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Application Retirement Methodology

From intent to implementation. Introducing a practical, proven methodology that empowers you to stop dreaming of application retirement, and start reaping the benefits

People matter, results count.

The application landscape today. The challenge for the CIO.

Years of unbridled growth have left the typical application landscape bloated and in need of streamlining. The need to act and retake control of the application landscape is clear.

Application Rationalization is often identified as the solution. Rationalization can take many forms, including the retirement of applications. Indeed, retirement is often identified as one of the most beneficial rationalization actions and among the most desired by CIOs. And yet, experience tells us that while the need or desire to retire more applications is clear, many organizations find that the obstacles associated with this task are sufficiently prohibitive as to cause many such initiatives to be abandoned before positive action can be initiated.

Retiring an application that has been part of an enterprise's technology landscape for years, perhaps even decades, is not a simple case of clicking 'uninstall'. Users, business processes, interdependencies between different applications, and many other factors need to be considered before decisions and action can be taken.

What's more, while hundreds or even thousands of new applications are created everyday, how many are retired? The massive discrepancy between the number of applications that have been developed and the number that have been retired indicates that experience and available knowledge on the topic of application retirement is limited.

All of this begs the question:

Even if you have identified which applications should be retired, how do you go from intent to implementation?

This white paper represents a first step in how to answer this, and puts forward Capgemini's Application Retirement Methodology as a proven solution to this problem. The methodology comprises a coherent set of principles that can be used to retire those applications considered to be obsolete.

When delivered as a continuation of a rationalization analysis exercise, such as Capgemini's Wide-angle Application Rationalization Program (WARP), the Application Retirement Methodology provides the means by which to progress from identifying opportunities for application retirement to actually reaping tangible benefits from this exercise. The methodology as a whole consists of industrialized process flows, artifacts, frameworks, tools and techniques that, together, address many of the problems encountered by CIOs when seeking out the best path towards retiring applications.

By providing a structured approach to implementing application retirement, Capgemini's Application Retirement Methodology serves as a key enabler in simplifying and streamlining the application landscape. A simplified, streamlined application landscape improves IT's ability to support the business and its ever-evolving needs. Using the methodology put forward in this paper, all of this can be achieved in a safe and controlled manner.

What are the main benefits of an Application Retirement Methodology and how does Capgemini's approach achieve these benefits?

Broadly speaking, the key benefits that Application Retirement can deliver are

- Significant cost savings;
- More efficient utilization of critical resources;
- Freeing up of headroom and budget so that resources and funding can be directed toward adding value to the business.

The benefits are clear, as is the intention. But implementation? To better enable enterprises to go from intent to implementation, Capgemini's methodology is built around:

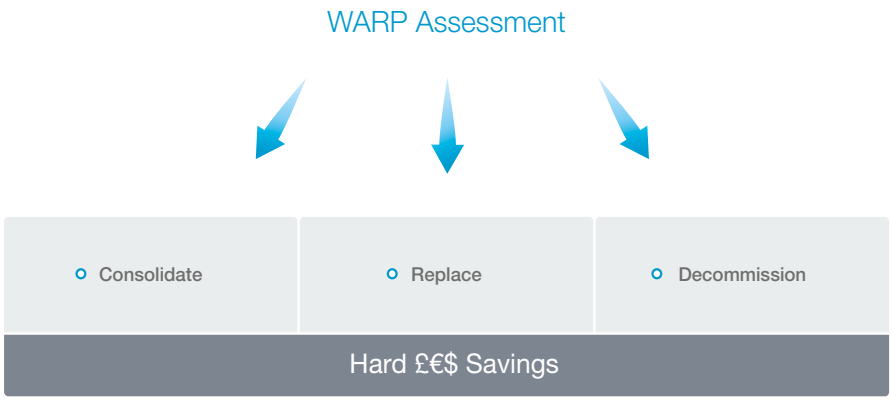
1. A unique suite of processes, tools and techniques to facilitate the implementation of application retirement projects;
2. Managing compliance risk using best-practice archiving and retrieval methods;
3. Planning operational cost reduction in a way that considers both functional and personnel requirements;
4. Eliminating maintenance costs by optimizing the usage of licenses within the design;
5. Efficient re-use of capital;
6. Reducing the strain and dependency on finite data center resources.

Capgemini's Application Retirement Execution Methodology offering provides the client with a detailed framework and set of artifacts for effectively executing application retirement, and resultantly, simplifying their application landscape. This methodology builds on Capgemini's Wide-angle Rationalization Program (WARP). WARP is used to identify rationalization opportunities within the client application landscape and identify those applications that are suitable for consolidation, replacement or decommissioning. WARP does not comprise implementation, but serves as a 'decision catalyst' within the overall rationalization exercise. The route to implementation is mapped out in Capgemini's Application Retirement Methodology. This methodology is based around three key application scenarios:

- **Application Consolidation**
  Removing obsolete applications and augmenting more-relevant applications to cover any functionality gap caused by removing the obsolete application.
- **Application Replacement**
  Replacing existing applications with new ones.
- **Application Decommissioning**
  Complete removal of applications found to be obsolete and serving no useful purpose.

> *The key benefits of Application Retirement are significant cost savings, efficient utilization of resources, and the creation of headroom to innovate.*

Strategies applied within Capgemini's Application Retirement Methodology



The retirement framework used in the methodology consists of four phases:

1. Decide – This comprises a series of analyses whereby redundancy, retirement and risk analysis are performed. Redundancy and retirement analysis are performed to identify and validate the candidates for this decommissioning. This phase can take place either based on the findings of a WARP exercise, or, if a client has already defined which application or applications need retiring, this action can take place immediately.

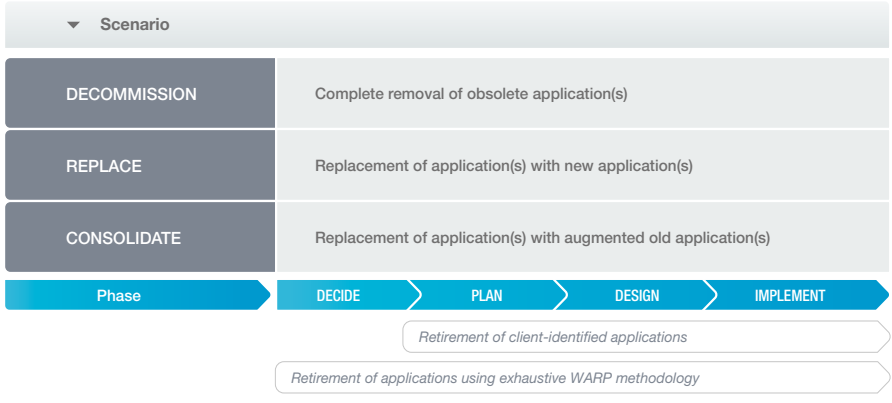
2. Plan – This stage comprises the development of a set of workflows and analyses, the principal ones being impact analysis, estimation analysis, and cost/benefit analysis. At this stage, the level of risk implied by the project is identified, and a plan for personnel reorganization is devised. Whether or not to proceed depends on whether the emerging 'plan' contains sufficient financial benefit and with minimal threat of disruption.

3. Design – A workflow. The result is a system architecture 'design'. This facilitates the traceability of functionality and also provides test cases for ensuring a seamless workflow. The decision on whether to proceed to the next phase depends on the architecture design being approved by the client.

4. Implement – This consists of an 'implementation' workflow: a series of checklists, test scripts execution, and re-skilling training for resources. Once this workflow is signed off, the client is able to successfully approve the retirement of the application or applications.

To explain the mechanics behind this model further, *The Application Retirement Framework* diagram provides an overview of the processes and actions that make up this exercise.

The Application Retirement Framework



> *"The Retirement Methodology phases are **decide**, **plan**, **design** and **implement**."*

The Different Retirement Strategy Scenarios

In order to better understand how the Capgemini Application Retirement Methodology is implemented in practice, the following table consists of three possible retirement scenarios, the objective of each one, and the tools and techniques that can be used to achieve this.

A depiction of the various retirement strategy scenarios

Scenarios	Objectives	Tools & Techniques	Deliverables
Decommission	Removing obsolete applications whose removal does not impact the overall functionality of the enterprise	• Retirement Analysis Model • Effort Estimation Tool • 'Retirement Ready' Checklist • Data Archival and Backup Tools	• Business case for choice of 'Decommission' • Feasibility/Impact Analysis • Requirements Traceability Artifact • Customer Sign off on Retirement
Consolidate	Identifying and replacing old applications with new applications whose introduction ensures replication of existing functionality in the enterprise	• Functional Redundancy Analysis Tool • Risk Analysis Tool • Framework for selection between COTS/Build/Migrate • New Application Selection Framework • Effort Estimation Tool • Design Checklist • Testing & Data Migration Tools • 'Retirement Ready' Checklist	• Business case for choice of 'Replace' • Feasibility/Impact Analysis • Requirements Traceability Artifact • Application Architecture Design • Executed Test Scripts • Customer Sign off on Retirement
Replace	Aims to improve the application landscape by identifying and replacing old applications by augmenting the functionalities of other existing applications in the landscape	• Functional Redundancy Analysis Model • Target Application Selection Framework • Effort Estimation Tool • Design Checklist • Testing & Data Integration Tools • 'Retirement Ready' Checklist	• Business case for choice of 'Consolidate' • Feasibility/Impact Analysis • Requirements Traceability Artifact • Application Architecture Design • Executed Test Scripts • Customer Sign off on Retirement

> *"The Retirement Methodology addresses the key strategy scenarios of **decommission**, **replace** and **consolidate**."*

Key artifacts leveraged within the Retirement Methodology

The Application Retirement Methodology contains an extensive library of artifacts that are used to achieve the objectives listed in the various retirement scenarios. A list of some of the most important artifacts can be found below:

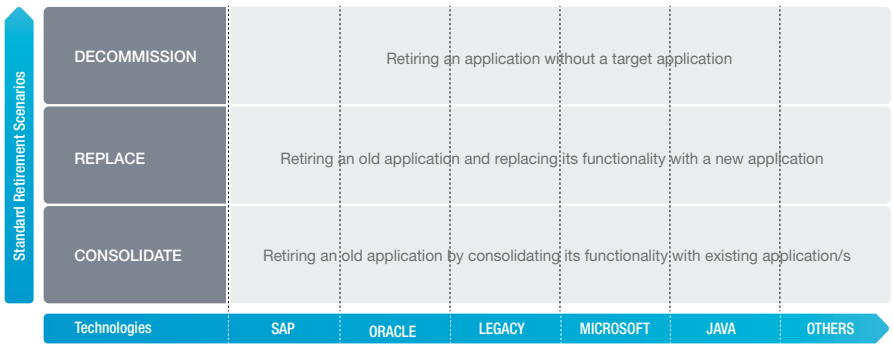
- Organization Landscape Questionnaire;
- Data Gathering Worksheet;
- WARP Recommendations Summary Sheet;
- Impact Analysis Report;
- Requirements Scope Summary;
- Estimation Analysis;
- Cost/Benefit Analysis;
- Selection of tools for performing data archiving/migration and integration;
- Requirements Traceability;
- Data Scan Report;
- Data Quality Improvement Strategy;
- Data Archiving/Migration/Integration Strategy;
- Test Plan;
- Extraction Procedures;
- Archiving Procedures;
- Data Archiving/Migration/Integration Reports;
- Dismantle Plan/Report;
- Incident Report;
- Risk mitigation plan.

Technology-specific solutions for retirement strategies

Each of the standard retirement strategies – consolidate, replace and decommission – have been customized with a set of tools, artifacts and frameworks based on the following technologies:

01 SAP	02 Oracle	03 Legacy Systems	04 Microsoft	05 Java

The Retirement Methodology grid for technology-specific solutions



By providing a bridge between an understanding of the benefits of Application Retirement and how to achieve Application Retirement effectively and safely, Capgemini's Application Retirement Methodology represents a significant step towards a rationalized, streamlined, simplified application landscape.

Whereas a dearth of experience in this domain or lack of a structured approach had previously hampered CIO attempts to reduce the bulk and complexity of their application landscapes, Capgemini's approach provides a proven and safe means of retiring those applications that can be considered obsolete. By adopting this methodology – either as a continuation of a WARP engagement or after proprietary analysis – client organizations can progress from the hypothetical stage of application rationalization to a point where they can start experiencing tangible benefits.

When a client elects to use Capgemini's Application Retirement Methodology as a continuation of a WARP engagement, they can benefit from an end-to-end solution that takes them from identifying where rationalization opportunities exist within the application landscape (including a detailed understanding of the benefits – both business and technology) right through to acting on these findings and experiencing tangible benefits.

What is WARP?

WARP is Capgemini's proprietary approach to modernizing your IT landscape and industrializing your IT processes. It is a hypothesis-driven approach that combines hard fact-finding with deep business insight and sensitivity.

The WARP Framework – Four streams underpinned by two engines.

WARP consists of four 'streams' underpinned by two 'engines'. These streams are **path** (vision, architecture and solution), **bizz** (business analysis), **case** (the business case – from both a financial and value perspective) and **plan** (change planning, change scenarios and the roadmap). Experience shows that the success of any rationalization program is greatly improved by the presence of these four streams.

WARP - Wide-angle Application Rationalization Program				
Engine AMBI	Landscape Governance and Industrialization			
Stream PATH	Vision, Architecture and Rationalization Design			
Stream BIZZ	Business Process Analysis			
Stream CASE	Business Case and Value			
Stream PLAN	Change Readiness and Transformation Roadmap			
Engine APPS	Application Portfolio Assessment			
	PLOT	SCAN	CRAFT	SOLVE

The two engines – **apps** and **ambi** – are highly industrialized 'lenses' that are used to analyze both the technology, or apps landscape (the application portfolio), and also ambient factors. While the **apps** engine provides an industrialized analysis of the portfolio, **ambi** looks beyond the technology and analyzes the context in which the application finds itself, including the relationship between the business, the processes and data harmonization.

This framework of streams and engines ensures that each WARP engagement follows a comprehensive and structured approach. The streams focus on the core activities of a rationalization program, while the engines use industrialized patterns to generate powerful insights. The findings are used to identify opportunities to dramatically modernize your application estate, industrialize your IT processes and improve your organization.

Find out more at
www.capgemini.com/warp

- **Application Retirement Analysis Framework**
  White Paper

  Capgemini's Application Retirement Analysis Framework serves as a tool for identifying which applications within the application portfolio can be considered for retirement. The framework itself is based on measuring the overall impact that retiring an application can have on the portfolio and organization as a whole.

- **Assessment of Application Risk & Mitigation Recommendations**
  White Paper

  Capgemini's proprietary Risk Assessment Model is a tool that will help IT decision makers to gauge the level of risk in their application landscape and better understand where that risk lies, what form it takes, and what its impact on strategic business objectives is. Based on insight generated by multi-angle analysis, a selection of strategies and recommendations is suggested aimed at mitigating risks discovered.

- **Application Portfolio Cost Reduction Strategies**
  White Paper

  This paper proposes the use of Capgemini's Cost Reduction Strategies Methodology as part of a broader portfolio analysis in which cost reduction is a key objective. This methodology is based on a set of 'lenses', with each used to analyze the application landscape from a different perspective. The common objective is to reduce the overall costs associated with ownership and operation of the application portfolio.

- **Holistic Assessment Model to Determine Application Value**
  White Paper

  The Capgemini Holistic Assessment Model is proposed as a means of determining the true value delivered by an IT application to the organization. It enables decision makers to focus on increasing the overall technical, functional and business value of the application landscape, and improving its overall cost effectiveness.

- **WARP: Wide-angle Application Rationalization Program**
  Brochure

  Capgemini's WARP Methodology is also supported by a comprehensive four-page brochure. This brochure showcases, holistically, the value that Capgemini's WARP can add to the business, and highlights the underlying mechanisms that are at the core of the framework. It also acts as a facilitator, of sorts, tying together the WARP story told by the five white papers.

Find out more about WARP and download the white papers at
www.capgemini.com/warp

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About Capgemini

With more than 125,000 people in 44 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2012 global revenues of EUR 10.3 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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