Dean Bolton
Michael Corey



# Straight Talk on Oracle Licensing & Licensing Trends

#### Dean Bolton



- Co-founder: VLSS (2005) & LICENSEFORTRESS (2016)
- Chief Architect
- Leading Oracle on VMware licensing expert
- Oracle DBA since 2000
  - Oracle Certified Professional 8i through 12c
  - Oracle Certified Master 10g, 11g, 12c
- Oracle Exadata Certified Expert
- Oracle SQL Expert
- Vmware vExpert









### Michael Corey

Cloud: Top 100 Influencers for 2017

BLOG: http://michaelcorey.com/

Oracle Compliance Management +
Audit Protection with a Guarantee

LICENSEFORTRESS®

Started Working with **Oracle Version 3.0** Beta Tested Oracle 5,6,6.2,7,8.X,9.X..... Presented on Technology & Business Topics from Brazil to Australia Worked with Oracle on UNIX, Linux,

Windows, MVS,VM, VMS,...











Virtualizing SQL Server with VMware Doing IT Right

Oracle Database 12c: Install, Configure &

Maintain like a Professional

Oracle 11g A Beginner's Guide

Oracle 10g A Beginner's Guide

Oracle 9i - A Beginner's Guide

SQL Server 7 Data Warehousing

Oracle8i - Data Warehousing

Oracle8i - A Beginner's Guide

Oracle8 - Data Warehousing

Oracle8 – Tuning

Oracle8 - A Beginner's Guide

Oracle - Data Warehousing

Oracle - A Beginner's Guide

Tuning Oracle



#### **Key Past/Current Affiliations:**

Past President of the Independent Oracle Users Group (IOUG)

President IOUG VMware SIG www.vmsig.org

Founding Board IOUG Virtualization SIG & VMware SIG

Recognized Top 100 People who Influence the Cloud

Founding Board Professional Association of SQL Server

Past Member IOUG Board of Directors

Talkin'Cloud Top 200 Channel Partner Experts Cloud

Past Member Microsoft Data Warehouse Council

Past Member Oracle Educational Advisory Council

Past Director of Conferences IOUG Alive

Executive Board Massachusetts Robert H. Goddard

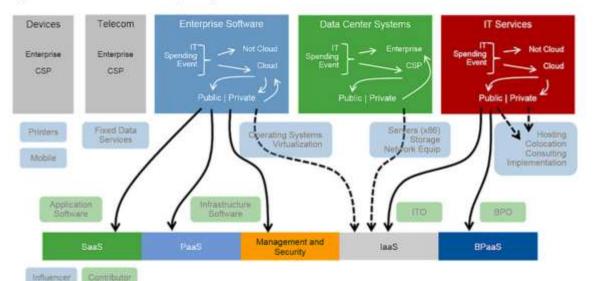
Council on Science, Technology, Engineering & Mathematics

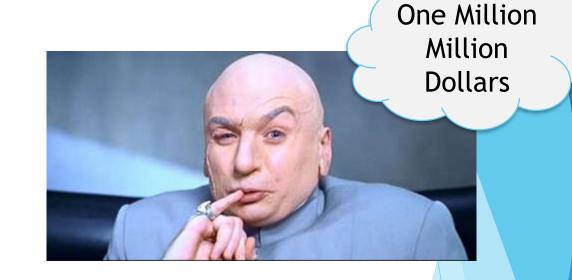
Regular Columnist Big Data Quarterly http://www.dbta.com/BigDataQuarterly/



# Gartner Says by 2020 "Cloud Shift" Will Affect More Than \$1 Trillion in IT Spending

Figure 1: Shift From Traditional IT Spending to Cloud





Source: Gartner (July 2016)

Cloud Shift is having a Rippling effect on Software Licensing...

Source: http://www.gartner.com/newsroom/id/3384720

Movie: Austin Powers: International Man of Mystery 1997

Cloud Computing Hits a Tipping Point - June 15, 2017

Cloud Computing Established 2000 Approaches 2 Decades

**BERNARDGOLDEN** 

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**Cloud Computing Hits a Tipping Point** 



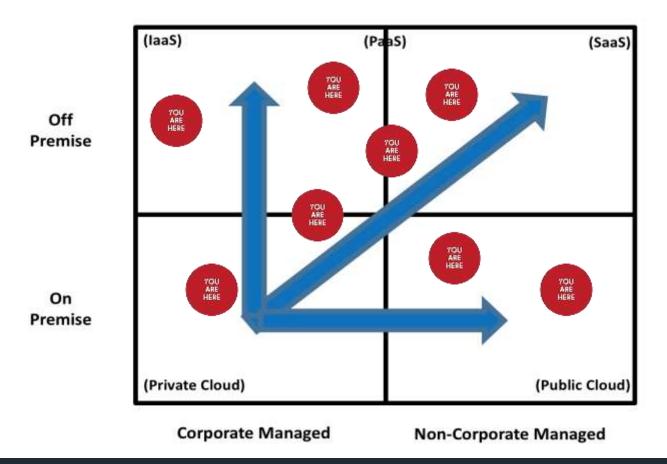
- Cloud computing now established as the default choice for application deployment. More important, the IT disciplines that accompany application design and operation are now cloud-centric.
- infrastructure availability is measured in seconds or minutes, not weeks or months.
- ▶ IT groups are **using services rather** than implementing components
- The mantra of the day is "hybrid IT," meaning a mix of on-premise and cloud-deployed applications.

Source: http://bernardgolden.com/2017/06/cloud-computing-hits-a-tipping-point/

It was Hard Enough to Manage Software Licensing when Corporate Infrastructure was under One Roof, Now We Have the Cloud Silos



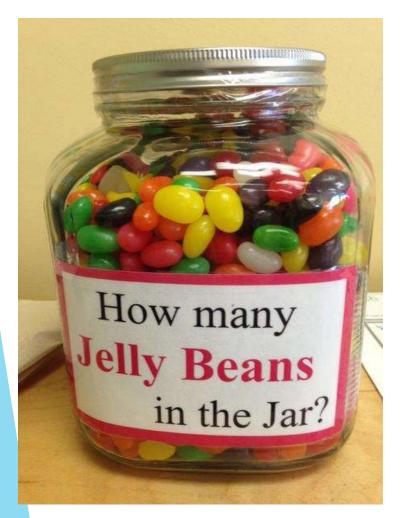
## Today Corporate IT Is Stretched Everywhere...



"Map Your Organization What Would You Get?"

Is your Software Still in Compliance?, How do you Know?

# Most Companies Can't Get an Accurate Account of their Databases? How About Java?







Important Oracle Java License Update

The Oracle Java License has changed for releases starting April 16, 2019.

Commercial license and support is available with a low cost <u>Java SE Subscription</u>.

Oracle also provides the latest OpenJDK release under the open source <u>GPL License</u> at <u>jdk.java.net</u>.



Source: https://www.oracle.com/technetwork/java/java-se-support-roadmap.html

## Enterprise software marketplace undergoing massive transformation as **pricing & licensing models evolve** (July 2016)

- Perpetual Licenses Decline
  - ▶ Only 43% producers say perpetual software licenses contribute to > 50% of their revenues.
- Historically, perpetual license was the dominant licensing model
- Shifting Foundations: 70% of producers will change their pricing & licensing models within the next 2 years.
  - To generate more revenues
  - ▶ be more competitive
- > 42% say their customers have challenges determining which software products they're entitled to use

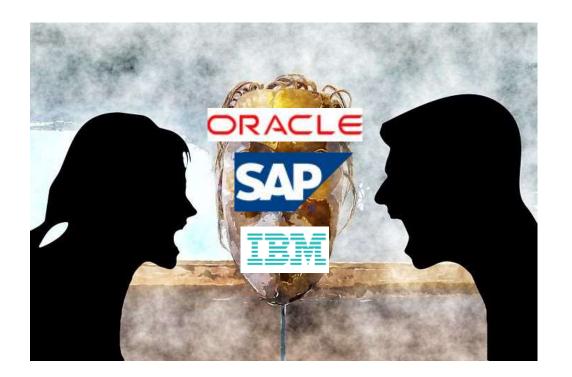
# "Enterprise Software Goal: Generate More Revenues"





# Customer Goal <u>Driving Cost Down is in Direct Conflict</u> with Software Vendor Protecting Revenue Stream

- ► IBM All or Nothing Subscription & Support Requirement
- Oracle Repricing Policy
- SAP All or Nothing Support Policy
- Microsoft Requires Software Assurance to Gain Server Mobility Rights



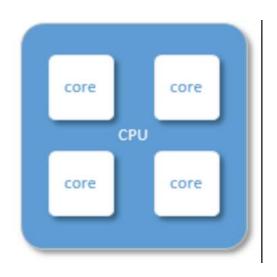
## Oracle Support Repricing

- For a given CSI, Oracle's repricing policy dictates that when some, but not all, licenses are desupported, the support for the remaining licenses is repriced at list price (as long as this doesn't exceed what the customer was previously paying).
- Policy makes it difficult for customers to save money when their Oracle requirements decrease
- Safeguards Oracle's support revenue without regard to the practical value customers are receiving.



### Trend: Evolving License Metrics

Software vendors will continue to <u>introduce new licensing metrics</u> as the name of the game is to generate as much revenue as possible and to ensure the lack of software piracy.



#### License Metrics

#### Capacity/ Client/User User Role Infrastructure **Desktop Licensing** Capacity/Datacenter User Role or Level Licensing · Number of users Based on types of transactions · Size of Machine (cores, or Device or level of access processors, sockets) · Commonly used in ERP Device · Type of machine solutions. For example, SAP User Employee, SAP Professional, Typically converted into Named User etc. points **Company Metrics** Usage Concurrent Simultaneous # Employees Amount of Usage over a Access time period # Transactions Concurrent User · Usually Pay as you go Revenue Floating User Based on number of # Locations

accesses or the size or speed of disk space

#### Trend: People Will Pay More For ....

- Less Up Front
- Flexibility





Very Expensive to run 7X24X365

#### Trend: Overcharging is Rampart

Increasing complexity around cloud offerings and determining exactly what is required vs premium features means overcharging is running rampant.

**FUD = Profit** 

"License Resellers Know This, Enterprise Vendors Know This"



Trend: Overcharging is Rampart

"A Trusted
Advisor it
Critical in
todays Rapidly
Evolving
License
Landscape"



"Look for a Trusted Advisor Without Conflicts"

#### Trusted Expert:

Helps You Negotiation a better Price

► Know what the vendor is willing to do & Not Willing to do

Knows Optimal time to get best deal

A License Audit Does Not have to feel like an Interrogation



# At LicenseFortress We Have An In-House Pricing Advisor Database

- Takes The Guess Work Out of
  - Best time to negotiate
  - Knows what the best price is by
    - Company Size, # Employees, Processor Count.....

#### **PRICING ADVISOR**

We keep a database of all Oracle discounts so we can advise you on if you are receiving a good value on your potential purchase or what you've already purchased.

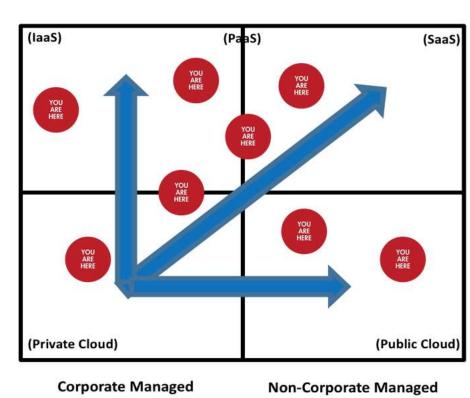
"This Should Be Standard Practice From Your License Advisor"

# Look For a License Solution That Includes Access to License Experts



Don't Put the
Burden of
Keeping Up
With evolving
Licensing Rules
On your Staff -- Its
A full time job

# To Be Effective Today License Experts Need to Understand Complex Architectures



Off Premise

On Premise



"The Reality, Most License Experts Don't"

## Larry Ellison Announced - He Would Make Oracle Cloud Cheaper than All Other Clouds

#### **Approved Vendors**

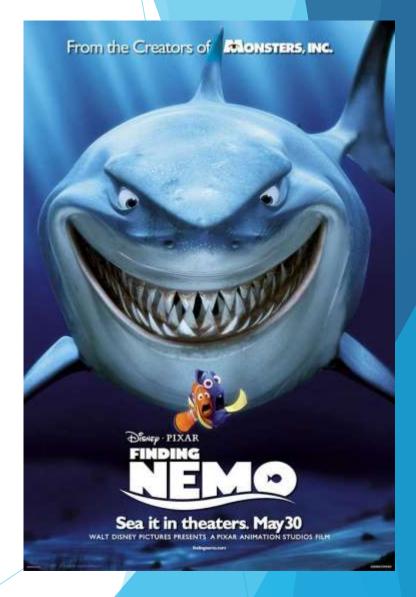
This policy applies to cloud computing environments from the following vendors: Amazon Web Services - Amazon Elastic Compute Cloud (EC2), Amazon Relational Database Service (RDS) and Microsoft Azure Platform (collectively, the 'Authorized Cloud Environments'). This policy applies to <a href="mailto:these-Oracle programs">these Oracle programs</a>.

For the purposes of licensing Oracle programs in an Authorized Cloud Environment, customers are required to count as follows:

- Amazon EC2 and RDS count two vCPUs as equivalent to one Oracle Processor license if hyper-threading is enabled, and one vCPU as equivalent to one Oracle Processor license if hyper-threading is not enabled.
- Microsoft Azure count one Azure CPU Core as equivalent to one Oracle Processor license.

"Oracle Hyper-threading - Tax"

To Succeed, Means Understanding Architecture, Performance, ...



## Know Difference Between Policy Statement & Contract

- Oracle Changed it Policy (Driving Cost 2X overnight)
- Get it in the Contract
- Get it on the Work Order at a Minimum

#### Licensing Oracle Software in the Cloud Computing Environment

#### Approved Vendors

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- Microsoft Azure count two vCPUs as equivalent to one Oracle Processor license if hyperthreading is enabled, and one vCPU as equivalent to one Oracle Processor license if hyperthreading is not enabled.

When counting Oracle Processor license requirements in Authorized Cloud Environments, the Oracle Processor Core Factor Table is not applicable.

When licensing Oracle programs with Standard Edition One, Standard Edition 2, or Standard Edition in the product name, the pricing is based on the size of the instance. Authorized Cloud Environment instances with four or fewer Amazon vCPUs, or four or fewer Azure vCPUs, are counted as 1 socket, which is considered equivalent to an Oracle processor license. For Authorized Cloud Environment instances with more than four Amazon vCPUs, or more than four Azure vCPUs, every four Amazon vCPUs used (rounded up to the nearest multiple of four), and every four Azure vCPUs used (rounded up to the nearest multiple of four) equate to a licensing requirement of one socket.

"Our Experience suggests that Oracle is interpreting the policy as if it were a Contractual obligation from a Pricing and compliance perspective" - Gartner Research Report

Source: February 8, 2019. How to Minimize BYOL Risks and Costs When

Moving Oracle On-Premise Perpetual Software to Public Cloud

http://www.oracle.com/us/corporate/pricing/cloud-licensing-070579.pdf

#### **Architecture Impacts Costs & Performance**

- Architecture Changes Can Results in Huge License Savings
- Optimal License Architecture Does not mean having to sacrifice performance
- > Software Vendors Recommendations need to be taken with a grain of salt



#### CUSTOMER SUCCESS

#### **State Health Exchange Saves** \$3.9M with LicenseFortress

#### Building the Exchange

In 2012, the Affordable Care Act (ACA) provided a pool of money so states could build Health Exchanges – state-wide resources for individuals, families, and small businesses looking to purchase health insurance and obtain financial assistance. In the case of one such exchange (the Exchange), the timeline to be up and running was a matter of months, so the Exchange contracted with a global



Source: https://www.licensefortress.com/resources

## Trend: Move Towards Consumptions Based Models

Shift from traditional software licensing schemes by vendors to consumption-based models. The importance of being able to monitor in real time when cloud-based applications and services are being consumed will become paramount in controlling costs.

- No Up Front Costs
- Flexibility
- Cheaper??????



#### Trend: Software Available at Click of a Mouse

Vendors Will Continue to Make it Easy to invoke Software

If a user downloads software and activates it, your organization is responsible for licensing and paying the bill.



"A simple Download, By Any User Can Result in a Very Expensive Bill"

# Installing Software Can Turn On Features You Did Not Pay For (Expect This Trend to Continue)

"Installing Oracle version upgrades sometimes turns on software features, such as the diagnostic and features packs, which trigger an associated increase in licensing cost. A company can significantly increase its Oracle spend during version upgrades without knowing it."

Source: Campaign for Clear Licensing



"If it's turned on, You don't Detect it, in the next software audit will have to Pay for It"

# An Annual Audit Is no Longer Enough! You Need to <u>Proactively</u> Check for Software Compliance

Software Asset Management (SAM) Are Not Event Driven



"The Bomb Keeps Ticking, Until You Discover & Deal with It - It can be a very expensive mistake it you don't"

# Training Your Staff on Software Compliancy Is Now A Requirement

- Especially
  - Database Administrators
  - System Administrators

"Training is **NOt** a One Time Event"



"A Simple Mistake Can Be Very Costly"

# Look for a License Solution (Software Asset Management) That Includes A Training Component

- Look for Self-Serve Capabilities (Videos, Webinars)
- Access to License Experts As Needed
  - New Architectures, New Applications?

License Consultants Can No Longer Just be License

**Consultants** 

- Complex Architecture
- Processor Capabilities
- Performance Issues



## The MSP Warning

- Customer if you own the Software You are Responsible for their Mistakes
- ▶ If You Manage Some One's Environment & Make a License Mistake?
  - ▶ They Will Come After You for damages after they pay the bill
- Customer May Feel You Are at Fault Even if You did Nothing Wrong
  - How do you protect yourself



If a Third-Party Support Vendor downloads software and activates it, uses unlicensed options, for example vMotions a Virtual Machine onto a bigger host,

The organization who owns the license is responsible for paying the bill.



## The MSP Warning (Case in Point)

- Customer Outsourced IT
- Outsourced vendor created a 15 Million Liability
- Customer settled for about \$5 Million
- Outsourced Vendor paid \$1 Million



#### CUSTOMER SUCCESS

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https://www.licensefortress.com/resources

# Trend: Companies are Holding Off Upgrading Software

Many businesses see no value in new releases of software & and are sitting tight with the software licenses they already own the perpetual rights for.



Look for Vendors Like Oracle & Microsoft to offer premium features and integration with other software that will only be available with the latest versions

### Expect Software Audits Velocity to Increase



## Software audits: How high tech plays hardball

'Truing up' licenses amounts to billions of dollars in revenue for the major software makers. Here's where the money goes -- and how it's extracted



https://www.infoworld.com/article/3060596/software/software-audits-how-high-tech-plays-hardball.html

## Expect Software Audits Velocity to Increase

## Gartner.

Audits are on the rise, and they're getting more expensive. According to Gartner, 68 percent of enterprises get at least one audit request each year, a number that has <u>climbed steadily</u> <u>each year since 2009</u>. The most frequent requests come from the usual suspects: Microsoft, Oracle, Adobe, IBM, and SAP.

## Software audits continue to rise

Understand the software vendor's audit playbook



https://www.cio.com/article/3208346/leadership-management/software-audits-continue-to-rise.html

Expect oracle, and other vendors to outsource Audits to 3<sup>rd</sup> Party

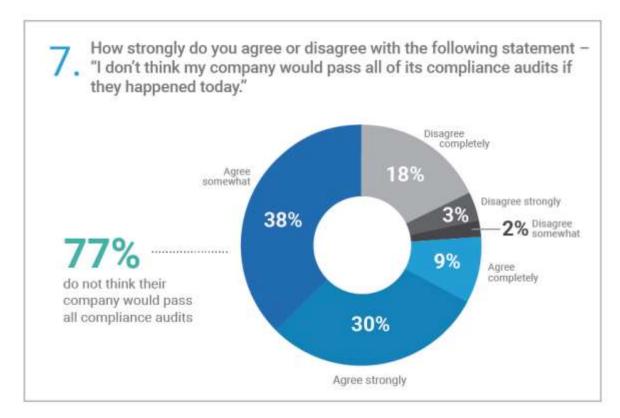
"Vendor-imposed and revenuemotivated audits are increasing for organizations of all sizes and industries"

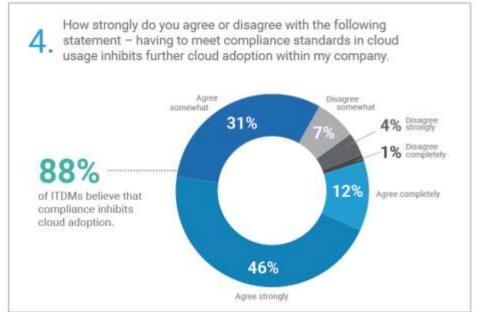


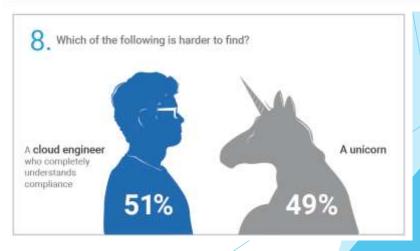
# Gartner



#### 77% Do Not Think Their Company Could Pass Compliance Audits







Source: LogicWorks State of the Cloud Compliance Annual Survey 2019

Verify Audit Request is Official before

Responding

from Software Investment Advisory (SIA)
Are not Official Audits

Is a team of experts who work with you to maximize the efficiency, value, and impact of your Oracle environment.

"The nine most terrifying words in the English language are:
'I'm from the government and I'm here to help.'"
-Ronald Reagan

"Oracle Cloud Audits Are Not Typical Today, Expect that to Change"



https://www.oracle.com/corporate/software-investment-advisory.html

#### When a Vendor Audit Happens

- ► Halt any intended or in-process purchases (Unless it impact the business)
- Review your Oracle/Vendor audit and compliance Provisions
- Don't let Oracle LMS/Vendor circumvent the 45-day Advance Notice Requirement
- Negotiate Audit Scope & Approach
  - Limit Scope to Oracle Software (Not VMware Platform)
  - Make Sure You Are Comfortable with the Audit pace
- Use of Oracle Audit Script is not contractual
- Limit where Oracle/Vendor gets their information from
- Seek Professional Help "Its About Revenue"

"Vendor-imposed and revenue-motivated audits are increasing for organizations of all sizes and industries"



"Oracle maintains what I consider to be the most aggressive audit program of any major software publisher. Its licensing rules can be extremely difficult to understand, and they frequently are not clearly stated in the applicable license agreements. Moreover, Oracle's License Management Services (LMS) team typically is unforgiving when it comes time to apply those rules, and it often uses Oracle's ambiguous license terms and confusingly constructed contracts to prepare audit findings that can cause heart palpitations for business owners"

"Don't go into a Vendor Audit ill-prepared"

#### Software Audit Playbook



"You audit someone, find some issues, put some fear into their hearts, and throw a big number up there," he says. "Then you close a deal on something else they want you to buy. Except these days I'm calling it 'audit bargain cloud' -- throw in a cloud deal, and suddenly all your audit issues go away."

Based Upon the Audit You Owe Us 10 Million Dollars

"Trusted Advisor- Separate's the Fear From the Fact"

https://www.infoworld.com/article/3060596/software/software-audits-how-high-tech-plays-hardball.html

#### Forbes / Tech / #InTheCloud

MAY 21, 2018 @ 06:50 AM

9,892 👁

The Little Black Book of Billion

#### Oracle's Strong Arm Cloud Tactics - The 2018 Model



Dan Woods, CONTRIBUTOR FULL BIO ✓

Opinions expressed by Forbes Contributors are their own.

Oracle has used its license auditing model to run the "Audit Bargain Close" playbook to encourage customers who are out of compliance to sign new deals to get into compliance.

#### November 2016 Oracle & IBM Lead The Pack



"Oracle and IBM have been singled out as the vendors with the most aggressive behavior and biggest focus on short-term revenue when it comes to software audits".



The findings came from an independent survey of 170 IT asset managers, software asset managers and software licensing professionals worldwide.

Source: https://www.crn.com.au/news/vendors-conduct-copyright-audits-for-profit-survey-442837

## Ironically Recent Survey Microsoft Was Most Feared...

Note: The second of the sec

▶ 53% ORACLE®

> 33%





Trend: Vendors Will Find Ways to Do More

and More Audits

Audits Generate Revenue

TREND: Authorized Third Party Audits



## Software Audit: Burden of Proof The Customer

- Licensee has burden of proof to show that usage was in compliance with licence terms
- Do you know what \_\_\_\_\_ would find in an audit of your environment?
- Do you have proof of how \_\_\_\_\_ was installed and running throughout your environment?

In a civil copyright infringement claim, many users of copyrighted material are surprised to learn that once the copyright owner has demonstrated that it owns a copyright in the work, the burden shifts to the copyright user to demonstrate that it had the right to use the work in the way it was using it. For copyrighted software use, this means that not only must the user have a valid license, the use case must fall within the scope of the license terms. Software publishers actively protect their copyrighted material by pursuing audits of its consumers either directly or through entities such as BSA|The Software Alliance, or the Software & Information Industry Association ("SIIA").

Source: https://scottandscottllp.com/burden-of-proof-in-copyright-infringement-matters-2/



#### Know Your Contract....

- There is lots of FUD that happens during an Audit
- Know Your Contract
- Make Sure You Have a Copy of your contract

"6-Node Oracle Cluster"



"Our Experience suggests that Oracle is interpreting the policy as if it were a Contractual obligation from a Pricing and compliance perspective" - Gartner Research Report

Source: February 8, 2019. How to Minimize BYOL Risks and Costs When Moving Oracle On-Premise Perpetual Software to Public Cloud

#### Trend: Terms of Contract Point to URL

- Page that contains URL can change over time
- Make Sure You have a copy

Oracle Stipulates the number of license for different Servers in oracle Processor Core Factor Table,
Which is updated frequently

2017 - Updated Three Times

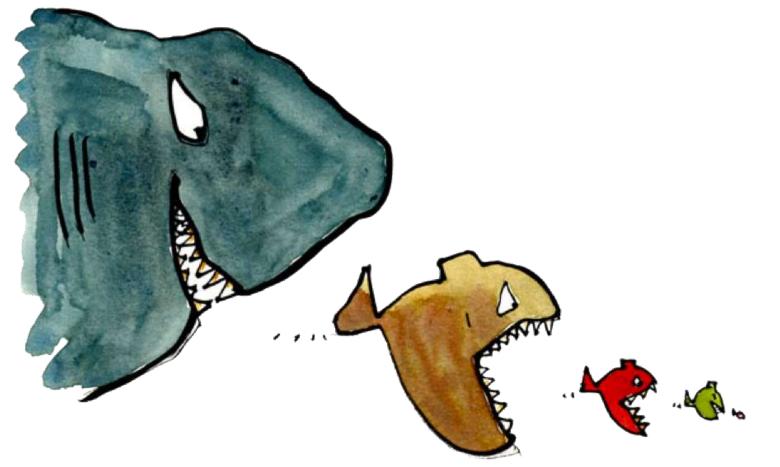
I Year Oracle Hosted Term: A program license specifying a I Year Oracle Hosted Term shall commence on the effective date of the order and shall continue for a period of 1 year. At the end of the 1 year the program license shall terminate. A program license specifying a 1 Year Oracle Hosted Term must be hosted by Oracle.com via Computer

1 Year Subscription: A program license specifying a 1 Year Subscription shall commence on the effective date of the order and shallcontinueforaperiodoflyear. At the end of the 1 year the program license shall terminate.

and Administration services.

Licensing Rules for Oracle Technology Programs and Oracle Business Intelligence Applications Failover: Subject to the conditions that follow below, your license for the programs listed on the US Oracle Technology Price List, which may be accessed at <a href="http://www.oracle.com/corporate/pricing/pricelists.html">http://www.oracle.com/corporate/pricing/pricelists.html</a>, includes the right to run the licensed program(s) on an unlicensed spare computer in a failover environment for up to a total often separate days in any given calendar year (for example, if a failover node is down for two hours on Tuesday and three hours on Friday, it counts as two days). The above right only applies when a number of machines are arranged in a cluster and share one disk array. When the primary node fails, the failover node acts as the primary node.

Current Enterprise Vendor Could Change Any day & So Could their Attitude during An Audit - Get it in Writing



Think Again, When an Aggressive Vendor Acquires Them

## When Negotiating Get Leverage

- Infrastructure as a Service: Amazon, Google IBM, Rackspace ...
- CRM: Microsoft, SAP, Saleforce, Genesys...
- Focus on Oracle Main Competitor

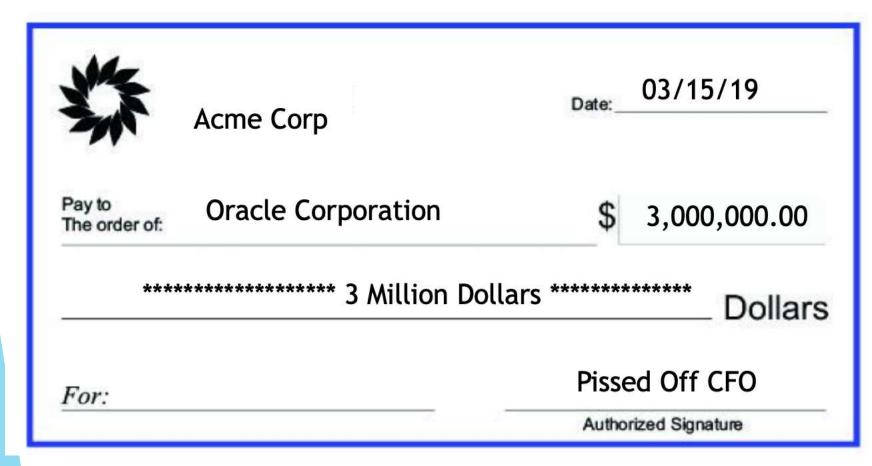
## Get Leverage When You Buy A Strategic Product

- Strategic Products are those Oracle is actively promoting to Increase Market Share
- Account Reps are highly incentivized to sell strategic products
- During Oracle Earnings Call -> Focuses on Product Lines they think are strategic





#### After Effect's of Expensive Software Audit





# 2018 Trend: Manage Services Meet Software License Compliance

Managed services: Using outside companies to provide hardware infrastructure, network monitoring services, or professional services to save money has become common place.

One of the biggest trends to watch for in software licensing this coming year will be services to assist organizations with their software asset management in real time.

Having experts who understand that there are many ways that a software application can be deployed and its use optimized within your environment is logic that no software inventory tool on the market can integrate.

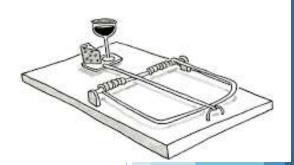
https://www.method180.com/software-licensing-trends-what-to-watch-for-in-2018/



#### Managed Services Approach Many Advantages

- Low Up-Front Cost
- Fixed Monthly Price
- Access to Continuous Training
- Access to License Experts as Needed
- Software Asset Management Software
- Real Time License Monitoring and Alerting (Cloud Enabled)
- Understand Cloud Licensing Implications
- Understanding Complex Architecture
  - Optimize Licensing and maintain Performance





"The LicenseFortress Guarantee"



## Licensing Best Practices

- Obtain an independent Review of Your Environment Annually
  - Continuous Monitoring "Real-time" is Optimal
  - Access to License Experts as Needed is Optimal
- Review of Existing Contracts
  - Make Sure You have Copy of all Contracts
- Inventory of all Installations & Options Used
- Look for Shelfware (Software You are paying for and not Using)
- Try to get a credit for shelfware when making a strategic purchase from vendor
  - If purchasing an engineered system from Oracle (I.e. Exadata) Shelfware credits can be negotiated
- Take Advantage of lower-cost maintenance & Support offering from incumbent vendors as your internal knowledge of product increases and needs decrease
  - Do you still need highest support offering
  - □ Is there a 3<sup>rd</sup> Party Option Available

#### Licensing Best Practices

- Optimize Existing License Usage
- When Making Strategic Purchase Negotiate Price Protection/Price Hold
  - 1-3 Years protection to add licenses at discounted price
- Timing of maintenance cancellations is critical
  - Many Automatically Renew
  - May require 60/90-day notice
  - Budget for vendors Software reinstatement penalties if you must return to vendors support
- Consider Architecture Review
- Implement License Management Process
  - Manual/Reactive/Proactive
- Timing of when you purchase matters
  - Oracle End of Year in May
- When Vendor contact's You
  - Don't Panic
  - Seek Help of a License Expert before its too late

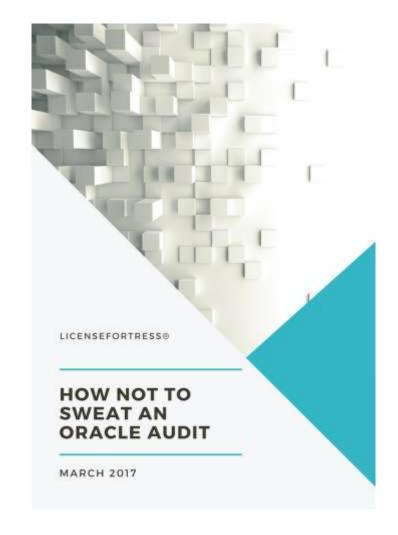
#### **Q&A**

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Michael.Corey@LicenseFortress.com





https://www.licensefortress.com/oracle-licensing-audit-whitepapers/how-not-to-sweat-an-oracle-audit