



Likewise Makes Joining Macs To Active Directory Easy

LIKewise PORTS BENEFITS OF DOMAIN MEMBERSHIP TO MAC

- Centrally manage Mac OS X settings, users, and groups
- Use Kerberos to securely authenticate Mac users without building an ad hoc Key Distribution Center
- Apply more than 100 group policies to Mac computers
- Manage system preferences with Mac-specific group policy objects
- Consistently implement security settings across the enterprise
- Generate reports to help improve regulatory compliance
- One user, one ID

SUPPORTED MAC VERSIONS

Likewise Enterprise supports the 32-bit and 64-bit versions of the following Mac operating systems:

- OS X v10.4 PowerPC
- OS X Server v10.4 PowerPC
- OS X v10.4 x86
- OS X v10.3 PowerPC

Overview

Likewise Enterprise lets you join Mac OS X computers to a Microsoft Active Directory domain, yielding a range of benefits beyond those provided by the Active Directory plug-in that is included with Mac OS X. Likewise simplifies the process of joining a Mac to an Active Directory domain, allows you to assign a static UID to a Mac user without changing the Active Directory schema, and gives you the power to centrally manage all your Macs with group policies. The result: Less work, more security, easier system administration.

About Likewise Enterprise

By joining Mac computers to Active Directory – a secure, scalable, stable, and proven identity management system – Likewise gives you the power to manage all your users' identities in one place, use the highly secure Kerberos 5 protocol to authenticate users in the same way on all your systems, apply granular access controls to sensitive resources, and centrally administer Linux, Unix, Mac, and Windows computers with group policies.

Likewise includes the following features:

- Mac-specific group policies that are simple to manage because they are integrated into the Microsoft Group Policy Object Editor and the Group Policy Management Console.
- Many more group policies that can be applied to Mac OS X computers to manage security settings, sudo configuration files, logs, Kerberos authentication, shell scripts, and other functions.
- Reports that show access privileges for users, groups, and Mac computers. The reports can help you comply with regulatory requirements.

Why choose Likewise Enterprise?

There are three options for joining a Mac to Active Directory:

1. Use the Active Directory option that comes with the Mac OS X.
2. Use the “Golden Triangle” approach as suggested by some in the Mac community:: Connect an Mac OS X Server to Active Directory and add AD users to OS X Server groups, yielding group management without having to extend the AD schema.
3. Use Likewise.

Apple’s Approach:

Since Mac OS X 10.3, Apple has included an option in its Directory Access utility to join an Active Directory domain. (To view the plug-in, in Finder, click Utilities, click Directory Access, select Active Directory, and then click Configure.) Using the plug-in to join a Mac to Active Directory isn’t terribly difficult; in fact, it’s pretty easy. It provides single sign-on to all Active Directory resources.

In an approach known to some in the Mac community as the Golden Triangle, you can deploy an open directory domain on a Mac OS X Server that is intended to map ID users to security groups and to apply policies. In this scenario, Mac users can access both Apple resources, such as an Mac OS X file server, and Active Directory resources.

Likewise Approach

Finally, there is the Likewise approach. Likewise is designed to integrate various system of authenticating users — such as NIS, custom LDAP solutions, home-grown Kerberos key distribution centers, and local /etc/passwd and group files — into Active Directory.

Likewise provides configuration and reporting tools that empower administrators to consolidate disparate User IDs into a single Active Directory ID. More: With Likewise, Mac clients can gain single sign-on to OS X, Active Directory, and other Linux and Unix resources by using a single Active Directory account.

Likewise also extends group policies to the Mac platform. This extended functionality provides over 100 policies and extensible scripting

capabilities that help administrators centrally configure any Mac system. Reporting capabilities can help administrators address compliance audits.

Likewise's Domain Join Tool: Simple and Elegant

Likewise includes a domain join tool for Mac OS X that lets you quickly and painlessly join a Mac computer to Active Directory and then use the full power of Active Directory to manage Mac users just as you would manage Windows users.

Likewise overcomes the differences between the Open Directory schema used by Macs and the schema used by Active Directory in such a way that you can manage each user's UID in Active Directory. There is no need to generate a UID, and there is no concern about using an ad hoc attribute in the Active Directory schema to store UIDs. Instead, Likewise maps Active Directory security identifiers (SIDs) to UIDs and stores the data in the Active Directory database. A user can use the same UID to log on Mac, Unix, Linux, and Windows computers.

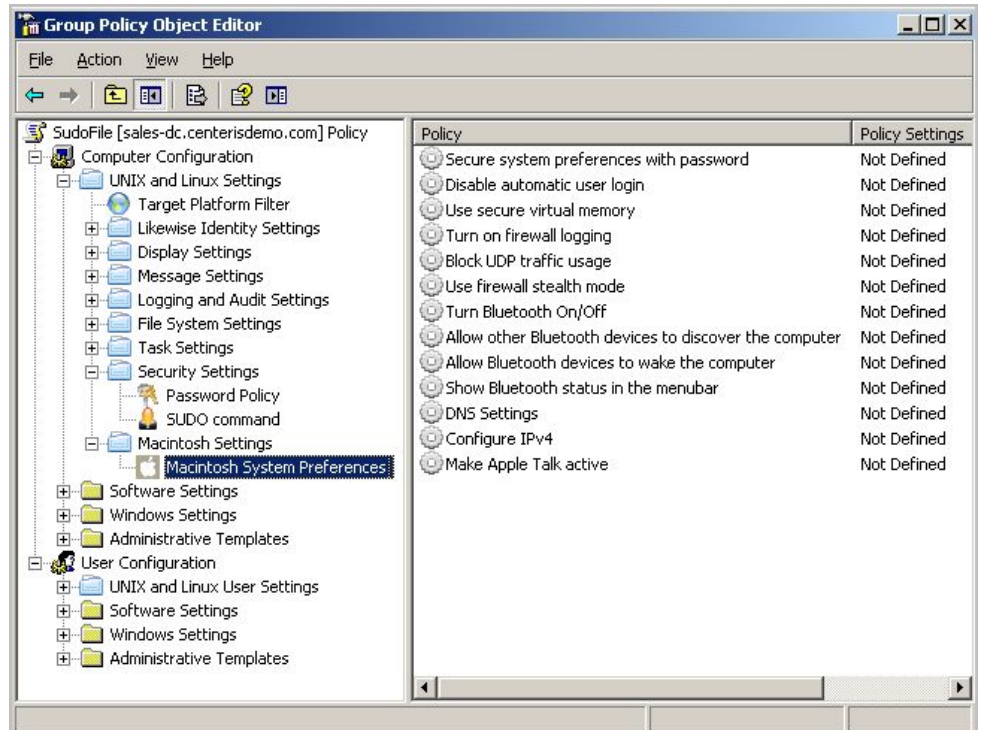
After joining your Mac computers and servers to Active Directory, Likewise lets you apply group policies to them by using the Microsoft Group Policy Object Editor.

Likewise Group Policies for Mac OS X

Likewise empowers you to define group policies for computers running Mac OS X, including Mac-specific policies and more than 100 other policies that you can apply to Mac and other Unix computers.

For example, you can use a group policy to control who can use sudo for access to root-level privileges by specifying a common `sudoers` file for target Mac computers. You could, for instance, create an Active Directory group called SudoUsers, add Active Directory users to the group, and then apply the sudo group policy to the container, giving those users sudo access on their Mac computers. In the `sudoers` file, you can specify Windows-style user names and identities. Using a group policy for sudo gives you a powerful method to remotely and uniformly audit and control access to Mac resources.

The group policies are integrated into the Group Policy Object Editor:



How Group Policy Works with Mac OS X

Likewise group policies work like Windows group policies. After Likewise joins a Mac to Active Directory, a Likewise Group Policy Agent runs in the background on the computer. The Likewise Group Policy Agent determines the list of group policy objects that are applied to a computer. Likewise has implemented a set of client-side extensions for policies specific to Unix, Mac OS X, and Linux. These policies are irrelevant to Windows computers because the corresponding Unix or Linux client-side extensions do not exist on a Windows computer. With Likewise, you can also enforce a subset of the Windows security policies on Mac.

Macintosh Policies

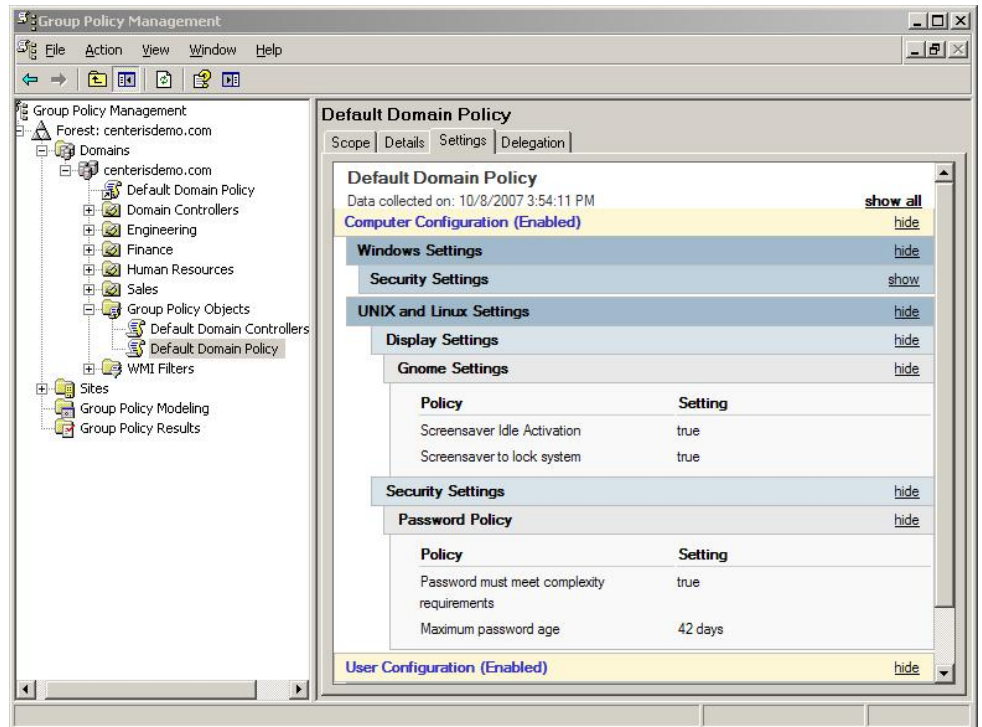
The Likewise group policies in the following table apply only to computers running Mac OS X. For information on Likewise's group policies for Unix and Linux computers, see the Likewise Group Policy Technical Note available at www.likewise.com. Most of the more than 100 Unix and Linux policies can also be applied to the Mac.

Group Policy	Description
Allow Bluetooth Devices to Find the Computer	This group policy makes target Mac OS X computers discoverable by Bluetooth devices.
Allow Bluetooth Devices to Wake the Computer	This group policy sets the system preferences to allow Bluetooth devices to wake target Mac OS X computers. The policy allows a user who has a Bluetooth keyboard or mouse to press a key or click the mouse to wake a sleeping computer.
Block UDP Traffic	This policy sets the built-in firewall on target computers running Mac OS X to block UDP traffic. Blocking User Datagram Protocol traffic can help secure target computers.
Disable Automatic User Login	This policy disables automatic login on target computers running Mac OS X. The policy requires a user to log on every time the computer is turned on or restarted.
Log Firewall Activity	This policy logs firewall activity on target computers running Mac OS X Tiger or later. To help you monitor and audit Mac computers for security issues, the policy turns on firewall logging, which keeps a log of such events as blocked attempts, blocked sources, and blocked destinations.
Secure System Preferences	This policy locks system preferences on target computers running Mac OS X so that only administrators with the password can change the preferences.
Show Bluetooth Status in the Menu Bar	This policy sets the system preferences to show the Bluetooth status in the menu bar of a target Mac OS X computer. When enabled, the policy displays a Bluetooth status icon in the menu bar.
Turn Bluetooth On or Off	This policy turns on or turns off Bluetooth power on target Mac OS X computers. When Bluetooth power is turned off, other Bluetooth devices, such as wireless keyboards and mobile phones, cannot connect to the computer.

Group Policy	Description
Use Firewall Stealth Mode	This policy sets the built-in firewall on target computers running Mac OS X to operate in stealth mode. Stealth mode cloaks the target computer behind its firewall: Uninvited traffic gets no response, and other computers that send traffic to the target computer get no information about it. Stealth mode can help protect the target computer's security.
Use Secure Virtual Memory	This policy configures target computers running Mac OS X to store application data in secure virtual memory. In case the computer's hard drive is accessed without authorization, the policy sets the target Mac to encrypt the data that it stores in virtual memory.
Configure IPv4	This policy defines the IP address and other IPv4 settings on target Mac OS X computers. For example, you can configure IPv4 to use DHCP or Bootstrap Protocol (BootP).
DNS Settings	This policy specifies the DNS servers and search domains on target Mac OS X computers. The search domains are automatically appended to names that are typed in Internet applications.
Make AppleTalk Active	This policy makes AppleTalk active on target Mac OS X computers. You can also use this policy to make AppleTalk inactive.

Viewing Reports on Group Policy Settings

Likewise integrates its group policies into the Microsoft Group Policy Management Console so that you can use the console to manage Mac OS X policies. For example, you can view a report that shows the settings for a Likewise group policy. Here's an example:



ABOUT LIKewise

Likewise Software is an open source company that provides audit and authentication solutions designed to improve security, reduce operational costs and help demonstrate regulatory compliance in mixed network environments. Likewise Open allows large organizations to securely authenticate Linux, UNIX and Mac systems with a unified directory such as Microsoft Active Directory. Additionally, Likewise Enterprise includes world-class group policy, audit and reporting modules.

Likewise Software is a Bellevue, WA-based software company funded by leading venture capital firms Ignition Partners, Intel Capital, and Trinity Ventures. Likewise has experienced management and engineering teams in place and is led by senior executives from leading technology companies such as Microsoft, F5 Networks, EMC and Mercury.