

Moving Exchange to the Cloud: 5 Really Practical Best Practices



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You've decided to move Microsoft® Exchange to the cloud. Now what?

Whether you've chosen to move Exchange to a private or public cloud, you need to find the right answers to these questions in order to make the transition successfully:

1. What does my current Exchange environment look like?
2. How do I move data, and what data will I move?
3. How do I provision identities?
4. How do I provide seamless coexistence during the move?
5. How do I manage the end-user experience?

That's according to David Odell, Service Architect for Dimension Data. Odell and his team have managed a number of Exchange transitions to the cloud. Here, he shares some practical ideas to help flatten some of the bumps on your journey to the cloud.

1. Know your Exchange environment – in(box) and out

'It's easy to move to the cloud, but it's not easy to move what you have to the cloud,' says Odell.

To successfully replicate your environment, you need a thorough understanding of what it comprises and how it's used. 'This is the hardest but most important part of the move,' Odell explains, 'as proper planning helps avoid surprises.' Things to look out for include the number of shared mailboxes in use, and regular 'spikes' in email communication, for example large files sent for quarterly board meetings and mass mail-outs.

2. You've got mail!

'Most organisations are accustomed to on-premise migrations and have high bandwidth for this,' says Odell. 'But with a cloud migration the throughput is considerably slower – cloud providers will protect themselves from potential breaches in SLAs by "throttling" traffic.'

Odell gives us the word problem: 'Let's say you're moving a total of 12 TB of data to the cloud, for 8,000 users, on an internal network – either a LAN or WAN. Your limiting factor is how fast you can process the data. Typical speeds are around 20 GB per hour. So, with a migration window of 12 hours, that's 600 hours, or 50 days – which is acceptable for a migration project. If you're moving to a cloud platform, you could be looking at a throughput rate of 2 GB an hour which turns your migration time frame into 500 days...'

Put simply: more data = larger (and longer) coexistence. Odell gives some advice on how to take the minimum amount of data across initially, then move the rest:

1. Evaluate **the user community** to understand which data must be transferred – the legal department, for example, may need all 10 years' of data to be moved. An **archiving solution** helps as you can migrate the minimum amount of data to the cloud at first. However, Odell cautions against 'leaving data behind': **'If you keep old data on the on-premise Exchange, you're not realising the benefits of moving to the cloud,'** he says. 'You're still maintaining hardware just to get access to old information. And you're wasting valuable skills on maintaining an unreliable, degrading platform.'
2. Confirm whether your cloud provider is able to **plan and monitor network bandwidth** for the migration, and what its limits are for moving data.

3. Evaluate **data migration tools** and put them through their paces.
4. **Take a different approach to data migration** than you would for an on-premise migration. For example, move data in a phased approach: start with moving the last six months' worth of email to the cloud, then move older data over time once the cloud service has gone live. This strategy is highly dependent on the migration tools utilised.
5. **Manage the first-day download.** Many email cloud platforms, particularly Exchange-based ones, rely on the 'cache mode' feature of Microsoft® Outlook – that is, automatically downloading all new email on starting Outlook. This feature allows for a superior user experience as all data is accessed from the user's workstation, not the servers in the cloud. 'That's not a concern if it's a small migration,' says Odell, 'but 500 people downloading email on a Monday morning after a migration can overload the WAN and bring things to a grinding halt. The most successful migrations we've seen are those with a mitigation strategy to overcome and manage this download impact when users first access the cloud service.'

For Outlook 2010 and below, Odell recommends downloading the message headers only. 'Users can double-click on the message header to download the message. Then, over time, you can selectively turn on the downloading of the message body via a Group Policy,' he says. 'Better still, Outlook 2013 gives you greater control of how much mail is cached due to the ability to pick a range – for example, download only the last seven days' worth of mail.'

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3. A peaceful coexistence: managing the migration

'Most organisations with 1,000 seats or more follow a staged migration from the existing Exchange environment to the cloud-based environment,' says Odell. 'During this time, some users will be on the existing system and others on the cloud. The level of coexistence varies depending on what the business needs, and how much of a disrupted service it can tolerate.'

There are a number of Exchange migration tools available on the market but, Odell cautions, not all migration tools are created equal. Most will perform **mail routing** between both systems through back-end routing rules, which takes care of email delivery. Others will maintain the local email cache to avoid the first day data download. It's also important to **synchronise the Exchange Global Address List in both messaging environments**. If you're creating or deleting users in one environment, make sure these changes are reflected in the other environment so that the address books correspond.

4. Avoiding an identity crisis: managing Active Directory

'You need to consider how you'll provide the same sign-on experience for end users,' says Odell.

Typically, a cloud provider will have its own Active Directory which you'll provision into. Many will **synchronise usernames and passwords**, but other cloud providers don't offer this solution. 'You need a consistent identity management framework,' says Odell, 'because people won't remember new usernames and passwords. Find an identity management tool that can perform this kind of synchronisation.'

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5. Keeping the end users happy

As Odell explains, a migration of 1,000 users takes about two weeks, from a slow start of ten seats a night, building up to an average of 150 a night. **Typical disruptions during this time include:**

- a delay in email delivery
- being unable to see colleagues' availability for meetings on Exchange Calendar
- being unable to see the availability of conference rooms and equipment

Odell encourages **consistent communication with users** before, during and after the migration:

- Tell users what to expect and explain any limitations of the service during the move.
- Posters can't be deleted; emails can (and often are) – use a number of communication channels to reinforce the message.
- Keep the message simple: 'This is how you used to do it; this is how it works now'. A fact sheet on the user's desk the day after a cutover can be very helpful.

Mitigate the disruption by, for example, setting up a **concierge service for booking meetings**, and having **people 'on the floor'** who can help with troubleshooting. 'One organisation gave red caps and fluorescent vests to its IT support team and sent them to "walk the floor" – this turned out to be really effective,' says Odell.

Life after the cloud...

Once you've migrated Exchange to the cloud, make sure you can maintain the authentication hub for the cloud service.

'**The cloud changes what you need to maintain,**' says Odell. 'You don't have to maintain as much, but you may need to maintain more complex integration pieces. Keeping those pieces running is critical to the success of your cloud solution.'

Odell also suggests having a **cloud exit strategy**: 'There may come a time when you want to change providers and you need an effective strategy to do that.'

Last words of advice? 'It's worthwhile engaging a third party to help with your Exchange migration,' says Odell. 'Look for a provider that's done this before so you can get the right guidance and advice when it comes to understanding your environment and planning your move – you'll benefit from what they've learnt from other migrations.'

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