
Office of Student Financial Assistance

SFA Modernization Partner

SFA Portal Product Evaluation &
Recommendations



Task Order #48

Deliverable 48.1.2 – R1

March 27, 2001

Table of Contents

1.0	Executive Summary	1
2.0	Requirements & Strategy.....	4
3.0	Portal Solution Evaluation.....	11
4.0	Recommendations.....	18
	Appendix A – Autonomy Evaluation	20
	Appendix B – Brio Evaluation	29
	Appendix C - BroadVision Evaluation	42
	Appendix D – Corechange Evaluation.....	62
	Appendix E – DataChannel Evaluation.....	71
	Appendix F – IBM/WebSphere Portal Server Evaluation.....	81
	Appendix G – Plumtree Evaluation.....	90
	Appendix H – SUN/iPlanet Evaluation.....	100
	Appendix I - Viador Evaluation	126

1.0 Executive Summary

The primary goal of the enterprise Portal Strategy is to provide one-stop web-based services at <http://www.sfa.ed.gov> for all customers and employees. Mapping the strategy services to the business goals of the organization results in the identification of several dependencies for the success of the strategy (e.g., EAI, LDAP, etc.) as shown in Figure 1.

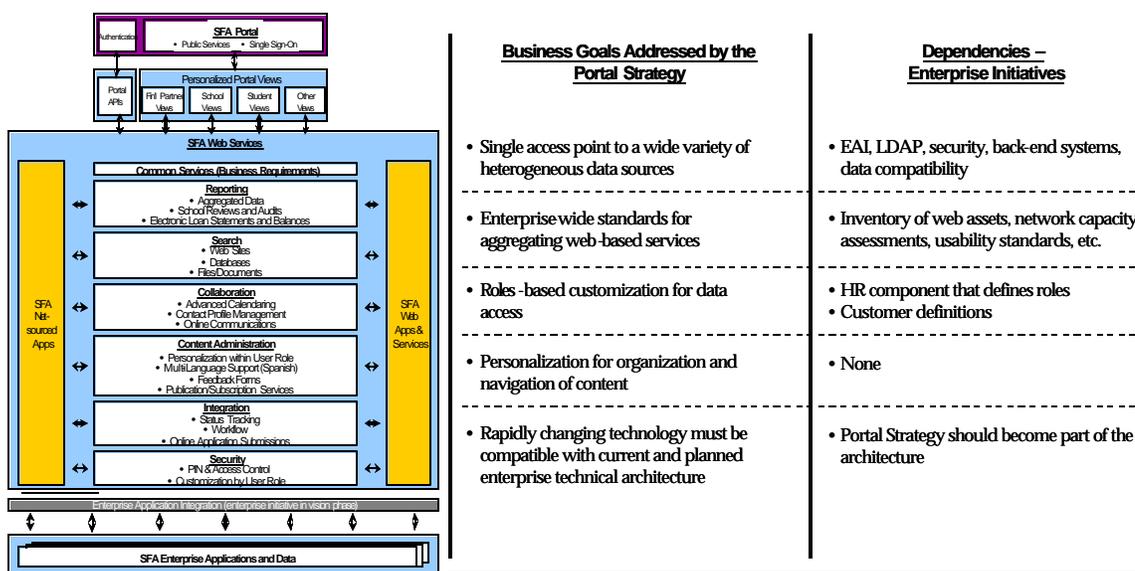


Figure 1: SFA Portal Strategy

The dependencies shown above include defining roles, performing network capacity assessments, and integrating the Portal Strategy with other technical architecture solutions. To address the technical architecture dependencies, the following should be considered once the selection of the portal technical solution is determined:

- Leverage investments of existing tools, especially with the Enterprise Application Integration (EAI) infrastructure.
- Implement Portal Strategy priorities incrementally.
- Deliver infrastructure elements to achieve the Portal Strategy goals.

The Portal Solution Evaluation Section of this study outlines the capabilities of existing SFA software tools relative to the portal requirements collected during the strategy phase of this study. To address the gaps between requirements and capabilities, an evaluation of specific portal vendors/products was performed.

Several vendors were considered for this evaluation based on industry analysis and product compatibility screening. Refer to designated appendixes for the detailed evaluation results.

While there are vendors with plans to enhance their products or migrate them to a compatible platform, a long-term software package solution cannot be identified for SFA at this time. The current SFA environment provides an open, standard architecture that can be leveraged to provide initial portal capabilities without compromising the integration of a portal software package in the future. This conclusion also supports the Industry perspective that the portal market is early in its definition but that the market will continue to grow.

Existing SFA technical architecture components can provide many features that were identified as portal requirements during the first phase of this study. The evaluation of the portal software packages did not result in the identification of a recommendation for SFA that would meet all requirements, integrate with the technical environment, or provide the framework for a long-term solution that supports SFA's Target State Vision. Based on these conclusions, the following are recommended to achieve the SFA Portal Strategy:

1. Implement Standard Portal Architecture. SFA can leverage existing infrastructure components to build the foundation for implementing the Portal Strategy. Although there are diverse requirements across all of the Channels, there are also many common services that will be shared across the portal views. Giga states that, "standardizing the portal infrastructure components across sites will help enable separate portal sites to share user information, content, personalization, and security." The following existing and planned architecture components comprise the standard portal architecture:
 - IBM HTTP Server (IHS)
 - IBM WebSphere Application Server (WAS)
 - Autonomy (Search)
 - InterWoven (Content Management)
 - MQSeries (Messaging, Workflow)
 - Oracle

2. Establish Library of Reusable "Portlets." By utilizing the standard portal architecture described above, a library of open and reusable "Portlets" will provide SFA with common development components for all views within the Portal. This will result in decreased development and maintenance costs as well as a standard presentation across the views.

3. Evergreen Process in 6-12 Months. Although there are no portal products available today for all SFA requirements, there are indications from our evaluation and industry analysis that products will continue to mature. As the “evergreen” process takes place, there should be considerations for how to best leverage the standard portal architecture and library of “Portlets” described above.

2.0 Requirements & Strategy

The Application Architecture for SFA in 2002 is outlined in the Target State Vision document. It illustrates at a high-level how/where portals integrate with the SFA environment. Over 150 requirements were defined as a part of this effort, which is indicative of the interest in an enterprise-wide solution for a portal framework. The SFA business areas prioritized these requirements and indicated which were critical, important, and useful to their business function and core client constituents. Additionally, they provided many more prioritized requirements for future portal development that had not previously been identified. At a high level, requirements marked critical aligned with the following portal feature categories:

- Collaboration
- Content Management
- Integration
- Personalization
- Reporting
- Search
- Single sign-on

Collaboration

SFA business channels and business units created requirements covering the breadth of functionality for this area. Among the requested features were:

- **Advanced Calendaring.** Functionality would include the ability for SFA business channels to push important dates to Student, School, and Financial Partner views as well as a personalized calendar pre-populated with important dates. Other non-critical functions included pulling calendar events from SFA site to personal calendar tool (palm pilot or other program), enabling reminders from calendar tool, and filtering calendar events by region.
- **Online FAQ.** This includes the ability for customers to submit a question as well as the collection of answers to all questions in one central, searchable repository.

- **Contact Profile Management.** Students should be able to update self-descriptive information such as address, enrollment status, and employment information in one central location. Similarly, Schools, GA's, and Lenders should be able to update self-descriptive profile information such as addresses and contacts within the organization in one central location for that organization. Employees would leverage this feature by providing contact information to specific clients such as schools and lenders, while not providing this information to students.
- **Online communications.** School professionals should have a mechanism for real-time discussions with SFA professionals. Additionally, SFA employees require the same capability for internal collaboration. Real-time communications include single "one call does it all" functionality including e-mail, chat, and telephone assistance in a secured environment. Interactive support currently exists in the Direct Loan Servicing System (DLSS).
- **Document Repository.** A centralized location for important documents facilitates information sharing between SFA and other organizations. It supports SFA's collaboration with schools on development and deployment of outreach campaigns and programs. A document repository could also be used as the vehicle for uploading and downloading shared reports between GA's, Lenders, and SFA Financial Partners.

Content Administration

This area typically covers a tool's ability to create, maintain, delete and provide version control for pages displayed on a site. SFA would use a content administration tool to display nearly all static content that would be changed on both a frequent and infrequent basis. In addition, the tool should provide support for the following items:

- **Languages.** This includes the ability to develop content in Spanish.
- **Link Management.** Several sites and systems were listed as potential links within the Portal. Because of the changing needs of SFA business units and the changing information at remote sites, links may be changed frequently. A Content Management tool eases the management of these links. Application links would include those to systems such as NSLDS, DLSS, CPS, FMS, and GAPS. Other links would include those to school reviews and audits, and internal or external financial planning tools for students.

- **Feedback Form Development.** SFA internal organizations require the ability to solicit feedback from clients.
- **Publication/Subscription services.** While some content may be provided to SFA through the use of links, other content can be pulled from these sites and published as part of the SFA site. Publication/Subscription services allow SFA to subscribe to information maintained by another site and include it as SFA portal content. Examples of this would include legislative updates on Higher Education issues and lender-provided interest rates and schedules, both of which are gathered from 3rd party data sources.

Integration

Within the SFA organization, there are several systems that currently have functionality necessary for the day-to-day activities of students and SFA employees, and the business-specific needs of schools and financial partners. The Portal's capability may involve not only providing links to systems that are currently internet-based, but also integrating with those systems and business processes that are not. The following are feature sets that should be taken into consideration when considering solutions:

- **Status Tracking.** Includes the ability to track status of all incoming financial aid funding requests, all payment processing requests, pending and completed transactions, and of actions required during the loan process.
- **Online Application Submissions.** Includes the step-by-step process of submitting and approving of federal aid, forbearance, deferral, or loan consolidation forms. This should also include the ability of users to complete and submit a paperless promissory note.
- **Workflow.** Some channel-specific examples of workflow include: certify funds to transfer to and from GA's and Lenders; e-servicing of loans; disburse funds into student accounts individually or by program; issue authorizations and approvals for transactions; notify chosen school of funds disbursement and transfer funds; and exchange and consolidate financial data between SFA and school's systems based on school business process needs.

- **3rd Party Tools.** Tools include personal financial software and other e-commerce tools for e-payment of student debt.

Personalization

Personalization features allow users to plug-and-play with the content delivered to their view of the portal. In SFA's case, personalization would be used to deliver specific regulatory and legislative news features, deadlines, program-specific announcements, and new tools and initiatives to users. A calendar feature would also allow personalized and SFA-deadline dates to be stored.

Reporting

Reporting within the portal should include these features and data elements:

- Access to aggregate data on Servicers, Lenders, and GA's.
- Upload/download reports: SFA's systems seamlessly interact with FP systems.
- Access to all school reviews and audits.
- Electronic loan statements.
- View disbursement history for individual or school loans.
- View current loan balances.

Search

Search extends not only through the enterprise, but also to other internet-based resources. This search engine must not only extend to internal systems, but also extend beyond the firewall.

- Complete, searchable information on programs, legislation, etc. This information resides in web sites, databases, individual machines, and some information that is on IFAP.
- Provide the customers with the ability to search/cross reference schools with similar attributes such as size of school, software used, and Title IV programs in which you participate.
- Online FAQ. Included as part of the searchable database.

Single Sign-on

Single Sign-on encompasses two steps in user verification and authentication process. The first of these steps, user validation, occurs when the user first enters the Portal. This step determines the applications to which the user has access as well as authority levels within the Portal for content management. The second step in this process is user authentication and authorization. Within each application, each user has an identified username and password, as well as authority rights within the Portal. Single sign-on seeks to implement one distinct username and password combination to make sign-on to individual applications simpler.

- Enable the customer to enter his/her sets of ID's/passwords at the portal level, to enable access to other SFA sites.
- Standardize the password expiration times for all SFA web sites.
- For schools, single sign-on should occur for the following web sites: <http://www.pellgrantsonline.ed.gov>, <http://lo-online.ed.gov>, <http://www.nsldsfap.ed.gov>, and <http://www.gapsweb.ed.gov>.

Other Critical Functional Considerations

- **Electronic Learning.** Use of online Computer-based training tools to help educate students on the Financial Aid process and newly-hired employees on SFA internal processes and procedures. Always-current online FAQ's, computer-based training, and downloadable training material are also required. SFA would like to post more software tutorials, particularly for new staff.
- **Estimated Family Contribution Calculator.** Calculator providing EFC will help students make quicker financial decisions regarding financing of education.

Based on our analysis of enterprise requirements, a common architecture is required for providing portal services to all SFA employees and customers. Figure 2, introduced in the SFA Enterprise Portal Requirements and Strategy, highlights the concept of a single enterprise Portal with multiple Views for various user groups accessing various services and systems. Anyone accessing the SFA Portal would go to the same home page to login except for the general public who would be able to navigate the site without security. Once a user is authenticated, they could access their View within the Portal depending on their roles and access rights.

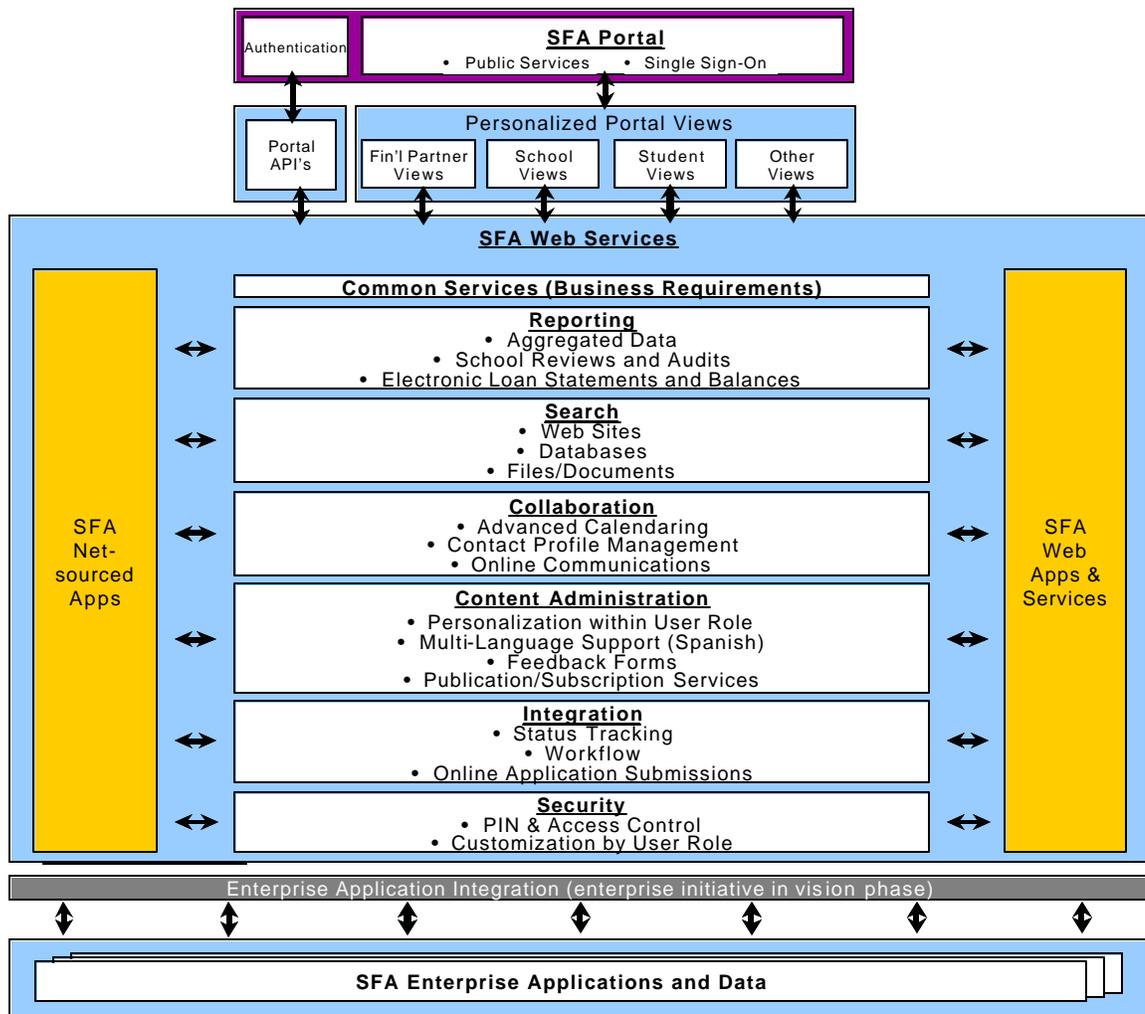


Figure 2: SFA Portal Requirements

Accessing a specific View within the Portal will require logging into the Portal. As shown in Figure 2, there is a separate enterprise initiative being planned to achieve a single sign-on capability. Until this capability is in place, users still require the ability to login to the Portal so that they can personalize their site as well as access other web services available to them. A summary of the business requirements collect during this study is included in the center of the illustration. The “SFA Net-sourced Apps” box represents web SFA-based services not hosted within the SFA environment whereas the box titled “SFA Web Apps & Services” represents those SFA web-based services that are hosted internally. The Enterprise Application Integration layer is also being addressed by a separate enterprise initiative.

Strategic Implications

The primary goal of the enterprise Portal Strategy is to provide one-stop web-based services at <http://www.sfa.ed.gov> for all customers and employees. Mapping the strategy services to the business goals of the organization results in the identification of several dependencies for the success of the strategy (e.g., EAI, LDAP, etc.) as shown in Figure 3.

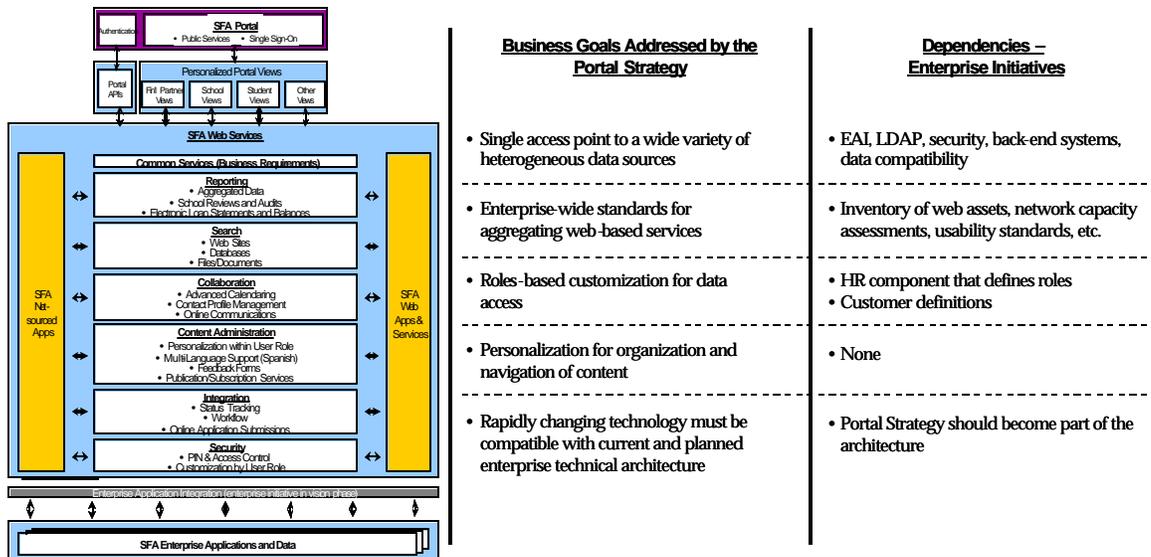


Figure 3: SFA Portal Strategy

As shown in Figure 3, there are many business challenges addressed by the Portal Strategy. The dependencies include defining roles, performing network capacity assessments, and integrating the Portal Strategy with other technical architecture solutions. To address the technical architecture dependencies, the following should be considered once the selection of the portal technical solution is determined:

- Leverage investments of existing tools, especially with the Enterprise Application Integration (EAI) infrastructure.
- Implement Portal Strategy priorities incrementally.
- Deliver infrastructure elements to achieve the Portal Strategy goals.

3.0 Portal Solution Evaluation

The first step of the evaluation was to review the capabilities of existing and planned SFA software tools and applications to determine whether there is a need for a separate portal software package. The table below illustrates where SFA technology can provide the required functionality. Autonomy v2.1, InterWoven TeamSite v4.5, and the WebSphere Application Server (WAS) Enterprise Edition v3.5 are the primary tools available for providing SFA web services through the Portal. If a portal software package is required, it must be compatible with these tools. Other existing or planned SFA tools or applications are listed in the Comments column where applicable. If a portal software package can assist with providing the required functionality, it is designated with an “X” in the Portal column even if another tool or application can also provide this functionality. If there is an “X” in only the Portal column, then it is a portal software requirement that none of the other tools can provide.

Functional Requirements	Description (Details included in Section 2)	Autonomy	InterWoven	WebSphere (WAS)	Comments	Portal
Collaboration Capabilities						
Advanced Calendaring	Ability to push important dates to Student, School, and Financial Partner views; personalized calendar pre-populated with important dates.				Minimal capability currently provided by Schools Portal, Complex solution with 3 rd party tools	X
Online FAQ	Ability to collect and organize online FAQ's.		X			X
Contact Profile Management	Ability to perform contact profile management.			X	Dependent on Single Sign-On	
Online Communications	Ability to perform online communications including email, chat, and discussion.				Minimal capability currently provided by Schools Portal, Potentially	X

Functional Requirements	Description (Details included in Section 2)	Autonomy	InterWoven	WebSphere (WAS)	Comments	Portal
					with Siebel	
Document Repository	Ability to contain a document repository.					X
Content Administration						
Languages	Ability to develop/convert content to Spanish.				Not Critical	
Link Management	Ability to provide internal and external link management.		X			X
Feedback Form Development	Ability to solicit feedback from customers.		X			X
Publication/Subscription Services	Ability to provide publication/subscription services.				Not Critical	
Integration						
Status Tracking	Ability to perform status tracking.				Dependent on Application, MQSeries	
Online Application Submissions	Ability to accept online application submissions.				Dependent on Application, MQSeries	
Workflow	Ability to design/model workflow.				Dependent on Application, MQSeries	
3 rd Party Tools	Ability to integrate with 3 rd party tools.			X	Dependent on Application, MQSeries	X

Functional Requirements	Description (Details included in Section 2)	Autonomy	InterWoven	WebSphere (WAS)	Comments	Portal
Personalization Functionality						
	Ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page).			X	Minimal capability currently provided by Schools Portal	X
	Ability for users to customize the physical layout of portal pages.			X		X
	Ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.			X		X
Reporting Capabilities						
	Ability to access aggregate data on Servicers, Lenders, and GA's.				OLTP	
	Ability to upload and download reports.				OLTP	
	Ability to access all school reviews and audits.				OLTP	
	Ability to access electronic loan statements.				OLTP	
	Ability to view disbursement history for individual or school loans.				OLTP	

Functional Requirements	Description (Details included in Section 2)	Autonomy	InterWoven	WebSphere (WAS)	Comments	Portal
	Ability to view current loan balances.				OLTP	
Search						
	Ability to search programs, legislation, web sites, databases, etc.	X				
	Ability to search/cross-reference schools with similar attributes, etc.	X				
	Ability to search online FAQ.	X				
Single Sign-On						
	Ability to enter single ID via the portal to access other SFA web sites or source systems.				Dependent on other SFA initiatives	Security, LDAP Compliance
	Ability to standardize password expiration times.				Dependent on other SFA initiatives	X
	Ability to prioritize web sites for this feature.				Dependent on other SFA initiatives	
Additional Considerations						
	Ability to integrate eLearning solutions.				SFA U	
	Ability to integrate or link to an Estimated Family Contribution (EFC) calculator.				Not Critical	

The table above illustrates the SFA tools and applications that can provide the capabilities to meet SFA's requirements. It also highlights the following requirements that cannot be implemented with SFA tools or applications without custom development:

- Collaboration
 - Advanced Calendaring
 - Online Communications
 - Document Repository
- Security (LDAP Compliance, for Single Sign-On)
- Personalization

There are other SFA requirements, however, that are also considered as portal features even though there is already a tool or application that can provide its functionality for SFA. The list below includes all requirements listed in the table above that were included in the evaluation of portal packages even though an existing tool may provide this functionality.

- Collaboration
 - Advanced Calendaring
 - Online FAQ
 - Online Communications
 - Document Repository
- Content Management
 - Link Management
 - Feedback Form Development
- Integration
 - 3rd Party Tools
- Security (LDAP Compliance, for Single Sign-On)
- Personalization

In addition to the functional requirements listed above, the following technical and vendor profile criteria were outlined as critical for this evaluation:

- Certified/compatible with UNIX/Sun Solaris
- Certified/compatible with Oracle 8i database
- Certified/compatible with IBM HTTP Server
- Certified/compatible with the MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)
- Compatible with Visual Age Java

- Compatible with Autonomy Server v2.1
- Compatible with InterWoven TeamSite v4.5
- Certified/compatible with WebSphere v3.5
- Capability for password management (e.g., minimum length, can't use same password, etc.)
- Capability to handle multiple concurrent online self-registrations
- Largest installation base (i.e., number of users)
- Number of concurrent users that can all hit the same function at the same time
- All references we may contact where product has been installed
- Evaluation copy of the product for a short time period
- Resources for integration and test to ensure it is compatible with the SFA environment
- Cost information for license fees, etc. GSA rates if applicable

Although an analysis of the capabilities of SFA tools and applications resulted in minimal requirements for a portal software package, the evaluation of portal software packages was done to ensure that the optimal solution for SFA would be recommended for testing at the Virtual Data Center (VDC). Based on all functional and technical requirements identified above, the following critical evaluation factors were used to narrow the number of viable options available to SFA:

- Product
 - Compatibility with SFA environment (e.g., Autonomy, WAS, etc.)
 - Scalability
- Vendor
 - Stability & Industry Perspective
 - Flexibility (e.g., evaluation copy, resources, etc.)

To address all SFA requirements with an emphasis on the critical evaluation criteria, an evaluation of portal vendors/products was performed. The vendors listed below were considered for this evaluation based on industry analysis and product compatibility screening. Vendors/products that did not rate highly during the initial screen were not considered for detailed evaluation. Refer to designated appendixes for the detailed evaluation of each vendor/product including a summary of their strengths, weaknesses, and assessment for suitability for SFA.

- Autonomy/Portal-in-a-Box (Appendix A)
- Brio (Appendix B)
- BroadVision (Appendix C)
- Corechange (Appendix D)

- DataChannel (Appendix E)
- IBM/WebSphere Portal Server (Appendix F)
- Plumtree (Appendix G)
- SUN/iPlanet (Appendix H)
- Viador (Appendix I)

After evaluating the vendors/products listed above against the applicable business requirements, critical vendor and product criteria, and all other technical criteria, it was determined that none of the packages meet all of SFA's portal requirements. Specifically, a single package could not meet all of the following requirements:

- Compatibility
- Scalability
- Advanced Calendaring
- Online Communications

While there are vendors with plans to enhance their products or migrate them to a compatible platform, a long-term software package solution cannot be identified for SFA at this time. The current SFA environment provides an open, standard architecture that can be leveraged to provide initial portal capabilities without compromising the integration of a portal software package in the future. This conclusion also supports the Industry perspective that the portal market is early in its definition but that the market will continue to grow.

4.0 Recommendations

Existing SFA technical architecture components can provide many features that were identified as portal requirements during the first phase of this study. The evaluation of the portal software packages did not result in the identification of a recommendation for SFA that would meet all requirements, integrate with the technical environment, or provide the framework for a long-term solution that supports SFA's Target State Vision. Based on these conclusions, the following are recommended to achieve the SFA Portal Strategy:

1. Implement Standard Portal Architecture. SFA can leverage existing infrastructure components to build the foundation for implementing the Portal Strategy. Although there are diverse requirements across all of the Channels, there are also many common services that will be shared across the portal views. Giga states that, "standardizing the portal infrastructure components across sites will help enable separate portal sites to share user information, content, personalization, and security." The following existing and planned architecture components comprise the standard portal architecture:

- IBM HTTP Server (IHS)
- IBM WebSphere Application Server (WAS)
 - Java Servlets
 - Enterprise Java Beans (EJB's)
 - Java Server Pages (JSP's)
- Autonomy (Search)
- InterWoven (Content Management)
- MQSeries (Messaging, Workflow)
- Oracle

2. Establish Library of Reusable "Portlets." By utilizing the standard portal architecture described above, a library of open and reusable "Portlets" will provide SFA with common development components for all views within the Portal. This will result in decreased development and maintenance costs as well as a standard presentation across the views. The following requirements are examples of "Portlets" that can be built into the library:

- Self-Registration
- Logon
- Personalization

- Search
- Calendar
- Feedback Form

3. Evergreen Process in 6-12 Months. Although there are no portal products available today for all SFA requirements, there are indications from our evaluation and industry analysis that products will continue to mature. As the “evergreen” process takes place, there should be considerations for how to best leverage the standard portal architecture and library of “Portlets” described above.

Appendix A – Autonomy/Portal-in-a-Box Evaluation

Autonomy/Portal-in-a-Box

Autonomy, Inc. was founded in March 1996 by Dr. Michael Lynch, an expert in the field of adaptive pattern recognition. Autonomy is a profitable global organization and has demonstrated strong, sustained growth since the launch of the company. Autonomy technology is highly scalable, automatic, language-independent and can be rapidly implemented either as a complete out-of-the-box solution or as an integrated component of an existing software application.

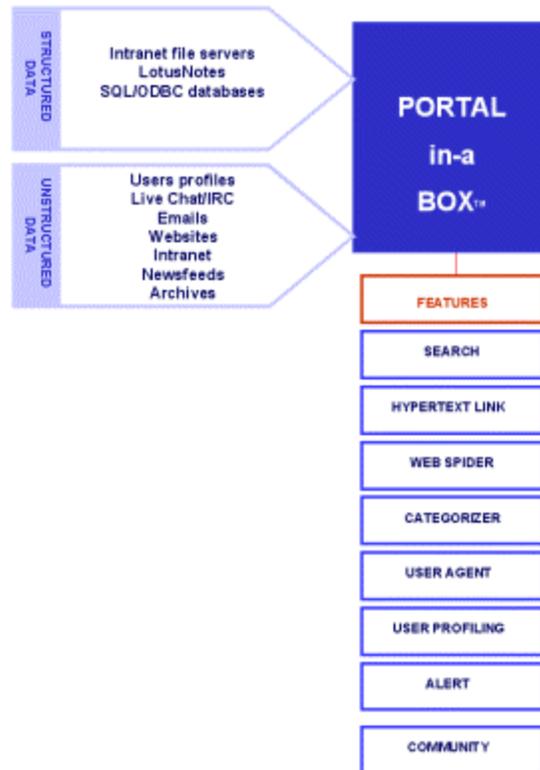
Autonomy's Portal-in-a-Box is a solution that enables online publishers to create and maintain a customized portal site. Core features include the following:

- Aggregating and organizing all internal (Lotus Notes files, word processing documents, emails, presentations) and external (news feeds, websites) information into easy-to-navigate directories.
- Categorization and tagging of all documents, presentations, articles and web pages based on the actual ideas in each piece of text.
- Automating XML tagging by automatically marking data with an XML tag based upon the content of the document.
- Inserting hypertext links to other relevant material on the fly.
- Retrieving relevant information based upon natural language queries.
- Profiling users based on the ideas in the text they read or write.
- Routing and delivering information to those most likely to be interested.

The Gartner Group did not rate Autonomy very well both in terms of vision and ability to execute. There are, however, other features branded as knowledge management that SFA already owns and can utilize immediately. Specifically, the following components within the Knowledge Suite could be used to meet some of the SFA portal requirements:

- Knowledge Server (query, concept indexer, and auto suggest)
- Knowledge Update (multi-threaded spider and agent retraining)
- Community (finding similar agents)
- Alert
- Categorizer (by example and natural language training)
- Knowledge Visualizer

The following illustrates Portal-in-a-box's technical architecture:



In summary, Autonomy’s Portal-in-a-Box fails to meet SFA requirements primarily because its JSP-based version 3.0 did not seem to port all functionality found in its more mature ASP-based version 2.0. Version 3.0 offered very few gadgets that integrate with back-end systems or databases. Collaboration tools are very limited. Finally, the interface did not seem to present an easy-to-navigate, modifiable interface out of the box.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	Autonomy Inc.
Product name, current version	Autonomy Knowledge Suite Version 2.2
List all platforms supported by your product (include specific versions and/or certifications)	NT4, Windows 2000, SUN Solaris, Linux, HP-UX, AIX, True64

Factor	Yes/No and/or Description if applicable
List all databases supported by your product (include specific versions and/or certifications)	All ODBC compliant databases and Oracle 8i.
List all Web servers supported by your product (include specific versions and/or certifications)	IIS version 4 or greater, Apache, iPlanet, IBM WebSphere, Netscape
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Yes, these products can be integrated into the Autonomy Portal interface.
Is your product LDAP-compliant?	Yes
Is your product compatible with Visual Age Java?	Yes
Is your product compatible with Autonomy Server v2.1?	Yes
Is your product compatible with InterWoven TeamSite v4.5?	Yes
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	Yes
Does your product have the capability to handle multiple concurrent on-line self-registrations?	Yes

Factor	Yes/No and/or Description if applicable
List your largest installation base (i.e., number of users)	1,000,000 +
How many concurrent users can all hit the same function at the same time?	Depends how much system resources are available
List all references we may contact where your product has been installed	Bob Wells, DOE – OCRWM Harry Needleman – NASA Goddard Roger Channing – NDU Additional references available
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Further discussion required to determine best way to evaluate Accenture is a partner/reseller of Autonomy
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	Yes
Please provide cost information for license fees, etc. Include GSA rates if applicable.	Accenture has the price list and is entitled to partner pricing SFA is an existing customer, and upgrades are part of their maintenance agreement

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Yes, a third party calendaring system that has these capabilities can be integrated into the Autonomy portal interface.
Does your product have the ability to collect and organize online FAQ's?	Yes

Factor	Yes/No and/or Description if applicable
Does your product have the ability to perform contact profile management?	Yes, a contact management tool can be integrated into the Autonomy portal interface. Also Autonomy can be customized to capture and display contacts.
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes
Does your product have the ability to contain a document repository?	Yes
Does your product have the ability to solicit feedback from customers?	Yes, through some customization of the Autonomy interface to provide a capability to display a form for the user to fill out.
Does your product have the ability to provide publication/subscription services?	Yes
Does your product have the ability to perform status tracking?	Yes through customization
Does your product have the ability to accept online application submissions?	Yes through customization
Does your product have the ability to integrate with 3 rd party tools?	Yes
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes
Does your product have the ability for users to customize the physical layout of portal pages?	Yes
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	Yes
Does your product have the ability to access aggregated data?	Yes

Factor	Yes/No and/or Description if applicable
Does your product have the ability to upload and download reports?	Yes, Autonomy can index existing reports. Autonomy can be integrated with a Report Writer.
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	Yes
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	Yes
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes
Can XML be developed via a rendering tool rather than by a text editor?	Not sure what you mean.
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	Yes, C, COM, JNI, JAVA Classes, HTTP
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes

Factor	Yes/No and/or Description if applicable
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes
Is the application available as close to 24 x 7 x 365 as possible?	Yes
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	Yes
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	Autonomy does load balancing of query requests and indexing request
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.	Yes, to the extent that in the customer environment that there is a single login and password for all external data repositories to be spidered and indexed into Autonomy. Autonomy has security plugins to read the security of the external repository to give document level security.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Yes
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes

Factor	Yes/No and/or Description if applicable
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes, Autonomy uses WML
Does your product's architecture inhibit the integration of future wireless solutions?	No
Is your product highly-configurable in terms of presentation and application integration?	Yes
Does your product have the ability to access additional services from ASP's?	Yes, Autonomy can access ASP services

Appendix B – Brio Evaluation

Brio

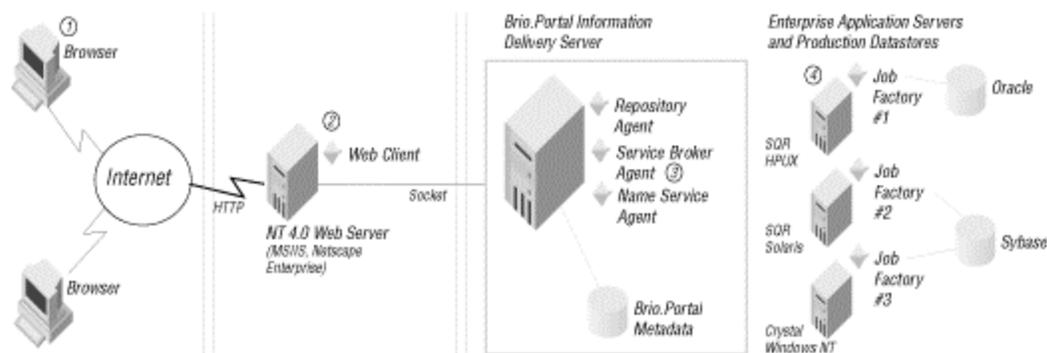
Brio was incorporated in 1989. In August of 1999, Brio completed the acquisition of Scribe Technologies. The acquisition enabled Brio to immediately double the size of its worldwide operations, and the complementary product sets from Brio and SQRIBE were integrated to create the Brio ONE decision-processing platform.

Brio.Portal, Brio's next-generation enterprise information portal, is designed to provide dynamic, self-service access to enterprise information for the broadest range of corporate users. Brio.Portal creates a single point of access to an enterprise's heterogeneous information assets, enabling the organization to create a flexible, secure infrastructure for personalized, self-service access to the wide-range of structured and unstructured information required by corporate information consumers. The components of Brio.Portal are:

- **Brio.Portal Administrator** - This GUI-based management interface enables administrators distributed across the enterprise to easily load content into the Brio.Portal repository; organize and catalog information using dynamically evolving categories; assign privileges to users and groups; assign permissions for content items; and manage life span for repository content.
- **Brio.Portal Services** - Brio.Portal's multi-threaded services can be replicated as required, enabling the product to scale to support hundreds of thousands of users and a virtually unlimited number of information objects. Services include:
 - **Repository** - providing storage management services, this service offers central storage for a variety of information objects: including reports and report output, queries and their results, HTML files, graphics, and executables.
 - **Name Server** - offering a directory lookup service to all other Brio.Portal services, this Brio.Portal service manages user information. Name Server also maintains an inventory of other Brio.Portal services and stores their configuration information.
 - **Job Factory** - responsible for executing Brio.Portal jobs, this service listens for Brio.Portal job requests from Web Client users, manages program execution, and returns results to the requestor. The Job Factory accepts job requests, builds appropriate job control steps (or scripts) to run the job, runs the job, and returns results both to the client user (through the Web Client) and to the repository for future output distribution.

- Service Broker - the primary role of this service is to provide overall session management for Brio.Portal. It sets up and maintains each end-user connection, routes client requests to appropriate services, dynamically load balances between different services, and enhances security.
- Web Client - using servlet technology, this service provides a Web browser user interface for Brio.Portal. A servlet is a Java application server that executes as an extension of the Web server. Users connect to the Brio.Portal system by logging into the Web Client from their Web browsers. Using the Web Client, they can browse and download objects or run executables that reside in the Brio.Portal system.

The following illustrates Brio.Portal's technical architecture:



Neither the Giga Group nor the Gartner Group rated Brio very well both in terms of vision and ability to execute. Giga identifies strengths more in the areas of Reporting and Business Intelligence. Common weakness identified is employee-to-enterprise solutions. Additionally, the Brio products require third party packages to integrate with InterWoven and MQ Series.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	Brio Technology
Product name, current version	Brio Portal 7.0

Factor	Yes/No and/or Description if applicable
List all platforms supported by your product (include specific versions and/or certifications)	NT, Unix, Sun Solaris, HP-UX, AIX
List all databases supported by your product (include specific versions and/or certifications)	Oracle, MS SQL, Informix, DB2, Sybase
List all Web servers supported by your product (include specific versions and/or certifications)	Netscape, IIS, Apache
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Third party packages can be integrated via BrioONE/API. As an open system, Brio.Portal provides many interfaces that allow external applications to interoperate with Brio.Portal components. Third party applications can use the Brio.Portal API or command-line interface to schedule tasks, check information in and out of Brio.Portal and request any possible service.
Is your product LDAP-compliant?	Yes, Brio.Portal utilizes a service agent (the Authentication Agent) that acts as a gateway to centralized access directories and other security rules. Out of the box, the Authentication Agent supports Brio.Portal based security, LDAP directories and NT Domain Services. It comes with a Software Development Kit, so that the existing supported formats can be tailored or so that the Authentication Agent can be used with other security schemas of the customer's choice.
Is your product compatible with Visual Age Java?	Brio Portal is 100% Java.

Factor	Yes/No and/or Description if applicable
<p>Is your product compatible with Autonomy Server v2.1?</p>	<p>Our product can be purchased with an optional Autonomy Knowledge Server. In version 7.0, Brio.Portal offers the option of including the Knowledge Server component. The Knowledge Server provides seamless and transparent access to multiple structured and unstructured sources of information. The incorporation of the Knowledge Server into Brio's umbrella solution provides extensive capability to discover, categorize, and search unstructured data (text, documents, html, etc.) Used in conjunction with Brio's Business Intelligence expertise, the Knowledge Server provides users with a complete picture of the enterprise and its space in the market.</p> <p>The Knowledge server consists of two new services: 1)Crawl Service Agent, 2)Search Service Agent.</p> <p>The Crawl Service Agent crawls and indexes external and internal websites as well as Brio.Portal content. It automatically catalogs content for more relevant end-user searches and categorizes information based on Channel definitions. The Crawl Service Agent can crawl and index pages using cookies behind firewalls and in pages protected by login access.</p> <p>The Search agent provides full-text search capabilities beyond simple keyword searches with concept matching technology and natural language interaction. Users can search by MIME type, within specific URL patterns, and within a specific time period where a document may have been modified. In addition, users can "train" the search agent by entering text phrases or simply attaching existing documents pertaining to their specific need. This added functionality eliminates useless search results and surfaces the most pertinent information in one all-inclusive search.</p>
<p>Is your product compatible with InterWoven TeamSite v4.5?</p>	<p>Third party packages can be integrated via BrioONE/API. As an open system, Brio.Portal provides many interfaces that allow external applications to interoperate with Brio Portal</p>

Factor	Yes/No and/or Description if applicable
	<p>components. Third party applications can use the Brio.Portal API or command-line interface to schedule tasks, check information in and out of Brio.Portal and request any possible service.</p>
<p>Does your product support multiple languages (e.g., Spanish, etc.)?</p>	<p>Yes. Multi-Language support is provided by use of the following variables in the resources.properties file:</p> <ul style="list-style-type: none"> • WSTemplateRoot.string - Points to the directory containing the directories of localized template sets for the locale; • WSProcessedTemplateCharset.string - Identifies the character set that the ONE/WebClient should use for the locale when generating HTML; • WSInputTemplateCharset.string - Identifies the character set in which the templates in the WSTemplateRoot directory (and its subdirectories) are encoded; • WSValidationFile.string - Identifies the localized formValidation.js file for the locale. This file includes forms for dates, phone numbers, postal codes and so on. <p>A locale's language is specified by the ISO 639 standard, which describes valid language codes that can be used to construct a Locale object. A Locale's country identifier is also specified by an ISO standard, ISO 3166, which describes valid upper case two-letter codes for all countries.</p>
<p>Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?</p>	<p>Yes. Password must be 5 characters long. The rules may be configured in Brio ONE/Users.</p>
<p>Does your product have the capability to handle multiple concurrent online self-registrations?</p>	<p>Yes.</p>

Factor	Yes/No and/or Description if applicable
List your largest installation base (i.e., number of users)	NASD – 40,000 users
How many concurrent users can all hit the same function at the same time?	Depends on the hardware.
List all references we may contact where your product has been installed	Hans Krein U.S. dept. of Labor 202-693-4326x158
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Yes.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	Yes.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	GSA Pricing; 100 Users - \$39,949+Maint. \$7227, 500 Users - \$79,899+\$14,455 Maint., 501-1000 Users - \$120 per user + \$22 Maint. 1001-5000 Users - \$96 per user + \$22 Maint. 5001-10000 Users - \$88 per user + \$22 Maint. 10001-15000 Users - \$84 per user + \$22 Maint. 15001-20000 Users - \$81 per user + \$22 Maint. 20001+ Users - \$80 per user + \$22 Maint. Pricing is subject to negotiation based on project

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Not at this time – planned for future release.
Does your product have the ability to collect and organize online FAQ's?	Yes.
Does your product have the ability to perform contact profile management?	No.
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes. Chats and messaging, bulletin boards, etc can be integrated via BrioONE/API. As an open system, Brio.Portal provides many interfaces that allow external applications to interoperate with Brio.Portal components. Third party applications can use the Brio.Portal API or command-line interface to schedule tasks, check information in and out of Brio.Portal and request any possible service.
Does your product have the ability to contain a document repository?	Yes.
Does your product have the ability to solicit feedback from customers?	Yes.
Does your product have the ability to provide publication/subscription services?	Yes. Publication can be done with the BrioONE/Publisher. Much like My-Yahoo!, Individuals can subscribe to reports they find most useful and put them on a personal page. They have the ability to set versions of reports, to embed output into an html frame, to schedule their own reports to run and to set up notifications upon completion. Customers also have the ability to

Factor	Yes/No and/or Description if applicable
	subscribe to their 'favorite' or most important reports by browsing categories of available reports and selecting them to appear on a personal page.
Does your product have the ability to perform status tracking?	Yes.
Does your product have the ability to accept online application submissions?	Yes.
Does your product have the ability to integrate with 3 rd party tools?	Third party packages can be integrated via BrioONE/API. As an open system, Brio.Portal provides many interfaces that allow external applications to interoperate with Brio.Portal components. Third party applications can use the Brio.Portal API or command-line interface to schedule tasks, check information in and out of Brio.Portal and request any possible service.
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes. Brio.Portal's customization capabilities allow users to construct personalized views of the information using Portal.Pages. Portal.Pages combine exception alerts, charts, gauges, syndicated content, and business events into an intuitive and easily customized interface. Brio.Portal dynamically generates the customized page based on a user's security and access control. End-users have point and click control over content and layout through the use of a wizard. Using the wizard, users can further customize their Portal.Pages with regard to styles, colors, and text, creating a web page appearance within the portal. Users are allowed to create

Factor	Yes/No and/or Description if applicable
	<p>and publish multiple portal pages, facilitating content collaboration throughout the organization. Within each Portal.Page, end-users can embed Internet or Intranet content, creating Portal.Objects. Portal.Objects can include syndicated content, external links to content and applications, channels, embedded applications, links to internal content, and so on. In addition, administrators can configure various Portal.Page attributes, such as the number of Portal.Pages that a user can have and the number of Portal.Objects that appear on the default Portal.Page for new users. Administrators can also customize and publish Portal.Pages that specific groups of users can copy for personal use.</p>
<p>Does your product have the ability for users to customize the physical layout of portal pages?</p>	<p>Yes. See above.</p>
<p>Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?</p>	<p>Yes. See above.</p>
<p>Does your product have the ability to access aggregated data?</p>	<p>Yes.</p>
<p>Does your product have the ability to upload and download reports?</p>	<p>Yes.</p>
<p>Are the controls of the interface fully customizable beyond what is provided out-of-the-box?</p>	<p>Yes.</p>
<p>Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?</p>	<p>Yes.</p>

Factor	Yes/No and/or Description if applicable
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes.
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes.
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes.
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes.
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes.
Can XML be developed via a rendering tool rather than by a text editor?	Yes.
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	Portal is 100% Java.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes.
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes.
Is the application available as close to 24 x 7 x 365 as possible?	Yes.
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes. Brio.Portal has been designed as an N-tiered architecture. It consists of multiple service agents, each of which designed to handle specific functions of the portal. Each agent is multithreaded

Factor	Yes/No and/or Description if applicable
	(native threads) and can handle multiple requests simultaneously while utilizing multiprocessor architectures. The agents communicate with all other agents via TCP/IP protocols. This allows the agents to be distributed across multiple machines. Brio.Portal has a flexible N-tier architecture that allows it to grow and scale according to user demand and resource availability. Workload requests can be distributed to like service agents that exist on separate servers.
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	See above.
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	See above.
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.	Users can be created as Super Users or regular users and rights to read, write and execute jobs can be specified.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes. A shared, external authentication can be used by multiple Portal instances.
	Yes. Brio includes full SSL support, as well as firewall and proxy server support

Factor	Yes/No and/or Description if applicable
	to facilitate the secure delivery of controlled reports and analysis over an extranet. In a typical extranet environment, data is inside the firewall and the Web Server is outside the firewall.
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes.
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes.
Does your product's architecture inhibit the integration of future wireless solutions?	No.
Is your product highly-configurable in terms of presentation and application integration?	Yes
Does your product have the ability to access additional services from ASP's?	Yes.

Appendix C - BroadVision Evaluation

BroadVision

BroadVision, founded in 1993 by Dr. Pehong Chen (President, Chairman of the Board, and CEO), develops and delivers an integrated suite of packaged applications for personalized enterprise portals. Global enterprises and government entities use these applications to sell, buy, and exchange information over the web and on wireless devices. The BroadVision e-commerce application suite enables companies to become more competitive and profitable by establishing and sustaining high-yield relationships with customers, suppliers, and employees.

The BroadVision InfoExchange Portal is a ready-to-use application for building powerful enterprise information portals, enabling businesses to reach customers, partners, suppliers, and employees through a single, personalized gateway. It is the only application that allows users to perform sophisticated publishing, access relevant information, perform analysis, manage business processes, and collaborate across organizational boundaries through user-defined web pages. The BroadVision InfoExchange Portal takes full advantage of BroadVision One-To-One Enterprise, the industry's leading e-business platform, and works in conjunction with other BroadVision e-commerce applications and tools to create a unified e-business platform.

The Giga Group rated BroadVision very highly as a CM/KM/Search portal application for 2000. BroadVision also appears as one of Giga's 2002 vertical/specialty applications. BroadVision offers the most capabilities among the products compatible with the SFA environment, but does not integrate with MQSeries without significant customization and does not provide the advanced calendaring functionality required. It is also a potentially expensive solution depending on licensing costs.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	BroadVision, Inc. Headquarters: 585 Broadway Redwood City, CA 94063

Factor	Yes/No and/or Description if applicable
	Local Office: 8201 Greensboro Drive Suite 1000 McLean, VA 22102 (703) 264-9377
Product name, current version	BroadVision Enterprise 5.5 (6.0 in March 2001) BroadVision InfoExchange Portal 5.5
List all platforms supported by your product (include specific versions and/or certifications)	Solaris 2.6, 2.7, 2.8 HPUX 11.0 AIX 4.3.x NT 4.0, 4.5 Windows2000
List all databases supported by your product (include specific versions and/or certifications)	Oracle 8i Informix 7.3 Sybase 11.9 SQLServer DB2 7.1
List all Web servers supported by your product (include specific versions and/or certifications)	Microsoft Internet Explorer 4.0 Netscape 4.1 Apache 1.3.6 Any CGI/Fast-CGI compliant browser
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Our product has been proven to integrate with MQSeries with such customers as GE Supply and Merck-Medco. BroadVision insures that customers are prepared for the future by providing an open, standards-based architecture. Integration and customization can take place in Java, JavaScript, XML, C++, COM, Corba—meaning we support many standards (not just Java) to insure that customers can easily integrate with any technology, such as MQSeries.
Is your product LDAP-compliant?	Yes. Many of our customers integrate with LDAP to provide directory services. This supports authentication services for backend legacy systems so that users may conduct business transactions through the portal.

Factor	Yes/No and/or Description if applicable
Is your product compatible with Visual Age Java?	Yes. BroadVision supports the latest Java standards for integration and customization.
Is your product compatible with Autonomy Server v2.1?	Yes. For example, Autonomy has been integrated with BroadVision for the Department of Navy.
Is your product compatible with InterWoven TeamSite v4.5?	Yes. Interwoven has been integrated with BroadVision at several customer sites, including Xerox and State of California.
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes. Supports multi-byte encoding. Ships in versions for many European and Asian languages. Can handle content in any language.
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	For password management, our customers use a mix of BroadVision capabilities, third party utilities, and local directory (e.g., LDAP) integration. A common BroadVision configuration is to use the local directory or security infrastructure (e.g., LDAP-compliant directory) to confirm the login password; this process eases the integration with backend systems to allow for transactions to be executed from the portal interface. Through these extensions or integrations, SFA can easily make sure that passwords meet their requirements for length, uniqueness, and characteristics.
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes. BroadVision Enterprise is highly parallelized. It is designed to handle huge sites with millions of potential registrants, large numbers of whom hit the site at the same time. Examples of BroadVision-based sites that support concurrent online self registrations are Sears (www.sears.com) and Circuit City (www.circuitcity.com).
List your largest installation base (i.e., number of users)	<p>In terms of number of users accessing the site, one BroadVision customer serves over 5 million pages a day.</p> <p>In terms of number of profiled users that the site stores and accesses, one BroadVision customer has over 25 million profiled users and serves up to 12 million unique visitors a day.</p>

Factor	Yes/No and/or Description if applicable
	(For competitive advantage reasons, customers have asked us not to associate their names with specific numbers unless under nondisclosure.)
How many concurrent users can all hit the same function at the same time?	<p>Conceivably there is no limit. We have a BroadVision customer that has measured over 25,000 concurrent users on their site. We have sized and benchmarked sites to handle over 100,000 concurrent users.</p> <p>The number of concurrent users that can be handled depends to what extent BroadVision Enterprise's scalability features are implemented during deployment, and how the function in question is designed. Sun Microsystems has recently completed an independent study of BroadVision's products, and announced that their testing lab was not able to find an upper bound on BroadVision performance. BroadVision scaled without degradation at a factor of 2X (extremely efficient) to the limits of the supercomputer hardware available at Sun Labs.</p>
List all references we may contact where your product has been installed	<p>BroadVision has over 1200 customers. Instead of listing all referenceable customers, we have listed for reference purposes those customers that we feel would be of most benefit to SFA in its review of portal technologies. These customers are either in the financial or government domain, have similar technology platforms and issues, and/or involve the same technology or integrator partners. We have indicated after each customer name some of the key similarities to the SFA.</p> <p><u>Citibank</u> (relationship to SFA: financial domain): www.citibankonline.com is Citibank's BroadVision-based consumer financial portal. The site went live in 4Q00. Citibankonline.com provides personalized products, financial services, information, and financial planning tools. Citibank estimates the number of users in 2000 year to reach 500,000 and forecasts 2,000,000 users by the end of 2001. They also plan a global rollout of smaller sites to over 25 different countries.</p>

Factor	Yes/No and/or Description if applicable
	<p><u>Adhesion Technologies</u> (relationship to SFA: financial domain): Adhesion is a spin-off of First Union National Bank and a jointly owned venture between First Union and one other very large financial institution. They are building a large financial services/shopping/news portal based on BroadVision to provide integrated shopping, small business portal capabilities, news, awards, etc. Adhesion required an extremely scalable architecture to support millions of users and an open environment to integrate with many back end systems. www.shopfirst.com, the initial branded portal site for Adhesion, launched September 18, 2000. This personalized shopping site will be offered as a value-added service to the firstunion.com in addition to other financial institutions. The business model is to build and provide custom financial portals for large banking institutions, along with hosting and maintaining these portals. The plan is to use BroadVision's InfoExchange Portal to enable private client portals.</p> <p><u>General Services Administration</u> (relationship to SFA: government agency): GSA is using BroadVision on two different projects: GSA's internet site, www.gsa.gov, which provides personalized services to increase customer share, retention, and perceived value; and, GSA Advantage!, www.gsaadvantage.gov, a personalized online ordering system that allows agencies to search through all GSA sources of supply based on their profile (e.g., agency, business community) and select the item that is the best value for their requirements. GSA will initially deploy to 80,000 government buyers.</p> <p><u>U.S. Postal Service</u> (relationship to SFA: government agency; Accenture/BroadVision partnership; Interwoven integration): USPS has two projects based on BroadVision: their award-winning internet site, www.usps.com, which went live in March 2000 and also contains a BroadVision-based online Postal Store to sell stamps and philatelic supplies; and their intranet site, USPS online, whose goal is to reduce costs through keeping their 800,000 employees better informed</p>

Factor	Yes/No and/or Description if applicable
	<p>provide a full range of "self services", reduce administrative tasks, and provide access to legacy systems based on individual entitlements. The BroadVision-based intranet will provide a personalized interface to each employee based on such characteristics as their role, level, and geographical region. Accenture and BroadVision are partners at U.S. Postal Service.</p> <p><u>Xerox.</u> (relationship to SFA: <i>Interwoven integration, multiple language support</i>): In a recent press release (January 2001), Xerox announced that the new www.xerox.com site offers more personalization, easier navigation and e-commerce capabilities, increased speed, higher reliability and improved customization. Xerox.com also includes an online store that offers businesses and consumers an easy way to purchase more than 1000 equipment, supplies and software products directly from Xerox. The new BroadVision-powered site provides several benefits to customers, including a reduced order to fulfillment time, self-service customer order tracking, customized supplies catalogs, password-protected access and targeted language capabilities.</p> <p><u>Frost National Bank</u> (relationship to SFA: <i>financial domain, HP platform and IBM mainframe integration</i>): Frost is a regional bank concentrating on superb customer service and personalization to its users. Based on HP hardware, their site (www.frostbank.com) includes backend integration to their IBM mainframe and checking services.</p> <p>Once SFA is ready to contact these customers, please let Mary Eward (703-264-9377) know and she will provide the necessary contact information.</p> <p>If SFA would still like a comprehensive list of all of BroadVision's referenceable customers, please let Mary Eward know.</p>

Factor	Yes/No and/or Description if applicable
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Yes.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	Yes.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	<p>BroadVision pricing is based on two categories: Development and Deployment.</p> <p>Development licenses are based on a traditional named user basis and include the Command Center for personalization / business rule creation, the Design Center (which is based on Macromedia's Dreamweaver) for developing the look-and-feel of the site, and One-To-One Publishing, for creation and publication of XML-based content to web and wireless devices.</p> <p>Deployment licensing is based on user profiles and follows a sliding scale. This scale starts at \$9 per profile and goes down to \$.08 per profile, based on number of profiles being purchased. These are one-time licensing fees, and may be bought on an as-needed basis, or in bulk to take advantage of economies of scale.</p> <p>A more specific ROM of the total license cost would be available upon further investigation of SFA needs.</p> <p>BroadVision products, training, and services are available through a GSA schedule.</p>

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Yes. BroadVision's InfoExchange Portal provides portlets for Microsoft Outlook and Lotus Notes among other things. The applications are channeled to the browser while remaining 100% server side. The calendars in these products are capable of the functions required. Other calendaring functions can be provided if desired, including custom calendars.
Does your product have the ability to collect and organize online FAQ's?	Yes. BroadVision's InfoExchange Portal contains out-of-the-box functionality that will provide SFA with the ability to collect and organize online FAQ's.
Does your product have the ability to perform contact profile management?	Yes. BroadVision's InfoExchange Portal provides a "lead management" application out of the box whereby contact profile management is combined with workflow management. Profile management is a strong basic feature of BroadVision products.
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes. Online communications supported out of the box include online task groups, meetings, threaded discussions, document sharing, announcements, alerts, notifications, work-flow, case-management, and more. We provide interfaces to 3 rd party products for live chats, whiteboarding, and e-mail.
Does your product have the ability to contain a document repository?	Yes. BroadVision repositories can handle documents, images, video, audio, other binary objects, and XML tagged elements.

Factor	Yes/No and/or Description if applicable
	BroadVision has the industry's leading XML repository technology for storing, managing, and publishing XML-tagged information. This repository can take XML-tagged information from any source.
Does your product have the ability to solicit feedback from customers?	Yes. BroadVision has multiple ways to solicit feedback from customers, including e-mail, integration to 3 rd party CRM systems (e.g., call center integration), customer feedback forms and pages, and discussion threads.
Does your product have the ability to provide publication/subscription services?	Yes. These capabilities are out of the box with BroadVision Information Exchange Portal.
Does your product have the ability to perform status tracking?	<p>Yes. Out-of-the-box capabilities within BroadVision's InfoExchange Portal provide SFA with the ability to track status of action items, discussion threads, customer input, etc.</p> <p>The BroadVision Enterprise product also has status tracking as a core piece of its functionality. This capability will allow SFA to track the status of each piece of content displayed on its web site, including such things as hit rate, affinity with other content items, how long users stay on that page – this capability is flexible and extensively implemented within BroadVision.</p>

Factor	Yes/No and/or Description if applicable
Does your product have the ability to accept online application submissions?	Yes. BroadVision allows for the submission of applications either through online form-based input or upload of a document with the application information.
Does your product have the ability to integrate with 3 rd party tools?	<p>Yes. BroadVision technology was designed to be open and to adhere to open standards. BroadVision has a completely open, published environment, based on multiple standards—COM, Java, XML, Corba, etc.—so that customers can choose the best technology for the integration.</p> <p>We have over 65 partner integrations with a wide variety of technologies.</p>
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	<p>Yes. BroadVision was originally designed to handle personalization back in 1993, the first company to do so, and remains the leader in this field. BroadVision supplies over a dozen distinct means of personalization of which Home Page personalization (mentioned here) is only one.</p> <p>Specifically, BroadVision’s InfoExchange Portal allows users to customize what content appears on their home page. They can select what they want on their home page from the list of content items that they are entitled to see.</p> <p>These content items can contain: <i>Structured information</i>, which includes personalized access to legacy and ERP systems as well as access to business</p>

Factor	Yes/No and/or Description if applicable
	<p>intelligence systems such as data warehouses, OLAP and data mining applications.</p> <p><i>Unstructured information</i>, which includes personalized access to both internal information and external data sources. Internal information includes content such as business documents, which can be used by employees, customers, and partners. External data sources include syndicated or free content such as news feeds, stock tickers, calendars, or business information from content aggregators.</p>
<p>Does your product have the ability for users to customize the physical layout of portal pages?</p>	<p>Yes, this is another aspect of Home Page personalization. BroadVision's InfoExchange Portal provides configurable home pages, allowing users to tailor the physical layout of their own home page, based on their specific interests, needs, and style of work. It supports ready-to-use configurable home pages unique for each of SFA's employees, customers, and partners.</p>
<p>Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?</p>	<p>Yes. This is fundamental to BroadVision's principle of personalized self-service ebusiness applications. SFA can define what types of profile information they want to keep on known and anonymous users and can use this information to personalize every page view that is displayed. BroadVision's profiling capability is extensively configurable.</p>

Factor	Yes/No and/or Description if applicable
Does your product have the ability to access aggregated data?	<p>Yes. BroadVision can access and display content from any source on web or wireless devices, including aggregated data sources.</p> <p>In addition, the BroadVision Analytics application can access, analyze, forecast, and report on BroadVision site data (e.g., number of hits, duration on site) as well as other aggregated data as determined by SFA.</p>
Does your product have the ability to upload and download reports?	Yes.
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	<p>Yes. Designers have the ability to implement any controls design they want. BroadVision supplies a special version of MacroMedia DreamWeaver 3 for interface design. It is used to design the web page templates and can be used to implement any controls desirable. The design may also allow users to select their own controls.</p>
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	<p>Yes. This would be developed with DreamWeaver (or other design tools) for the user to use or choose from. A number of these controls are standard with BroadVision's InfoExchange Portal application.</p>
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	<p>Yes. The entire user experience is through a browser, and what the browser displays is personalized to that user. Therefore, any "interface" (web page) can be tailored for what is required, including the layout for user selections.</p>

Factor	Yes/No and/or Description if applicable
<p>Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?</p>	<p>Yes. This is a frequent use for our customers. For example, www.shockwave.com is a BroadVision-based site showing 3rd party advertisement and www.officemax.com and www.cellmania.com are BroadVision-based sites showing custom, internal campaigns.</p>
<p>Is the physical layout of the portal application and all portal pages within are fully customizable?</p>	<p>Yes. SFA will have complete control over the physical layout, look-and-feel, content display, and navigation of the application. In fact, from one infrastructure, SFA can have a different layout for different users based on their identify (e.g., school, student, financial institution, employee).</p>
<p>Can the Portal application be defined using XML and XSL style sheets for presentation?</p>	<p>Yes. BroadVision has the industry's leading XML/XSL technology.</p> <p>BroadVision has an XML repository, based on Oracle 8i, that will allow SFA to create, manage, and store XML-tagged documents down to the element level, giving SFA complete flexibility and control for managing and reusing individual components.</p> <p>BroadVision also provides a visual editing tool for designing XSL style sheets. This tool is integrated with the XML repository and will allow SFA to target multiple devices from the same central source of information. For example, if SFA wants to display loan status to a student on a web browser, the full details of the loan would be shown</p>

Factor	Yes/No and/or Description if applicable
	<p>in a nice graphical layout (e.g., loan number, last payment, next payment, loan balance); however, for a PDA or cell phone, BroadVision would style the information appropriately, showing only the minimal amount of information (e.g., loan number, loan balance).</p>
<p>Where possible, can application modifications be accomplished via changes to style rather than code?</p>	<p>Yes. BroadVision was founded on the principle of maintaining the business rather than maintaining the software. For example, BroadVision includes support for XSL to handle styling of the same information for multiple devices (e.g., PDA, Section 508 devices) as mentioned above.</p> <p>In addition, BroadVision's Command Center tool allows complete control of what content is displayed on the site using wizard tools. The changes can be made at run-time without requiring the system to be taken down.</p>
<p>Can XML be developed via a rendering tool rather than by a text editor?</p>	<p>Yes. BroadVision provides transparent plugins for Microsoft Office tools, including Word and Excel. For example, a drop-down menu from MS Word allows the author to validate the document against an XML DTD, export the document as XML, and check the XML-tagged document into the repository. Authors do not need to know anything about XML in order to use it; they are simply entering content into a tool that they already know.</p>

Factor	Yes/No and/or Description if applicable
	The XML document can also be round-tripped back into MS Word for editing. WordPerfect does its own rendering and is also compatible with BroadVision's XML repository.
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	Yes. Portal components can be created in COM, C++, CORBA, Java, as well as in Java Beans, Javascript, and JSP.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes. BroadVision runs on CORBA and is a J2EE platform developed and certified by Sun. BroadVision also provides full source code to an extensive C++ API and object library, and with version 6.0, to a Java object library as well.
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes. With over 1200 customers, BroadVision has had the opportunity to develop an extensive list of portal objects and applications for every conceivable situation. Some are in the form of CORBA servers, others are portlets such as news feeds, calendars, spreadsheets, and e-mail, others are information channels, document sharing applications, Java and C++ objects, and so on.
Is the application available as close to 24 x 7 x 365 as possible?	Yes. In addition to the usual means of accomplishing 24x7x365, BroadVision provides request brokering, high scalability, function redundancy, selective drain, clustering, and Quality of Service. Specific points to make in this area include: BroadVision is extremely scalable making overloads much less probable. BroadVision has multiple session-

Factor	Yes/No and/or Description if applicable
	<p>brokering layers between its processing tiers. This allows session requests to be routed to servers that are alive and well and able to handle the traffic; servers scale with demand (above). Zero maintenance downtime is possible with the BroadVision architecture. Selective drain allows a single chassis to be drained down for maintenance without perturbing the other physical servers or the site. Once serviced, it can be reactivated while the next is drained. BroadVision servers can be clustered so that they share user sessions adding to redundancy. Quality of Service software ensures that those users that need it will always have a session, and that Denial of Service attacks have less ability to impact the site.</p> <p>Hardware redundancy, data replication and mirroring, and automated backup are also part of the picture. If the site design is good, there is no reason for a BroadVision powered site to go down ever for any reason.</p>
<p>It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?</p>	<p>Yes. Aside from hardware, operating system, and database redundancy, BroadVision's high degree of scalability and its brokered architecture result in very high availability. Customers report that the only downtime they have experienced with BroadVision is scheduled downtime, and even that is unnecessary with selective drain.</p>

Factor	Yes/No and/or Description if applicable
<p>Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?</p>	<p>BroadVision's architecture is flexible enough to allow SFA to extend across multiple servers and/or system implementations across the enterprise. Sun Microsystems has independently benchmarked BroadVision's architecture to be linearly scalable, so that any load can be conceivably handled.</p> <p>The site can also be partitioned, if desired, into multiple "services" across the enterprise, though this is a design issue that has more to do with an organization's mission than it does with the load.</p>
<p>Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?</p>	<p>Yes. HTTP service, session initiation, session service, pageviews (presentation), business logic, application processing, data access, and back-end connectivity are all load-balance-able.</p>
<p>What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.</p>	<p>BroadVision supports account/password, digital authentication, strong role typing, 128-bit encryption (license from RSA Bsafe MD5 and RC2 technologies binary embedded), unlimited precision encrypted URL encoding, LDAP (single login), and personalization/entitlements. Roles can be established and managed for any conceivable requirement. Security roles can have passwords and traffic secured at 128-bits. Actively managed entitlement profiles ensure that anyone only gets to see (or even to know about) what they are entitled to.</p>

Factor	Yes/No and/or Description if applicable
	BroadVision also does not require cookies to be placed on the client, though that is an option that SFA may implement. All BroadVision functionality is done solely on the server side without the need for the security issues associated with cookies.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes. BroadVision provides for securely partitioning a single physical site into multiple web portals, and within each portal, multiple independent services. For example, a single physical server can host a web portal for schools, students, financial institutions, and employees. Each portal in turn can be partitioned into intranet, extranet, and Public internet physical services. Built-in security mechanisms keep each of these separate, distinct, and inviolable.
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Yes.
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes. BroadVision is partnered with many ISPs and ASPs and can provide partner and customer lists on request.
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes. BroadVision has been shipping a comprehensive multiple-touchpoint solution for over two years. Many of our customers (e.g., CellMania) have already been deploying to wireless as well as web devices. BroadVision provides support for XML and XSL, to allow for the styling of content to whatever device that SFA wants to target. This way the content is

Factor	Yes/No and/or Description if applicable
	<p>rendered and stored once and then reused for any device.</p> <p>BroadVision has taken a leading position in wireless technology, participating in the definition of and implementation of wireless presentation standards. In addition, BroadVision has pioneering partnerships with Ericsson and with NTT for wireless pre-loads.</p>
<p>Does your product's architecture inhibit the integration of future wireless solutions?</p>	<p>No. We are shipping a full wireless solution today. We have membership on the appropriate international standards committees and a division focused on wireless applications.</p>
<p>Is your product highly-configurable in terms of presentation and application integration?</p>	<p>Yes. For example, we bundle BEA-WebLogic Application Server and i2 supply chain. Our customers have integrated BroadVision with IBM's WebSphere, IBM's MQSeries and other EAI technologies for application integration, and MS desktop tools for an integrated presentation. None of them are necessary for a BroadVision site, but can be integrated if desired.</p>
<p>Does your product have the ability to access additional services from ASP's?</p>	<p>Yes. The standards and open architecture supported by BroadVision, as discussed above, will support access from a BroadVision site to other ASP services.</p>

Appendix D – Corechange Evaluation

Corechange

Corechange develops an e-business access framework that empowers enterprises to take a giant leap into the New Economy by quickly implementing their e-business strategies. Their Coreport™ product is designed to meet the ever-growing demands of e-business by creating a single personalized user interface enabling role-based access to any kind of data (e.g. legacy) through one password. The product gathers all relevant information into a single framework and distributes business information based on the roles and needs of each end-user. This quick and efficient interaction among clients, partners and employees results in higher productivity, and increased e-business opportunities in a shortened time to market, thereby generating a very rapid return on investments (ROI).

The Gartner Group did not rate Corechange very well both in terms of vision and ability to execute. Similarly, Giga grouped their product under the category of CM/KM/Search without demonstrating substantial capabilities in Collaboration, Information Aggregation, or Business Intelligence. Additionally, Corechange does not appear on Giga's mapping of enterprise portal market segment predictions for 2002 indicating that SFA should be cautious with proceeding with this option. The Meta Group and Delphi Group, however, had more favorable reviews about the Corechange approach and framework. Primary weaknesses cited include employee-to-enterprise tools and a limited operating history. Key features include the following:

- Powerful integrated search and organization tools
- Unique legacy applications and data formats
- Wireless access
- User-specific information access based on a user's role in the enterprise
- Pre-built layout templates
- Secure, single sign-on components

In summary, the Corechange portal fails to meet SFA requirements because it has not proven to scale to more than 20,000 users. In addition, Corechange currently does not have a set of connectors integrating with MQ-Series.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	Corechange
Product name, current version	Coreport 3g
List all platforms supported by your product (include specific versions and/or certifications)	Windows NT SP5, Windows 2000, Linux, Sun Solaris 2.7/2.8 and others.
List all databases supported by your product (include specific versions and/or certifications)	SQL 6.5/7.0/2000, Oracle 8/8i, DB2. The need for a database is to store profiles and this can also be accomplished through LDAP, Active Directory, I-Planet and others.
List all Web servers supported by your product (include specific versions and/or certifications)	BEA Weblogic, Websphere, IIS, Apache, and numerous other Unix environments.
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	If the MQ Series of products have a web view (Can be seen in a browser), then we are compatible with them.
Is your product LDAP-compliant?	Yes
Is your product compatible with Visual Age Java?	Yes
Is your product compatible with Autonomy Server v2.1?	Yes and certain integrated functionality is already included out-of-the-box
Is your product compatible with InterWoven TeamSite v4.5?	Yes
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes, we support Unicode and double bytes. Currently, we support English, Swedish, Japanese, and Chinese.

Factor	Yes/No and/or Description if applicable
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	Yes, our Single Sign On (SSO) can be customized to require minimum length, expiration, can't use same password, etc.
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes
List your largest installation base (i.e., number of users)	20,000 plus
How many concurrent users can all hit the same function at the same time?	Based on our tests, it takes less than 3 seconds for each user logon with 50 concurrent users accessing the same quad CPU 200Mhz server. Servers can be easily scaled and load balanced to allow for the clustering of multiple servers in conjunction with Internet server farms
List all references we may contact where your product has been installed	Will be provided separately. Customers include EMC, Capital One, AB AMRO, CSFB
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Yes
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	Yes
Please provide cost information for license fees, etc. Include GSA rates if applicable.	We have named user pricing and server pricing dependent on application. Currently on NIH and within a few weeks GSA

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Our product acts as a framework and is compatible with any web-enabled calendar product. The ability to personalize the calendar will depend on the product chosen
Does your product have the ability to collect and organize online FAQ's?	Our integrated product, Autonomy, allows you to gather FAQ's in a repository and then search the repository with a natural language search engine
Does your product have the ability to perform contact profile management?	That functionality is included in applications such as ACT or MS Outlook and we are fully compatible with them.
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes
Does your product have the ability to contain a document repository?	Yes
Does your product have the ability to solicit feedback from customers?	Yes
Does your product have the ability to provide publication/subscription services?	Yes
Does your product have the ability to perform status tracking?	It depends on the term "status tracking". If it means document tracking, through our partner Documentum, full document management application integration is available
Does your product have the ability to accept online application submissions?	Yes
Does your product have the ability to integrate with 3 rd party tools?	Yes

Factor	Yes/No and/or Description if applicable
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes, one of the differentiators of Coreport is the ability to offer a very wide range of customizable features to the end user including choosing the content and display features out-of-the-box
Does your product have the ability for users to customize the physical layout of portal pages?	Yes
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	No, but third party software that has this data mining ability can be simply plugged into our framework
Does your product have the ability to access aggregated data?	Yes
Does your product have the ability to upload and download reports?	Yes
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	We use cascading style sheets to display information within the portal. These can be easily customized.
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	Yes, and are customizable out-of-the-box
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	All user customizability is already provided out-of-the-box
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes and we provide our own banner stream to deliver info to users based on their role
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes

Factor	Yes/No and/or Description if applicable
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes
Can XML be developed via a rendering tool rather than by a text editor?	Yes
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	We use ASP and JSP to develop our Coreport Connectors. The end user can even develop most Connectors by using a simple wizard.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes, we offer a full set of APIs to facilitate custom development
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes. In most cases, knowledge of ASP or JSP will allow an administrator to customize a Connector however they wish.
Is the application available as close to 24 x 7 x 365 as possible?	Yes, if there is failure in one application or server, only that Connector will fail. The portal will still load the rest of the Connectors.
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes, we use NT replication to allow for fault tolerance and can accommodate mirrored databases
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	Yes, our strength is superior flexibility and scalability. We base our server load capacity on 5,000 users per quad cpu server. We can expand our architecture in both multiple servers per box and multiple boxes
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	Yes

Factor	Yes/No and/or Description if applicable
<p>What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.</p>	<p>By default, Coreport uses our own proprietary Bridge authentication, but we also fully support NT, LDAP, and NDS authentications. For security we can incorporate biometrics, certificates, smart cards and others. Our SSO is role-based and can be configured to block users from knowing the password to the applications to which they are logging in. All passwords are Triple DES encoded. In addition, users can only see the applications to which they have authority to view based on their role in the organization.</p>
<p>Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?</p>	<p>Application security is based on the existing applications involved. Coreport does not interfere with security protocols used.</p>
<p>Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?</p>	<p>As mentioned above, we support any security algorithm desired, which includes SSL v3.0.</p>
<p>Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?</p>	<p>Yes. We seamlessly connect to a myriad of 3rd party hosting services</p>
<p>Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?</p>	<p>We support the following wireless standards: WML 1.1+ and HTML 3.2. This covers Palm, WAP phones, PocketPCs, Imode phones, RIM devices, and wireless laptops. Our software does not depend on carrier. Style sheets can be made to handle any new browser developed for wireless devices in the future.</p>

Factor	Yes/No and/or Description if applicable
Does your product's architecture inhibit the integration of future wireless solutions?	Through the use of style sheet templates, support for new wireless devices can be added seamlessly.
Is your product highly-configurable in terms of presentation and application integration?	Coreport 3g is very flexible, scalable, and customizable.
Does your product have the ability to access additional services from ASP's?	Yes. We have integrated with ASP's like Citrix in the past

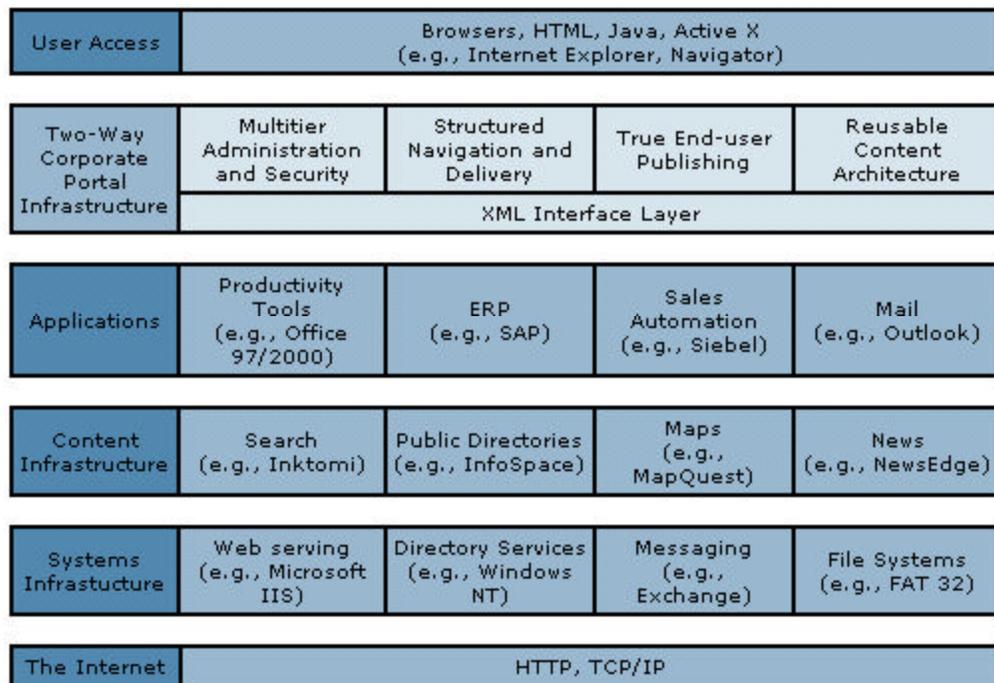
Appendix E – DataChannel Evaluation

DataChannel

DataChannel was founded in 1996 by Dave Pool and Tim Gelinis - the team behind Internet In A Box and Mosaic In A Box. The company co-developed the Java versions of the XML technology in Microsoft Windows NT 5, Microsoft Office 2000, and Microsoft Internet Explorer 5. In 1998, DataChannel added a Professional Services operation in 1998 to answer customers' requests for help in using XML to bridge their data warehouse, database, report distribution, knowledge management, and ERP capabilities. In 1999, DataChannel expanded their professional services offering through the acquisition of ISOGEN International Corp., a leading XML and SGML service provider in the structured information market. DataChannel is considered one of the largest XML-based EIP solutions company in the marketplace.

While the Gartner Group places DataChannel in the middle of the pack for their vision, it lists them near the bottom in terms of their ability to execute. Giga includes them in their 2000 enterprise portal market segment as a player in the portal infrastructure space with its strong XML capabilities. However, DataChannel falls off the 2002 chart indicating that SFA should be cautious with proceeding with this option.

The following illustrates DataChannel's technical architecture:



In summary, Datachannel’s product is a solid portal application, but in conversations with Datachannel staff, Datachannel felt the product is better suited for a smaller user base, preferably a base similar to the SFA employee population. Datachannel made no mention of large-scale references for its product. Additionally, license costs are prohibitive for its use for any of the populations the SFA Portal seeks to assist.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	DataChannel
Product name, current version	DataChannel Server 4.1 (DCS)
List all platforms supported by your product (include specific versions and/or certifications)	DCS is certified for the Windows NT / Windows 2000 and Sun Solaris server platforms.
List all databases supported by your product (include specific versions and/or certifications)	DCS supports both Microsoft SQL and Oracle as databases within the system.
List all Web servers supported by your product (include specific versions and/or certifications)	DCS supports Windows NT—Microsoft Internet Information Server (IIS) and Apache Web Server—and UNIX—Apache Server and iPlanet Web Server.
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Yes, it is compatible and can be integrated with MQ Series.
Is your product LDAP-compliant?	Yes.
Is your product compatible with Visual Age Java?	Yes.
Is your product compatible with Autonomy Server v2.1?	Yes, DCS has an open architecture. Although DCS has the Convera search engine included, it can be detached and another plugged-in.

Factor	Yes/No and/or Description if applicable
Is your product compatible with InterWoven TeamSite v4.5?	Yes.
Does your product support multiple languages (e.g., Spanish, etc.)?	The current version of DataChannel Server has been translated into Spanish and German for specific customer engagements. Our upcoming product release provides broad language support.
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	Yes.
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes.
List your largest installation base (i.e., number of users).	<p>DCS will support thousands of concurrent users. Generally, the number of concurrent users supported depends on 1) the actual activity level of the hosted users and 2) the server hardware that is deployed. (e.g., a Solaris based server with multiple CPUs will support more users than a single CPU NT server.)</p> <p>To specify the number of concurrent users supported by a configuration, your DataChannel team needs the following information 1) the type of host hardware and number of CPUs, and 2) the typical usage pattern for a user of the central extranet (number of page accesses per second). Given this information, DataChannel could work with you to provide an estimate of the number of users that can be supported.</p>

Factor	Yes/No and/or Description if applicable
<p>How many concurrent users can all hit the same function at the same time?</p>	<p>DataChannel Server will support thousands of concurrent users. Generally, the number of concurrent users supported depends on (1) the actual activity level of the hosted users and (2) the server hardware that is deployed.</p> <p>To specify the number of concurrent users supported by a configuration, your DataChannel team needs the following information: The type of host hardware and number of CPUs The typical usage pattern for a user of the central extranet (number of page accesses per second)</p> <p>Given this information, DataChannel would work with you to provide an estimate of the number of users that can be supported.</p> <p>For an average installation, DataChannel supports 85 to 100 concurrent users per processor. A concurrent user is defined as an active, authenticated user who performs at least one click every 10 seconds.</p>
<p>List all references we may contact where your product has been installed</p>	<p>DataChannel Server is the enterprise portal of choice for many large Fortune 500 accounts. Some of those accounts, once fully deployed, will be using the DataChannel Server to give hundreds of thousands of employees access to the information and applications that are vital for them to do their jobs more effectively. Since it is DataChannel's intent that we achieve 100 percent referencability within our client base, we would be happy to arrange a meeting or conference call with one or more of our large accounts. It is important to note, of course, that some of our large accounts do not wish to be a reference at all, or will only accept reference calls or visits once the EIP is fully deployed.</p> <p>As a courtesy to the client(s) and to ensure that your goals for the call are met, DataChannel would give the client some advance notice of the call and also provide to the client(s) some advance information as to the nature of the question that you will be asking so the client can prepare more detailed responses to those questions.</p>

Factor	Yes/No and/or Description if applicable
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Pilot evaluations are possible, but require defined requirements and properly designed plan. Additionally, DataChannel policy requires engagement costs be covered by customer.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	DataChannel can provide resources for integration, testing, and compatibility evaluation, but DataChannel policy requires engagement costs be covered by customer.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	<p>DataChannel Server pricing consists of three components. The first is a one-time basic software license fee of \$50,000; it is a flat fee and is not tied to number of servers, CPUs, users, etc. The second component is based on an Authenticated User model (i.e., a per-user license fee is charged for each user that logs onto and is authenticated by DCS at any time, regardless of frequency or timing). Volume discounts apply based on number of users licensed. For example, the list price for 20,000 users is \$1,800,000. The third is an optional Internet Connector component for customers who require extranet access for anonymous users. Pricing is subscription-based and will be negotiated.</p> <p>Annually renewable Maintenance and Support Agreements are available at three levels of support. The Silver Support plan costs 18 percent of total list license price. The Gold Support plan is available at a price equal to 25 percent of total list license price. Pricing for the Platinum Support plan is negotiated.</p>

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Yes.
Does your product have the ability to collect and organize online FAQ's?	Yes.

Factor	Yes/No and/or Description if applicable
Does your product have the ability to perform contact profile management?	Yes, it can integrate with a contact profile management application.
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes.
Does your product have the ability to contain a document repository?	Yes.
Does your product have the ability to solicit feedback from customers?	Yes.
Does your product have the ability to provide publication/subscription services?	Yes.
Does your product have the ability to perform status tracking?	Yes.
Does your product have the ability to accept online application submissions?	Yes.
Does your product have the ability to integrate with 3 rd party tools?	Yes.
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes.
Does your product have the ability for users to customize the physical layout of portal pages?	Yes.
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	Yes.
Does your product have the ability to access aggregated data?	Yes.
Does your product have the ability to upload and download reports?	Yes.
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	Yes.

Factor	Yes/No and/or Description if applicable
Are the controls (i.e. window resizing) for the various components customizable beyond what is provided out-of-the-box?	Yes.
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes.
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes.
Is the physical layout of the portal application and all portal pages within fully customizable?	Yes.
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes.
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes.
Can XML be developed via a rendering tool rather than by a text editor?	Yes.
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	DCS supports programming interfaces in a number of different areas. For example, the presentation layer can be extended via custom themes through the development and modification of XSL style sheets or JavaScript. DCS application logic can be extended via Java. Finally, access to the portal data access layer is possible through several different programming APIs. These APIs support access via Java.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes.

Factor	Yes/No and/or Description if applicable
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes.
Is the application available as close to 24 x 7 x 365 as possible?	Yes.
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes.
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	Yes.
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	Yes?
<p>What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.</p>	<p>Access to a DataChannel Server-based portal by end users will be through user accounts controlled by a user ID and password. This can be integrated with a single sign-on solution to allow access across application with one sign-in.</p> <p>DCS security features are also used to ensure that portal users are able to access only data and applications for which they have the appropriate permissions. DCS Administration provides the ability to manage access and content rights which can be tightly controlled across roles and individuals.</p> <p>Security can include secure authentication with certificates and encryption, to protect the transfer of confidential information over the Internet.</p>

Factor	Yes/No and/or Description if applicable
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes.
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Yes.
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes.
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes.
Does your product's architecture inhibit the integration of future wireless solutions?	No.
Is your product highly-configurable in terms of presentation and application integration?	Yes.
Does your product have the ability to access additional services from ASP's?	Yes.

Appendix F – IBM/WebSphere Portal Server Evaluation

IBM/WebSphere Portal Server

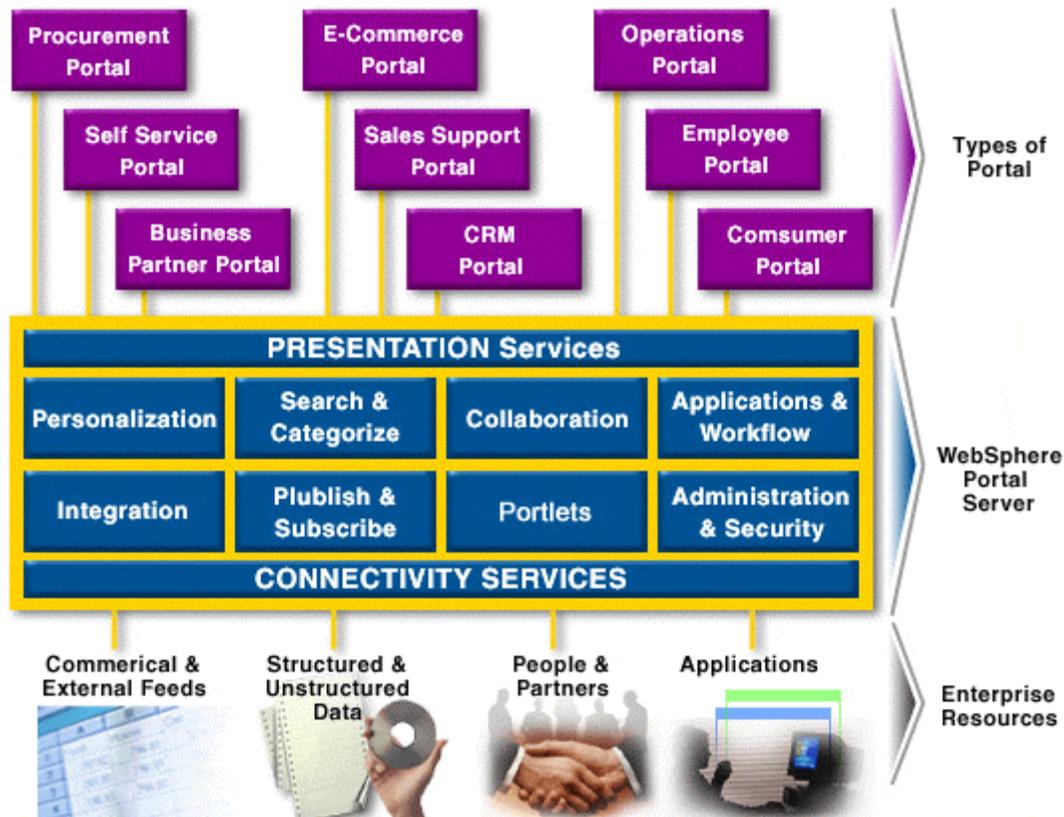
IBM was incorporated in the state of New York on June 15, 1911 as the Computing-Tabulating-Recording Company. Today, IBM is the world's leading information technology company. The WebSphere Application Server and MQSeries are critical components to the existing and planned SFA technical architecture.

Most Industry Analysts agree that the larger infrastructure players, like IBM, will be the major players in the next few years. The Giga Group states that they “are the best positioned to capitalize on their current market position or strengths and continue to compete in the larger portal market.”

WebSphere Portal Server is made up from the intersection of several best of breed products from IBM. Many of the products are integrated into a single cohesive solution that links easily into nearly all computing environments, especially existing web sites and mainframe centers. WebSphere Portal Server is an integrated solution that includes:

- WebSphere Portal Server Framework. Allows you to establish personal home pages for every employee, business partner, and customer as well as serve wireless pervasive devices. The framework architecture is the connection point for attaching applications and services for the end users.
- WebSphere EveryPlace Suite. When remote employees or on the go customers want to connect to the portal with Personal Digital Assistants or cell phones, wireless device support as well as transcoding services can be added.
- WebSphere Application Server, Advanced Edition. The market share leading web application server is actually a family of products that make it easy to build java server pages, write applications, manage performance, data mine portal click streams, and dozens of other vital web services.
- Portlets. The WebSphere Portal server comes with a variety of portlets ready to use. Plus, portlets can be built to add to the portal catalog of functions for end users.
- Tivoli SecureWay LDAP Directory. The SecureWay LDAP directory provides industry standard user authentication for the portal.

The following illustrates the WebSphere Portal Server technical architecture:



The IBM WebSphere Portal Server is a new product that does not currently have a version compatible with the SFA environment. Since it is recognized that this could potentially be the best long-term solution for SFA since it will integrate tightly with other components, offer high scalability, and is being developed by a very stable company, it should be considered moving forward as SFA designs and deploys portal solutions. With this approach, SFA can maximize portal development approaches and standards if the WPS product matures over the next year.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	IBM
Product name, current version	WebSphere Portal Server

Factor	Yes/No and/or Description if applicable
List all platforms supported by your product (include specific versions and/or certifications)	AIX today - SUN, NT Beta end of March. SUN, NT GA estimated for May/June with 1.2
List all databases supported by your product (include specific versions and/or certifications)	DB2, Oracle coming in April
List all Web servers supported by your product (include specific versions and/or certifications)	All web servers supported by WebSphere Application Server Advanced Edition, Apache, Netscape, etc.
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Yes
Is your product LDAP-compliant?	Yes
Is your product compatible with Visual Age Java?	Yes
Is your product compatible with Autonomy Server v2.1?	Yes - the customer can create connector with sample portlet we provide
Is your product compatible with InterWoven TeamSite v4.5?	Yes
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	Yes with TPSM or Policy Director

Factor	Yes/No and/or Description if applicable
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes
List your largest installation base (i.e., number of users)	WebSphere Portal Server is an integration of existing products that are used widely as components but brand new as an integrated package. - USAF for 100k users and Whirlpool are just beginning deployments.
How many concurrent users can all hit the same function at the same time?	Jerry Cuomo numbers in white paper on water.raleigh.ibm.com
List all references we may contact where your product has been installed	None willing to act as reference yet.
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Yes - if customer will invest in education/work with lab as reference.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	IBM provides lab resources from our Raleigh lab on a chargeable basis to do installation, customization - and most important - skills transfer.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	Approx \$40 per user or \$30,000 per CPU at list.

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Yes - with calendar portlet supplied

Factor	Yes/No and/or Description if applicable
Does your product have the ability to collect and organize online FAQ's?	Yes - issues mgt. Portlet supplied
Does your product have the ability to perform contact profile management?	Address book - supplied as part of calendar portlet
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes
Does your product have the ability to contain a document repository?	Yes - Integrated with Content Management or as images in EIP - big stength
Does your product have the ability to solicit feedback from customers?	Yes
Does your product have the ability to provide publication/subscription services?	Yes - integrated with MQSI
Does your product have the ability to perform status tracking?	Do you mean approval of content heading to the web -if so CM such as Interwoven or Vignette does this
Does your product have the ability to accept online application submissions?	Yes - user self service/self care TPSM
Does your product have the ability to integrate with 3 rd party tools?	Yes - such as? Vignette, Interwoven - many, many more.
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes
Does your product have the ability for users to customize the physical layout of portal pages?	Yes
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	Yes - WebSphere Personalization is world class in this area by integrating IBM rules logic with Macromedia association/recommendation engine
Does your product have the ability to access aggregated data?	Yes

Factor	Yes/No and/or Description if applicable
Does your product have the ability to upload and download reports?	WS Portal allows users to open URL and download content - API's may allow integration with Crystal reports - not sure we understand the question.
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	Yes - APIs are open
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	Yes
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes - open and encouraged
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes with personalization will provide full campaign mgt -start stop, thresholds etc.
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes
Where possible, can application modifications be accomplished via changes to style rather than code?	Can use Interwoven templets to define styles - templates define presentation.
Can XML be developed via a rendering tool rather than by a text editor?	Can use any XML tool you want - Yes via browser
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	WPS is Java based. C++, CORBA logic can be executed on WSEE and returned to WPS.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes - the IBM strength is the API layer

Factor	Yes/No and/or Description if applicable
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes - Java servlets, beans
Is the application available as close to 24 x 7 x 365 as possible?	Yes - WebSphere strength
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes - redundany, failover built in Edge Server ships with.
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	Yes
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	Yes
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.	Yes - User and role, Internet access and Intranet can be differentiated Encryption - HTTPS 128 bit Yes - single sign-on Yes to security groups Menus are portlets which are assigned based on roles.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Policy Director can support many different portals - more than 1 portal can be hosted on one machine - lab did not recommend doing this.
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Yes

Factor	Yes/No and/or Description if applicable
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes - WPS is a WAP/WML based portal. This is big advantage to using WPS.
Does your product's architecture inhibit the integration of future wireless solutions?	No
Is your product highly-configurable in terms of presentation and application integration?	Yes
Does your product have the ability to access additional services from ASP's?	Yes - Rich Site services and via portlet APIs

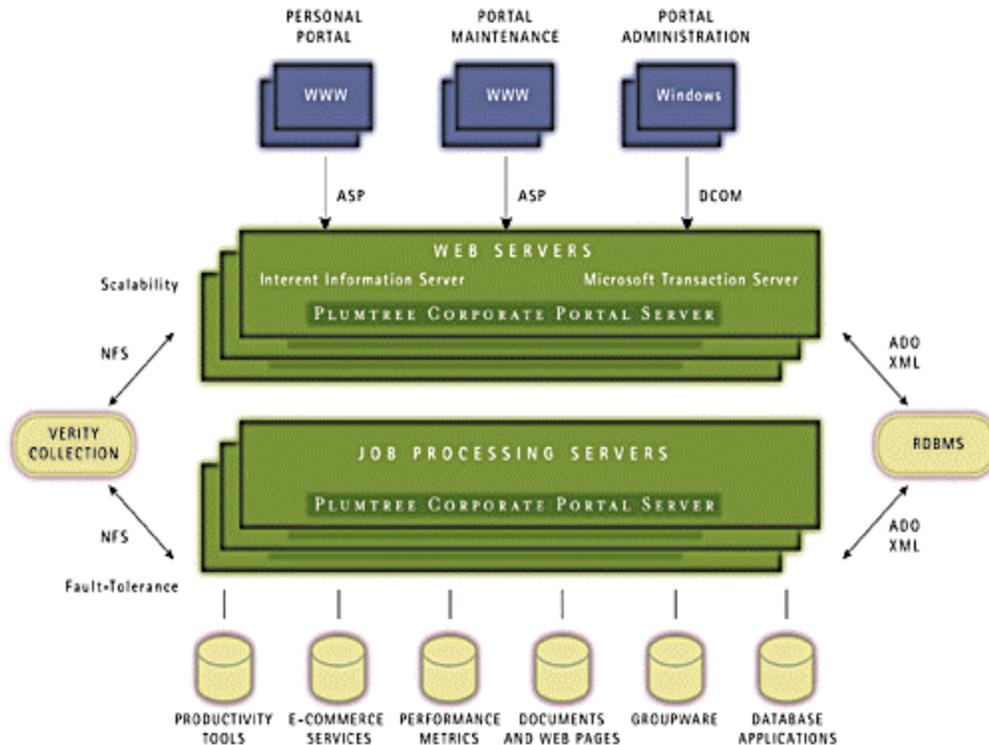
Appendix G – Plumtree Evaluation

Plumtree

Plumtree Software was founded in 1996 and claims to have shipped the world's first corporate portal in March 1998. In March 1999, Plumtree released Plumtree Corporate Portal 3.0, a corporate portal solution capable of embedding third-party tools and services. Plumtree provides a product called Plumtree Corporate Portal 3.0 which allows the integration of information from disparate sources. According to Plumtree, key features of Plumtree Corporate Portal 3.0 are:

- Personalization. The Plumtree Corporate Portal enables users to personalize their portal pages to feature only the content, applications, and services relevant to their work. Mobile users can choose to receive updates via electronic mail or other media in lieu of the Web. As a result, the portal is more compelling and has a greater impact on productivity.
- Comprehensive Services. The Plumtree Portal provides a complete view of both the content and application services available to an organization. The system is extensible, so it can integrate access to new content and services to meet customers' specific requirements.
- Organization. The Plumtree Portal assembles content in browseable logical categories regardless of its physical location, providing an at-a-glance view of important information without requiring users to issue searches. As a result, getting exactly the information you need is as simple as opening a browser.
- Automation and Distribution. Portals that rely exclusively on users to submit links die of neglect. Portals that categorize information without user involvement focus efforts on technology rather than the ways in which people think of their business. The Plumtree Portal strikes a balance, automating repetitive tasks, but also involving different business experts to approve portal updates. As a result, keeping the portal up-to-date becomes a byproduct of standard business practices.
- Security. The Plumtree Portal secures access to each embedded application and to entire categories of information, as well as to individual document links. As a result, administrators can use the portal to broker access to sensitive content and tools.
- Scalability. The Plumtree Portal is scalable and fault-tolerant, with support for any number of Web servers to support an increasing number of users, and any number of job processing servers to support large numbers of documents. If any Web or job processing server fails, users experience no interruption in service. As a result, large organizations have the confidence to deploy the portal to a large number of users on an intranet, extranet, or on the Internet.
- Location-Transparency - Content and tools are hosted by their native systems, reducing maintenance costs and simplifying deployment.

The Plumtree Corporate Portal Server consists of two Windows NT components: one installed with a Web server to host the portal for users, the other a job server installed on a networked computer to process new information from data sources and applications. Plumtree's commitment to remaining an all-Microsoft architecture indicates that it is not a viable option for SFA. The technical architecture is illustrated below.



In summary, Plumtree offers one of the most comprehensive portal packages through its Portal Gadget framework. Considering its longevity in the marketplace, Plumtree has evolved this framework into a mature platform supported by: an extensive library of gadgets; a linearly scalable architecture supporting heavy load; a development environment lending itself to several languages; and a high degree of personalization and content architecture. Based upon SFA's platform requirements, Plumtree falls short in the area of platform independence, due largely to it being a Microsoft ASP-based solution. Plumtree plans to offer a UNIX/JSP-based solution in June 2001 with a beta version being tested beginning March 2001. Plumtree states it will release this version with approximately 90% of the functionality available in its Microsoft version.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	Plumtree Software Inc.
Product name, current version	Plumtree Corporate Portal v4.0
List all platforms supported by your product (include specific versions and/or certifications)	The Plumtree Corporate Portal v4.0 is a hybrid solution that leverages multiple computing platforms to provide the most scalable solution. Plumtree supports NT as the platform for the Plumtree Corporate Portal server and can interface to applications residing on UNIX, mid range, and mainframe as platforms for Gadget integration. In spring 2001 Plumtree will deliver a complete solution the Plumtree Corporate Portal on UNIX.
List all databases supported by your product (include specific versions and/or certifications)	The Plumtree Corporate Portal v4.0 provides support for Microsoft SQL Server (7.0 and higher) and Oracle (7.0 and higher) as the internal database. Plumtree is able to access data from all relational and non-relational platforms leveraging available drivers and middleware.
List all Web servers supported by your product (include specific versions and/or certifications)	The Plumtree Corporate Portal v4.0 natively supports Microsoft IIS but can interface with any application supported by any web server.
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	The Plumtree Corporate Portal is an important part of IBM's EIP initiative and is fully compatible with IBM's MQ series. Gadgets are available to quickly take advantage of MQ Series services through the portal. For more information follow this link. http://www.plumtree.com/partners/technology/ibm.htm
Is your product LDAP-compliant?	The Plumtree Corporate Portal can authenticate users against LDAP-compliant user directories, and can import LDAP group information.

Factor	Yes/No and/or Description if applicable
Is your product compatible with Visual Age Java?	Yes. The Plumtree Corporate Portal's Java Gadget Development Kit works with any Java development environment, including IBM's Visual Age Java.
Is your product compatible with Autonomy Server v2.1?	Plumtree has developed Portal Gadgets to search Autonomy search collections at several customer sites. A Network Search Provider, which would integrate Plumtree searches with Autonomy searches, is under development
Is your product compatible with InterWoven TeamSite v4.5?	Yes. Plumtree has created two layers of integration with InterWoven TeamSite. Users of the Plumtree portal can use a gadget to submit content to an InterWoven workflow. Additionally, users of TeamSite can, at the end of a workflow, designate that a Web page automatically be published to Plumtree's document directory.
Does your product support multiple languages (e.g., Spanish, etc.)?	The Plumtree Corporate Portal's user interface can currently be delivered in English or French, according to the user's preference. On April 15 th , Plumtree will release a language extension kit that will include German, Spanish, Italian, Japanese, and traditional Chinese.
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	The Plumtree Corporate Portal's server places no limitations on passwords. Criteria such as minimum length can therefore be changed/enforced by customizing the user interface.
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes. Plumtree uses database connection pooling to optimize connections between the Plumtree Web Server and the database. The number of concurrent self-registrations is a function of the underlying database.
List your largest installation base (i.e., number of users)	Some of Plumtree largest installation include enterprise wide deployments at Ford Motor Company, Proctor & Gamble, and Kmart as well as sizeable implementations at The US Dept. of Energy, The US Air Force, and The US Navy.
How many concurrent users can all hit the same function at the same time?	The Plumtree Corporate Portal is thread-safe, so there is no intrinsic limit on the number of users who can do the same thing at the same time. Plumtree portals that manage a large number of users are typically load-balanced over several servers, so in practice this will be limited by the relational

Factor	Yes/No and/or Description if applicable
	database at the back end. Benchmarks have demonstrated that a 4-CPU Web server can handle about 45 hits per second, and that multiple Web servers scale linearly.
List all references we may contact where your product has been installed	Ford Motor Company, Proctor and Gamble, and Kmart are just a few of the large companies that regularly speak with organizations considering the Plumtree Corporate Portal. We greatly value our customer's time and will provide access to them at an appropriate time during your evaluation of the Plumtree Corporate Portal.
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	Possibly with mutually agreeable terms and conditions.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	At associated costs.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	GSA list price is \$80,000 per CPU with a four CPU minimum. Plumtree does not charge for mirrored boxes or the Gadget development tools.

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Plumtree has Gadgets to integrate with many commercially available calendaring applications.
Does your product have the ability to collect and organize online FAQ's?	Yes
Does your product have the ability to perform contact profile management?	Yes

Factor	Yes/No and/or Description if applicable
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes Plumtree has Gadgets available to support most all of the commercially available email, chat, and collaboration tools.
Does your product have the ability to contain a document repository?	Yes.
Does your product have the ability to solicit feedback from customers?	Yes.
Does your product have the ability to provide publication/subscription services?	Yes
Does your product have the ability to perform status tracking?	Yes
Does your product have the ability to accept online application submissions?	Yes
Does your product have the ability to integrate with 3 rd party tools?	Yes. Currently there are over 1000 Gadgets available to integrate with 3 rd party tools such as ERP, CRM, Collaboration, and Business Intelligence. Additionally Plumtree provides Gadget Development Kits to enable the building of custom Gadgets.
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Yes. Users are able to select and arrange content on multiple “My Pages”.
Does your product have the ability for users to customize the physical layout of portal pages?	Yes. Users are able to arrange portal components on the page.
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	Yes
Does your product have the ability to access aggregated data?	Yes
Does your product have the ability to upload and download reports?	Yes

Factor	Yes/No and/or Description if applicable
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	Yes
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	Yes
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes. Plumtree can integrate content from any accessible source including advertisements and subscription content.
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes. All aspects of the user interface are customizable.
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes
Can XML be developed via a rendering tool rather than by a text editor?	Yes
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	Yes. Components can be created in any mainstream programming language. Plumtree provides Gadget development kits for ASP, JAVA, and Perl.
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes. The Plumtree APIs are available to customize the UI and application behavior.
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes

Factor	Yes/No and/or Description if applicable
Is the application available as close to 24 x 7 x 365 as possible?	Yes. By creating redundancies in all system components Plumtree customers have been able to achieve %99.999 availability of the Plumtree Corporate Portal.
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes. The Plumtree Corporate Portal architecture allows for the creation of multiple redundancies for all tiers.
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	The distributed architecture of the Plumtree Corporate Portal enables it to leverage resources located throughout the enterprise as well as those hosted by ASPs or partner organizations. Plumtree also supports the “syndication” of multiple portal implementations enabling the sharing of content, applications, and services.
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	The Plumtree Corporate Portal architecture allows for the creation of multiple redundancies for all tiers. Plumtree’s load balancing capabilities are a function of NT server/Win 2000 server capabilities and address load balancing at the presentation layer. Best practice approaches are available for scaling at the business logic and database tiers.
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications administration non-SFA groups etc	The Plumtree Corporate Portal provides a modular, open environment for including multiple authentication sources and user directories in the portal system. The Plumtree Corporate Portal 4.0 authenticates and synchronizes users from LDAP directories and Windows NT domains as a standard feature, but its power comes from the flexibility to

Factor	Yes/No and/or Description if applicable
Employees in different corporate functions have menu of applications to run based upon job function.	authenticate users using a wide variety of protocols, including Web-based authentication systems from Netegrity and enCommerce, network protocols such as NTLM and Kerberos, and various forms of digital certificates.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Plumtree Portal Pages run on Microsoft's Internet Information Server, which supports SSL.
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	The Plumtree Corporate Portal currently supports output to many wireless devices. In the v4.5 release Plumtree will make available the Plumtree Devices Server which will provide the best available solution for managing a wide range of viewing devices.
Does your product's architecture inhibit the integration of future wireless solutions?	No
Is your product highly-configurable in terms of presentation and application integration?	Yes
Does your product have the ability to access additional services from ASP's?	Plumtree enables the integration of hosted Gadgets into the portal. Plumtree has partnerships with US internetworking and BT as providers of hosted Gadget services.

Appendix H – SUN/iPlanet Evaluation

SUN/iPlanet

Sun Microsystems, Inc. has long been synonymous with leading-edge technology. Now, after 18 years of telling the world "The Network is the Computer," Sun is poised to become the leader in the emerging network-driven economy. Forward thinking organizations are looking to Sun to lead them into the dot com future.

The iPlanet Portal Server is a full services platform for deploying robust e-commerce portals, providing all of the membership, management, personalization, aggregation, security, and integration services needed to quickly deploy e-commerce portals. The portal server is still a new product although the Giga Group rates them highly because of SUN's market position.

Although one of the strengths of this product is that it is bundled with its own Web Server and Application Server, this results in an increased integration effort with the WebSphere Application Server and IBM HTTP Server. Additionally, does not integrate as seamlessly with the MQ Series Family of products.

The following information was provided directly from SUN.

iPlanet Portal Server

iPlanet Portal Server is a product family that addresses the needs of enterprises looking for hosted or internally deployed portal services. The product family consists of iPlanet Portal Server 3.0, and the iPlanet Portal Server 3.0, Service Provider Edition. This section has been included to introduce the core Portal Server 3.0 and its feature set.

The iPlanet Portal Server completely redefines portal technology. It is the next generation platform and infrastructure for the secure, customized, and personalized delivery of any application or resource to users with merely a browser and an Internet connection. For the first time, a single product combines all the components required to implement a secure portal. Perhaps more important, iPlanet Portal Server enables you to create portals in ways previously unimagined.

Instead of having to integrate piece-parts of authentication, policy management, content APIs, customization, etc., the iPlanet Portal Server contains all these elements-and more- so that you can create scalable, personalized portals serving the needs of your employees, partners, suppliers, and customers. With the iPlanet Portal Server, iPlanet e-commerce solutions delivers the premier software environment for secure access from any Internet

browser to enterprise mission-critical information and applications. It provides an innovative yet cost-effective method for migrating mobile and remote users from traditional dial-up lines to Internet-based connections. It can also create extranets for trading partners and suppliers.

iPlanet Portal Server features

A major benefit of iPlanet Portal Server software-compared to other portal offerings is the simplicity of its architecture: a server software-based solution that does not require any client software installation, management, or configuration. The client application is either pushed to the client's browser as HTML web pages, or is a Java applet that is downloaded on demand. With iPlanet Portal Server software, users are only required to have a web browser and an Internet connection. In this way, iPlanet Portal Server can support a complete, heterogeneous computing environment. Private networks are not affected by the use of iPlanet Portal Server; server-side plug-ins are not required on intranet Web servers; protocol conversion modules are not required on file servers; and existing authentication schemes can be used.

Some iPlanet Portal Server features to highlight:

- Enables community creation and management
- Achieves multi-tiered portal personalization
- Delivers integrated content, applications, and services through customizable portal channels
- Bundled, modular Compass Server search engine enables a robust knowledge management system out of the box
- Allows secure extranet access to portal by mobile/remote employees, suppliers, and partners that requires no additional client software to install and maintain
- Leverages existing technology and digital asset investments
- Integrates native non-web-based Windows NT, Unix X-Server and Mainframe applications
- Requires lightweight single sign-on for portal applications
- Integrates subscription-based external content
- Incorporates a highly scalable and reliable architecture
- Partnerships with market leaders in knowledge management, content syndication, content management, recommendation engines, traffic analysis, business intelligence, reporting, CRM and application integration.

Based on the iPlanet Portal Server technology and capabilities, the following section contains our responses to the requirements presented in the original Enterprise Portal Market Survey Request for Information.

Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	iPlanet e-commerce solutions
Product name, current version	iPlanet Portal Server, 3.0 service pack 2
List all platforms supported by your product (include specific versions and/or certifications)	Solaris 2.6, 7 and 8
List all databases supported by your product (include specific versions and/or certifications)	The iPlanet Portal Server requires only the iPlanet Directory Server (bundled and installed with the Portal Server) as a database to hold user profiles and preferences. No other database is required, but with the Portal Server tools, SFA can integrate, to some extent, any database. More information about the level of integration required is needed to properly address this requirement specifically.
List all Web servers supported by your product (include specific versions and/or certifications)	The iPlanet Portal Server is required to run with the iPlanet Web Server (bundled and installed with the Portal Server product). The iPlanet Portal Server's flexible integration tools and architecture allow it to access Web information or applications that are served on any Web server.
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	No, this is not the functionality a Portal Server provides. The Portal Server provides enterprises a "Portal Platform" from which to build a flexible, scalable and secure portal implementation. The iPlanet Portal Server's flexible integration tools and architecture allow it to leverage any tool (such as an application server) that has hooks and connections into the MQSeries products.
Is your product LDAP-compliant?	The iPlanet Portal Server supports LDAP for as an authentication method. Also, the iPlanet Portal Server uses the iPlanet Directory Server, an LDAP v3 compliant directory server to store user preferences, profile and role based access information.
Is your product compatible with Visual Age Java?	No.

Factor	Yes/No and/or Description if applicable
Is your product compatible with Autonomy Server v2.1?	Yes. However, the iPlanet Compass Server, comparable to Autonomy, is bundled with the iPlanet Portal Server. The Compass Server is modular and can easily be replaced by other search technology, such as Autonomy.
Is your product compatible with InterWoven TeamSite v4.5?	Yes.
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes. The iPlanet Portal Server is localized for Japanese, Simplified Chinese, French and German. Users can select their language preference and have it dynamically displayed in the Portal Server Desktop.
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	<p>The Membership authentication method (described below) provides for password management. The other supported authentication methods listed below may also support password management, but that is dependent upon their technology.</p> <p>Rather than introduce another security method into an enterprise, the iPlanet Portal Server can leverage already established authentication methods for user authentication. When you install the Portal Server using a standard installation, the following authentication modules are enabled on your portal:</p> <ul style="list-style-type: none"> S/Key SecurID SafeWord Unix/NIS Windows NT LDAP Digital Certificates Radius <p>Membership (self registration LDAP directory that supports user name and password authentication)</p> <p>The iPlanet Portal Server product includes only the client modules for RADIUS, SafeWord, SecurID (ACE/client, NT Primary Domain Controller) and LDAP. You must obtain the server modules for these authentication types from a third party supplier to have the full implementation.</p>

Factor	Yes/No and/or Description if applicable
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes.
List your largest installation base (i.e., number of users)	<p>Our largest deployments are listed below. If available, the number of registered users is provided, although it's not readily provided by the customers.</p> <p>mysun.sun.com – 200,000 users</p> <p>TNT Vacations – A nationwide Business to Consumer portal deployment</p> <p>State of New Jersey (https://portal01.state.nj.us/) – First phase of the deployment was a Government to Employee portal. Currently in the next phase, the Government to Consumer/Constituent portal.</p> <p>AXA (http://www.axaonline.com/) – Business to Consumer Portal deployment</p>
How many concurrent users can all hit the same function at the same time?	<p>The iPlanet Portal Server scales both vertically and horizontally. We can support a number of concurrent users per CPU based on the security implementation in a deployment – open versus secure mode. To support more users, more CPUs can be added.</p> <p>The following is a description of the Portal Server components and how they relate to the two Portal Server security modes (supporting graphics supplied in Appendix A of this response).</p> <p>Portal Server Components</p> <p>The iPlanet Portal Server has three basic components in its architecture.</p> <p>Gateway Server – The gateway component of the Portal Server product contains the following components: the encrypting proxy (eproxy), and the optional firewall. By default, the gateway is configured to listen for client traffic from the Internet on port 443. The gateway component of the Portal Server product uses the secure socket layer protocol (SSL) to communicate with a browser, and can be configured to use SSL to communicate with the server component.</p>

Factor	Yes/No and/or Description if applicable
	<p>Portal Server Server - The server component of the Portal Server product contains a profile server, the platform, and the applications. (If you are using multiple server components, only one server in the installation group contains the profile server.)</p> <p>The profile server stores the majority of the Portal Server platform, user, and application-specific data. The platform includes services such as authentication and logging. The applications include desktop, mail, intranet browsing, and file access.</p> <p>The server component of the Portal Server product is configured to listen for traffic (non-SSL) from the gateway component of the Portal Server product on port 8080 by default; it can be configured to listen for SSL traffic from the gateway component on port 443.</p> <p>Profile Server – The Profile Server is an iPlanet Directory Server instance that installed on one Portal Server Server. The Profile Server holds user information and preferences and is used for authentication if using the Membership authentication module.</p> <p>The iPlanet Portal Server uses the above components to support two distinct Portal Server deployments: Open Mode Portal and Secure Mode Portal.</p> <p>If the Portal does not contain sensitive information (deploying public information and allowing access to free applications), then by using the Open Portal mode (without a Gateway), the Portal server can respond faster to access requests by a large number of users than if a Gateway server (Secure Portal mode) is installed.</p> <p>The Gateway element, which provides encryption services and URL rewriting, is not required when the iPlanet Portal Server is operating in Open Portal mode.</p> <p>Running iPlanet Portal Server without the gateway is referred to as Open Portal mode. The main difference between an open portal and a secure portal are the services presented by the open portal typically reside within the DMZ and not within the secured intranet.</p> <p>The iPlanet Portal Server 3.0 product was targeted towards</p>

Factor	Yes/No and/or Description if applicable
	<p>customers deploying highly secure portals with highly sensitive data or remote access portals. These types of portals have a major emphasis on security and protection and privacy of intranet resources with the need to access multiple types of applications, services and information. The iPlanet Portal Server architecture is well suited to this type of portal. The URL Rewriting, URL Access Policy, and Netlet features of the Gateway, allow users to securely access intranet resources from the internet without exposing these resources to the public internet. The Gateway, residing in the DMZ, provides a single secure access point to all intranet URLs and applications. All other iPlanet Portal Server services such as Session, Authentication, Desktop, Channels, and Profile database reside behind the DMZ in the secured intranet. Communication from the client browser to the Gateway is encrypted using https. Communication from the Gateway to the server and intranet resources may be either http or https.</p>
<p>List all references we may contact where your product has been installed</p>	<p>Current customers who have implemented or are deploying the iPlanet Portal Server include: The Hartford, Washington Mutual, Northwest Mutual Life, Williams Communications, TNT Vacations Gateway, AXA, BMW, Debeis (part of DCX), Jet Propulsion Lab (NASA), State of New Jersey, eMed Soft, Bell South, Bell Canada, Workscape.com, Lockheed Martin, MBNA, Synopsis, CompuServe, Siemens AG, News Corp, Lehman Brothers, National Semiconductor, NCR, Singapore Airlines, MSF Ventures, GE Plastics, Federal Express. Due to customer concerns, it is the policy of iPlanet to not provide contact information directly to prospective clients. However, we will be more than happy to set up a conference call or meeting with any of the above clients if requested.</p>
<p>Will you be willing to provide SFA an evaluation copy of your product for a short time period?</p>	<p>Yes</p>

Factor	Yes/No and/or Description if applicable
<p>Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?</p>	<p>iPlanet can provide some level of assistance with integration and testing efforts on a pre-sales basis, primarily in the form of reviewing your architectural approach and making recommendations accordingly. Depending on the level of effort however, it may make sense to engage our Professional Services organization on a paid basis. iPlanet Professional Services operates on a worldwide basis and employs some of the most talented in the industry. History has shown us that our customers that choose to employ their services to assist with the design, integration and implementation of our solutions have been the most successful.</p>
<p>Please provide cost information for license fees, etc. Include GSA rates if applicable.</p>	<p>iPlanet Portal Server</p> <p>PSE29-LCO-EE29 with Encryption Retail \$90,000 per CPU GSA \$71,091 per CPU</p> <p>PSE29-LCO-EL29 without Encryption Retail \$25,000 Per CPU GSA \$19,747 per CPU</p> <p>Annual Maintenance is 25% of the GSA price</p>

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
<p>Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?</p>	<p>We provide the capability to integrate a calendaring service into the Portal Server, but do not provide a calendaring solution with the Portal Server.</p> <p>The iPlanet Portal Server provides a stable, secure and flexible <i>portal framework</i> to build an enterprise portal that can easily incorporate new and existing technologies or applications, such as calendaring.</p> <p>iPlanet Calendar Server, separate from the iPlanet Portal Server, is one such solution available to enable you to deploy customized calendar and planning solutions to share up-to-date, real-time information. Implementation of the iPlanet Calendar Server, and many other solutions, would provide this functionality.</p>

Factor	Yes/No and/or Description if applicable
Does your product have the ability to collect and organize online FAQ's?	Not out of the box. However, leveraging the Portal Server tools, such a mechanism could easily be accomplished.
Does your product have the ability to perform contact profile management?	Not out of the box. Not out of the box. However, leveraging the Portal Server tools, such a mechanism could easily be accomplished or a third party solution could be leveraged.
Does your product have the ability to perform online communications including email, chat, and discussion?	<p>The iPlanet Portal Server provides a stable, secure and flexible <i>portal framework</i> to build an enterprise portal that can easily incorporate new and existing technologies or applications, such as messaging/email, chat, instant messaging or threaded discussions.</p> <p>Email/Messaging The iPlanet Portal Server can integrate with messaging systems in many ways. First, the iPlanet Portal Server ships with two applications to help integrate any IMAP email server. The NetMail and NetMailLite applications will connect via IMAP to the appropriate email system. NetMail is a Java applet and NetMailLite is an html-based version. Second, any Web mail system can be integrated into the Portal Server. The level of integration depends on the messaging system capabilities and architecture. Examples of integration range from simple links to launch Web mail applications for authorized users to a more complex integration where information (i.e. number of new messages) is gathered and presented in a Portal Desktop channel. We have experience integrating the iPlanet Messaging Server, Microsoft Exchange, Lotus Notes, GroupWise and others within the Portal Framework.</p> <p>Chat We provide the capability to integrate a chat application into the Portal Server, but do not provide a chat solution.</p> <p>Instant Messaging While this service is not specifically embedded within the iPlanet Portal Server today, it is noteworthy that AOL (as a parent to iPlanet) is in the process of developing a Corporate based Instant Messaging Service that will be tightly integrated into the iPlanet Portal Server in future releases.</p>

Factor	Yes/No and/or Description if applicable
	<p>Threaded Discussions We provide the capability to integrate a threaded discussion application into the Portal Server, but do not provide a threaded discussion solution.</p>
<p>Does your product have the ability to contain a document repository?</p>	<p>Typically the iPlanet Portal Server is not used as a document repository. Given the Portal Server capabilities, clients prefer to let the Portal Server do the work and connect to already established document repositories through links, URL screen scraping or knowledge management tools.</p>
<p>Does your product have the ability to solicit feedback from customers?</p>	<p>This certainly can be accomplished through a variety of means. More information on how SFA envisions this interaction is needed to discuss it in detail.</p>
<p>Does your product have the ability to provide publication/subsription services?</p>	<p>Yes. The iPlanet Portal Server provides a complete set of integration services, including integration with syndicated content (publication/subsription services), html/xml applications and the ability to integrate non-html applications based upon Windows NT, Unix X-Server, or mainframe access, without modifying the applications.</p>
<p>Does your product have the ability to perform status tracking?</p>	<p>Is status tracking referring to a workflow scenario or more towards the status of the Portal Server (administrative tracking)? More information is needed regarding "Status Tracking" to properly address this question.</p>
<p>Does your product have the ability to accept online application submissions?</p>	<p>Yes. However, more information is needed to properly address this requirement and how the Portal Server can achieve this (i.e. what document type are the submissions, where are they sent, how are they submitted, etc).</p>
<p>Does your product have the ability to integrate with 3rd party tools?</p>	<p>Yes. The iPlanet Portal Server can integrate with a range of 3rd party tools that supply functionality such as: Messaging, chat, online collaboration, knowledge management, content management, CRM, Traffic Analysis, financial and workflow applications and many others.</p>
<p>Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My</p>	<p>Yes. First, the Portal Server has a role-based architecture that administrators use to define a set of privileges for applications and services. This role-based architecture specifies the user's desktop; specifically, the content, the layout of the content and the look and feel.</p>

Factor	Yes/No and/or Description if applicable
Page)?	<p>Once this initial desktop has been prepared, users with the appropriate rights can customize and personalize their desktop. The Portal Server Desktop provides all of the tools you need to update, customize, and efficiently use Portal Server. Some features of the Portal Server Desktop are standard for all users, while others vary considerably, depending on how your particular installation has been customized.</p> <p>The Portal Server Desktop has a set of standard links at the top and bottom of the Portal Server Desktop that you can use to customize Portal Server. The links are:</p> <p>Home – refreshes the Desktop and updates the content.</p> <p>Options – provides a way for users to customize the features and appearance of channels. User can select the appropriate column widths or channel timeout limits.</p> <p>Content – allows users to add or remove channels from the Portal Server Desktop. Not all channels can be removed (your system administrator might, for example, require that <i>User Information</i> is always displayed) but you can check or uncheck the configurable channels to display them or not display them, respectively.</p> <p>Layout – allows users to set the arrangement of the channels on the Portal Server Desktop. However, much like locking content, administrators can lock the position on a specific channel in the Desktop.</p> <p>Help – provides Portal Server Desktop Help</p> <p>Logout – safe way to end your user session.</p> <p>In addition to those items available at the top of the Portal Server Desktop, the content channels have a set of buttons for channel-specific configuration and personalization. The buttons include (from left) Minimize, Help, Edit, Detach, and Remove features.</p> <p>Minimize hides or shows the channel content. When the channel is minimized, only the toolbar is visible and the Minimize button is replaced with a Maximize button to redisplay the content.</p> <p>Help provides help for that channel.</p>

Factor	Yes/No and/or Description if applicable
	<p>Edit provides a way for you to customize the settings for that channel.</p> <p>Detach separates the channel from your Portal Server Desktop and allows you to move it separately on your screen.</p> <p>Remove removes the channel from your Portal Server Desktop. To restore it, edit your Content (from the link in the Portal Server Desktop header or footer).</p>
<p>Does your product have the ability for users to customize the physical layout of portal pages?</p>	<p>Yes. The end user may move channels around the page to display information in a manner useful to them. However, with the iPlanet Portal Server, administrators may lock channels so that a certain channel is always displayed in a specific area.</p>
<p>Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?</p>	<p>Yes. User information is useful for the iPlanet Portal Server to create a customized and personalized experience. Users can further customize information presented in a channel if allowed by the Portal Server administrator or the subscription service.</p>
<p>Does your product have the ability to access aggregated data?</p>	<p>Yes.</p>
<p>Does your product have the ability to upload and download reports?</p>	<p>Not out of the box.</p>
<p>Are the controls of the interface fully customizable beyond what is provided out-of-the-box?</p>	<p>Yes.</p>
<p>Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?</p>	<p>Yes.</p>

Factor	Yes/No and/or Description if applicable
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes. The channel selections are based on the channels that you provide the user based on their role and their access rights. Administrators can limit the channels a specific user or user group can select to protect sensitive information or services from unauthorized access. This provides a more meaningful experience to the end user as they are not presented with applications or information that is of no interest.
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes.
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes. Furthermore, with the Portal Server, each domain can have a different look and feel. For instance, banks and financial institutions could have a different look from students or school administrators. You have the ability to specify that per domain.
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes. There are ways to incorporate XML and XSL into the Portal Server Channel Providers.
Where possible, can application modifications be accomplished via changes to style rather than code?	No.
Can XML be developed via a rendering tool rather than by a text editor?	Yes.
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	JAVA, XML and JavaScript.
Does your product have an API set or accessible object model to facilitate custom development/ modifications?	Yes. iPlanet Portal Server can be extended in several ways. If additional authentication capabilities are needed use the Pluggable Authentication API to create them. To add Java based applications use the Session Profile and Policy and

Factor	Yes/No and/or Description if applicable
	<p>Log APIs to integrate them into the iPlanet Portal Server framework. Finally, to have additional content providers in the iPlanet Portal Server desktop, use the Content Provider API (and optionally other APIs) to integrate the providers directly into the iPlanet Portal Server desktop.</p> <p>The following is a summary of the APIs available for the Portal Server:</p> <p>Policy and Profile: The Profile allows applications to access profile information, with the Profile and Policy API, stored on the iPlanet Portal Server. Profile information includes user preferences, application attributes, platform-wide attributes, and configuration information.</p> <p>The Policy provides some methods, in the Profile and Policy API, to determine user privileges.</p> <p>Session: The Session API allows applications to verify whether a user has a valid session. The Session API allows any application to validate the user's session and retrieve information about the session, such as the session state, the time remaining, and the user name.</p> <p>Logging: The Log API allows applications to create, delete, write, and read logs and log records to and from the iPlanet Portal Server.</p> <p>Content Provider: The Content Provider API provides methods for integrating content with the iPlanet Portal Server desktop.</p> <p>Pluggable Authentication: The Authentication API allows the writing of a Java-based pluggable authentication module for iPlanet Portal Server software.</p>
<p>Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?</p>	<p>Yes, this is possible to an extent.</p>
<p>Is the application available as close to 24 x 7 x 365 as possible?</p>	<p>Yes. The application can be deployed to match this requirement.</p>

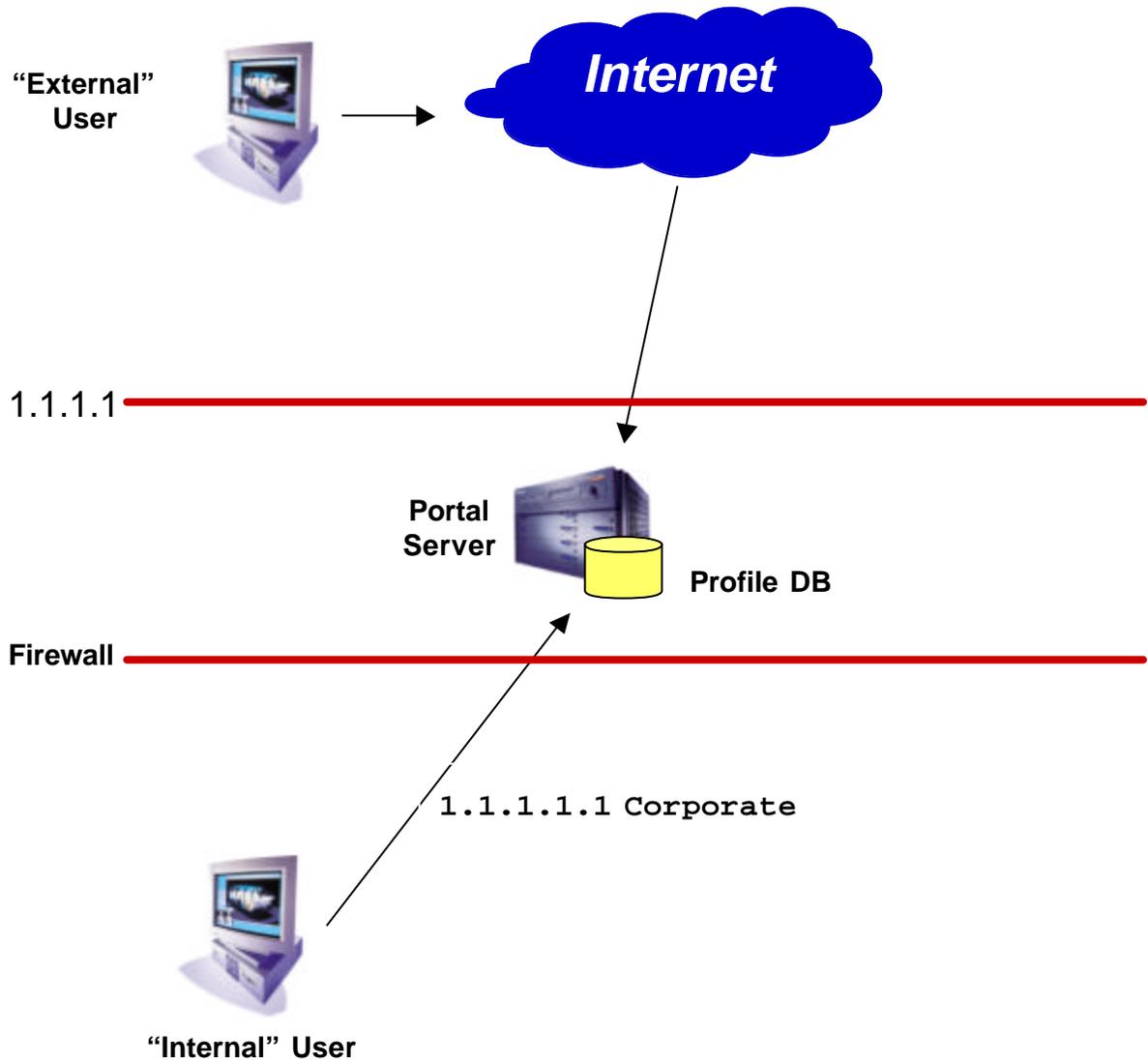
Factor	Yes/No and/or Description if applicable
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes. Multiple Portal Servers and Gateway Servers may be installed for load balancing and redundancy. Please see Appendix B for a graphical representation.
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	The iPlanet Portal Server can be implemented across multiple servers to provide redundancy, scalability and load-balancing. The applications, information and services users access via the Portal Server can be spread across the enterprise and not centrally located that the Portal Server.
Is load balancing scaleable for all tiers (e.g., presentation, business logic, data access, etc.)?	Yes. However, it does beyond the Portal Server application.
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.	In order for the portal to be integrated across an enterprise's value chain, the portal must provide secure access to content and services. Moreover, the security paradigm must be consistent with existing authentication mechanisms, and eliminate the need to authenticate with each portal service separately. Extranet and remote access to the portal are provided securely via user authentication. Authentication support is provided for Windows NT domains, Unix log-in, X.509 certificates, LDAP, RADIUS, and token-based mechanisms (SafeWord, SecurID, CryptoCard and JavaCard/SmartCard. Secure extranet connectivity is provided by on-demand virtual private network technology. The iPlanet Portal Server also maintains the status of a user's session and enables single sign-on capabilities with portal applications and services. Role-based access control By implementing the role-based access controls of the Portal Server SFA will be able to present applications, services or information based on a user's pre-defined role. Every application within the iPlanet Portal Server defines a set of privileges in its application profile. A privilege may be as

Factor	Yes/No and/or Description if applicable
	<p>simple as a boolean value for clicking a button in a frame or as complex as a regular expression for controlling access to specific URL's on a web server. When an administrator creates a role, they choose from the combined set of Portal Server and integrated third party applications privileges, or access control, to define the policy for that specific role.</p>
<p>Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?</p>	<p>Yes. There are many types of specialty portals, including knowledge management, content management, and retail ones. However, portals are typically custom built or purchased--and costly to integrate (if integration is even possible). iPlanet Portal Server offers a platform and services that allow IT organizations to unify their internal portal projects cost effectively, and plug in value-added applications and services from other leading portal and e-commerce vendors. Additionally, the iPlanet Portal Server provides a single integration platform that centralizes the management of the portal, and reduces the need for its long-term support.</p>
<p>Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?</p>	<p>Yes. SSL can be used to encrypt the connection between the browser and the Gateway Server, the Gateway Server and the Portal Server, and even between the Portal Server and the application being accessed in the back end.</p>
<p>Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?</p>	<p>Yes.</p>
<p>Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?</p>	<p>The iPlanet Portal Server team and the iPlanet Wireless Server team are currently working to provide a solution that will provide extensive wireless access to the Portal Server. The target for a pilot is scheduled for the 2nd quarter of 2001 and a release to market planned for the last part of 2001 (subject to change).</p>

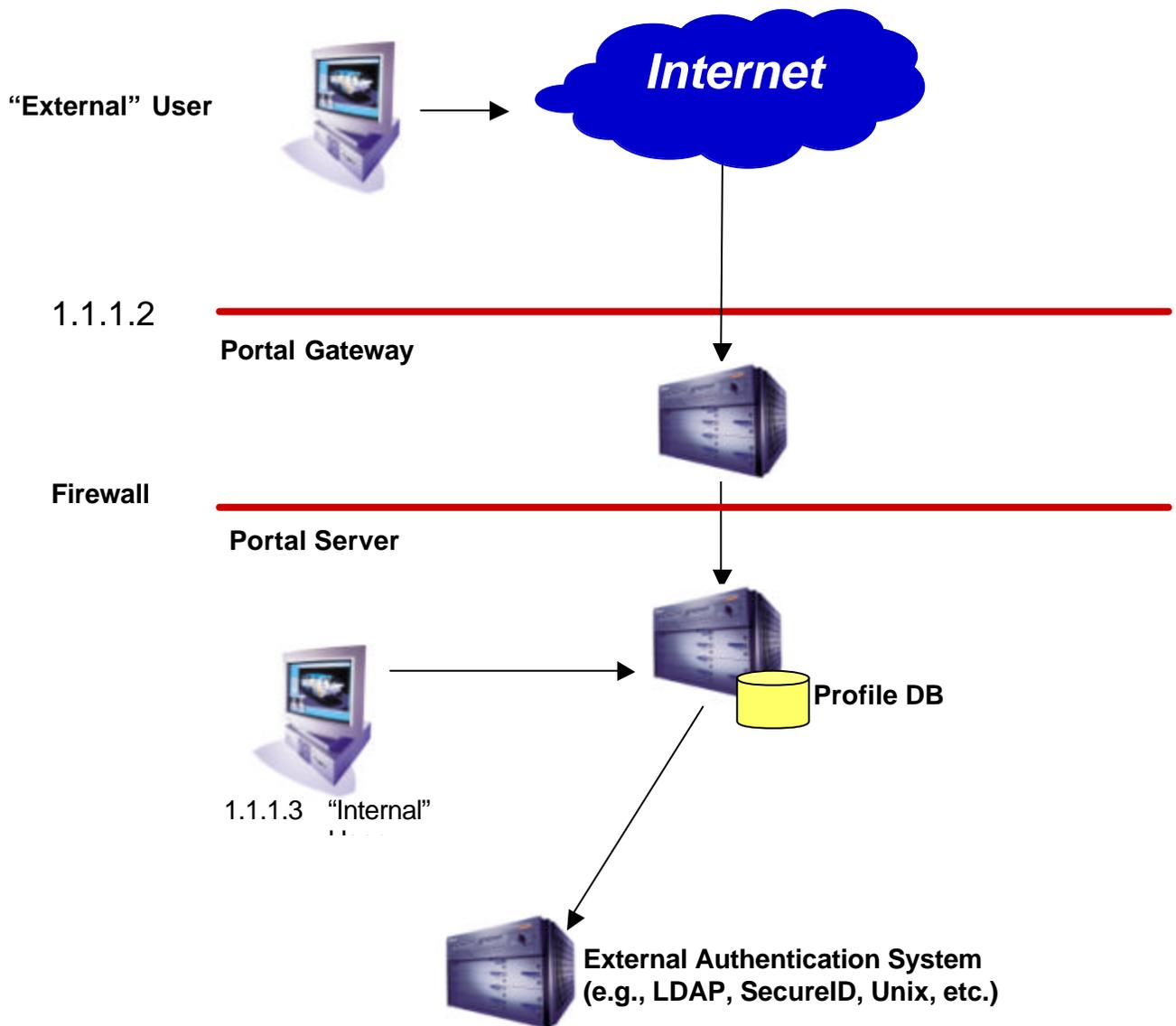
Factor	Yes/No and/or Description if applicable
Does your product's architecture inhibit the integration of future wireless solutions?	No. We are currently in the process of integrating the iPlanet Portal Server with the iPlanet Wireless Server for presentation on wireless devices.
Is your product highly-configurable in terms of presentation and application integration?	Yes. The iPlanet Portal Server provides a complete set of integration services, including integration with html/XML applications, syndicated content, and the ability to integrate non-html applications based upon Windows NT, Unix X-Server, or mainframe access, without modifying the applications. Pre-packaged mail client and file- access client are included with the product.
Does your product have the ability to access additional services from ASP's?	Yes. More information is needed to discuss the integration points and other specifics.

Configuration Examples

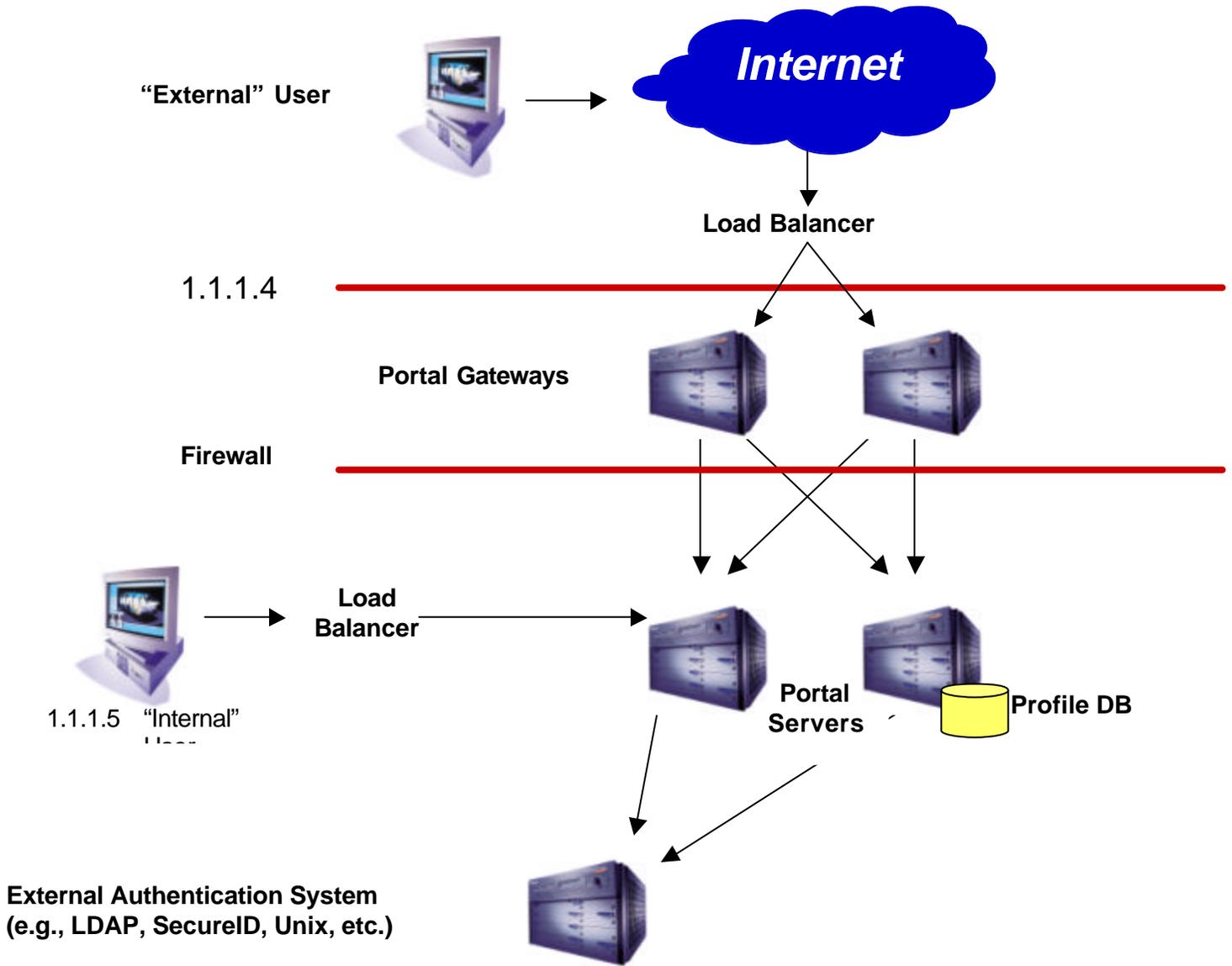
Open Mode Portal



Secure Mode Portal



Multiple Server Architecture



iPlanet Portal Server Datasheet

Features Overview

- Enables community creation and management
- Achieves multi-tiered portal personalization
- Delivers integrated content, applications, and services through customizable portal channels
- Allows secure extranet access to portal by mobile/remote employees, suppliers, and partners that requires no additional client software to install and maintain
- Leverages existing technology and digital asset investments
- Integrates native non-web-based Windows NT, Unix X-Server and Mainframe applications
- Requires lightweight single sign-on for portal applications
- Integrates subscription-based external content from content syndicators
- Incorporates a highly scalable and reliable architecture

The Platform for Deploying E-Commerce Portals

The iPlanet Portal Server is the industry's first portal platform, enabling delivery of content, services, business processes, and applications in personalized portals for enterprises competing in the Net Economy. iPlanet Portal Server allows them to connect and interact with their suppliers, employees, partners, and customers in a highly scalable, highly secure portal environment. The iPlanet Portal Server reduces portal implementation and management costs. It enables enterprises to aggregate internal and external information to improve overall employee productivity, optimize supplier and partner transactions, and generate new customer revenue streams.

Reduces portal deployment and management costs

There are many types of specialty portals, including knowledge management, content management, and retail ones. However, portals are typically custom built or purchased--and costly to integrate (if integration is even possible). iPlanet Portal Server offers a platform and services that allow IT organizations to unify their internal portal projects cost effectively, and plug in value-added applications and services from other leading portal and e-commerce vendors. Additionally, iPlanet Portal Server provides a single integration platform that centralizes the management of the portal, and reduces the need for its long-term support.

Creates personalized portals that leverage internally developed and third-party applications

The iPlanet open and flexible platform makes it easy for companies to integrate both internally developed and third-party applications. This means that enterprises can realize the value of their existing technology investments while already being fully prepared to support future initiatives.

Integrates services securely across the corporate value chain

The iPlanet Portal server enables collaboration above and beyond today's technology (e-mail, calendar, chat, instant messaging, etc.). It does so by allowing enterprises to grant their suppliers, customers, and channel partners secure remote access to applications and data. For example, a channel partner could work with suppliers to address a product order by sharing information over the portal.

Provides a highly scalable and reliable portal platform

Current portals provide access to mission-critical applications and business processes. The iPlanet Portal Server leverages the industry-leading iPlanet Directory Server and Web Server. It is designed for hundreds and thousands even millions of users and transactions.

iPlanet Portal Server Capabilities

The iPlanet Portal Server provides a complete set of services, which enable the creation of a portal that responds to the individual user's needs, and presents the appropriate content, services and applications depending upon the user's role and context within the enterprise.

Membership Services

At the heart of every portal is the creation of a community and its population. Communities are established via user self-registration, and governed by policy-enforced access to delivery of content and services.

Channel Aggregation and Presentation Services

The portal provides a workspace that presents to the user information and applications that are necessary for making decisions and carrying out transactions. The portal is constructed utilizing user-selected page layout and placement of customizable channels.

Personalization Services

The user experience is based upon, and driven by the ability to deliver multi-tiered personalization of portal content. Personalization of the portal may be predefined by the portal administrator or user, as well as through dynamic interactions with the portal itself based on previous usage.

Security Services

In order for the portal to be integrated across an enterprise's value chain, the portal must provide secure access to content and services. Moreover, the security paradigm must be consistent with existing authentication mechanisms, and eliminate the need to authenticate with each portal service separately. Extranet and remote access to the portal are provided securely via user authentication. Authentication support is provided for Windows NT domains, Unix log-in, X.509 certificates, LDAP, RADIUS, and token-based mechanisms (SafeWord, SecurID, CryptoCard and JavaCard/SmartCard. Secure extranet connectivity is provided by on-demand virtual private network technology. Finally, the iPlanet Portal Server maintains the status of a user's session and enables single sign-on capabilities with portal applications and services.

Integration Services

The iPlanet Portal Server provides a complete set of integration services, including integration with html/xml applications, syndicated/subscription content, and the ability to integrate non-html applications based upon Windows NT, Unix X-Server, or mainframe access, without modifying the applications. Pre-packaged mail client and file- access client are included with the product.

Enhanced Offering for Service Providers

The iPlanet Portal Server: Service Provider Edition delivers enhanced capabilities, including multi-domain hosting and delegated administration, that allow application service providers to realize economies of scale and reduce administration costs.

Supported Platforms and System Requirements

Operating Systems: SPARC, Solaris 2.6, Solaris 7 Operating Environment

System Requirements

Memory Requirement: 256 MB RAM (minimum)

Disk Space: 300 MB (minimum)

Web Server Requirement: Netscape Communicator v4.06 or higher (except v4.6) or Microsoft Internet Explorer v4.0 or higher with: SSL v3.0, JavaScript software, JDK software, 1.1

Server Requirement:

- Two servers are recommended:
- Gateway; Platform and application.

Internationalization

Localization planned for Japanese, Simplified Chinese, French, and German.

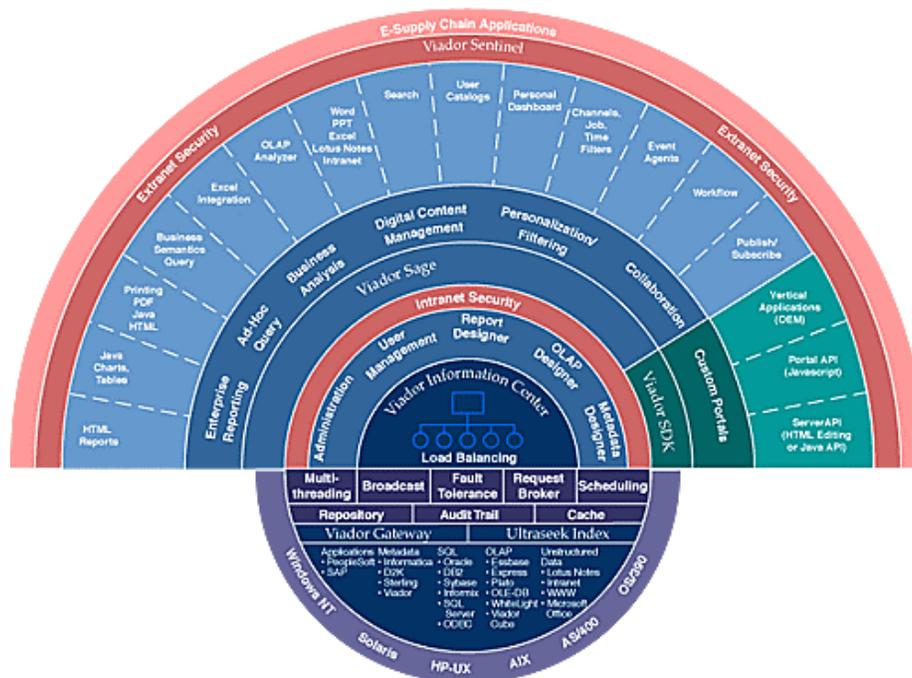
Appendix I - Viador Evaluation

Viador

Founded in 1995, Viador, Inc., is a developer of Enterprise Information Portal (EIP) software. Viador's E-Portal Suite™ is a browser-based system that provides ubiquitous access to business information in the same manner that Internet content portals like Yahoo are the gateway to the wealth of content on the Web. Viador customers include over 120 Global 1000 enterprises. Viador is a privately held company.

Viador's E-Portal Suite is a comprehensive and integrated Enterprise Information Portal offering that gives users a single browser-based interface with which to access up-to-the-minute reports, analyze business results, and publish data quickly and easily. Combining this easy-to-use portal interface with an adaptable server-based information backbone, the Viador E-Portal Suite provides secure access and delivery for structured data from any database, data mart, or data warehouse, as well as unstructured data contained in documents such as Microsoft Word and Excel or existing business intelligence tools.

The Viador E-Portal Suite was used for SFA's pilot portal application, the Schools Channel Portal. As SFA moves towards its Target State Vision, a more appropriate long-term solution is required to integrate with other components of the planned technical architecture. The following illustrates Viador's technical architecture:



Primary Evaluation Factors

Factor	Yes/No and/or Description if applicable
Company Name	Viador Inc
Product name, current version	Viador Portal Express version 6.3
List all platforms supported by your product (include specific versions and/or certifications)	Viador e-Portal runs on NT 4.0, Windows 2000, and Solaris 2.7 and 2.8.
List all databases supported by your product (include specific versions and/or certifications)	We support Oracle 8.0.5-8.1.6, MS-SQL 7.0-2000, DB2 6-7.1, and Sybase 12. See attached certification matrix.
List all Web servers supported by your product (include specific versions and/or certifications)	Netscape Enterprise Server, iPlanet, IIS, and Apache on UNIX
Is your product certified/compatible with MQ Series Family of Products (e.g., Messaging v5.1, Integrator v2.0, and Workflow v3.2.1)?	Yes, through the use of the MQ Series api and our Java portlets.
Is your product LDAP-compliant?	Yes
Is your product compatible with Visual Age Java?	Yes
Is your product compatible with Autonomy Server v2.1?	Yes
Is your product compatible with InterWoven TeamSite v4.5?	Yes
Does your product support multiple languages (e.g., Spanish, etc.)?	Yes, Spanish, French, German, Kanji, Korean, so far.

Factor	Yes/No and/or Description if applicable
Does your product provide the capability for password management (e.g., minimum length, can't use same password, etc.)?	Yes
Does your product have the capability to handle multiple concurrent online self-registrations?	Yes, through our portlet technology
List your largest installation base (i.e., number of users)	Sprint PCS with 10,000+ users
How many concurrent users can all hit the same function at the same time?	Depending on the server and cpus we have performance benchmarks demonstrating 1000 concurrent users per cpu and we are currently scaling higher
List all references we may contact where your product has been installed	Department of State/FedData DOD/CIO, SPAWAR, Army Knowledge Online, Sprint PCS,
Will you be willing to provide SFA an evaluation copy of your product for a short time period?	SFA currently has Viador installed on a previous release. We will gladly demo and allow an evaluation of 6.3.
Will you be willing to provide resources for integration and test to ensure it is compatible with the SFA environment?	Through our partnership with Accenture we will provide the required resources.
Please provide cost information for license fees, etc. Include GSA rates if applicable.	Costing information will be provided through Accenture and the use of our GSA Schedule pricelist.

Additional Functional and Technical Evaluation Factors

Factor	Yes/No and/or Description if applicable
Does your product have the ability for user to personalize their calendar and have it pre-populated with important dates?	Yes. Function of the calendar software.
Does your product have the ability to collect and organize online FAQ's?	Yes via channels or communities of interest
Does your product have the ability to perform contact profile management?	Yes
Does your product have the ability to perform online communications including email, chat, and discussion?	Yes
Does your product have the ability to contain a document repository?	Yes, through our portlet technology, and the use of Venice Bridge i.e to Filenet, Documentum, etc
Does your product have the ability to solicit feedback from customers?	Yes
Does your product have the ability to provide publication/subscription services?	Yes
Does your product have the ability to perform status tracking?	Yes
Does your product have the ability to accept online application submissions?	Yes
Does your product have the ability to integrate with 3 rd party tools?	Yes, through our portlet technology
Does your product have the ability for users to customize the presentation of content within the portal (i.e., specify what is displayed on My Page)?	Users can select/deselect the pages that they want to access. They can also select/deselect specific content on the page and move content vertically in the column of the page.
Does your product have the ability for users to customize the physical layout of portal pages?	Yes if those privileges have been extended to the user

Factor	Yes/No and/or Description if applicable
Does your product have the ability to capture user profile information for the purpose of implicit personalization of content, site access, news feeds, etc.?	Yes
Does your product have the ability to access aggregated data?	Yes
Does your product have the ability to upload and download reports?	Yes
Are the controls of the interface fully customizable beyond what is provided out-of-the-box?	Yes
Are the controls (i.e. window resizing) for the various components are customizable beyond what is provided out-of-the-box?	Yes
Is the user interface that allows users to select components that are made available to them customizable beyond what is provided out-of-the-box?	Yes
Is the incorporation of banner advertisements possible either via a custom campaign or 3rd-party advertisement serving?	Yes
Is the physical layout of the portal application and all portal pages within are fully customizable?	Yes
Can the Portal application be defined using XML and XSL style sheets for presentation?	Yes
Where possible, can application modifications be accomplished via changes to style rather than code?	Yes
Can XML be developed via a rendering tool rather than by a text editor?	Yes
Can portal components be created in mainstream programming languages (e.g., COM, C++, CORBA, Java, etc.)?	Our portlet technology is based on Java

Factor	Yes/No and/or Description if applicable
Does your product have an API set or accessible object model to facilitate custom development/modifications?	Yes, through our portlet technology
Is there a repository of portal objects that can be reused in development efforts with specific development languages or development environments?	Yes, Portlets.Viador.com
Is the application available as close to 24 x 7 x 365 as possible?	Yes
It is possible for the architecture to provide mechanisms for high availability (e.g., redundancy or replication of two devices)?	Yes
Does the product have the ability to extend across the enterprise via multiple servers and/or system implementations? Is it to handle increasing load on Web?	Yes
Is load balancing scalable for all tiers (e.g., presentation, business logic, data access, etc.)?	Yes
What level of security is available? Considerations: user and role-based security (to grant access to different applications and views according to job functions or Partner relations), Internet access, and Encryption. The ability to authenticate one username/password combination across multiple applications. The ability to establish security groups to facilitate role-based access to applications, administration, non-SFA groups, etc. Employees in different corporate functions have menu of applications to run based upon job function.	Yes, and has been demonstrated with the current installed version of the software. Version 6.3 only increases that capability.
Is there robust security to enable sharing of resources (i.e. two different portals are hosted securely on one application server)?	Yes
Does your product securely transmit data to and from browsers (i.e. using SSL 3.0)?	Yes

Factor	Yes/No and/or Description if applicable
Is your product compatible with the rendering of its pages, functionality, and data access to the extent possible with the hosting services of 3rd party providers?	Yes
Is the rendering of the portal to wireless devices compatible within a near comprehensive range of browsers, devices, carriers, and mark-up languages?	Yes. Supports access by PDA, PCS phones, pages, using WAP and XML.
Does your product's architecture inhibit the integration of future wireless solutions?	No
Is your product highly-configurable in terms of presentation and application integration?	Yes
Does your product have the ability to access additional services from ASP's?	Yes