ORACLE®

OpenWorld 2015
Maintenance rEvolution

Spending Less Time Maintaining and More Time with Your Family! [CON4940]

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https://blogs.oracle.com/Solaris11Life https://blogs.oracle.com/patch



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How would you like...



To reduce the number of issues you encounter by over 70%?

To leverage automatic analysis of your systems to address risk before it turns into issues? At **no** additional cost.

If Oracle patched your systems, so you don't have to? At **no** additional cost.

To experience 7x fewer issues with Engineered Systems

To spend less time maintaining and more time with your family?



Program Agenda – Maintenance rEvolution To Platinum Patching and Beyond!

- In the Beginning...there were Patches, lots of Patches
- The Discovery of Flint...Recommended Patchsets
- The Bronze Age...Live Upgrade and feedback loops
- The Age of Enlightenment...Tools and Knowledge
- The Renaissance...The Beauty of Oracle Solaris 11
- The Industrial Revolution...ACS, ASR, PAC
- 7 The Space Age...Engineered Systems and Platinum Patching
- 8 Head in the Cloud...On Premise or in Cloud, it's all the same



4,000+

Oracle Solaris patches per year

In the Beginning...
There were Patches.
Lots of Patches.
And people were confused.
"Tell me which patches I need for <u>my</u> systems!"



In the beginning...

There were patches. Lots of Patches.





- Each customer system ended up with unique patch combinations => \$risk (small)
- Patches were time consuming to apply => \$cost
 - Applying to live boot environment resulted in long maintenance windows => \$cost



The Discovery of Flint...Recommended Patchsets



Created Recommended Patchsets containing the most critical fixes needed by all customers

Customers still needed to figure out which additional patches they may need for their specific environment => \$cost

Still end up with each customer system having unique patch combinations => \$risk (small)

Still costly to apply => \$cost



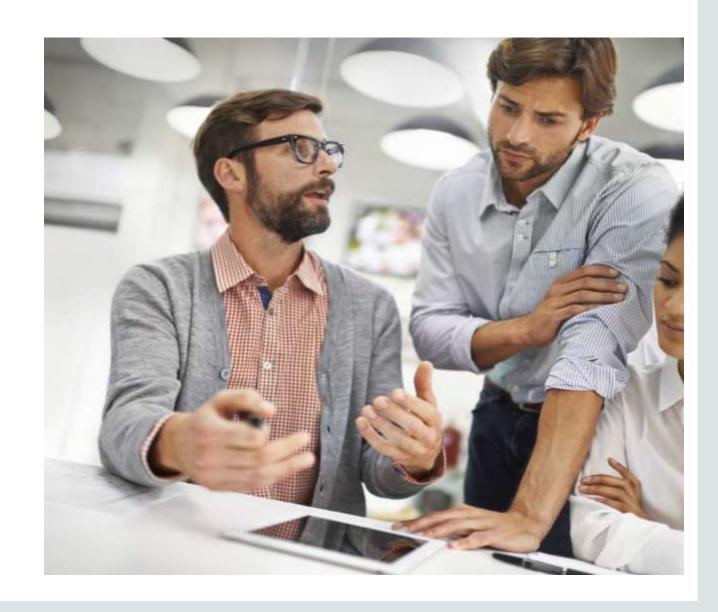
The Bronze Age...

Feedback to Developers

Feedback loop to developers on
issues arising help improve features
in subsequent releases

Live Upgrade

Reduces maintenance windows and risk by modifying an inactive copy of the boot environment => \$cost saving, \$risk saving



The Age of Enlightenment...Tools and Knowledge



Technical Debt: How well a system is initially installed and configured is <u>the</u> key factor determining the quality of the customer's lifecycle experience

Regular patch cadence helps customers plan maintenance windows

Enable customers to be as self sufficient as possible – better tools, more knowledge

"Performance, Performance, Performance" is now "Security, Performance, Cloud" (and Cost, Reliability, and Standards)



The Renaissance...The Beauty of Oracle Solaris 11

Oracle Solaris 11 IPS simplifies the customer experience => \$cost savings

SRUs applied as a unit. No need to choose patches => \$cost savings

Safety-in-numbers with many customers running same SRU => \$risk savings

Oracle Solaris 11 is feature rich:

- solaris-minimal-install
- compliance framework in 11.2
- solaris-11-cpu CVE metadata package

Security IDRs, Silicon Secured Memory, OSM

Zero Downtime maintenance (Ksplice++)





The Industrial Revolution...ASR, ACS, PAC



ASR can report issues before they've even happened - \$risk savings

ACS Installation Services ensure best practice installation and configuration, reducing subsequent SR rate by over 70%! - \$cost savings

Proactive Analysis Centre enumerates your Operational Risk and guides you proactively to mitigate risks before they become issues - \$risk savings

EM 12c does exactly what it says. Enterprise class Management.



Why Oracle Premier Support? **Premier Support Benefits** Auto Service Request 2 When systems are down and Portfolio highlights and How ASR reduces time and business benefits. customers are angry, getting back effort to get back online fast. online fast supersedes all. **Platinum Services Device and Data Retention** 10 Specialized Support for Keep malfunctioning storage Engineered Systems at devices replaced under support to no extra cost. comply with data retention legislation. ORACLE' PREMIER SUPPORT **Business Critical Services Proactive Analysis Centre** Oracle's highest service level offering for customers who are Proactively mitigate downtime willing to pay more for additional risks and improve patch management activities. risk mitigation assurances. My Oracle Support Systems Take Back Program Tech Refresh 8 The world's most advanced Get trade in discounts toward new support portal keeps Oracle's latest technology Oracle systems when returning customer systems healthy reduces TCO and simplifies qualified used products. cloud adoption. and secure.

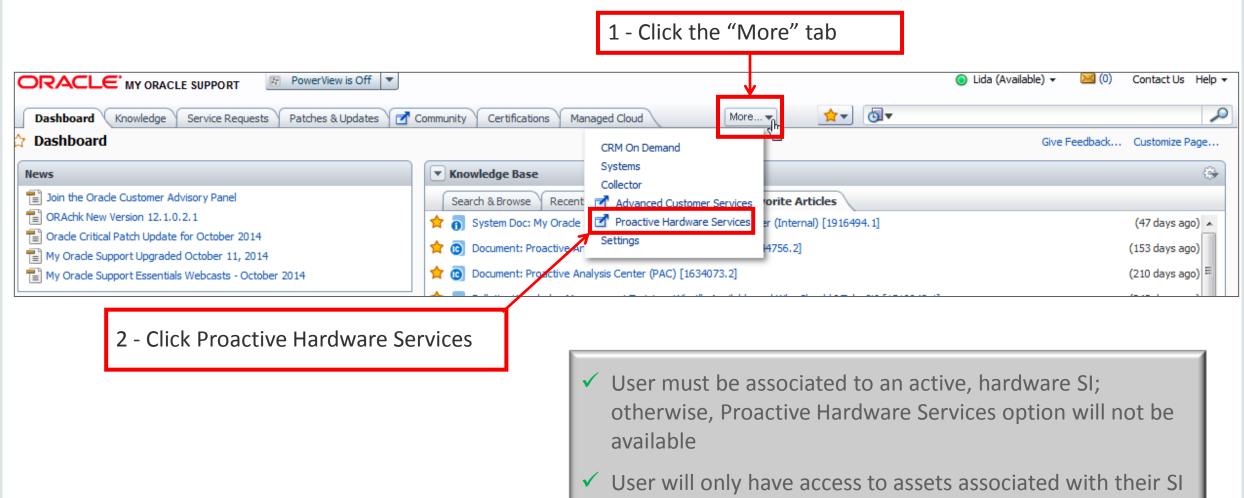
ACS Installation Services Reduce Customer Production Issues By Over 70%!

	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

^{*}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.

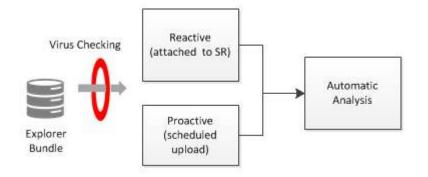


My Oracle Support – Proactive Analysis Center (PAC) Access

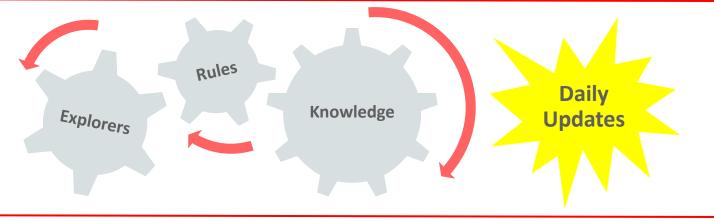


Proactive Analysis Center (PAC)

Step 1
Data submission



Step 2 PAC Engine



ORACLE MY ORACLE SUPPORT

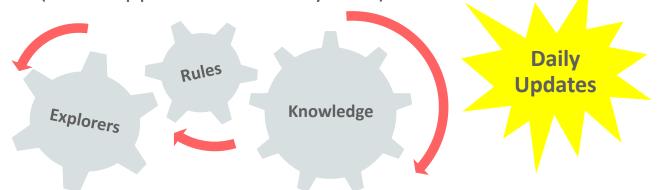
Step 3
Report Access





Proactive Analysis Center - Operational Risk Index (ORI)

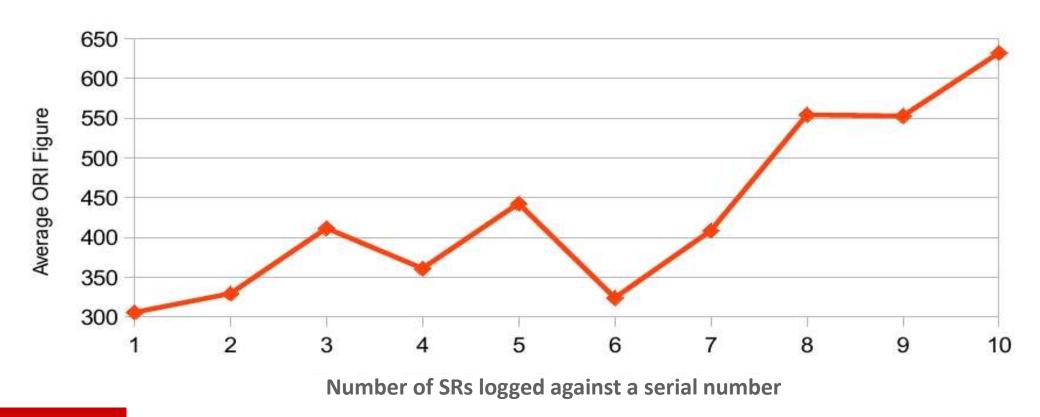
- A metric that acts as a leading indicator of IT risk
- The ORI score is based on a measurement of failed rules for a system
- The higher the ORI number the greater the potential for problems, downtimes, or outages
 - ✓ Each issue (rule) is given an ORI Score
 - ✓ The possible severities include: Critical, High, Medium, and Low
 - ✓ ORI is calculated only on conclusive results (100% applicable to this system)
- As failures are remediated
 - √ ORI Drops
 - ✓ Customer Satisfaction Increases



Proactive Analysis Center (PAC) – Lower ORI => Fewer Issues Case Study: Large multinational Telco

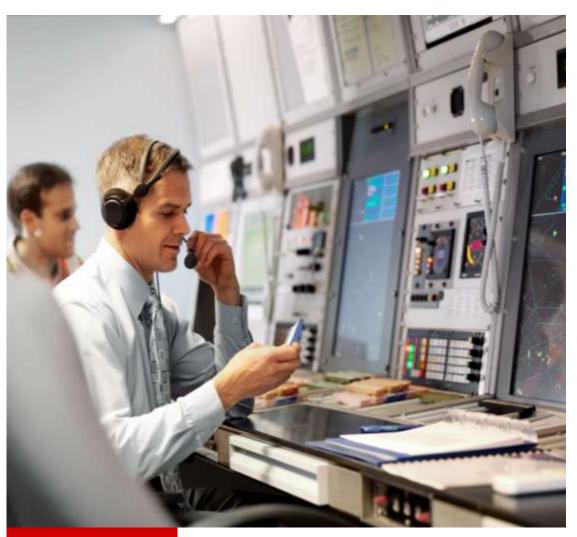
No of SR's per system against average ORI

803 Calls & 407 Servers





The Space Age... Engineered Systems



Engineered Systems vastly reduce risk as Engineered Together, Tested Together:

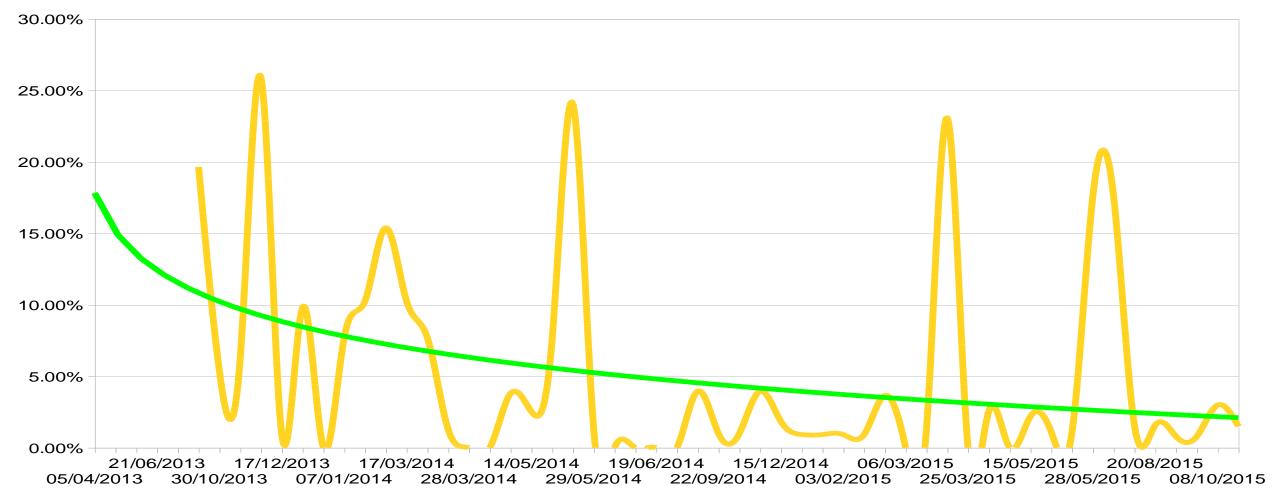
- Best practice install and configuration
- Enables rapid deployment
- Increased test effectiveness
- Much faster RCA and bug fix delivery
- Proactive roll-out, safety-in-numbers effect
- Quarterly Full Stack Download Patches (QFSDP)
- Dedicated Support

SuperCluster Solaris 11 IDR Content

Benefit of Engineered System Install, Configuration, and Maintenance Lifecycle on Bugs Fixed per SuperClusters Sold

- % New Bugs Fixed per SuperClusters sold in trailing 2 quarters

Logarithmic (% New Bugs Fixed per SuperClusters sold in trailing 2 quarters)



Date



The Space Age...Oracle Support for Engineered Systems

Helping customers more fully realize the benefits of their Engineered Systems



Complete. Proactive.

- Specialized Engineered Systems support team for single point of ownership
- Customer Incident Managers for support introduction, critical SR monitoring
- Escalation prevention and special handling
- Automated SR creation (ASR), Oracle Configuration Management
- Proactive support via:
 - MyOracle Support publications / alerts
 - Healthchecks
 - Patch bundles / product enhancements



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PLATINUM SERVICES

Integrated. No Additional Cost.

- Special entitlement for qualifying Exadata, Exalogic and SuperCluster configurations
- Oracle engineers perform remote patch planning and deployment up to 4x/year
- 24/7 remote fault monitoring, Software ASR
- Accelerated response and restoration
 5 Minute Fault Notification



15 Minute Restoration or Escalation to Development

30 Minute Joint Debugging with Development



Platinum Services Objectives and Results More than 1,000 customers have adopted Platinum Services

Maximize Availability & Performance

- Proactive, integrated approach to sustaining system health
- · Best practice configs and patching
- Critical issue prevention
- 37% fewer bugs encountered
- 75% fewer Sev 1 service requests
- 27% faster issue resolution time

Reduces operational risk with around the clock fault monitoring and ensures continued availability for our core banking processes running on Oracle Exadata



Reduce Support Complexity

- Single-vendor access to engineering expertise for complete Oracle stack
- Service Requests (SRs) opened automatically through monitoring
- Oracle performs patching when it's best for your business
- 86% of SRs opened by Oracle

"It (Exadata) is being monitored 24/7 by Oracle, and we are notified before we've actually realized that we are having a problem. That type of support model allows me to sleep at night – this has been a godsend."



Decrease IT Resource Requirements

- Oracle experts perform support and maintenance services on your behalf at no extra cost
- 70% fewer escalations
- Fewer IT support resources required

thetrainline.com leveraged Oracle Platinum Services to reduce IT resource workload by 30%

thetrainline.com



Head in the Cloud...



Oracle Converged Infrastructure - on premise and in cloud are identical

- Migrate seamlessly from one to the other
- Dev and test in cloud, production on premise
- Off-site back-ups and Disaster
 Recovery in the cloud
- Or go the whole hog!







Platform

PaaS

Infrastructure



Data





A Little Extra...Engineering Robustness into SuperCluster

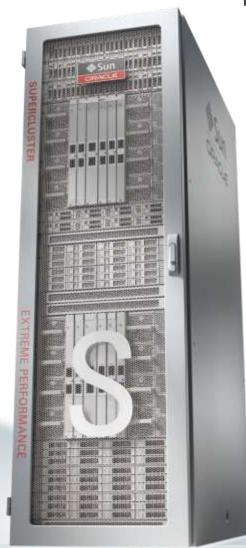


Don O'Malley, Senior Manager, SuperCluster Install and Configuration Utilities

SuperCluster M7:

Secure Cloud Infrastructure for Database and Applications

- Industry's Most Advanced Security
- World's Fastest
 Engineered System
- Extremely Cost Effective
 Secure Cloud
 Infrastructure



- Private Cloud
- Optimized for Oracle
 Database
- Runs Any Standard
 Enterprise Application
- Ready to deploy laaS & PaaS



Solaris Talk Tracks

What	When	Topic	Location
CON8329	Mon, 4:00 p.m.	Securing Your Enterprise Cloud Data	Intercon B
CON4940	Mon, 5:15 p.m.	Spend Less Time Maintaining and More Time with Your Family	Intercon B
GEN8606	Tue, 11:00 a.m.	Security, Speed, Simplicity—Cloud Present & Future with Oracle Solaris	Intercon B
CON8314	Tue, 5:15 p.m.	Patch on Day Zero or Have a Zero Day: Secure and Safe Lifecycle Management	Intercon B
CON8724	Wed, 11:00 a.m.	Making DevOps Secure with Docker	Intercon B
CON8468	Wed, 12:15 p.m.	DevOps Done Right: Secure Virtualization with Oracle Solaris	Intercon B
CON8605	Wed, 1:45 p.m	Developing the Platform of the Future: Oracle Solaris Engineering	Intercon B
CON8604	Wed, 3:00 p.m.	Customer Panel: Customer Insights into Deploying Oracle Solaris	Intercon B
CON8337	Thu, 9:30 a.m.	Developer Cloud Made Simple: How to Build an OpenStack Developer Cloud	Intercon B
CON8726	Thu, 10:45 a.m.	Keeping your Compliance/Security Auditor Happy	Intercon B
CON9757	Thu, 12:00 p.m.	Oracle Solaris: Building a Secure Platform-as-a-Service Hybrid Cloud	Intercon B
CON8354	Thu, 1:15 p.m.	The DBaaS You've Been Waiting for—Oracle Database, Oracle Solaris, SPARC, and OpenStack	Intercon B



SuperCluster Talk Tracks

What	When	Topic	Location
Session	Tuesday	Expert Insights on Orchestrating Extreme High Availability on <i>Oracle SuperCluster</i>	Intercontinental—
CON3303	11:00-12:00		Intercontinental B (5th Floor)
Session	Wednesday	How to Implement Comprehensive Security in a Multitenant Cloud Environment	Intercontinental—
CON7978	12:15-1:15		Intercontinental C (5th Floor)
Session	Wednesday	Consolidating Workloads in a Private Cloud on <i>Oracle SuperCluster</i> : Case Study	Intercontinental—
CON9709	3:00-4:00		Intercontinental C (5th Floor)
Session	Wednesday	Platform as a Service Delivering the Business Vision	Intercontinental—
CON2017	4:15-5:15		Intercontinental C (5th Floor)
Session CON8355	Wednesday 4:15-5:15	How to Deploy Practical Platform as a Service On Premises and in the Cloud	Intercontinental—Sutter (5th Floor)
Session	Thursday	Data Center Security: Ensuring Compliance in a Dynamic Data Center Environment	Intercontinental—
CON7439	9:30-10:30		Intercontinental C (5th Floor)
Session	Thursday	Lessons Learned: Architecting and Implementing Security in the Modern Data Center	Intercontinental—
CON3852	10:45-11:45		Intercontinental C (5th Floor)
Session CON8777	Thursday 12:00-1:00	Making On-Demand Application Provisioning Simple, Reliable, and <i>Secure</i>	Moscone South—270



Session Surveys

Help us help you!!

- The organizing committee OW would like to invite you to take a moment to give us your session feedback. Your feedback will help us to improve your conference.
- Please be sure to add your feedback for your attended sessions by using the Mobile Survey or in Schedule Builder.

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