SAP NetWeaver™ – The Need For Tactical Solutions On The Road Towards Strategic Goals

A series of white papers by Iryx

Paper 1

Overview

Contents

Today's Challenges.

Evolution

IT has moved on from disparate systems, through desperate integration by any means (point-to-point), to SOA. Service Orientated Architecture is what is says on the label. SOA is the ability to re-use existing functionality, existing data and existing systems but exposing them to create an environment flexible enough to support 'agile businesses'. SOA is, therefore, the instruction sheet for how to create an environment which:

- provides meaningful and structured information in a timely fashion,
- supports enterprise-wide initiatives, and
- allows agile responses to new market, customer or internally-driven needs.

I would be letting the side down if I did not mention the fundamental term of choice – '*leveraging existing assets through web-services*'.

In essence SOA is the answer to the question 'How can I integrate my people, information, processes and systems in a single, homogeneous environment that allows me to leverage all of the advantages that brings?'.

What the IT community is now facing, driven by today's leaders, Microsoft, IBM and SAP, is the need to move to a more flexible infrastructure to facilitate collaboration. As IT budgets have shrunk two things have come to the fore:

- Firstly, the need to reduce costs through closer ties to partners (both customers and suppliers); in a word, collaboration.

- Secondly, the need to move from IT strategies of massive re-implementations, each costing millions and taking years to a strategy of quick-win, fast ROI projects. Each successive project must build on the infrastructure and re-using the functionality of previous projects.

To enable all of this we have SOA. SOA is the architecture for flexibility, collaboration and empowerment. The 21st century IT architecture.

Packaged Applications

It is not a spectacular breakthrough in thinking to realise that most companies have IT applications which have evolved to become pretty much in line with the way the business works. In all probablity they have been developed to mirror the businesses own peccadillo's, and are all the more invaluable to the business for all of that. Previously, the drive for commonality of information, processes and people interfaces led us all down the garden path of packaged applications. What were the consequences of this?

- Loss of specific functionality supporting internal processes.
- Force-fitting processes into ill-fitting suits of functionality (or should that be straight-jackets?).
- Large, long and very, very expensive IT projects (as an SAP consultant I did appreciate this though).

Integration

Where the breakthrough has come is in the realisation (driven, admittedly, by pressure on IT budgets) that it is not necessary to replace all of those old but well-fitting applications to achieve the goals of commonality. The dawning of the age of SOA brings with it enlightenment, with the understanding that we can keep all of that nice functionality and leverage it's intrinsic value by placing a single, homogeneous integration layer above it. A layer which understands the applications, can expose their critical functions, and pull together the disparate data into single, homogeneous information channels for the business.

Agility

The promise of SOA is one of real agility, where businesses really can collaborate real-time and with a much reduced lead time. SOA is the host from where business processes can be changed and from where new business processes can be developed without changing the plethora of applications which reside underneath. The creation of web services, exposing the application functions is the key driver for this.

NetWeaver

And so to SAP NetWeaver™ - not a product or even a component, but a technology stack. In fact, NetWeaver is the SAP answer to the whole IT question, it incorporates their own SOA (Enterprise Services Architecture – ESA), their own development environment fully integrated with J2EE and integration at people, information and process level, exposing most functions of most SAP component applications as web services. All of this exposed as role-based portals. Basically, NetWeaver could be seen as the evolution of the SAP philosophy.

There is one more, one critical, factor; that of the need to create a more homogeneous, single-sign-on environment for users. This means to move away from lots of different systems with lots of different user interfaces towards a portal concept. The portal concept allows any user to access everything they need from a single, browser-based access point and allows the Enterprise to create a single user-experience, leveraging the information in the Enterprise and providing a more flexible and responsive user community.

Timescales

One thing is for sure, the implementation of a complete NetWeaver solution will not be a 1 month project. SAP themselves talk about projects lasting years. In today's business environment this is only feasible if those years are actually a series of small, fast projects each delivering the customer one more piece in the final jigsaw.

What does this mean for SAP customers? Well, no matter the size of the customer the same questions need to be asked;

- Why do I need NetWeaver, which parts of NetWeaver do I need and when do I need it?

- Where should NetWeaver fit into the strategic IT architecture? (does it replace the current one, can it sit side-by-side with the current? do I have a strategic IT architecture?)

- What will NetWeaver deliver for me that I cannot get out of my current architecture?

- How do I get from today's architecture to the strategic architecture I now envisage (which includes NetWeaver)?

- Can NetWeaver deliver everything I need in the new, SOA, world?

Iryx will be publishing a series of white papers addressing each of the above 5 questions in turn. We believe that these white papers will help our customers (current and potential) better understand the challenges and opportunities that SAP NetWeaver has already delivered.

Summary.

The Iryx methodology for providing integration solutions is basically the same whether looking at a single, short-term tactical solution or at a medium-term Enterprise Integration project. That is that there are no single, generic answers but there are a single set of factors, a set of questions which can be answered with the experience of providing integration solutions that Iryx has. Those answers are the foundation for building the SOA IT architecture which will truly enable Business agility – the cornerstone of 21st century Business values.

We believe that every Business can define and implement an evolving strategic IT architecture which is based on the principles of leveraging existing assets and integrating the Enterprise at every level and which will deliver the flexibility, responsiveness and competitiveness every Business requires.

We also believe that it is critical for Businesses to be able to deliver short-term tactical solutions along the road to the strategic goals and even before the final architecture is defined. The key to this is the use of strategic tools such as Magic's iBolt integration platform. These tools provide lower-cost options for tactical integration solutions which guarantee re-usability and integration into any chosen final architecture through their use of open standards.

We hope that, through this series of white papers, it may become clearer to our customers, current and future, how SAP's NetWeaver can be implemented and why it should become a key part of the strategic IT architecture.

Paul A Moore
Director
Iryx Limited

References.

This document is one in a series of whitepapers Iryx have published on the subject of NetWeaver. The full list of whitepapers is:

[Tactical solutions towards strategic goals overview](#)

>   Overview document – 'Tactical solutions towards strategic goals'

[Why do I need NetWeaver?](#)

>   Why do I need NetWeaver, which parts of NetWeaver do I need and when do I need it?

[Where should NetWeaver fit into the strategic architecture?](#)

>   Where should NetWeaver fit into the strategic IT architecture? (Does it replace the current one? Can it sit side-by-side with the current one? Do I have a strategic IT architecture?)

[What will NetWeaver deliver for me?](#)

>   What will NetWeaver deliver for me that I cannot get out of my current architecture?

[How do I get from todays architecture to NetWeaver?](#)

>   How do I get from today's architecture to the strategic architecture I now envisage (which includes NetWeaver)?

[Can NetWeaver deliver everything I need in the new SOA world](#)?

>   Can NetWeaver deliver everything I need in the new, SOA, world?