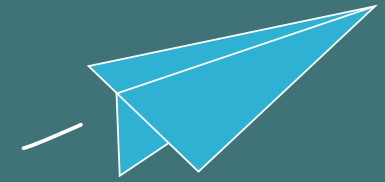


5

WAYS TO CUT SPENDING ON ORACLE DATABASE

How to reduce licensing costs by up to 30% with Software Asset Management

INTRODUCTION



Oracle databases are the mainstay of many successful IT operations. They are integral components of mission-critical systems and also utilized in smaller IT programs.

“*Oracle is the second-largest vendor in the global software market after Microsoft, with an estimated total software market share of 6.6% and revenue of approximately \$30 billion per year**”

Any organization who utilizes Oracle database technologies within their IT infrastructure is likely to allocate a significant proportion of its IT budget spend towards licensing, managing and maintaining these technologies. That's why optimizing these costs can lead to substantial savings.

Oracle delivers a great deal of flexibility through its database editions, features and management options.

This level of choice requires a wide variety of licensing options.

Combined with this are differing license multipliers (core factors) associated with physical processors which run the database products. There are also restrictions on the use of virtualization technologies. The result is substantial complexity, financial exposure and risk.

In order to optimize licenses, it is vital to understand the options available to make fact-based decisions.

To break down this complexity and to enable all stakeholders to make optimal licensing and configuration decisions, you need a Software Asset Management solution with in-built licensing intelligence that consolidates data from multiple sources and delivers it in a straightforward view.

This guide covers five cost-saving initiatives for Oracle products. Apply all of these and you can save yourself up to 30% on your Oracle database licensing costs in the first year.**

INTRODUCTION ◦

*Gartner's T4 Process Will Cut Your Costs When Negotiating for Oracle Licensing: Ignore at Your Peril
Published 17 May 2016
Analyst(s): Roberto Sacco | Rob Wilkes

**Cut Software Spending Safely With SAM
Published: 16 March 2016
Analyst(s): Hank Marquis, Gary Spivak, Victoria Barber

1

MANAGEMENT PACKS & OPTIONS



Base your decisions on usage

Oracle offers a number of Database Options with their flagship solution - Enterprise Edition. These options are often enabled by default in a standard installation.

Where Options are installed but not used, the burden to prove non-usage (and thus avoid paying for them) lies with the customer. These Options are very costly so it is crucial to understand which Options are enabled, whether they are being actively used and whether there is a strong enough business case to use them.

A single instance of Oracle Advanced Compression costs \$11,500 per processor (list price*). Even a single server running the Oracle server may have eight processor cores totalling \$92,000. And that's without the additional 22% annual maintenance!

Ensure that all enabled Options are visible across your environment and that every Option is either required or it is possible to prove non-usage.

* <http://www.oracle.com/us/corporate/pricing/technology-price-list-070617.pdf>

Consolidate data to understand choice

It is a common scenario for a chain of stakeholders to be involved in the deployment, configuration and ongoing maintenance of Oracle databases.

“ In most cases, no single stakeholder has visibility of all aspects of the Oracle deployment.

Ensuring that the various stakeholders are able to see all Options per database – what is enabled and what is used – is vital for controlling costs.

MANAGEMENT PACKS & OPTIONS

HOW SNOW CAN HELP

Snow's Oracle Management Option is a component of Snow License Manager. It consolidates the view of all Oracle databases, shows the Options which are installed and how much each Option has been used (if at all).

Enabling all stakeholders to view usage means that they can make informed decisions to disable/ uninstall Options which are under-utilized as well as be aware of all utilized Options and the associated license costs.





Why datacenters must remain up to date

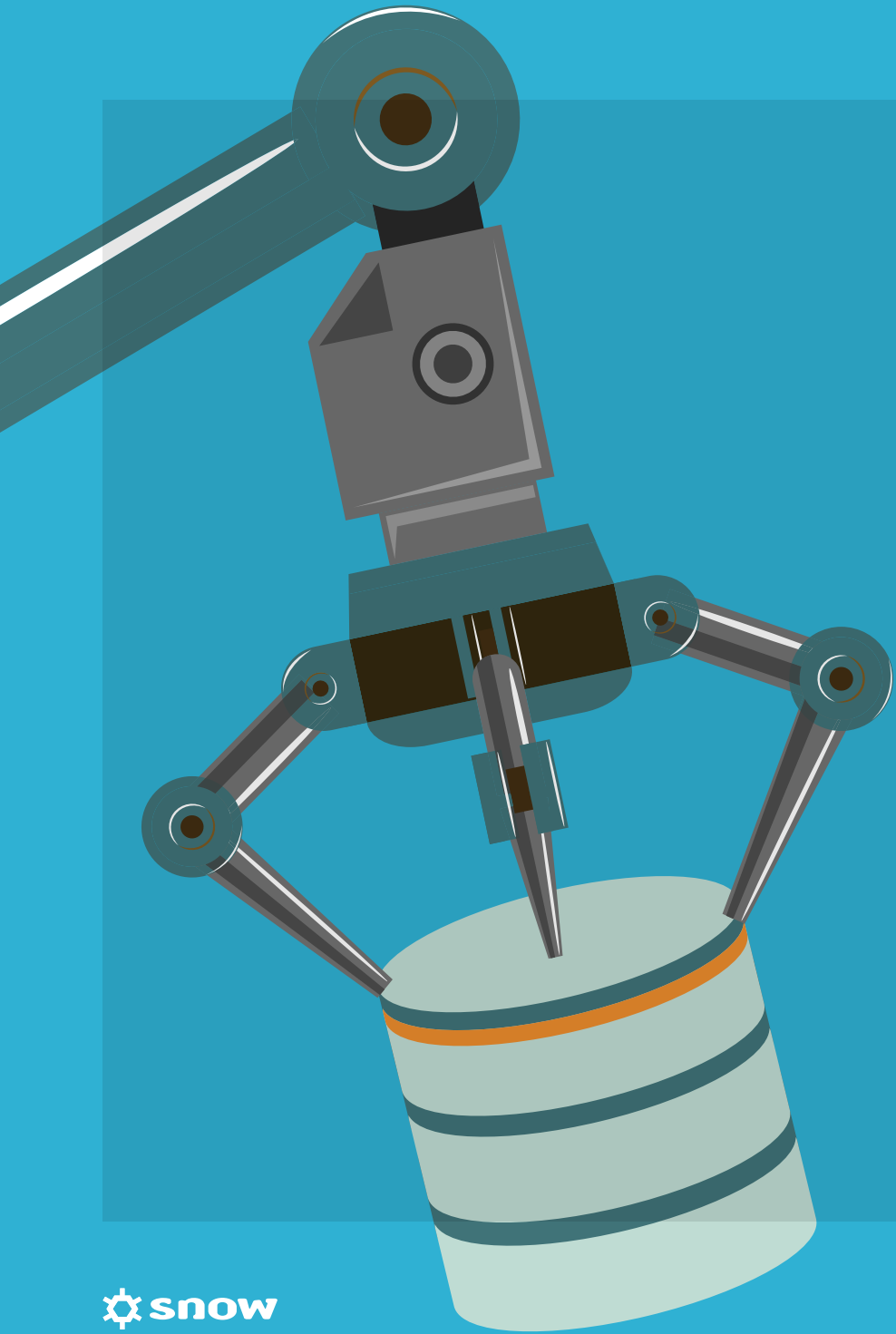
Rapid access and high-availability are essential features of datacenters. As such, it is standard practice to keep vital components like Oracle databases running on up-to-date hardware.

The majority of Oracle licensing metrics are linked to hardware, so any change in the hardware on which an Oracle database is installed can have licensing implications, many of which are very costly.

Hardware changes impact licensing

Using a solution which consolidates all datacenter information together allows you to quickly understand current licensing requirements based upon the installed databases, the Options which are enabled and to choose the appropriate licensing metric.

Oracle has a very specific list of virtualization technologies that it officially supports so the ability to report on a cluster or virtual host is essential for many environments.



HARDWARE RUNNING ORACLE

HOW SNOW CAN HELP

Snow's Oracle Management Option is designed with Oracle license optimization in mind. In combination with Snow License Manager and Virtualization Management Option, it produces a complete picture of Oracle deployments.

Oracle Management Option has built-in intelligence to automatically display the core factors of hardware on which Oracle databases are installed. This saves administrators significant time because they can rapidly identify software which is over- or under-licensed across the entire estate and act upon optimization opportunities.

HARDWARE RUNNING ORACLE ●





Beware of licensing pitfalls

The type of virtual technology used in your environment can have a significant impact on Oracle license liability. This is because Oracle does not recognize the majority of third-party virtualization technologies.

If Oracle was installed onto a virtual machine within a datacenter using an unapproved virtualization technology, the organization would be liable for the full capacity of the datacenter node on which it resides, even if there was only one Oracle instance on one virtual machine.

“*Limiting the number of physical servers, for instance by splitting off a separate Oracle cluster, can dramatically reduce the required number of licenses.*”

Understand all technologies on which your databases run

Organizations should ensure that only an Oracle-accepted hard partitioning method is used, which allows a customer to only license the allocated hardware. IBM LPAR or Solaris Container/Zone are examples of this.

Where soft partitioning does have to be used (Oracle considers any kind of virtualization using VMware to be ‘soft partitioning’), ensure that all the underlying hardware running the virtual environment is licensed.

VIRTUAL ENVIRONMENTS ○

VIRTUAL ENVIRONMENTS

HOW SNOW CAN HELP

Oracle Management Option, in combination with Snow's Virtualization Management Option enables the administrator to identify licensing implications of the virtual technologies.

This empowers stakeholders to detect costly situations where, for example, a full datacenter node has to be licensed even though it contains only a small number of VMs running Oracle.

With this knowledge, the configuration can be altered so that it remains effective from a technical standpoint and is license-optimized.

VIRTUAL ENVIRONMENTS 

4

NAMED USERS VS. PROCESSOR PRICING



Understand available licensing metrics

Oracle provides two distinct methods to license their database products. They are Named User Plus or per-processor licensing.

In general, if there are a small number of known users who access a database, then it is a cheaper option to license with the Named User Plus (NUP) metric.

The most common scenario in which NUP can be applied is where a database is installed within a test or development environment. In this case, access to the database is restricted and the number of users can be strictly controlled.

Example: Get your licensing metrics right!
The price variance of Enterprise Edition licensed using Named User Plus compared to per-processor for 2,000 users is \$1.425 million (not including maintenance charges).*

* Cost of Enterprise Edition licensed @ \$47,500* per processor running on a 10 processor core datacenter is $10 \times 47,500 = \$475,000$
Cost of Enterprise Edition licensed @ \$950 per named user with 2000 users is $2000 \times 950 = 1,900,000$.
Price variance = $\$1,900,000 - \$475,000 = \$1,425,000$

**<http://www.oracle.com/us/corporate/pricing/technology-price-list-070617.pdf>

Choose the optimal license type and regularly review

Where a database is part of an externally facing system (such as a website backend), per-processor licensing is the appropriate method. In this case, if the database was incorrectly licensed using the NUP metric, the organization could face a substantial bill at the point of audit.

The number of users needing to access a database can fluctuate over time. As such, it is important to periodically assess whether Named User Plus (NUP) or per-processor licenses are appropriate.

NAMED USERS VS. PROCESSOR PRICING ○

NAMED USERS VS. PROCESSOR PRICING

HOW SNOW CAN HELP

Oracle Management Option automatically populates an Oracle Server Worksheet (OSW) to provide an accurate and transparent view of all Oracle databases without complicated and time-consuming work.

The data contained within the report provides the insights required to understand location of database, number of users per database and many other crucial attributes.

This empowers the administrator to decide whether NUP or per-processor licensing is the most cost effective option and make substantial savings.

NAMED USERS VS. PROCESSOR PRICING



What are the differences?

Oracle provides different database editions – from its flagship Enterprise Edition (EE), Standard Edition 2 (SE2) down to a Personal Edition. Depending on the edition, Oracle provides the choice to use multiple Management Packs and Options.

Oracle also imposes limitations on the hardware on which a database can be installed*.

Although SE2 is intended primarily as a database solution for SMBs, both SE2 and the Personal Edition can be the most appropriate product to deliver sufficient functionality within larger organizations.

**Oracle Database Standard Edition 2 may only be licensed on servers that have a maximum capacity of 2 sockets"
<http://www.oracle.com/us/products/database/oracle-db-se2-brief-2680836.pdf>

Evaluate every decision on an individual basis

Having *one* instance of an EE database installed where an SE2 version would have sufficed could cost in excess of \$30,000 per processor. For organizations with hundreds of Oracle instances, this can amount to a huge over spend.

Given the cost implications, it is always important to scrutinize whether Enterprise Edition is absolutely necessary.

To evaluate the choice between EE and SE2 requires that all database information is consolidated and easily accessible. A manual approach is time-consuming and prone to error.

Database Editions ●

DATABASE EDITIONS

HOW SNOW CAN HELP

Use Oracle Management Option to assess the technical requirements for all Oracle Databases within the environment.

Where EE is installed and there are no Oracle Management Packs or Options used or required, it may be appropriate to downgrade the database to SE2 and move the database to a server or cluster with no more than two sockets.

There are a number of further decisions which have to be made where different options could be used, but having this information to hand makes the entire decision process substantially faster and more straightforward.



SUMMARY



Oracle licensing is both expensive and multi-faceted. Every variation which is made to a configuration can lead to significant differences to an organization's financial exposure.

This means that it is easy for organizations to get things wrong and for different stakeholders to be unaware of the consequences of their decisions.

Turn this on its head and the opportunity for cost savings is huge. Using a solution which allows stakeholders to understand the configuration of all Oracle components, the associated license position and the upshot of configuration changes enables substantial optimization opportunities.

The combination of Snow License Manager, Oracle Management Option and Virtualization Management Option allows stakeholders across the organization to understand their Oracle deployment in full and to start cutting costs immediately.

Snow's SAM platform enables organizations to optimize licensing based upon real need for the numerous options available, to right-size configurations, and choose the right tool for the job.

BRING ALL OF THIS TOGETHER AND YOU CAN ACHIEVE SIGNIFICANT SAVINGS ON YOUR ORACLE INVESTMENT.

ABOUT SNOW SOFTWARE

By managing software in use across the organization, Snow creates tangible savings and releases budgets, giving enterprises around the world the confidence to invest in new technologies such as virtualization, cloud and mobile.

Snow provides C-level executives, software managers and procurement professionals actionable intelligence on software installs, usage and entitlements across all platforms – from mobile to desktop, datacenter to cloud – saving up to 30% of software spend in year one.

Some call it Software Asset Management, Enterprise Mobility Management, Unified Device Management or even just license compliance.

Like thousands of organizations around the world, we call it Snow.

SUMMARY ○

➔ **Look out for our complementary cost saving guides on SAP, IBM and Microsoft, available at snowsoftware.com**