Open Blueprint Executive Summary

Never has information technology (IT) played a more important role in bringing competitive advantage to an organization. Yet IT has never been more complex. Without question, there has never been a tougher time to make IT decisions: How do you deal with disparate systems and applications that need to talk to one another (but don't)--connecting them in a way that can make the entire enterprise truly productive? How do you integrate those systems? Share data? Adapt to changing needs? How do you reconcile your technology landscape with the landscapes of companies you acquire, or partners with whom you must work more tightly than ever? How do you meet the needs of a workforce that's more demanding, more mobile, and extraordinarily constrained for time and resources?

IT teams are adopting enterprisewide technical architectures to address these issues. As Larry R. DeBoever, Senior Vice President of Enterprise Architecture Strategies at META Group, Inc. says, "The goal of any enterprisewide technical architecture must be to enable rapid change in business processes and the applications that support them. Global 2000 companies that adopt these highly adaptive architectures gain a significant competitive advantage, since IT can be easily aligned with the business and more importantly, quickly realigned when business requirements change."

Don Tapscott, author of *The Digital Economy*, echoes that opinion: "The new economy is a networked economy.... Companies need to achieve strategic alignment (so that business strategies and IT plans are harmonized); architectural alignment (so that IT infrastructures correspond to business infrastructures); and organizational alignment (so that IT human resources are located and structured within the business to maximize their contribution to the business)."

Our goal at IBM is to help you achieve that kind of alignment. The IBM Open Blueprint is designed to help you make sense out of software chaos. It is a reference model that can help you build a strategic technical architecture for the entire enterprise. It's a tested tool that companies are using to help refine their IT strategy, to make better decisions about IT projects, and to proactively plan for change. It serves as an important common language that unites the IT and business professionals within the organization as they work side-by-side to address the challenges facing the organization.

IBM Open Blueprint

"With Open Blueprint, IBM presents an ambitious, well-segmented, layered schema for system interoperability that extends from the desktop to the mainframe and encompasses everything from its own proprietary legacy technology to the latest open client/server and Internet technologies.... IBM Open Blueprint is the broadest, most comprehensive, mature interoperability road map for enterprise architectures that the Hurwitz Group has evaluated. Open Blueprint itself stays remarkably vendor neutral, resisting the obvious temptation to impose an IBM bias." --The Hurwitz Group, Analysis of Enterprise Architectures, January 1997

"I honestly feel that if we hadn't taken the Open Blueprint approach, we would still be working on the original architecture draft we published over six months ago." --Claudia Light, technology consultant to the Oregon Department of Transportation

"Open Blueprint presents us with a road map that touches on all of the technical issues we need to address." --Nick Ioli, CIO, Citizens Utilities

"In a world in which customers demand open and heterogeneous solutions based on robust, well-integrated architectures, IBM's Open Blueprint offers a comprehensive and well-designed approach to planning and building successful systems." --Amy Wohl, Wohl Associates

"The Open Blueprint structure helps us deliver applications and systems with fewer opportunities for missteps--and at a minimal cost." --John Tucker, VP of Information Systems, Appleton Papers

"Goodyear's Information Technology Policy and Strategy Group's goal is to provide the proper infrastructure to support our business units in gaining and sustaining competitive advantage. One of the ways that we are doing that is through a coherent and consistent standards-based technology architecture. We are focused on practical issues and are including not only the protocols and interfaces involved, but also the products that deliver that functionality. We have found that the Open Blueprint structure gives us a comprehensive reference model on which to base our enterprisewide technology plans." --John Frame, Director, Information Technology Policy & Strategy, The Goodyear Tire & Rubber Company.

"At Chase, Information Technology (I/T) is an essential component of our ability to deliver the best products and services to our customers, in a cost effective way.¸Chase's overall I/T architecture strategy is to promote the development of common, integrated and reusable solutions. IBM's Open Blueprint is the technical framework which is helping Chase gain optimum value for its I/T investments - by aligning the bank's infrastructure components with our functionally and geographically diverse businesses." --Sultan J. Khan, Vice President - Manager Enterprise I/T Architecture, Chase Manhattan Bank.

How the Open Blueprint can help you deal with chaos

At its heart, the Open Blueprint is a descriptive reference model for distributed computing. It's a logical blueprint that can be used to:

- *Develop an enterprisewide architecture.* The Open Blueprint provides everything you need to create an enterprisewide architecture--from the ground up, starting with the technologies that you already have in place. There are many examples of how this can help boost competitiveness. Many organizations have found that the breadth, depth, and compliance with an enterprisewide architecture built on Open Blueprint contribute to their ability to rapidly deploy technology solutions that support business transformation.

- *Plan and design distributed systems and applications.* The Open Blueprint provides a comprehensive framework that makes planning for these systems and applications much easier. You can literally use the Open Blueprint as a checklist to ensure that the plans are clear and complete.

- *Plan and implement application and system changes.* The Open Blueprint provides you with an objective way to manage change. It helps you determine which building blocks to consider. It helps you see the relationship between those building blocks, and how a change will affect other elements in your architecture--for instance, how one change might have an impact on distribution services, security, or systems management.

- *Harness new technologies.* The Open Blueprint helps you to exploit Internet technologies, e-commerce offerings, object-oriented technologies, workgroup solutions--all of these in a way that will peacefully coexist with your current systems, platforms, and applications. The goal, of course, is not to implement these technologies merely for the sake of implementing new technologies, but to ensure that they meet the strategic objectives--and that they're implemented in a way that maximizes the return on investment.

- *Cope with a heterogeneous environment.* The Open Blueprint is based on open industry standards. By moving the organization to these standards, you can reap significant savings--not only in implementing the technology itself, but also in reduced training and education and support costs. The Open Blueprint helps you cope with even the most complex, diverse environment.

- *Implement new projects.* The Open Blueprint serves as a solid, structured framework that actually enables you to be more responsive and far more nimble in exploiting opportunities quickly. With Open Blueprint, you know that your underlying technology model is always a sound one--one that makes it possible for you to embrace new projects and technologies with more confidence. New technologies coexist with the existing technology landscape.

- *Rally teams, bring rationality to decisions, and ensure better results from vendors and suppliers.* The Open Blueprint can serve as an objective plan. It can foster tighter IT and business-unit relationships by providing a forum for collaboration. It can become a common meeting ground for all the executives and managers who need to be involved in making sound¸IT decisions. By neutralizing that meeting ground, you can help all the members of the team make better decisions. Open Blueprint can also serve as a common language with consultants and vendors, ensuring that their work and technologies fit into the longer-term vision for the organization.

Open Blueprint can help you achieve all of these things, while supporting these additional important goals:

- *Build on what you have.* For any architectural model to be sound, it must build on the mix of technologies, platforms, and applications that are already in place in the organization.
- *Keep all the IT costs in check.* This is achieved through enhanced decision making, eliminating wasted energy and misdirected project dollars, and increasing the productivity of the staff.

Decision making and efficiency: The business value of Open Blueprint

IT organizations that have adopted the Open Blueprint have been able to achieve a high level of interoperability and integration between computer systems. The business value of this is clear: IT becomes a competitive advantage. The organization can be far more nimble, adapting to change much more easily. People can work better together, and teams can share ideas and data. These gains are possible because the Open Blueprint provides a consistent enterprise architecture. It puts you in control. It helps you make sense of new technologies. The Open Blueprint is a completely modular reference model, from which you can easily build an architecture that covers all the key elements of the enterprise. Each layer of the model helps you deal with the real-life questions, such as:

- *How do I connect all the platforms in my enterprise? How do I extend the reach of my IT system to business partners and customers?*

  Open Blueprint's Network Services start by using the base of the existing network to provide the enterprise with a common and consistent set of communication interfaces for middleware and applications. The Open Blueprint features support for TCP/IP--the protocol suite behind the network computing revolution.

- *How do I get these connected platforms to talk to one another in an intelligent way? How do the platforms find and utilize distributed resources (for example, printers, software, services)? How do I do all this securely and with integrity?*

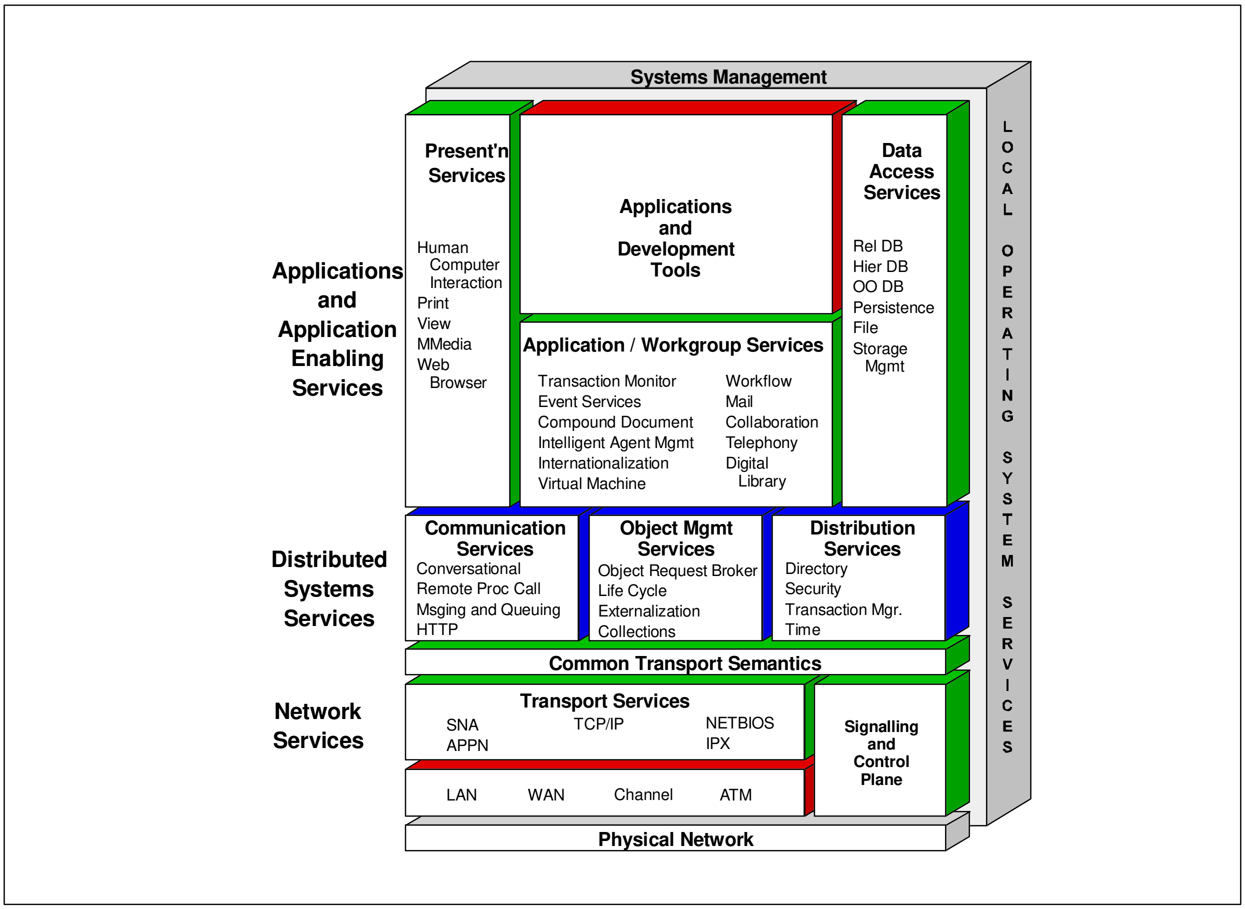
  Open Blueprint's Distributed System Services provide a common language that allows heterogeneous platforms to talk to each other. Dialects for both procedural and object-oriented computing are provided. A set of distribution services allows platforms to find resources on the network, make sure users are authorized to use those resources, and ensure their integrity through transaction support.

- *How do I productively build applications to exploit a distributed, network-computing environment?*

  Based on a three-tier distributed application model, Open Blueprint's Application-Enabling Services and Development Tools provide the key support for all application development, enabling services to support the presentation of information to end users, the development of business logic and business processes, and the access to stored data. The tools that are consistent with the model provide a highly productive, visually integrated development environment for creating these applications.

- *How do I deploy and manage these new enterprise solutions?*

  The Open Blueprint offers systems management that reaches across the entire architecture--based on a point of view that effective systems management requires the full and enthusiastic participation of all the components in the system.



The Open Blueprint Structure

At each level, the Open Blueprint draws on technologies that have been selected for their interoperability, portability, and multivendor support. Development and deployment of applications benefit from standard application programming interfaces (APIs) and protocols. Applications are more efficient, smaller, and easier to maintain--because they're able to draw on key components that work with one another and with the underlying infrastructure.

On the leading edge

As a model, the Open Blueprint is updated frequently so that it keeps in step with the latest issues IT teams face--new technologies and types of computing are addressed, and the overall architecture is enriched. For example, this year IBM presented a framework for helping customers make sense out of Internet-based technologies. The Network Computing Framework (NCF) is a prescriptive framework that is based on the Open Blueprint to help IT teams make intelligent decisions about how to design and build network computing applications. The NCF is a specific path through the Open Blueprint specifying--at each level--which technologies should be used to implement cost-effective network computing solutions.

What to do next:

There are several things you can do:

- If your organization already has an enterprisewide architecture, you can use the Open Blueprint to test the depth and strength of that architecture. Open Blueprint can be a valuable yardstick, and can also help you tackle issues that your architecture may not address. If you do not currently have an enterprisewide architecture, you can leverage Open Blueprint as a model that can help you develop one.

- Talk with your IBM representative, who can provide materials about the Open Blueprint. These materials convey the concepts behind Open Blueprint so the team can begin using it as a common language and model.

- You can call on IBM Global Services to help you leverage the Open Blueprint to tackle the IT challenges you face.

- The Open Blueprint Web site offers in-depth technical information and shows how companies are taking advantage of Open Blueprint to tackle their toughest IT issues. You can find the Open Blueprint Web site at http://www.software.ibm.com/openblue.

- There are several documents that you might find useful. You can get them from your IBM representative, or by calling 1-800-879-2755 (choose Option 1):
  Introduction to the Open Blueprint (G326-0395)
  Open Blueprint Technical Overview (GC23-3808)
  Open Blueprint Technical Reference Library (SBOF-8702; printed), (SK2T-2478; CD-ROM), includes 35 component technical papers about the Open Blueprint, and the Introduction and Technical Overview documents.