

Sangfor WANO

Sangfor WANO DC-DRC Solution



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DC-DRC Background



A DRC (disaster recovery center) serves to protect businesses and assets in the event of a disaster. To achieve business high availability, data security and better user experience, many companies choose to build their DRC in a remote designated location.

Due to different geographical locations, companies always use a high-quality and stable link such as leased line/MPLS VPN for DC-DRC connectivity to allow users to access resources and to guarantee a continuous business operations.

However, these types of links are very expensive and have bandwidth limitations.

Challenges for DC-DRC WAN?



Big Traffic

With business growth, more and more application traffic need synchronization between DC and DRC, therefore incurring high cost for bandwidth upgrades.



Replicate Data

In DC-DRC scenarios, application traffic requires heavy data replication, wasting bandwidth by running data replication in WAN.



Inefficient

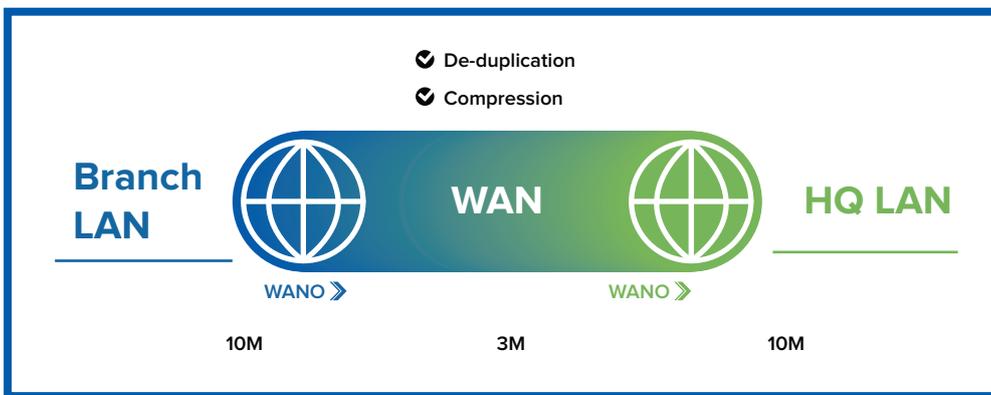
Synchronization/backup/restore is a common daily task for IT Administrators in DC/DRC. Due to heavy traffic and limited bandwidth speed, IT administrators are required to devote significant time and effort to executing daily tasks.



RTO & RPO

Time is money when it comes to disaster recovery. Reducing business downtime is always a key objective for DC-DRC.

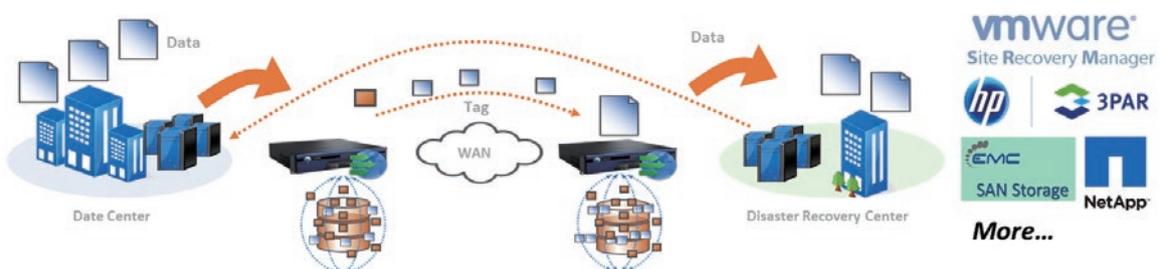
- Byte Cache:** Byte level cache, each tag can represent up to 4K real data.
 * Don't require the entire file, just byte stream.
- Compression:** GZIP/LZO/Quick LZ.
 * Three compression algorithms, intelligent selection.
- Application Proxy:** Local WANO will complete the application connection actively
 * Reduce connection in WAN, reduce response time.



Key Values

<p>Efficiency</p> <p>Reduce synchronization, backup and restore time. Make backup and recovery solutions meet compliance standards</p>	<p>Reliability</p> <p>Provide high service uptime thus increasing productivity and decreasing business down-time risk</p>	<p>Visibility</p> <p>Provide reports on bandwidth</p>	<p>Cost</p> <p>Reduced cost of upgrading infrastructure & OPEX</p>

Best Practices



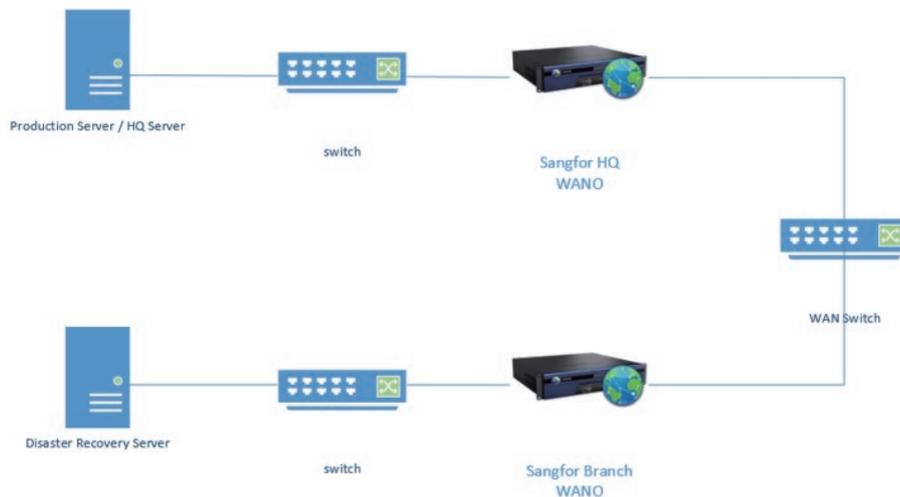


Background:

7-Eleven Malaysia is the largest convenience store chain with more than 1,905 stores nationwide, serving over 900,000 customers daily in Malaysia. Due to the importance of maintaining business continuity, 7-Eleven built a disaster recovery center in Shah Alam using a 150Mbps leased line to connect to the data center. Because of limited leased line bandwidth, huge amounts of data being synchronized from the production server to the disaster recovery server by HP 3Par required a whole day.

Sangfor WANO Solution:

WANO transparency mode deployed in HQ and Shah Alam enabled byte cache to delete duplicated data while using a small tag instead of real data transfer in WAN, enabling compression features to improve the WAN transmission effect.



After deployment of WANO, the data reduction ratio reached up to 73%. For 1.9TB data, we only need to use 538GB to transfer using the WAN link. 7-Eleven successfully enhanced the WAN link throughput from 150M to 550M (150/(100%-73%)) and reduced synchronization time by more than half, compared with upgrades to leased bandwidth from 150M to 550M, they saved at least 50% of their cost every year.

