# Software Defined Storage – SDS

# Infraestrutura Agnóstica
# Para banco de dados

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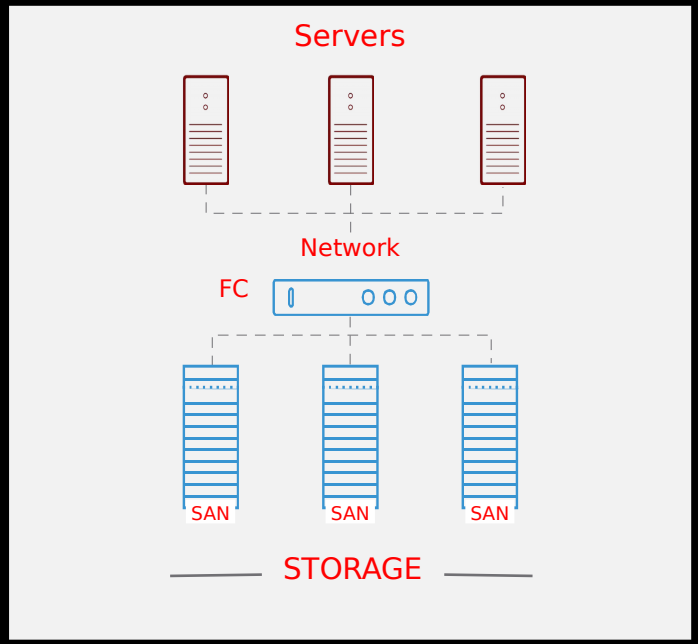
Family, Hobby and Fun

Sax - Violin Family Wine Gym

# .Now

Well suited for client-server era

Shared storage




Dedicated workloads & painful / costly migrations

Large upfront investment to account for future usage

Expensive FC & storage HW

Storage & Application Silos

## PROBLEM

- Traditional storage has a 4 or 5 year refresh cycle
- When the array fills up (and you hope it does)
  - Need a forklift upgrade for migration
  - Purchasing another up-front under-utilized array


# There is another way!

***Software-defined storage delivers the full suite of storage services via a software stack that uses commodity hardware built with off-the-shelf components.***
*IDC Worldwide Software Defined Storage Taxonomy, 2014

- No vendor specific hardware dependencies
- Able to run on any commodity server
- Supported on nearly any operating system and/or hypervisor
- Can leverage existing and future datacenter designs

# What Is Software Defined Storage SDS?

- Software-Defined Storage is Not Storage Virtualization
- There’s no standard definition of SDS
- Becoming your own hardware vendor probably isn’t a realistic option
- Some Vendors aren’t thinking about your performance requirements
- There’s no universal measurement system for agility and ROI
- Making SDS work requires work

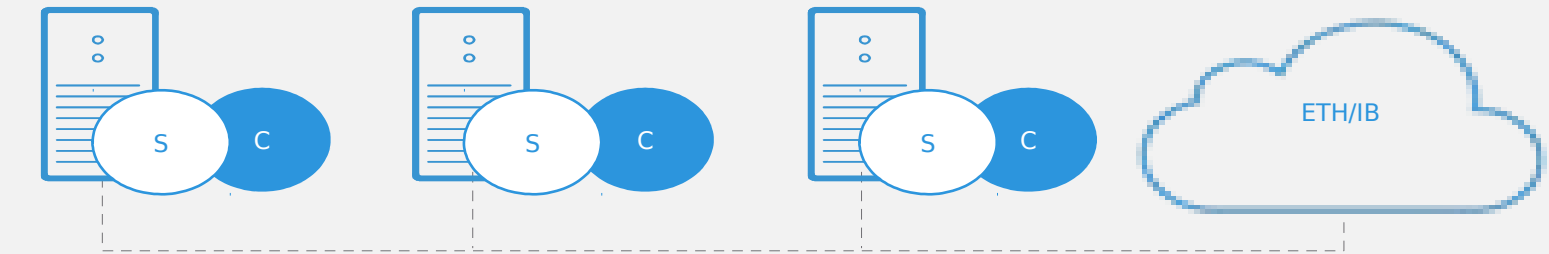
http://www.infoworld.com/article/2997239/storage/5-bitter-truths-about-software-defined-storage.html

http://www.emc.com/corporate/glossary/software-defined-storage.htm

*"By 2019, 70% of existing storage array products will also be available as "software only" versions"*


Gartner Separating Hype from Hope for SDS, Oct 2014

# SAN.Next




SDS Client + Storage

## VALUE

- “Pay as you grow”—linear predictable costs
- Commodity hardware
- No dedicated storage components (FC network, HBAs)
- Add servers of any type or configuration to the pool
- Retire servers on your own schedule
- Eliminate migration

# Agnostic

## Operating System

Microsoft Windows

redhat

SUSE

CentOS

## Hypervisors

Microsoft Hyper-V

vmware

KVM

Xen

Bare Metal

## Platforms

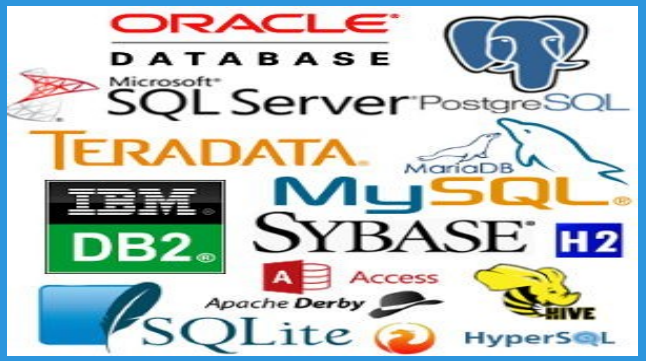

## Media

HDDs

PCIe Flash

SSDs

## Data Bases




## *P3


*http://www.idc.com/prodserv/3rd-platform/

DBA

# Vendors Softwere Defined Storage

EMC²
where information lives®

vmware®


IBM

maxta

nexenta
Enterprise class storage for everyone

DataCore™
SOFTWARE

hp

redhat®

open-e

https://www.gartner.com/doc/3121625?ref=ddisp

DBA

# Oracle Licensing, SDS

## Why Is It Important To Understand Oracle Licensing?

Because it costs a lot of money!!!

***nstalled and/or Running"***

https://www.vmware.com/files/pdf/techpaper/vmw-understanding-oracle-certification-supportlicensing-environments.pdf

http://houseofbrick.com/blog/

# my Oracle Contracts

| Oracle Document | Contractual or Not? |
|---|---|
| Software Investment Guide | ✝ No |
| Licensing Data Recovery Guide | ✝ No |
| Technology Hosting | ✝ No |
| Technical Support Policies | ✝ Yes |
| Core Processor Factor Table | ✝ Yes |
| Partitioning Policy | ✝ No |
| Cloud Computing Environment Policy | ✝ No |

http://houseofbrick.com/blog/

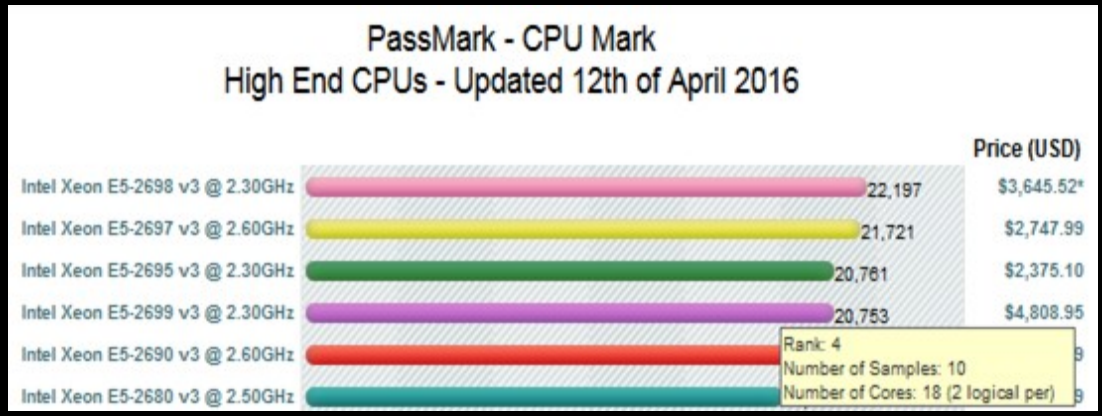
http://wikibon.org/wiki/v/Oracle_Negotiation_Tips:_Focus_on_Reducing_License_and_Maintenance_Costs

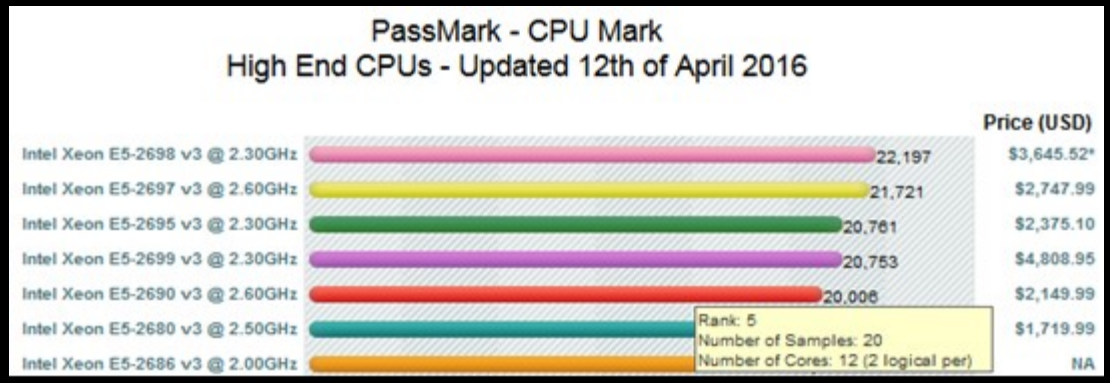
# How to win ?

## What I need ?

- Storage Data Service
- Vendors
- Buy or Build
- Hardware
- Disks
- Processor
- Business, Business, etc

My Business, time to market




https://www.cpubenchmark.net/high_end_cpus.html

# SDS?