

Design, Development, Hosting and Support

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IBM Resources

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The IBM Solution

The decision to choose IBM as the solution partner was a considered one. Multiple vendors responded to the Request for Proposal. In the end, FSH's determined that IBM's size, expertise, reputation and experience to address our design, development, support and hosting needs provides the right relationship for such a project. The benefits of keeping the design, development, hosting and support within the same company pays multiple dividends by keeping the same company involved in the project from conception to implementation and support.

IBM Application Development Services

Our global teams provide leading edge custom application development services for both new development and significant functional enhancement and maintenance of existing applications across all computing platforms. Our professionals provide the expertise to plan, design, build, test and implement applications fully integrated into your business process and system environment. IBM Global Services is committed to a multi-vendor, open systems environment and utilizes state-of-the-art tools, processes and methodologies to create highly effective user-centered applications. Our services provide rapid delivery of application function and reduced cycle times designed to minimize project risk and cost while maintaining high-quality delivery. Our application development approach is focused on helping businesses rapidly re-engineer selected business processes and systems through prioritization of activities, extensive use of solutions prototyping, and time-boxed project management. This approach significantly reduces the risk and cost of systems development and enables more rapid response to the changing business environment.

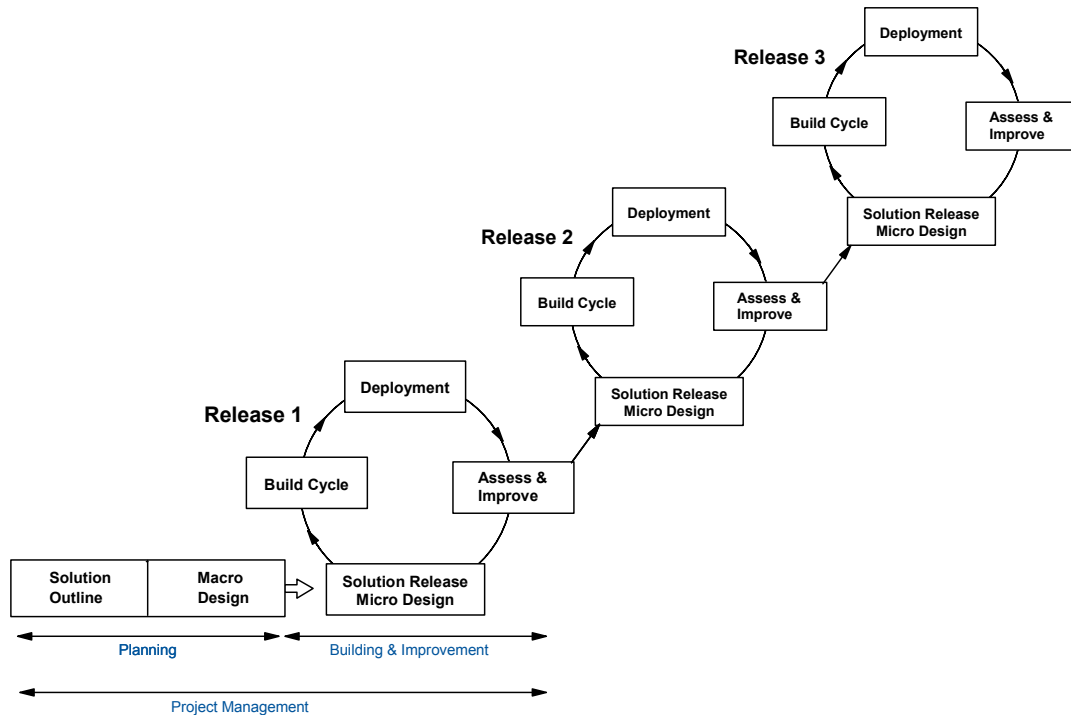
In addition, we can also analyze and assess your application development process and procedures to improve their effectiveness. Our consultants are experts in all aspects of the application development process including culture, methodology, technology, skills, organization and measurements. Engagements can be tailored to one, many or all aspects of the overall application development process for improvement.

Through IBM Application Development Services, your company can quickly respond to business and system changes with fast delivery of high-quality applications

Solution Design and Development

IBM has extensive experience with solution design and development. It is IBM's intent to conduct intensive workshops in order to identify and validate FSH's business requirements and processes. This provides a generous opportunity to provide transfer of knowledge and industry information to give IBM a firm understanding of the various system components needed to develop the technical infrastructure required to support FSH's business systems and applications.

The high level process that IBM uses in the e-business solution development is:



The design, development and deployment of the FeeSimpleHosting Prior Policy Center will be performed in two phases. The first phase is to begin the Solution Outline, Macro Design, and Micro Design. This stage will produce the system design, schedule, and estimate for the execution of the second phase (Build and Deploy). IBM's experience is that to effectively scope, schedule, and estimate the Build and Deploy stages, due diligence must first be done in the Solution Outline, Macro Design, and Micro Design steps. These steps will detail the business and technical issues and goals, resulting in an effective plan for the Build and Deploy stage.

The intention of this phase one is to focus on the requirements for the design of the FSH e-business solution. Our methodology will also take into consideration the long-term plans FSH has for its business. We view the e-business development process as an evolutionary process, a process of continual examination of the business processes, introduction of new applications and leveraging position in the marketplace. This cycle repeats itself on an ongoing basis with the introduction of new functions aimed at providing timely products and services to your customers. IBM is well positioned to assist FSH as we have with thousands of other satisfied customers.

IBM e-business Hosting Services: Colocation facilities and management services

Highlights

- 5,000+ hosting customers represent businesses of every size and shape, across all industries and in 160 countries around the world.
- Provides high-speed Internet access and optimal availability needed to manage business-critical applications
- Delivers numerous security and power availability features to help optimize Web site performance
- Provides bandwidth options for reliable Internet connectivity
- Allows for flexible, customized and expandable Web-hosting solutions as your business evolves

Entrusting your e-business to the Internet

In today's electronic world, many companies rely on their Web site to deploy mission-critical applications that must manage increasingly complex solutions. Within this changing environment, many organizations are turning their space and connectivity requirements over to a Web-hosting provider that can offer leading-edge data centers, protect servers and deliver system security. IBM e-business Hosting Services offer colocation facilities and management services as part of a continuum of capabilities that can address the changing needs of your evolving e-business. We offer a flexible solution that can help optimize Web site performance and provide value-added services as your Web site grows.

Delivering high-speed access

High-speed Internet access is a top priority wherever your servers are located. IBM e-business Hosting Services feature IBM-managed facilities equipped with high-speed, redundant fiber connections designed for maximum network availability. State-of-the-art e-business hosting centers are established throughout the major metropolitan areas in North America and in other parts of the world, so you can choose a location most convenient to you.

Providing security-rich hosting centers for optimal performance

For organizations that want to retain control of set up and management of their Web hosting infrastructures, but want to maintain a security-rich, reliable environment, a colocation option with IBM e-business Hosting Services can be an ideal solution. Our facilities are built to meet rigid IBM security requirements, and are designed with dual power feeds to provide maximum power availability. You can be confident that your systems are placed in an environment that is designed to provide uninterrupted, around-the-clock access to your company servers.

Delivering bandwidth options for reliable Internet connections

You can select the Internet connectivity and bandwidth that best matches your requirements and budget. Primary Internet connections to your dedicated space are available in standard 10 and 100 mbps sizes; 1 gbps is also an option. Redundant Internet connections are available for additional reliability, and you can customize your connection by selecting the maximum committed and burstable bandwidth needed. Bandwidth utilization reports are available via a Web site.

Allowing for expandable Web-hosting solutions as your business evolves

As your operations grow, you have the flexibility to run your own servers as required or you can call on IBM specialists to assist you with a customized solution. The basic colocation package allows a choice of server-space size -- sold in half cabinet, full cabinet, and cage increments. Additional basic services include:

- Around-the-clock, by-appointment access
- Around-the-clock support and service
- Ping and URL monitoring with problem notification
- Online service reports and invoices
- Dual power feeds and UPS backup
- Network and facilities management services.

We also offer the following range of optional services:

- Onsite operations support, including reboots, server status, tape changes, and tape shipping
- Technical assistance, including assistance with problem determination, problem resolution, system administration, and script writing
- Backup and restoration services
- Cross-connect services
- Threshold monitoring services
- Process monitoring services
- Firewall services
- Load balancing, either local or geographic.

Flexible options from an industry leader

With colocation facilities and management services as part of the continuum of IBM e-business Hosting Services, you can receive a full range of solutions that align with your Internet business objectives. From basic colocation of servers to fully managed custom solutions, the people of IBM Global Services can provide the flexibility you need to select unique hosting services as your business grows.

IBM people

When all is said and done, what separates one hosting provider from another is the quality and commitment of its staff. IBM Global Services has people across the country and around the world, from hosting and e-business experts to consultants and systems integration practitioners. So we can scale -- up or down -- and apply our knowledge to help your business.

People who know their way around the Web

The people of IBM Global Services are among the best in the industry, with a broad array of skills across the hosting spectrum, including:

- Expertise in Linux, Cisco, Sun® Solaris™, UNIX®, AIX®, router hardware, multiple operating systems, Intel®, Microsoft® Windows NT® and Windows® 2000, database products including IBM DB2®, Oracle and Sybase, WebSphere®, Ariba Technologies and i2 Technologies e-commerce applications.
- In-depth knowledge of specific industries, including retail, banking and financial services, transportation, public sector, communications, healthcare and online trading.
- Experience with advanced applications for business-to-business and business-to-consumer commerce, streaming technology, groupware, collaboration and "cybercasting."

Proactive monitoring and problem response

Our people also take responsibility for alert management, a level of service you won't find with most other providers. The industry standard leaves critical, skill-intensive tasks of service restoration almost entirely up to the customer. But with an IBM e-business Hosting solution, our Web experts are accountable. We follow a proven process: Proactively investigate every alert ourselves, weed out any false alarms and then take the appropriate actions.

Expertise on call 24/7/365

The IBM Customer Care organization gives you the confidence that you always have access to an IBM hosting expert. Every hour of the day. Every day of the year. We provide help desk support, performance reporting, end-to-end problem management, vendor coordination and consulting services -- all through a single point of contact. So you can get the help you need, quickly and without hassle.

IBM Infrastructure

IBM e-business Hosting places more resources at your disposal than virtually any other provider. We've put a brand new multibillion-dollar infrastructure in place consisting of more than 150 state-of-the-art e-business Hosting Centers™. Our fully redundant Class A data centers with multiple Tier 1 network connectivity and advanced security features provide highly reliable, high-performance Internet operations.

IBM connectivity

Our infrastructure consists of multiple providers capable of supplying redundant, high-bandwidth connections to the Internet. Rather than relying on a single provider for every Internet connection worldwide, we select the most qualified providers in each region. Our vendor neutrality allows us to provide customers with superior connectivity anywhere they need it, while securing favorable pricing arrangements based on our aggregate volume. All of our partners are major Tier 1 providers, with high-speed backbones and, in some cases, hundreds of public and private peering relationships with local, regional and major providers globally. This facilitates traffic and decreases backhaul, particularly in countries outside the U.S.

IBM e-business Hosting Centers

Legend:

- Currently online
- Opening soon

| United States | |
|--------------------|-------------------|
| Phoenix/Mesa, AZ ● | St. Louis, MO ● |
| Chatsworth, CA ■ | Raleigh, NC ● |
| Los Angeles, CA ■ | Newark, NJ ● |
| San Jose, CA ● | Secaucus, NJ ● |
| Sunnyvale, CA ■ | West Orange, NJ ● |
| Boulder, CO ● | Yonkers, NY ■ |
| Southbury, CT ● | Bristol, PA ■ |
| Atlanta, GA ● | Austin, TX ■ |
| Chicago, IL ● | Dallas, TX ● |
| Lisle, IL ● | Ashburn, VA ● |
| Schaumburg, IL ● | Sterling, VA ● |
| Boston, MA ■ | Seattle, WA ■ |

IBM Support

Single Point of Contact Help Desk (SPOC)

IBM operates a state-of-the-art Help Desk to support our customers. The Help Desk mission is to resolve end user issues as quickly as possible. This is accomplished either by resolving the problem directly, or passing it to another level of support.

SPOC Services

The IBM single-point-of-contact solution has a number of facets over and above providing a simple Help Desk. We have assumed our SPOC solution for FSH will include our typical help desk services, including the following:

1. Establishing a Level 1 Help Desk to accept end-user calls available 24x7
2. Problem and change management
3. Problem escalation and notification
4. Full support for Level 1 Help Desk calls
5. Tracking and transfer for all other calls to the appropriate support group
6. Dispatching all move, add, change, and tracking requests to the appropriate support group
7. Dispatch of hardware break-fix and tracking
8. FSH will be responsible for non-technical customer support and problem resolution. All calls related to these issues will be passed on to FSH's customer support group and tracked as open problems until closed successively
9. Verify that client satisfaction is confirmed before inquires and problems are closed

Call Management

All calls are routed through a call management system and answered in order of receipt. We have strict controls in place to measure both response time and levels of "resolved by first respondent." It is our intention to resolve as many issues as possible using the first respondent to save you time and money. In support of this, we have a number of systems in place to provide both technical and application level support for our clients.

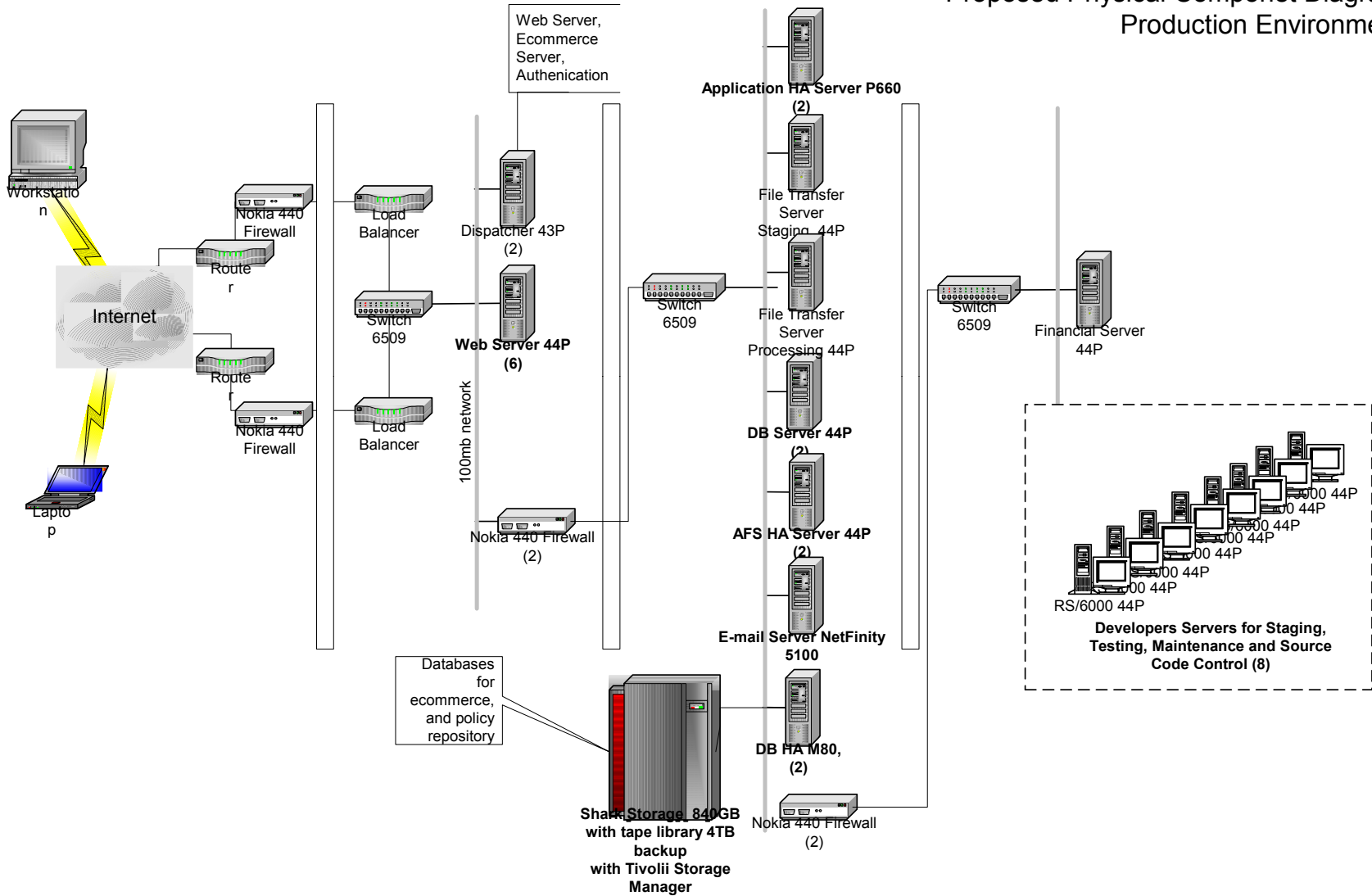
Call Logging and Fault Recording

All calls are logged, and once logged each call is tracked through to conclusion. We are committed to minimizing the number of calls to the Help Desk. This is achieved by analyzing call type trends. When a particular issue is identified as causing an unacceptable number of calls, actions will be undertaken to resolve the cause (for example: user training issues).

Level 2 and Level 3 Help Desk

If calls cannot be resolved at the Level 1 SPOC Help Desk, they will be escalated to Level 2 support. Level 2 support is provided by individuals who have a higher level of expertise and who are trained to address the specific needs of certain applications and environments. This complements the more general skill set that is provided by Level 1 SPOC personnel. IBM will supply Level 2 and Level 3 Help Desk for all those services directly under our responsibility and pass other calls, which cannot be resolved by Level 1, on to FSH or the appropriate third party supplier. All calls will be tracked by the Level 1 SPOC through completion, and escalated if appropriate based upon problem management rules that will be defined specifically for FSH.

FeeSimpleHosting Prior Policy Center Proposed Physical Component Diagram Production Environment



FSH Server Management Solution Summary

Tentative Equipment List and included Hosting Services

IBM has based estimated fees upon the following included services:

- ❖ Managed Operations for the servers located at a secure, hardened IBM site
- ❖ 7 x 24 Technical Support
- ❖ 7 x 24 Availability and Security Monitoring of the Network, Hardware, OS, and application
- ❖ Daily Incremental Backups of the FSH Servers
- ❖ Level 2 Help Desk for questions related to the hardware, system software and specialized management tools IBM utilizes
- ❖ System Management Controls, disciplines and reports
- ❖ Server hardware, software and related maintenance expenses are included in the estimated fees.

IBM's server management services estimates are based upon deploying the hardware and network solutions described below. *These server configurations are tentative and based upon the conceptual server architecture that has been developed by IBM's design team.*

Initial Configuration

The equivalent of 1 T-1 of bandwidth on our bank of OC-3s to the Internet

- 2 – Nokia Firewalls Model 440 with VPN Option
- 2 – Cisco 6506 Switch
- 2 – Dispatchers RS/6000 Model 43P, 1 processor, 256MB of memory
- 2 – Web Server RS/6000 Model 44P, 1 processor, 512 MB of memory
- 2 – Nokia Firewalls Model 440
- 1 – Application Server RS/6000 Model 44P, 1 processor, 512 MB of memory
- 1 – File Transfer Server Staging RS/6000 Model 44P, 1 processor, 512 MB of memory
- 1 – File Transfer/e-mail Server Processing RS/6000 Model 44P, 1 processor, 512 MB of memory
- 1 – DB2 Servers RS/6000 Model 44P, 1 processors, 1 GB of memory
- 2 – DB2 High Availability Servers RS/6000 pSeries 660 Model H1, 4 processors, 4 GB of memory, 500 GB of Disk with backup
- 2 – Nokia Firewalls Model 440
- 1 – Accounting Server Model 44P, 1 processor, 512 MB of memory
- 5 – RS/6000 44P Servers for Staging, Test & Maintenance
- 1 – Backend connection of a T-1 with 512K CIR

High Volume Configuration

The equivalent of 2 T-1s of bandwidth on our bank of OC-3s to the Internet

- 2 – Nokia Firewalls Model 440 with VPN Option
- 2 – Cisco 6509 Switch
- 2 – Dispatchers RS/6000 Model 43P, 1 processor, 256MB of memory
- 6 - Web Servers RS/6000 Model 44P, 1 processor, 512 MB of memory
- 2 – Nokia Firewalls Model 440
- 2 – Application High Availability Servers RS/6000 Model p660, 6 processors, 6 GB of memory
- 1 – File Transfer Servers Staging RS/6000 Model 44P, 1 processor, 512 MB of memory
- 1 – File Transfer Servers Processing RS/6000 Model 44P, 1 processor, 512 MB of memory
- 2 – DB2 Servers RS/6000 Model 44P, 2 processors, 1 GB of memory
- 2 – AFS High Availability Server RS/6000 Model 44P, 2 processors, 1 GB of memory
- 1 – E-Mail Server Netfinity 5100, 2 processors, 512 MB of memory
- 2 – DB2 High Availability Servers RS/6000 Model M80, 8 processors, 16 GB of memory
- 1 – Shark Storage 840 GB of Disk
- 1 – LTO Tape Library 4 TB Backup with Tivoli Storage Manager
- 2 – Nokia Firewalls Model 440
- 1 – Accounting Server AS/400
- 8 – RS/6000 44P Servers for Staging, Test & Maintenance
- 1 – Backend connection of a T-1 with 512K CIR