

## Increase Customer Responsiveness with On-line Statements, Financial Payments and the Cloud





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Companies need to increase their transparency & responsiveness

by providing customers access to their content when they need it

with high-performance electronic statement presentment and enterprise report management.







## What type of content do you use in your industry?





#### Agenda

- Challenges, Trends and Opportunities
- Clients are Driving e-Delivery
- Content Manager OnDemand for e-Delivery and Compliance
  - ... and 'on Cloud'



hat rds. 152 million Adobe, November 2013 m 145 million esit EBay, May 2013 130 million rity Heartland Payment nal Systems, August 2009 110 million Target, January 2014 102 million Sony, May 2011 94 million TJX Cos., March 2007 92 million AOL, June 2004

## **Key Issues every Organization Must Address**

#### **Challenges, Trends and Opportunities**

- Customer Service
  - Highly responsive
  - Self-service options
  - Accessibility
- Content Explosion
  - Producing and sending more than ever
  - Requires storage and handling efficiencies

#### Risk Avoidance

- Security Breaches, Know Your Customer
- Client and Shareholder confidence

#### Cost Reduction

Lower operational and infrastructure costs





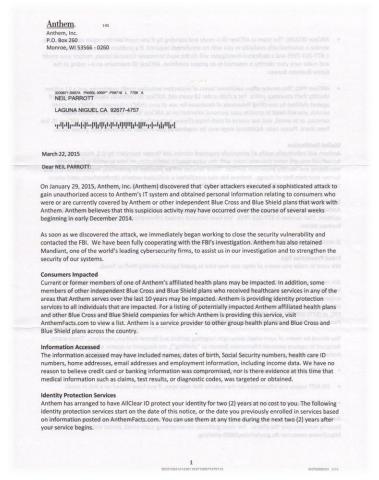
## Anthem Cyber Attack Challenges, Trends and Opportunities

#### Consumer Sensitive Personal Info Breach

- names
- dates of birth
- Social Security numbers
- health care ID numbers
- home addresses
- email addresses
- employment and income data

#### Mitigation

- FBI alerted
- AllClear Secure
  - 24 months of identity protection
  - Credit repair
- AllClear Pro
  - Credit monitoring
  - \$1M ID theft insurance







## Finance Sector Trends Challenges, Trends and Opportunities

#### Dramatic Increase in Online Payments

- IBM Financial Transaction Manager
- PayPal
- Trustly online payments from your online bank account
- Digital Wallets ApplePay, Blockchain
- biyo pay with your hand











#### Transaction Message Size Expansion

- From as little as 18 chars to over 100x larger
- Enhanced Remittance Data

#### Customer Focus & Added Value

- Real Time Payments (RTP)
- e-Invoicing
- Trends and insights analyze payment flows to feed pricing engines
- Better customer service



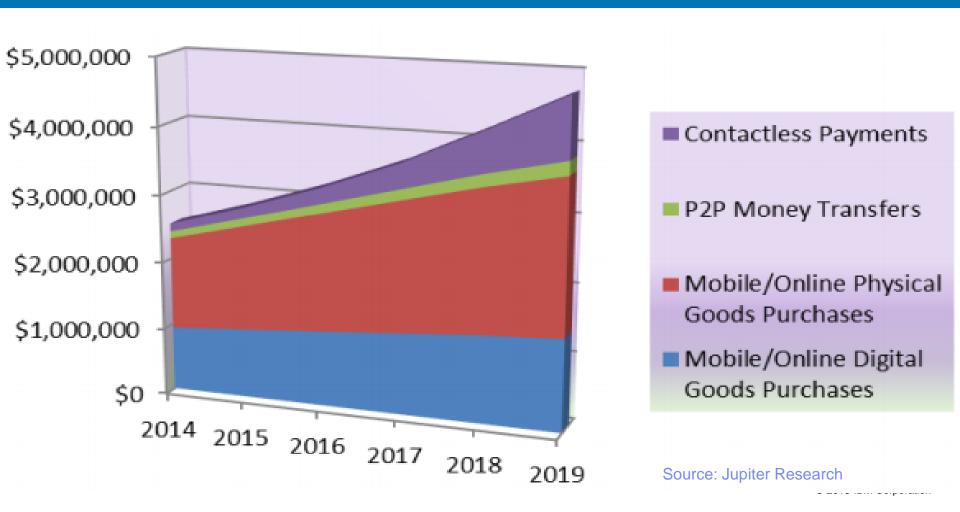
## Digital Transactions Per Annum (millions) Split by Transaction Type 2014-2019



Source: Jupiter Research



## Digital Transaction Values Per Annum (millions) Split by Transaction Type 2014-2019





## Finance Regulations and Standards Challenges, Trends and Opportunities



#### Interoperability and Globalization

- Europay, MasterCard, and Visa cards a.k.a. chip and pin
- Payments, Securities, Cards and FX systems
- ISO20022 framework
  - Single Euro Payments Area (SEPA)
  - XML format

### Retain for longer periods VS delete with positive confirmation

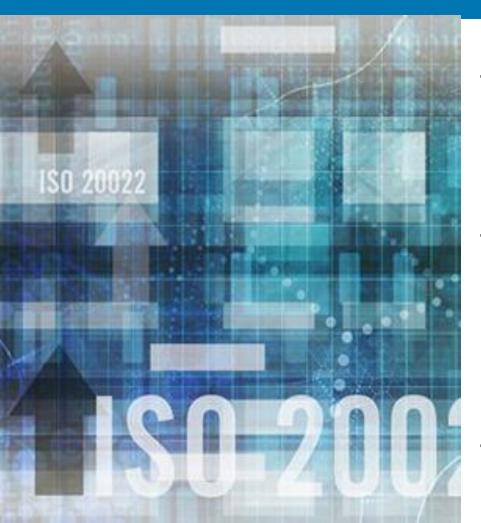
- Extended dispute and refund periods
- Fraud investigations

#### **Privacy initiatives**

- General Data Protection Regulation (GDPR)
- Governs how personal data is used, shared and stored
- Actively manage and dispose or risk substantial penalties



## ISO20022 Challenges, Trends and Opportunities



#### - A Universal Finance Industry communication message scheme

- Performance streamline cross border communications
- Cost reduction due to a single, common "language"

#### - Single Euro Payments Area (SEPA) Example

- 500 million citizens, 20 million businesses and public authorities
- €21.9 billion per year expected gains
  - Aug 1<sup>st</sup> 2014 live in 18 euro countries
  - Oct 31<sup>st</sup> 2016 end date for non-euro EU countries
- Rest of the world is either adopting ISO20022 or aligning with it



## Customer Satisfaction - Stakes are Higher Than Ever Clients are Driving e-Delivery

"In the age of the customer, executives don't decide how customer-centric their companies are — customers do."

- Kate Leggett, Forrester
- 51% of US consumers switch service providers due to poor experiences
- Up 5% from 2012





## The Customer Relationship Clients are driving e-delivery

#### Today's Customers:

- Are more informed
- Have more choices
- Low attention spans

#### Today's Organizations must:

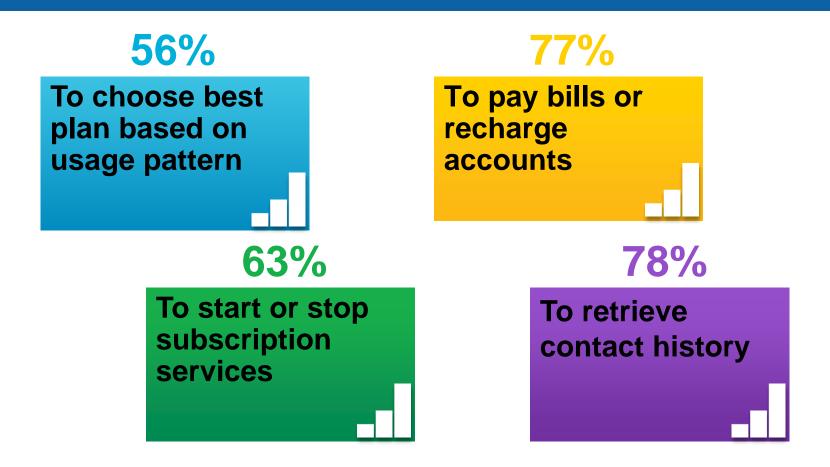
- Be Customer-centric and highly responsive
- Offer Engagement options:
  - Device independence
  - Accessibility
- Demonstrate Responsibility and Trust
  - Protect Sensitive Personal Information (SPI) as required by state, federal and country laws







#### Why do Consumers prefer Self-service?





#### **Market Opportunity with Mobile**

#### **Clients are Driving e-Delivery**

#### **Changing Customer Set:**

50% of the population is under the age of 30

These consumers do not want mail

#### e-Delivery Anytime, Anywhere:

Allow access to statements via smartphone, tablet and the web



## The Customer Relationship Market Statistics



It costs 6 to 7 times more to acquire a new customer than to keep an existing one



On average, increasing customer retention rates by 5% increases profits by 25%-95% Harvard Business School



70% of marketers claimed their Retention Marketing is average at best, with room for improvement



## Customer Experience drives Shareholder Value Clients are driving e-delivery

#### **Customer Experience Leaders Outperform the Market**

7-Year Stock Performance of Customer Experience Leaders vs. Laggards vs. S&P 500 (2007-2013)





## IBM Content Manager OnDemand: The Big Picture



# Know your Customer with OnDemand and Report Mining Server

#### **Smarter Content, Smarter People**

Use report mining and analytics to extract new insights



- Reveal information hidden in content to gain new insights and perspectives (e.g. buying patterns)
- Improve business decisions
- Improve performance of people and systems





#### **IBM Content Navigator**

Access content across your enterprise in a secure manner – anytime, anywhere





#### **Clarity**

Cross Repository Search, Retrieve and Display

Smartphone & Tablet accessible



#### Extensible open standards framework

**CMIS Support** 

Plug-in functionality



#### **Benefits**

Single Pane of Glass for all ECM Products



# ISO 20022 and XML Archiving with XML Indexer

#### **Smarter Content, Smarter People**

Optimized for Newer Transactional Workloads



#### **Archive**

High volumes of newer transactional documents.
Keep core LOB systems lean



#### Retrieve

Customer Service, Self Service Smartphone, Tablet, Laptop Reconstitute LOB Data



#### Comply

With Retention and Accessibility requirements



# Compliance with Full Text Search and Enhanced Retention

#### **Smarter Content, Smarter People**

Comply with Legal Holds – Quickly and Efficiently



#### **Full Text Search**

Go beyond Meta Data. Search complete document text. Find Needles in a Haystack!



#### **Holds (Enhanced Retention)**

Comply with Legal requests to lock down and preserve documents. Reduce Risk!



#### Time based retention

Retain the documents you needs - for as long as needed Good Housekeeping!

## IBM ECM TD Bank



#### The Opportunity

Whichever bank responds first usually wins the business. "It is critical that our team members have information at their fingertips to quickly make sound lending decisions"

- Paul D. Smith, SVP at TD Bank

#### Allowed within 24 hours,

for the bank to now process loan applications

### Provided around the clock services

travel associated with loan review, audit and compliance functions

#### **Slashed**

expenses through consolidation of multiple filing centers

Customer Success Video- TD Bank



#### IBM **ECM**

## **American National Insurance**



William L. Moody, Jr- Founder

#### The Opportunity

Need to consolidate old ASG, BMC and Cypress environments into a single, integrated high performance platform

#### **Streamlined**

management of policy documents for 3 different report management systems

### Provided around the clock services

to American National Insurance for their existing IBM Content Manager environment - to provide one place for employees and customers to access policy documents 24 x 7 including mobile device access



#### IBM ECM

#### **Verizon Wireless**



## The Opportunity Needed to reduce the time needed to research billing issues, improve customer service and satisfaction

#### **Implemented**

50,000 customer services reps with fast access to over 100M monthly customer bills to quickly and efficiently handle client inquiries

#### Improved customer service

by reducing time needed to research billing inquiries – and bills can be reprinted on demand, if needed



#### IBM **ECM**

IBM

We've progressed the portfolio to become the clear market leader

"A growing opportunity for IBM lies in building smarter ECM infrastructures. These industry initiatives span enterprises and ecosystems."



#### What's next?

#### IBM Content Manager OnDemand on Cloud and IBM Case Manager on Cloud deliver enhanced customer service

IBM United States Software Announcement 215-214 April 28, 2015

■ ENUS215-214.PDF

#### Table of contents

- Overview
- Key prerequisites
- Planned availability date
- \* Program number
- Publications

- Technical information
- \* Ordering information
- Terms and conditions
- Prices
- Order now

Announced Al28|2015

#### Overview

IBM® Content Manager OnDemand on Cloud enables companies to:

- Manage electronic capture of reports, customer correspondence (for example, bills, statements, policies, and explanation of benefits), in the cloud.
- Enhance customer service by empowering customer service representatives with anytime and anywhere access to customer correspondence through web and mobile access.
- Provide customer self-service through integration of consumer facing applications and web
  portals.

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<sup>\*</sup> Back to top





## Content Manager OnDemand on Cloud Flexible Licensing and Deployment



#### - Key Capabilities

- OnDemand as a Secure Hosted Managed Services offering
- Provisioned on SoftLayer by ECM Services

#### - Included

- Setup of reports/application-output definitions
- Report Loading and Indexing
- Report distribution to Authorized Users
- Periodic content expiration
- Web-Based User Access
- Full System Management

#### - Optional

- System integrations
- System migrations
- Additional report/application definitions

#### - For

- Existing customers upgrades, expansions
- New customers migrations, replacements



#### CMOD on Cloud - High level comparison

| Activities  | Cloud   | OnPrem                      |
|---|---|-----------------------------|
| Define Reports, Applications, Groups                                    | IBM   | Customer                    |
| Loading and Indexing data   | Customer uploads files Loading/Indexing Done by IBM | Customer                    |
| Setup of CMOD and Clients (web & mobile). Periodic upgrades and patches | IBM   | Customer                    |
| Infrastructure security setup   | IBM   | Customer                    |
| Backups and periodic maintenance  | IBM   | Customer                    |
| Database Administration   | IBM   | Customer                    |
| Setup user accounts for Web/Mobile access                               | Customer  | Customer                    |
| Setup access for applications and groups                                | IBM   | Customer                    |
| Setup for Business Continuity (HA, DR)                                  | IBM (included)                                      | Customer (additional HW)    |
| Full Text Search  | IBM (included)                                      | Customer (feature purchase) |
| Enhanced Retention (Holds)  | IBM (included)                                      | Customer (feature purchase) |
| Report Distribution   | IBM (included)                                      | Customer (feature purchase) |

#### CMOD on Cloud – configurations

1. Select one (1) standard configuration:

#### **Silver**

- Load & Index 50 GB of PDF in 12 hours
- Load & Index 900 GB of AFP data in 12 hours
- 60,000 document retrievals with concurrent 30GB of PDF data loading/indexing in 12 hours
- 60,000 document retrievals with concurrent 500GB of AFP data loading/indexing in 12 hours

Gold = 2X Silver

Platinum = 5X Silver

- 2. Select storage per Terabyte
- 3. Optional SOW based Services
  - Setup x10 additional Reports, Applications, Groups
  - Integration with consumer facing application / portal
  - Data migration from legacy system

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## **IBM Content Manager OnDemand Key Benefits**



#### - Secure On-line e-Presentment for :

- Customer Service
- Customer Self Service
- Analytics Know your Customer

#### - Optimized Repository

- Unmatched compression, scalability and performance
- Advanced Security Features

#### - Fast deployment and ROI

- Install and deploy in 1 week
- Fast ROI
- Proven Conversions & Migrations
- Active roadmap
- Active User Group



## IBM Services help deploy Your OnDemand solution

- CMOD Architecture Review & Design
- CMOD Implementations
  - Installations
  - Upgrades
  - Training
- Custom ODWEK application interface development or mentoring as you do business application development and integration
- System Healthcheck
- Disaster Recovery (DR) & High Availability (HA) mentoring
- CMOD Migrations
  - IBM to IBM, any competitive product to CMOD, across platforms, across databases, across media – We will get you there successfully
- Service Offerings, Project Management and Knowledge Transfer throughout



#### **Key CMOD Resources**

- Melissa Krauss WW Sales Leader, Content Management and Capture Portfolio
  - krauss@us.ibm.com
- Brian Phelps WW Sales Lead
  - brphelp@us.ibm.com
- Blair Groff NA CMOD Solution Leader
  - bgroff@ca.ibm.com
- Stephanie Wing WW Portfolio Marketing Manager
  - smwing@us.ibm.com
- Bud Paton WW Technical Sales Lead
  - rpaton@us.ibm.com
- Shailesh Gupta Senior Product Manager
  - guptash@us.ibm.com
- Raghuram Tadipatri Senior Development Manager
  - tadipatr@us.ibm.com
- Neil Parrott WW Offering Lead / Product Marketing
  - nparrott@us.ibm.com





For more Information:

ibm.com/ondemand



#### Backup Slides



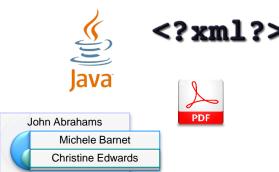


#### CMOD V9.5 Summary of Key Features

- Evolutionary enhancements to:
  - CMOD for MultiPlatforms
  - CMOD for z/OS
  - CMOD for IBM i (via PTF in V7.2)



- XML Indexing included
  - For enhanced XML document loading and handling
- Document Store APIincluded
  - Programmatic interface for loading documents
- Ondemand Distribution Facility option
  - Report distribution enhancements
- Line2PDF Transform included
  - Improved functionality
- Usability and Operational Enhancementsincluded







# Why use Separate Repositories? Optimized High Performance Archive

## **OnDemand is designed for:**

- √ Fully Automated High Volume Ingestion
- ✓ Storing very large volumes of static 'like' content, typically transactional print output such as reports, statements, and invoices
- ✓ Long-term archival with low rates of retrieval
- √ Very large numbers of internal and external users
- ✓ Virtually unlimited scalability
- ✓ Unmatched compression
- ✓ Fast install and deploy

# IBM Content Navigator makes repositories invisible

## **General Purpose ECM is designed for:**

- ✓ Updateable documents, or creation of new documents
- ✓ Repository for cases or workflow documents
- ✓ Team collaboration
- ✓ Workflow solutions, review and approval, active content

# A Legacy of Big Numbers Optimized High Performance Archive

**Compression** 

30:1\*

Up to 50% cost savings

- Get the most out of disk
- Petabytes of data under management
- No access penalty

\*AFP, Line, PDF

### **Performance**

3500

Items per second Instant Retrieval

- 42M peak retrievals/day
- Multiplatforms, zSeries, iSeries, Web interface
- ECM System Monitor

## **Scalability**

**162** 

# Billion documents Optimized architecture

- 33 petabytes in a single repository
- Scales from department to enterprise deployments



# XML Indexer Optimized High Performance Archive



### XML Indexer features

- Simple, automated XML document loading and handling:
  - Documents and Indices identified and normalized for loading into OnDemand
  - Document Resources extracted and archived with the document data
  - XSLT style sheets for on-the-fly specific display formats based on user preference
  - Integrates and works with existing ARSLOAD process

- Easily archive newer transactional document formats
  - ISO 20022
  - SEPA
  - G3
- Enables compliance with Accessibility Requirements
  - ADA Section 508
- Included feature



## XML Indexer and Accessibility Optimized High Performance Archive

<?xml?>

- Dramatic increase in on-line statement and billing data access
  - Document display optimized by device
    - Smartphone
    - Tablet
    - Laptop

| PREVIOUS<br>BALANCE<br>5111.84            |                           | - PAYMENTS                           | - CREDITS     | • PURCHASES 277.86                                       | + CASH ABU. |  | 7.38 | country desired vil<br>country limite<br>probable count security |  | - NEV<br>BALANCE |
|---|---------------------------|--------------------------------------|---------------|--|-------------|--|------|--|--|------------------|
|   |                           | 2048.62                              | 0             |  |             |  |      |  |  | 277.86           |
| DATE                                      |                           | TRAF                                 | SACTION DESCR | ON DESCRIPTION   |             | REFERENCE HUMBER   |      | SOCESS<br>DATE   | AMOUNT   |                  |
| 09/20<br>09/20<br>09/20<br>09/20<br>09/20 | GART E<br>K-MART<br>WORLD | ARLINES<br>BROTHERS<br>T<br>D TRAVEL |               | DENVER<br>WESTMINSTER<br>ARVADA<br>LOUISVILLE<br>PETOSKY |             | 1115859434 11068<br>970498453 223844<br>654921885 139531<br>223407720 125762<br>1831968133 13071<br>1749423853 56747 |      | 09/21<br>09/21<br>09/21<br>09/21<br>09/21<br>09/21               | -2048.62<br>27.14<br>22.02<br>24.64<br>180.06<br>24.00 |                  |

- Americans with Disabilities Act (ADA) requires equal access
  - Target, Netflix, Monster.com, Ticketmaster
  - Initially targeted at websites that are 'gateways to bricks and mortar' establishments
    - http://online.wsj.com/news/articles/SB1000142412788732437320457837448367949
       8140#articleTabs%3Darticle
- Benefits
  - Comply with Accessibility regiurements
  - Enables Multiple style sheets for
    - Visually able
    - Visually impaired





# **Document Store API's**Optimized High Performance Archive



- Document Store API capabilities
  - Store Individual Documents programmatically with new ODWEK Java APIs
  - Key Steps:
    - Initiate Load
    - Bulk load documents pages, index values, document data
    - Commit to CMOD specifying the application group and application

- Individually stored documents have full OnDemand expiration capabilities (i.e. LOAD)
- Leverage Enhanced Retention Management and Full Text Search
- OnDemand archive can free-up valuable space and resources in originating applications
- Included capability

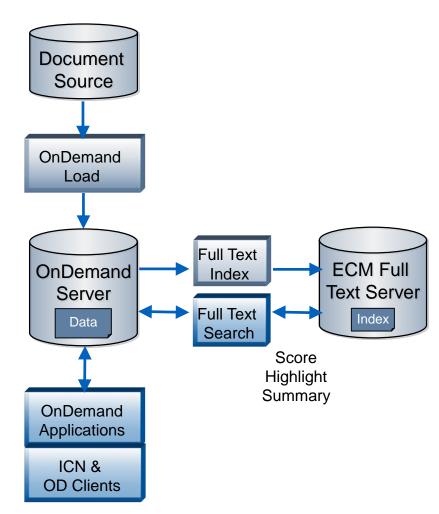


# Full Text Search OnDemand for Customer Service and Self Service

## Full Text Search capabilities

- Complex query support
  - 1
  - 2
  - 3
- Documents grouped by "collections"
- FTS server supported on AIX, Sun, Linux, zLinux and Windows

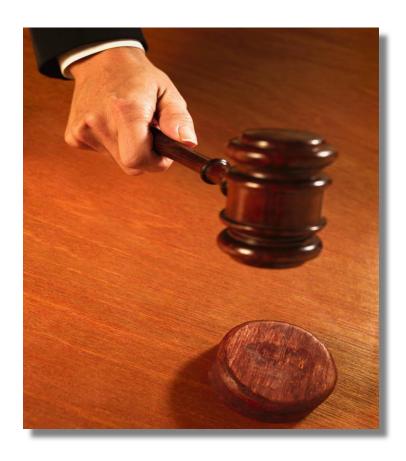
- Comply with Legal & Discovery Requests
  - · Beyond Meta Data
  - Search complete document text
- Separately priced feature





# **Enhanced Retention**OnDemand for Customer Service and Self Service

- Enhanced Retention capabilities
  - Holds Lock down documents and suspend expiration
  - One or more documents per Hold
  - Single document can have multiple Holds
  - Implied Hold
    - All loads locked down
  - Full Text Search companion feature
- Benefits
  - Enable Regulatory Compliance
  - Satisfy Legal Retention Requirements
- OnDemand also works with
  - Enterprise Records
  - Atlas Policy Suite



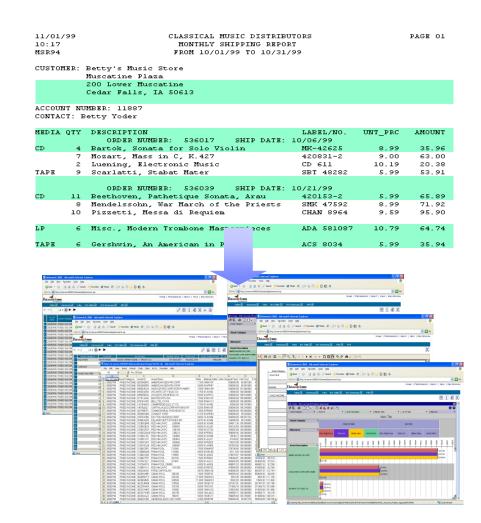


# **Analytics for Know Your Customer**OnDemand for Customer Service and Self Service

## Report Mining Capabilities

- Web-based Analytics for OnDemand
- Transforms OnDemand content into end user data views:
  - Summarize and Analyze
  - · Subtotal, Total
  - Average, Counts, Percentages
  - In browser filtering, sorting and graphing of report data
- Real-time access to report data in web and Excel spreadsheet format

- Enable deeper Client understanding for cross-sell / upsell opportunities
- Put content at rest to work for additional insights









# ADVANCED SECURITY FEATURES

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# **Content Manager OnDemand for e-Delivery and Compliance**

- Optimized High Performance Archive
  - High Volume Transactional content
  - -Line of Business content

## Customer Service and Self Service

- -Customer Portal via Java APIs
- Enhanced Retention & Holds for Compliance
- Analytics for KYC
- Advanced Security
  - -Protect SPI and avoid Risk
- Minimal Infrastructure & Resources
  - -80% of customers run on 4 cores
  - Fast Deployment
  - -Simple Admin
- Licensing and Deployment updates
  - Hosted Managed Cloud

## **Advanced Security features**



## Advanced Security features

- Secure Socket Layer (SSL) data transmission
- SSL communication with Lightweight Directory Access Protocol (LDAP) server
- Strong 128 bit Password Encryption (FIPS 140-2)
- User Proxy
  - Leverage LDAP userid/password for role based OnDemand user
- Password limits/restrictions
  - Validate against up to 10 previously used passwords
- Stash file
  - Encrypted file used to store User Id's and Passwords
  - Eliminates use of User Id and/or password on the command line

### Benefits

- Protect SPI
- Avoid Security Breaches

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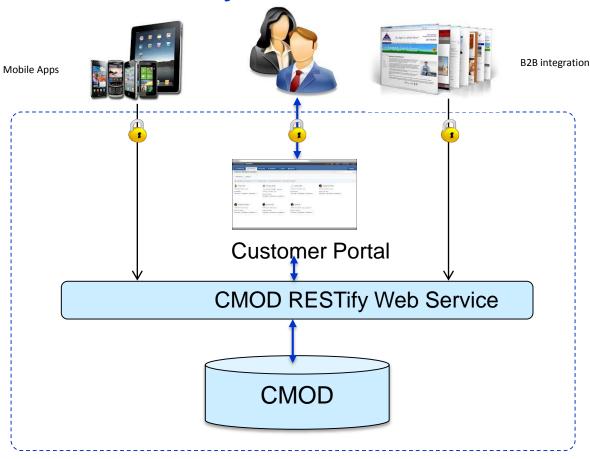


# CMOD V9.5 Highlights Flexible Licensing and Deployment

- Monthly Fixed Term Licensing
- PDF Indexer
  - Deprecated on z/OS must be run on MP
- Report Distribution Facility (RDF) OnDemand MP
  - Migration utility from RDF to new OnDemand Distribution Facility is available
- AFP2WEB Transforms feature
  - Not a good fit for the majority of IBM customers
  - V9.5 includes Line2PDF transform
  - Plug-and-Play transforms supported since V8.5
  - IBM ECM Services can resell Ricoh and Crawford transforms
- ACIF z/OS (4.5)
  - New level, however must be ordered since it does not ship with OnDemand
- OnDemand for HPUX
  - Deprecated last supported version will be 9.0.X
- Tivoli Storage Manager (TSM)
  - Deprecated on z/OS and IBM i. use an OnDemand MP Object Server



## **CMOD RESTify Web Service**



- Ready from day 1
  - No coding
- Create an integration in about 1 hour
- Requires very, very basic knowledge of CMOD and ODWEK APIs



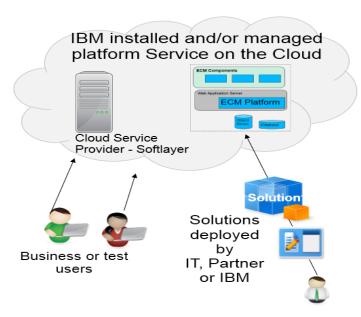
## **CMOD RESTify Web Service**

- RESTify is a turn-key solution offering a single and universal REST-Web Service interface to integrate to CMOD
- RESTify exposes the entire CMOD repository with a simple http call
- All technologies can talk to RESTify easily using simple http calls that drive logon, open folder, search and retrieve
- RESTify uses signed requests for authentication. Every application must have an access+secret key pair
- Services can be added, deleted and updated without downtime
- Can be configured to work with multiple CMOD repositories
- RESTify uses many optimization mechanisms such as caching and connection pooling when communicating with CMOD





## **ECM PaaS (Platform as a Service)**



### Cloud Solution

•IBM managed ECM platform as a service

### Offerings

- Platform Installation Services for Production/ Nonproduction Environments
- Platform as a service for Production/Non-Production Environments

### Costs

- Perpetual ECM license
- Pay as you go for cloud infrastructure on Softlayer
- •One time setup fee for each environment in the cloud
- Monthly administration for each managed environment in the cloud
- Additional services for a fee

### Key Customer Benefits

- Provides rapid Cloud deployment of IBM ECM primarily on IBM SoftLayer.
- Facilitates deployment of applications without the overhead for managing the underlying hardware and the software platform
- Customers can focus on building solutions on top of ECM.

#### Infrastructure

Managed by service provide

### **Platform**

- Available as a service
- Managed by IBM
- Can be installed by IBM and managed by IT

### Solution

• Deployed by IT, Partner or IBM

Ongoing Solution Maintenance

Partner or IT



# **Services Offerings** for OnDemand

- 1. Quickly integrate your existing applications with OnDemand
  - Provide "real-time" access to check images and statements in eBanking portal
  - Issue: migrate three existing custom application integrations to access OnDemand?
    - 1. e-Banking (in .Net)
    - 2. Aida (in Java)
    - Mobile Banking (in Objective-C, Java)
  - Resolution: CMOD RESTify Web Services provides middleware to .Net, Objective-C appls and mobile devices
- 2. Replace your web service with RESTify
  - Migrate statements and invoices from InfoWeb to OnDemand
  - Issue: Existing applications using InfoWeb SOAP Web Services. InfoWeb replaced with CMOD
  - Resolution: CMOD RESTify Web Services implemented with wrapper to convert SOAP call to RESTify call and leveraged existing web service definitions