

Information Technology (IT) Initiative Business Case Responses for BYs 2003 & 2004

Please type your responses in the white answer blocks provided and return the electronic copy of this document to Treva Lutes by April 26th. Please do not modify the shaded rows of the table. These rows contain special codes that we will use to populate a database automatically.

1.0 General Background

1.1 Initiative Name

Integrated Technical Architecture (ITA) Releases 4.0 and 5.0

1.2 Initiative Description

FSA has a five-year modernization program to transform its information technology from the old "hairball" into the FSA Enterprise Architecture, our vision of the "end state" that fully supports the process requirements of the FSA Business Model. Over the past year, FSA has been developing a technical architecture and identifying the technology services we need to build our target FSA Enterprise Architecture, also known as the Integrated Technical Architecture (ITA).

ITA comprises three core architecture domains: *Internet, Integration, and Operations*. The Integrated Technical Architecture (ITA) will evolve as existing systems are modified or retired, and new applications are added to the FSA environment. The main focus of this effort will be on adding efficiency and performance in development stage as well as providing operations support for applications that have rolled out under previous ITA releases. In addition, ITA will focus on performance testing and reusable common services.

ITA and EAI are two distinct and non-overlapping technical architecture areas within the Modernization Program. The ITA provides a conduit to web enable applications through it's reusable web services, product specialist support, reusable environments and web construction products. The EAI team provides an infrastructure for applications to quickly and efficiently integrate with back end systems through a queuing mechanism that guarantees delivery.

1.3 Initiative Type

Business Process Support System	
Financial Management System	_____
Non-Financial Management System	_____
Program Delivery System	
Financial Management System	_____
Non-Financial Management System	_____
IT Infrastructure	_____
IT Services	_X_
General Office Automation	_____

1.4 Contact Information

	Name	Principal Office	Phone Number
Project Manager	Ganesh Reddy	FSA	(202) 377-3557
Program Manager	Ganesh Reddy	FSA	(202) 377-3557
Project Sponsor	Steve Hawald	FSA	(202) 377-3501
Contracting Officer	Janet Scott	FSA	(202) 377-3377
Contracting Officer's Representative	Carol Seifert	FSA	(202) 377-3506

2.0 Business Process

2.1 Business Process Support

<input type="checkbox"/> Grants <input type="checkbox"/> Evaluation <input type="checkbox"/> Research <input type="checkbox"/> Information <input type="checkbox"/> Dissemination <input type="checkbox"/> Enforcement <input type="checkbox"/> Resource <input type="checkbox"/> Management & Administration <input type="checkbox"/> Loans <input checked="" type="checkbox"/> Other: <u>_FSA_</u>	<ul style="list-style-type: none"> • Provide technical infrastructure support and services for FSA information technology initiatives to rollout their system applications. • Specific technical product specialty support
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2.2 Business Problem or Opportunity and Causing Conditions

The modernization of FSA delivery systems requires that information flow reliably, efficiently and timely to all points of need. Some of the challenges to achieving integration in FSA's current environment are:

- Lack of performance testing product and expertise;
- Lack of code reuse;
- Lack of product ever-greening strategy and execution;
- A costly and cumbersome set of legacy systems;
- Multiple hardware/software platforms, each with its own security/authentication regime;
- Many custom built, point-to-point interfaces between systems that are difficult to update and maintain;
- Interdependent applications (changes to one application can affect all interfaces to/from that application);
- Lack of centralized management, visibility of information flows, and business rules; and
- The need for a single reliable, scalable, highly available, and secure integrated architecture.

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2.3 Existing Systems

None

2.4 Solution Impact

(If this is an implemented initiative with no enhancements, then address item (3) only)

(1) Business Areas/External Groups

The Integrated Technical Architecture will provide a standardized, reusable infrastructure for enabling business capabilities, execute the ever-greening direction set by Enterprise Architecture Management, and allow FSA to reduce the number of custom-built, stove-pipe applications that are difficult to update and maintain. Specifically, the Integrated Technical Architecture will enhance Internet, EAI, and Data Warehouse architectures/services by making them more robust, scalable, reliable and available.

The Integrated Technical Architecture implementation will reduce the burden on existing legacy systems as new technology is implemented in FSA. The ITA's performance testing effort underscores the significance of this service for all FSA applications. The ITA has acquired the necessary infrastructure to carry out performance testing on FSA applications prior to their launch in order to verify the robustness of applications by identifying and correcting performance related problems.

The ITA utilizes Mercury Interactive's LoadRunner performance-testing tool which has the capacity to generate load assessments on a given application by simulating the conditions of heavy, simultaneous usage. Such conditions occur when large numbers of users access a particular application's web site, at once. LoadRunner verifies the targets set by application teams for peak and off-peak utilization.

The purpose of performance testing is to identify performance bottlenecks in the application, network, web server, application server, and the database(s) accessed by the application. The fundamental goal of performance testing is to realize a significant improvement as the testing evolves through predetermined iterations. It is customary to establish a baseline in the first iteration, thereby setting the stage and scope of further testing. The focus of subsequent testing is to validate resolution of performance bottlenecks.

The current implementation will affect applications in production by assisting in the resolution of some of the most difficult issues and those that are under development. The ITA will affect applications in production by assisting in the close out of bugs and fix some of the most difficult technical issues.

The ITA can do this in two ways; first by upgrading products, which fix the manufacturer's bugs, and secondly by utilizing Reusable Common Services which fix performance and functional problems within the application. As an example, the Interwoven Team Site was upgraded which fixed the manufacturer's rich text format bug. This allowed projects to smoothly deploy embedded images and bitmaps through the Interwoven product.

The ITA will affect applications in development by rolling out the Reusable Common Services. Application teams can reduce their development time and reduce their time to market by building on top of these pre-built and pre-tested common technical architecture services.

Business Processes

There will be no initial changes to current business processes as a result of the Integrated Technical Architecture implementation. Over time, the Integrated Technical Architecture implementation will support introduction of new business processes and systems.

(2) Impact on Other IT Initiatives

ITA will not have a direct impact on any other business cases. Its impact will be a positive one, as it will provide very specialized support.

(3) (4) Enterprise

The Integrated Technical Architecture (ITA) is fundamental to the FSA IT strategy and provides a positive enterprise impact. The ITA enables FSA (Students, Schools, and Financial Partners Channels) application teams to progress and realize benefits by shortening the time to market of applications, reducing application development costs and improving application performance.

The ITA will reduce costs for FSA by providing on site product specialists that are ready to troubleshoot a team's most difficult technical issues. The ITA will also reduce costs for FSA by creating environments where applications can share hardware.

(5) Systems

There will be no initial changes to current systems as a result of the Integrated Technical Architecture implementation. However, the Integrated Technical Architecture will be the technical foundation that will enable future Modernization Program's re-engineered business process and systems improvements.

2.5 Business Process Reengineering

(Applies only to New Business Process Support and Program Delivery Systems)

None

2.6 Mandatory Requirement

Not Applicable – This initiative does not result from legislation or regulation.

2.7 Consequence of Not Funding the Initiative

- Drastically increases risk with applications going to production, since there will be no performance testing, no product SME expertise, and no architecture expertise;
- FSA continues with existing legacy interface systems and maintenance challenges;
- Attempts to leverage new technology with old existing legacy systems will only clog and aggravate existing interface problems and infrastructure deficiencies;
- Restricts ability of FSA to meet business requirements of customers and mandates of electronic signature legislation;
- Duplicate similar services across multiple applications (i.e., redundant efforts).

3.0 Strategic Alignment

3.1 OMB E-Government Initiative Alignment

- Consolidated Health Information
- Disaster Assistance and Crisis Response
- E-Authentication
- E-Grants
- E-Payroll/HR
- E-Training
- E-Travel
- E-Vital
- Electronic Records Management
- Eligibility Assistance Online
- Expanding Electronic Tax Products for Businesses
- EZ Tax Filing
- Federal Asset Sales
- Federal Enterprise Architecture
- Geospatial Information One Stop
- Integrated Acquisition Environment
- Integrated Human Resources/e-Clearance
- International Trade Process Streamlining

- One Stop Business Compliance Information
- Online Access for Loans
- Online Rulemaking Management
- Recreation One Stop
- Recruitment One Stop
- USA Services
- Wireless Public Safety Interoperable Communications – Project SAFECOM
- None of the Above

3.2 Mission Alignment

- Goal 1: Create a Culture of Achievement

- Objective 1.1 Link federal education funding to accountability for results.
- Objective 1.2 Increase flexibility and local control.
- Objective 1.3 Increase information and options for parents.
- Objective 1.4 Encourage the use of scientifically based methods within federal education programs.

- Goal 2: Improve Student Achievement

- Objective 2.1 Ensure that all students read at grade level by the third grade.
- Objective 2.2 Improve math and science for all students.
- Objective 2.3 Improve the performance of all high school students.
- Objective 2.4 Improve teacher and principal quality.

- Goal 3: Develop Safe Schools and Strong Character

- Objective 3.1 Ensure that our nation’s schools are safe and drug-free and that students are free of alcohol, tobacco, and other drugs.
- Objective 3.2 Promote strong character and citizenship among our nation’s youth.

- Goal 4: Transform Education into an Evidence-Based Field

- Objective 4.1 Raise the quality of research funded or conducted by the Department.
- Objective 4.2 Increase the relevance of our research in order to meet the needs of our customers.

- Goal 5: Enhance the Quality of and Access to Postsecondary & Adult Education

- Objective 5.1 Reduce the gaps in college access and completion among student populations differing by race/ethnicity, socioeconomic status, and disability while increasing the educational attainment of all.
- Objective 5.2 Strengthen accountability of postsecondary institutions.
- Objective 5.3 Establish effective funding mechanisms for postsecondary education.
- Objective 5.4 Strengthen Historically Black Colleges and Universities, Hispanic Serving Institutions, and Tribal College and Universities.
- Objective 5.5 Enhance the literacy skills of American adults.

- Goal 6: Establish Management Excellence

- Objective 6.1 Develop and maintain financial integrity and management and internal controls.
- Objective 6.2 Improve the strategic management of the Department’s human capital.
- Objective 6.3 Manage information technology resources, using e-gov, to improve service for our customers and partners.
- Objective 6.4 Modernize the Student Financial Assistance programs and reduce their high-risk status.
- Objective 6.5 Achieve budget and performance integration to link funding decisions to results.
- Objective 6.6 Leverage the contributions of community-and faith-based organizations to increase the effectiveness of Department programs.
- Objective 6.7 By becoming a high performance, customer-focused organization, earn the President’s Quality Award.

None of the Above

3.3 Strategic Plan Strategies Supported

Strategic Objective 6.3:

- **Reduce partners' data reporting burden:** Minimize burden on our partners by reducing the number of information collection addressing similar issues. With our stakeholders and customers, collaboratively build and publish data standards, including consensus data elements and definitions. The enterprise architecture will be structured to meet business needs.
- **Complete enterprise architecture:** Create a business focused enterprise architecture that describes long term information system requirements and prioritizes IT business needs based on Strategic Plan Goals and Objectives.

Strategic Objective 6.4:

- **Create an efficient delivery system:** Use new technologies and system integration for improving systems, minimizing noncompliance and default rates, and reducing the improper payment of student aid funds.

3.4 Quality Indicators

Processes and technologies incorporated by the ITA team will improve the following areas:

- Reduced application development cost
- Reduced specialized technical resources required by application team
- Reduced time to market
- Established technical standards and guidelines
- In-house Subject Matter Experts

4.0 Technology Initiative

4.1 Initiation Date

October 1, 2001

4.2 Initiative Deployment / Implementation Date

September 30, 2004

4.3 Initiative Phase

- Under Development
- Maintenance Only
- Maintenance with Enhancements

4.4 Initiative Scope

Integrated Technical Architecture – Automated Regression Testing

The main purpose of regression testing is to verify that the application continues to fulfill all of its requirements, whether they have been modified or not. This includes both application product testing and testing for performance, operational readiness, etc. Most of the modified functionality will have been tested in the component and assembly tests executed for each work request that is part of the application release, but new scripts for any new functionality must also be tested during regression testing. Automating the repetitive and error prone tasks of regression testing would significantly reduce effort and cost that FSA application teams invest in this stage of application development.

Integrated Technical Architecture – Performance Enhancement Services

In order to maximize server utilization efficiency and system response time, a set of tools is needed to analyze and

monitor application performance in development, test and production. A set of performance tools will allow us to plan for current and future capacity, handle peak volumes, and staff the appropriate level of call center support resources. In addition to performance tools, this task will also provide a set of performance testing best practices and sample performance test deliverables from other Accenture projects. The benefits for this initiative are:

- With the use of monitoring, tuning and performance testing tools, FSA applications can be properly sized and hardware can be appropriately assigned rather than using a historical solution of adding more hardware.
- Performance Enhancement Services will allow applications to identify and solve performance bottlenecks before the application goes into production.

Integrated Technical Architecture – Reusable Common Services

The Reusable Common Services provides common technical and business services that are required for virtually every web-based application within FSA. These services can be built once and reused across all the applications. Currently, each application is building its own set of 'one off' services. These services are typically not efficient, optimally constructed, nor reusable. Additionally, these services require deep technical skill which most applications do not have.

Integrated Technical Architecture – ITA Software

In order for the ITA to execute the services listed above, software must be procured. The following software is needed to meet the requirements of this task order:

- Performance Tools: Jprobe and LoadRunner
- XML Integrated Development Environment: XML Spy
- Testing Tools: Junit and RoboMon

Integrated Technical Architecture – FSA Technical Architecture Practices

A set of best practices that addresses how to design efficient web based applications with a similar look and feel as well as similar technical standards. Application teams do not need to do research in deeply technical areas as the research is done once and rolled out to each application team.

Integrated Technical Architecture – ITA Product Specialty Support

Products deployed in FSA are essential to each application. It is the greatest importance for the products used in each application to function at an optimum level. With research and knowledge acquisition, ITA has developed deep expertise in the products it recommended. ITA has been and will continue to support products such as IBM HTTP web server and WebSphere Application server.

Integrated Technical Architecture – ITA Scripting

Automates the manual process of repetitive technical tasks within the ITA. Scripting the repetitive ITA tasks allows for an increase in team efficiency and reduces setup time for new application teams. Once the ITA creates scripts for repetitive tasks, they no longer have to allocate a developer to build environments, or set up servers.

Integrated Technical Architecture – ITA Core Services

This effort will provide for the integration of ITA maintenance and new ITA development; this structure is known as a high performance team. Services that have been rolled out in previous releases will receive bug fixes, modifications and enhancements. Additionally, this effort will provide operational support for the ITA environment and product suite for applications that are in production. This effort will also provide the ITA the ability to roll in the RCS to applications that have already moved into production.

Integrated Technical Architecture Release – Independent Verification & Validation

In order to maximize the performance of the ITA services, independent verification is needed to pinpoint problems and show areas of improvement. This will provide metrics and performance data to improve the systems and components within ITA.

Integrated Technical Architecture Release –Application Maintenance

The ITA team will provide architecture maintenance for tools and products which make up the ITA in the production environment. This effort will include trouble shooting ITA products, making ITA product fixes, and ITA product

upgrades. The ITA team will make changes in development, execute tests in the test environment and hand over any necessary changes to the operations infrastructure team for production installation. The benefits for this initiative are:

- Enhanced system security associated with upgrades reduces security vulnerabilities. The net effect is an increase in data integrity and a reduction in overall fraud risk.
- Overall customer experience (as well as overall application uptime) is increased as upgrades fix known software defects.
- Ensures latest product enhancements and functional improvements are available to customers increasing end-user satisfaction.
- Enhanced service results in less application defects. The net effect is a reduction in call center support costs.
- Assist in hardware cost reduction by moving to a single platform in the ITA

Besides upgrades to software, application maintenance includes troubleshooting issues that occur with applications that are in production. These issues can include but are not limited to:

- Resolution of WebSphere database connection pooling issues
- Resolution of WebSphere Application Server performance issues
- Resolution of IBM Http Web Server issues
- Work with applications operations to resolve Autonomy issues
- Resolution of Network Dispatcher issues
- Trouble shoot ITA product issues after applications move to production

The ITA team will provide production support for emergency fixes on mission critical applications such as FAFSA and COD on a twenty four by seven basis.

4.5 Assumptions, Constraints, and Dependencies

- (1) Assumptions: None identified
- (2) Constraints: Funding – The scope of this effort will be dependent upon the amount of funding approved by the IRB.
- (3) Dependencies: Successful completion of ITA Release 3.0.

4.6 Outstanding Issues

None

4.7 Benefits

This business case will prove that new services can be provided for FSA's customers and partners through the use of new technology, improving the way information is shared and managed. This is in response to the old "hairball" systems that only hampered activities and provided out-of-date service. ITA Service and Support will ensure improved application performance and code quality. These services will allow FSA to achieve its main goals of reducing unit cost and increasing employee and customer satisfaction.

4.8 Crosscutting Initiative

- Entire Department
- Office for Civil Rights
- Office of Educational Research and Improvement
- Office of Elementary and Secondary Education
- Office of English Language Acquisition
- Office of Postsecondary Education
- Office of Special Educational and Rehabilitation Services
- Federal Student Aid
- Office of Vocational and Adult Education
- Office of the Chief Financial Officer
- Office of the Chief Information Officer
- Office of the General Counsel
- Office of Inspector General
- Office of Intergovernmental and Interagency Affairs
- Office of Legislation and Congressional Affairs
- Office of Management
- Office of Public Affairs
- Entities outside of the Department

4.9 Audit Finding

None

4.10 Alternatives Analysis

(This Applies Only To Initiatives Under Development or Being Implemented.)

Alternatives	Description	Total Life Cycle Costs	Benefits	Drawbacks
Alternative 1 (Selected Alternative)	Integrated Technical Architecture (ITA) Releases 4.0 and 5.0	FY02 - \$3.9M FY03 - \$3.45M FY04 - \$3M FY05 - \$3M FY06 - \$3M FY07 - \$2.8M Total – \$19.15M	<ul style="list-style-type: none"> • With the use of monitoring, tuning and performance testing tools, SFA applications can be properly sized and hardware can be appropriately assigned rather than using a historical solution of adding more hardware. • Performance Enhancement Services will allow applications to identify and 	None

			solve performance bottlenecks before the application goes into production.	
Alternative 2	Do Nothing – Remain as-is	FY03 \$(2,000,000) FY04 \$(2,000,000)	Without ITA, FSA will be expected to spend an additional \$2,000,000 on IT Services.	<ul style="list-style-type: none"> • FSA continues with existing legacy interface systems and maintenance challenges • Attempts to leverage new technology with old existing legacy systems will only clog and aggravate existing interface problems and infrastructure deficiencies • Restricts ability of FSA to meet business requirements of customers and mandates of electronic signature legislation • Duplicate similar services across multiple applications

5.0 Enterprise Architecture

5.1 Use of COTS/GOTS

Percentage of COTS/GOTS Components:

- 0 - 25%
- 26 - 50%
- 51 - 75%
- 76 - 100%
- Not Applicable

5.2 Consistency with Product Support Plan

(Please refer to Appendix A to identify supported products and indicate non-supported products below)

Compatible with all existing software with which ITA interfaces. See checklist in Appendix A.
The following software products are not in the checklist in Appendix A:

- IBM HTTP Server
- IBM WebSphere
- Autonomy
- Interwoven
- Network Dispatcher
- Netscape LDAP

5.3 Section 508 Compliance
(Accessibility)

(1) N/A -- The ITA does not produce any front end software products; All custom software developed by the ITA are server side Java Implementations.
(2) N/A
(3) N/A

5.4 Government Paperwork Elimination Act (GPEA)
(Business Process Support and Program Delivery Systems only)

(1) N/A
(2) N/A
(3) N/A

5.5 Information Management
(Business Process Support and Program Delivery Systems only)

(1) N/A
(2) N/A
(3) N/A

5.6 Privacy

(1) N/A – Backend system.
(2) N/A

5.7 Security
(This question applies if the initiative meets the definition of major application or general support system as defined in OMB Circular A-130.)

Part 1 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)

N/C

Part 1 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)

01/10/2003

Part 1 – c.

This initiative has just been reclassified as a “system;” security will be handled starting with the FY03 initiative

Part 2 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)
N/C
Part 2 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)
03/30/2003
Part 2 – c.
This initiative has just been reclassified as a “system;” security will be handled starting with the FY03 initiative
Part 3 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)
N/C
Part 3 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)
03/30/2003
Part 3 – c.
This initiative has just been reclassified as a “system;” security will be handled starting with the FY03 initiative
Part 4 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)
N/A
Part 4 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)
03/30/2003
Part 4 – c.
Part 5 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)
N/C
Part 5 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)
03/30/2003
Part 5 – c.
Part 6 – a. (Please enter a date in the form of MM/DD/YYYY or N/C)
N/C
Part 6 – b. (Please enter a date in the form of MM/DD/YYYY or N/A)
03/30/2003

6.0 Risk and Project Management

6.1 Risk Management

Risk Category	Risk Description	Risk Probability	Risk Impact	Management Strategy
Strategic	N/A	N/A	N/A	N/A
Organizational/Change Management	Lack of buy-in from business stakeholders (channels)	Low	Medium	Implementation of the enterprise infrastructure must be understood as a strategic investment, supporting all business units
Project Resources (Financial, Personnel, etc.)	Project takes longer than expected, thus driving up labor costs	Low	Low	<ul style="list-style-type: none"> • Make sure contractors have a clear scope and a well defined project plan • Use a performance based financial relationship and/or fixed price bids
Project Management	Scope: Try to solve all problems at once	Low	High	Maintain focus on one application at a time
Business	N/A	N/A	N/A	N/A
Exposure	Hardware and software delivery	Medium	Medium	Coordination of time frames and schedules
Data/Information	N/A	N/A	N/A	N/A
Application	N/A	N/A	N/A	N/A
Technology/Infrastructure	<p>Company goes out of business</p> <p>Technology may not be appropriate for all systems/applications</p>	Low	Low	<ul style="list-style-type: none"> • Contractors will be using proven technology developed and provided by industry leaders • System will be evaluated by SFA

Security	N/A	N/A	N/A	N/A
Privacy	N/A	N/A	N/A	N/A

6.2 Operational Performance Measures

Processes and technologies incorporated by the ITA team will improve the following areas:

- Ensures application performance meets performance metrics;
- Ensures Capacity of applications;
- Increases the quality of application code;
- Improves the quality of development, test and production environment.

6.3 General Acquisition Strategy

- (1) Single Contract – There are no contracts in lieu of ITA R3
- (2) We will use Fixed Price only – Fixed Price contract with Accenture.
- (3) No financial incentive or other performance based contract will be used.
- (4) Period of Performance Same as GSA Contract (9/7/99 – 9/30/02, with two 5 year options)
- (5) General contract information are as follows:

Ordering Agency

US Department of Education (ED), Federal Student Aid (FSA), Union Center Plaza 830 1st Street NE, Washington, DC 20004

Project

Modernization Partner

Contract Type

Blanket Purchase Agreement (BPA) under GSA Schedule 70 Contract (GS-35F-4692G) implemented using Task Orders (FP, FP Share in Savings IF, and T&M)

BPA

ED-99-DO-0002

Sources

The ITA will continue to use the existing suppliers for upgrades of its product including IBM for Load Balancing, Web and Application servers, Autonomy for the search engine as well as MicroStrategy & Informatica for datamarts. The ITA expects to license its performance-profiling tool called Jprobe from Sitraka Software. Additionally, the ITA expects to license JUnit for the execution of java based unit test conditions.

Competition

Competitive bids will be required for each sub-contractor arrangement that is made. Competitive bids are expected for product specialty support in the areas of upgrades.

Contract Considerations

Contracting for upgrades services will be based on a fixed fee basis. All product specialty services will be contracted as time and materials. The ITA is expecting to continue using IBM professional services on a time and materials basis.

(6) N/A

(7) N/A

(8) N/A

(9) N/A

(10) N/A

APPENDIX A

Hardware

Personal Computers

Primary Support

X Compaq Professional Pentium II (266 MHz or faster), minimum 64 MB of RAM, 3.0 GB of Hard Drive available for OCIO configuration

_Professional Dell Pentium II (266 MHz or faster), minimum 64 MB of RAM, 3.0 GB of Hard Drive available for OCIO configuration

Secondary Support

_As defined in OCIO non-standard workstation policy

Laptops

Primary Support

_Dell Pentium II (266 MHz or faster), minimum 64 MB of RAM, 3.0 GB of Hard Drive available for OCIO configuration

_Toshiba Pentium II (266 MHz or faster), minimum 64 MB of RAM, 3.0 GB of Hard Drive available for OCIO configuration

Secondary Support

_As defined in OCIO non-standard workstation policy

Printers

Primary Support

X HP LaserJet 5 and newer

Secondary Support

_HP LaserJet 4

Monitors

Primary Support

X 17-inch or larger, capable of 1024x768 resolution

Personal Digital Assistants (PDA)

Primary Support

_Blackberry RIM 957

_Blackberry RIM 950

Secondary Support

_IntelliSync

_Microsoft ActiveSync 3.1 or newer

Software

Client Operating Systems

Primary Support

X Windows 2000 Professional Service Pack (SP)2

Secondary Support

_As defined in OCIO non-standard workstation policy

Office Suites

Primary Support

X Office 2000 Service Release (SR) 1A with Word 2000, Excel 2000, PowerPoint 2000, Access 2000

Anti-Virus Software

Primary Support

X Norton AntiVirus 2000 Corporate Edition 7.5

Communications

Primary Support

___ Citrix ICA

Secondary Support

___ Citrix Winframe

Terminal Emulation Software

Primary Support

___ Attachmate 6.5

Database Clients

Primary Support

X Oracle 8.1.7 Client

X Microstrategy 7

Electronic Mail Software

Primary Support

___ Outlook 2000

Internet Browsers

Primary Support

X Internet Explorer 5.5 SP1 (128-bit encryption)

Secondary Support

___ Netscape 4.x

Helper Plug-Ins

Primary Support

X Adobe Acrobat Reader 5.0 and newer

___ RealPlayer 8.0 Intranet

Project Management Software

Primary Support

X Microsoft Project 2000

___ TeamMate 2000

Web/Desktop Publishing Software

Secondary Support

___ Adobe Illustrator 7.0

___ Adobe PageMaker 6.5 and newer

___ Adobe Photoshop 5.0

___ Interwoven LaunchPad

___ Macromedia Dreamweaver 2.0 and newer

___ Macromedia Fireworks 2.0 and newer

___ Macromedia FreeHand 7.0

___ Macromedia HomeSite 4.0

___ NetViz 4.0

___ Publisher 2000

Groupware

Secondary Support

X Lotus Notes Client (all versions)

Assistive Technology Software

Primary Support

- ___ Aladdin Genie CCTV
- ___ Dragon Systems NaturallySpeaking 4.0 and newer
- ___ Freedom Scientific JAWS for Windows 3.7
- ___ Gus Word Prediction
- ___ IBM Homepage Reader 2.5 and newer
- ___ NexCom 300 TTY modem, which requires an ISA slot
- ___ NexTalk/NTS, NXI Communications NTS 3.41 and newer
- ___ ZoomText Xtra Level 2 7.04 and newer

Secondary Support

- ___ NXI Communications NexTalk for Windows
- ___ WinTalk modem

Principal Office-Specialized Applications

Primary Support

- ___ ARCHIBUS/FM-10
- ___ CARS
- ___ CCM Plus
- ___ CMIS
- ___ DACS
- ___ EDCAPS
- ___ EDICS
- ___ Folio Builder 4.2
- ___ Folio Views 4.2
- ___ HEATWEB 3.11
- ___ IAS
- ___ Method/1 GuideVersion 11
- ___ Monarch Professional 5.02
- ___ Ombusman Case Tracking System 2.0
- ___ Peer Review System
- ___ TRAINS

Secondary Support

- ___ CMTS
- ___ DLOS
- ___ Folio Views 3.11
- ___ GAPS
- ___ GPAS
- ___ IEFARS
- ___ OCR Electronic Library
- ___ OSERS Quick
- ___ PC Travel Drop Box
- ___ PEPS
- ___ PFIE
- ___ Response Phone System
- ___ SACONS
- ___ Total Access Agent

Network Operating Systems and Enterprise Software

Primary Support

- ___ Cisco IOS 12.1(5) (Router)
- ___ Cisco IOS 6.1(2) and newer (Switch)
- ___ Microsoft Exchange 5.5 SP4
- ___ Microsoft SMS 2.0 SP3
- ___ Microsoft NT Server 4.0 SP6a
- ___ Microsoft Windows 2000 Server SP2

- Netscape Compass Server 3.0 (SPARC)
 - Netscape Enterprise Server 3.51 (SPARC)
 - Oracle 8.1.7
 - Raptor Firewall with PowerVPN Version 6.5
 - Solaris 2.6 (SPARC)
 - SQL Server 7.0 SP5
 - SQL Server 2000 SP1
 - Terminal Server 4.0 SP6a
- Secondary Support*
- All versions of Linux
 - All versions of Lotus Notes
 - Microsoft Internet Information Server 4.0 and newer
 - SQL Server 6.5