

**An Introductory Proposal for**

Consideration of Oracle’s StorageTek Virtual Storage Manager (VSM) 7

Mainframe and Heterogeneous Virtual Storage with Native Cloud Tiering

## Proposal for:

<Company name>

<Customer’s title>

<Company address>

<Your name>

<Your title>

<Your email>

<Your mobile>

# Executive Summary

The amount of information that enterprises generate and store is expected to continue to grow exponentially over the coming years. At the same time, capital expenditure budgets for storage remain flat or are slowly shrinking. The core challenge for IT managers is how to cost effectively manage this data growth while meeting enterprise requirements for performance, security and availability. To further complicate matters, this challenge must be met without creating undue complexity in technology infrastructure or operations—whether you are managing a heterogeneous or mainframe computing environment.

The latest mainframe systems are architected to optimize many of today’s most demanding workloads and use cases such as high volume mobile transaction processing, real-time Big Data analytics or the hosting of highly virtualized private cloud environments. More than ever, these contemporary use cases require an equally modern data storage strategy to meet the aforementioned challenges. That’s why, Oracle introduced VSM 7, the seventh generation of its StorageTek Virtual Storage Manager system for the mainframe.

# Oracle’s StorageTek Virtual Storage Manager 7

Oracle’s StorageTek solutions have a 40-year tradition of delivering production-proven, industry hardened, highly innovative storage systems for the mainframe market. And since 1998, Oracle's StorageTek Virtual Storage Manager (VSM) has redefined mainframe virtual storage with unprecedented flexibility, simplicity, and performance.

VSM 7 improves mainframe storage efficiency and speeds virtual tape operations through a high-speed, disk-based architecture. With VSM 7 you can:

* Architect a single solution that supports varied workload demands while simultaneously optimizing both performance and cost
* Take advantage of the low cost and business agility available with cloud storage
* Backup and retrieve mainframe data at disk speeds
* Adapt flexible, industry-leading disaster recovery policies to meet your specific business needs
* Connect multiple scale-out system building blocks to increase capacity and accelerate performance
* Combine multiple tiers of storage (performance disk, second tier disk, physical tape, cloud storage) to create high-performance, flexible and highly cost-effective mainframe storage solutions

## Engineered For The Most Demanding Mainframe Environments

Your mainframe powers your business. System outages and unplanned downtime can lead to lost revenue and profits. Consequently, overall system availability is a mainframe imperative. Oracle’s StorageTek Virtual Storage Manager 7 architecture provides the highest levels of system availability through:

* Active/active, redundant processing nodes with high-speed interconnects
* Fully redundant disk communication paths
* Automatic failover of all critical system components
* Hot swappable componentry
* Triple parity RAID
* “On-the-fly” dynamic job recovery upon hardware failure

But having access to data doesn’t guarantee the accuracy of the data. Oracle recognizes that “always on” access to data is of little value without concurrently ensuring that the stored data is error free. VSM 7 employs multiple levels of data integrity checking including read/write CRC on every tape block and after each compress/decompress cycle. With VSM 7, virtual tape blocks are protected at all times.

VSM 7 can be deployed to meet all the needs of your enterprise’s unique mainframe environment. Use the VSM 7 in a disk-only configuration for small-to-medium mainframe environments or test sites, or deploy with physical tape for large-scale on-premises operations. The flexibility of the VSM 7 architecture extends to disaster recovery scenarios, as well. VSM 7 offers multiple DR configurations including one-to-one and one-to-many multi-site configurations leveraging multiple VSM 7 systems and StorageTek tape. You can extend your VSM 7 environment to the cloud by leveraging native cloud tiering to backup or archive data to Oracle Storage Cloud Services. Yes, that’s right… VSM 7 now includes native, seamless integration with cloud storage, giving you access to an infinite storage pool and cloud economics!

## Ushering In a New Era of Mainframe Storage

Oracle’s StorageTek VSM 7 is the **first and only**, mainframe virtual tape storage system that provides native, automated tiering to the cloud. With VSM 7, Oracle is bringing mainframe storage into the 21st century.

VSM 7 has been architected to seamlessly integrate with the Oracle Storage Cloud Service. Now you can set policies to automatically copy or migrate files from VSM 7 mainframe storage to low-cost, off-site cloud storage. Off-loading capacity to cloud storage optimizes utilization of VSM 7 on-premises resources and reduces overall cost while adding capabilities. With tiering to the cloud, VSM 7 provides another data storage tier and a simple, secondary data protection option without the need for expensive remote site operations and resources.

VSM 7 seamlessly co-exists with previous generations of StorageTek VSM technology, so whether you are a current VSM customer or considering a new mainframe virtual storage platform, you can take advantage of everything the VSM 7 has to offer including seamless integration with our enterprise-class Oracle Storage Cloud Services.

VSM 7 is architected for extreme performance and doubles capacity over the previous generation. In fact, with native cloud tiering, VSM capacity is now essentially limitless. And VSM 7 is powered by the latest SPARC processor technology from Oracle featuring extreme performance and unique on-chip security.

## Support for Heterogeneous Environments

With the introduction of Virtual Storage Manager 7, Oracle is bringing VSM’s high performance, high availability virtual tape architecture to heterogeneous environments—delivering the same high-end, production-proven, enterprise-class capabilities of mainframe data protection plus native cloud tiering to their mission-critical applications running in open-systems environments.

# Flexible IT Acquisition And Consumption Models

Transform challenges into opportunities with flexible IT acquisition options from Oracle. Oracle offers a comprehensive range of financial options to support your IT investment. Our financial experts can structure a payment plan and acquisition strategy that’s right for your business. With the help of an Oracle financial expert you can simplify budgeting with predictable multi-year payment plans and accelerate acquisitions with simple and fast approval process.

# Strong Support from Industry Experts

The Virtual Storage Manager 7 system has also received extremely positive support from industry analysts. Below are a few of their comments and links to their longer analyses.

 “Oracle is offering the IBM z Mainframe ecosystem an ‘Edge’ device front-end strategy to the Oracle Storage Cloud. The VSM 7 solution offers high performance local copy well integrated with very low-cost cloud storage. **This represents a marked change for CIOs who can now leverage the consumption economics of the cloud for their mainframe-class data.” –** David Floyer, Chief Technology Officer, Wikibon; [Oracle Announces Hybrid Cloud for Mainframe Backup](http://wikibon.com/oracle-announces-hybrid-cloud-for-mainframe-backup/)

 “**With its VSM 7 Oracle is bringing mainframe-caliber data protection to heterogeneous systems users**; and its native tiering to the Oracle Public Cloud’s storage and archive services will no doubt extend the market potential. Furthermore, the enterprise-caliber Oracle Public Cloud adds a compelling and affordable storage alternative for mainframe customers.” – Mark Peters, Practice Director and Senior Analyst, ESG; [Oracle Brings the Cloud Back to Earth](http://blog.esg-global.com/oracle-brings-the-cloud-back-to-earth)

 “As enterprises transition to cloud to enable next generation applications that create exabytes of data, storage becomes mission-critical again. Many next generation application use cases stand and fall with the TCO, availability and flexibility of storage. Data gravity is another key consideration for CxOs facing storage problems, combined with statutory data residency challenges, the flexibility to be able to expand storage both on-premise and in the cloud is a very important quality. **Being able to extend and utilize existing investments in on-premise architecture with modern storage offerings is highly desired, as large bulk investments of combinations of compute and storage on-premise are less desirable going forward**.” – Holger Mueller, Principal Aanlyst & VP, Constellation Research; [Oracle Unveils First Data Protection Solution with Seamless Cloud Tiering](http://enswmu.blogspot.com/2016/03/news-analysis-oracle-unveils-first-data.html)

 “**The Oracle VSM 7 has finally brought mainframe users into the cloud age**. For the first time ever, mainframes can finally get the same hybrid cloud storage advantages as open systems users for data protection and archiving, but even more importantly, direct access both locally and in the Oracle cloud.” – Marc Staimer, President of DSC; [Why IBM z System Mainframe Cloud Storage is No Longer an Oxymoron](http://www.oracle.com/us/products/servers-storage/virtualization/staimer-vsm7-final-3382198.pdf)

# Next Steps

I look forward to better understanding your mainframe data requirements and how Oracle can help you meet the challenges ahead. I’d like to follow up with a phone call to discuss exactly how you can leverage the Oracle Storage Cloud for your mainframe data requirements with Oracle’s StorageTek Virtual Storage Manager 7.

Sincerely,

<your name>

<title>

<phone>

<email>

# For More Information

www.oracle.com/goto/VSM