

# 5 user provisioning challenges in healthcare and how to solve them



# Table of Contents

<b>1. Introduction</b>	<b>1</b>
<b>2. User provisioning challenges in healthcare institutions</b>	<b>1</b>
IT staff hours wasted on manual operations	1
Decreased interoperability of legacy applications with the increase in digitization	1
Managing temporary medical contractors and consultant accounts	2
Struggling to produce audit trails for ensuring compliance	2
De-provisioning ex-employee accounts to secure patient data	2
<b>3. Automated user provisioning solutions from ADManager Plus</b>	<b>3</b>
Automated lifecycle management	3
Enterprise-ready integrations	5
Role-based access control	6
Delegated administration	6
Just-in-time (JIT) access	7
Enhance security and compliance	7
<b>4. About ManageEngine AD360</b>	<b>8</b>

# Introduction

Healthcare is a highly dynamic industry due to the evolving changes in technology and an escalating employee turnover rate. On top of that, healthcare institutions must adhere to strict IT regulations that safeguard the interests of stakeholder data, such as HIPAA and HITECH. All this has made identity access management and user provisioning to be quite the challenge for IT admins in the healthcare industry. Manual methods can be tedious and prone to error, so organizations seek automated user provisioning solutions. But choosing the right solution that helps overcome IT challenges while meeting budget constraints is a tough task.

This e-book discusses some of the routine user provisioning challenges faced by IT admins in the healthcare industry and how to craft custom solutions that benefit your healthcare institution with ADManager Plus.

## User provisioning challenges in healthcare institutions

### **IT staff hours wasted on manual operations**

The healthcare industry has one of the highest attrition rates compared to other industries. According to a 2022 retention and staffing report by NSI Nursing Solutions, over the past five years, the average US hospital experienced a 100.5% turnover in workforce. With such high turnover, IT admins have the task of frequently updating their identity management platform. They can spend hundreds of hours manually creating and modifying thousands of user accounts and copying user data in Human Capital Management (HCM) solutions, while managing AD and other cloud platforms, tracking and offboarding inactive accounts, and managing user permissions to critical clinical apps. From a healthcare professional's time of onboarding, they will be assigned certain privileges, and over time these privileges may change based on the nature of their role. This can make it even more difficult for the IT team to keep track of these accounts as they simultaneously make modifications in AD and other associated platforms.

### **Decreased interoperability of legacy applications with the increase in digitization**

With the increased adoption of cloud platforms for employee and patient record management, healthcare institutions have undergone large-scale digitization over the past several years. This is a welcome change, as legacy systems are more vulnerable to modern security threats and have limited interoperability with other cloud applications.

Healthcare institutions that lack extensive resources and budgets will prompt their IT admins to rely on native AD tools and implement unsustainable methods such as coding complex PowerShell scripts. This process can be error prone and time-consuming enough to pull the IT admin team away from more critical matters.



## Managing temporary medical contractors and consultant accounts

Healthcare institutions often employ contingent workers to address staff shortages or tackle short-term requirements. In organizations where manual provisioning is the norm, properly deprovisioning contingent users can be daunting. Failing to deprovision these temporary external users could pave way for data breaches resulting in the leak of sensitive information such as PHI, PII, financial records, etc., making the institution liable to huge fines and penalties due to compliance violations.



## Struggling to produce audit trails for ensuring compliance

All healthcare institutions that store, process, or transmit PHI must strictly adhere to HIPAA and HITECH regulations. Depending on the degree of a HIPAA violation, the department of Health and Human Services (HHS) can impose fines ranging from \$100 to \$50,000 per violation, with an annual maximum of \$1.5 million. But institutions that still rely on manual means of user provisioning and AD management will find it challenging to establish a supervised workflow for their staff. This makes it practically impossible to supervise or cross-check every activity carried out by technicians, resulting in lack of activity records for audits, and leading to compliance violations.



## De-provisioning ex-employee accounts to secure patient data

Each organization will have their own policies for decommissioning inactive user accounts. Identity access management in health care institutions is dynamic—manually disabling all inactive accounts seamlessly can be daunting, and IT admins often find it impossible to track down all inactive users accurately for deprovisioning. [The health care sector is at the most risk from stale accounts, with 79% of institutions having more than 1,000 orphaned accounts.](#) The existence of stale accounts makes an organizations' network vulnerable, as they provide an opportunity for malicious actors to infiltrate and gain access to confidential internal resources.

# Automated user provisioning solutions from ADManager Plus

ManageEngine's AdManager Plus is a user-friendly, comprehensive solution that helps you automate AD management tasks like user provisioning and group policy management. Optimize user provisioning for your healthcare institution with automated solutions from ADManager Plus.

## Automated lifecycle management

Healthcare institutions manage a diverse and fluid workforce ranging from clinicians, technicians, contingent workers, administrative staff, partners, and vendors. ADManager Plus helps you simplify challenging tasks that may cost your IT team operational efficiency. The solution offers a wide range of features for automated user provisioning, such as the ability to create and manage users and groups, resetting passwords, and managing permissions and access controls. Further, it allows IT admins and technicians via role-based access control (RBAC) to set up supervised workflows and implement orchestration for a sequence of routine automated tasks.

### Bulk user management:

ADManager Plus allows IT admins to provision users accounts in bulk across AD, Microsoft 365, Google Workspace, and Exchange servers without having to rely on time-consuming, outdated legacy AD management tools or coding complex PowerShell scripts. With ADManager Plus, you can import user details via CSV files or based on inputs from your institution's HCM solutions and implement sequential follow-up tasks at predetermined intervals for routine bulk user management functions.

The screenshot displays the 'Create New Automation' form in the ADManager Plus interface. The form is organized into several sections:

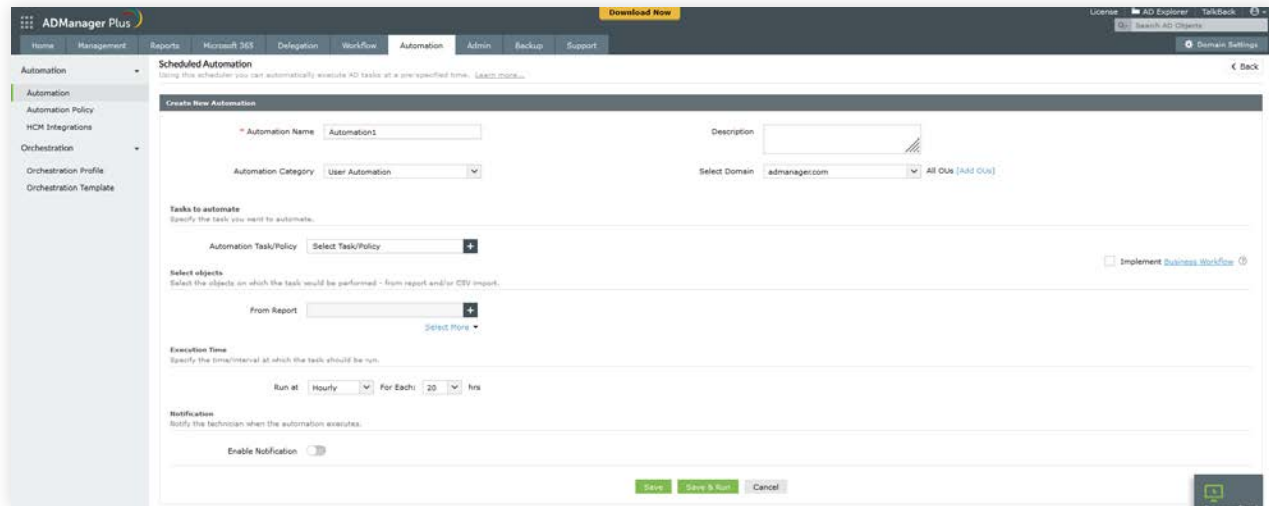
- Automation Name:** A text input field containing 'Automation1'.
- Description:** An empty text area.
- Automation Category:** A dropdown menu set to 'User Automation'.
- Select Domain:** A dropdown menu set to 'admanager.com' with a link for 'All OUs [Add OUs]'.
- Tasks to automate:** A section with the instruction 'Specify the task you want to automate.' It features a 'Select Task/Policy' dropdown and a '+' button.
- Select objects:** A section with the instruction 'Select the objects on which the task would be performed - from report and/or CSV import.' It includes a 'From Report' dropdown and a 'Select More' link.
- Execution Time:** A section with the instruction 'Specify the time/interval at which the task should be run.' It has 'Run at' set to 'Hourly' and 'For Each' set to '20 hrs'.
- Notification:** A section with the instruction 'Notify the technician when the automation executes.' It includes an 'Enable Notification' toggle switch that is currently turned off.

At the bottom of the form, there are three buttons: 'Save', 'Save & Run', and 'Cancel'.

## Templates:

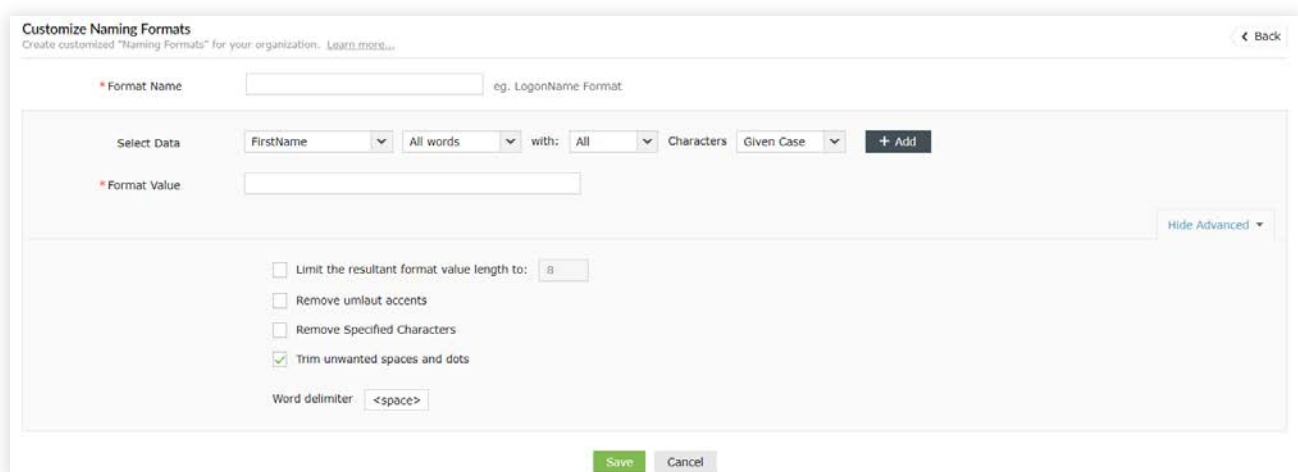
Healthcare institutions can use rule-based user provisioning templates by setting up predetermined attributes for each role based on every department, both medical and non-medical, and adhering to organizational policies.

ADManager Plus' templates help you create reactive provisioning measures for every situation. Set up user creation rules for every scenario like creation and modification templates for users, computers, groups, contacts, mailboxes, and OUs to help IT admins save time and effort.



## Custom naming formats:

ADManager Plus' custom naming format templates let you create unique logon names using a custom naming format to avoid duplication during bulk user creation.



## Enterprise-ready integrations

According to a survey from HIMSS, more than 83% of healthcare institutions now make use of cloud platforms. With ADManager Plus, IT administrators can integrate user data across various cloud applications and HR management solutions with API support.

### i. Custom HCM integrations:

Your healthcare institution can use ADManager Plus to seamlessly integrate HCM applications like UKG Pro, BambooHR, and Workday with API support, and databases like Microsoft SQL or Oracle to automatically reflect user provisioning changes in your AD accounts and other associated cloud platforms.

The screenshot displays the 'HCM solution Configuration' page. At the top, there is a 'Back' button. Below the title, there is a toggle switch for 'Enable HCM solution Integration' which is currently turned on. The main configuration area is divided into sections: 'Authorization' (with a right arrow), 'HCM solution Endpoint Configuration' (with a dropdown arrow), and a table for 'API Endpoint Configuration'. The table has one row, 'API Endpoint Configuration1', which contains an 'Endpoint URL' input field. Below the input field is an 'Advanced Options' section with 'Test & Save' and 'Cancel' buttons. At the bottom of the configuration area, it shows 'Data Source - LDAP Attribute Mapping' with a right arrow. A '+ Add API Endpoint' button is located in the top right of the configuration area.

### ii. Webhooks:

ADManager Plus' webhook integration with your target application lets you automate user creation, modification, and deletion whenever the webhook POSTs to a specific URL.

The screenshot shows the 'Webhook Template' configuration page. It starts with a title 'Webhook Template' and a subtitle 'Create customised "Webhook Template" with macros for your organisation'. Below this are several form fields: 'Name' (with a 'Description' field next to it), 'URL', 'Method' (with radio buttons for Get, Put, Post, and Delete), 'Headers' (with a message 'No headers available. Click here to add'), and 'Parameters' (with a message 'No parameters available. Click here to add'). At the bottom, there is a 'Message Type' section with radio buttons for None, JSON, and XML. A note at the bottom right says 'Type "%" in the value fields to list the default macros'. At the very bottom, there are three buttons: 'Test Connection', 'Save', and 'Cancel'.

### iii. REST APIs:

Integrate ADManager Plus with other applications using REST APIs. Carry out AD management activities such as user creation, user modification, user deletion, password reset, and more by integrating with other applications using REST APIs.

## Role-based access control

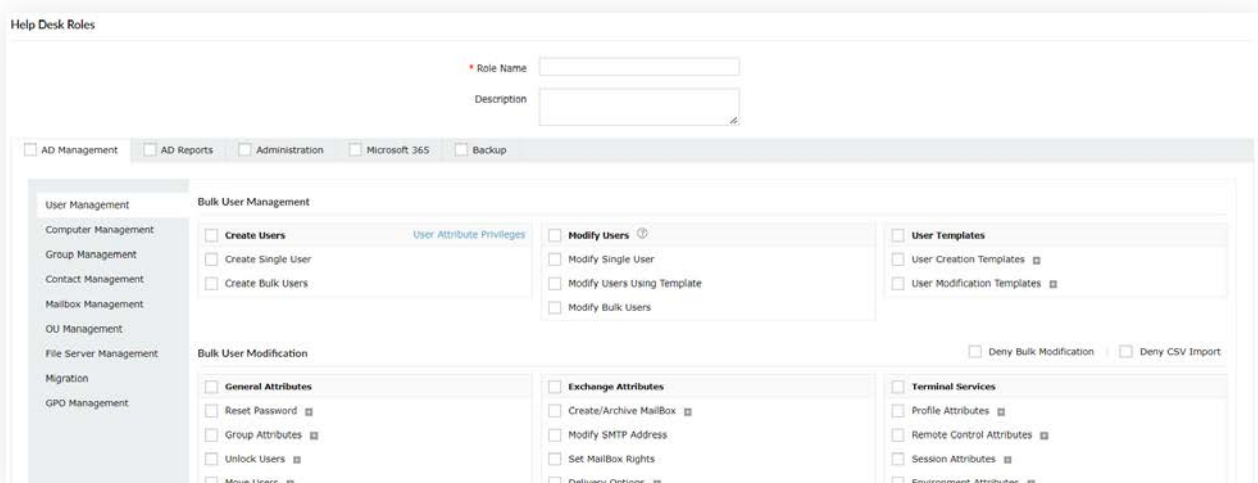
ADManager Plus lets you manage user access privileges for your stakeholders by the principle of least privilege (PoLP). Provide doctors, nurses, operational staff, and contingent users access to resources based on their roles.

IT admins can reduce their burden by automating processes like managing group memberships and access to files or folders by providing birthright access for every staff that joins the healthcare institution from their date of joining. Limit a user's access scope based on their OUs and groups to reduce chances for unauthorized access to sensitive information like PHI and PII.

## Delegated administration

Using ADManager Plus reduces the burden on your IT admin staff by delegating routine user provisioning functions to non-technicians without the risk of elevating the user's AD rights. Delegate repetitive tasks like managing group memberships, OU changes, folder permissions, password reset, and account unlocking to technicians with non-admin rights.

Authorize key personnel such as physicians, department heads, and senior operational staff with delegated administrative rights to take care of repetitive routine functions such as modifying permissions and allocating and removing group members. This reduces dependencies on the IT admin staff, leaving them more time to address critical aspects of AD management.





## Just-in-time (JIT) access

Considering the nature of sensitive data in health care institutions, it is essential to ensure that there is no unrestricted or arbitrary access for anyone in the organization. With ADManager Plus templates, manage user permission to files and folders by providing JIT access for your guest users for a specified, limited duration.

During unprecedented events like pandemics or natural calamities, it is likely for healthcare institutions to onboard temporary medical staff for additional support. Seamlessly manage ad hoc requests from your contingent users, granting them access to the required resources for a specific duration without causing any delays, while safeguarding data security.

**Create New Automation**

\* Automation Name: Automation1      Description: [Empty]

Automation Category: User Automation      Select Domain: admanager.com      All OUs [Ac]

**Tasks to automate**  
Specify the task you want to automate.

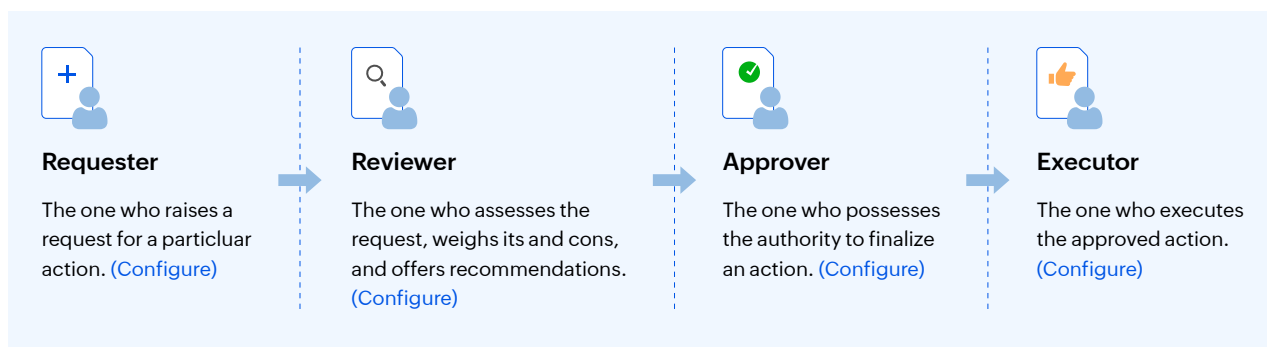
Automation Task/Policy: Set folder permissions +

Folders	Permission	Applies To	Type
Select Folders +	Select a permission v	This folder only v	Allow v

Duration: Forever v

## Enhance security and compliance

Using ADManager Plus, create a workflow that enables controlled automation with adequate supervision from key personnel like department heads and managers for every activity carried out by technicians and non-technicians. Introducing a supervised workflow will reduce the risk of errors and create a ticket-based system for every AD management activity. Having an audit trail record for every AD activity will help healthcare institutions adhere to compliance measures such as HIPAA and HITECH.



# About ManageEngine ADManager Plus

ManageEngine ADManager Plus is a web-based Windows Active Directory management and reporting solution that helps Active Directory administrators and help desk technicians accomplish their day-to-day activities. With an intuitive, easy-to-use interface, ADManager Plus handles a variety of complex tasks, like AD object backup and recovery, and generates an exhaustive list of Active Directory reports, many of which are essential requirements for satisfying compliance audits. It also helps administrators manage and report on their Exchange Server, Office 365, G Suite, and Active Directory environments—all from a single console.

[\\$ Get Quote](#)

[↓ Download](#)