

Virtual Stream

Using MS Exchange High Availability

Published: November 2009

Our oil and gas operator customer wanted to ensure that in the event of a failure, email could be retrieved. The client's recovery time objective was 24 hours, we wanted to do it in less than 24 minutes.

Situation

This oil and gas operator has locations throughout the world, including the UK, US and the Middle East. They produce almost 1 000 000 bbls per day.

The client has recently invested both time and money in ensuring the business has a robust disaster recovery plan. Many technologies can be used, including Storage Area Network (SAN) replication and virtualisation.

The client has created a triangle of sites so that even if links fail, the business won't.

Solution

Replicating Exchange 2007 can be done in a variety of ways, each with benefits and disadvantages. SAN replication was the initial plan as most of the other systems with data stored on the SAN were replicated to a site several miles away. However, no matter how many ways we tried it, the snapshot from the SAN left the Exchange databases in a dirty state and often unable to mount. Sometimes it would and sometimes it wouldn't. Large databases or small databases, quiescing the data, we could not get it to work consistently.

We wanted to go with our primary plan and use the Exchange replication built-in functionality itself and worked with the client's networks team to create a Cluster Continuous Replication system (CCR) cluster over a wide area network (WAN). Exchange replication relies on Windows failover clustering and so we had to make sure that every detail was right.

With lots of testing we proved that we could fail Exchange over and have clients up and running within 5 minutes of a failure with 100% data integrity. Crucially, we could fail back in the same time.

Once we had proved this system, even the SAN hardware vendor was moving away from recommending hardware replication and snapshots for Exchange, confirming our direction.

Solution Overview

Customer Profile

This oil and gas operator has locations throughout the world, including the UK, US and the Middle East. They produce almost 1 000 000 bbls per day.

Business Situation

The company required a trusted partner to design, test and implement a failover for email which can be fully recovered in 24 hours.

Solution

Virtual Stream recommended using Exchange Cluster Continuous Replication (CCR) to ensure that all email is replicated and that downtime is kept to an absolute minimum

Benefits

This client now has the ability to deliver the SLA of 24 hours to the business and has the comfort that every single email sent and received is replicated to another site.

Fully testing the solution and failing over and back gives complete confidence in a Windows and Exchange failover cluster where the time taken to failover is the time taken to get a cup of coffee.

Virtual Stream solve business problems using today's technology. If your business is expanding into new locations and you require staff to have access to email and resources or figuring out how to upgrade those old legacy servers with the minimum of downtime, that's what Virtual Stream do. Whether you are looking for IT Strategy or operational assistance, Virtual Stream can advise on any aspect.

For more information about Virtual Stream, please visit: www.virtualstream.co.uk

For More Information

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