Northern California Oracle User Group

Lightning Fast RMAN Backups and Database Duplications!

Using NVMe Flash Storage..
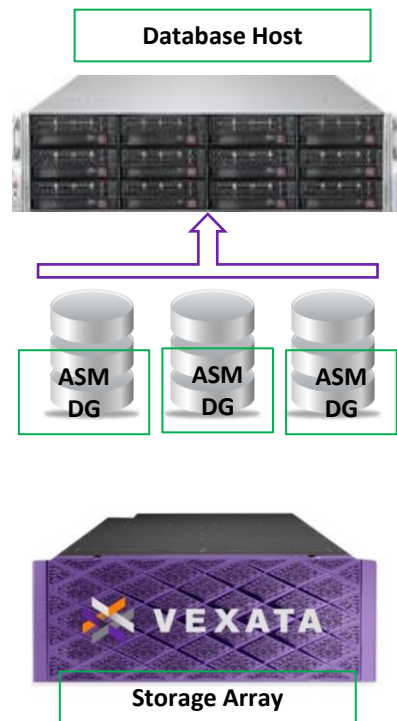
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Agenda

✓ **Test Bed Review**

✓ **Demo Steps Review**

✓ **Demos Live / Pre-recorded**

✓ **Q & A**

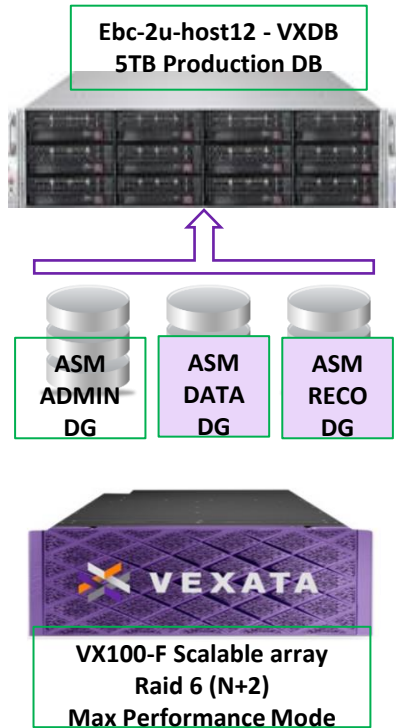# Test Bed

✓ **<u>Storage</u>**

  ✓ Vexata VX100-F All Flash Scalable Array

    ✓ 16 Enterprise Storage Modules

    ✓ 16x32Gb Fibre Channel ports
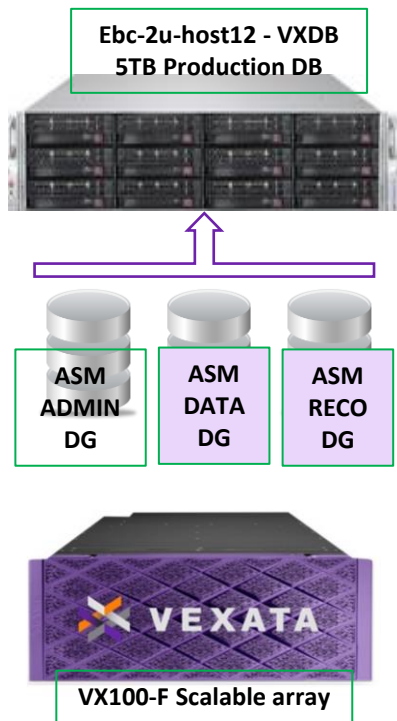
    ✓ RAID 6 (N+2) – Max Performance mode

✓ **<u>Host Servers</u>**

  ✓ Supermicro X11DPi-NT

  ✓ Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz

  ✓ 2 Sockets, 20 cores per socket

  ✓ 512 GB Memory

  ✓ 4x32Gb Fibre Channel ports

Database Host

ASM DG **ASM DG** **ASM DG**

Storage Array

Demo Steps - 1

Ebc-2u-host12 - VXDB
5TB Production DB

ASM ADMIN DG

ASM DATA DG

ASM RECO DG

VX100-F Scalable array
Raid 6 (N+2)
Max Performance Mode

Demo Steps - 2

Ebc-2u-host12 - VXDB
5TB Production DB

ASM ADMIN DG

ASM DATA DG

ASM RECO DG

VX100-F Scalable array

At Host12,
1. Run an OLTP workload (approx. 3M transactions per minute)

At Storage Array,
1. Create Snapshots for DATA and RECO Volumes (Luns / Disks)
2. Create Clones of all Volumes (for Reads and Writes)
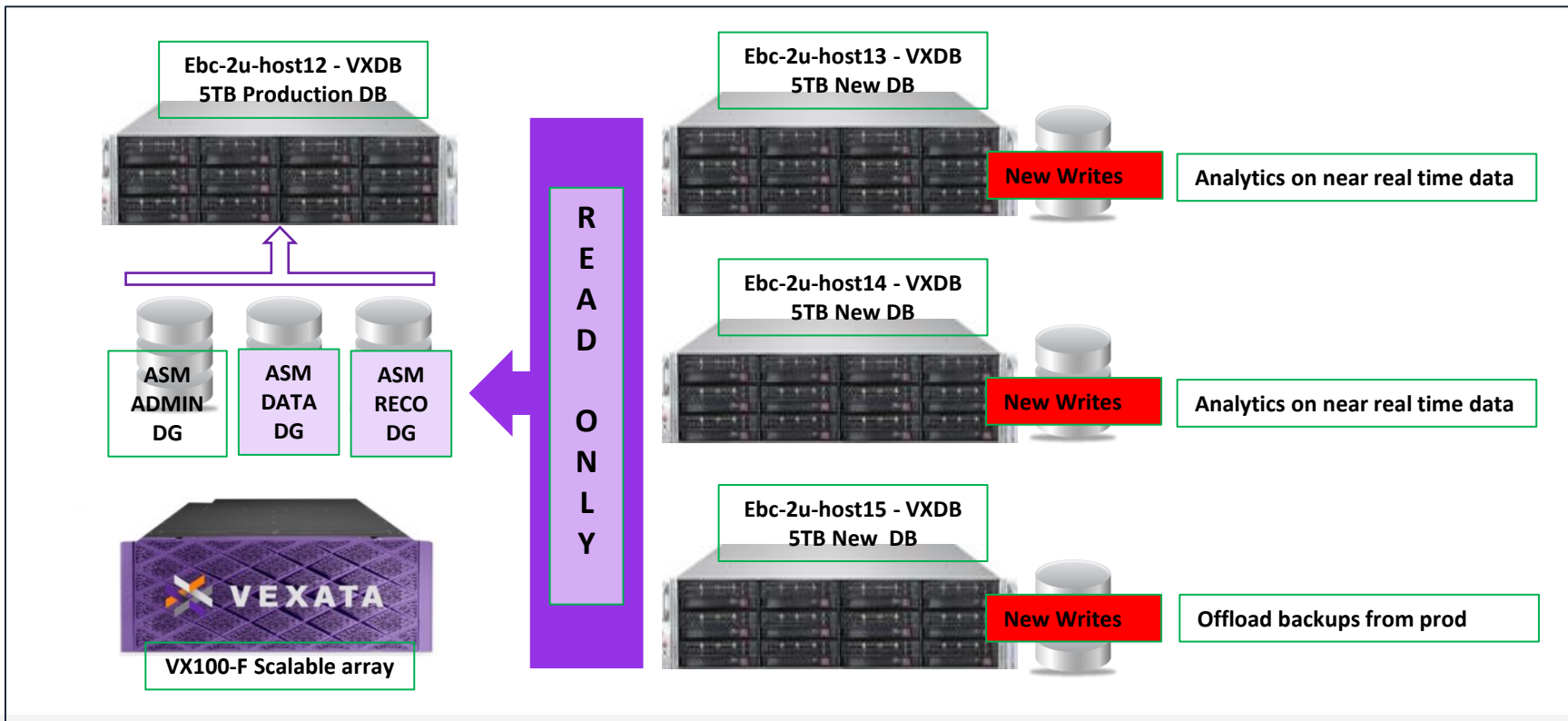3. Export Clones to Ebc-2u-host13

At Host13,
1. Discover luns, add multipath add PFile
2. Start a NEW DATABASE on Ebc-2u-host13 (W/O additional storage)

Repeat cloning & new DB steps on Host14 and Host15

Run OLAP/Analytical tests on Host13 and Host14

Run RMAN FULL Backup test on Host15

Demo Steps - 3

Ebc-2u-host12 - VXDB
5TB Production DB

ASM
ADMIN
DG

ASM
DATA
DG

ASM
RECO
DG

VX100-F Scalable array

READ ONLY

Ebc-2u-host13 - VXDB
5TB New DB

New Writes — Analytics on near real time data

Ebc-2u-host14 - VXDB
5TB New DB

New Writes — Analytics on near real time data

Ebc-2u-host15 - VXDB
5TB New DB

New Writes — Offload backups from prod

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Demo