



IBM ECM Strategy and Roadmap

Feri Clayton, Director, ECM Products and Strategy



@fericlinton

#IBMContent2017



ECM Solutions:

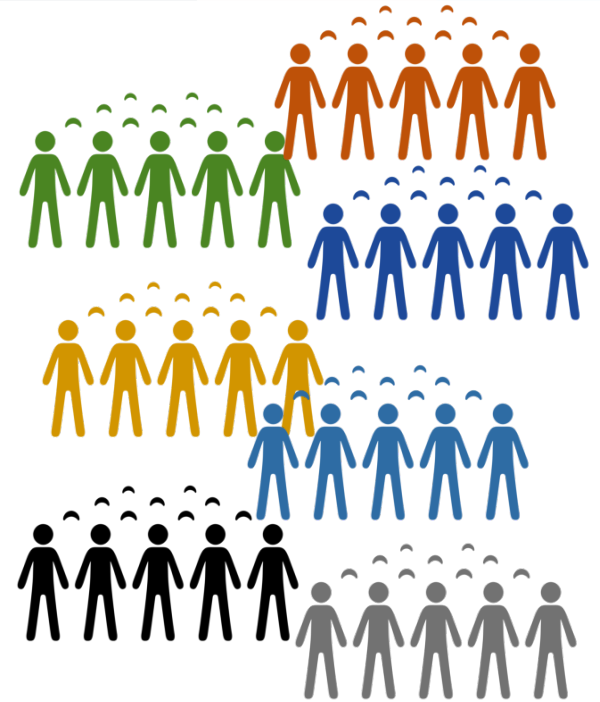
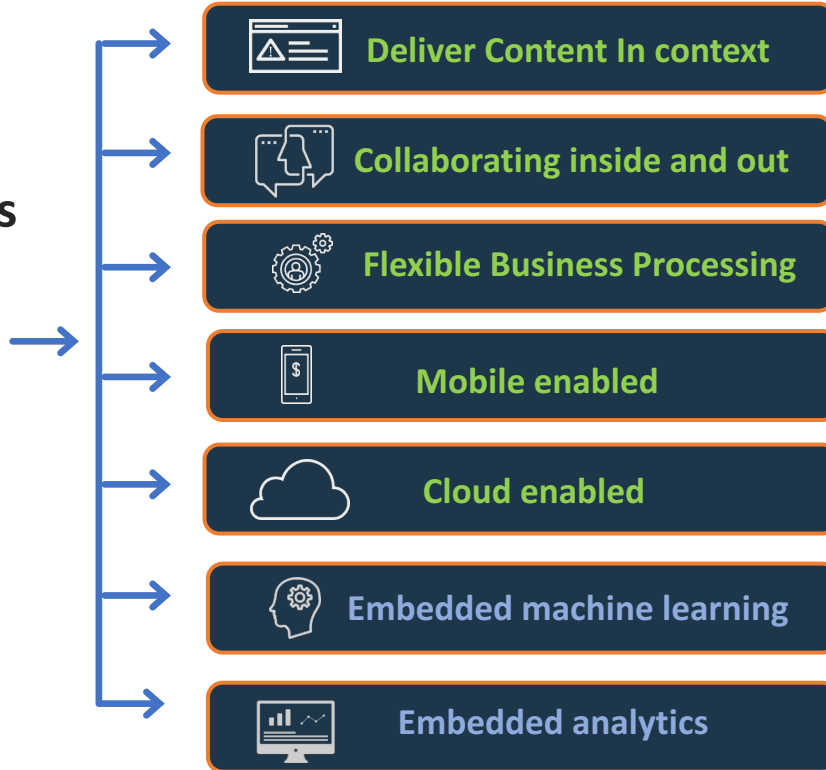
- Archiving and retrieval
- Records management
- Basic workflow



Small number of back office Users

- Records Managers
- Imaging Specialists
- IT specialists

ECM Solutions
of Today and
Tomorrow



Front Office Users, Field workers,
Customers, Agents, Citizens, ...

How Clients Are Using IBM ECM in Variety of Industries

Banking

- Account opening
- Lending
- Account servicing
- Investment reports
- Regulatory & compliance
- ...

Government

- Benefits management
- Social services eligibility
- Tax processing
- Permits and licenses
- Program enrollment
- ...

Insurance

- Property and casualty claims
- Policy underwriting
- Enrollment
- Appraisals
- Investigations
- ...

Healthcare

- Medical claims
- Patient onboarding and discharge
- Prescription processing
- Health records
- Explanation of Benefits (EOB)
- ...

Retail

- Employee on/off boarding
- Product sourcing
- Recalls
- Shop lifting
- Call centers and complaints
- ...

Energy and Utilities

- Account Opening
- Permits & Planning
- Correspondence
- Customer bills online
- Regulatory & Compliance
- ...

Business drivers for ECM solutions



Content Collaboration

Business Agility

Cost takedown

Customer Experience Improvements

Digital Transformations

Analyze and Act

Governance, Risk and Compliance

IBM ECM / Content Services Portfolio



Content Navigator

Unified experience on web, mobile and desktop

FileNet P8

Content Mgr 8

Datacap

Datacap Insight
Edition

Case Foundation
Case Manager

Watson
Explorer

Content
Manager
OnDemand

Information
Lifecycle
Governance



On-premise, On Cloud, or Hybrid



IBM leads in ECM



Gartner

Enterprise Content Management Magic Quadrant 2016

“IBM has one of the broadest ECM portfolios...”

“...on-premises and cloud delivery models with integrated hybrid options, and global reach make IBM a leading ECM vendor and a preferred vendor for large, global enterprises. “

Key Roadmap Themes



- Next round of innovation in user experience
- Cloud capabilities behind the firewall
- Simplified deployment
- Enhanced design and dev tools
- Embedded machine learning and analytics
- Unified governance of content and data
- Micro services

A graphic on the right side of the slide depicts a winding road with yellow dashed lines on a dark grey surface. Two circular markers are placed on the road: an orange circle labeled '2017' and a green circle labeled '2018', both connected to the road by thin lines of their respective colors.

2018

2017

IBM Content Navigator



Search, Browse
View



mobile access



collaboration



Team Spaces



security

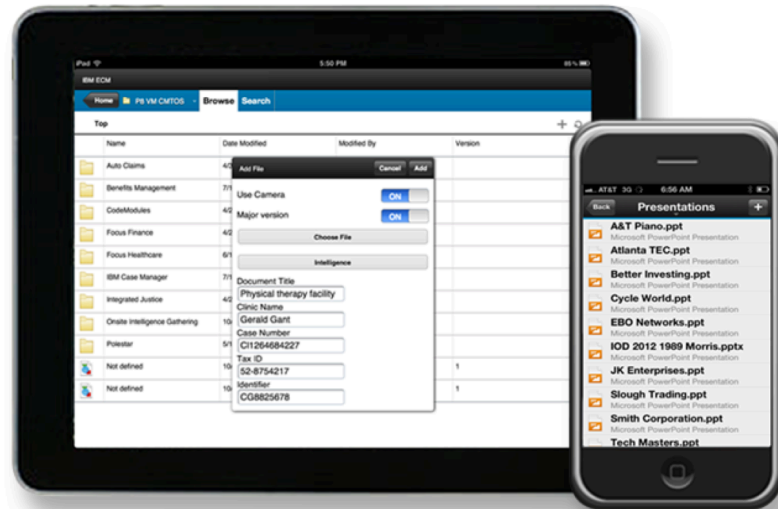


Solution framework



Unified access to content from anywhere, on any device

- IBM repositories, Box, SharePoint, Alfresco, OpenText, Documentum, ...



Content Navigator speaks 32 languages



Arabic, Brazilian Portuguese, Catalan, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Slovak, Slovenian, Spanish, Swedish, Thai, Traditional Chinese, Turkish, Vietnamese



Content Analytics in Navigator with Watson Explorer

The screenshot displays the IBM Content Navigator interface. At the top, the search bar contains the query: `** AND (keyword:/Sentiment Analysis/7Negative/7decline* OR keyword`. The left sidebar shows a folder browser with 'es045' selected, containing subfolders like 'DOW30', 'ICA', 'Office', etc. Below the folder browser is a 'Facet Navigation' section with 'Sentiment Analysis' expanded to show 'Positive' and 'Negative' options.

The main content area shows two search results. The top result is titled 'No Job Name' and dated October 29, 2013, at 4:49:03 PM GMT+09:00. The text snippet includes: `#6 0 obj 120 100 80 64 48 32 24 20 16 12 8 Percent shares traded 21 14 7 Target Price Range 2016 ... was particularly disappointing, as the decline in the consumer demand for PCs contin-ued to take a ... Moreover, the soft-ware giant took a $900 million writedown in the June quarter (excluded from our ... Our sales and earnings targets are now $81 bil-ion and $2.75, compared to the $83 billion and $2. ... The Server & Tools group should continue to be a relative bright spot given Microsoft's strength ... to also show progress, reflecting the general health of its productivity applica-tion business and ... though, it will probably be difficult for the Windows group to show growth this year. A new release ... Our sense is many larger shareholders would like to see MI-crosoft place less emphasis on the con-`

The bottom result is also titled 'No Job Name' and dated October 29, 2013, at 2:41:20 PM GMT+09:00. The text snippet includes: `... the core Upstream (Exploration & Production) business (94% of the first-half tally) were down 12%, ... supermajor peers Shell and Exxon Mobil reported disappointing second-quarter earnings, CVX stock ... On a percentage basis, this is not a drastic decline, but it is indicative of the overall trend in ...) Our top-line estimate for CVX of a shade over $24 billion, is based on worldwide production of 2 ... Our estimates are also based on the company selling a barrel of oil for an average of $92, compared ... But natural gas prices should average $3.75 per thousand cubic feet, compared to $2.15/mcf in 2012 ... To this end, it is undertaking huge LNG projects in the Wheatstone and Gorgon fields in Austra-ia, ... The company's finances are excel-lent, thanks to substantial cash flow gen-eration, which should be`

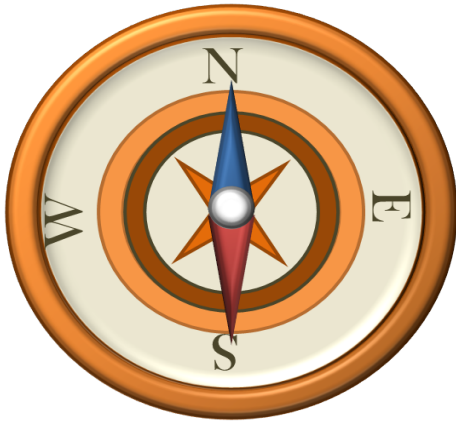
On the right side, the 'Facets' panel shows a table of sentiment analysis results:

| Check | Values | Frequency | Correlation |
|--------------------------|---------------|-----------|-------------|
| <input type="checkbox"/> | decline | 8 | 3.1 |
| <input type="checkbox"/> | disappointing | 3 | 1.3 |
| <input type="checkbox"/> | recessions | 9 | 5.5 |
| <input type="checkbox"/> | weak | 4 | 4.8 |
| <input type="checkbox"/> | weaker | 2 | 2 |
| <input type="checkbox"/> | declined | 2 | 1.5 |
| <input type="checkbox"/> | cautious | 2 | 1.5 |
| <input type="checkbox"/> | difficult | 3 | 1.4 |
| <input type="checkbox"/> | gross | 2 | 0.6 |
| <input type="checkbox"/> | unsustainable | 1 | 0.4 |
| <input type="checkbox"/> | sluggish | 1 | 0.4 |
| <input type="checkbox"/> | exacerbated | 1 | 0.4 |
| <input type="checkbox"/> | NOT exciting | 1 | 0.4 |

At the bottom of the interface, the text '© 2017 IBM Corporation' is visible.



What's new?



Released in Dec 2016

- ✓ Content Navigator 3.0
- ✓ Navigator Mobile 2.4.1
- ✓ Daeja 5.0
- ✓ FileNet 5.2.1.6

- ✓ Office 365/Online integration
- ✓ DocuSign integration
- ✓ Box integration enhancements
- ✓ Replacing applets with HTML solutions
- ✓ IBM Cloud Object Storage
- ✓ Role-based dynamic redaction

Role-based Dynamic Redaction for Privacy



One document of record

Statement of Disputed ACH Item

NAME OF CLAIMANT: Fred Francis

ACCOUNT NUMBER: 4072074471

DATE: 05-02-2013

Unauthorized

Authorization Revoked

Incorrect Amount or Date

Double Posting

Other

Please include the following information on the disputed ACH item:

Transaction ID: 334234667

Date: 04-14-2013

Amount: 23.00

Merchant: B Store

BY SIGNING BELOW, YOU ARE MAKING THE FOLLOWING DECLARATIONS:

- I did not receive any benefit or value from the proceeds of the item listed above.
- I have not arranged with the person(s) who misused the item listed above to be reimbursed for any portion of the proceeds of the item.
- I will cooperate in any investigation, promptly disclose any information requested by the Bank, and if necessary, prosecute the wrongdoer.
- I will testify to the truth of these statements in any case which may result from this affidavit.
- All information I have provided in this document is true.

I DECLARE UNDER THE PENALTY OF PERJURY THAT THE ABOVE STATED IS TRUE.

Signature: Fred Francis

Date: 05-11-2013

Place Notary Stamp Here

Address of Claimant: 4523 My Street, Anytown, CA 90023

Phone Number: 555-555-1212

Different visibility based on role

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Phone Number: 555-555-1212

Roadmap: Content Navigator, Daeja, Mobile



- Document merge & split
- Next round of innovation in user experience
- React framework
- Role-based security
- Manual compound document creation
- High speed file transfer via Aspera
- Recycle Bin
- Replacing applets
- Mobile support for saved searches, entry templates, External Data Services

FileNet – Our Core ECM Platform

... with broadest and deepest capabilities in one engine

- Document & content management
- Extensible metadata model
- Fine grained security
- Events and subscription
- Full auditing on actions and events
- Lifecycle management
- Retention and hold capabilities
- Sweep Framework
- Geographical distribution
- Extensive APIs: Web Services, Java, .Net, REST

- Social features (likes, comments, etc.)
- Metadata and content based search
- Cross repository search
- Content analytics
- Content federation
- Rendition generation
- Streaming (e.g. for videos)
- Embedded workflow engine
- Review-and-approve workflows
- Broadest storage options inc. cloud storage and Hadoop
- ...

FileNet Platform – by the numbers

Ingest

2M

Documents added / day

- 5M peak per day
- Triggers generation of links & custom objects
- 8M stored objects/day

Deliver

41K

Business Users

- 19,000 unique logons /day
- 80+ consumer systems
- 350+ vendor & agency systems

Scale

5.78 B

Objects stored

- 2.75 B documents
- 6 repositories
- 12 physical servers
- 47 OS partitions

A large Financial Services provider

FileNet Platform – by the numbers

Ingest

1.6M

Pages added / day

- 100M pages per qtr
- Multiple injection streams
- Vendor facing apps are 90% electronic; minimal scanning

Deliver

100K

Business Users

- 80+ ECM applications
- ECM Services to every state agency & county
- For 2016, delivered \$123.8M in ECM benefits

Scale

4.4 B

Pages stored

- 50+ repositories
- 80+ TB
- FileNet servers had 100% Prod Uptime for the past 2.75 yrs.

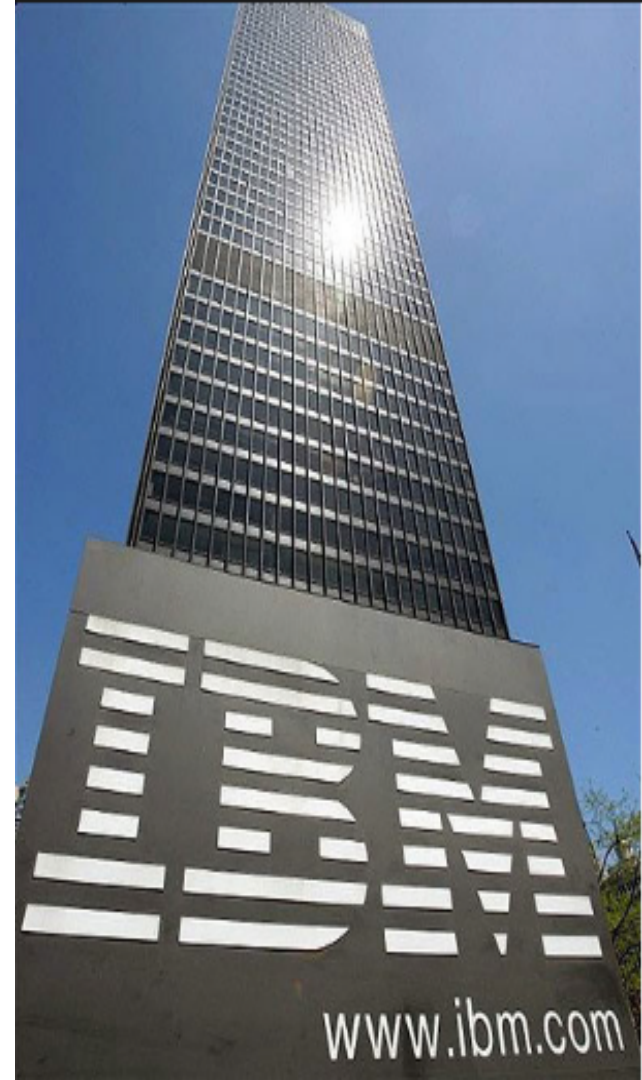
A large state government ECM Shared Service

FileNet Platform at IBM

Deployed by IBM CIO office as a multi-tenant cloud platform for the following use cases:


- Corporate archives (documents, audio files, videos, photos, ...)
- Product documentation and chip design specs
- Compliance and audit records
- Invoices, Orders, Contracts
- Proposals and quotes
- Service delivery documents
- SAP documents
- Accounting and finance documents

...



Roadmap: FileNet P8 and Content Foundation

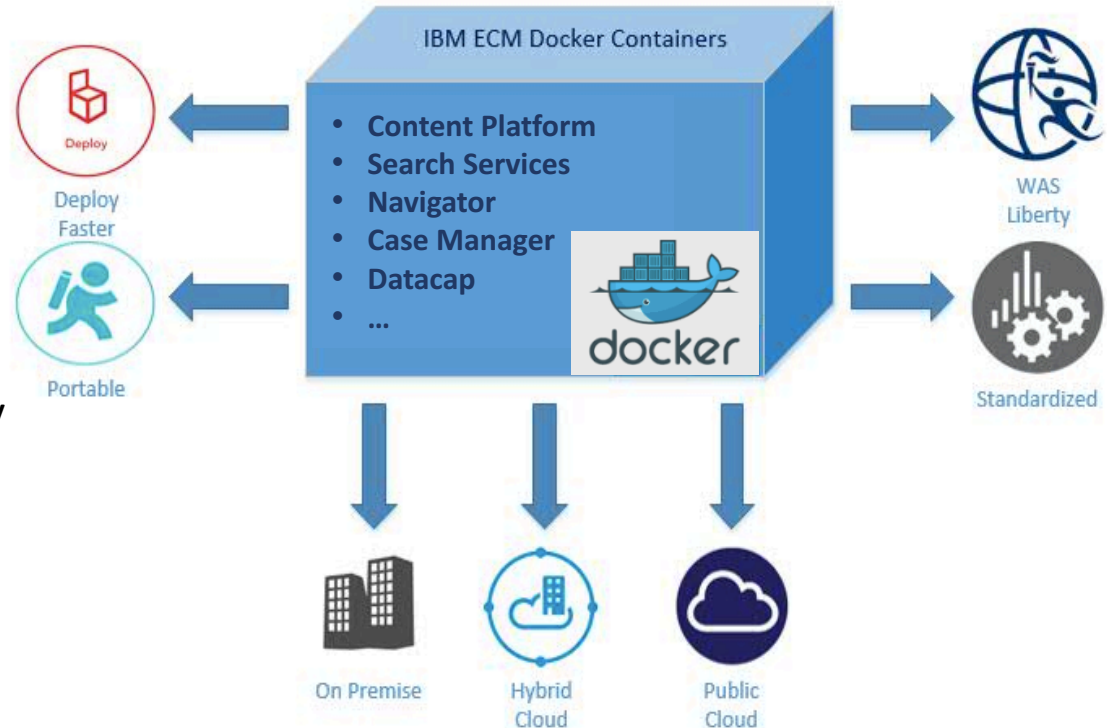


- 
- Docker Container deployment
 - Full multi-tenancy
 - Role based security and administration
 - Amazon S3 connector
 - Advanced Console (ACCE) enhancements
 - Platform updates
 - SUSE 12, Windows 2016, WAS 9, WebLogic 12.2
 - DB2 11.1, SQL 2016
 - EMC Elastic Cloud Storage 3.0
 - NetApp Snaplock Fixed Content Device Cluster mode
 - WAS Liberty

Docker Containers for ECM



- Standardized deployment of ECM components anywhere Docker container is supported
- Update ECM components faster by simply updating the container
- WebSphere Liberty support



Case Manager



Single View

Access to Content and Data wherever it exists

In Context

Each worker is presented with the right data at the right time



Take action

through case-centric workflows and dynamic tasks

Govern the Process

Archive all content, decisions and actions for compliance and audit

What's new?



Released in Dec 2016

✓ **Case Manager 5.3**

- ✓ DocuSign integration
- ✓ Native dashboard
- ✓ Case Packager
- ✓ New theming for case client
- ✓ Case Builder enhancements
- ✓ Assignment steps
- ✓ Quarterly Mobile - MDM with Good, in-basket sort
- ✓ Box Integration enhancements

Every step of a case is recorded:

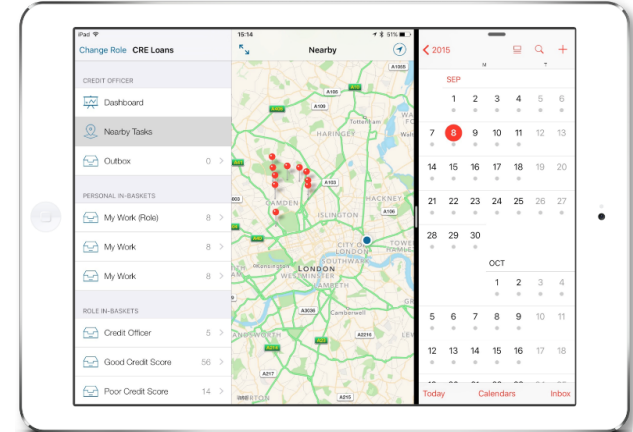
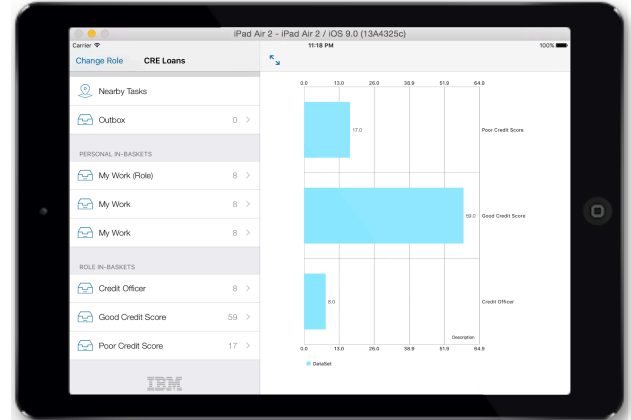
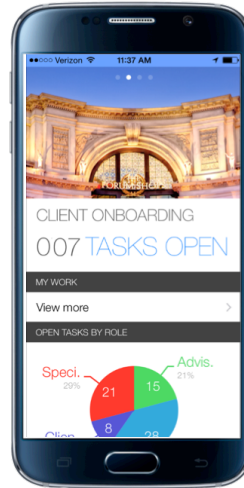
- Content
- Data
- Discussions
- Decisions
- Analytics
- Actions
- Tasks
- History

Can be used for delivering cases to Legal, courts, auditing, external groups, etc.



Case Manager Mobile

- iOS and Android apps
- Get work done away from the office
- Make field-workers productive
- See case info from anywhere
- Perform tasks, take actions
- Dashboards, geo-location, history
- Branding of the app
- Mobile device management (IBM Fiberlink MaaS 360, Airwatch)
- SDK for customization



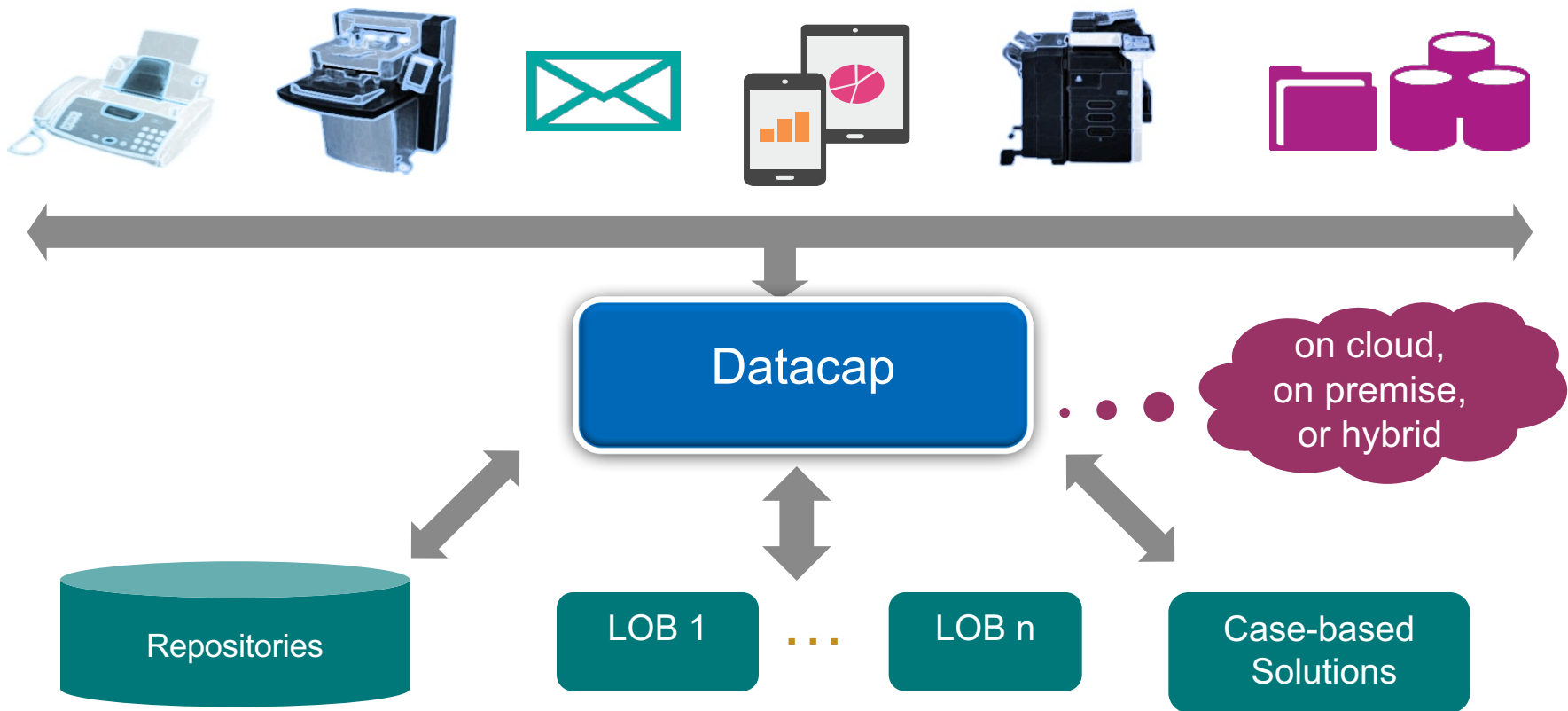
Roadmap: Case Manager



- User Interface Refresh
- Quick tasks / checklists
- Easily configurable user interface styles and layouts
- Enhanced form-like data layouts
- Dashboard enhancements

-
- Cognitive case processing with machine learning
 - Docker container and multi-tenancy
 - Business objects
 - Ability to only deploy the changes
 - Calendaring, events, case stages

Datacap Multi-Channel Capture



What's new?

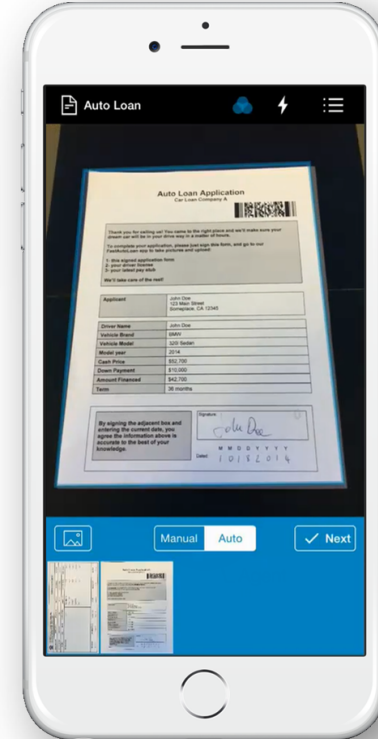
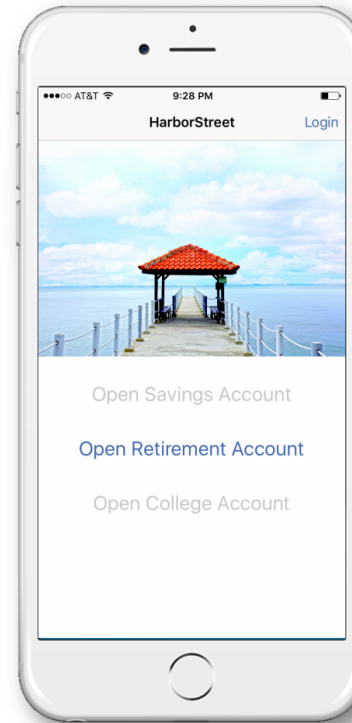


Released in Dec 2016

✓ **Datacap 9.1**

- ✓ Role-based redaction
- ✓ Datacap on Cloud
- ✓ Cognitive capture enhancements
- ✓ Cursive, check & signature verification
- ✓ Business user dashboard
- ✓ Web Services lookup, validation, export
- ✓ Language updates - Arabic, Thai, Vietnamese
- ✓ Mobile on-device OCR & classification

- iOS and Android apps
- Auto-capture with video camera
- Real-time edge detection
- On-device OCR, barcode, form identification
- ID and passport capture
- Document separation, assembly and indexing
- Offline capture
- SDK for customization
- Integration with Box
- Mobile device management (IBM Fiberlink MaaS360, Airwatch)



Automating capture for many document types

The collage displays a variety of document types, each with a corresponding colored label above it:

- APPLICATIONS**: Phoenix Clubhouse - Eastern Vocational Enterprises Limited (EVE Ltd) Application Form for Membership.
- TAX RETURNS**: 1040 U.S. Individual Income Tax Return 2011.
- TITLES**: STATE OF CALIFORNIA CERTIFICATE OF TITLE for a 1997 CHRYSLER.
- SALES ORDERS**: Sales Order form for Morganthaler, Jeremy Roma.
- BILLS OF LADING**: Bill of Lading form.
- RESUMES**: Resume for Gary M. Examble.
- LEASES**: Lease Agreement form.
- MEDICAL RECORDS**: Medical record form with handwritten notes.
- DEEDS**: LINCOLN FAMILY FARM Property Deed.
- CONTRACTS**: Contract for Photography Services.
- Correspondence**: A handwritten letter or note.
- Invoices**: INVOICE form with a table of items and a total of \$ 555.56.



Applying Cognitive Computing to Capture



**Memorial Hospital
Medical Center**

Admit Date: 08/03/2004 Admit Time: 08:15 AM Room: 102 MRN: M081720951

| Patient Information | | | |
|---|----------------|---------------------------------------|--|
| Case # | PI Type | FIC | MR |
| 000081720951 | OP | SP | M |
| Patient Name and Address | | SSN | Employment Information |
| ROBIN ANDERSON 808 4TH AVE S MINNEAPOLIS, MN 55311 | | 255-70-0100 Phone (612)757-3000 | BROOKS MEDICAL CENTER 485 MAIN ST MINNEAPOLIS, MN 55311 (612)757-5544 |
| Relatives and Emergency Contacts | | | |
| Relationship to Patient | | Relationship to Patient | |
| HUSBAND | | | |
| Relative Name and Address | | Phone | Relative Name and Address |
| RALPH ANDERSON 808 4TH AVE S MINNEAPOLIS, MN 55311 | | (612)757-3000 Alternate Phone | |
| Alternate Phone | | Alternate Phone | |
| | | | |
| Quarantor Information | | | |
| Surname | | Relationship to Patient | |
| OSCH11980 | | SAME | |
| Quarantor Name and Address | | SSN | Employment Information |
| ROBIN ANDERSON 808 4TH AVE S MINNEAPOLIS, MN 55311 | | 255-70-0100 PHONE (612)757-3000 | BROOKS MEDICAL CENTER 485 MAIN ST MINNEAPOLIS, MN 55311 (612)757-5544 |
| Insurance Information | | | |
| Insurance Plan 1 | | Group Number | Insurance Plan 2 |
| 4566A UPSCALE SELECT PLUS POS PO BOX 1234567 MINNEAPOLIS, MN 55311 | | 8901234 | |
| | | Policy Number | Group Number |
| | | 255700100A | |
| Insurance Plan 3 | | Group Number | Insurance Plan 4 |
| | | | |
| Subscriber | | Policy Number | Subscriber |
| | | | |
| Physician Information | | | |
| Type | Physician Name | Address | City/State/Zip |
| Admitting | DR. JOHN SMITH | 4032 MAIN ST | MINNEAPOLIS, MN 55311 |
| Preliminary Diagnosis | | | |
| Code Numbers | | Principal and Secondary Diagnosis | |
| V76.10 | | SCREENING, UNSPECIFIED | |
| ANDERSON, ROBIN 05011980 44Y F CAUCAS DR. J. SMITH M081720951 | | | |



Rob

Robert Hanson
1234 Oak St
Anytown, CA 90000

Paul Peters
A Insurance Inc.
PO Box 12345
New York, NY 10000

March 10, 2004

Dear Sir,

This is with reference to my letter dated January 03, 2004 where I submitted my claim letter and documentation and you assigned M081720951 as the number under my policy number H080800.

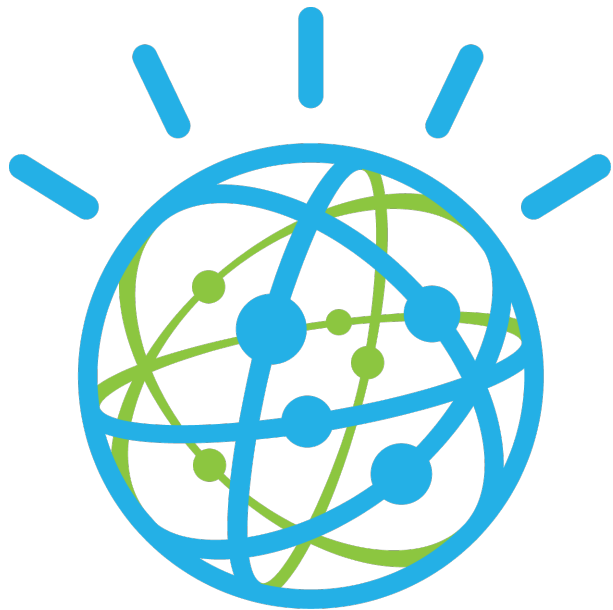
I am further, this is the second experience I have ever had I have to do this but I also called the New York State Insurance Commission and I am sending them a letter to them about this situation. I also contacted the State Insurance Commissioner and the Director of Commerce. I know that you expect that a mail should pay for the balance my Toyota Camry just had in the New York Journal that this will not occur. You should be including the staff of the company and how that work in the car when I was in LA.

I have received a payment today from you. I am not satisfied with the amount of \$1,000.00. I want to know why I have received less than the amount. Per the policy terms, the amount is calculated at the day when the request for consideration of the policy is received. In cooperation, I called my insurance commissioner, Mary Hanson at JFC Services Inc. and she told me that this is correct. On January 03, 2004 when I had initiated the request. According to that, the total amount that should be paid against my policy should be \$1,000.00. Please send me an immediate explanation along with a new check or that I do not need to pursue legal action.

Sincerely,
Robert Hanson

Robert Hanson
(916) 488-1234
myemail@memorial.com



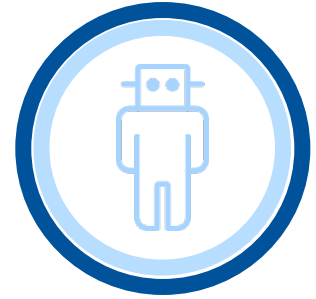


A new generation of document capture enhanced by machine learning

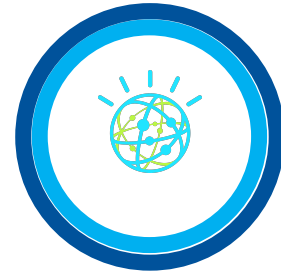
Reduce templates, automate classification and extraction, prioritize next business action

Extract data from content for analytics

- Datacap efficiently digitizes and extracts data with cognitive capture and feeds to robots
- Identifies errors before they get to the bots, minimizing exceptions




Automated classification of documents using Natural Language Understanding and machine learning



Roadmap: Datacap



- 
- Cognitive capture of data with machine learning extractors (Watson Knowledge Studio)
 - Cognitive capture of data using document structure
 - Datacap Navigator improvements and customization
 - Role-based job filtering using LDAP groups
 - High volume manual indexing via Datacap Navigator
 - Export to Amazon S3 Object Store
 - Enhancements of Mobile Capture app and SDK

IBM Content Manager OnDemand



**High volume archiving
and fast retrievals**



**Self Service
Statements**



XML Archiving



**Report
Distribution**



**Data Mining
with Datawatch**



Content Manager On Demand 10.1



Released in April


- Active – Active High Availability
- IBM Cloud Object Storage
- Amazon S3 Support
- Migration options for CMOD z/OS to cloud
- Separation of admin duties with read-only admin privilege
- Unique Document ID

In CM 8.5 Fixpack 6

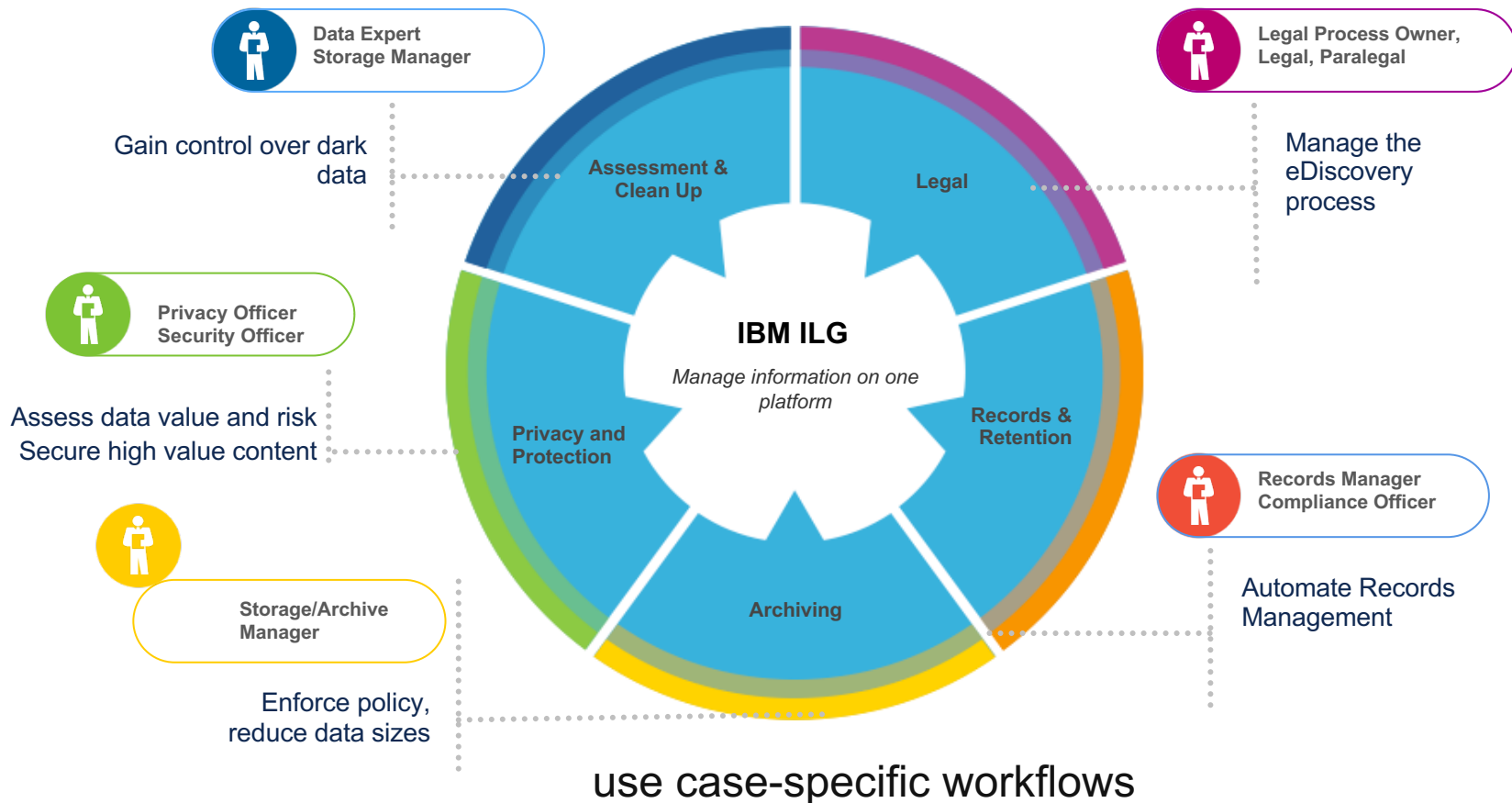
- Encryptor Utility for in-place encryption of existing content
- Java viewer -Faster search of text in large PDF document
- Improvements in LDAP sync utility
- Support for WAS Liberty profile for CM8 Java APIs
- Support for JRE 8, RHEL 7.2, WAS 9.0, DB2 V11, AIX 7.2,

Roadmap: Content Manager 8

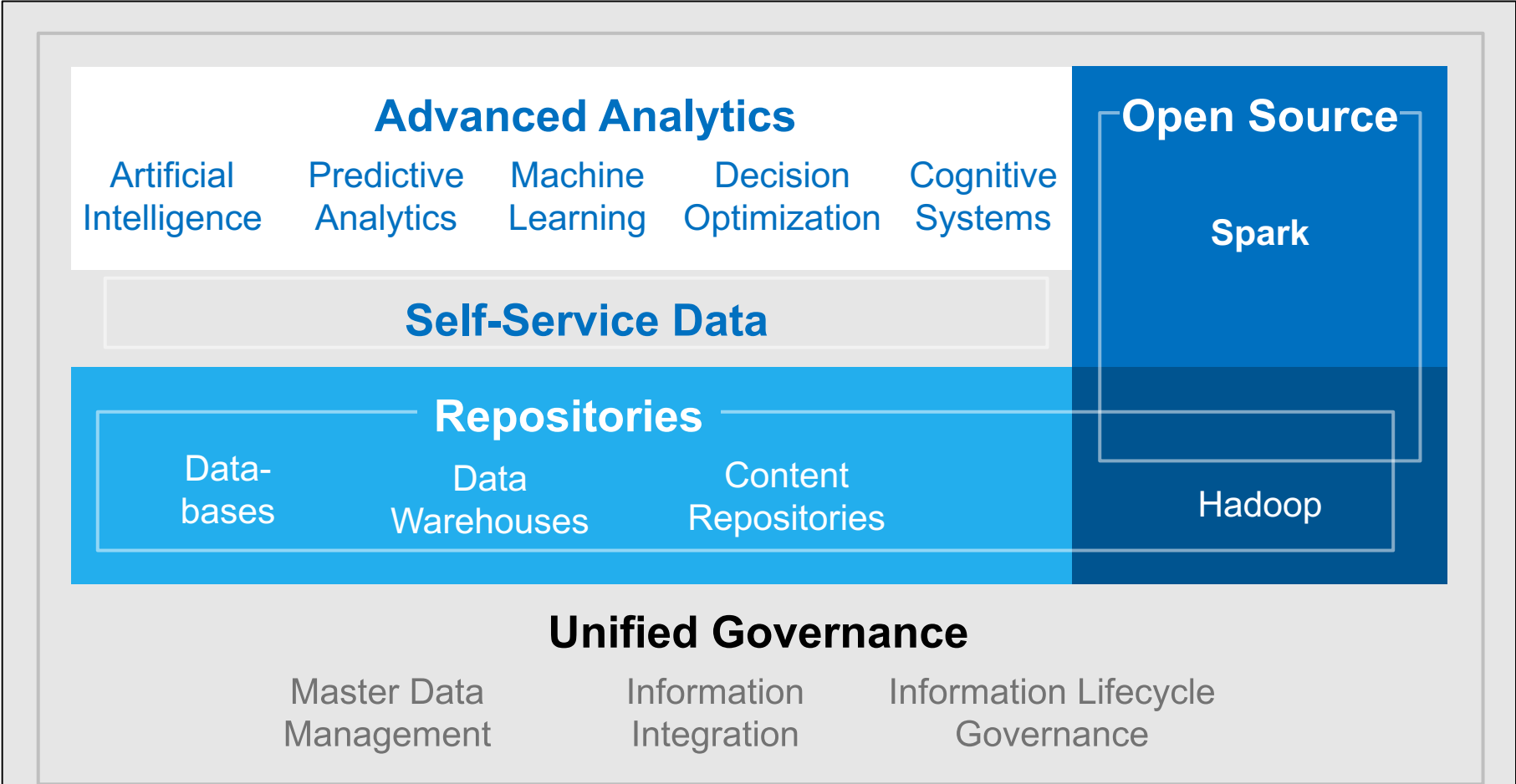


- 
- A graphic of a winding road with yellow dashed lines on a black background, curving from the bottom left towards the center of the slide.
- IBM Cloud Object Storage (CleverSafe)
 - Enhanced web based admin
 - Case insensitive searches in Navigator
 - Improved caching
 - Support for GFS 2 – shared disk file system for Linux Clusters
 - Linux Journaling file system
 - Tool for dropping attributes from Item Type definition
 - Performance, Security and Usability enhancements

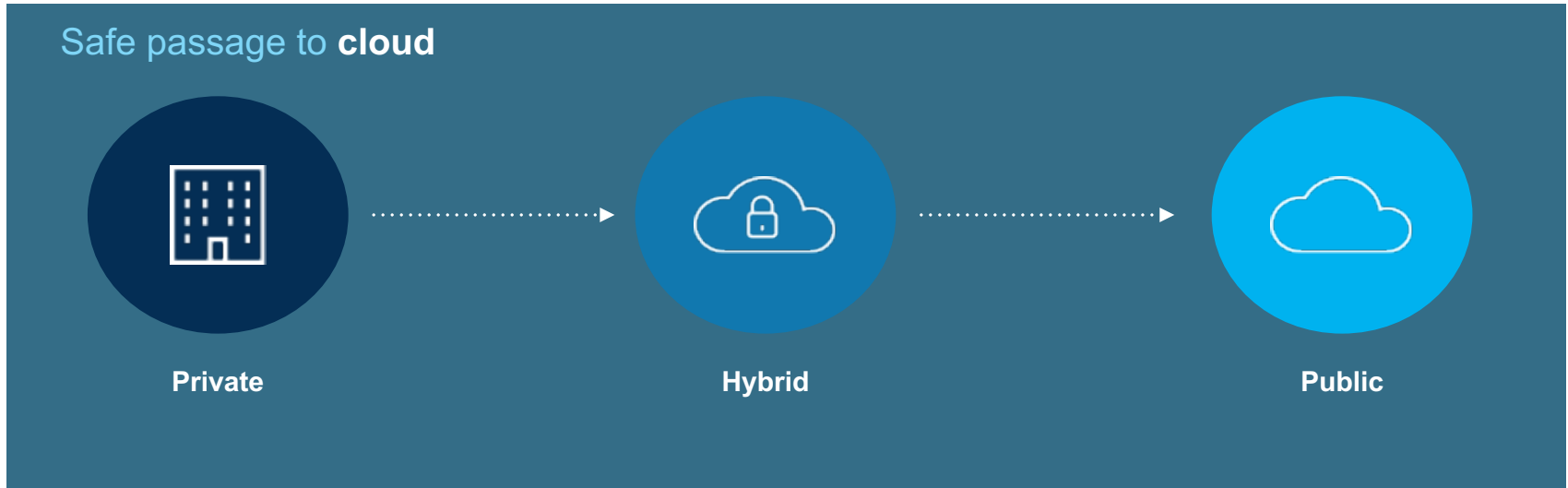
IBM Information Lifecycle Governance



Power Behind and Beyond Your Firewall



Cloud Options for Various Client Needs



- Cloud features, behind your firewall
- Data residency
- Your security architecture
- Leverage current investments

IBM ECM Managed Cloud Offerings

FileNet /
Content Foundation
on Cloud

Case Manager
on Cloud

CM OnDemand
on Cloud

Datacap on Cloud

CM8 on Cloud

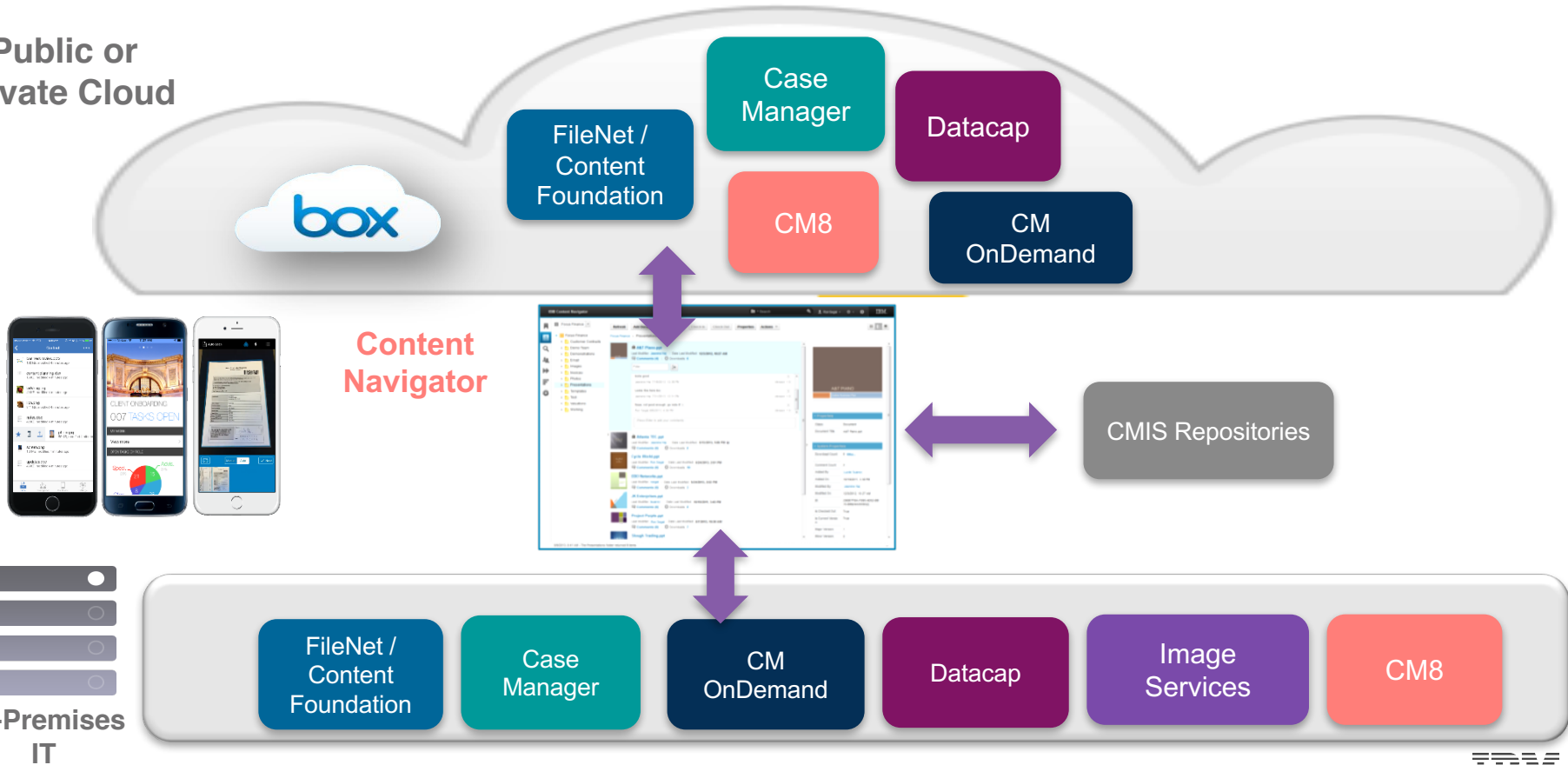
Enterprise Records

Dev/Test, Production

- ✓ Provisioning on IBM Cloud
- ✓ Installation, configuration, admin
- ✓ Back-ups
- ✓ HA/DR
- ✓ Data encryption
- ✓ Replicated storage
- ✓ 24 x 7 support

Hybrid Cloud with IBM ECM

Public or Private Cloud



ECM cloud offerings in multiple models

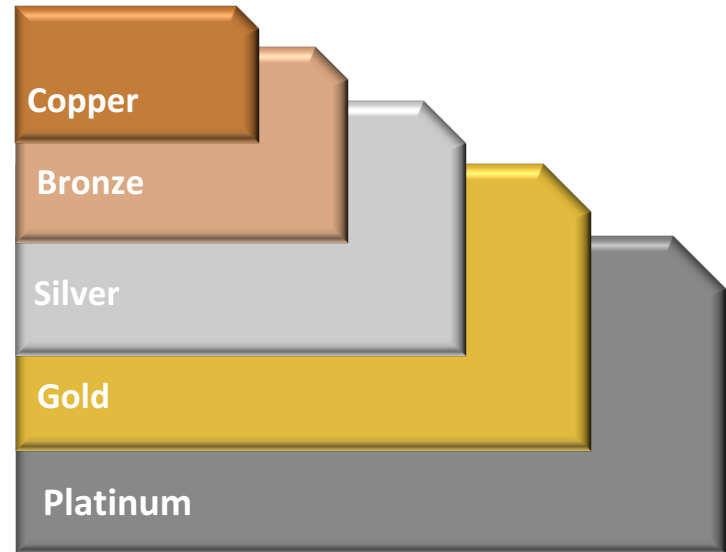


Clients choose a model based on workload:

- FileNet / Content Foundation /CM8– concurrent users
- Case Manager – users and cases per day
- Datacap – pages per day
- CMOD – data throughput per day

Simplified pricing

No counting users for licensing!





“Bridge to Cloud” provides a path from on premise to cloud

- Buy a cloud offering
- You have two years to transition
- No dual support payments during the transition

ECM capabilities as composable micro services



IBM Bluemix Platform (on-prem or on cloud)
Or
other PaaS

Content Solutions evolving for new enterprise needs



**Robotics
Process
Automation**

**Digital
Transaction
Management**

**Cognitive
Business**

Blockchain

**Unified
Governance**

**Hybrid Data
Management**

IBM ECM

Content Services for the
Digital and Cognitive
Business

In Summary... ECM is being reimagined...



- New Ways to Develop by Composing Services into Solutions
- New Ways to Deploy
- Mobile Solutions
- Cognitive Solutions
- Deeper Embedded Analytics and Machine Learning



Thank
You

The text "Thank You" is rendered in a large, 3D, light blue font with a white outline. Each letter contains a portrait of a different business professional. The "T" shows a man in a dark suit. The "h" shows a man in a light blue shirt. The "a" shows a woman in a tan jacket. The "n" shows a man in a white shirt. The "k" shows a woman in a dark jacket. The "Y" shows a man with glasses in a tan jacket. The "o" shows a man in a white shirt. The "u" shows a man in a light purple shirt. The background is dark blue with glowing, curved lines of light blue dots.

fericlayton@us.ibm.com



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