The initial procurement of expensive Oracle product licenses is managed through well defined purchasing processes. However, any subsequent deployments in response to company changes are often carried out without examination of product license impact. The resulting risk of improperly licensed software use remains undetected and continues to grow over the years. In the case of an audit, the threat of enormous penalty fees and additional payments exists due to the high license costs of the products.
The Oracle Risk Assessment Service provides comprehensive analysis and assessment of license utilization resulting from infrastructure and configuration, and offers subsequent optimization. The service is founded on an Oracle-verified toolset, ensuring the highest possible compliance with Oracle policies. «Form follows Function» - hardly any service organization is more subject to this statement than the IT department. Constantly changing business requirements must be implemented as soon as possible, problems must be corrected promptly, to avoid service level overruns processes are continually optimized and any deemed unnecessary process steps are omitted. The business faces increased financial and legal risks as IT staff works through the increased complexity of correctly assessing, implementing and largely making technically motivated decisions which impact environment or configuration changes but often without consideration to resulting licensing obligations. Installation and maintenance of Oracle database environments are especially difficult in this regard. On the one hand, these products often support business-critical applications that must be running at all times and as such are prioritized independently above other considerations. On the other hand, Oracle has created a licensing model that is especially difficult in terms of its complexity and license risk vulnerability.

<table>
<thead>
<tr>
<th>Products: Processor metric</th>
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<tbody>
<tr>
<td><strong>Key</strong></td>
<td><strong>Product</strong></td>
</tr>
<tr>
<td>EE</td>
<td>Enterprise Edition</td>
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<tr>
<td>P</td>
<td>Partitioning</td>
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<td>AC</td>
<td>Advanced Compression</td>
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<tr>
<td>CMP</td>
<td>Cloud Management Pack</td>
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<td>DCM</td>
<td>Configuration Management Pack</td>
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<td>DD</td>
<td>Diagnostic Pack</td>
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<td>DT</td>
<td>Tuning Pack</td>
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<tr>
<td>DDM</td>
<td>Data Masking Pack</td>
</tr>
</tbody>
</table>

The Oracle Dashboard in Spider shows the current license usage across all installation and configurations.

«For audits, Oracle accepts only data collected by itself or generated by a verified tool.»
Oracle licensing

Licensing guidelines
In essence, Oracle database licensing guidelines allow for standard or Enterprise product versions to be extended via paid Options and Packs.

Options and Packs
The activation of added functionality is largely done via the user interface, but feature activation can also be implicit in the context of the installation of an application. During install, the database administrator could, perhaps unknowingly, install and activate all available feature options. Thus, in addition to the costs of the feature additions enabled by an unsuspecting administrator, the technical conversion from Standard Edition to Enterprise Edition can carry with it a 10-fold increase in license liability.

Physical or Virtual
Normal operations conceal a substantial licensing pitfall. Oracle’s licensing model depends on the configuration of the underlying hardware on which its software runs. In virtual environments, the physical configuration of the host running the hypervisor is critical. Considering that Options and Packs cost an average of USD 7,000 a piece or more, a hardware upgrade underneath the virtualization layer at the datacenter or simply moving a virtual machine can immediately trigger a 6-digit cost increase.

NUP (Named User Plus)
As an alternative to its complex per-processor based metric license model, Oracle offers NUP licensing, in which user count serves as the licensing metric. The problem with this model lies in the correct determination of the number of users, because in addition to actual users, service or technical users are also counted towards licensing. Additionally, Oracle sets a minimum licensing threshold based on processor performance which is always applied irrespective of user count.

What happens in an Oracle audit
In the case of audit, all installations performed by the customer are analyzed by means of a SQL script delivered by Oracle. The data gathered is then supplemented with a spreadsheet that documents host hardware and virtual server relationships. All this data is then analyzed, evaluated and provides the basis for the final conclusions reached by the Oracle LMS team. Besides the high costs incurred by the performed audit, the customer has no way to view the data in a structured way to evaluate, review or even question Oracle’s conclusions – the customer is left in an overall weak negotiating position.

License optimization
Analysis and optimization of Oracle license deployments and usage involves numerous steps, the basis of which is the information collected on installation as well as the configuration of each database – the information collected is an integral part of the overall evaluation.

Are your risks under control?
- Moving virtual machines into operation
- Inefficient licensing arrangement of databases
- Configuration changes managed via change processes
- Hardware upgrades in the datacenter
- Change of editions via option activation

Technical inventory
Evaluation of the technical license requirement
Technical optimization
Compliance
Optimization of contracts and licenses

Technical License Agreement
Without visibility into the customer’s existing agreements, insights are possible across

Picture of the Spider SAM solution
Depending on the customer’s knowledge or as offered by a SAM partner
Risk Assessment Service

Optimization of costs and benefits

Oracle Risk Assessment Service uses the Oracle-verified nova ratio toolset. All necessary data are collected, evaluated and made available for analysis in a structured form. Within the scope of the Oracle Risk Assessment Service, the customer collects all the necessary infrastructure data using the automated tool set from nova ratio and sends it to us. By processing with the eOracle engine approved by Oracle as verified, the resulting technical license usage is determined. This is analysed by our experts and submitted to the customer with detailed reports and recommendations for action.

On the basis of the recommendations for action and optionally in cooperation with an Oracle SAM consultant, the customer can now optimize the environment themselves. Subsequently, the effectiveness of all changes is verified in a second analysis run before the final system documentation, and the Oracle server worksheet requested by Oracle is generated as part of an audit.

Alternative to Do-It-Yourself

There are various scripts on the Internet that allow you to read out the configuration of an Oracle environment. Many of these are inadequate because they only query Oracle’s feature usage table or deliver results whose quality the customer can not readily verify.

To emphasize, it is very important to understand the approach Oracle takes: as part of an audit, Oracle only accepts data that is collected either through its own scripts or from one of the 6 verified partners. Our solution corresponds to this criterion.

«Root-cause analysis» for negotiations

The decision tree of options to be licensed is very complex. In order to have a good negotiating position in case of disagreements with Oracle billing, our solution records the entire decision tree. This can be added in the context of post-negotiations, which considerably strengthens the negotiating position.

Oracle Risk Assessment Workflow

1. Definition & Script Delivery
   Definition of contact partners, process and timeline. We deliver our «Oracle verified» SQL script to your data centre team.

2. Approval & Data Collection
   Data centre team validates the SQL script and then collects data from required servers, data exported as text files. 2 days of remote support for questions included.

3. Data Analysis
   Data is imported for analysis into brainwaregroup «Oracle Database Services» tool.

4. Report
   A team of Oracle specialists analyses the data and compiles report and required data exports for you.

5. Corrections / Audit
   Apply any required corrections to the Oracle installations.

Advantages of continuous operation

The Oracle Risk Assessment Service is the right choice for cost-effective optimization and audit preparation of an existing Oracle environment. Datacenter infrastructures are, however, subject to ongoing adjustments to operational needs. The risks of a cost-relevant change are thus given on a daily basis and should therefore be considered as part of every infrastructure change process.

As the basis of the service, we use our Spider SAM products, which are available to customers in product and Saas versions. We are delighted to create an offer in which we also transfer the data obtained within the framework of the service directly into the environment so as to maintain benefit continuity.
Think global – act local

The brainwaregroup is located in Switzerland and Germany, but at home in Europe and the world. The owner-managed enterprise expanded very early to countries such as Japan and South Africa to accompany the rapid globalization of its customers. These work in industry and trade, in financial economy or in the public area and therefore act locally as well as internationally.

As a strong partner with international contacts and local focus, the brainwaregroup offers in products and consulting its competence in IT management, from software distribution up to asset, license and contract management. We will always make the knowledge available for technical departments and management, to make sure that decisions are based on facts and actions.

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