



Desktop Disaster Recovery Solution

IMSCAD Cloud offer a unique and cost-effective Microsoft Azure DR solution for your Desktops.

When looking at Desktop DR, we have found that customers tend to have implemented structured redundancy measures for their infrastructure and critical data in the event of a disaster. However, we are seeing that this does not necessarily cover desktops in a physical on prem environment or datacenter hosted virtual solution.

Having seen this scenario on numerous occasions IMSCAD have designed a solution to help fill the gap and ensure there is a desktop DR solution in place for these desktops. Microsoft Azure offers favorable pay as you go options for hosting Virtual Desktops, with the only recurring expenditure being for the infrastructure and storage. The infrastructure remains always on while the desktops sit dormant, ready to burst and scale as required in the event of an outage.

IMSCAD Cloud build and maintain the infrastructure in the cloud, exclusively, for you the customer and provide yearly DR scenario tests, meaning you can sign the solution off as fully functioning for complete peace of mind. Billing for the infrastructure will be

on a monthly basis, until such time as the Disaster Recovery solution is invoked. At this time, billing will be on a pay as you go basis for the desktops. In the event of a disaster, we endeavor to make these desktops available within hours, we do however, guarantee, full functionality of the solution within 2 working days.

Once desktop failback has completed, all running instances except for that of the infrastructure will be turned off and deallocated to avoid any unnecessary costs whilst returning the environment to it's always on base infrastructure.



IMSCAD Cloud are experienced with public cloud GPU instances and understand the best instances for various workloads for a wide range of industries to ensure the best possible performance and user experience, minimising the impact on productivity for all users when working from the DR system.

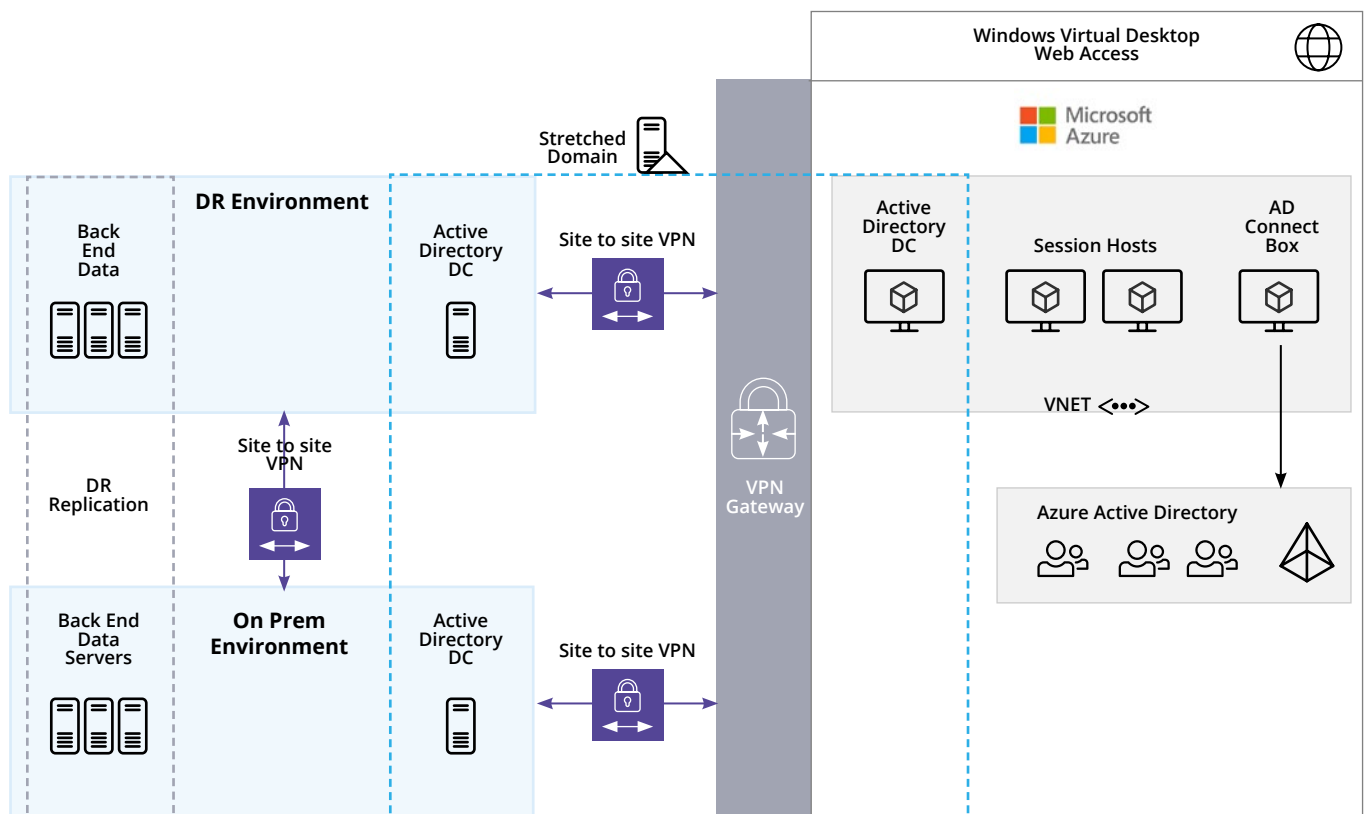


The original IMSCAD Cloud Desktop Disaster Recovery Solution

To set the scene, we had a customer that had replicated their infrastructure such as networking, AD DS, file shares etc. from their on-prem environment to a physical datacenter to act as failover in the event of a disaster. However, the customer also had 12 physical host servers with GPUs that housed 300 virtual desktops. This customer was looking for a solution to cover the virtual desktops without having to commit to the substantial

hardware costs that are associated with replicating that physical capacity in a datacenter, especially when that hardware could potentially sit there for years and never be used.

Below is a high-level view of an Azure virtual desktop design, implemented as a desktop disaster recovery.



The Solution

At its heart, the solution is, dare we say it “straight-forward” we were able to utilise the flexibility of the public cloud, in this case, Azure, to provide the ability to provision desktops quickly at scale, whilst keeping costs low with minimal, always on infrastructure required. This setup also enabled the customer to continue to access their data and network shares etc.

The steps to achieve this are as follows:

- Create a subscription in the customers Azure tenant If your business is using O365 for example, you will have a tenant in Azure.
- Setup a virtual network and infra virtual machines in Azure for AD replication with an AD synch on the customers on prem environment.
- Create a site-to-site VPN tunnel (a reciprocal connection) from Azure to the customers on-prem production environment to access network drives, license servers etc. and create another site-to-site VPN from Azure to the customers replicated DR environment for the same purpose once DR is invoked.
- Replicate the customers virtual desktop master images to Azure and use these to create Azure virtual desktop session hosts using NV_v4 or NV_v3 GPU instances. Doing this gives users a familiar look and feel when they connect to their session.



With this set up, having connects from Azure to both production and DR sites, solved two problems for the customer. It allowed the customer to burst capacity in the cloud for specific project work as well as serve the customers Desktop DR setup.

The infrastructure piece is always on so there is an ongoing cost for this, but the session hosts can be spun up as needed on demand and you are only charged for what you use.

IMSCAD Cloud & IMSCAD Global have years of experience deploying both Cloud and on-premise virtual desktop solutions for architecture, as such, we understand what it takes to provide Disaster Recovery Desktops that give the best performance for all users working at home or anywhere.

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