Scalable, Cost-effective Data
SUSE Enterprise Storage
With DiskProphet

With unstructured data multiplying at an unprecedented rate, enterprises are looking for innovative and cost-efficient storage solutions to cope with this challenge. Using SUSE Enterprise Storage as the disk target of a backup solution, organizations can decrease TCO and scale simply and easily into petabytes of data and more. Businesses must also consider how to manage performance loss prevention. With the addition of ProphetStor DiskProphet®, enterprises can foresee disk failures weeks in advance, avoiding performance hits during critical operation.

ProphetStor’s DiskProphet at a Glance:
A patented and intelligent data analytics solution that addresses the problem of performance loss prevention in a unique way:
+ Predictive analysis of disk failures
+ Reporting and open REST APIs

Products:
SUSE Enterprise Storage

Cost-Effective and Scalable Option for Enterprise Backup
SUSE Enterprise Storage enables IT teams to transform their enterprise storage infrastructure to deliver a unified and highly scalable storage solution that is cost-efficient and able to seamlessly adapt to changing business and data demands. As an intelligent software-defined storage solution, SUSE Enterprise Storage delivers a self-healing and self-managed distributed storage cluster designed to scale from hundreds of terabytes to petabytes and beyond. Leveraging industry-standard server and storage building blocks, you get the cost-efficient infrastructure you need with the unlimited scalability your business demands, with no vendor lock-in. SUSE Enterprise Storage improves efficiency and automatically optimizes operations with intelligent, self-healing, self-managing distributed storage—enabling organizations to support more capacity per storage administrator and spend more time focused on delivering value.

Another benefit of SUSE Enterprise Storage is that it simplifies the backup environment by appearing to the backup server as a simple, monolithic target—as an iSCSI interface, an S3 gateway or even a POSIX-standard filesystem. The operator of the backup software is not required to know the details of the storage configuration, making administration that much easier.

Innovative Visibility, Analytics and Intelligence
With ProphetStor’s DiskProphet, SES users gain the ability to foresee disk failures weeks in advance. This results in two main benefits:

1. An unhealthy drive with reduced read/write speeds negatively impacts the performance of the entire cluster,
and will continue to do so until the disk is ejected. Users now have the ability to detect and remove these unhealthy drives before they have prolonged impact in the SUSE Enterprise Storage cluster.

2a. When a disk fails the cluster will set the corresponding OSD to “out” and immediately begin to rebalance. Rebalancing takes up significant cluster resources and depending on the size of your cluster could take days, and greatly impact performance. DiskProphet enables the user to see disk failures in advance, and schedule proactive maintenance tasks conveniently during off hours to avoid performance loss during critical operation.

2b. By being able to schedule disk replacement before the disk dies, SUSE Enterprise Storage users avoid having to rebalance after disk failure altogether, allowing for a considerably more streamlined disk failure and replacement process.

Simplicity Realized

SUSE Enterprise Storage is a self-healing, self-managing cluster. The storage system provides built-in fault tolerance, ensuring that you won’t lose data if a drive fails or a server goes offline. The self-healing, self-managing nature of SUSE Enterprise Storage further minimizes management expense. A typical SUSE Enterprise Storage cluster enables a single admin to administer up to five petabytes of storage—over six times the standard rate commonly used for an equivalent block storage scenario in typical enterprises.

SUSE Enterprise Storage also keeps upgrades manageable, with improved performance as the storage subsystem grows. When there is a need to scale the disk target, simply add another server node to the cluster and SUSE Enterprise Storage integrates the new server and distributes the workload. As the size of the storage cluster increases, the aggregate bandwidth of the storage solution also scales linearly. This means you see increased performance in your backup solutions, even for large deployments, without paying a premium.

SUSE Enterprise Storage offers your backup environment overall lower cost.

Due to node-based pricing, especially when paired with storage-dense servers (with a much higher disk count vs traditional servers), the overall price per GB stored rivals that of public cloud providers—including hardware costs! And, because of the lower cost, backup administrators have the option to store more data on-premises, as opposed to moving it offline to tapes, enabling them to serve their end users more effectively with better SLAs.

Combined with DiskProphet, enterprises have a scalable, self-healing, distributed and easy-to-manage solution that can meet unstructured data needs now and into the future.