



## Case study

# Exchange Server Crashing

***Personal Information Manager (PIM)** databases such as Microsoft Exchange are the lifeblood of small businesses everywhere. These databases are where companies' email, contacts, calendars and tasks are collected and saved.*

***NSK Inc** installs, configures and backs up these databases for all of its clients on a regular basis. But most importantly, in extreme disaster recovery scenarios such as the one below, **NSK Inc** will get all of your data back to your fingertips as quickly as possible.*

*Even better while your server is offline, we will use our resources to keep your company connected while resolving the problem.*

Recently, a client of NSK Inc's email server stopped working. No one at the company could use their Outlook to send or receive email, nor could they access their contacts or calendars. We investigated the issue and quickly determined that one of the hard drives in the server had failed. Typically this is an easy fix and covered under the manufacturer's warranty. The server manufacturer sends a new hard drive and one of their technicians replaces it the same day. However, this time there was a miscommunication between the server manufacturer and their technician. The manufacturer's technician replaced the wrong hard drive. This incorrect process had some major consequences for our client which included:

1. Their Exchange (email) database was permanently corrupted and unusable
2. The server still had a bad hard drive in it
3. The server could not be used for email that day

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That evening while we were on the phone with the server manufacturer coming up with a plan to fix the server, we set the client up on a hosted email solution so that they would be able to send and receive emails when all the employees came into the office in the morning. The manufacturer agreed to send out 2 new hard drives that would arrive in the morning.

At that point we knew that we would need to install at least 1 of the new hard drives, wipe all the data from the drives, recreate the hard drive array and restore the email database from a backup tape. Unfortunately when we tried to recreate the hard drive array after installing the new hard drive it did not work. The new hard drive we installed also became corrupted and went offline! We then immediately escalated the issue with the manufacturer to figure out what the problem was with this server. The manufacturer realized that the problem was the hard drive array itself and that any drive we put in the array would become corrupt and stop working. They said that they would send 3 new drives and we could rebuild the array with those drives. **NSK Inc** made them go one step further and had them send extra hard drives, a new motherboard, a new hard drive controller and cables.

Once all the hardware was installed on the server, **NSK Inc** began rebuilding the drive array so that the Exchange database could be restored from tape. While we were doing this one of the hard drives that the Windows Operating System was running on crashed. Luckily, **NSK Inc** had requested the extra hard drives from the manufacturer, so we were able to replace the drive and the operating system became stable again. **NSK Inc** restored the Exchange database from a backup that was taken the night before the server crashed. In some cases, this is the best an IT consulting company can do for you, but because we had set the mail server logging correctly for disaster recovery, we were able to bring the mail server back to within minutes of when the server originally crashed. This means all emails, calendar items, contacts and tasks were recovered. Once the mail server was up and running and completely stable, we took the client off of the hosted email solution and got them working on their own email server again.

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