

A Practical Guide to Legacy Application Retirement

Archiving Data with the Informatica® Solution for Application Retirement

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Executive Summary

Today's IT organizations face tremendous challenges to innovation. With budgets tied up in supporting existing applications and infrastructure, there is little room to invest in new technologies that would otherwise help grow business. Many of these applications are legacy systems that were acquired or replaced when new applications were deployed. And although the business value of these systems decreases with every passing year, organizations often continue to support them for the purposes of data access and compliance. But the cost of doing so can consume over 50 percent¹ of an overall IT budget.

An effective strategy to free up budget for investing in new and innovative deployments is to retire legacy applications. This white paper begins with a discussion of the business drivers, suitability, and strategies for application retirement. It then explains how the Informatica® solution for application retirement provides a systematic approach of best practices to archive legacy data into a low-cost central repository. With this solution, data remains accessible and is managed according to your data governance standards. It enables you to decommission all associated hardware and software after retirement, eliminating the maintenance costs associated with these outdated systems—including the ever-escalating cost of scarce application experts. As a result, the Informatica solution can help your organization have more of its budget available for re-investment and business growth.

¹ NCC Survey of Companies with over 50 IT Staff, ESG Research Report IT Spending Intentions Survey (January 2013).

Business Drivers for Application Retirement

Forrester has identified updating and modernizing legacy applications, upgrading packaged applications, and consolidating or rationalizing enterprise applications as three of the top four problematic software issues facing IT organizations.² Application retirement plays an important role in enabling organizations to rationalize and modernize application portfolios. Here are the top reasons businesses are embracing application retirement strategies:

Cost Reduction

Application retirement allows the application and the supporting hardware and software stack to be decommissioned. This eliminates recurring costs such as licensing, maintenance, and application administration costs, representing potential significant savings. Also noteworthy are the space savings and reduction of power consumption in the data center when applications are retired.

Application Consolidation

Many of these legacy applications are redundant systems. For example, many companies have 10 or more legacy financial systems acquired from predecessor companies or left behind after new applications are deployed. These systems are often compartmentalized, running incompatible software packages and versions. Moving data to a common accessible repository streamlines research, audits, and reporting across systems.

Compliance with Industry Regulations and E-Discovery Requirements

Sarbanes-Oxley, SEC rule 17a, HIPAA, and FDA regulations, for example, have made enterprises nervous about compliance with corporate data retention policies. The heightened regulatory environment and the new Federal Rules of Civil Procedure are putting renewed emphasis on e-discovery policies. Keeping legacy applications active just to retain access to information is an expensive proposition. In addition, the end result of a “do nothing” approach is that you keep your data forever, which is not viable. During application retirement, data is classified, assigned retention policies, and disposed of according to your data governance initiatives.

Risk Reduction

Relying on IT and business analyst skills to administer legacy systems that are 10 to 20 years old, or more, is problematic. Finding consultants or even the vendor who built and supported the application may not be possible. The lack of IT staff familiar with the application increases the potential risk of delayed responses to audits and e-discovery. Retiring application data to a common platform that allows access using standard reporting tools lets you leverage skills you have in current investments in. This enables you to be responsive to audit or litigation requests.

² Phil Murphy, “Application Retirement: It’s Time to Put the Elephant in the Room on a Diet,” Trends, Forrester Research (February 3, 2011): p. 1.

A Framework for Determining Application Retirement Eligibility

Determining an application's eligibility for retirement entails comparing its business value to the costs of its required support and maintenance. In other words, an application is a prime target for retirement when the cost of supporting and maintaining it exceeds the business value it provides.

Business Value of Legacy Applications

Several parameters determine the business value of a legacy application:

1. Usage type: What is the application being used for?
2. Number of users: How many employees, partners, or customers use the application?
3. Usage frequency: Is the application accessed regularly by many users or only infrequently by a handful of users?
4. Usage history: When was the application last used, based on production control or application inventory monitors?
5. Age: How old is the application?
6. Utility: Is the application actively creating new content, or is it used only for reporting purposes or needs such as policy servicing?
7. Redundancy: Does the organization have other applications that can serve the same purpose? If so, how many users will have to be trained on the other system?

Costs Associated with Legacy Applications

Similarly, asking the following questions can help you determine the costs of legacy applications. Consider the following parameters:

1. Administration: How much does it cost to license, maintain, and administer the application?
2. Complexity: How complex is the application?
3. Customization: How expensive are customizations to the application?
4. Customization resources: Are resources available to support the application after customization? If so, what will they cost? If not, what is the potential cost of being unable to respond promptly to audit and data access requests?
5. Infrastructure support: How much does it cost to maintain the software and hardware stack supporting the application?

Strategies for Retiring Applications

Organizations reviewing their application portfolio for the first time often find hundreds of applications eligible for retirement. But because it's impossible to retire hundreds of applications at once, companies must develop a strategy for deciding which applications and data should be retired and when.

Priority-Based Application Retirement

Starting with applications that generate the greatest cost savings optimizes the value of your application retirement initiative by freeing up budget and resources. Tying the savings to hardware that has maintenance contracts about to expire is an optimal approach because a large portion of the costs savings can be realized immediately. One of the challenges of application retirement is the lack of functional knowledge about the application being retired. But starting with legacy applications whose functionality and reporting requirements you understand makes success more likely. It also helps to build the business case for retiring other applications.

Complete Application Retirement or Selective Data Retention

Application retirement best practices suggest archiving all of the data at once while maintaining online access to the data through a preferred reporting tool. By keeping all the data accessible from an online archive, an organization can avoid lengthy analysis at the outset. This is the simplest process and can be deployed quickly, in turn accelerating the savings benefit. For organizations that have a clear understanding of the application data model and retention requirements, selective data retention can be implemented up front or applied after the application has been retired as a whole. In either case, using a best-in-class application retirement solution gives an organization the choice of complete retirement or selective retention.

Retirement of Applications of Questionable or Limited Value

In a scenario where the business value of an application is marginal, retirement is a sound strategy. An organization saves costs by shutting down the legacy application, while retaining its data. The ability to add relationships between the application data, even after retirement, protects the firm if this data needs to be accessed later.

Assessing Application Retirement Solutions

Application retirement requires sophisticated data modeling, extraction, retrieval, validation, and retention capabilities. Because of this, organizations are best served by seeking out a vendor with a proven solution. An application retirement solution should furnish the following capabilities:

- Modeling the data in the legacy application
- Discovering unknown data relationships
- Creating retention policies that define which data should be retired
- Extracting the data with its full application context
- Indexing the data for efficient searching
- Validating the completeness and correctness of retired data
- Providing application-independent access and reporting
- Ensuring immutability of the retired data and securing it for access only by privileged users
- Enforcing retention and disposal policies at the application, entity, or groups-of-records level, based on regulatory and organizational requirements
- Auditing all access and any actions against the retired data (changes in retention policies or disposal and legal hold)

Because every organization has unique requirements for application retirement, choosing a software solution must often include a substantial component for services. It's advisable to give the highest consideration to vendors who have extensive experience with archiving large volumes of data from structured applications, proven project management capabilities, and implementation best practices.

The Informatica Solution for Application Retirement

The Informatica solution for application retirement manages the full lifecycle of content in database applications. The solution consists of the following products that meet the full requirements for an application retirement project:

- Informatica Data Archive
- The Informatica ILM Discovery Option
- The Informatica ILM Data Validation Option

Together, these products are designed to meet the challenges of application retirement by providing enhanced capabilities (see Figure 1):

1. Discovery, classification, and extraction of business records
2. Validation of archived data
3. Easy, secure, standardized access to retired data
4. Efficient compression of data and implementation of tiered storage strategies
5. Compliance with data retention and privacy regulations

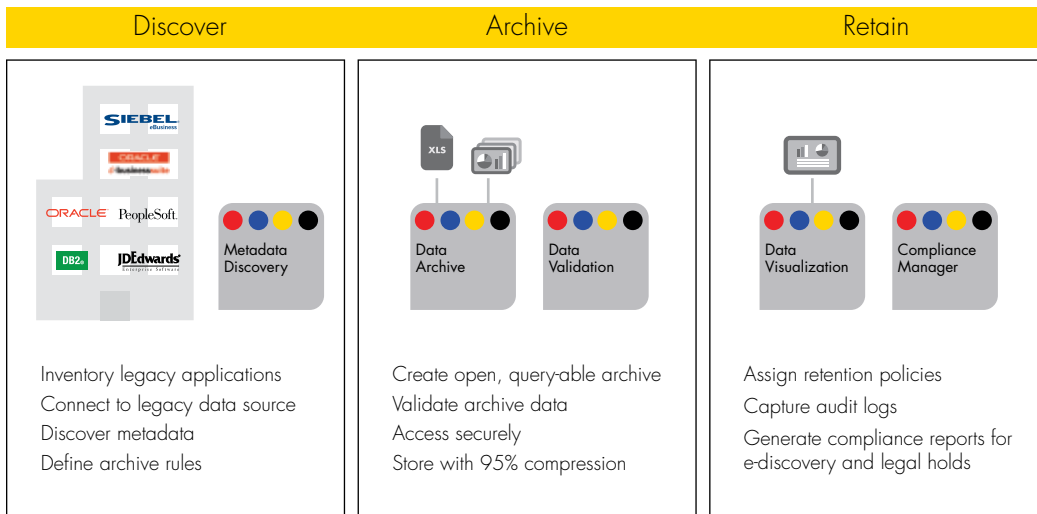


Figure 1. The Informatica solution for application retirement manages the full lifecycle of content in database applications.

Discovery, Classification, and Extraction of Business Records

The Informatica solution for application retirement provides data modeling techniques that allow you to classify and extract related subsets of data that represent the business object. The original context of the business object is preserved in an audit-ready format that is readily accessible for compliance and regular business needs. It also allows for creation downstream of additional relationships between data for future analysis.

If information on the relationship between tables and records is neither stored in the source system nor known by functional experts, the Informatica ILM Discovery Option is available to infer table relationships and business entities based on the discovered relationships. Knowledge about data relationships is important for establishing retention policies for related records as well as determining how data will be accessed.

Validation of Archived Data

The Informatica ILM Data Validation Option lets you easily validate that the data archive process is complete and correct by defining business rules to compare archived data against data in the original application. The ability to define validation rules eliminates the need to write SQL scripts to perform the data comparison, ultimately increasing productivity. Any discrepancies between the archive and source system are noted in the report output, which can be used later for review and audit purposes.

Easy, Secure, Standardized Access to Retired Data

Informatica Data Archive supplies several ways to ensure that retired data is appropriately secured and remains accessible on demand during the regular course of business as well as for audits and e-discovery. Informatica technology furnishes several choices for accessing and securing retired data:

- Retired application data can be searched based on keyword search and business entities, with full application context, from Informatica Data Archive's data discovery portal.
- Custom reports can be created and saved for reuse using integrated Data Visualization capabilities.
- Retired data is accessible via standard interfaces such as ODBC/JDBC and SQL and through enterprise reporting tools such as Crystal Reports and MicroStrategy.

Efficient Compression of Data and Implementation of Tiered Storage Strategies

Informatica Data Archive converts the retired data into a highly compressed archive format, yielding up to 95 percent and higher compression. The data is fully indexed to support SQL queries as well as keyword searches, while reducing storage capacity requirements. Additionally, because retired data is infrequently accessed and typically never modified, the archive can be stored on an inexpensive storage tier. As a result, organizations can save costs and free up high-speed storage for more critical business needs.

Compliance with Data Retention and Privacy Regulations

Informatica Data Archive offers a comprehensive feature set to ensure that retired data is secured and retained for the period specified by relevant regulations. A policy engine enforces retention policies assigned to retired data, from the higher level of applications down to the granular level of record groups. It then purges the data when the retention period expires so that it's not retained beyond a period of time that would pose a legal risk. Legal hold capabilities are also available to ensure that data relevant to a legal case is retained even if the retention period has expired. Integration with best-in-class storage platforms, such as EMC and Hitachi Data Systems, guarantees that retired data is locked down until the retention period expires. At the same time, reporting and e-discovery capabilities ensure that retired data remains accessible in the event of an audit or litigation. Integration with third-party e-discovery solutions is also available via open APIs.

The Informatica Advantage

What makes the Informatica solution for application retirement unique is its foundation: the industry-leading Informatica Platform. This comprehensive, open, unified, and economical platform delivers a one-stop shop for application retirement and provides a comprehensive library of connectors to a wide range of applications and databases. Informatica has years of experience as a leader in the industry with validated customer satisfaction and loyalty ratings. Data archives are intended to endure a rapid pace of technology changes—so should your data archive vendor. That is the Informatica advantage.

Conclusion

To stay ahead in today's competitive marketplace requires that enterprises modernize their application portfolios to improve and increase the value of their products and services. An effective strategy for doing so is to retire legacy applications. The Informatica solution for application retirement provides a comprehensive and feature-rich approach for archiving legacy data into a low-cost central repository. With this solution, data remains accessible and is managed according to your data governance standards. It also enables you to decommission all associated hardware and software after retirement, eliminating the maintenance costs associated with these outdated systems. As a result, you can free up IT budget for re-investment and business growth, ultimately sharpening your organization's competitive edge.

About Informatica

Informatica Corporation (Nasdaq:INFA) is the world's number one independent provider of data integration software. Organizations around the world rely on Informatica to realize their information potential and drive top business imperatives. Informatica Vibe, the industry's first and only embeddable virtual data machine (VDM), powers the unique "Map Once. Deploy Anywhere." capabilities of the Informatica Platform. Worldwide, over 5,000 enterprises depend on Informatica to fully leverage their information assets from devices to mobile to social to big data residing on-premise, in the Cloud and across social networks.



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