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DATACENTRE SPECTRUM

How are the datacentre technologies evolving?

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Nitin Mishra, Senior EVP & Chief Product Officer, NTT-Netmagic, is responsible for cloud and datacentre services of NTT-Netmagic. He also looks over the security aspects. Here, he discusses some trends of datacentre operations in 2020

What are the five emerging trends for datacentre networking in 2020 and beyond?

The five trends related to networking that we are witnessing are as follows:

- **Cloud Connectivity**—Cloud connectivity has rapidly come across as a major enabler for datacentres. It helps in seamless networking of different device types dispersed across geographic locations. Customers with workloads in datacentre and public cloud(s) are increasingly leveraging cloud connectivity to create secure Private networks.
- **Software Defined Networks** – Adoption of software defined networking is expected to go mainstream, as alternative to MPLS to create secure private network over Internet. These allow centralised policy control for network and security policies
- **Edge data centers** – With proliferation of IoT, there is a lot of emphasis being given to micro datacentres or Edge Computing. The



TRENDS IN DATACENTRE

concept entails setting up of storage and computing facilities closer to the data collection points. This is going to transform the speeds at which the locally generated data is processed and will allay various concerns related to small network of personalized IoT devices such as data security and localisation needs.

- **Network dynamism** – In today's time, customer's bandwidth requirements are changing rapidly. The implementation of work-from-home strategies saw the demand shoot up and we anticipate demand variations continue in the coming times too. Hence, a business should have access to adequate data and services as and when needed. Companies are also rapidly transitioning to hybrid cloud systems that offer single-window management of different cloud assets. Thus, the trend is to put in place agile networks that can handle all these scenarios or other unforeseen contingencies too.
- **Network virtualisation and security** – The software defined network and security is moving closer to application with micro-segmentation capabilities. There is high level of automation that comes with network virtualisation redefining provisioning and management.

How is the market now for adoption of hybrid cloud and datacenter virtualisation?

We see hybrid cloud computing and datacenter virtualisation are among the hottest trends of the year. Due to performance, licensing or compliance requirements not all workloads can be moved into public cloud. Hybrid cloud is becoming the preferred choice to deploy enterprise applications by running some on private cloud and others on public cloud and establishing a private interconnect. Datacentre virtualisation with network and security virtualisation provides capability to take security close to application. It goes well with hybrid setup for seamless connect across compatible cloud setups.

How are you rebalancing your provision of datacentre services, co-location and capacity management?

Our first priority has been to ensure continuation of our clients' business processes. Since we came under the essential services category, we managed the presence of critical staff at our data centers in accordance with the government policies. Our personnel continue to work remotely and are taking care of servers and databases. We have plans to expand our data center

capacities and will soon try to make our newer facilities live. In the near future, we are also looking to installing new equipment at various locations.

We have always built our capacity with an eye on the future growth in demand and ample redundancy. Thus, even during the lockdown, we not only managed to continue offering the same seamless level of service to our clients, but, were also in a position to cater to new clients. Our cloud and bandwidth capacities offer ample scope. Usually we operate with over 30% buffer capacity. Hence, even in the scenario of the demand for bandwidth and storage rising rapidly, we have not faced any problems until now.

How are you updating DR plans to reflect this new world of vendor-distributed work?

DR management is the need of the hour. At NTT-Netmagic, we offer DRaaS which is a complete DR Management program based on the pay-per-use model. We have integrated automated DR processes and real time visibility into the organisation's objectives related to availability, Recovery Time (RTO) and Recovery Points (RPO). This new offering will help our customers enjoy a more affordable alternative to traditional DR solutions. This helps the clients in reducing downtime to the minimum and avoiding service disruptions. By entrusting us to manage the DR process, our customers don't need to focus on things other than their core business activities.

Are you going for remote management of datacentres?

We offer end-to-end remote datacentre management services. We have an optimal mix of onsite and offshore services that allow us to provide a comprehensive and integrated suite of remotely managed services to private or 3rd party datacentres.

We have the RDM framework which helps our clients consolidate, standardise and set universal performance SLAs for their IT operations, even if they are spread across several datacentre locations, on different technologies, business processes and IT user groups.

Demand for cloud services will soar in some sectors, but wither in other verticals. According to you, in which sectors this might happen?

Cloud services will see adoption across the verticals. There may be delayed transformation in certain verticals, which



CLOUD SERVICES WILL SEE ADOPTION ACROSS THE VERTICALS. THERE MAY BE DELAYED TRANSFORMATION IN CERTAIN VERTICALS, WHICH ARE BADLY IMPACTED BY COVID. THE VERTICALS LIKE TRAVEL, HOSPITALITY, RETAIL WILL CUT DOWN ON EXPENDITURE IN MIDTERM, BUT EXPECT THEM TO ADOPT CLOUD AS THEIR BUSINESSES COME BACK ON TRACK

are badly impacted by COVID. The verticals like travel, hospitality, retail will cut down on expenditure in midterm, but expect them to adopt cloud as their businesses come back on track.

Currently, we are seeing increased demand from gaming companies, OTT players, E-commerce and Healthcare.

How are CIOs looking at datacentres in Covid-19?

Covid-19 pandemic has been a major challenge for the CIOs. There is a massive impact on business continuity, working style and supply chains. CIOs are now focusing on strategic projects and their IT priorities have changed. The focus is higher on remote working tools and secure communication platforms they are greatly turning to collocation datacentres to resolve three major problems:

- **Data security** – These days phishing scams and ransomware attacks are becoming increasingly common. Hence, CIOs are trying for having enterprise level security in place. Compared to private datacenters, the co-location datacentres usually have more advanced, robust and multi-layered data security systems in place.
- **DR in the cloud** – Work from home has become the go-to operational process today. Thus, the cloud technology has become the key to resilience and continued business operations. CIOs are now looking at the datacentres to offer this cloud elasticity and dynamically scale their IT infrastructure to meet increasing remote worker needs. This is where the datacentres are ideal Managed Service Providers for them. There is availability of large number of customer networks and the best resources. Thus, the Covid-19 situation has made the datacentres highly strategic for the CIOs.

Covid-19 may either kill the datacentre, or forever change storage. What do you think about this?

Covid-19 has already started boosting the demand for datacentre storage. There are various benefits that a collocation datacentre offers over a conventional company owned data/server facility. During the Covid-19 related lockdown, we saw how the movement of personnel was hampered all over the country and while datacentres were exempted under the essential services category, it is the small and medium enterprises with their own storage/servers that had to face disruptions. With the shutdown of offices and commercial complexes, a lot of such companies were not able to access their servers in case of need. In many cases, the power supply to the office complexes and buildings was discontinued after the lockdown and there were reports of server malfunctioning in the absence of the required air-conditioning.

Among our existing clients also, we saw the demand for datacentre services such as cloud storage and bandwidth increase tremendously after the adoption of work-from-home practices. Even the functions that were non-technical in nature, have now become digital and data intensive. For instance, team meetings and any strategy discussions are now being held online via video conferencing whereas earlier the teams simply used to huddle in the meeting rooms. Hence, the prevalent Covid-19 situation has made datacentre services even more crucial for businesses. The storage preferences are likely to change from privately stored data to data stored at collocation datacentres within the country.