**SAP Solution Brief**
SAP NetWeaver

# MANAGING THE INFORMATION LIFECYCLE

## STRATEGIES FOR COPING IN A COMPLEX WORLD

Information lifecycle management is a comprehensive approach to managing information to meet the needs of the enterprise and to comply with legal and regulatory mandates regarding data accessibility and retention. SAP provides the tools and technologies to make this possible.

Information has a predictable lifecycle. It is created, lives, and changes within databases, repositories, and software solutions. It is archived and eventually destroyed. A comprehensive strategy for information lifecycle management (ILM) focuses on maintaining a balance between total cost of ownership, risk, and legal compliance. It specifies steps to define, document, and introduce ways to better manage the information that exists across the organization.

The ILM process includes knowing and categorizing your data, defining policies that govern what you do with the data, and setting up your system in such a way that you can apply these policies to your data. You then implement your information management strategy with the help of technology. The added value of ILM over more conventional information management strategies is automation and completeness.

Several factors have converged to bring about a major change in the way companies manage data. For example, awareness of the unforeseen events that could occur – such as natural disasters, terrorist attacks, or financial meltdowns – has set in motion new efforts to protect consumer identity and privacy. This awareness has led to an explosion in legal requirements. There are currently thousands of regulations worldwide pertaining to the handling of electronic data, and the number continues to grow. Some of the better known include the Sarbanes-Oxley Act, the Gramm-Leach-Bliley Act, the Health Insurance Portability and Accountability Act (HIPAA), and the European Union Data Protection Directive.

Another factor that is becoming increasingly urgent is the management of legacy systems in both SAP® software and non-SAP software landscapes. Not only are the aged systems generating ongoing and unnecessary costs through the consumption of electricity and need for administration and maintenance effort, but they pose a significant legal risk. The data they hold must be accessible and ready to be presented at relatively short notice, for example, to an auditor in the event of a tax audit. However, as knowledge about the old systems gradually fades from the company and the old hardware is physically removed, it is difficult to predict whether or not that data will be accessible when needed.

The management and retention of information has become so important that traditional data management approaches are no longer sufficient. An effective ILM strategy is an essential part of an enterprise's overall strategy for dealing with the challenges of cost, compliance, and risk. SAP has developed an approach to ILM that meets the complex information management needs of today's organizations.

### SAP and Information Lifecycle Management

Information lifecycle management comprises the policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost-effective IT infrastructure from the time information is created through its final destruction. The complete, flexible, and automated approach to ILM advanced by SAP gives you the support you need to

adapt to constantly changing regulations. It helps you:

- Identify and categorize your data
- Define policies that govern what you do with data
- Leverage application and storage technology in such a way that you can apply these policies to your data
- Implement your information management strategy
- Shut down your legacy systems in a legally compliant manner

## The Three Pillars of Information Lifecycle Management

The SAP approach to ILM addresses different business scenarios and challenges with SAP® software, tools, and technologies. As shown in the figure, three "pillars" comprise the approach.

**Data archiving**. ILM covers the flow of data and metadata in information systems from their creation and storage in the live system database to the end of the lifecycle when the data becomes obsolete and no longer has to be retained to meet regulatory or other legal requirements. SAP's approach to ILM enables you to perform analysis and categorization of data and move the data from the database into long-term, less expensive storage. The SAP NetWeaver® technology platform provides a tried and tested archiving infrastructure that maintains the complete business context intact while archiving your business data.

**Retention management**. SAP tools and technologies for ILM provide retention-policy management functions that support the complete information lifecycle – from creation to retention to destruction. They enable you to enter different rules and policies reflecting various criteria, including where data is stored, the duration of data retention, and when data can be destroyed. The policies, usually based on external legal requirements or internal service-level agreements, can be applied to both structured and unstructured data stored on all types of media. Based on the rules, the data is automatically archived into the correct storage area and receives an expiration date. ILM-aware storage integration means that your storage systems understand and can act on the stored data based on rules you define. At the end of the lifecycle, an automated destruction function permanently destroys the archived data when the expiration date has been reached. The SAP NetWeaver Information Lifecycle Management component includes functions that support legal-case management, legal-hold management, and automated electronic discovery.

**System decommissioning**. SAP NetWeaver Information Lifecycle Management provides a complete approach to shutting down legacy systems and bringing the data from both SAP and non-SAP software into a central ILM retention warehouse. The data is stored with the relevant expiration dates in ILM-aware storage and can be viewed with different reporting options even after the original system has been shut down. Functions of the SAP NetWeaver Business Warehouse (SAP NetWeaver BW) component as well as local reporting functions are used to extend the ILM retention warehouse with centralized auditing and reporting functions. These ILM solutions include functions that enable you to create archiving snapshots of master and customizing data, support cross-system archiving, and provide on-demand analysis of archived data.

## Implementation of Information Lifecycle Management

SAP offers different support mechanisms to help you get started on your ILM strategy and support your ILM team during the implementation process. A good way to begin is with a system decommissioning project, which provides you with a clear overview of all ILM functions across the three pillars of ILM. The System Landscape Optimization group of SAP Consulting offers starter packages to help you take the first steps. Depending on your initial focus and objectives, the starter packages can help you in different areas. You may want to begin with an archiving approach to curb your data volumes and then expand into a full-fledged ILM strategy, or you may need to tackle legal compliance issues from the very start.

A phased approach to implementation works best. It's important to have a clear grasp of your existing IT landscape and current data situation. You may also want to classify your data into different categories. SAP can help you analyze your data, set up a policy catalog based on legal requirements, plan archiving implementations, or set up a retention warehouse for system decommissioning.

At this point, you are ready to implement the strategy and policies that you have developed in the previous phases. To apply the policies to your enterprise data, you need technology that can support your ILM processes. For example, this could entail finding an ILM-certified storage partner to set up your storage system.

## The Business Case for Information Lifecycle Management

The three pillars of ILM reduce the total cost of ownership in your IT investments and improve your return on those investments (ROI).

Data archiving helps you stay in control of your data volumes, resulting in:

- Increased system availability
- Improved system performance
- Better use of existing system resources, leading to reduced costs for disk space and storage administration

Retention management enables you to implement a responsible and transparent data destruction strategy and automates your data archiving processes, resulting in:

- Reduced costs during legal discovery processes through more efficient information-gathering practices and elimination of penalties for failing to present essential information
- Less money spent on unnecessary fines by helping to prevent the accidental deletion of important data
- Time and money saved on archiving processes through rule-based automation

**Information Lifecycle Management**

| Data Archiving | Retention Management | System Decommissioning |
|---|---|---|
| ▪ Analyze data volumes<br>▪ Securely move data from database to archive<br>▪ Access archived data conveniently<br>▪ Archive data from SAP NetWeaver® Business Warehouse (SAP NetWeaver BW) – near-line storage | ▪ Define and manage all retention policies across the enterprise<br>▪ Manage destruction of data responsibly based on policies<br>▪ Enforce retention policies<br>▪ Use secure information lifecycle management–aware storage (partner offerings)<br>▪ Perform e-discovery and set legal holds | ▪ Decommission legacy systems to a central retention warehouse<br>▪ Enforce retention policies on data from shut-down system<br>▪ Run reporting on data from shut-down system (SAP NetWeaver BW)<br>▪ Use predefined business warehouse interfaces for reporting and tax content<br>▪ Interpret and understand data in archives without help of original system |
| Active data and system | End-of-life data | End-of-life system |

**Figure: Three Pillars That Support Information Lifecycle Management**

ILM covers the policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost-effective IT infrastructure from the time information is created through its destruction.

System decommissioning allows you to cease maintenance of the systems you don't use, resulting in:

- The elimination of unnecessary time and money spent on keeping old systems running
- An increasingly fast ROI – the more systems you decommission to one central retention warehouse, the faster your ROI
- A considerable streamlining of your system landscape by bringing both SAP and non-SAP software systems into a single SAP software environment
- Better legal compliance by continuing to harness the value of your information even though the original system has been shut down

## For More Information

To learn more about how you can use information lifecycle management tools and technologies from SAP, please contact your SAP representative, write to us at ilm@sap.com, or visit us on the Web at www.sdn.sap.com/irj/sdn/ilm.

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**Summary**

SAP® software, tools, and technologies support information lifecycle management (ILM) activities, meeting enterprise needs for data retention, data destruction, system decommissioning, and compliance with legal and regulatory mandates.


**Business Challenges**

- Surge in legal requirements regarding the handling of electronic data
- Traditional data management techniques that no longer meet enterprise needs
- Ongoing introduction of complex country- and state-specific compliance laws that cover more data types and mandate longer retention periods
- Large and complex system landscapes that pose compliance risks and entail a huge overhead of unnecessary running costs

**Key Features**

- **Governance** – Specify and apply policies for attributes and categories, such as data retained for legal compliance
- **Data management** – Analyze data, determine data types, and define attributes
- **IT management** – Support automated archiving, migration, destruction, and data access
- **Retention management** – Support the complete information lifecycle, from creation to retention to destruction
- **System decommissioning** – Introduce standardized methods for shutting down legacy systems in a legally compliant manner

**Business Benefits**

- **Increased productivity** through automation of all aspects of handling your organization's data, rather than just automating storage procedures
- **Reduced total cost of ownership** through optimized use of resources while reducing hardware and administrative costs
- **Compliance with legal requirements and internal service-level agreements** by implementing storage systems that understand and can act on data using rules you define
- **Reduced risk** with faster backup and recovery and elimination of legacy systems
- **Higher flexibility** with software support for adapting to a steady flow of new regulations and requirements

**For More Information**

To learn more about how you can use information lifecycle management tools and technologies from SAP, please contact your SAP representative, write to us at ilm@sap.com, or visit us on the Web at www.sdn.sap.com/irj/sdn/ilm.


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