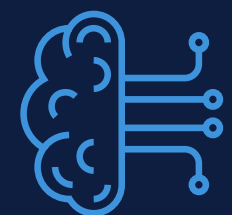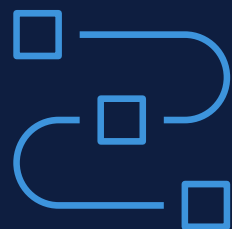# Content Services
*Recent updates and roadmap*

**Lauren Mayes** | Program Director
October 2019

IBM

Please Note:

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.
Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.
The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment.  The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed.  Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

IBM

# FileNet Content Manager

# Navigator

# Enterprise Records

# Content Collector

# Content Services on Cloud

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# Themes

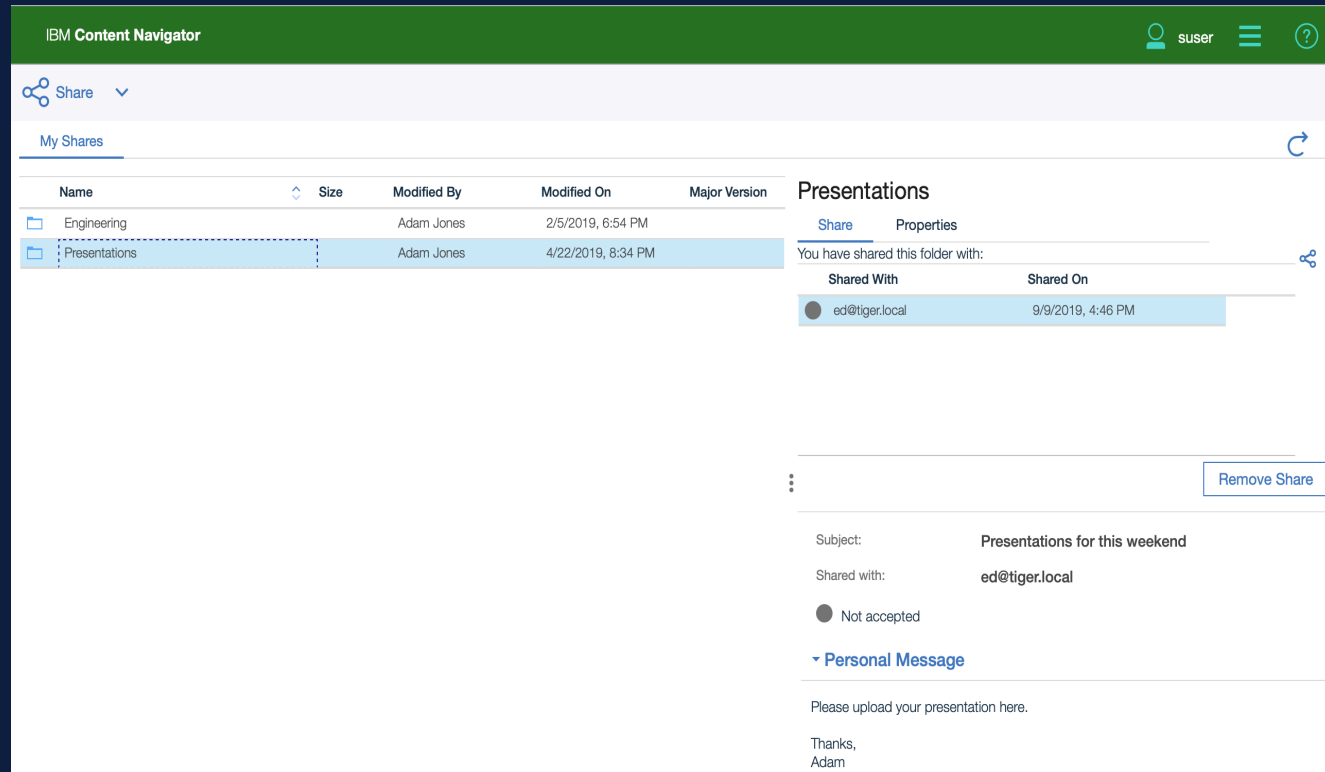| | | |
|---|---|---|
| Collaboration | Enterprise Application Integration | Platform APIs and Toolkits |
| Low code Application Development | Application Modernization | Flexible deployment |

# Collaboration

## Securely collaborate with content

# Securely share documents and folders with people outside of your organization



- ***Secure and auditable***
  - Only authorized users can share
  - ***Granular control*** over what the external user can do:  view, download, edit, add, update

- Optional share ***expiration date***

- Share ***subject and message provides context*** that is always available

- Easily discoverable

- No copies required

# Feature-rich web viewing
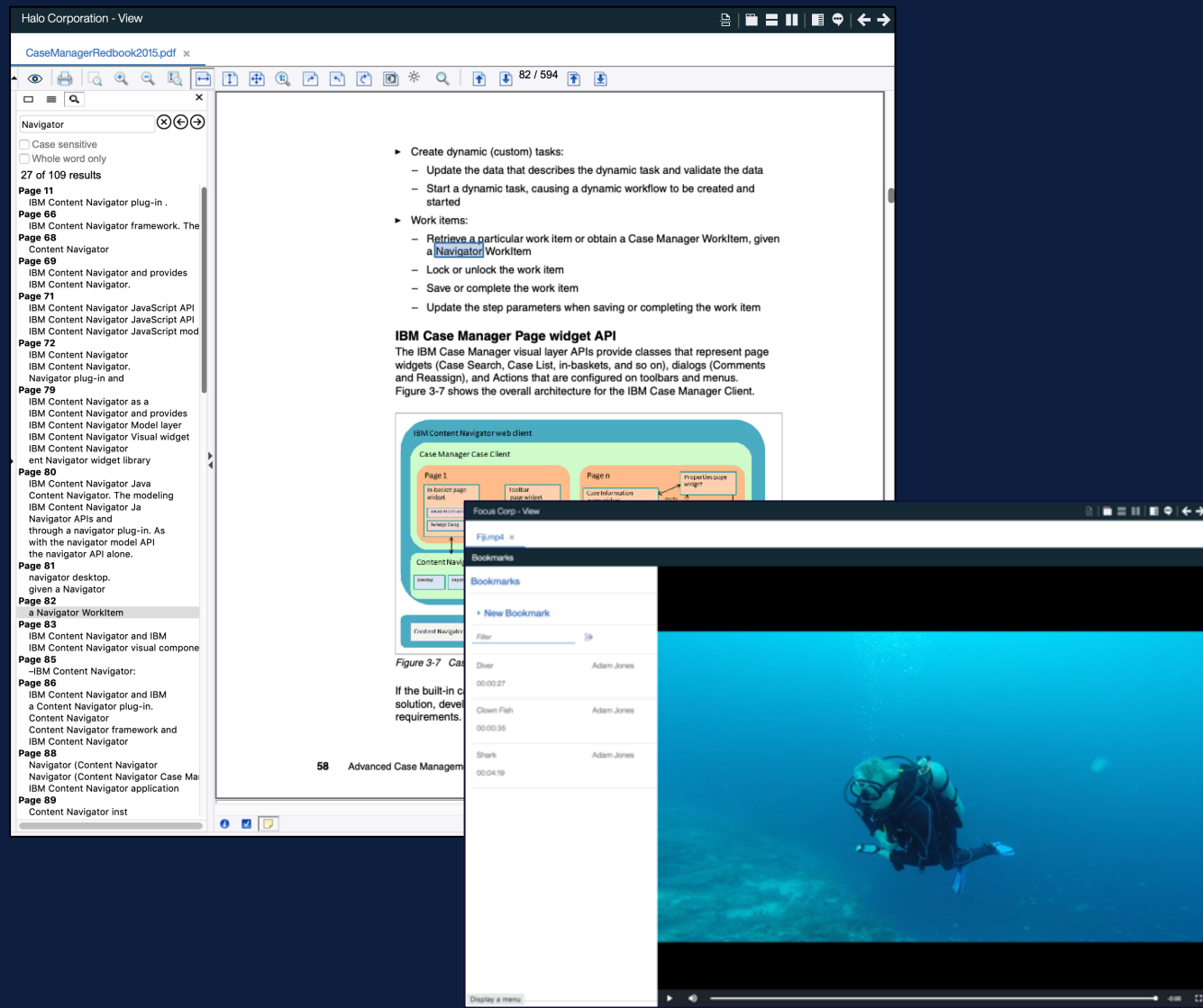


- PDF viewing
  - *Faster display* with improved fidelity
  - *Search* with hit highlighting
  - *Copy text*
  - Display *native PDF annotations*, *signatures* and *password protected PDFs*
- Merge and split – *edit pages*
- Dynamic *role-based redaction*
- *Video viewing*, with *bookmarks*
- Copy/paste text in annotations
- Faster printing
- Brightness control
- Toolkit extensions

# With more to come...

## Roadmap

- External users self-registration
- Embedded viewer, for quick viewing
- Improved user experience
- Updated, modern theming
- Connector for Watson Enterprise Video Streaming
- Simple search

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# Enterprise application integration

## Control content chaos



    5 October 2019

# IBM Content Collector – flexible archiving so you can easily determine what data to archive, and act on content

- Enables **business processes, governance and eDiscovery**
- Support for **Exchange online**
- Now included with **Digital Business Automation**
- Updated industry certifications - **SAP ArchiveLink** and Information Lifecycle Management

## Roadmap

- ICC Files, ICC SAP coming soon to Content Services on Cloud
- Collect documents from **SharePoint on cloud**
- Updates to support SharePoint 2019, Exchange2019, Outlook 2019, Domino 10, 11
- Coming soon to **Cloud Pak for Automation**

File system

# Work in Salesforce, store documents in FileNet



## Roadmap

- Avoid content sprawl with **document governance and records management** across your applications

- *Activate documents* added in Salesforce, driving your digital automation processes

- **Up to date information** whether working in FileNet Content Manager, Salesforce, or another integrated application - without duplication

- Get a **360 view of your customer** by utilizing important documents stored in FileNet Content Manager

- Content accessible to Salesforce users where they are working **without having to switch** applications and reduce productivity

- Programmatically **associate new and existing documents with** Salesforce objects

# Platform APIs and toolkits

## Integrate content in the enterprise

# Simplify application development using a rich, modern API– ideal for web and mobile application development
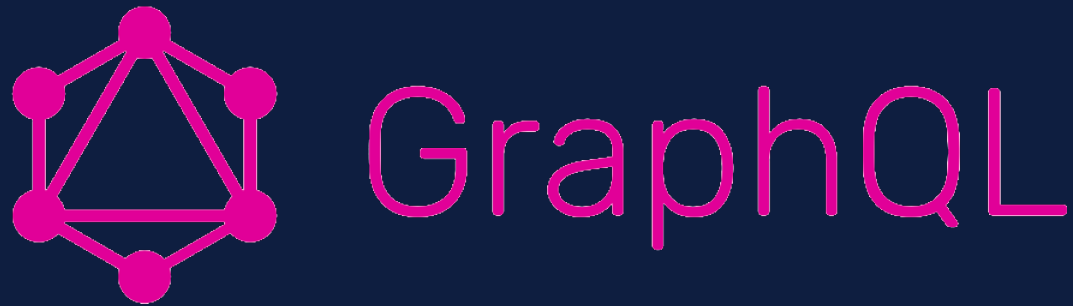


Linux Foundation Project - https://gql.foundation

- GraphQL – a ***query language*** for APIs
  - Open source standard

- Response returned in an intuitive hierarchical format, optimized for rapidly changing data at scale

- Retrieve and update just the information you need, resulting in improved performance

- **Tech Preview** available now
  - Document, folders, metadata discovery, search, browse, add, update

## Roadmap
- General availability
- Content based search, joins, large documents, custom objects

# Act on content events with webhooks



FileNet CPE
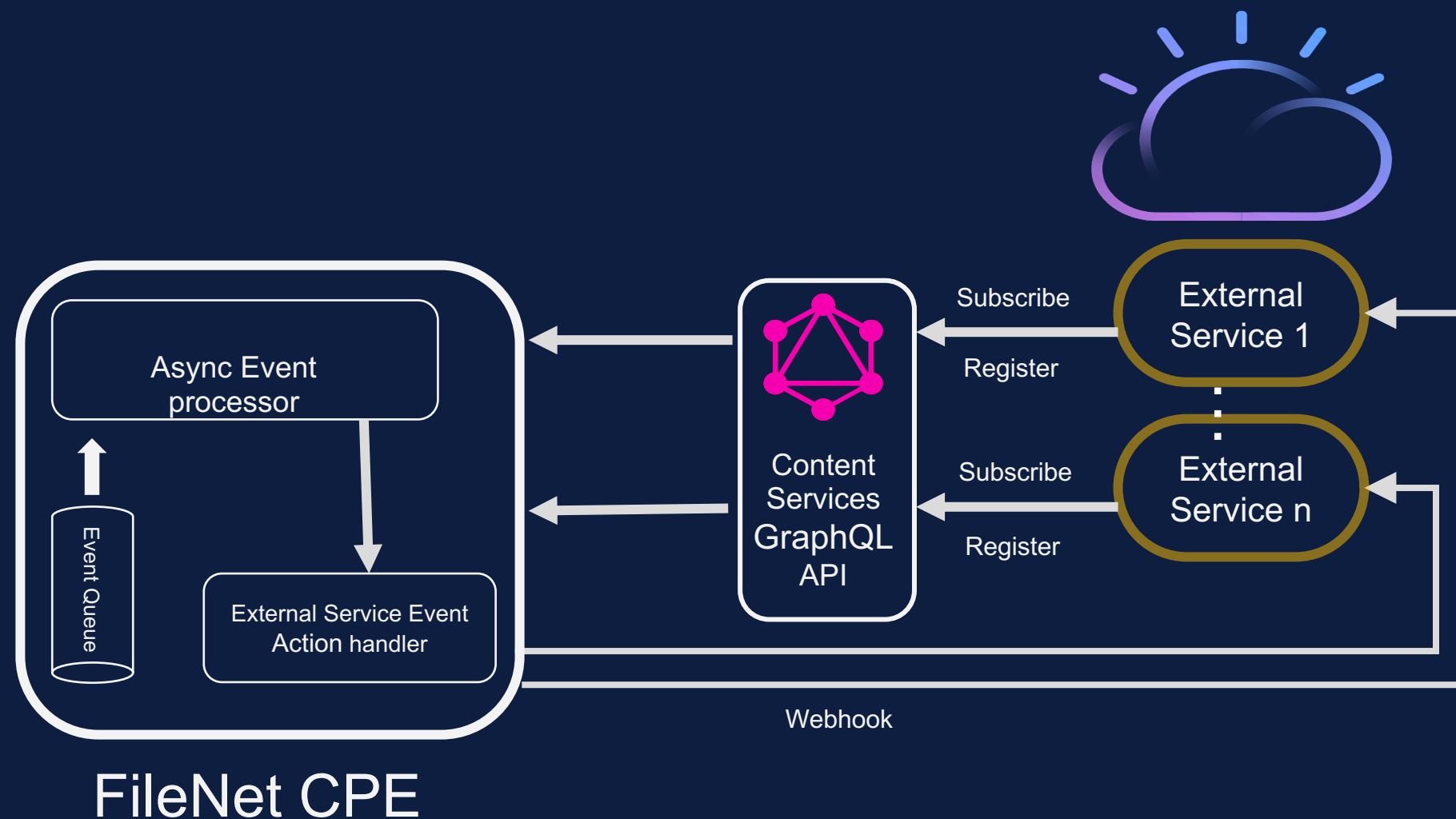
## Roadmap

- Webhooks *deliver content data to other services in real-time*, based upon a *triggering event*

- Well-suited to *cloud,* enabling *server-less computing*

- Built on the *comprehensive FileNet event model*

    e.g. New document added, folder created, ...

# Low-code application development

## Build applications that leverage content

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# Enrich your low-code applications with content
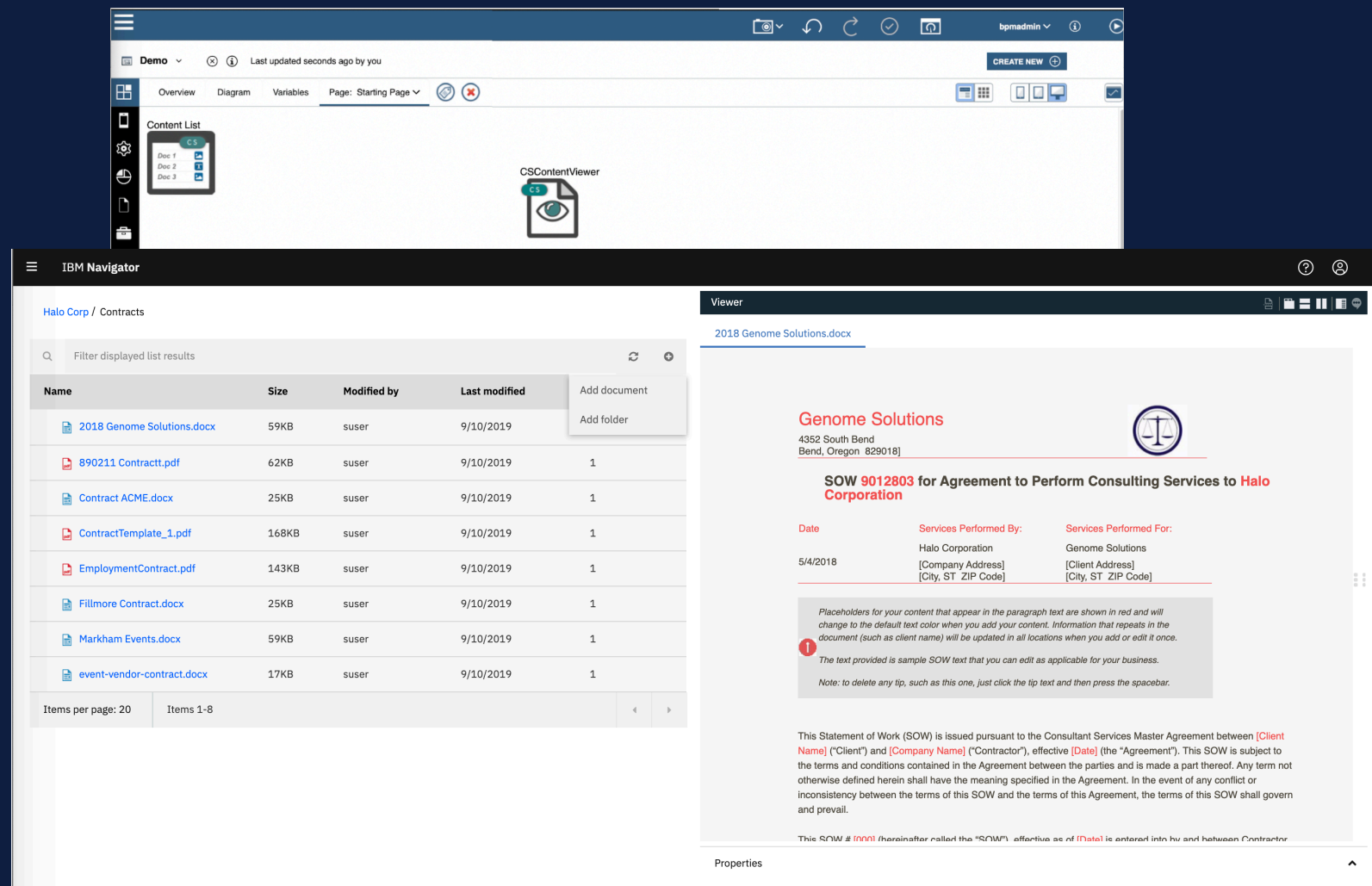


**Tech Preview -** *Content Toolkit* for BA Studio App Designer

*List View* for showing documents and folders – including search and browse –toolbar, context menu, navigation breadcrumb  and paging controls
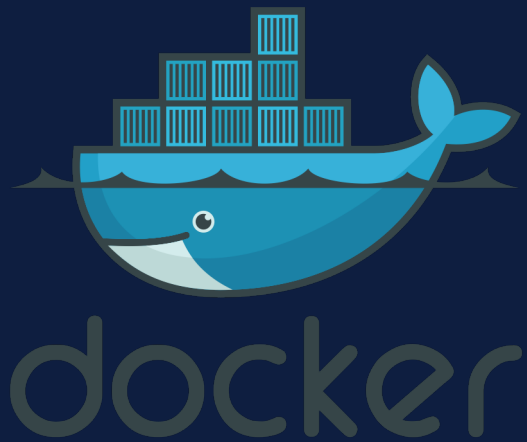
*Viewer* to view documents

*Properties view* – for viewing, updating properties and used to add add/edit document

# Application Modernization

## Reduce total cost of ownership

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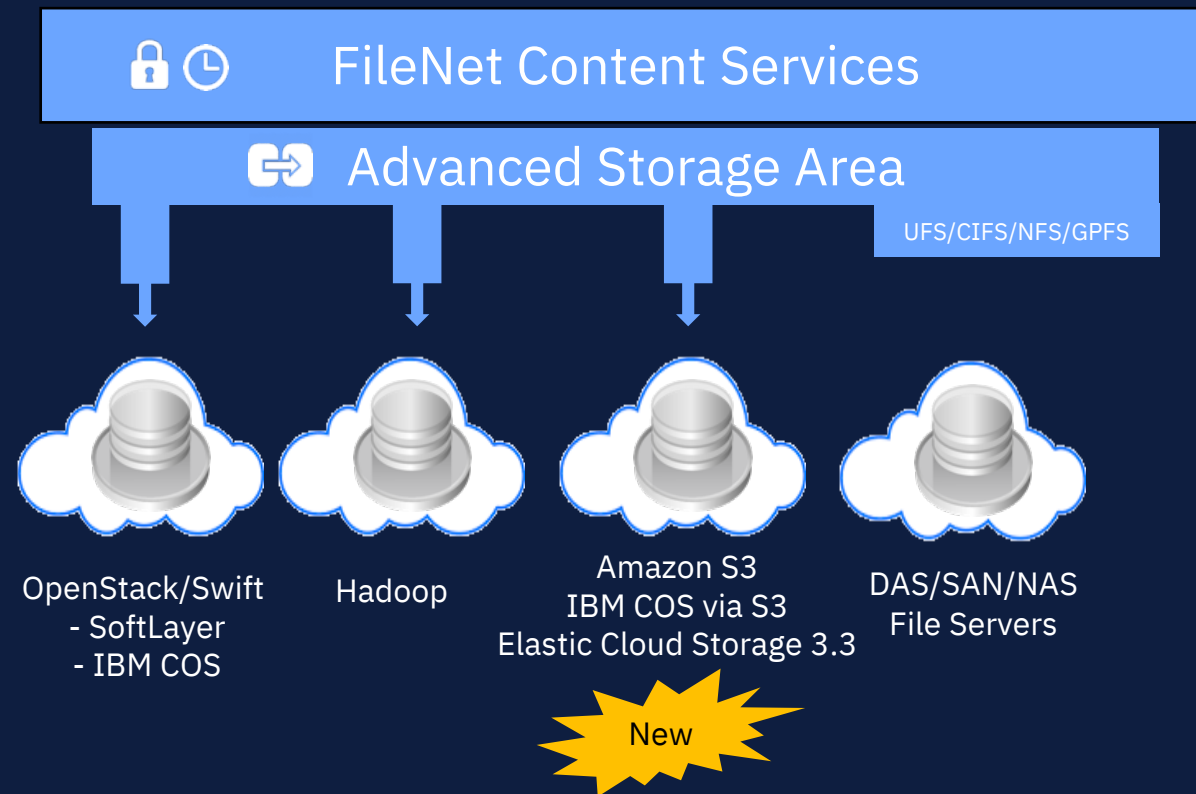# Reduce operational costs with Docker containers and Kubernetes

- Rapid deployment, increased availability, and resiliency, improved resource utilization, *efficiency and agility*

- Containers for: *Content Navigator, Content Platform Engine, Content Search Services, CMIS, External Share, GraphQL*

- Built on Red Hat *Universal Base Image* (UBI) *and includes WAS Liberty*

- Supported in cloud environments with Kubernetes certification from Cloud Native Computing Foundation (CNCF)

Roadmap
- AWS Quick Start guide
- IBM Enterprise Records Container
- IBM Content Collector SAP Container
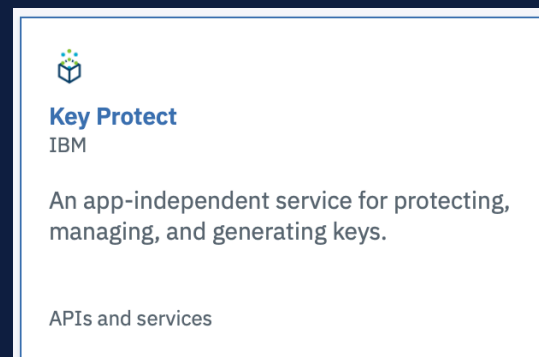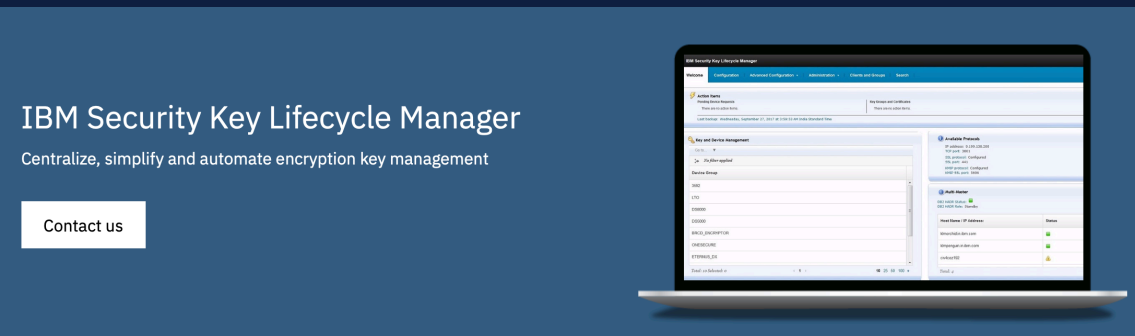
# Reduce storage costs with cloud storage



FileNet Content Services

Advanced Storage Area

UFS/CIFS/NFS/GPFS

OpenStack/Swift
- SoftLayer
- IBM COS

Hadoop

Amazon S3
IBM COS via S3
Elastic Cloud Storage 3.3

DAS/SAN/NAS
File Servers

New

- S3 storage connector supports multiple vendors
  *Amazon S3*, *IBM Cloud Object Storage*,  *Dell ECS*, …

- *Transparently move content* between storage devices with sweeps

- Address *regulatory requirements*, such as SEC 17a4 requirements  with Write Once Read Many (WORM) and holds at the storage level
  *IBM Cloud Object Storage* - meet securities industry requirements for preserving record objects in a non-rewriteable and non-erasable format, by protecting each record object from being overwritten or erased until it has been stored for the applied retention period and legal holds

## Roadmap
- AWS Object Locking (WORM) support
- Google Cloud Storage

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# Manage encryption keys externally

IBM Security Key Lifecycle Manager
Centralize, simplify and automate encryption key management

Contact us

**Key Protect**
IBM

An app-independent service for protecting, managing, and generating keys.

APIs and services

THALES

KMIP
OASIS STANDARD

- Encryption keys can be managed in a key management provider, *centralizing key management* in the location of your choice

- Supports the Key Management Interoperability Protocol (*KMIP*) standard

- Support for
  - IBM Key Protect – cloud-based service providing lifecycle management for encryption keys; enables HSM (Hardware Security Module) in IBM Cloud
  - IBM Security Key Lifecycle Manager
  - Vormetric Thales Data Security Manager
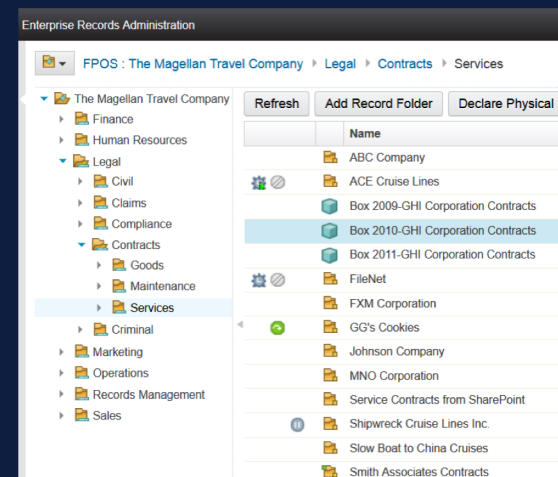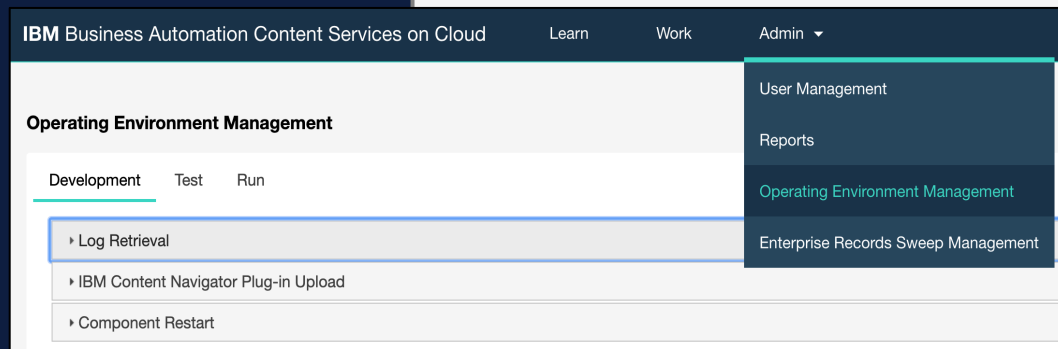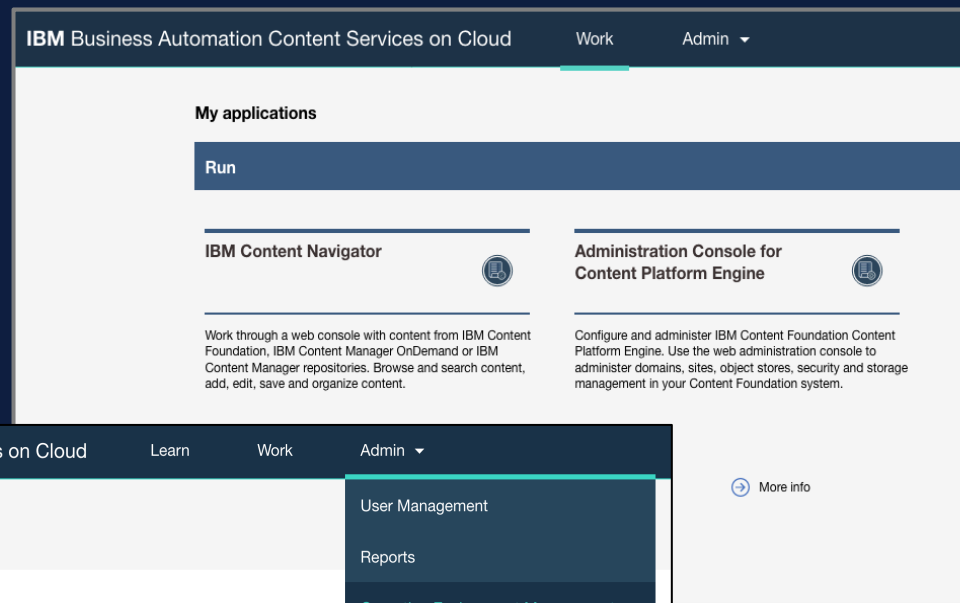
- Available for *new* and *existing* P8 domain

# Flexible deployment options

**Full flexibility of the FileNet platform**

*managed by IBM, in your data center, or in the cloud of your choice*
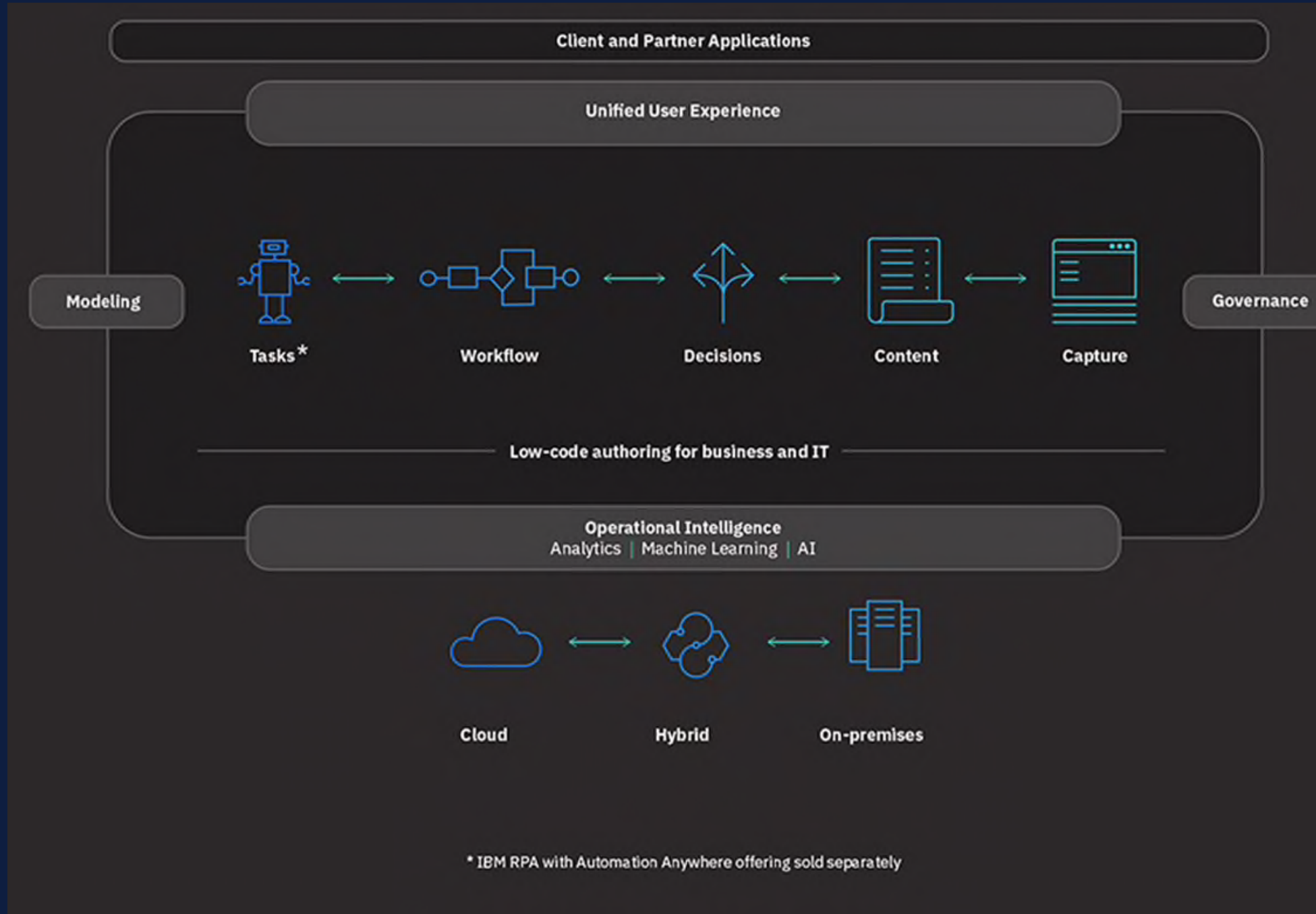
# IBM Business Automation Content Services on Cloud

The *FileNet platform*, managed by IBM

- *Content Navigator* for access from any device

- *Custom development* via APIs and plug-ins

- Role-based access to *administration tools*
  - Desktop configuration, metadata configuration, audit, etc.
  - Upload plug-ins, Download logs, Restart service

- IBM Enterprise Records add-on
  - Records managers can manage *file plans*, define *retention schedules*, place *dynamic holds*
  - Documents automatically declared as records with *zero-click declaration*

## Roadmap
- Trials
- Premium Availability option to further reduce RPO and RTO
- IBM Cloud Direct Link option for improved response times
- IBM Cloud Object Storage WORM
- API usage reports

# IBM Cloud Pak for Automation



**Client and Partner Applications**

**Unified User Experience**

Modeling

Tasks* — Workflow — Decisions — Content — Capture

Governance

Low-code authoring for business and IT

**Operational Intelligence**
Analytics | Machine Learning | AI

Cloud — Hybrid — On-premises

* IBM RPA with Automation Anywhere offering sold separately

- IBM Digital Business Automation Platform

- Part of the Cloud Pak family of **Red Hat OpenShift** ready software

- Complete offering for operations business automation

- Modular, integrated capabilities include:
  - Full spectrum of workflow
  - Digital decisioning
  - Content services
  - Data capture & document management
  - Analytics, ML & AI

- Supports low-code & professional developers

- Complemented with RPA for tasks and Blueworks Live for modelling