Agenda

Customer Pain Points and Environment
Information Management, Information Lifecycle Management and Enterprise Content Management
Information Lifecycle Management Details
Information Lifecycle Management Benefits
Services and Partner Offerings
Summary
Customer Pain Points and Environment
Today's Information Management Challenges

- Large and complex system landscapes
- Data volume growing exponentially
- Content not retained for legally required duration, or kept too long
- Inefficient paper-based processes
- Content fragmented across applications and systems
- Increased regulation requiring auditable content lifecycle records
Distribution of Storage Costs

Hard disk costs represent less than a quarter of storage costs.

Giga Information Group

Administration costs for 1 Terabyte storage are five to seven times higher than the storage costs.

Dataquest / Gartner

Hard disk 23%

Personnel 45%

Various (Training, other costs) 10%

Environment (Electricity, physical space) 3%

Storage Mgmt. (Soft- & Hardware) 19%
Total Cost of Ownership (TCO) Per Legacy System

**Hardware**
- Costs for Technical Infrastructure
  - Computer Hardware
  - Network
  - End-User Environment
  - Green-IT (Power consumption, cooling, etc.)

**Software**
- Costs for System & Application Operations
  - Computing Hardware
  - End-User Environment
  - Extended Maintenance Fees

**Operations**
- Costs for System & Application Operations
  - Monitoring
  - Administration
  - Problem Management
  - Change Management
  - Service Desk & Incident Management

**Application Improvement**
- Costs for Continuous Improvements
  - Process Design
  - Organizational Changes
  - Technical Setup
  - Business Setup
  - Project Mgmt.
  - Testing & Training
Risk Assessment Matrix for Legacy System

- **Hardware**
  1. Reliability
  2. Spare parts
  3. Vendor support
  4. Loss of control
  5. Efficiency/Green IT

- **Software**
  1. Vendor support
  2. Manageability of data volume
  3. Compatibility hardware/software
  4. Compatibility software/software

- **Legal compliance**
  1. Retirement process
  2. Data Provision not possible
  3. Too much data provided

- **Business**
  1. IT knowledge availability
  2. Process knowledge availability
  3. Invest in obsolete software
Retention Periods
Some Records Need to be Kept for More Than 50 Years

80% of respondents declared they have information they must keep over 50 years and 68% of respondents said they must keep it over 100 years

SNIA: 100 Year Archive Requirement Survey

Long-term generally means greater to 10 – 15 years – the period beyond which multiple migrations take place and information it at risk

IDC Worldwide Enterprise Blackbook

Database information (structured data) was considered to be most at risk of loss

SNIA: 100 Year Archive Requirement Survey
IM, ILM and ECM
Empower key decision makers with accurate analytics for Big Data

Ensure information governance at every step of the business process

Unleash the business value of unstructured information
Customers want to manage data as an asset

To manage …

Analytical Data (HANA, DB, DW, 3rd Party)

Process Data (Suite – ERP, CRM, etc.)

Process Content (Suite – ERP, CRM, etc.)

They need …

Discover & move

Data Services

Enterprise Master Data Management

ECM Solutions

Use

Retain & retire

BW Near Line Storage

ILM Retention Management & System Decom.
Content Management
Manage enterprise content in context of business processes

**Old Paradigm**
Content Managed Separately from Core Business Processes

Core Business Processes

**New Paradigm**
Content Integrated With Core SAP Business Processes (e.g. FI/CO, MM, HCM, SRM, CRM)

Content – enriched Business Processes

Create/Capture

Preserve/Destroy

Store/Secure

Access/Distribute

Review/Collaborate
Next generation SAP Real-time Data Platform Vision
Unified Data Management Platform for real time business

SAP RTDP Foundations

- **Cross-application data management & access** for new models of value discovery.
- **High-performance** on all classes of application and usage scenarios

Benefits

- Store, analyze, optimize, transact and mobilize without system limitations.
- Embrace and extend across variations of data forms and processing models.
- Common modeling, integrated development environment, shared systems management infrastructure and deployment independent solutions.
- Trusted and unified data environment.

*Information management solutions include: SAP Data Services Enterprise, SAP Enterprise Master Data Management, SAP Information Lifecycle Management, SAP Enterprise ECM solutions by OpenText, SAP Sybase Replication Server*
SAP Solutions for Information Lifecycle Management

Optimization Live Systems

SAP BW / NLS
- Support for Sybase IQ

SAP ILM Retention Management
- Policy Management
- Data Destruction
- Legal Holds & eDiscovery
- Support for Sybase IQ
- Part of SAP ERP 6.0 deployment
- ERP Product Standard

SAP Data Archiving
- Data Volume Management
- Performance Optimization
- Part of SAP Basis since 1997

Optimization System Landscape

SAP Test Data Management
- Transfer, Compression & Masking Solutions for ERP, BW, CRM, HCM, SCM and SRM
- Strong integration with SAP Solution Manager
  Industry specific content

SAP ILM System Decommissioning
- Audit compliant decommission of legacy SAP and Non-SAP systems
- Flexible reporting on legacy systems tax content and product liability content
SAP ILM in Detail
SAP Information Lifecycle Management

Retention Management
Managing the lifecycle of data of a live application system
- Definition of flexible ILM rules to control retention time and storage location of archived data
- ILM-conform storage of archive files on an ILM-certified WebDAV-Server
- e-Discovery and legal hold management
- Data destruction taking retention periods and legal holds into account

System Decommissioning
Managing the lifecycle of legacy data in a stand-alone ILM Retention Warehouse
- Data transfer from legacy systems to RW
- Local or BW-based reporting

ILM Enhanced Data Archiving
Evolution From Data Archiving to ILM
# Archiving and System Decommissioning Core Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Pain Point</th>
<th>Customer Value</th>
<th>Products</th>
</tr>
</thead>
</table>
| Archiving and Retention Management | ▪ Growing SAP DBs  
▪ Resource consumption  
▪ Administration effort  
▪ Legal requirements  
▪ Litigation Hold  | ▪ Reduced IT cost  
▪ Improved system performance  
▪ Higher system availability  
▪ Information preservation and destruction  
▪ Legal compliance  | ▪ SAP ILM RM  
▪ SAP Document Access  |
| Legacy System Decommissioning    | ▪ Cost of legacy systems  
▪ Historic data still needed for legal or business reason  | ▪ Information preservation and destruction  
▪ Legal compliance  
▪ Reduced IT cost  | ▪ SAP ILM SD  |
| ECM Platform Consolidation       | ▪ Information silos  
▪ Inefficient processes, missing information  
▪ It landscape complexity (different vendors)  | ▪ Enterprise wide ECM Solutions  
▪ ECM Consolidation  
▪ End to End Process Efficiency  
▪ Business User Efficiency  | ▪ SAP Extended ECM  |
End-to-End Coverage Throughout the Complete Lifecycle
Data Volume and Lifecycle Management

- Current fiscal year
- Current fiscal year -1
- Current fiscal year -2
- Current fiscal year -3
- Current fiscal year -m
- Current fiscal year -n

- Business and legally relevant
- Business or legally relevant
- Neither business nor legally relevant

Legacy system decommission
Retention Management

Archiving
Managing the Amount of Time and the Location Where Data Is Securely Kept

Manage and enforce retention policies
- Set policies for automatic data retention and subsequent destruction
- Retain data according to set policy
- Responsibly destroy data when expiration date has been reached

Maintain Separate Archives per Retention Period
- Create multiple data archives for each data expiration date

Perform e-Discovery
- Search for information in response to legal requests

Apply Hold on Data
- Automatically prevent data deletion or destruction
- Apply holds to archives and current database
Retention Management Process

- Set up audit areas
- Set up policies and maintain rules
- Archive and store data
- Destroy data

Perform e-Discovery and set legal holds

Database

File System

Storage System

- Residence time
- Business complete
- Non changeable

- Creation

Retention Time

- Access
  Frequency

Audit

Lawsuit

Information Destruction

Time
Retention Management – Overview

Runs on your live SAP ERP 6.0 EhP 7

Audit Area Management
- Including predefined audit areas

Policy engine (IRM)
- Manage policies and rules
- Import and Export of rules

ILM-enhanced archiving programs and functions
- Archiving programs integrate with policy engine for automated, rule-based archiving

Destroy Function
- Database
- Archive
- Attachments

Legal Case Management (LCM)
- Perform e-Discovery
- Manage legal holds

WebDAV-based ILM interface
- Connect to ILM-aware storage for secure and legally compliant retention of data

ILM-certified storage system
- Enforces retentions and holds, executes destruction
- Connect to WORM-like storage for secure and legally compliant retention of data

Partner

SAP ILM WebDAV interface

Enterprise Library

WORM-like Storage

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Legacy and Redundant Systems Proliferate within IT Infrastructures

Consequence of normal business operations
- Acquisition of new systems during M&A activity
- System upgrades over time

However, decommissioning can be difficult
- Need access to data residing on legacy systems for financial reporting
- Legal regulations may require retention of data
Alternatives in Handling of the Legacy Systems

Based on the information contained in the systems each company has to assess which option is providing the largest cost-benefit ratio and the least risks.

Never change the winning team.

Keep the system available in the cellar.

Sort out and retain data.

Nobody will ask.
IT Departments Need an Efficient Way to Manage Legacy Systems

TCO Reduction without losing auditing and reporting capability

- Consolidate multiple large legacy systems into one small modern instance called Retention Warehouse
- Retain on demand access to data from legacy systems
- Respond to tax audits and create financial reports

SAP ILM Retention Warehouse
SAP ILM Retention Warehouse

Benefits
- One central retention warehouse = single repository for multiple systems
- Flexible and modern reporting capability
- Continued enforcement of retention policies
- Compliance and auditing acceptability
- Preservation of business knowledge
SAP Information Lifecycle Management
System Decommissioning Process

- Data Profiling (Analysis)
- Extraction
- Transfer
- Conversion
- Rule based storage
- On-demand data retrieval

SAP/Non-SAP Legacy System(s)
- SAP R/3 4.6C
- SAP R/3 4.0B
- SAP R/3 4.7

Extract & Transfer

Conversion
Storage
Enterprise Library
ILM Certified Storage

Prepare
Report

SAP BW/BO Suite
Local Reporting

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End-to-End Approach for Non-SAP System Decommissioning

- Extract
- Transform & Convert
- ADK converter
- Transfer
- Convert
- Storage
- Prepare
- Report
SAP Data Services
Integrate a variety of data from any data source

SAP BusinessObjects Data Services 4.0
- One Solution that Provides
  - Data Integration
  - Data Quality
  - Text Data Processing
- One server to execute all capabilities
- One design environment to manage all of the development
- One administration console to monitor all functions

Unified Metadata

One Runtime Architecture & Services

One Administration Environment
(Scheduling, Security, User Management)
One Set of Source/Target Connectors
Streamlined System Decommissioning
More Automation, Higher Data Quality with SAP LT

1. Select tables from source
2. Create synonyms
3. Create target tables
4. Create transformation environment (migration objects, runtime objects, access plans)
5. Load data

1. Identify database tables
2. Create archiving objects
3. Generate code for write program
4. Extract and archive data
5. Transfer archive files to RW

*SAP Landscape Transformation system
Transformation of Legacy Data Using SAP LT

- Add Tables from Source
  - Select Tables from Source
    - Select Tables from the Source System that will be added to the Configuration

- Create Synonyms for Source Tables
  - Create Source Synonyms
    - Create Synonyms on Source System and Structures on SLT for accessing Source Tables

- Create Target Tables
  - Create Target Tables
    - Create Target Tables with Technical Names as Targets for the Replication

- Define Migration Objects
  - Define Migration Objects
    - Define Migration Objects for Tables in Configuration

- Generate Runtime Objects
  - Generate Runtime Objects
    - Generate Runtime Objects for Transferring Data

- Calculate Access Plans
  - Calculate Access Plans
    - Calculate Access Plan for Reading the Source Tables

- Schedule Load
  - Schedule Transfer Jobs
    - Transfer Data from Source Tables to Technical Target Tables
### Rapid and Cost-Efficient System Decommissioning with SAP LT

#### Previous Solution vs. Solution with SLT

<table>
<thead>
<tr>
<th>Previous Solution</th>
<th>Solution with SLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor intensive and error-prone processes for data mapping, data transfer, and archiving</td>
<td>Highly automated processes, no manual effort required</td>
</tr>
<tr>
<td>Tables to be considered for retirement must be selected individually</td>
<td>All tables in the system are considered, de-selection possible</td>
</tr>
<tr>
<td>Manual selection of tables related to a transactional table (audit area creation)</td>
<td>Automatic selection of all related tables based on enhanced metadata</td>
</tr>
<tr>
<td>Longer decommissioning project lifecycle</td>
<td>Shortened project lifecycle realizing benefits of decommissioning sooner</td>
</tr>
<tr>
<td>More costly decommissioning project</td>
<td>Reduced project costs</td>
</tr>
</tbody>
</table>
Holistic Archive Store Based on SAP Sybase IQ

Classic storage in ERP and BW

Storage of operational and analytical data in Sybase IQ

*Note: Current state of planning. Subject to change.
**archive information structures
SAP ILM Retention Management on Sybase IQ

Benefits at a Glance

Innovation

- Store and manage your archive index and data on column-based DB
- Eliminate costly 3rd party compliant store SW and HW
- Consolidate your storage infrastructure

Benefits

- Reduce system landscape complexity
- Increase performance for archiving and data access
- Increase search capabilities
- Optimal data compression
- WORM-like security

\[ \text{SAP ILM RM} + \text{SAP Sybase IQ} = \text{One point of contact (vendor)} \]
\[ = \text{One storage infrastructure} \]
\[ = \text{One archiving strategy} \]
SAP ILM Benefits
SAP Solutions for Information Lifecycle Management
Reduce Complexity and Cost, Enable Compliance

Complexity
- Live Data Volume
- Legacy System
- Decommissioning
- Non-Production Systems

Cost
- Reduce amount of Data
- Reduce amount of Systems

Compliance
- Records/Retention Management
- Data Destruction (part of Data Privacy)
- eDiscovery
- Litigation Readiness
Three Scenarios For Data Growth and Data Volume

Example:
- 3 systems incl. replications
- 24 month residence time
- 6 years retention time
- 300GB yearly growth

Result:
- With data archiving significant reduction in data growth and data volume
- With Retention Management stabilization of data volume
## Retention Management Benefits

| ...e-discovery          | 1 GB of data = $1,800 (Forrester Research)  
|                        | 1 TB system = $1,800,000  
|                        | x 500 law suits at any given time (Fulbright & Jaworski 2006)  

*Appetite for Destruction, Information Week, June 2008*  

*DuPont estimates that during one law suit, e-discovery cost $11 million. In that same discovery effort, DuPont found that $4 million to $6 million worth of records had already met their retention deadlines and should have been destroyed.*

| ...no penalties in law suits | Audit Trail  
|                             | • Transparent and comprehensive policy management  
|                             | • Approved by tax auditor and legal counsel  
|                             | • Data securely erased beyond any type of forensic recovery  

*Data Destruction and Document Lifecycle Policies: Considerations for Compliance with Federal Mandates and Acts, CyberScrub 2006*  

*DuPont estimates that during one law suit, e-discovery cost $11 million. In that same discovery effort, DuPont found that $4 million to $6 million worth of records had already met their retention deadlines and should have been destroyed.*  

| ...IT and storage | Holding data beyond its retention period has no value  
|                  | Use of resources, system availability, performance  

| ...legal compliance | Certain laws require you to destroy data after retention is up  
|                    | Sarbanes-Oxley, HIPAA, FACTA, Gramm-Leach-Bliley (GLB), etc.  
|                    | Avoid penalties for not complying with the law  

*DuPont estimates that during one law suit, e-discovery cost $11 million. In that same discovery effort, DuPont found that $4 million to $6 million worth of records had already met their retention deadlines and should have been destroyed.*
System Decommissioning Benefits

Reducing System Complexity
- Reduced efficiency of operations (e.g. system backups)
- Reduced overall system reliability

Growing Maintenance Costs
- Costs of hardware and personnel to keep legacy systems running (keeping a legacy system running can easily cost $10K / month)

Wasteful Energy Footprint
- Old legacy systems are inefficient and consume unnecessary energy for operations and cooling (energy costs per legacy system can be up to $1,000 per month)
The Benefits of Holistic Information Management

- Meet audit requirements
- Cut energy use
- Ensure legal compliance
- Reduce risk
- Cut data volume
- Reduce system complexity and cost
Services and Partner Offerings
What Should Your Strategy be Now?

Quick wins
- Legal case management
- Policy based data management
- Archiving
- Legacy system decommissioning

Midterm strategy
- Legal retention requirements
- Automated data destruction
- ECM
- ILM as central enterprise service

Long-term strategy
- TCO Reduction
- Optimized IT, Green IT & Sustainability
- Data Archiving
A leading German pharmaceuticals company recognized the need to streamline its system landscape in a legally compliant manner and became a ramp-up customer for SAP Information Lifecycle Management. They started off with decommissioning a SAP R/3 4.6c system and are currently rolling out the strategy to other systems worldwide.

Their decommissioning project had the following objectives:

- Manage long-term data and document storage and reduction of data volumes
- Reduce overall system and storage costs
- Comply with legal and audit requirements according to defined records management policy
- Use standardized and flexible reporting mechanisms for legacy environment independent of different system types and releases
- Automate the destruction of data when appropriate and in accordance with policies and guidelines

### Key figures

- **First system:** SAP R/3 4.6C
- **Data retention times:** 5-33 years
- **Total number of systems planned:** 135
- **Special reporting requirements:** FDA
Concept Review of SLO Services with SAP ILM by Deloitte & Touche

Challenges for SAP customers

- Customers require a global strategy for system decommissioning solution considering central availability and scalability that complies with legal and technical regulations

Objectives

- Deloitte performs a review of SLO consulting services concepts and processes based on the corresponding ILM functionality to verify defined compliance aspects

Approach

- Simulate a system decommissioning based on a predefined exemplary procurement process
- Review the step-by-step procedures with respect to data retention requirements for financial data according to German commercial and tax law

Benefits for SAP customers

- A renown global public audit firm has reviewed the concept of SLO services with SAP Information Lifecycle Management
- A concept review report is published for SAP customers using the following link:
  
  https://websmp206.sap-ag.de/~sapdownload/011000358700000629192010E/SLO_ILM_Click_Agree_EN.htm

About SAP Information Lifecycle Management (ILM):

- Manage and enforce retention policies across the enterprise
- Manage the responsible destruction of data based on policies
- Perform e-Discovery and set legal holds
- Complete decommissioning of legacy systems
- Enforce retention policies on data from retired system
- Run reporting on data from retired system (SAP BW)
- Use predefined tax content and reporting interface
- Use secure ILM-aware storage – Partner offerings, e.g.:

QUICK FACTS

Deloitte Touche Tohmatsu Limited

- Location or Headquarters: United Kingdom
- Industry: Auditing, Consulting
- Products and services: audit, consulting, financial advisory, risk management, and tax services
- Revenue: 26.1 billion US$
- Employees: Approx. 169,000
- Web site: http://www.deloitte.com

For a full list of partners certified for BC-ILM 2.0 and BC-ILM 3.0 see:

www.sap.com/usa/ecosystem/customers/directories/SearchSolution.epx
SAP Consulting Services – ILM Retention Management
Service Components

Scoping Workshop
- Review archiving & retention strategy and verify scope
- Transfer knowledge to IT Architects
- Plan technical infrastructure
- Create high-level implementation roadmap

Archiving Analysis Service
- Remote analysis of production system
- Identification of relevant Information for future archiving purposes

Proof of Concept
- Demonstration of an end-to-end scenario of Retention Management
- Based on a predefined scope
- Conducted in a sandbox environment

Full Implementation
- Complete implementation of Retention Management according to customer requirements
- Performed in productive system environment
SAP Consulting Services – ILM System Decommissioning

Service Components

Scoping
- Scoping Workshop
  - Review of current archiving & retention strategy and verify scope
  - Transfer knowledge to IT architects
  - Plan technical infrastructure
  - High-level implementation roadmap

Planning
- Business Case Development (optional)
  - Comparison of quantitative and qualitative aspects of possible solutions against current situation
  - Results will be documented in a management summary presentation

Realization & Go-live
- Proof of Concept
  - Demonstration of an end-to-end system decommissioning scenario
  - Based on a predefined scope
  - Conducted within a customer’s sandbox environment

- Pilot Implementation
  - Full decommissioning of one legacy system according to customer requirements
  - Test run, and after validation by customer productive run
The ILM Project Cockpit as Part of the Implementation Service

The ILM Project Cockpit* offers a central control during the process of decommissioning a system (ETL):

- Process tree containing phases and activities, guiding through decommissioning process
- For each executable activity a process log is created
- Documentation of the ETL process (extract, transfer and load/convert and store)
- Automated activities through the ILM Project Cockpit
- Execute transactions and reports directly from the cockpit
- User Guide for each activity available

* The ILM Project Cockpit is a SAP Consulting solution and not included in the SAP ILM solution itself. The Cockpit is currently only available for a SAP System Decommissioning scenario.
ILM Value Discovery with SAP Value Lifecycle Manager

Enterprise Information Management:

- Information Lifecycle Management
- Retention Management
- Information Lifecycle Management
- System Decommissioning

New content includes: interview question, pain points, best practices, solution enablers, and value drivers including specific KPIs

To access VLM (user needed), please click here
SAP Archiving & Document Access Features Complementing SAP ILM

OpenText

- Enforces retention on SAP data and SAP documents
- Seamless virtual folder capability
- Document Access complements SAP decommissioning with print lists
- Hardware abstraction gives customer a choice between leading WORM-like storage

World of SAP Data
- SAP ILM Interface
- ArchiveLink
- WebDAV

World of SAP Documents
- WebDAV (AL references)
- ArchiveLink

SAP Archiving by OpenText - OpenText Enterprise Library (Hardware Abstraction Layer)
SAP Document Access by OpenText
Includes SAP Archiving by OpenText

Single point of access to SAP and non-SAP data and documents
- Provides access to data and documents from any SAP module
- Integrates all content associated with a transaction (email, office documents, paper documents)
- Spans multiple SAP modules and systems
- User interface in either SAPGUI or SAP NetWeaver Portal

Organizes and manages all content (incl. legacy) in virtual folders
Provides an easy, low cost way to archive documents (SAP Archiving by OpenText included)

SAP Archiving by OpenText

SAP Data Archiving
- Securely archives SAP ADK archiving files
- Leverages storage lifecycle management for lower costs

Document Archiving and Imaging
- Links documents with SAP transactions
- Archives print lists and outbound documents
- Archives paper, faxes, desktop documents and email
- Supports bulk-import and high volume scanning
- Provides viewing with notes and annotation capability
Customers Benefits From Joint SAP & Open Text Offering

Reducing Total Cost of Ownership

- Decommission legacy systems (SAP & NON-SAP) while securing data access
- Reduce administration and resource consumption of SAP database
- Simplified data management by using NetApp for SAP Environments

Complete Information Lifecycle Management

- One platform for ILM and ArchiveLink data and document archiving
- Unique offer of an End to End solution by SAP, OpenText and NetApp

Compliance for SAP and non SAP World

- Secure long term archiving for data and documents
- Retention enforcement, legal holds and destruction at end of life
SAP Information Lifecycle Management
Most Complete Solution in The Market

- Pre-configured content/ Best practices
- Flexible reporting on retrieved data
- Compliance and auditing acceptability
- Retention Management on business object level
- Automated data destruction
- Applicable to existing SAP archive files
- Structured and unstructured information
- Secure WORM-like functionality
Summary
Holistic Information Management with SAP

SAP and Non-SAP

Legal Compliance

Structured and Unstructured

TCO Reduction

Live and Legacy

Process Optimization
One Holistic Solution to Manage the Information Lifecycle

- SAP ILM Retention Management
- OT Document Access
- SAP and OT Archiving
- SAP ILM System Decommissioning
Book: Enterprise Information Management with SAP

- Understand the big picture of SAP’s enterprise information management offerings
- Explore step-by-step instructions for working with SAP Data Services
- Learn how to perform the most important tasks in SAP Information Steward, SAP Information Lifecycle Management, SAP Master Data Governance, and SAP Extended Content Management
- All royalties donated to Doctors Without Borders
Sources of Information

Collateral
Solution Brief
Managing the Information Lifecycle

Technical Brief
Drive Efficiency and Compliance in Managing Business Data

Solution in Detail
Reducing Total Cost of Ownership and Business Risk
Available on SDN: http://www.sdn.sap.com/irj/sdn/ilm

Videos on YouTube
- Compliant Archiving:
  http://www.youtube.com/watch?v=QX6Rx3dVYpw
- Legacy Landscape Consolidation:
  http://www.youtube.com/watch?v=sAyvhIsUNeE&feature=youtu.be

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