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A true IT Services Company

How to choose you NAS Box..

"A sound IT infrastructure is usually a balanced mix of "Strategic understanding of the Business", "IT Need Assessment" and "Clear product knowledge". On one side where strategic understanding of the business and subsequently understanding the need.....

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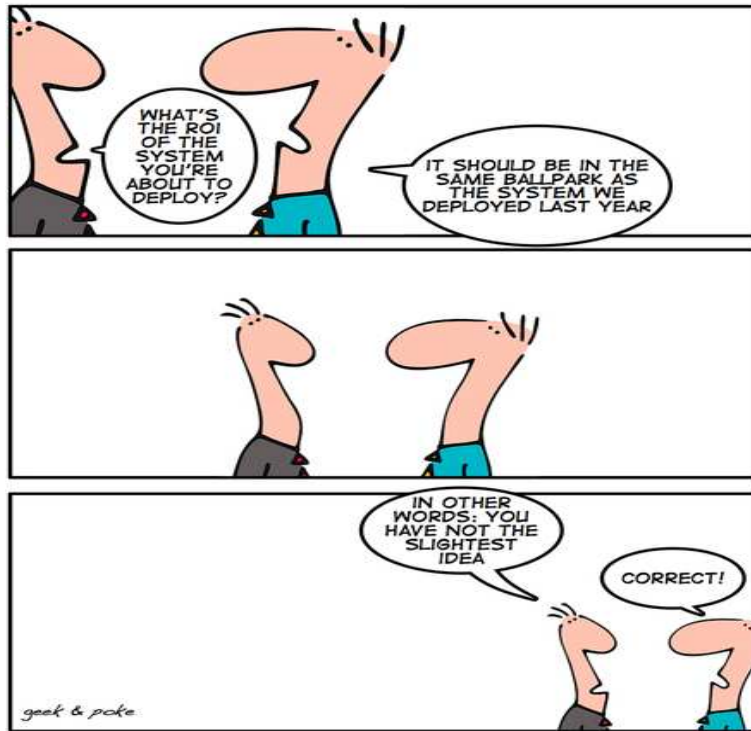
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Introduction

Setting aside plethora of products and services available, it's always a challenge to balance a growing business requirement and shrinking budget.

A sound IT infrastructure is usually a balanced mix of "Strategic Business Understanding", "IT Need Assessment" and "product knowledge".

On one side where strategic understanding of the business and IT Need assessment is more of a management role, deriving bill of material for the need requires not only business acumen but also good technical understanding.



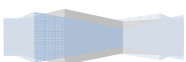
requires not only business acumen but also good technical understanding.

This paper is to put forth the technical key points of NAS procurements as more often "IT Need Assessment" and "Strategic Business Understanding" is case specific and requires deep diving into a system.

Factors to be considered before getting your NAS Box ...

Any procurement is unique in nature and so are the drivers which influence the need to buy the product. Drivers/Influencers are never standard and vary with changing requirements and demands. Following are the few technical drivers which are the key influencers in current times...

- a) **Budget & Storage Need:** The first step in choosing a NAS would be defining a budget and the storage needs. Keep in mind, the storage you need depends on the expectation of what you will do in the near future, let's say, the next 12 to 24 months. You don't want to invest multiple times



in smaller NAS which would end up more expensive than going for a bigger NAS immediately.

- b) HDD type and Interface:** Besides understanding ones need of capacity of hard disk, it's important to keep in mind that usually only 70% of the storage is available due to space being consumed by RAID configuration, OS and recovery module.

Few key points concerning hard disk would be to;

- i) Know the type of hard drive compatible with the storage device
- ii) Adhering to specification of hard disk mentioned also ensure that the guarantee clause is appreciated and performance is maximized
- iii) Experts opine that SAS drives give a better performance than SATA
- iv) Check the hot-swapping of hard drive and hot-spare hard drive
- v) Data-compression to enhance the usage of storage is also one of key features available around.

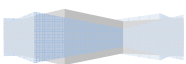
- c) Backup:** Suitable RAID provides timely backup and failover capabilities to the stored data. Few key points to take into account are;

- i) RAID 0,1,5 are standard offerings these days. RAID 6 would be a bonus to have in the same cost.
- ii) Check the availability of snapshot and replication technologies along with RAID, thus enhancing the reliability levels
- iii) Few vendors also provide "hybrid" backup solution, which means that the data on NAS is mirrored on a server in Cloud.

- d) Monitoring & Management:** The impact of disaster depends on the level of preparedness. A qualified and smart monitoring plan can transform any disaster into a normal trouble. For a better monitoring and management few key features one should emphasize are:

- i) Web-Based interface, remote login facility, remote desktop connectivity
- ii) Remote monitoring of disk quota management, storage and screening report
- iii) LCD screen for basic trouble shooting and error reporting.
- iv) iSCSI support and number of target the NAS box supports

- e) Supported file systems Clients and protocols:** One more important feature to look before taking the plunge is the list supported network



protocol. Despite the fact that even the most basic storage devices appreciate protocols like TCP/IP, CIFS/SMB, AFP, NFS, HTTP, HTTPS, FTP, FTP-SSL/TLS and DHCP server/client, for any specific requirement, one needs to check before buying. Similarly most storage devices support clients like Windows, Mac, Linux/Unix and pretty much all popular file systems.

- f) **Price & Warranty:** Besides all the technical scrutiny and monitoring, pricing is the most important aspect to be reckoned. There is significant variation in pricing depending on the features build into the system. Hence to begin with, one should have the detailed pricing structure of the storage device one is planning to buy. Next to check is the software updates and the cost associated with it. With so much importance on redundancy and seamless performance, warranty is paramount. Vendor support is of paramount importance as the network cannot afford a long downtime.

