

Solaris Maintenance rEvolution

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Schlüsselworte

Solaris Maintenance Lifecycle System Administration Engineered Systems Platinum Patching ACS
Proactive Analysis Centre Security

Einleitung

The quality of the initial system installation and configuration is the key factor determining the quality of the subsequent customer lifecycle experience. Sub-optimal choices made during installation are usually hard to correct once a system goes into production.

Engineered Systems such as Exadata and SuperCluster are Engineered Together and Test Together ensuring optimal installation and configuration to maximize performance, robustness, and maintainability.

This presentation charts the evolution from generic Solaris systems to SuperCluster Engineered Systems and beyond. It includes data demonstrating the effectiveness of ACS Installation Services and the Proactive Analysis Center on MOS.

Solaris Maintenance rEvolution

Maximize your return from Premier Support

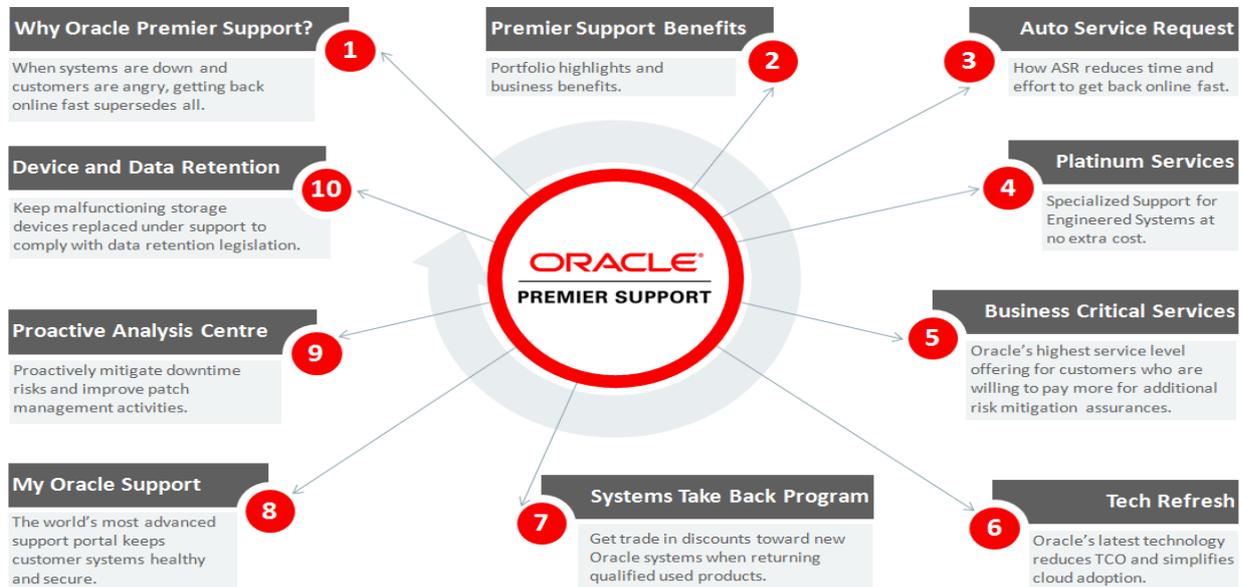


Abb. 1: Oracle Premier Support provides a feature rich portfolio – make sure you leverage it to the maximum!

Platinum Patching in particular can really help remove a load from your Sys Admins – we patch the systems for you, so you don't have to. And it's included as part of Premier Support at no extra cost.

The Proactive Analysis Centre is another useful feature of Premier Support to help you manage Operational Risk. It analyzes uploaded system telemetry, running thousands of health checks, and provides an Operational Risk Index (ORI) for each system, advising on the measures to take to reduce Operational Risk.

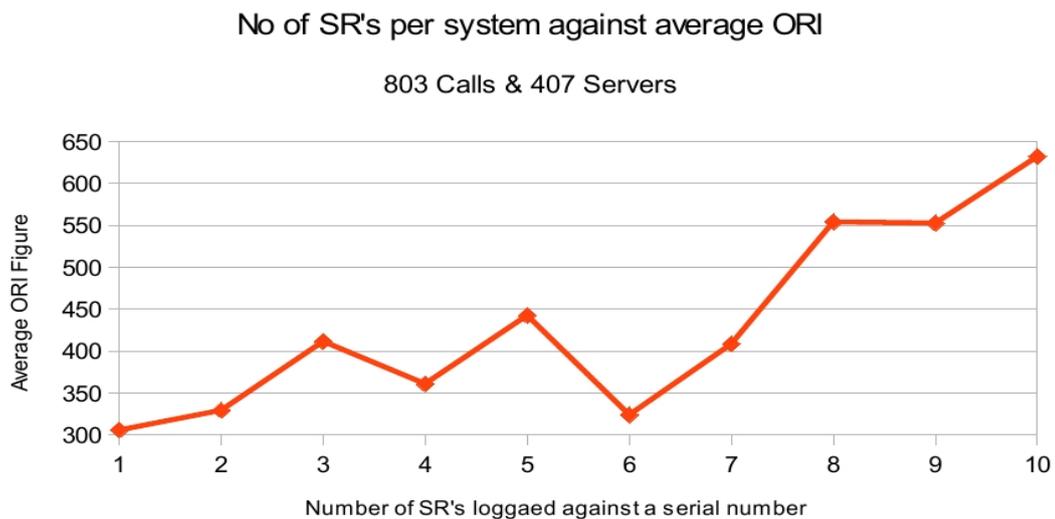


Abb. 2: Case Study: The lower the Operational Risk Index, the fewer Service Requests are filed for the system

Oracle ACS Installation Services

A golden nugget I learned from one of the first management courses I attended was „You can't manage what you don't measure“.

That's stuck with me and I'm always looking for metrics which demonstrate the effectiveness or otherwise of processes.

A statistician colleague of mine recently analyzed the effectiveness of Oracle ACS Installation Services and the results were dramatic.

Buying Oracle ACS Installation Services instead of installing and configuring the system yourself can reduce the subsequent issue rate by over 70%! That's 70% fewer production issues than if you do it yourself.

	Percentage of Total	Number of Software SRs per KSSD*	Number of Bugged SRs per KSSD*
No ACS Installation Service	22%	9.9	3.3
ACS Hardware Installation Service	66%	6.5	2.9
ACS Hardware & Software Installation Service	12%	2.6	1.3

*Abb. 3: ACS Installation Services dramatically lowers the number of subsequent Service Requests for the System. *SRs per KSSD is Service Requests per Kilo System Service Days, that is SRs normalized per 1,000 days of operation. Bugged SRs refers to Service Requests which were associated to a bug. Data refers to all M6 installations worldwide.*

So next time you buy an Oracle system, do consider buying Oracle ACS Installation Services too. It's worth it.

Engineered Systems

The quality of the initial system installation and configuration is **the** key factor determining the quality of the subsequent customer lifecycle experience. Sub-optimal choices made during installation are usually hard to correct once a system goes into production.

Guiding customers to optimal configuration in generic systems is hard due to the vast range of options available, including integration with 3rd party products at every level of the hardware and software stack. Usually recommendations come down to „it depends“ type statements with too many „ifs“, „buts“, and „ands“ to be particularly useful.

Engineered Systems such as Exadata and SuperCluster on the other hand are Engineered Together and Test Together ensuring optimal installation and configuration to maximize performance, robustness, and maintainability.



Abb. 4: Left: SuperCluster T5-8. Right: SuperCluster M6-32 (comes with Exadata cabinet)

The hardware configuration is one of a finite set of options. For example, a half rack or full rack SuperCluster. Within those options, the hardware layout is fixed.

We know how many Infiniband, 10GbE, and 1GbE cards are in the system and which slots they are in.

We know how much CPU and memory is available and we distribute it optimally to each LDom to ensure processor affinity.

We control the whole set-up and configuration, from the T5/M6/M7 servers to the ZFSSA general purpose Storage, to the Exadata Storage Cells.

We set-up redundant paths.

We optimize /etc/system settings for performance, while mindful to workaround any known issues with the current component versions.

We provide dynamic health checks such as the ,ssctuner‘ utility which monitors system performance and corrects it on the fly – for example if a Sys Admin makes a sub-optimal setting in /etc/system.

We provide the customer with options as to how they want to virtualize the system. How many LDoms they want. Whether each will be running an Oracle Database or Applications. How many Zones they want. Customers can choose whether they want high redundancy or simple server consolidation.

We limit the choices to what’s sensible from a performance, robustness, and maintenance perspective.

But the key to Engineered Systems is that our test and support systems are identical to customers‘ systems.

This makes our pre-release testing far more effective for Engineered Systems than it can ever hope to be for generic systems. So far fewer issues escape to customers. This improves the customer experience, reduces risk and issues, and therefore reduces cost.

It makes customer issue reproduction in-house much, much easier. This dramatically accelerates Root Cause Analysis and fix availability. This speeds up time to resolution, improving the customer experience.

Because all other SuperClusters are identical, the fix for an issue discovered by one customer can be proactively rolled out to all other customers before then hit the issue. This provides a safety-in-numbers effect, improving the customer experience.

We’ve now nearly 5 years SuperCluster experience under our belt, and not one customer issue has been workload dependent. That is, it doesn’t matter what workload you are running – SAP, E Business Suite, Siebel, Telco, Banking, or home grown applications – the SuperCluster Engineered System will provide a robust and performant platform for your business.

Oracle is embracing the Cloud.

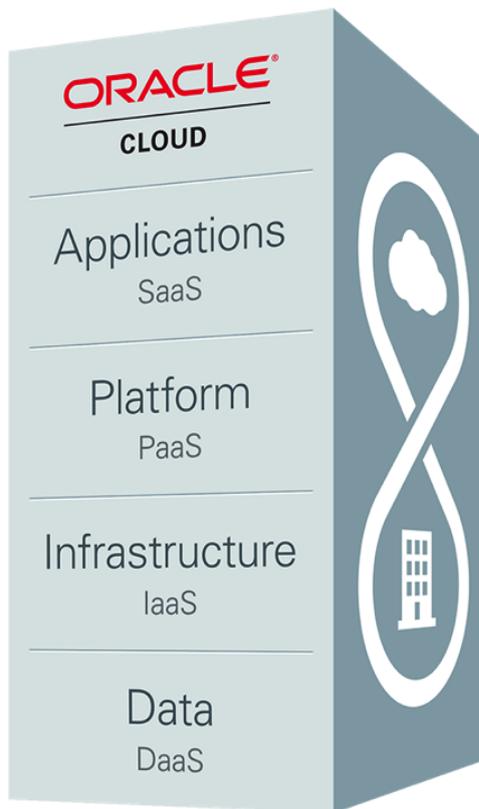


Abb. 5: Oracle Cloud. On Premise or In Cloud. It's the identical systems.

Oracle's unique advantage is that it's the identical systems – such as Engineered Systems – which are available to you either in the Oracle Public Cloud or on premise.

You can be confident that what works in one environment will work equally well in the other. Without modifications.

That enables you to turn the dial from On Premise to Cloud as fast or as slow as you like, with the option to turn it back again whenever you want.

For example, you might start by hosting your Development and Test environment in the Cloud while maintaining your Production environment On Premise.

You might extend your Cloud presence by using it for off-site backups and Disaster Recovery environment.

And if and when you're ready, you can go the whole hog and migrate your Production environment to the Cloud.

It's entirely up to you!

Isn't it time you put your head in the Cloud ?

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