Fulfilling the Promise of University-wide Collaboration: Unifying E-Mail, Calendaring, Document Sharing & Electronic Forms

Darrel Huish
Director, Applications & Consulting

Mark Royal
Manager, Electronic Messaging

Arizona State University, Tempe, Arizona

Arizona State University (ASU) is a leading research and teaching institution. ASU is a multi-campus environment with three campuses, East, West, and Main, distributed across the Phoenix metropolitan area. ASU has a current enrollment of approximately 49,000 full- and part-time undergraduate and graduate students.

Separate Information Technology organizations support the East and West campuses; however, the Main Campus IT organization provides the central server support for administrative, electronic messaging, and research/instructional support systems. The Applications and Consulting Information Technology (ACIT) department within Information Technology (IT) provides information resources for administrative operating departments.

Abstract:

With today's choices in workgroup software, the risk of campus-wide chaos is very real. At ASU we are reducing this risk through an effort to entice each department to "think globally, act locally". What we offer is a centrally led implementation of a fully functional suite of workgroup software, with high degree of local control over the details of the implementation.

Centralized IT organizations can not easily dictate University-wide standards for workgroup software. There are too many options that departments may demand for inter-departmental communication and cooperation. And yet, we cannot be all things to all people. We are strapped with support for legacy systems. How do we persuade departments to use a single suite of tools? This paper begins with the human aspects of Arizona State University’s selection of Microsoft Exchange, and how departmental computing personnel are being utilized for its deployment. We discuss the central IT deployment issues of staffing and hardware set-up along with sharing "success stories" from the deployment that began in January '97 and continues today.
Fulfilling the Promise of University-wide Collaboration: Unifying E-Mail, Calendaring, Document Sharing & Electronic Forms

Introduction

Many university electronic messaging environments have become a potpourri of just about every kind of free e-mail software package available. Standards such as simple mail transfer protocol (SMTP) have avoided what would otherwise be the proverbial Tower of Babel. However, many features available in individual packages cannot be used effectively in conjunction with different software applications, this causes problems for those administering information technology and for those using it.

At the end of 1996, Arizona State University settled on a single electronic messaging package for employee use. We now have concrete experience that emphasizes the advantages that a single vendor-supported solution can offer.

In this paper we will share:

- Background on the Selection Process
- Deployment Strategy and Tactics
- Microsoft Exchange server model
- Success Stories
- Ongoing Issues

Background on the Selection Process

In 1983 Information Technology made available a mainframe character-based e-mail and calendaring system (PROFS). During the past ten years our customers have been pressing for something better, meaning more features and graphical screens. More recently customers began to strike out on their own in the area of electronic mail systems.

A sprinkling of LAN-based systems began cropping up in the early nineties. Those systems suffered from various problems, including internal reliability and poor scalability\(^1\), major problems of connecting with the rest of the University’s e-mail systems, and access to directory services.

In 1991, at our customer’s request, we began to set up and maintain SMTP gateways for specific LAN-based systems. Those gateways were extremely problematic in terms of their reliability. We are still working to retire a few remaining gateways.

Upon providing this “gateway support,” we found ourselves caught in the position of having customers split between the old mainframe character-based PROFS system and the newer LAN-based systems. The

---

\(^1\) Scalability refers to the ability of the system to accommodate large numbers of users with a few “large” servers, minimal administrative overhead, and relatively low network load.
former was scaled to support the University but was missing many features that could be provided only through a graphical user interface (GUI). The latter had the GUI and features, but could not be scaled to support the University. Our customers were asking for change, and we discovered upon trying to meet this demand that there was no solution that provided the features we were looking for and the scalability necessary to meet the demands of a campus-wide system.

In 1994 we began work with our advisory committees to put together a request for proposal (RFP) for an “Electronic Messaging System” that was to include e-mail, scheduling, conferencing and workflow. The result of that RFP reinforced our conclusion that there was no existing solution to the scalability problems present in LAN-based systems. This led us to contract with an outside company to develop a system that could potentially include all the functionality we required. The system purchased was based on the Internet Mail Access Protocol (IMAP) and was to be a comprehensive e-mail, scheduling, conferencing, and workflow system with client workstations for both the PC and the Mac. Unfortunately, the company chosen did not meet delivery dates and the agreement was soon rewritten to include only e-mail clients.

In 1996 we revised the 1994 RFP to incorporate what we had learned as a result of the previous vendor responses and what we knew of current vendor offerings. The RFP went out in May ’96 and the advisory committee finished its evaluation that September. A few of the major differences between the first and second RFP’s were:

- allowance for vendor-partnered solutions (more than one vendor)
- allowance for partial solutions—e.g., student solution and/or faculty/staff solution
- application of more weight to e-mail and calendaring and less to conferencing/workflow

Of the 20 vendors that responded, the list was quickly narrowed down to six on the basis of the quality of the response and scalability of the systems. Any system that was file-based \(^2\) was eliminated due to the scalability issue.

With most other attributes of the proposed products considered equal, the final decision was based on the product’s “ease of use” and “feature richness.” Using this criteria, the group reached consensus that Microsoft Exchange was the product of choice. We were particularly attracted to features such as the ease of use of the directory, the in-box filtering, the ability to use MS Word as the text editor, and the public folder space for shared resource calendars, contacts, tasks, and documents.

**Deployment Strategy and Tactics**

The committee, having chosen Microsoft Exchange, took its recommendation to IT management to request funding for the project. Funds were allocated for a DEC Alpha computer that could support approximately 1,500 user accounts.

A “deployment” planning team was formed that consisted of nine IT staff and four technically oriented members of our customer community. In addition to the main campus in Tempe, both our East and West campuses had representatives on the team.

---

\(^2\) A file-based system is one in which a workstation logs in to a file server and the underlying means of electronic message transfer is accomplished using file I/O. It is characteristic of the older LAN based e-mail systems.
The project was broken into three Phases:

**Phase I - Internal IT Pilot**

This phase was limited initially to project team members. From there it moved to include all staff members of IT, numbering approximately 270. It began in December ‘96 and continued until July ‘97.

**Phase II - Workgroup Deployment**

This phase was limited to workgroups across the University that had local computing support, were willing to “commit as a group” to move to Exchange, and were willing to go through training. It began in July ’97 and is still in progress.

**Phase III - General Availability to the University**

This phase is considered the point of “critical mass,” when knowledge of the product exists across the University to such a degree that customers can train and help each other.

**Phase I - Internal IT Pilot**

During this phase of internal testing there was some amount of “second guessing” as to whether the right product had been selected. Vendors were still knocking on the door in an attempt to change our minds.

Lotus had not responded to the RFP and they came courting anyone that would listen. Netscape, at the time of the RFP, did not have a product that satisfied the requirements. In the spring of ‘97, they came to ASU management with a proposal that promised a product that would be “production-ready in June”. It had the advantages of no client workstation-side costs, and would use the IMAP model that is part of our current e-mail infrastructure. The scheduling product was one they had purchased from another company and was coincidentally the scheduling product we were contracted to purchase in 1994.

The “second guessing” ended at a June meeting of our highest level advisory committee when they let IT know that they did not want another delay. They directed us to go with the decision that had been made the previous September and get on with moving the University to a new electronic messaging system. This directive was significant because it indicated that the university community understood that some newer and better solution will always be just out of reach. Sometimes you need to stop evaluating and implement the best available solution.

**Phase II - Workgroup Deployment**

**Necessity is the Mother of Invention.**

We knew we had a great new service for the University, but because of budget limitations that restricted the IT staff to its current resources, the responsibility for deployment of this new service was placed squarely on the shoulders of already overworked staff. The work involved in deploying the “server-side” of the system was ominous enough, but the work involved in implementing the workstation “client-side” was absolutely daunting.

The model of “workgroup deployment” is nothing new; however, after several brainstorming sessions, the project team began to expand the model in ways that would leverage their time by employing the time and talents of local departmental computing support staff. What they came up with was a set of “requirements” that had to be met before a workgroup could begin to use the service.
We should mention here that there was some amount of consternation concerning how the University would receive the news that they must satisfy “requirements” before they could use the new service. This is a difficult concept to sell to an academic environment that encourages autonomy and individual thinking. Several members of the project team resisted the idea of dictating anything of the sort. However, the group that would bear the burden of the deployment work was able to come up with a course of action that made the proposition more palatable.

The course of action that was proposed and endorsed by the project planning team and management was to:

- Write up a “Letter of Understanding” to the university community regarding support services offered (see Appendix A).
- Require the department (local) computing support analysts to submit “workgroup proposals”; only those workgroups showing local support and willingness to attend training would be allowed.
- Do the appropriate public relations work with advisory committees and user groups (six separate groups) to sell the cooperative, yet restrictive approach.

The alternative solution for those areas without local support identified, or who were unwilling to attend training, was that they wait for “Phase III – General Availability.” The training requirement was lifted for decision-makers in departments where the local support staff pledged to give individualized support as they began using the new product. This compromise helped to ensure that the demand for the new service would keep the Workgroup Deployment phase going.

Initially, the project team targeted completion of “Phase II – Workgroup Deployment” for the first quarter of ‘98. However, because this phase has been so successful in connecting us with the local support, we are continuing it as long as the demand for the service will allow.

An approach like this one has not been attempted in any past IT product deployment at ASU. Because of the key role of a “local computing support analyst,” units are put in the position of either identifying one or waiting until Phase III. The impact of this process goes beyond the Exchange deployment project in support of a general “distributed support” model.

**Win-Win Situation**

This approach has resulted in a true win-win situation. Not only is IT staff leveraging their time through the local analysts, but the local analysts are getting recognition for their importance to the individual units. Here are some of the benefits identified:

- Local support analysts are put into leadership roles in planning the Exchange deployment in their departments
- Local support analysts are able to do necessary planning required to manage expectations and workload
- IT can refer customers directly to their local support when “client-side” problems arise
- IT is able to train local support analysts on the specifics of client installations and product support
- Units that do not have local computing support are placing current staff in that role, contracting with other units, or budgeting for a position.

---

3 The deployment work group, referred to as the “E-Team,” consisted of 3.5 technical staff, 3 half-time student-employees, and a manager. An additional 2 half-time student-employees were allocated, bringing the student-employee number to a total of 5 half-time students.
Phase III - General Availability

This phase will be ongoing and starts once the Workgroup Deployment phase ends. We are in the process of doing the coding for web-based “self-subscription” software that will allow employees of the University to self identify, subscribe to the service, and thus obtain an Exchange account. We are building this software on top of similar software that is used for self-subscription to our UNIX systems.

Microsoft Exchange Server Model

As we began planning for deployment, we found that across the University there were over sixty departmental Windows NT servers and that Exchange was running on three of the sixty.

We identified two basic issues relating to the distributed servers:

- Could/should the existing Exchange servers be incorporated into the central model?
- How could we accommodate existing “local NT profiles” with a central NT account domain?

In dealing with these issues, we were very fortunate to have included on the project team a strong “local support analyst” who chaired one of our advisory committees and was active in the various user groups. By involving him in the design process for the server model, we were able to settle on a central model for the servers, with an allowance for adding distributed servers if a “business need” was identified that could not be met within the central model. The two issues identified above were resolved in favor of a central model that IT would manage.

The issue of “incorporating existing Exchange servers into the central model” became a non-issue once the complexity of doing so was examined. It would have required reinstalling the distributed servers in order to get them under the Exchange “Organization” name that was established. This reinstallation of servers would also have required that NT trusts be established and/or a site connector be put in place for replication of directories and public folders.

The issue of “accommodating existing local NT profiles” was resolved in favor of not establishing trust relationships between the distributed servers and the central NT account domain. For customers on the existing NT servers, the disadvantages of this approach were:

- customers would have to perform a second logon to Exchange; i.e., no pass-through logon (they could avoid a second logon if they synchronized their passwords).
- customers would have to do the following to change their Exchange password:
  1. logoff their local NT domain
  2. logon to the central NT domain
  3. change their password; and finally
  4. logoff the central NT domain and back on to their local NT domain.

Note: We have been told that Microsoft is working on the password change problem by looking into the possibility of allowing a password change via the Exchange Web client.

---

4 An NT trust is a means of allowing one NT server to access the resources of another NT server. It can be enabled by the NT Administrators for the servers and can be limited to specific resources.
Success Stories

One major success from an IT perspective has already been emphasized in this paper. We have connected with the local computing support analysts in a way that has not been done before. A relationship has been formed that can be the basis for other cooperative successes in the future. That aside, here are some of the more tangible benefits that we have seen to date.

Changes to the Way ASU Does Business

At the end of the “IT Internal Pilot”, in August ’97, there were 400 people using Exchange. In the last 5 months, 700 additional people have begun to use the Exchange product, bringing the total to 1,100 as of January 31, 1998.

For these people, communication, collaboration, and information re-use capabilities are enhanced by implementation of Exchange. Some examples of the new tools available are:

- A comprehensive, easy to search directory that can be used to look up the e-mail address and demographic information for anyone at ASU (all employees and students).
- Public folders that allow people to share information such as documents, resource schedules, task lists and contact lists.
- Ability to use e-mail to send and receive attachments that can be documents, spreadsheets, or other “binary” files.
- Ability for anyone to create and administer e-mail distribution lists that can be shared by everyone, or only by a limited number of people based on permissions given.
- An active “Inbox Assistant” that can automatically “filter” incoming mail into separate folders depending on their source or subject.
- User-friendly, intuitive graphical user interface that seamlessly integrates with other workstation software such as spreadsheets and word processing.
- Remote access to e-mail via any World Wide Web browser that supports Java and frames.

Just say YES, Facilitate use, Don’t Dictate Methods!

The goal was to provide information, structure, and tools to empower customers to implement solutions for their business needs. To that end, the deployment team focused on enhancing and tailoring infrastructure items such as the “ASU Electronic Directory”, “Shared Distribution Lists” and “Public Folders”.

ASU Electronic Directory

A comprehensive directory has been developed that pulls information from the Student Information System, Human Resources System, and Electronic Post Office. Integration of this directory into Exchange provides a powerful tool for University communication and collaboration. With the ability to search the ASU directory by attributes like name and/ or department, it is easy to locate, get information about, and communicate with anyone at ASU.
Shared Distribution Lists

Distribution lists allow a group of e-mail recipients to be referred to with a single name, so that Exchange users can easily send messages to everyone in the group. Exchange distribution lists can be shared such that a single copy is maintained by the administrator and is available for use by the members of the list, or by everyone. There are already over a hundred shared lists and the number is rapidly growing. A naming convention was developed in anticipation of customer demand and to give the distribution lists a naming scheme that provides organization to an inherently flat name space.

1.1 The naming convention for shared distribution lists should cause all lists to be co-located in the Directory. Therefore all distribution lists will begin with a “DL.” prefix. The next level of the name will specify what type of distribution list it is. These names will closely follow (but not necessarily match) the top level of the public folder hierarchy. Some examples are:

- **DL.ORG**  Organizational - Used to address members of an ASU department, academic unit, or administrative area.
- **DL.PROJ**  Projects – Used by members of a project group. Project groups contained within a department or academic unit should add a prefix for the unit (e.g., DL.PROJ.IT.ACIT.EXCHANGE)
- **DL.WG**  Workgroups – Used by workgroup members to send e-mail amongst themselves. Examples include University Committees, Management teams, and special interest groups.

Public Folders

A public folder can be described as a shared area for electronic information, such as documents, forms, e-mail messages, graphics, etc., that can be accessed by Microsoft Exchange users. Emphasis should be placed on the “shared” aspect of Public Folders. The diagram on the right depicts the ASU organizational structure that was used to form a portion of the Public Folders hierarchy.

The intended use for the “organizational” public folders is for sharing within departments. Each department is empowered to administer their own Public Folder space. They can decide who can read or write information into the folders, and how the information is organized.

In addition to the Public Folders that are designed for workgroup and departmental collaboration, there are several other hierarchies that are for University-wide use. For example, some of the top-level categories include “Announcements”, “Consulting”, “Projects” and “Publications”. It is important to provide this organization up front in order to avoid the structure becoming cluttered.

Every Exchange user sees a common set of Public Folders that look and act just like folders in their mailbox. Since the folder metaphor is used, customers require little or no new training to be able to use them. This ease of use is fundamental to user acceptance, and has been the reason for immediate requests for Public Folders.
Forms and Workflow Automation - An Example

One of our customers, Russ Mohn, who works in the Office of the Vice Provost for Research (OVPR), had identified a need for a Help Desk application that would connect his technical staff with their customers for problem reporting purposes. Last spring an application was purchased for $900 that was cast aside after the OVPR found its capabilities were not adequate.

Russ said that “before we looked at the possibilities with Exchange Public Folders, the only other viable Help Desk application we found sold for $10,000. Going to the Microsoft Web site and looking through a library of free software that works with Exchange, we found exactly what we needed at no cost.”

Russ downloaded the free software, modified it for his unit’s needs and implemented it. One of the analysts in the OVPR area had these comments “The system is so easy to use, I became an expert in 2 hours!! I can create views of the tasks so that I can keep track of what <problem> is open, in progress, on hold, or even closed….Our users are happier now and we have received nothing but praise…Proof is right here in the areas that we support, the smiles, the Thank you’s’ and the time I have to focus on other important issues and needs”

With the introduction of Exchange and the availability of Public Folders, other departments can, as the OVPR did, replace paper forms with electronic forms and route them electronically.

OVPR Help Desk System

To the right is a high level diagram of the system that Russ downloaded, modified and implemented.

The customer submits a problem, it is assigned to a technician, and when resolved the loop is completed with the customer getting information on the resolution.

To the left is a snapshot of the electronic form that the customer completes when they want to report a problem.

It has been customized by OVPR staff to include the Property Control ID that they use in reporting and tracking problems.
Online Consulting Service

For over five years Information Technology has provided an “Online Consulting Service” (OLCS) that allows customers to use e-mail to ask questions of consultants. The OLCS service is considered very successful in terms of both leveraging staff time spent consulting, and in providing a valuable consulting service to customers. However, there have been limitations in accessibility caused by the diverse systems it was built upon (E-mail, Web, and Netnews).

With Exchange now available to all employees, in particular the consulting staff, we have revitalized the old system to take advantage of Exchange Public Folders and Forms. Below you will find a description of a new OLCS system that takes advantage of those Exchange features, and allows for a high degree of cooperation and collaboration between consultants and customers (please refer to Appendix C for a pictorial representation of the system).

The OLCS concept is based on the following system objectives:

- Ability for any member of the University to broadcast (e-mail) a question to an appropriate group of consultants
- Ability for the consultants to archive “good answers” (along with the original question) in a frequently asked question (FAQ) database and later do a keyword search on that information
- Ability to cut-n-paste the answers found in the FAQ into an e-mail note; and
- Ability to send an e-mail note with the answer to the customer and ALSO allow other consultants to view the question and answer.

Using Exchange we have been able to retire the locally developed software that built upon separate E-mail, Web and Netnews systems. The new OLCS system uses a combination of Public Folders and Forms to improve its accessibility and usability.

Public Folder Use

Public Folders can have and associated e-mail address, and for the OLCS have been setup with an e-mail address for each individual OLCS consulting groups. The OLCS Public Folders receive e-mail notes that are sent by customers to any one of a number of “consulting” addresses. For example, the E-Team has a consulting address of email-q@asu.edu, available to anyone in the University, to which customers may send e-mail related questions. Notes sent to email-q@asu.edu are forwarded to a Public Folder area of “Email-q Questions” that the E-Team consultants monitor. An E-Team consultant takes ownership of a specific question by moving the question from the “Email-q Questions” Public Folder to a Public Folder that they own (it has their name on it). We call this doing an “I got it” for questions that come in.

Upon moving the question to their Public Folder, the consultant decides whether to answer the question directly or to reference the FAQ database for a possible answer. In either case, when they send the answer back to the customer they also copy the answer to an “Email-q Question and Answer” Public Folder. In this way other staff can see the question and answer. This has allowed us to use student-employees to answer questions with full-time staff supervising the quality of the response.

Forms Use

As mentioned above, consultants are able to search a FAQ database of questions and answers. The FAQ database contained in a Public Folder space that is populated by means of a simple form that has been created to help categorize the question and answer. An example of a form for the Email-q FAQ Public Folder is included in Appendix D.
As a final note, the system allows anyone on Exchange to see questions and answers that have been asked and answered and also, more importantly, gives them access to the FAQ Public Folders that have information on commonly asked questions in the various consulting areas. The Help Desk staff is can refer or send questions to the consulting addresses and see the resulting answer. This brings the frontline phone consultants in touch with answers given by the “subject matter experts”.

Ongoing Issues

Single Site Exchange Model

The project team’s recommendation was a “Single Site” Exchange model. The fallback for a “business need” that cannot not be met within the central model is to allow for other departments to place their servers within the Single Site. A diagram of this model can be found in Appendix B.

We have not had a “business need” that would press us to set up servers for departments outside of IT within the Single Site. However, we have not resolved how requests for large amounts of Public Folder space will be satisfied. One course of action might be to allow customers to set up an Exchange server for the Public Folder space. Another course of action might be to allow customers to purchase disk space on a Public Folder server that IT manages. Either of these two options will involve considerable work and planning.

“Employee Only” Use of Exchange

At ASU Exchange is being deployed for employee use only. This means that some features available in Exchange cannot be used effectively in conjunction with the electronic messaging software the students are using, IMAP based Pine, Simeon and Netscape. The calendar/scheduling capability is one example of this problem.

The first hurdle for student use is that of cost. Microsoft has dramatically dropped their educational per-seat cost for Exchange so that it is now around $6 per client access license (CAL) plus another $5 for two years of maintenance. However, with a student body of approximately 50,000, this per-seat cost translates into over half a million dollars for just the CAL’s. This figure does not include the server side costs. Since IMAP clients, such as Netscape, exist that are free for educational use, it is unlikely we would consider Exchange for students unless Microsoft decides to offer CAL’s for students at no charge.

Other hurdles include migration of student accounts from the current IMAP based systems, along with the training that would be required. Students do not have “departmental computing support analysts” that would be available to assist in a migration.

Summary

Arizona State University has experienced the pain of using varied and incompatible electronic messaging systems. We are now seeing the beginning of significant productivity gains that come from combining good software with an effective distribution of support responsibility. Connecting the University with a
robust collaboration tool has opened a door of opportunity that will allow creative solutions to follow. Information Technology's role looks challenging, but promising.
Appendix A

Letter of Understanding

To: ASU Community

From: Mark Royal, Manager, Electronic Messaging

Through: Darrel Huish, Director, Applications & Consulting

Subject: Workgroup Deployment Phase for Microsoft Exchange

We are now working with Department Computing Support Staff to develop a schedule for deployment of Exchange to volunteer workgroups at ASU. Those workgroups must be willing to “commit as a unit” to moving to Exchange. The commitment of the unit is very important in terms of minimizing interoperability problems and maximizing the benefit of people helping each other through the learning curve for the product.

The Electronic Messaging Team plans to offer as much service as possible by focusing available staff time on the Exchange Project. However, we must continue to maintain and support the other central University electronic messaging systems such as OfficeVision and Pine. The Electronic Messaging Team currently consists of three full-time staff, one Grad Assistant, and four half-time student employees. This group supports over 40,000 electronic mail users at ASU.

To avoid the impossible task of training each customer individually as he or she goes through the product in a trial-and-error manner, we must ensure that quality training occurs when customers first begin to use Exchange. That training must focus on not only how to use the features of Exchange but also how to use Exchange in the ASU and Internet environments.

The purpose of this memo is to reach an understanding with all of you on what services we will provide and what services we will not during the workgroup deployment phase.

We will:

- Provide a central service for customer training using the Electronic Messaging staff and IT classrooms.
- In lieu of central service providing training for individual customers, work with Department Computing Support Staff to assist its staff in providing the same level of training (Train-the-Trainer).
- Provide separate training for Department Computing Support staff on installation and configuration of the client software.
- Provide ongoing customer support by answering questions sent to email-q@asu.edu with a maximum of 24-hour turn-around Monday through Friday.
- Provide direct assistance via phone, or on-site (main campus only), to Department Computing Support Staff for problem resolution.
- Add customer accounts on the Exchange Server at the time these customers are going through their training.
- Provide CD’s on a checkout basis through our Computing Assistance Center for home installation of the Exchange clients.

We will not:

- Do customer workstation software installations of the Exchange clients (e.g., Outlook). The Department Computing Support Staff, or end users must complete these installations.
- Set up accounts for customers before they have gone through training.
Appendix B

Single Site Model with IT Managing Servers for Other Departments

Distributed Exchange Administration

Exchange Organization = Arizona State University

Exchange Servers Maintained by IT
Site = MAIN

MAINEX1
Bridge Head Server
SMTP Gateway
Web Client Access
Directory Import

MAINEX2
Private Mailbox Server

MAINEX3
Private Mailbox Server

MAINEX4
Public Folder Server
Forms Based Applications

Exchange Servers Maintained by a Department
Site = MAIN

MAINEX5
Private Mailbox Server
Public Folder Server
Forms Based Applications
Web Client Access

Information Technology maintains the Exchange Organization.
Information Technology maintains the Site.
Most Exchange services for the University are handled centrally by Information Technology.
Individual colleges and/or departments bring their own server up in the MAIN Site (IT must set up the server) for the purposes of satisfying a business need that is unmet by Information Technology.
Appendix C

Customer

Local Consultant or Help Desk

Question asked & answered via phone

Exchange Server

Question asked via e-mail

Question/Answer Area
Email Communications Research etc.

Search FAQ for an answer

Public Folders

Question Area
Email Communications Research etc.

Email “I Got It” Area Heather Buchanan Chris Walsh etc.

Question Answered via e-mail

Frequently Asked Questions (FAQ)
Email Communications Research etc.
Appendix D

Form for E-Mail Question-Answer (FAQ) Public Folder

EMAIL-Q

Keywords:

System
Electronic Post Office

Products
EPO Web Client

Actions
Configuring

Additional Keywords
Alias

Question:

How do I creat an alias for myself and get rid of that "imap3" or "asuvm" in my e-mail address?

How can I turn jdoe@imap2.asu.edu to Joe.Doe@asu.edu?

Answer:

One can register his/her e-mail address and generate a return address in the form anything@asu.edu by accessing your Electronic Post Office (EPO) account. An EPO Update Facility is available at the following site on the World Wide Web:

http://epo.asu.edu/

A person can only connect to epo.asu.edu through the ASU Network. They can not connect via an outside Internet Service Provider (i.e. you need to be connecting from an IP address within the ASU domain).

A user's userid is their 9-digit ASU id number and their password is initially your birthdate in YYMMDD format. If anyone has trouble logging in, please contact "EMAIL-Q@ASU.EDU".

Once a person is logged in, set the "return address" field to anything@asu.edu, where "anything" is at the user's discretion. Set the "mailbox address" field to the address where the person would like to receive his/her mail at. These changes will allow mail addressed to the person's return address or their mailbox