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ARTICLE: TAMING THE KRAKEN WITH PETASAN!

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Monsters do exist! (They are ugly, they have tentacles, and they like to live on modern Datacenters):

Anyone who had worked before with Ceph surely knows all the great advantages of working with a fully open source based Software-Defined Storage that is scalable in an almost infinite way. With Ceph we can distribute and scale our data (from terabytes to many petabytes or more) and keep an extraordinary performance on all our I/O operations. But there is a catch this ingenious solution…. The "Ceph" monster is not exactly easy to understand, also not easy to install… and definitively not easy to manage (especially for the non Ceph-expert IT guy).
Ceph is with no doubt at all "A MONSTER" that scares the unprepared ones, and sometimes, also the most expert hard-core IT nerds too.

Monsters only speak their own language:

Ceph uses its very own protocol for the client-server interactions (a protocol that is very fast and efficient) but sadly, a protocol that is only common to some Linux systems and cloud platform. Any modern Linux can speak "Ceph" natively (or by installing some extra software) and some cloud solutions (like OpenStack) also natively speak "Ceph"… but… what about other non-Ceph-speaking systems? What about one of the most used network-storage protocols in the industry? What about iSCSI? Well… there is some experimental support that is coming into Ceph but again… "Experimental and not ready for production" yet! So what about iSCSI with Ceph in a real production environment?

Enter the Monster's tamer: PetaSAN is here (and the monster will cry on a different language!):

Then you want to tame the Ceph monster and also "force it" to speak another language (namely iSCSI)? PetaSAN is the right solution for you!
But what exactly PetaSAN does? That "open source" solution sits on top of the Ceph monster in a very ingenious way, and "tames it" by easing the full installation of all related Ceph components (from the base operating system to the complete Ceph install and configuration) and adds more juice to the goose by enabling TRUE MPIO iSCSI and TRUE automatic failover for the iSCSI paths. Not happy with that, it also helps you administer your Ceph cluster using a WEB-UI that also includes very useful metrics. In other words: You have your cake, you can eat it, and you can cook more cakes too because if you want to scale your cluster (by adding more disks, more nodes,

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or both) PetaSAN helps you to do this "normally complex task" with the same WEB-UI used for your day-to-day administration.
In other words and resuming: Now you can use have the best of both worlds: All the advantages of running a scalable Ceph cluster and using natively and highly redundant multi-path I/O iSCSI for your non-Ceph-speaking platforms (namely: Windows Server, VMWare, and anything in the word that is compatible with iSCSI/MPIO). And to the best of this: Ease of administration with a very well constructed WEB-UI!

A little testimonial: The deeds of UBXCloud.com knights!

Now is my time as author of this article to speak about our personal quest in our company (ubxcloud.com) in the search for the "holy grail" of open-source scalable storage with iSCSI compatibility for VMware.
As many IT teams in the industry, we are using a highly virtualized and redundant environment. The core of this environment is VMWare and while we have a nice storage solution already (iSCSI-MPIO based) that solution is costly and not necessarily easy to scale out.
Recently we expanded our services to a new datacenter (that will call "DC-B") but instead of using the same storage we already have on our main DC (hehe… yes… "DC-A") we begun to check out Ceph and how to make it work with iSCSI… then we found on the Internet the solution (yes, PetaSAN).
Our team is already expert in Ceph and iSCSI but not "Ceph-with-iSCSI" (that was on experimental stage in Ceph at the moment we were searching for a dependable solution) so… what if this PetaSAN solution really works? Then we decided to give it a try by "first" installing many limited-labs (just in order to know how that stuff works as expected) and after a lot of testing and testing we convinced ourselves and decided to mount our first cluster and add it as main-storage for our VMWare platform on "DC-B".
We really did it…. We tested that cluster and forced many failures in order to see how it self-heals and keeps the path redundancy no-matter-what! Ceph by itself can "literally eat" a NUKE and keep the data flowing to its clients but this is different… we have here a new player: "iSCSI" and that is not native to Ceph. So our tests not only forced the bar on the Ceph-defined-storage part but also on the highly-available iSCSI-MPIO layer provided by PetaSAN and you know what? IT WORKS… It just really WORKS and in a fantastic and very production-like way!
PetaSAN was able to keep those paths working after many induced failures (OSD's, networking, complete nodes, everything we tried but sending a Nuke) and the thing keeps the data flowing all the time.
Now our cluster is working with production loads and we are adding more OSD disks to it (something that we can just do with the aid of Peasant's graphical interface). We did Ceph before… and it was never that easy!
So this is it: Our deed is done and our knights at the UBX Castle can rest assured that the cluster will combine the best of both worlds: Ceph and iSCSI multipath I/O.