industry-leading SDP applications and infrastructure products
- Combines best-of-breed technologies from Oracle
- Commercially proven with successful deployments worldwide
- Based on Java, SOA, Web and Telecom standards
Oracle Communications Services Gatekeeper
Service Exposure Ecosystem
Product Overview

- Service Exposure Platform
  - SMS, MMS, WAP Push, Location, Call Control, Profile, Presence, Charging
- Enables 3rd Party Application Ecosystem
- Partner Management
- Policy Control
- Service Facades
- Service Interceptors
- WebLogic Server
What’s New?

- Service Facades
  - REST, SOAP, SOA and Native

- Online and Offline Charging across all communication services

- New Features
  - Presence, Payment
  - MO Binary SMS
  - Custom SLA
  - SLA per Communications service
  - Extended Plug-in routing
  - SOAP2SOAP
What’s Coming?

• Theme
  – Integrate further the concept of Web and Communications i.e. OpenID and Global Identity
  – Promote two-sided business models
  – Support for mobile IN protocols and additional communications services over IP
  – Developer toolkits
  – Leverage Content, App store and Advertising eco-system

• Candidate Features
  – More PX 3.0 support
    • SMS, MMS, TS, MMC, ALM and CN
  – More resource adapters
    • UCP, USSD, CAP, MM7 Rel6
  – Store and forward
  – Interceptor support in plug-in
  – OAuth & OpenId
  – Subscriber SLA
  – Identity Management
  – PTE based SDK with REST support
Oracle Communications
Converged Application
Server
Trend to Web based Telecom Services

Converged Web-Telecom Services
Product Overview

• Extended Java EE 5 AS
  – Integrated SIP Servlet 1.1 container (JSR 289)
  – Extreme scalability, performance, high availability/fault tolerance and manageability
  – WebLogic Server 10.3
    • Spring, ADF, TopLink, JDeveloper, Eclipse, Web Services (WS-*/REST) support
  – Real-time Java VM
  – Geographically distributed and redundant deployment architecture
  – Enterprise Manager
Key Features

• Enables SIP-IMS feature composition with Application Router
• Enables HTTP-SIP convergence with SIP Servlet-Java EE integration
• Simplified application development
  – High level APIs like B2buaHelper and ProxyBranch
  – Annotations and Dependency Injection
• Key-based SIP application session targeting
• Automatic session invalidation
• Backwards compatibility with SIP Servlet 1.0 (JSR 116) applications
What’s New?

• First compliant implementation of SIP Servlet 1.1 standard (JSR 289)
  – Led by Oracle as JCP spec lead
  – Enhances and fixes SIP Servlet API

• Integration with Oracle WebLogic Server 10g Release 3
  – Java EE 5: EJB 3.0 (Faster development)
  – Java 6 (Annotations, Dependency Injection)
  – Support for Oracle developer tools: TopLink, ADF, JDeveloper
  – SNMP V3 support
  – Additional Web Services support

• New Diagnostic Monitors and Actions

• More standards support
  – Updated Support for Globally-Routeable User Agent URIs (GRUU)
  – Support for Unsolicited NOTIFY Messages
What’s Next?

• Theme
  – Generic IMS app server to promote migration to all IP network
  – Trend towards VoIP commoditization offset by LTE/IMS/NGN
  – Provide value-added applications and components
  – Provide higher-level APIs to reduce efforts in building converged services

• Candidate features
  – Custom Application Router
  – Media Server Control
  – SIP aware Load Balancer
  – Proxy/Registrar application
  – Application level tuning and configuration
  – Application level work manager
  – Asynchronous Session Interaction
  – 11GR1 integration
Evolved Eco-system
Product Overview

- Marketing and Advertising campaigns
  - SMS, MMS and WAP Push
- Campaign management portal
  - Supports auctioning and fixed price campaigns
- Enables flexible business models around service exposure and content management
- New revenue streams potential from emerging market
  - Offset declining voice revenue
Advertising Campaign Features

Flexible Business Models
- CPM
- Bid Price/Ad impression

Statistics and Reporting
- Hourly, Daily, Monthly reports
- Ad impressions
- Graphs and reports

Multiple Ad Strategies
- Text
- Picture

Ad Spaces
- Associated with content/application
- Application to Person (AtoP)

Marketplace
- Auction of Ad Spaces
- Fixed Price Ad Spaces
- Multiple Bid support

Traffic Interceptors
- SMS
- MMS

Mobile Advertising Campaigns

Ad Space

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Advertising Campaigns - Example

- Ads sent via an application to the subscriber’s mobile phone
- The advert is tagged to the message by OCMA on behalf of application
- Targeted Ad campaigns where a personalized advert is sent to a targeted subscriber base
Marketing Campaign Features

- Scheduling algorithms based on network capacity
- Day, time, duration options

Campaign Management

- SMS
- MMS
- WAP Push

Multi-Channel Bulk Messaging

- Segments based on Demographics
- Distribution Lists

Subscriber Targeting

- Opt-in/Opt-out delivery options

Permission Based

- Real time and Historical campaign statistics
- Demographic statistics
- Graphs, Delivery Reports

Analytics

- Message is highly personalized based on Subscriber data

Personalized messages

Reach

Purity

Low Cost

Measure
Marketing Campaign - Example

Male; 20-30 years of age

Demographic Targeting

Time Targeting

Multi-Channel

Campaign Objective: Free Gillette Coupons

Campaign Result: 98% Redemption Rate

Accurate targeting

SMS/MMS/WAP Push
Product Features

- Campaign Management
  - Campaign Scheduler
  - Heuristic Engine
  - Multi-Channel Delivery
- Bulk Messaging
  - SMS, MMS, WAP Push
- Traffic Interceptors
  - SMS, MMS
- Subscriber Profile Integration
- Subscriber Targeting
  - Demographics, Lists, Personalization
- BAM Integration
- Real-Time monitoring

Provide Campaign Management Capabilities that leverage Subscriber Data

- Leverage network resources to run campaigns
- Share the subscriber data with advertisers to refine targeting and increase addressability

Create Marketing Connection Configuration

- Name
- Channel Type
- Assigned Ad Space Owner
- Minimum Price
- Max Ad Size
- Is Premium
- Delivery Notification Enabled
- Personalization Allowed
- Short Code
- Traffic Hour

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Product Features

- Self Service Portals
- Pre-Built Dashboards
- Statistics and Reporting tools
  - KPI
  - Historic Statistics
  - Time Based Statistics
- Billing Integration
  - Revenue and Settlement
- Flexible Pricing Models
  - Auction
  - Fixed Price

Provide automated tools and flexible pricing structures.

Become an attractive partner to advertisers.
Product Features

Automate business processes to build association between advertiser, third party applications and delivery channels to advertisers.

- Marketplace
  - Ad Spaces
  - Auction
- Partner On-boarding
- User Interfaces
- Web Services
- Inventory Management
- Integrated approval workflows
- Notifications
- Role Management
Service Delivery Roadmap

Next 12 Months

OCMA
Phantom
- Marketing Campaigns
- Advertising Campaigns
- Marketplace
- Personalization
- SMS, MMS, WAP Push

OCASG
Helix
- P2P Messaging
- Context Aware: Location, Keywords
- Publishing
- Mobile Web

OCCAS
Cougar
- PX 3.0 Support
- OAuth & OpenId
- Store and Forward
- PTE SDK
- Protocol Support: MAP, USSD

Raptor
- Account Management
- Multi-Media Conference
- Network Address Book
- Protocol Support: CAP, UCP

Hydra
- Proxy, Registrar
- SIP Aware Load Balancer
- Custom AR
- Media Server Control
- Async Session API
- 11G R1
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