# Centrally Securing Cross-Platform Data Centers Using Active Directory

A survey by the 2010 Cyber Security Watch Survey* found that "the most costly or damaging attacks are more often caused by insiders (employees or contractors with authorized access)." Whether struggling to meet PCI or other regulations, or to protect intellectual property in an increasingly borderless network, IT organizations are deploying identity-aware security solutions that provide global control and visibility over user access rights, privileges and activity.

Increasingly, IT managers and industry analysts are turning to Microsoft Active Directory as an ideal, enterprise-class foundation for centralized identity and access management. The Centrify Suite extends Active Directory services to the rest of your enterprise: UNIX, Linux and Mac systems and applications. By enabling you to manage those platforms using existing Windows-based processes, Centrify helps you strengthen security and compliance with tools to control access rights, superuser privileges and audit trails, linked to a single, centrally managed identity. You can also reduce costs by eliminating redundant identity stores and streamlining IT operations across both your physical and virtual data center.

* Conducted by CSO Magazine, the U.S. Secret Service, CERT, and Deloitte. See: http://www.cert.org/archive/pdf/CyberCrimeRelease_final.pdf.
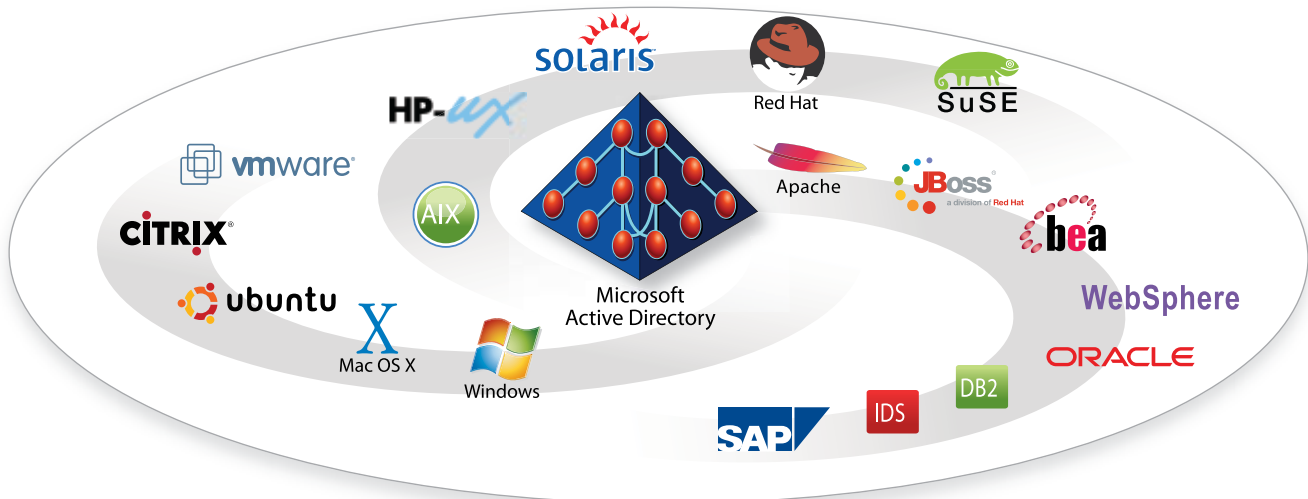
BY LEVERAGING ACTIVE DIRECTORY, ORGANIZATIONS HAVE A COST-EFFECTIVE SOLUTION FOR:

IT Security & Compliance Keep your complex, heterogeneous physical and virtual data centers secure and compliant with centralized management of user access rights, privileges and activity.

Mac Desktop Management Use familiar Windows-based tools and processes to centrally manage accounts and apply consistent security and configuration policies across your Mac OS X desktops.

UNIX & Linux Identity Management Reduce risk and streamline operations by eliminating redundant identity stores and tying access controls and superuser privileges to a single, centrally managed Active Directory identity.

SAP, Web & Database Single Sign-On Improve end-user satisfaction and streamline operations by tying access to SAP, web applications, and databases to a user's Active Directory account

An Integrated Suite of Solutions

Built on a common architecture, the Centrify Suite 2010 is an integrated family of Active Directory-based auditing, access control and identity management solutions that secure cross-platform environments and strengthen regulatory compliance. The key components of the suite are:

Centrify Direct**Control**

Centralized Authentication and Access Control

- Control who can log into which systems and applications
- Enforce security policies and consolidate user accounts

Centrify Direct**Authorize**

Role-Based Authorization and Privilege Management

- Control how and when users can access UNIX & Linux
- Specify exactly what commands they can run on those systems

Centrify Direct**Audit**

Detailed Auditing of User Activity

- Audit in detail what users do on UNIX & Linux systems
- Report on user sessions and monitor for suspicious activity

Centrify Direct**Secure**

Trust-Based Protection of Sensitive Systems

- Secure a logical network of trusted systems
- Enable end-to-end encryption of data-in-motion

Centrify Direct**Manage**

Centralized Management and Administration

- Deploy Centrify software and migrate identities to Active Directory
- Manage accounts, access rights, privileges and policies

Which Edition Is Right for You?

Centrify Suite is available in several editions to address organizations' different needs for cross-platform identity management leveraging Microsoft Active Directory.

Product	Features	EDITIONS			
		Standard	Enterprise	Platinum	Application
DirectManage	Centrally discover systems and deploy software	•	•	•	•
	Rapidly migrate existing accounts and access rights into Active Directory	•	•	•	•
	Provision and manage access and roles via MMC, CLI and web interfaces	•	•	•	•
	Advanced reporting of access and usage		•	•	•
DirectControl	Join Active Directory and authenticate users (PAM, NSS, Kerberos)	•	•	•	•
	Advanced Active Directory support (site-aware, trusts, zero schema mods)	•	•	•	•
	Centralized UNIX identity management (map multiple UIDs to one AD account)	•	•	•	•
	Zone-based access control & separation of duties	•	•	•	•
	Group Policy enforcement	•	•	•	•
	Legacy NIS integration and migration	•	•	•	•
	Centrify-enabled versions of OpenSSH, Kerberos and Samba	•	•	•	•
DirectAuthorize	Role-based authorization & privilege management	•	•	•	•
	Dynamic access restrictions	•	•	•	•
	Restricted shell environment (whitelist)	•	•	•	•
DirectAudit	User session capture (DVR) and correlated session collection		•	•	•
	User session search and replay with command list		•	•	•
	SQL–based event reporting and archiving		•	•	•
DirectSecure	Secure sensitive information by dynamically isolating cross-platform systems			•	
	Enable end-to-end encryption of data in motion			•	
	Leverage Windows 7 DirectAccess to secure UNIX and Linux systems			•	
	PKI certificate auto issuance and renewal			•	
Application Integration	SAP NetWeaver (SAPgui and Web) single sign-on				•
	Web single sign-on (Apache, Tomcat, JBoss, WebSphere, WebLogic)				•
	IBM DB2 single sign-on modules				•

Centrify's solution is "mature, technically strong, full featured, and possess[es] broad platform support for SSO applications and UNIX platforms… organizations looking for tight integration of their AD bridge and UNIX security products should evaluate the Centrify offerings."

– Burton Group

"We love Centrify DirectControl. It allows our clients to easily integrate their non-Windows systems into Active Directory (AD), and we can even support AD GPO's on Linux, UNIX and Macs!"

– Dustin Puryear, contributor, Windows IT Pro

"You can't go wrong if you choose Centrify."

– Darren Ehmke & Eric B. Rux, Windows IT Pro

"DirectControl offers the simplest and most full-featured Active Directory integration solution for Mac OS X. Because it relies on Active Directory's Group Policy architecture, it functions more seamlessly for managing access… particularly for systems administrators who are unfamiliar with Mac OS X."

– Ryan Faas, ComputerWorld

Why Customers Choose Centrify

Centrify's 1500+ customers include financial institutions, pharmaceutical companies, government departments, retail giants, high-tech firms and universities. The deployments range from thousands of globally distributed UNIX and Linux servers to a few Macs in a single department. Here are some of the problems customers are solving using Centrify.

IDEXX   **RIM**®   **SOCIETE GENERALE** Corporate & Investment Banking   **WYSE**   **Wyeth**®

Regulatory Compliance

"When the SOX auditors were looking at the access control to our systems, [we] were already covered with Centrify. Essentially, we could just print off a DirectControl report and say these people had access to this Linux system and when."

Ian Brown, Systems Architect, Research In Motion

Security & Access Control

"DirectControl has done a terrific job by providing a single point of controlling access leveraging Active Directory and has helped Wyse pass critical security review and external IT audits."

Faan DeSwardt, Director, Enterprise Architecture, Wyse

Increased Operational Efficiency

"Using Centrify DirectControl for server administration saved a lot of time that our system admins are now able to spend on more business-oriented responsibilities."

Libby Williams, Manager Systems Team, IDEXX Laboratories, Inc.

Centralized Management Scalable to Thousands of Systems

Société Générale Corporate & Investment Banking (SG CIB) has deployed Centrify DirectControl on several thousand physical and virtual servers running UNIX and Linux operating systems. SG CIB is optimizing its IT management control by leveraging its existing, robust Microsoft Active Directory infrastructure to centrally administer user accounts and access controls for its UNIX and Linux server systems.

Centralized and Streamlined Identity Management

"By enabling us to centralize identity management, reducing passwords for our users, and eliminating the Sun ONE Directory Server, DirectControl makes our lives a lot easier, and lets us focus more on the research goals of the business."

Dave Kennamer, Manager, Advanced Research Computing, Wyeth Research

Supported Platforms

Centrify leads the industry with support for over 225 flavors of UNIX, Linux and Mac.

SYSTEMS

- Apple Mac OS X
- CentOS Linux
- Citrix XenServer
- Debian Linux
- HP-UX
- IBM AIX
- Novell SUSE & OpenSUSE Linux
- Oracle Enterprise Linux
- Red Hat Linux, Enterprise Linux & Fedora
- Scientific Linux
- SGI IRIX
- Sun Solaris & OpenSolaris
- Ubuntu Linux
- VMware ESX Server

APPLICATIONS

- Apache HTTP Server & Tomcat
- IBM DB2, Informix & WebSphere
- JBoss AS
- Oracle Database & WebLogic
- SAP

Centrify®