

# AUTOMATING ACCOUNT CREATION IS CRITICAL

By Jon Greene

Competing in one of the world's most heavily regulated industries, casinos of all sizes are recognizing that automated user provisioning—the process of creating, managing, and tracking user accounts and access—is a “must have” solution. Virtually all regulations and operating standards, whether established by a gaming commission, the SEC or industry best practices, require controlling who has access to what and the process by which it is authorized. Automated user provisioning systems provide a mechanism for defining and enforcing organizational access policies while capturing an audit trail for reporting, thus streamlining compliance verification. It should come as no surprise that many user provisioning projects are launched in response to deficiencies identified in a recent audit.

The economic justification is just as strong. Casinos are dependent on information technology and a diverse set of hospitality and gaming applications to run all phases of their business, making systems administration a major component of IT budgets. Buried within these costs is an extremely large provisioning expense. Fortunately, while it may account for 40–80 percent of the annual systems administration budget, it can be nearly eliminated via software automation and well-defined processes and procedures.

Manual user provisioning will soon become extinct as additional operators recognize that remaining competitive in a dynamic market demands eliminating these costly, error-prone and time-consuming processes. The ROI analysis is too compelling to ignore, as it can easily quantify the hard dollars being spent every year on provisioning processes for direct labor, systems, software and services. A comprehensive automation project—including user provisioning, deprovisioning (terminations, transfers, etc.), approval workflow, policy enforcement and reporting—can pay for itself in just a few short years.

In short, a properly funded, staffed and deployed user provisioning software project delivers required business controls while perpetually reducing administration costs, increasing security and accelerating user productivity.

## What is User Provisioning?

Every organization has some combination of manual and automated user provisioning processes. Specifically, user provisioning consists of managing the adds/moves/changes

through the lifecycle of an employee, contractor, vendor or customer. In a typical heterogeneous IT environment, that includes managing user logon accounts, passwords and access rights on a wide variety of platforms like Active Directory, Exchange, IBM AS/400, databases and applications. Typical tasks include account creation; termination; daily account management, such as promotions, demotions and leaves of absence; access requests; and maintaining account attributes like cell phone number or title.

The legacy user provisioning process begins with an electronic form generated by HR indicating a new hire, transfer or termination. Unless the firm has defined the privileges required for each user's job (commonly called roles), the hiring manager will have to specify the requested access and forward the paperwork to a workflow administrator to manage the approval process. Once all approvals are obtained, the administrator sends instructions to each system or application admin to create the necessary accounts and assign access privileges. The results are then filed or tabulated in a spreadsheet for management or audit reporting (often manually generated).

With all of those manual operations, it's easy to see why it takes days or even weeks to assign access and why it often involves a dozen or more people, driving up costs and making auditing difficult. Auditors also commonly find “orphan accounts” corresponding to terminated employees, flagging a control deficiency and potentially exposing critical data to disgruntled former employees.

An automated user provisioning system consisting of the following six elements can handle the entire user identity lifecycle:

- A role management system for maintaining roles—the set of access rights and assets associated with each job function, geography, etc.
- An application for managing access requests
- A workflow management system—the automated approval process
- An audit and reporting system— who has access to what, how was it granted, etc.
- An directory for storing managed identity properties
- Connectors to each application for managing user credentials and updating access rights

## GAMING MANAGEMENT ■ efficiency

The entire process described above can now be executed with little or no administrative intervention, from automatic provisioning triggered by a new hire in the HR system to self-service access requests and workflow enforced approvals and, finally, automated termination. The current status of each operation is available online, and missing approvers can be reminded or the request can be escalated automatically per organizational policy. Perhaps most importantly, all steps are captured in a database for standard and custom audit reporting.

### Strategies for Success

Following a few simple principles greatly increases the likelihood of deploying user provisioning on time and on budget.

**Planning** Identifying key business goals, limitations (budget, time, etc.) and resources will lead to a much smoother implementation. Begin with a readiness assessment to determine what needs to be done before moving forward with the project. It should address

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questions regarding executive sponsorship, the existing identity management infrastructure and processes, regulatory/audit drivers, etc. This readiness can be performed in house or as a short-term (weeks, not months) professional services consulting project. Beware of vendors pushing for a project launch before these issues have been addressed.

**Simplification** Start with what you know. Access rights and approval processes are generally assigned based on roles. If you've already built a comprehensive role model and approval workflow, then by all means implement them in your provisioning automation solution. However, if you've only defined simple roles such as "employee" and "contractor," then start with those. Managers, or end users (if permitted), can submit additional access requests via the client interface, with the provisioning system automatically executing the approval workflow. Then you can go back to look for usage patterns that identify more complex roles (e.g. front desk manager, accounts payable clerk). This will enable you to establish a comprehensive role-based access control system on your schedule, not your vendor's.

Role management and workflow are the biggest user provisioning schedule and budget busters. The user provisioning system should provide a visual repository for organizing and modeling roles, privileges and assets by organizational structure and business process (for example, by geography, function and business process, such as Las Vegas-Hotel-Registration). This provides an easy navigation method for selecting role, privilege and asset assignments, and greatly simplifies role creation. It can be as easy as selecting the relevant privileges and assets and dropping them into a role. The system should then automatically generate the approval workflow from the organizational structure and business process without the costly and time-consuming manual definition or programming traditionally required. These visual tools enable business line managers to manage roles and workflow without perpetual dependence on programmers or third party consultants.

**Staged Roll-out** Consider a phased approach that delivers immediate business value while providing time for design and implementation of larger or more complex portions of the project.

For instance, the initial implementation of a complementary identity management function, like self-service password reset, will dramatically reduce calls to the help desk, lower costs and certify the infrastructure before you take on the larger challenge of user provisioning. Also consider rolling out to a test group to validate the provisioning process, and then focus on the highest priority groups, such as those with high turnover, that present the greatest administrative burden or those handling valuable assets that represent the greatest security and compliance risks.

**Infrastructure Support** Make sure that your vendor can support all of the critical applications that drive your business. Because many applications implement their own user ID, password and privileges, special "connectors" may be required. These enable the provisioning system to "talk" to each application and manipulate user credentials and access rights. If an application is not supported out-of-the-box, the solution should offer an advanced architecture, such as a modern web services design, that enables simplified creation and

deployment of connectors. If, on the other hand, the answer is "we'll send out a programmer," then you may experience significant cost or delay during deployment or on-going maintenance.

**Gaming Knowledge** Your vendor and its integration partners should understand the gaming business. It should have partnerships with your critical application vendors, including human resources and licensing, financial, gaming management, hospitality management, etc. Knowledge of the industry will also enable it to help you meet your reporting and auditing requirements.

**Proof of Concept** Because automated user provisioning is intimately tied to your most critical business processes, due diligence requires validation before acquisition and implementation. Your vendor should have a proof of concept methodology that integrates a representative set of mainstream applications and processes to illustrate the operation and value of the proposed system. With that focus, they should be able to deliver a working proof of concept in just a matter of days.

Whether initially motivated by a desire to comply with external regulations, internal operational policies or cost constraints, or just to keep up with rapid growth or turnover, leading-edge casinos and resorts are realizing the on-going benefits of automated user provisioning. Properly implemented, it off-loads a major burden from already scarce and expensive IT staff while delivering "day one" provisioning of new users with all the controls and reports necessary to satisfy any auditor. That's a rare win-win-win proposition.



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