Providing easy access for end users to what often becomes a very significant amount of archived data is crucial to the ongoing success of any archiving solution.

The Barracuda Message Archiver and Barracuda Cloud Archiving Service capture and retain a secure copy of every message and data item that has existed within an organization's email server – whether this is from a local server such as Microsoft Exchange, or from a cloud email server such as Microsoft Office 365. These Barracuda email archiving solutions support this with an additional feature called folder synchronization. This replicates mailbox folder structures from the mail server into the archive, making it easier for users to search and retrieve historical data and giving a consistent experience across both current and archived data.

What is Folder Synchronization?

Folder synchronization is a standard feature in all versions of the Barracuda Message Archiver and Barracuda Cloud Archiving Service. A folder structure is maintained within the archive store for each mailbox, and the folder synchronization process updates this in line with the folder structure in the corresponding mailbox on the email server.

The folder synchronization process does not import any emails or other data to the archive; it only imports the mailbox folder structure. Email messages and other mail items are added to the archive via SMTP journal capture or other data import methods.

End User Experience

Based on this folder structure, the Barracuda Message Archiver and Barracuda Cloud Archiving Service can then present users with their archived data in the same familiar structure that they are using in their email client such as Outlook.

End users can browse and search their archived data using the search page on the web user interface. With the Barracuda Outlook Add-in installed, they can also browse and search for content using the standard Outlook user interface and keep a local copy of archived data for offline access.
When a user uses Outlook to move an email within their live mailbox into a different folder, the next folder synchronization run will update the archive to reflect this and keep the folders in line.

**Historical Data**
The Barracuda Message Archiver and Barracuda Cloud Archiving Service are able to use journal capture to secure a complete historical record of all messages that have ever passed through a mail server. Additionally, folder synchronization can then be configured to keep track of all mailbox folders in which each of these emails has been located.

This means that any messages moved out from a folder on the email server will still appear to exist in that folder in the archive, and therefore an archive folder will not be an exact match with the corresponding folder on the mail server. However there is still only one copy of each email actually stored in the archive, together with a historical record of each location it has been stored in.

**How Does it Work?**

**Process**
Mailboxes within Microsoft Exchange Server or Office 365 are scanned to identify the current folder structure for each user, including all custom folders and sub-folders, and this structure is replicated within the Barracuda Message Archiver or Cloud Archiving Service.

A cumulative folder structure is then overlaid over the existing data within the archive to create an updated mailbox view for each user. Once folder synchronization is complete, users browsing their archived messages will see them all displayed within their corresponding folders.

**Configuration**
All folders and subfolders that have been created by users within their Exchange or Office 365 mailbox will be synchronized, including subfolders under system folders such as the Inbox and Sent items as well as custom folders.

The synchronization process is optional and can be scheduled to run automatically each night, or it can be run on demand as needed. When it’s configured to run nightly, the process will start at 10 pm when the additional system load on the archive will have least impact on end users.
Configuration options allow administrators to select those mailboxes for which folders will be synchronized. The default is to process all mailboxes, but it can be restricted to just those on a selected distribution list. It’s also possible to select by email address or user name, and if there are multiple mail servers, processing can be restricted to a single mail server. There is also an option to synchronize folders from a user’s Personal Archive (or In-Place Archive in Office 365) if they have one.

**Performance**

The folder synchronization process is optimized for speed and low resource utilization, which means that it does not have a perceptible impact on the performance of Exchange Server or Office 365. One key way in which this is achieved is to avoid synchronizing the Inbox and Sent Items folders.

The contents of Inbox and Sent Items folders can be inferred from information contained in each individual message header. If a user’s email address or alias is in the “To” field of the message header then it will be displayed in the Inbox, and if it is in the “From” field it will be displayed in the Sent Items folder. This approach means that folder synchronization jobs complete significantly faster while reducing the overall load on the mail server environment.

**Conclusion**

Folder synchronization with the Barracuda Message Archiver and Cloud Archiving Service enables end users to work with their archived email using the same folder structure they are familiar with in Outlook. They can easily browse, search, and retrieve messages from the archive even if the original messages no longer exist in their Exchange or Office 365 mailbox.

The process is easy to configure and run on a scheduled basis, and system design means there is no perceptible performance impact on the production mail server.

Folder synchronization is included as standard in both the Barracuda Message Archiver and the Barracuda Cloud Archiving Service at no additional cost.