• As this system will replace the old system, it is recommended to use two CPUs instead of one CPU per each server, so could you accept changing the one CPU into two CPUs with total 16 core per server or 24 core?

Regardless the Number of CPU's we need minimum 28 core per server/ node with 2.8 GHz and 42 MB cash.

Also, You could provide as option

• The storage highlighted is 11.5TB RAW capacity SSD or NVME per node, but you did not mention the **final usable storage** capacity for the cluster and you did not mention if N+1 HA is taken into consideration or not. As the usable storage is different from vendor to vendor, for example with vsan you can configure your cluster with Raid 5 or Rid 6 with erasure coding (more space and less protection), while with Nutanix you get higher protection with RF2 but with less usable capacity. So it is recommended to highlight the final usable capacity needed.

First Nutanix support Erasure coding EC-X, which is similar to RAID 4, 5, and 6. After selecting the vendor we will discuss what RAID/ Erasure coding will be used.

We will start with 11.5 TB per node according to budget limitation, later could be increased based on need. In addition we could use the existed storage Fujitsu SAN Storage DX200 S5.

• For the networking, you are asking for one card with two ports of 10/25 per server, and the 4 SFPS will be 2 for the server side and 2 for the switch side? Or you are asking for two cards with total four 10/25 ports and the SFPs will be from the server side and you will manage to get the SFPs from the switch side?

Required 4 X 10/25 ports per server/node with 4 SFP's Transceivers. 2 ports for LAN traffic (redundant), and 2-ports for SAN traffic (redundant).

• For Data Protection and disaster recovery, is the DR site ready, and there is a good link with it? As you ask for near zero RPO and RTO and non-snapshot based replication? If there is no DR ready yet, you can start with the native RPO which is near 1 hour instead of zero, and by that you are not depending on the link latency.

Could you please provide the options you have, and the price per option?

• Integration with current Fujitsu storage: with HCl you cannot use old storage as part of the cluster, but you can use it secondary storage or backup storage so please confirm how you will use it? Also is the storage have ethernet or FC connectivity?

Could you please show if your proposed vendor solution supports the integration with Fujitsu SAN Storage DX200 S5 or not, while we are looking for benefit from the storge since it is new investment implemented.

In case your solution not supporting the integration with Fujitsu SAN Storage DX200 S5, you could increase the HCI solution usable capacity to 40 TB.

For the connectivity its FC

Nutanix Servers support 1 CPU, or 2 CPU, (servers with two sockets can't be configure with one CPU).

Regardless the Number of CPU's we need minimum 28 core per server/ node with 2.8 GHz and 42 MB cash.

• Based on NX that support single socket CPU we can provide up to 24-cores per node, The request below is for 28-cores per node. (I suggest use Gold 6342 instead of Gold 6348).

Gold 6348 or Higher in terms of requested cores, frequency, and cash

• To achieve the 11.5 TB RAW I need to use $6 \ge 1.92$ TB, the Single socket CPU servers have 4 disks only, so I can use $3.84 \ge 4 = 15.36$ TB. So can we increase the RAW Capacity to be 15.36 TB to be fair for all.

We need minimum 11.5 TB RAW, so you could propose based on the vendor solution you have And the solution must support capacity expansion to a minimum of duple the requested capacity.

• About visualization , Nutanix use its own hypervisor called AVH, so no need for VMware ESX.

So, that fine with us but you have to provide full practice for PMO staff to be capable to use and mange using the AVH.

بالإشارة الى الموضوع أعلاه، وفيما يخص المواصفة الخاصة بالسيرفر Storage/capacity أرجو التوضيح فيما اذا كانت السعة المطلوبة هي <u>11.5TB</u> لكل سيرفر على حدة ام للنظام نفسه، على سبيل المثال اذ تم اضافة 6x1.92TB لكل سيرفر ستكون السعة لكل سيرفر هي 11.52TB هل هذا يفي بالغرض .

For each server yes, but please consider all above response for all questions and clarifications.