

## CASE STUDY: DIRECTORY MANAGER



### Integrating NHSmail at Northern Lincolnshire and Goole

Northern Lincolnshire and Goole NHS Foundation Trust (NLG) elected to move email services from their local Microsoft Exchange to NHSmail. This reduced local infrastructure costs, however, it introduced some administrative challenges. Maintaining accounts in NHSmail was proving difficult, as well as ensuring users had up-to-date contact information and that NHSmail addresses were visible in Active Directory.

#### Electronic Staff Record (ESR), Active Directory (AD) and NHSmail integration

The Trust already used Directory Manager v1 to automate the creation and management of their AD accounts, so approached BDS Solutions to assist. **Directory Manager v2** was deployed to extend their existing solution and create a further two-way synchronisation with NHSmail.

#### NHSmail synchronisation

BDS Solutions implemented Directory Manager v2 in conjunction with an NHSmail two-way 'connector' to:

- Submit data to NHSmail using a tailored extract of AD data

- Improve procedures for creating, updating and terminating Active Directory user accounts using a daily feed of information from ESR
- Download NHSmail nhs.net addresses from NHSmail, propagating them to corresponding Active Directory accounts and onward upload to ESR

Using Directory Manager, Northern Lincolnshire & Goole NHS Foundation Trust were able to ensure their local directory contained accurate and up-to-date contact information. This resolved the communication and administration challenges of moving to NHSmail.

Northern Lincolnshire and Goole   
NHS Foundation Trust



*"Migrating to NHSmail provided our Trust with significant benefits in functionality and reductions in cost. Directory Manager has now closed the loop on Active Directory and NHSmail account management with the latest version."*

**Ben Slowley**  
Technical Support Manager

## CASE STUDY: DIRECTORY MANAGER

### Automating user updates at Central Southern CSU

As part of the NHS restructuring, several organisations merged to form the Central Southern Commissioning Support Unit (CSCSU). A result of the merger was the requirement to integrate users from three Active Directory domains into one. The CSCSU quickly found that locating the right staff member in this new domain proved difficult due to the now out-of-date location and role information.

#### Empower end users to maintain their details

The CSCSU needed a solution that would allow staff to update their own contact and job details. This would help ensure that information is correct and facilitate a series of ICT projects.

The CSCSU chose BDS Solutions' Directory Manager to achieve this.

*"We were in great danger of our critical application deployments being delayed as we were so reliant on 'good' Active Directory information. Directory Manager ticked every box for us."*

#### Self service web portal

Directory Manager provides a configurable web page to users when they log on to their workstation. Their current details are displayed and selected attributes can be added and updated by the user.

This information provided by the user is stored as pending request until approved. Directory Manager notifies the designated reviewer via email to review and approve updates before being committed to Active Directory. A full audit trail is maintained by Directory Manager detailing the request, manager approval and resultant update to Active Directory.

At CSCSU, the software was configured to repeat this process every 90 days to ensure that user details were kept up-to-date.



**NHS** Central Southern  
Commissioning Support Unit

#### Free-up ICT resources with Directory Manager

Using Directory Manager the CSCSU were immediately able to:

- **Create an up-to-date database of staff contact information and job roles**
- **Delegate responsibility for the update of the contact information from the ICT department to the staff themselves**
- **Free up ICT staff resources at a time of increased workload during the organisation merger**

*"To employ additional administrators would have been costly, time consuming and have needed additional procedures to be established.*

*With Directory Manager we achieved the desired results and provide ongoing benefits. This allowed us to roll-out our critical applications and meet our go-live plan."*

**Luke Hillman**  
Specialist Technical Manager

## CASE STUDY: DIRECTORY MANAGER

### Resolving Active Directory issues at Shrewsbury and Telford

The Shrewsbury and Telford Hospital NHS Trust use Microsoft Active Directory as the foundation of their ICT network. Over time, the processes around the management of the user accounts on Active Directory were leading to a number of problems. Accounts were remaining live after employees had left, large numbers of accounts could not be linked to current staff, and inconsistencies in the administrative approach were causing support and address book issues.

#### Linking ESR to Active Directory

Shrewsbury sought a solution that would provide a 'managed' Active Directory user base, without the need for significant input from ICT staff. Shrewsbury turned to BDS Solutions and Directory Manager to achieve this. Directory Manager is used in over 50 NHS trusts across the UK, managing in excess of 200,000 user accounts.

*"Previously we had no link to ESR making Active Directory difficult to keep up-to-date. Directory Manager immediately resolved that problem."*

#### Improve Security and automate provisioning with Directory Manager

Directory Manager integrates directly with the NHS Electronic Staff Records (ESR) via the Generic Outbound Interface (GOI). New and changed staff records result in the creation or update of Active Directory accounts and Exchange mailboxes. This reduces cost of administration and ensures the directory is updated in a timely and consistent manner.

Directory Manager is able to:

- Automate provisioning of user accounts, mailboxes, folders and security rights
- Ensure accounts for leavers are de-provisioned promptly reducing security risks
- Notify other system administrators with starter and leaver information and other details from Active Directory



### The Shrewsbury and Telford Hospital NHS Trust

Shrewsbury were able to quickly take advantage of the benefits of systematic provisioning, including:

- Improved Information Governance evidence with Directory Manager providing a full audit of all changes applied to Active Directory
- Reduced redundancy with the identification of a large number of expired accounts
- Improved communication and security due to improved quality of data and the management of distribution and security group membership

*"Directory Manager is simple to use, requiring only an hour or two of my time a week at most.*

*BDS' support has been great and the system has been tailored to our Trust's needs. It is now an integral part of our AD and user management process and I only wish we'd had it sooner."*

**John Williams**  
IT Support Engineer

# CASE STUDY: DIRECTORY MANAGER

## Addressing user account management issues at LTH Hospitals

Lancashire Teaching Hospitals NHS Foundation Trust (LTH) looked to extend their usage of Active Directory (AD) by implementing products based on the technology. A Managed Print Solution was one example, enabling users to print anywhere and allocate print costs to departments. To work effectively, the accuracy of user information in Active Directory was of paramount importance.



Lancashire Teaching Hospitals   
NHS Foundation Trust

### Linking ESR to Active Directory

The LTH Active Directory contained many redundant user accounts that had accumulated over time due to ad-hoc leaver notifications from departments. These redundant accounts greatly increased the license costs of the managed print solution and other planned projects. LTH also lacked the required department data in the directory and had no method of updating existing accounts with this information or maintaining it in the future.

### Implementing automated provisioning to improve AD management

LTH looked for a solution that would improve Active Directory management, controlling user data, identifying redundant accounts and importantly, ensure accuracy in the future.

Having worked with BDS Solutions for many years, LTH were quick to identify that Directory Manager would meet their objectives.

### Directory Manager provides improved security

LTH implemented Directory Manager to link ESR to Active Directory and also provide a web-based portal for managers and Service Desk staff to request user accounts for those not in ESR.

Directory Manager quickly introduced the following benefits for LTH

- **Automation of Active Directory starters and leavers process, replacing the previous time consuming intensive and unstructured methods.**
- **A web portal allowing staff to request accounts and allowing the Service Desk staff to move away from any day-to-day direct Active Directory management.**

- **All Active Directory users were now associated with accurate department information needed to introduce and facilitate a fully managed print solution.**
- **Quick identification and systematic disablement of redundant AD accounts, allowing the local IT team to improve security and reduce licence costs.**

The quick implementation of Directory Manager enabled Lancashire Teaching Hospitals NHS Foundation Trust to resolve their immediate issues and ensure a consistently managed Active Directory for the future.

*"We are very impressed with the whole solution and the professionalism with which it was delivered, especially under tight timescales."*

**Derek Jones**  
IT Infrastructure Manager



Directory  
Manager™



## CASE STUDY: DIRECTORY MANAGER

### Integrating ESR with Active Directory at Warrington & Halton

**In 2001 the former North Cheshire Hospitals NHS Trust was manually creating and maintaining user and e-mail accounts for every employee.**

The Trust partnered with BDS Solutions to implement its Directory Manager software to automate user account administration using data from the Trust's HR system.

#### Initial aims were to:

- Create user accounts before new employees started, to work to avoid unnecessary delays
- Manage user security group membership according to the employee's department
- Ensure employee name changes were applied consistently and in a timely manner to Active Directory
- Provide a single resilient management point for the directory
- Deliver cost savings and productivity gains



*"The software saved us so much time and is now such an integral part of my working life that I can't imagine being without it."*

#### The partnership continues..

Since the initial meeting in 2001, BDS Solutions have continued to work in partnership with what has now become Warrington & Halton NHS Foundation Trust.

With the introduction of Directory Manager v2 in 2008, BDS ongoing product development, the Trust continues to benefit from further enhancements and additional functionality including.

- Greatly increased flexibility in managing Exchange mailboxes, home folders, group membership and user attributes
- Direct integration with the NHS Electronic Staff Records (ESR) via the Generic Outbound Interface (GOI). New and changed staff records result in the direct creation or update of Active Directory accounts and Exchange mailboxes.
- NHSmail synchronization in conjunction with an NHSmail 'connector' to submit data to NHSmail and download NHSmail addresses, propagating them to corresponding AD accounts and onward upload to ESR
- Introduction of a self-service web portal for ease of administration
- Ability to include non-ESR staff in the user provisioning process
- Extended Email notifications
- Deployed as Windows Services



Warrington and Halton Hospitals   
NHS Foundation Trust

Warrington & Halton Hospitals acknowledge that the introduction of Directory Manager has certainly helped to streamline the process of user account administration.

What was once a full time job can now be easily managed by a 0.5 WTE, enabling the IT team to focus on more important matters.

*"In a business operational environment that involves a considerable rate of staff changes the resource effort required and cost involved in ensuring that computer and information access is appropriate and timely is very high. Integration and automation between ESR and Active Directory has delivered a considerable reduction in this effort and cost and at the same time increase the reliability and security in our account management procedures."*

**Steve Nicholson**  
Network Manager

For more information contact BDS Solutions on:

[info@bds-solutions.co.uk](mailto:info@bds-solutions.co.uk) | 01884 33440 | [www.bds-solutions.co.uk](http://www.bds-solutions.co.uk)

