



Mac OS X Server

Workgroup Manager

Set up and manage user identities, group relationships, and access to network resources throughout your organization.

Features

Directory-based management

- Manage settings and privileges for multiple workgroups or departments from anywhere on your network
- Control access to and set quotas for use of hardware, software, and network resources
- Customize the desktop environment and control system preferences for different users and groups*
- Establish and enforce password policies
- Streamline administration and management of shared computers
- Maintain preferences and policies on desktop and portable computers even when they are offline

Simplified access to network resources

- Set up network-based home directories so users can access personal files and settings from any system on the network
- Create network-based group folders for sharing documents, applications, and network resources
- Automate access to shared printers, file servers, and applications

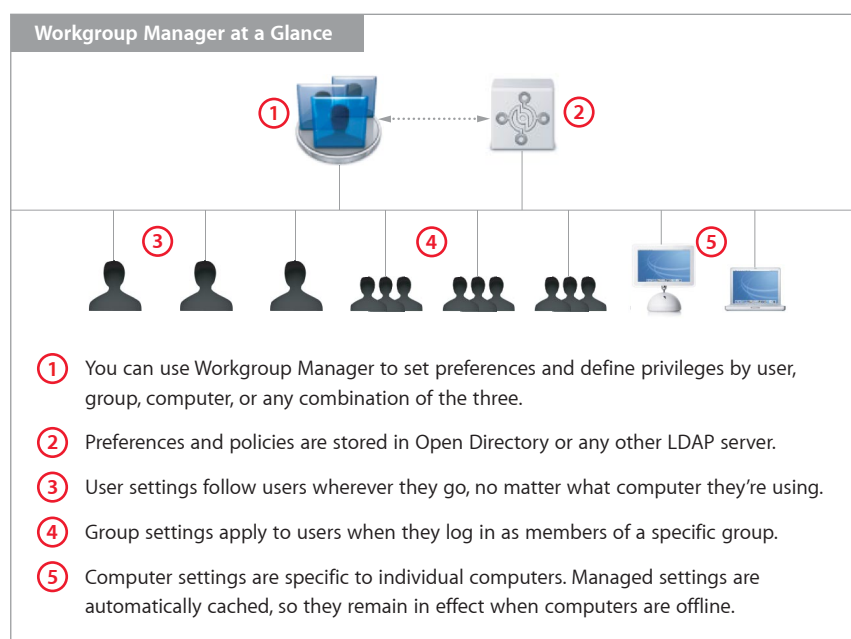
Integration with enterprise infrastructure

- Leverage existing network resources by integrating with any LDAP server
- Host home directories on NFS storage devices
- Connect to legacy AFP file servers, such as AppleShare IP and Netatalk servers

Workgroup Manager is a powerful tool for directory-based management of the Mac users and computers in your organization. An easy-to-use interface allows you to take full advantage of the robust manageability features built into the Mac OS X operating system. Using Workgroup Manager, you can provide access to network services, establish password policies, and create standardized desktop environments—giving you greater control over organizational resources, while optimizing your users' computing experience.

By setting system preferences on a per-user, per-group, or per-computer basis, you can provide a level of flexibility appropriate to your administrative needs. For example, you can create custom environments—with appropriate applications, settings, and permissions—for each workgroup or classroom in your organization.* When users log in, predefined group applications launch automatically and shared network resources are mounted on the desktop. The same functionality can be used to restrict operations: For example, you can set preferences that disable media burning or restrict outgoing email traffic; or require authentication for access to specific devices or printers.

The preferences and policies you define in Workgroup Manager can be stored in any LDAP directory server—including Apple's Open Directory, which is built into Mac OS X Server, and proprietary systems such as Microsoft's Active Directory—so you can use the directory infrastructure you already have in place.



Technology Brief

Mac OS X Server: Workgroup Manager



Mac OS X and Mac OS X Server feature the standards-based Open Directory architecture, enabling centralized management of users, groups, and computers using any LDAP directory server—or even proprietary systems such as Active Directory. For organizations that haven't deployed directory services, Mac OS X Server includes Open Directory Server, a robust, scalable LDAP solution with integrated Kerberos authentication.

Why Workgroup Manager?

Directory-based management simplifies the administration and support of Mac OS X systems while protecting your organization's resources. Workgroup Manager makes it easy to manage user, group, and computer information in your LDAP directory, allowing you to provide a superior user experience, with consistent system configurations, network-based home directories, and streamlined access to shared group resources.

Control over organizational resources

Workgroup Manager makes it easy to use directory services for controlling access to hardware, software, and digital assets, preventing unauthorized or excessive use of valuable resources. For example, you can prevent any user, group, or computer from burning media, copying unauthorized files, or connecting to certain servers. You can set print quotas to restrict the use of expensive printers; control application and device use in classrooms, open-access labs, and kiosk environments; or require password-protected, authenticated login to special-purpose systems. By enabling login privileges for authorized administrators on a per-server basis, you can even manage administrative access to the servers on your network.

Simplified administration of computer pools

With new client-side system controls for automatic logout and scheduled restart and shutdown, you can use Workgroup Manager to control these settings in computer pools and lab environments. For example, you can set all computers to power down at 5:00 p.m. or to log out automatically after 10 minutes of inactivity. And because computers are similarly configured across labs, classrooms, or departments, it's easier for administrators to support large numbers of client systems.

Enhanced user experience

With Workgroup Manager, you can set up your users for a successful computing experience. Managed system settings allow them to log in to a user environment that's appropriate to their needs and consistent from one computer to the next. For example, a teacher may choose a set of applications and documents that should always be in the Dock for each classroom of students; or when a kindergarten student logs in, the system could launch Simple Finder. In a work environment, you can set systems to open Final Cut Pro and mount shared storage volumes when a member of the video editing group logs in to any computer. Users' individual and group settings are immediately in effect, and they have streamlined access to authorized resources—no matter where they log in.

Shared group resources

Workgroup Manager enables groups to work more efficiently by sharing files and folders. You can create and designate a folder exclusively for members of a particular group and add documents and applications of special interest to group members. The group folder can be configured to mount on client systems when group members log in; it can also be set to appear in the user's Dock. Workgroup Manager ensures that all current and future members of a group can gain access to assigned applications; users who are removed from the group automatically lose access to group-specific shared folders and resources.

Defining Accounts: Users, Groups, and Computers

The Accounts feature in Workgroup Manager allows you to define users, groups, and computers on your network. The intuitive interface gives you easy control over passwords, print quotas, email servers, group membership, and more. For advanced administrators, the Inspector option lets you view all records in the LDAP directory, as well as raw account data in any record.

- **Users.** You can set up the Mac OS X and Windows users in your organization by assigning user names, alternate names, authentication methods, mail servers, and other attributes or parameters. It's easy to add or remove users—or even keep a user, such as a temporary contractor, on hold for instant reactivation at a later time. You can also specify the location of network-based home directories and set disk quotas for both Mac and Windows users.
- **Groups.** Workgroup Manager enables you to define groups and the resources associated with each group. You can add users simply by dragging members from a list of user accounts. Groups can be defined for multiple purposes: For example, you might set up a creative workgroup, a class of kindergartners, a multimedia class, a management team, or a group of new employees.
- **Computers.** In computing environments where users are coming and going, such as libraries, kiosks, and classrooms, it can be useful to manage settings on a per-computer basis. For example, a computer in a kiosk can be set to run a single application; computers in a multimedia lab can be available only to members of a multimedia class; or a computer can be associated with a nearby printer, making it easier for users to find their printouts.

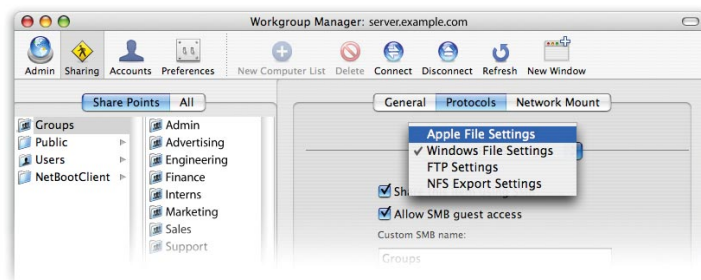
In addition to helping you manage individually identified computers, Workgroup Manager gives you flexible options for managing guest computers that connect to your network. You can assign specific settings to all guests—for example, prohibiting access to network-based resources—or you can set guests to have the same preferences, privileges, and restrictions as a specific managed computer, such as a system in a lab or library environment.

Windows systems

If you have Windows users on your network, you can use Workgroup Manager to configure their home directories, define disk and print quotas, set and manage passwords, and host roaming profiles and network-based home directories. Mac OS X Server can host a single home directory that users can access from either Mac or Windows systems—even if they switch between platforms.

Setting Share Points

The Sharing function in Workgroup Manager allows you to set share points for both Mac and Windows systems. A share point is a folder, hard disk, hard disk partition, CD, or DVD that can be accessed over the network. Users with access privileges—which are assigned in the Sharing pane—see share points as volumes mounted on the desktop or in their Network Neighborhood.

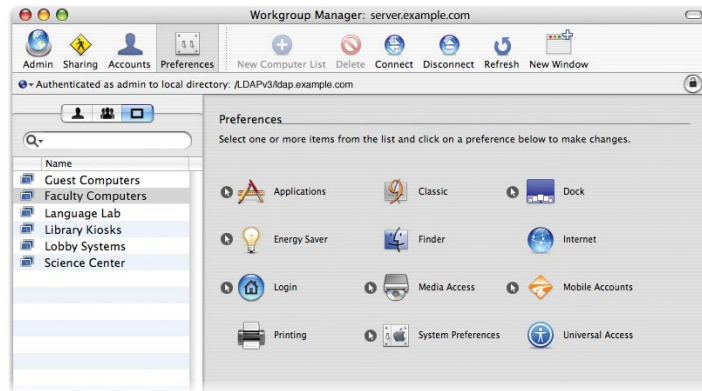


Integration with third-party directory services

Apple's standards-based Open Directory architecture features built-in directory access modules that simplify integration with third-party directory services, including Microsoft Active Directory, Novell eDirectory, OpenLDAP, SunONE, NIS, and NetInfo. Apple uses an open-schema format based on the standard LDAP RFC 2307 to define data specific to Mac OS X systems. This schema is published within the operating system and includes a unique Object Identity (OID), making it easy for administrators to integrate Mac OS X schema into an existing directory.

Defining Preferences

An intuitive interface allows you to set preferences for Mac OS X systems throughout your organization.* From the list in the Name column, select one or more users, groups, or computers, and click a preference icon to define or change their settings.



Available settings vary for users, groups, and computers. They include the following.

Applications. Specify available applications, preventing users from running unauthorized applications; or set authorized applications to open automatically when a user or a group member logs in.

Classic. Designate the location of the Classic startup system, control Classic utilities, and set the system to launch Classic automatically at startup, if required.

Dock. Manage Dock attributes such as display, size, magnification, and position onscreen; ensure that personal and group applications, documents, and URLs are always in the Dock.

Energy Saver. Set a computer to make optimal use of power, depending on performance requirements. This computer setting is especially useful for lab environments.

Finder. Define Finder behavior, desktop appearance, availability of Finder menu commands, and the desktop display of hard disks, removable media, and connected servers. Configure Simple Finder for environments such as a kindergarten classroom or a visitor area.

Internet. Set preferences for default email and web applications, such as defining a default home page and download location, controlling email account types, and restricting outgoing email traffic. For users, the default Internet browser can be set to download files to their network-based home directory.

Login. Define the Mac OS X login experience. The login window can be set to display a list of users local to the computer and on the network. For greater security, you can require users to enter their user name at login manually.

Media Access. Set authenticated access to or disable the use of internal and external disks, including hard drives, CD-ROMs, DVDs, and USB and FireWire devices.

Mobile Accounts. Set a portable system to cache the LDAP user, group, and computer account information, including authentication token, on its hard drive. This enables managed settings to remain in effect when the computer is disconnected from the network.

Printing. Define a set of printers and a default printer for any user, group, or computer. For example, you can associate a computer with a nearby printer or associate individual users with a particular printer regardless of the computer they are using.

System Preferences. Designate which system preferences can be configured by users and restrict access to other preferences.

Universal Access. Set features for those who have difficulty using computers. For example, large fonts or white-on-black text can help users with impaired vision, and Sticky Keys can help users who can't press more than one key at a time.



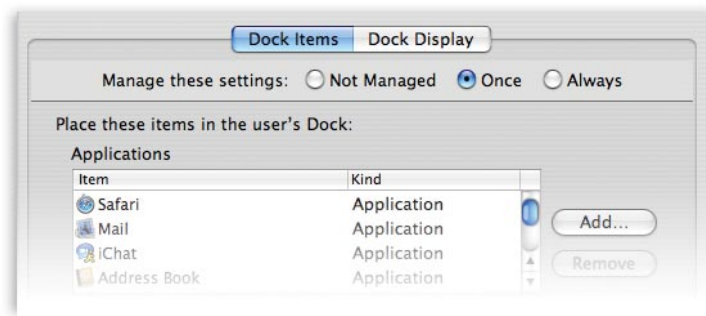
Apple Remote Desktop

Apple Remote Desktop (sold separately) is a complementary workgroup management solution that gives you remote access to client systems. You can use Workgroup Manager to set up preferences and policies and use Apple Remote Desktop to enforce them.

Setting levels of control

For each set of preferences, Workgroup Manager allows you to select an appropriate level of control over your network resources: not managed, once, and always.

- **Not managed** means that the administrator has imposed no settings. This is the default for all account preferences.
- **Once** provides an initial set of preferences but allows the user to change the setting. By managing a preference once, an administrator can define “good” default settings for an organization, encouraging—without imposing—appropriate computing practices.
- **Always** allows the administrator to define preferences that cannot be changed by the user. By preventing system reconfiguration, tampering, or unauthorized access to organizational resources, Workgroup Manager simplifies desktop support while providing a consistent, predictable user experience.



The directory hierarchy

To ensure the appropriate balance between user freedom and administrator control, Workgroup Manager negotiates privileges on an exclusive or inclusive basis, depending on the preference.

Exclusive settings

- Applications
- Classic
- Dock display
- Finder
- Internet
- Login options
- Media Access
- Mobile Accounts
- Universal Access

Inclusive settings

- Dock items
- Login options
- Printing
- System Preferences

Exclusive settings. Workgroup Manager applies privileges and restrictions according to the directory hierarchy: user, computer, and group, in that order. For example, an individual user's settings override the computer's settings, and computer settings override those assigned to a group. This allows you to lock down computers in tightly managed environments, while permitting selective actions by authorized users. For example, a computer in a library may have media burning disabled, which would prevent members of a multimedia classroom—who are permitted to burn DVDs—from tying up the library system for this purpose, but would not obstruct the librarian's individual privilege to use the computer to burn DVDs.

Inclusive settings. Workgroup Manager combines the privileges of the user, computer, and group. For example, the set of printers available to an individual is the aggregate of those available to the user, the specific computer, and the login group. This provides added convenience by enabling a user in a computer lab to print to nearby printers and also to personally defined printers, such as a large-format color printer available only to certain individuals. Because printers are assigned from the directory, no configuration is required on the client computer.

Automatic Discovery of Managed Configurations

Mac OS X supports automatic discovery of directory-based configurations using DHCP Option 95. This means that Mac systems on your network can automatically discover their directory server and retrieve user, group, and computer configurations— with no user intervention required. After obtaining an IP address from the DHCP server, the computer contacts the LDAP network directory, which configures the client system and provides user account information, group settings, and managed system preferences. This ensures that users can easily access authorized network resources. At the same time, it simplifies management of equipment pools and group resources by freeing technicians and administrators from continual system reconfiguration.

Apple Server Solutions

Workgroup Manager is one of the innovative client management solutions built into Apple's UNIX-based Mac OS X Server operating system. Combining the latest open source technologies with Macintosh ease of use, Mac OS X Server unleashes the power of Xserve, Apple's rack-optimized server hardware. With phenomenal performance, massive storage capacity, high-bandwidth I/O, and integrated remote management tools, Xserve running Mac OS X Server is an unparalleled server solution for businesses, schools, and research centers.

For More Information

For more information about Mac OS X Server, Xserve, and other Apple server solutions, visit www.apple.com/server.

*Managed preferences require Mac OS X v10.2 or later; some preferences are specific to Mac OS X v10.3 or later.

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