

Maximizing Value from Oracle Investments: Licensing Compliance & Cost Optimization

Mohammad Inamullah
Principal



About Redwood Compliance.

IT Cost Management and Software License Experts

Redwood Compliance LLC is a California-based firm specializing in IT Cost Management, Software License Management and License Audit Management.

Our expertise covers the major vendors: **Oracle, IBM, Microsoft, VMware, Red Hat, SAP, Adobe, others.**

We are independent of all major software vendors. This independence allows us to focus on our core mission – **helping our clients reduce IT cost, optimize spend, and align IT spend with the overall strategy.**

Agenda

- Reduce Costs, Optimize Spend, Maintain Compliance.
- Oracle Licensing - The Basics.
- Key Program Families.
- Important documents.
- Oracle licensing in virtualized environments.
- Unlimited License Agreement (ULA) Management.
- Oracle Support.
- Licensing DR Environments.
- Oracle License Audits.
- License Optimization & Compliance.
- Oracle Java.
- FAQ.

Audience

- Oracle DBAs and Application Managers/Administrators.
- IT Asset Management / Software Asset Management.
- Infrastructure Managers/Administrators.
- IT Procurement.
- Legal.

1. Reduce Costs, Optimize Spend, Maintain Compliance.

Reduce Costs	▪ Optimized procurement – buy only what you need. ▪ Negotiate discounts aggressively. ▪ Reduce Oracle Support where possible.
Optimize Spend	▪ Workload optimization. ▪ New hardware. ▪ OCI cost management.
Maintain Compliance	▪ Formal license audits declining – but “soft audits” continue. ▪ Unexpected license gaps can result in legal action, even without an “audit”.

2. Oracle Licensing - The Basics.

Common Oracle perpetual license metrics include:

Processor	Oracle's primary licensing metric is the "Processor" metric. This metric is dependent on the number and type of processor cores, which are scaled by an Oracle-defined factor. For most x86 chips with more than 1 core, that factor is 0.5. The Processor Core Factor Table is a critical contractually defined document: https://www.oracle.com/contracts/docs/processor-core-factor-table-070634.pdf
Named User Plus (NUP)	Named User Plus (NUP) metric is defined as individuals authorized to use Oracle programs installed on single or multiple servers regardless if individual is actively using the programs at any given time. Additional considerations like NUP-minimums apply.
Application User	Very similar to NUPs and used by many on-premise applications like E-Business Suite and others. Key thing to remember – if a user is provisioned access, then an Application User license is required.

3. Key Programs.

Oracle Database	Historically the highest risk and most material program. ▪ Enterprise Edition, SE, SE1, SE2. ▪ Options and Management Packs.
E-Business Suite	Still very widely used by a large customer base; continues to represent a significant over-spend and compliance concern.
WebLogic	Enterprise Edition, Standard Edition, Suite.
Middleware Programs	Internet Application Server, SOA Suite, Tuxedo, others.
Other Applications	Siebel, PeopleSoft, JDE – declining in license compliance importance, but still material.
Analytics / BI	Analytics Server, Publisher – very high-cost items.
Oracle Java	Currently the most pressing concern.

4. Important documents – OMA, Support Policy, others.

Oracle Master Agreement (OMA)	The main Oracle agreement that includes key license terms and definitions, references the Support Policy, and includes the LDRs reference. https://www.oracle.com/contracts/docs/lic_online_toma_for_o.com_v062223_ch_ca_eng.pdf
Oracle Support Policies	Important contractually referenced document that defines Oracle Support levels, License Sets, Matching Service Level, and other important Support terms. https://www.oracle.com/contracts/docs/057419.pdf
Oracle Partitioning Policy	Non-contractual policy document from Oracle for guidance around licensing in VMware, IBM, Oracle KVM/OVM, and other virtualized/partitioned environments. https://www.oracle.com/a/ocom/docs/it-infrastructure/partitioning-070609.pdf
Licensing Oracle Software in the Cloud Computing Environment (Policy)	Non-contractual policy document introduced by Oracle in 2016 and revised routinely. Describes the licensing guidelines for Oracle in third-party environments. https://www.oracle.com/a/ocom/docs/cloud-licensing-070579.pdf https://www.oracle.com/us/corporate/pricing/authorized-cloud-environments-3493562.pdf

5. Oracle licensing in virtualized environments.

Oracle licensing in virtualized environments poses a significant license compliance & optimization risk.

Contractual Terms	- Contractual terms do not address or account for virtualization. - You simply have to license all processor cores where Oracle programs are installed and/or running. - This vagueness can be problematic...or customers can leverage it to their benefit.
Oracle Partitioning Policy	- Introduces several non-contractual terms like “Soft Partitioning” and “Hard Partitioning”. Note that these are essentially arbitrarily “made up” terms by Oracle and have no contractual position. Soft Partitioning. This refers to software-based technologies like VMware, Hyper-V, and others. Oracle’s position is that such technologies cannot be used to limit license requirement. → Far reaching consequences for VMware users – they may be required to license entire VCenters if Oracle is not sufficiently challenged on this issue. Hard Partitioning. This refers to technologies like IBM LPARs, Solaris Zones, nPars, and others. Oracle’s position is that, with sufficient restrictions and configurations, such technologies may be used to reduce/limit the license requirement. - Oracle Linux KVM / OVM have specific guidance to reduce/limit the license requirement. Containers and Kubernetes. The Policy includes guidance on licensing Oracle programs in containers on physical as well as virtualized infrastructure.

6. Unlimited License Agreement (ULA) Management.

It is important to think of ULAs as having their own lifecycle.

Unlimited Usage Terms	Typically, ULAs allow unlimited usage of certain programs for a limited period of time (often 2-5 years). After this, the customer may renew the ULA or “exit” the ULA.
Common Risks & Concerns with ULAs.	▪ Over-paying for the ULA. ▪ Compliance risk due to using programs not on the ULA. ▪ Under-utilizing ULA programs. ▪ Incorrect certifications and/or miscounting, leading to incorrect and/or under-certified ULA quantities. ▪ ULA strategy not aligned with planned cloud expansion.

7. Oracle Support.

Oracle Support spend is the single most material aspect of Oracle investment when TCO is considered.

Contractually Referenced	The Oracle Technical Support policies are contractually referenced and binding.
Important Terms for Compliance & Cost	▪ License Set. ▪ Matching Service Level. ▪ Repricing following reduction of licenses under support. ▪ Support reinstatement fees.
Third Party Support	▪ May be an option for some customers. ▪ Has its own limitations.

8. Licensing DR Environments.

Generally, DR licensing falls into one of four scenarios:

Backup	▪ Oracle programs are backed up to storage media that is store offline. ▪ Backup may be tested on a spare machine up to twice per year. ▪ Does not require separate/additional licensing.
Clustered Failover	▪ Applies to clustered setup with shared storage. ▪ One failover node per cluster is allowed. ▪ May failover to spare node up to 10 days per year. Beyond that, additional licensing is required.
Standby	▪ Any situation where a spare machine has Oracle programs otherwise installed and/or running. ▪ Full licensing is required.
Replication/Mirroring	▪ Full licensing is required.

Additional Considrations	▪ License metrics between production and DR counterpart must be the same. ▪ Options/Packs must be licensed at the same level in DR as in production.
-----------------------------	--

9. Oracle License Audits.

Oracle audit frequency has declined, but not gone, and can resume.

Audit Clause & Notice	▪ Oracle audits may only be performed by the GLAS/LMS licensing group. ▪ The audit clause is in the OMA and provides 45-day notice period. ▪ Notice should clarify the scope and evidence of audit rights. ▪ Do not get tricked into “soft” or “stealth” audits initiated by Oracle Sales.
Audit Process	▪ Ensure scope and audit rights are clear. ▪ There is no formal definition of how the audit is to be done and what tools must be used. ▪ Customers should take control of the audit and set boundaries. ▪ Appoint a single contact point for the audit.
Findings & Resolution	▪ Review and challenge any findings. Focus on reducing the gaps through methodical pushback. ▪ Aggressively negotiate closing prices and terms.
Closure	▪ Obtain methodical, formal closure and address any remaining open items.

10. License Optimization & Compliance.

Routine self-assessments are critical.

Entitlement Analysis	▪ Review all Oracle agreements, Ordering Documents and Support Renewals to establish complete license entitlement picture.
Deployment Gathering	▪ Gather all relevant data using tools and/or scripts that meet Oracle audit rigor. For example, Oracle Database Options/Packs usage, E-Business Suite user/module mapping, etc. ▪ Ensure all environments are included: development, test, production, DR, etc. ▪ Perform inquiries with relevant personnel. ▪ Document the process and identify any areas of weakness or missing data.
Infrastructure Details	▪ Gather and incorporate relevant infrastructure details, like VMware, physicals, cloud deployments, etc.
Reconcile & Remediate	▪ Finalize deployment quantities based on deployment data. ▪ Reconcile license entitlements against deployment data and identify gaps and/or surpluses. ▪ For any surpluses, investigate cost reduction options. ▪ For any gaps, plan and implement remediation. Retest when completed.

11. Oracle Java.

Oracle Java licensing changes in 2019 and 2023 have caused many issues.

April 2019	▪ Oracle made major changes that essentially ended the “free” BCL license era. ▪ Basically, any Oracle Java installation after v8u211+ required a commercial license. ▪ License metrics were Processor and Desktop (NUP) based and depended on actual installation. ▪ All licensing was now on a subscription basis, instead of perpetual licenses.
January 2023	▪ Oracle significantly changed license rules – old metrics eliminated. ▪ “Employee” license metric introduced – ALL employees and consultants must be licensed. ▪ Customers saw Java costs go up 5x to 10x. ▪ Oracle Java Sales have gotten aggressive.
Oracle Java OTN License	▪ OTN license allows limited usage without a commercial license. ▪ It’s easy to exceed OTN allowances.
NFTC	▪ Introduced in 2021; generally, allows “free” Oracle Java for all uses. ▪ However, key issues and concerns remain, including free update terms for non-LTS and LTS versions.

12. FAQ Time!

Your feedback is critical!

Feel free to reach out to me:

- mohammad@redwoodcompliance.com
- +1-512-917-4337

Let's connect on LinkedIn:

<https://www.linkedin.com/in/mohammad-inamullah/>

Check out our Pro-tips Blog:

<https://www.redwoodcompliance.com/pro-tips-blog/>



Let's Connect.

Mohammad Inamullah

✉ mohammad@redwoodcompliance.com

☎ +1-512-917-4337

🌐 www.redwoodcompliance.com

