The Advanced Computing Environment

This Management Instruction sets forth policy for the Advanced Computing Environment (ACE) within the United States Postal Service®.

All Web links referenced in this Instruction are located on the Postal Service Intranet (Blue). References also available on usps.com are so noted.

Background

The Advanced Computing Environment centralizes the acquisition and maintenance of the information technology (IT) infrastructure and provides a systematic approach to managing that infrastructure. The ACE initiative refreshes the IT infrastructure by replacing workstations and servers that are obsolete or out of warranty. It also streamlines support efforts. The end result is an updated and more powerful information technology platform in line with the Postal Service Transformation Plan’s goal of using information technology to enhance value.

The Advanced Computing Environment is based on a more cost-effective and efficient operating model that includes the following:

- A standardized desktop environment that maximizes centralized management, minimizes local administration, and ensures compatible tools among users.
- Execution of national applications from a centralized, server-centric model reducing the time, complexity, and cost associated with executing these applications locally on each desktop.
- Web-based application design that supports a centralized execution model.
- A workstation and shared server environment with enhanced security.
- The ability for a user to log on to any ACE workstation on the Postal Service network — anytime, anywhere, anyplace.
Definition

Advanced Computing Environment (ACE). The enterprise infrastructure that supports the planning, design, implementation and ongoing management of Postal Service distributed computing. ACE replaces outdated and incompatible technologies with upgraded, cost-effective, and easy-to-use systems and centralized support.

Theft or Damage

It is the user’s responsibility to ensure that adequate measures are taken to protect against theft and damage. Costs associated with the replacement of stolen or mistreated/abused devices are the responsibility of the local site.

Scope

This instruction applies to all Postal Service™ organizations, employees, contractors and to any Postal Service business partners who are provided with ACE equipment.

Policy

The Postal Service uses the Advanced Computing Environment (ACE) as the operating method to simplify, standardize, centralize, and efficiently manage its information technology environment.

Management of this infrastructure by local IT personnel will be kept to a minimum and will generally be confined to problems or support that cannot be provided centrally or remotely.

User participation required for ongoing maintenance of desktop systems will be kept to a minimum.

Hardware

Workstations (Desktops, Laptops, and Kiosks)

Each ACE user is provided a standard workstation (either a desktop or a laptop) with a standard software configuration. Laptops are provided only to mobile users or users who have a business requirement for remote access. Workstations will be replaced approximately every 4 years. Nonstandard systems are not authorized within the ACE infrastructure and are subject to confiscation.

Workstations are assigned by position. Therefore, if a user is transferred or detailed to a position outside of his or her organization, the gaining organization must provide that user with a desktop or laptop system. Processes are in place to ensure that the user’s data can be moved to the new workstation. Assistance with this data migration can be obtained through local IT support personnel.

Kiosks are special-function ACE workstations that provide direct access to predetermined applications. Kiosks are placed in designated locations and are centrally managed. Users are not required to log on to a kiosk but will be required to log on to the application that the kiosk supports.

Note: IT provided the hardware for the initial ACE migration. It is the responsibility of the local facility or organization to fund and procure any additional ACE-compliant hardware. The local facility or organization must also fund the hardware warranty, software, ongoing support, and any telecommunications charges for this new hardware.

ACE-compliant hardware can be found on the ADEPT II contract (http://adept) and is purchased through the eBUY process (http://ebuy).
HVAC and Key Card Systems

HVAC and key card access control systems are nonstandard and require approval from the Network Connectivity Review Board (NCRB) before being connected to the network.

For additional Information on products and purchasing procedures, see Multifunctional Peripherals (http://blue.usps.gov/purchase/material/pmsc/windsor/mfp.htm).

Printers

Only network printers and multifunctional peripherals (MFP) are supported in the ACE infrastructure.

ACE-approved locally attached printers are allowed at sites without an onsite file server and are funded with local funds. Network printers are provided as part of the standard ACE implementation.

Peripherals

ACE provides standards for other peripheral devices such as label printers, plotters, scanners, digital cameras, modems, and CD/RW drives. Unapproved peripheral devices are not authorized within the infrastructure and are subject to confiscation. For specific information concerning supported peripherals, please see the ADEPT II contract (http://adept).

HVAC and Key Card Systems

HVAC and key card access control systems are nonstandard and require approval from the Network Connectivity Review Board (NCRB) (http://it.usps.gov/security/ncrb) before being connected to the network.

Desktop Software

The ACE platform consists of standard software packages as part of the base desktop image. Only standard and authorized software will be permitted and supported.

All software must operate within the ACE infrastructure and must be pre-approved before it can be used within ACE. In addition:

- It must be Microsoft logo compliant and/or certified by IT Engineering and Architecture (http://it.usps.gov/support/acesoftwarepolicy).
- It must be approved and listed in the Infrastructure Tool Kit (ITK) (http:// itk) for commercial off-the-shelf (COTS) products.
- It must be authorized for use within an ACE software category (http://it.usps.gov/support/acesoftwarepolicy).

Note: Custom-developed applications must be authorized through the ACE Distributed Optional Software Exception Process (http://it.usps.gov/pls/itprodnp/doc/site/10/DistributedOptSoftExcPro.doc).

Definition

Infrastructure Tool Kit (ITK). Lists Postal Service-approved software that supports the development, deployment, and management of Postal Service applications.
All unauthorized nonstandard software will automatically be removed from the user’s workstation.

**Definition**

**eAccess.** A centralized Web interface used to request and grant computer access to applications and user rights.

**Remote Connection Services**

The Postal Service maintains two remote connection services into its communications network:

- The toll free dial-up service, known as PPP, is available to authorized users with access to analog dial telephone service anywhere in the country.
- The Internet access service, known as VPN, is available to any authorized user with an Internet connection.

**Software Categories**

**Standard ACE Software**

Standard ACE software comprises the core products that are on every workstation. They are centrally distributed as part of the workstation image and are centrally supported by the ACE program. This software must be locally funded for any new hardware that is locally purchased.

**Optional ACE Software**

Optional ACE software consists of products that are authorized using eAccess (https://eaccess) and distributed to individual users. The licensing, distribution, and support methods vary, based on the individual software requirements.

**Non-supported Development Software (Designated Workstations Only)**

Non-supported development software encompasses products that are individually licensed and will be the responsibility of the user’s organization to fund, install, maintain, and support these products. The products will be authorized on a very limited basis.

**Connecting to Computing Resources**

The Postal Service data communications network provides access to its computing resources and business information. In general, only Postal Service-owned computers and devices should be connected to the Postal Service network.

**Requesting and Authorizing Access**

An enterprise directory service provides the foundation for identity management. It is the authoritative source for validating the identity of individuals who use Postal Service computer systems.

To request access to the Postal Service infrastructure, its resources, and/or applications, individuals must use eAccess (https://eaccess). Managers must approve the request before additional consideration can be given. Once approval is granted, the individual is given a unique logon ID and password.

Managing Access to Postal Service Applications and Computing Resources

ACE maintains a robust, centralized access management system to protect the security and integrity of Postal Service computing resources. This includes regulating and monitoring the access granted to individuals and applications. Application sponsors must ensure that their applications are both integrated with the enterprise directory service and directory-enabled.

Each user is granted appropriate permissions based upon the requirements of his or her individual job function. Business partners and external parties are provided limited access as required to conduct official business with the Postal Service through a business and risk-based review process conducted by the Network Connectivity Review Board. Additional information on external access can be found in Handbook AS-805-D, Information Security Network Connectivity Process (http://blue.usps.gov/cpim/ftp/hand/as805d.pdf).

Services

Messaging and Collaboration Services

Information Technology is the only authorized provider of the following services for the Postal Service:

E-mail

ACE provides enterprise-wide electronic messaging, calendaring, and task management services that are integrated with the global messaging address book. These services can be accessed anywhere ACE has been deployed by using either a full-featured desktop mail client or a Web browser interface. In addition, selected employees are provided with wireless handheld devices that work with the messaging system.

ACE Messaging Fax Service

The ACE Messaging Fax Service (AMFS) is available for ACE users who have e-mail accounts. It is a comprehensive network fax solution for creating, sending, receiving, and managing faxes directly from a user’s desktop computer. It is tightly integrated with Microsoft Exchange and the Outlook client for ease of use and enhanced functionality.


Additional information on the “ACE Messaging Fax Service (AMFS)” can be found in the list of ACE Frequently Asked Questions (http://it.usps.gov/support/itfaqs). Search the FAQs on the exact phrase “Fax service.”
PDAs Other Than Blackberry

The IPAQ Pocket PC is permitted as a component in specific applications, but ACE does not support it as a general-purpose PDA.

Other PDAs or handheld devices (including those from manufacturers like Sony, Palm, Franklin, etc.) are not supported by ACE.

For additional information, please refer to:

- Contact the Manager, Distributed Computing Environment (DCE) for access to this password-protected document.

Personal Digital Appliance (PDA)

ACE provides a PDA infrastructure in which the standard ACE desktop is configured to support synchronization between the ACE standard PDA devices and the corporate messaging services. The Blackberry is the ACE standard wireless handheld device that allows users to send and receive e-mail, read documents, maintain contact lists with associated information, and calendaring. Please refer to the IT Web site for additional information on Blackberry devices (http://it.usps.gov/support/blackberry).

Collaboration

ACE provides a collaborative computing environment that allows users to share documents and ideas, regardless of where they are physically located. Electronic mail is the foundation for collaboration, but additional services continue to be included to enhance and expand the methods by which people can effectively and efficiently communicate.

Directory Services

The ACE Active Directory (AD) is the enterprise directory for the Postal Service. It is the authoritative source for all Windows-based systems that are centrally supported and managed. Access to all infrastructure platforms, remote access methods and national applications will be based on user and machine credentials in the ACE Active Directory.

The enterprise directory contains relevant, non-sensitive user information such as business addresses, telephone numbers, and organizational information. This information is linked from Human Resources and other authoritative data sources but may require end-user updates for certain fields.

E-mail and Data Storage

E-mail Storage

Each ACE user has a pre-determined allocation of server storage for electronic messaging. This allocation is within the e-mail system and is independent of server storage for other data. See Management Instruction AS-840-2004-2, Electronic Messaging (e-mail) (http://blue.usps.gov/cpim/ftp/manage/a840042.pdf) for information regarding e-mail storage limits, data locations, security concerns, and client features.
Data Storage

Server Storage: ACE file servers are usually located at large plants or larger offices. The user’s ACE server storage is accessed through the “My Documents” folder. The following are indications that a user is accessing an ACE file server:

- The “My Documents” icon on the desktop has two blue arrows.
- Shared data is mapped to a drive letter (e.g., “T:”).

At locations with ACE file servers, the following applies:

- Users have a pre-determined allocation of 400 MB of server storage.
- Users will be notified by e-mail as they approach their server storage limit.
- Users will also be notified by e-mail when they reach or exceed their server storage limit.
- If the storage limit is reached, users will be unable to save items in their “My Documents” and “Desktop” folders.
- Users or their PCES manager can request an increase or decrease in their storage allocation through eAccess (https://eaccess) by selecting “ACE Network Storage.”

Local Workstation Storage: All ACE users have the ability to save data in specified folders on their local workstation. However, these folders are not backed up to an ACE file server. All users are responsible for backing up the storage folders on their local workstations.

Shared Files and Folders

Sites With ACE File Servers: Shared files and folders are available to users at ACE file server sites. They are an efficient mechanism for making information available to multiple users without having to transmit the information by e-mail. A specific group of users is allowed to control the content of and coordinate the changes to these shared files and folders. A mapped network drive provides users with access to shared folders. For example, the “T” drive is commonly used to map to a server share containing the shared folders.

Sites Without ACE File Servers: Users at sites without ACE file servers can share files and folders that are located on a designated local workstation. All users must be able to log on to the workstation that contains the shared files and folders. These files and folders are not backed up to an ACE file server. Users are responsible for backing up the shared files and folders located on the designated local workstation.

Authorization for users to create or share folders is obtained through eAccess (https://eaccess). For additional information on creating shared files and folders, see:

- The “Share Creation and Maintenance” section of the ACE Procedures (http://it.usps.gov/support/aceprocedures).
- ACE Frequently Asked Questions (http://it.usps.gov/support/itfaqs). Search the FAQs on the exact phrase “shares.”
Data Backup and Security

Server Data: IT is responsible for backing up server data. Backups are retained for a 30-day period. This also includes all server-based user data stored in either shared server folders or in the “My Documents” folder.

Workstation Data: The backup of data from a local workstation and the protection of the backup media is the sole responsibility of the user. The ACE Workstation Backup Utility will be used to back up user data. This utility captures all of the files and folders that are needed to restore user data and settings.

The user must ensure that backups are:

- Performed with the tools provided.
- Performed according to the instructions provided.
- Kept in a secure location.
- Available for restoration in the event of a hardware failure.

The IT Corporate Help Desk

To ensure a common user experience, support is provided by a centralized IT Corporate Help Desk for ACE hardware, software, and applications. The IT Corporate Help Desk is responsible for receiving calls from users, identifying problems, and troubleshooting them until resolution is achieved. When appropriate, the IT Corporate Help Desk will escalate calls to other support groups for final resolution.

Developing and Managing Applications

ACE supports the well-accepted best business practice of developing computer-based solutions that are integrated parts of an enterprise information technology infrastructure instead of stand-alone applications.

National Applications

All new interactive transactional processing systems within the U.S. Postal Service must be Web based and adhere to the Guidelines for New Development of Web-Based Applications (http://eagnmnsx851/).

The goal is for all new applications to be Web based and in compliance with the supported infrastructure. All new national applications and changes to existing national applications must be reviewed by the appropriate Portfolio Manager to ensure that the application is developed using products that fit the existing infrastructure and are listed in the ITK.

Application sponsors fund the IT Corporate Help Desk. End users are not charged for Help Desk calls.

The Integrated Solutions Methodology (ISM) (http://ism) provides information on development processes, deliverables, and requirements for both national and local applications.
Applications and their supporting infrastructure will be housed in the centralized facilities. The portions that cannot be housed centrally will be managed remotely from the centralized facilities.

National applications must be designed and built as components of the larger Postal Service application enterprise. The application design process includes the identification of functional components needed to support the requirements of the system. Existing components must be accessed through industry-standard interfaces, i.e., Web Services. New components are created as corporate resources and are not directly associated with or “owned” by any individual application.

**Local Applications**

If a field manager determines that building a local stand-alone application is in the best interests of the Postal Service, he or she must have the area vice president’s approval to proceed.

Ensure that when new local applications are designed, developed and implemented, they meet the following conditions:

- They must be Web based.
- They must run remotely on standard shared servers located in the Eagan Host Computing Services.
- They must be approved for use within ACE. Please review the list of pre-approved field application development tools (http://it.usps.gov/pls/itprodnp/doc/site/10/Software Tools.doc). These tools were selected by ACE from the Infrastructure Tool Kit (ITK).
- They must be listed in the Enterprise Information Repository (EIR) (http://eir) with all technology products defined.
- They must comply with all applicable Postal Service policies and standards, including the following:
  - Integrated Solutions Methodology (ISM) (http://ism).

**Terminal Services**

As an interim solution for the migration of applications to the ACE environment, some applications that were previously hosted on the Gold-Tape platform are now being hosted on Terminal Services servers. All applications being hosted on Terminal Services servers must be Web based by the end of FY 2006.
Contact Information

For additional information contact:
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