

## COSuser

Identity Management through policy-based user provisioning, account administration, role-based access control and password synchronization – for enterprises with infrastructures using UNIX, Linux and Windows®

**Identity Management is a major area of concern for most mid- to large-scale organizations, whether in the context of external computer users, (typically customers and suppliers), or employees and contracting staff, or both.**

**COSuser is a user provisioning software application that focuses on the control of access to the computing infrastructure by employees and contractors. By combining centralized user administration with password synchronization and strength control, and with a web browser based self-service facility, it reduces the cost of IT operations, improves service levels, increases security and assists with legislative compliance.**

**In particular, the recent appearance of corporate governance legislation, such as Sarbanes-Oxley, HIPAA and the European data directives, provides a major incentive for organizations to ensure that all access to critical, online data and applications is controlled and audited.**

**COSuser** centralizes the user administration function. It works on the principle that the organization grants access to its applications according to the role that a person plays within it. For example, an individual in the trading department based in Frankfurt requires access to the centralized trading system and the Frankfurt-based email and office server.

At its simplest, **COSuser** permits a user's name and department to be entered and his or her role(s) in the company to be specified, after which it will register that individual on every application, database, middleware and operating system instance to which he/she needs to have access. Based on a predetermined set of business rules, users' profiles are set up automatically and the users are granted the minimum access

requirements they need to do their jobs. When they leave, they can be immediately disabled from all applications.

The result is that access to applications is restricted to users who need to have that access, and it is granted at the appropriate level. Leavers are removed immediately.

The level of automation removes a huge administrative cost burden from the

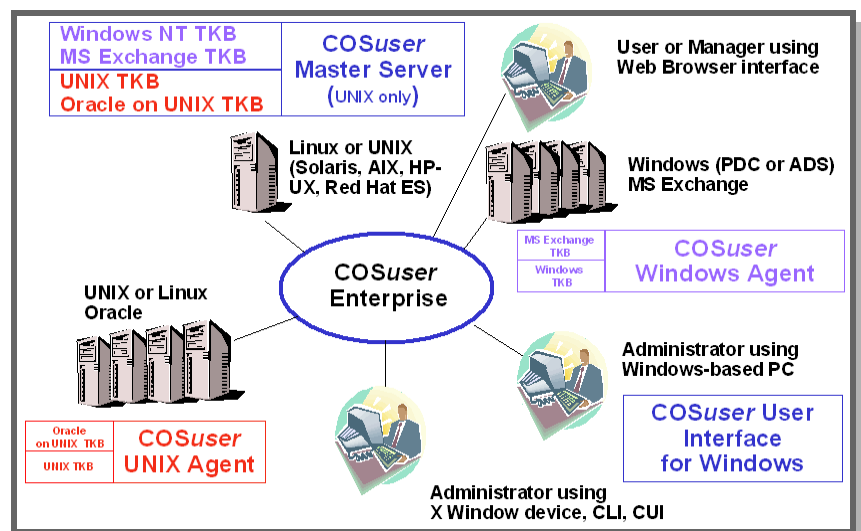


Figure 1 – COSuser's architecture

organization, and allows new employees to be productive as soon as they join, rather than having to wait days to be set up across all the different applications they need to do their job. All user administration transactions are audited so that directors can prove due diligence in their governance, and any bypassing of the role- and rule-based system can be quickly identified.

COSuser's central repository of authorized users allows password strength control and synchronization to be implemented. A user making a password change anywhere can have it checked for strength, and the change automatically propagated across all their applications. This means only one password to remember so that it can be made stronger and have the chance of its being written down and stolen reduced.

A web browser based workflow engine is also provided so that end users can easily request new accounts, passwords or shares, and have those requests routed automatically to the appropriate managers for authorization, before being committed to the system. This offloads the helpdesk, so producing significant efficiency gains, brings the end user into the business process and improves service.

COSuser also incorporates technology from both OSM's network-aware job scheduler – COSbatch (www.cosbatch.com) – and the secure IT operations workflow management software – COSduty-SSA (www.cosduty.com). In the event that an enterprise wishes to add one or both of those products to an existing COSuser installation, then complete compatibility is assured.

### COSuser Master Server

COSuser is implemented in a Server-Agent configuration, with all remote user accounts being managed from a single, central node running the COSuser Master Server software which must run on either a UNIX or Linux system. The COSuser Master Server holds the repository of users and user accounts together with the policy definitions of how those accounts should be set up, including roles, rules, templates, access capabilities and password strength controls. The COSuser Master Server is typically backed up by a failover node running on equipment either configured for redundancy or managed by the COSuser FailOver software.

### COSuser Agent

Any UNIX, Linux or Windows server which holds details of user accounts (for example, an AD Server within a MS Windows estate) which will be under the control of COSuser will normally run the COSuser Agent, a lightweight software product that handles all instructions from the Master Server for the system on which it resides. The Agent includes a secure communications method which can be altered if necessary to accommodate organization standards, for example, SSH.

### COSuser TKB

The Target Knowledge Base (TKB) encapsulates the knowledge necessary to provision a particular application or operating system with the attributes that are required to establish a user. Known to some of the industry as a "Connector", it is differentiated from those of many competitors by being abstracted from the communications method that is used to communicate with the application's host. In combination with the TKB Wizard (a toolset designed to quickly build new TKBs) it enables new applications to be brought on board much more quickly than would otherwise be the case. Part of the TKB resides on the Master Server, and part on the host serving the application.

### Transaction engine

All changes made to policy and to user accounts are queued for execution in the Transaction Engine. Within COSuser, this Transaction Engine uses technology developed for COSbatch, a commercial quality, top end job scheduler in its own right. All transactions are exploded into individual tasks which can be scheduled, managed and monitored to make sure that all user information is updated at times most appropriate to the

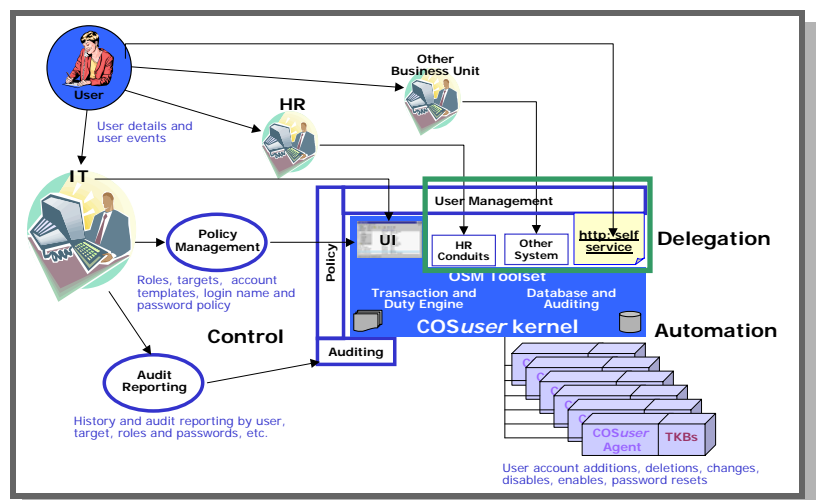


Figure 2 – COSuser operating overview

infrastructure elements being managed. *COSbatch* is separately available for use as a general purpose job scheduler.

### Delegation engine

In addition to using technology from *COSbatch* to handle enterprise-wide background processes, *COSuser* also incorporates technology from *COSduty-SSA*, a product for scheduling and controlling interactive processes – that is those requiring human intervention. The technology is used within *COSuser* as the basis of the delegation engine. The standardized technology of these modules allows all processes across the enterprise to be managed from a single point on the network.

The delegation functionality enables IT management to enforce best practice and policy across all supported computer systems. Instead of administrators performing the majority of their tasks using a privileged user account (such as 'root' on UNIX or Linux) with its implied security, audit and compliance concerns, a common Graphical User Interface is provided for running common processes.

Once encapsulated, the processes may be delegated as duties to other relatively unskilled personnel, with resultant benefits in reduced cost, improved service levels, full auditing, improved security, increased accountability and a reduction in dependency on skilled individuals. For further information on *COSduty-SSA* please visit [www.cosduty.com](http://www.cosduty.com).

### COSuser User Interfaces

User interfaces include a command line interface, an X Window System GUI, a Microsoft Windows GUI and a web browser based self-service workflow interface. Using the web browser interface, end users are able to request new accounts and shares, change or determine new passwords, and have all such requests authorized through management.

### COSuser KM for PATROL

*COSuser* can be monitored and managed from BMC PATROL, the proactive monitoring software from BMC Software, Inc., using an OSM authored Knowledge Module. The same information can be propagated to other enterprise monitoring tools including those

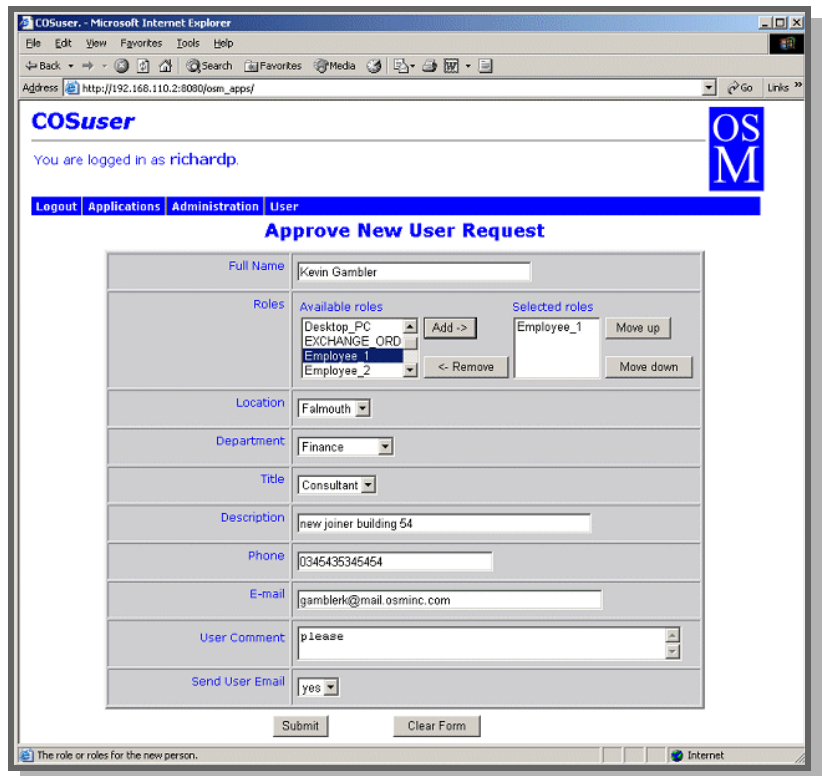


Figure 3 – An example of *COSuser*'s web user interface on Windows

from IBM Tivoli, Hewlett-Packard and Computer Associates.

### Features and functionality

*COSuser* provides the following capabilities:

- Centralized user administration so that all user accounts across the infrastructure can be managed from a single point on the network
- Immediate or deferred (scheduled) addition, changing, disabling, disarming or deletion of end user accounts

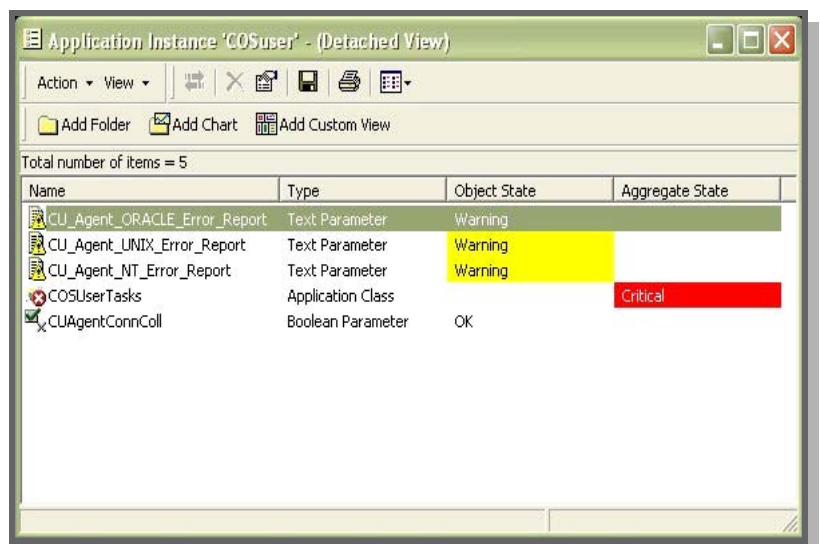


Figure 4 – PATROL Windows console – top-level view of *COSuser* KM

- MS Windows share management
- Automatic fail-over in the event of the Master Server going down
- Password ageing, history and strength control
- Password synchronization
- Privileged user management
- Delegation engine providing IT operations workflow management
- Transaction engine providing background job scheduling of provisioning processes
- Library of pre-written Target Knowledge Bases ("Connectors")
- TKB Wizard for the quick development of new TKBs
- Interactive TKB ("iTKB") for the provisioning of applications without the requirement to develop new Connectors
- Web browser based self-service workflow
- Web browser based self-registration
- Full auditing (8 standard audit trails plus custom options)
- Integration with Microsoft's MIIS
- Built in administrative access security controls
- Monitoring by BMC PATROL.

### Availability

**COSuser Master Server:** Sun Solaris, IBM AIX, HP-UX, Red Hat Linux ES and AS.

**COSuser Agents:** Sun Solaris, IBM AIX, HP-UX, HP Compaq Tru64, SCO UNIX, Sequent Dynix PTX,

Linux (most variants), Microsoft Windows NT4, 2000 and 2003.

### Summary

COSuser provides the following benefits:

- valuable efficiency gains and a rapid Return on Investment ("RoI") resulting from automation of the user account provisioning process, centralized administration for all user accounts across the infrastructure, reduced help desk calls and the retention of assets
- improved security through password strengthening and synchronization, tighter access controls, automatic disabling of leavers and privileged user management
- service level improvements as the result of business users being provisioned with the applications they need, immediately and accurately
- improved auditing as all actions and transactions are logged and reported
- increased legislative compliance as access to critical data is reduced to those who need to have it, with full logging of how that access was granted.

For more information please visit:

[www.cosuser.com](http://www.cosuser.com).



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[www.osmcorp.com](http://www.osmcorp.com)

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