

# Exchange Mailbox Preparation for Migration

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## ABSTRACT

This poster paper describes the purpose and methods used to investigate and prepare mailboxes for migration at Fulton Hogan. The purpose of preparing these mailboxes for migration was that there were many incorrectly configured mailboxes within the Fulton Hogan environment. If these mailboxes were no longer in use then it was safe to disable them and remove the licencing costs. If the mailbox was still in use but used incorrectly, the mailbox could be converted to the correct type, also saving in licencing costs.

**Keywords:** Exchange, Mailbox, Migration

## 1. INTRODUCTION

Fulton Hogan uses Exchange 2016 for user, resource, and shared mailboxes. This is hosted on-premise with local hardware and management support. Fulton Hogan also uses Office 365 licensing throughout the business, of which Exchange Online is included but was not fully utilised. The process of migrating user mailboxes from Exchange 2016 to Exchange Online was a project that was currently in progress during my time at Fulton Hogan. The projects purpose was to reduce operating expenditure, and minimise the need for local hardware and management support.

The goal of my project was to ensure that no incorrectly configured user mailboxes were going to be migrated to Exchange Online, and any that were incorrectly configured needed to be converted to their correct type (shared, room, resource), or disabled entirely.

Each user mailbox that was converted or disabled would save on licencing costs and meet compliance with Microsoft. The mailboxes that were converted from user to shared would then be migrated to Exchange Online at a later date.

By disabling unused accounts, this decreased the security risk to the Fulton Hogan environment, as these accounts were still active and could be used to login and access private information.

## 2. THE PROCESS

During this project, I made use of the Scrum for One and elements of the Kanban methodology to break the work up into manageable sprints, and visualise the work to be completed with a Kanban board. The process for collecting the accounts were as follows:

Firstly, accounts were extracted from Active Directory to an Excel spreadsheet using PowerShell. Filters were then applied on particular account attributes in order to create smaller batches of accounts to analyse.

Then, each account within a batch was then investigated and analysed based on attribute values and metadata within the environment. This allowed me to confidently determine whether an account was still in use but incorrectly configured or was no longer in use.

Finally, once a batch had been investigated thoroughly and an outcome could be determined, the accounts were then converted to shared mailboxes, or were disabled completely if no longer used.

The investigation process required me to make use of Active Directory, Exchange Management Shell, and Exchange Admin Center to determine the use case of each mailbox account and to try and determine if the account was even still in use. I also reached out to mailbox owners if I could determine who they were.

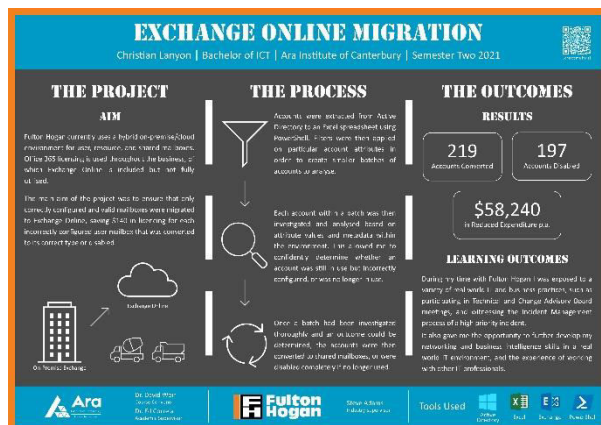
Each week, all of the accounts that had an outcome determined were compiled into batches and converted or disabled using PowerShell scripts that I had written.

## 3. THE OUTCOMES

In total, over 2000 mailboxes were filtered, investigated, and analysed. 219 mailboxes were converted, while 197 were disabled. The remaining mailboxes were already correctly configured.

This result of converting and disabling the mailboxes totalling a yearly saving of \$58,240 for Fulton Hogan.

As for personal outcomes, I was exposed to a variety of real-world IT and business practices, such as participating in Technical and Change Advisory Board meetings, and witnessing the Incident Management process of a high priority incident. It also gave me the opportunity to further develop my networking and business intelligence skills in a real-world IT environment, and the experience of working with other IT professionals.



#### **4. CONCLUSION**

After completing the project at Fulton Hogan, it was established that there was still a larger problem to be fixed within their Active Directory and Exchange services. The process of converting and disabling accounts will become an ongoing project while the migration of mailboxes goes forward.