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# Proactive support for Oracle Hardware

Csaba Balogh  
Technical Account Manager  
Support Services, Oracle Austria  
October 17, 2014

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# New Model for IT Support

1. My Oracle Support
2. ASR & Rapid SR
3. **EM Ops Center**

## Traditional IT Support

- Fragmented
- Reactive
- Costly

## Oracle Premier Support

- Integrated
- **Proactive**
- Efficient

## Oracle Platinum Services

- Monitored for You
- Updated for You
- Extreme Value for You



# Program Agenda

- 1 ➤ STB – Services Tools Bundle
- 2 ➤ Proactive Analysis Center (OSSA)
- 3 ➤ ASR – Automated Service Request
- 4 ➤ OPS Center
- 5 ➤ Platinum Service
- 6 ➤ Questions

# Oracle Services Tools Bundle



- Oracle Explorer Data Collector
- Oracle Remote Diagnostic Agent
- Oracle Serial Number in EEPROM (SNEEP)
- Oracle Automatic Crash Dump Tool (ACT)

# Oracle Service Tools Bundle – What is it?

## Features

- **Self-extracting tool** – available for Solaris and Solaris x86 release 8 onwards
- **Explorer** – series of shell scripts that gather system configuration, snapshot, and current state
- **RDA** – captures comprehensive snapshot of environment for support (MacOS, UNIX, VMS, and Windows)
- **SNEEP** – Easy serial number identification
- **ACT** – Crash dump analysis tool



# Oracle Service Tools Bundle – Value



- Bundled tools provide foundation for proactive and reactive support from Oracle
- Only configuration data is captured and sent to Oracle as per customer configurations (monthly, quarterly, etc)
- Enables customer to use Risk Assessment / Proactive capabilities (OSSA)
- Enables fully qualified Service Requests to be created (all data needed to assist in problem identification) ... faster problem resolution



# Oracle Proactive Analysis Center

*Oracle Sun System Analysis(OSSA)*



Accessible via [My Oracle Support – Proactive Hardware Services Tab](#)

# Oracle Proactive Analysis Center – What is it?

Oracle Proactive Analysis Center is a set of reports and content based on the output of the explorer files sent to Oracle.

## Easy to access tabbed format

- Home Page – Summary of Assets, Collected Data, Alerts and ORI
- The reports shows the impact of risk and known issues over your entire supported network of systems.



# Accessing the Proactive Analysis Center

Logged in as Your email address

Welcome Your email address (Logout)

**ORACLE** Proactive Analysis Center

Home Assets Explorer Risk Patches

### Proactive Dashboard

Proactive Dashboard Summary Page

Assets	
Assets Listed	1
Assets with Explorer data	1

Alerts	
Solaris Alerts applicable to	1

Collected Data	
Explorers in Oracle database	1
Explorers less than 1 month old	0
Explorers more than 1 month old	1

ORI	
Hosts Analysed	1
Best System ORI	10
Worst System ORI	10
Average ORI for all hosts	10

# Accessing the Reports



Proactive Analysis Center



Home Assets Explorer Risk Patches

ORI | Solaris Alerts | Faults | Messages | Sys FW | HBA | Disk FW

## Sun Alert 1359338.1 Summary

Summary	
Sunalert:	1359338.1
Date:	
Category:	Availability
Severity:	
Synopsis:	Sun Fire X4170/X4270/X4275 May Panic with "pcieb-4: PCI(-X) Express Fatal Error. (0x101)"
Servers:	1

Server	Hostid	Conclusive	Explorer Date	Patches
ops-release2-1-chi.ops.sfdc.net	23f14201	true	2012-07-07	

## Rules That May Cause Outages

Cause Outage - The following issues can cause unplanned outages

Rule Type	Id #	Applicability	Rule Description	Severity	Probability	Risk	ORI Severity
Sec Patches	<a href="#">118777-14</a>	Conclusive	<a href="#">CVE-2010-2386</a>	7	20%	51.6	Critical
Sec Patches	<a href="#">120543-19</a>	Conclusive	<a href="#">CVE-2009-1891</a>	7	70%	70.0	Critical
Sun Alert	<a href="#">1386106.1</a>	Conclusive	Solaris Systems May PANIC Due to Race Condition in SCSI Framework Module	7	30%	53.7	Critical
Sun Alert	<a href="#">1385969.1</a>	Conclusive	Solaris 10 'Disk In-Use' Check Failure May Allow Two Cluster Nodes to be Configured to Use the Same Disk	7	30%	53.7	Critical
Sun Alert	<a href="#">1020706.1</a>	Conclusive	Security Vulnerabilities in Solaris IP(7P) Module and STREAMS Framework May Lead to a Denial of Service (DoS) Condition	7	10%	50.2	Critical
Sun Alert	<a href="#">1020175.1</a>	Conclusive	A Security Vulnerability in the Solaris SCTP Packet Processing may Lead to a System Panic Resulting in a Denial of Service (DoS)	7	10%	50.2	Critical
Sun Alert	<a href="#">1020445.1</a>	Conclusive	Security Vulnerability in the Solaris sendfile(3EXT) and sendfilev(3EXT) Extended Library Functions may Result in a Denial of Service (DoS) Condition due to a System Panic	8	30%	60.1	Critical
Sun Alert	<a href="#">1020542.1</a>	Conclusive	Two Race Condition Vulnerabilities in the Solaris Event Port API May Allow Local Users to Panic the System, Causing a Denial of Service (DoS)	8	20%	58.0	Critical
Sun Alert	<a href="#">1019618.1</a>	Conclusive	Solaris 10 Kernel Patches 127111-08 and 127112-08 May Cause a System Panic From ip_wput_ioctl()	8	30%	60.1	Critical
Sys Firmware	N/A	Conclusive	Downrev System Firmware	9	25%	65.8	Critical
Sun Alert	<a href="#">1487270.1</a>	Conclusive	A Race Condition in Internet Routing Entries (IRE) Insertion on Solaris 10 and Solaris 11 Systems May Cause IRE Chain Corruption, And Possibly Lead to a System Panic	9	30%	67.2	Critical
Sun Alert	<a href="#">1480412.1</a>	Conclusive	A Race Condition in Solaris 10 and 11 May Cause a NULL Pointer Dereference in vmu_calculate_proc Leading to a System Panic	9	30%	67.2	Critical
Sun Alert	<a href="#">1470576.1</a>	Conclusive	Under Severe Memory Stress, Solaris 10/11 Systems Might Panic in TCP Mode (Port to Port Connection)	9	10%	64.3	Critical
Sun Alert	<a href="#">1020811.1</a>	Conclusive	Security Vulnerability in Solaris pollwakeup(9F) May Allow an Unprivileged User to Panic the System	9	100%	95.5	Critical
Sun Alert	<a href="#">1020811.1</a>	Conclusive	Security Vulnerability in Solaris pollwakeup(9F) May Allow an Unprivileged User to Panic the System	9	100%	95.5	Critical
Sun Alert	<a href="#">1020798.1</a>	Conclusive	Multiple Security Vulnerabilities in libtiff(3) Handling of CODE_CLEAR Code	1	10%	9.9	Medium

## Operational Risk

Operational Risk Index (ORI), is an indicator of a system's level of risk. This is calculated on the number and criticality of known issues that are identified as affecting a system. Generally, an ORI score below 150 is considered to be good, between 150 and 300 to be moderate risk, and above 300 to be high risk.

Based on the latest Explorer data we hold, the current status of systems at DGA is shown the the following table.

System	Hostid	Type	Critical	High	Medium	Low	ORI
psishhp403		Sun Fire E2900	64	30	68	26	1020
psishhp404		Sun Fire E2900	64	30	67	26	1017
psishhp203		Sun SPARC Enterprise T5220	61	29	67	22	978
psishhp402		Sun Fire T2000	41	14	39	19	616
psishhp401		Sun Fire T2000	34	13	30	19	514
psisibp200		Sun Fire T2000	34	13	30	18	513
psisibp201		Sun Fire T2000	34	13	30	18	513
psishhp400		Sun Fire T2000	32	15	32	18	509
psishhp500		Sun Fire T2000	32	12	29	18	485
psisges900		Sun SPARC Enterprise T5220	23	7	20	5	330
psisibp900		Sun SPARC Enterprise T5220	22	7	22	4	325
psishhp201		Sun Fire T2000	22	5	23	6	320
psishhp202		Sun Fire T2000	22	5	23	6	320
psisibdp401		Sun Fire E2900	22	7	19	4	316
psisibdp400		Sun Fire E2900	22	7	19	4	316
psisit001		Sun Fire T2000	21	6	22	6	312
psisibdp201		Sun Fire E2900	21	7	19	4	306
psisibdp200		Sun Fire E2900	21	7	19	4	306
psisibp002		Sun Fire T2000	21	5	22	5	306
psisges400		Sun Fire V240	21	7	18	2	301
psisges700		Sun Fire V245	21	6	19	3	300
psishhp002		Sun Fire V490	20	8	19	3	300
psisges600		Sun Fire V240	22	6	16	2	300
psisges800		Sun Fire V245	21	6	19	2	299
psisges300		Sun Fire V240	21	7	17	3	299
psiswep901		Sun SPARC Enterprise T5220	20	7	19	5	297
psisibdp901		Sun SPARC Enterprise M4000	20	7	19	5	297
psisibdp900		Sun SPARC Enterprise M4000	20	7	19	5	297
psisibdp051		Sun Fire E2900	20	7	19	4	296
psisibdp050		Sun Fire E2900	20	7	19	4	296
psiswep201		Sun Fire T2000	20	7	17	5	291
psisges200		Sun Fire V240	21	6	16	3	291
psisibp901		Sun SPARC Enterprise T5220	20	7	17	4	290
psishhp900		Sun SPARC Enterprise T5220	20	7	17	4	290
psiswep200		Sun Fire T2000	20	7	17	4	290
psisges500		Sun Fire V240	21	6	16	2	290

## Test Results Summary

Test	Status
Boot Device and OBP settings	
Primary Boot Devices	PASS
Alternate Boot Devices	PASS
Diagnostic Devices	FAIL
Watchdog Reboot	PASS
Console Settings	PASS
Boot Device Mirroring	FAIL
OS Configuration Settings	
<u>/etc/system</u> Settings	PASS
<u>/dev/null</u> Configuration	PASS
Storage Driver Settings	PASS
Volume Manager Replicas	PASS
Volume Configuration	PASS
Volume Manager Mirror Configuration	FAIL
<u>Veritas</u> Licence Keys	PASS
<u>Coreadm</u> Configuration	PASS
Dump Space on Underlying Volume Devices	FAIL
<u>Filesystem</u> Logging	PASS
<u>Filesystem</u> Capacity	FAIL
Redundant Power Supply	
Power Supply Configuration	PASS
<u>SunFire</u> V480/880/1280 Specific.	
OBP Settings	PASS
<u>SunFire</u> 12K/15K/20K/25K Specific	
Internal Network Configuration	PASS
Split Expander	PASS

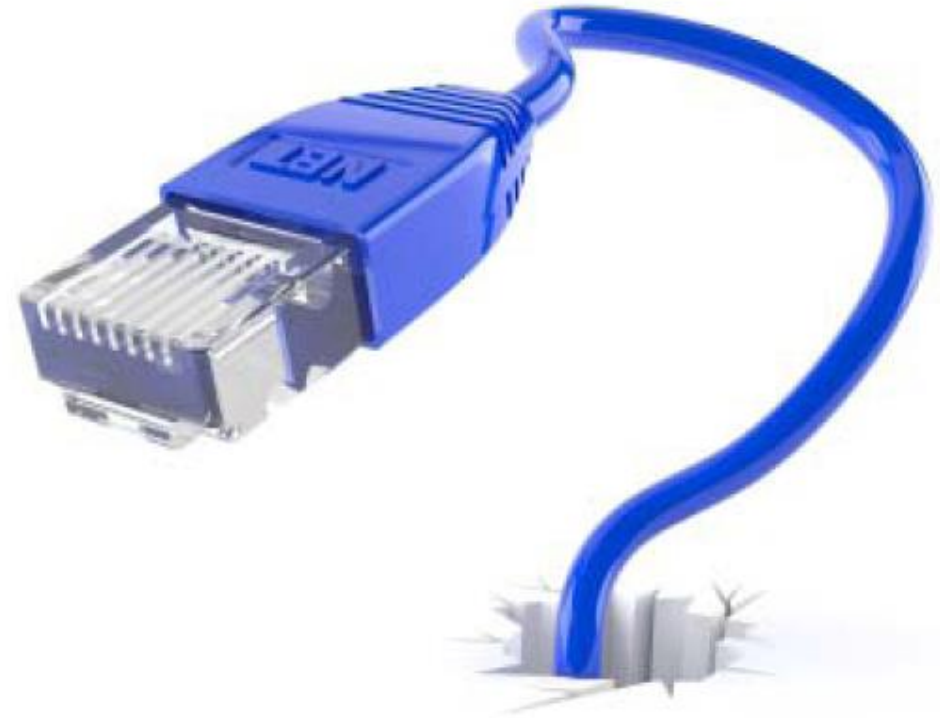
# Oracle Auto Service Request (ASR)



- Automatically creates Service Requests for known issues
- One-way transfer of fault information to Oracle – No security risks

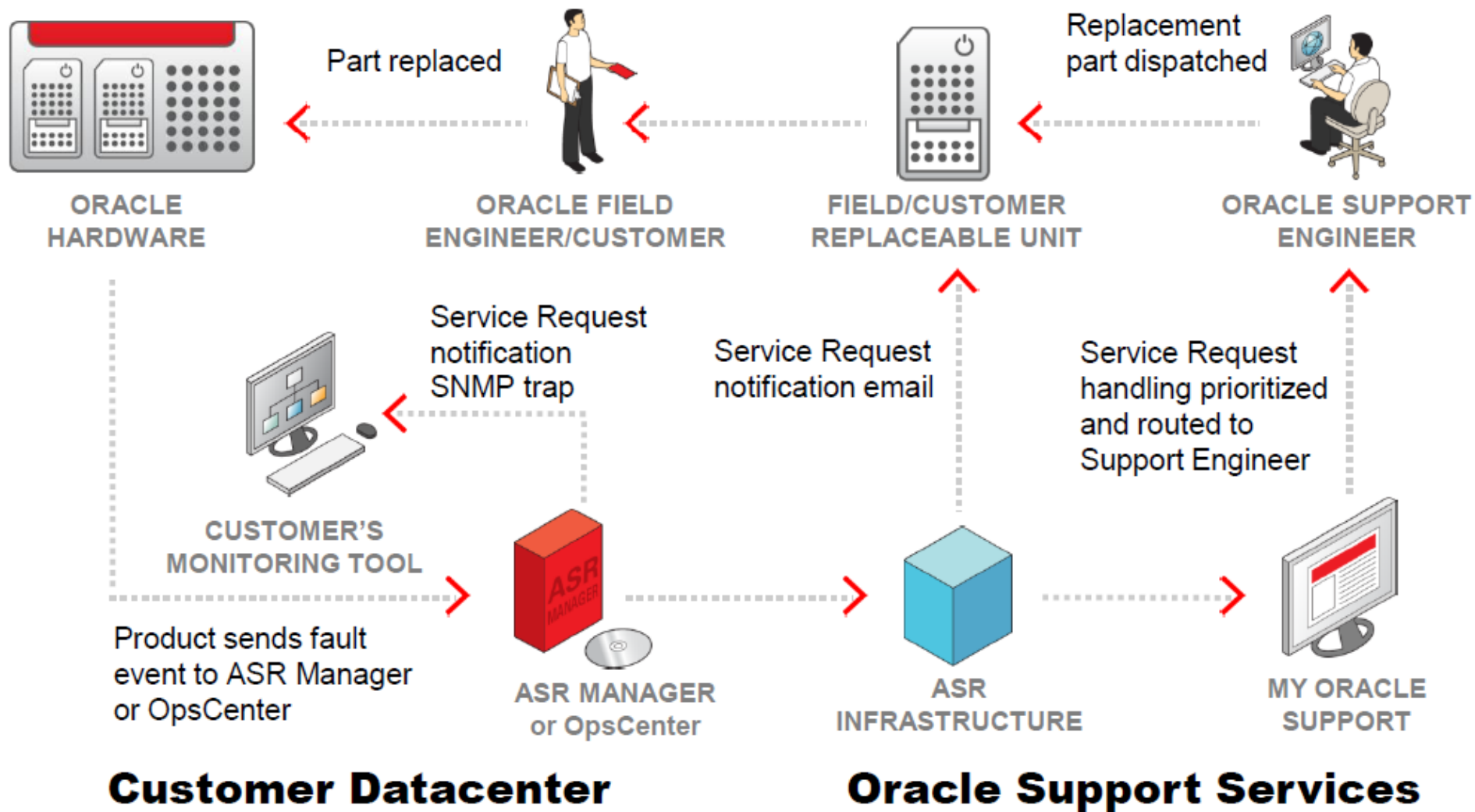
# ***What is ASR?***

*A secure, scalable, customer-installable software solution that automatically generates a Service Request for specific hardware faults.*

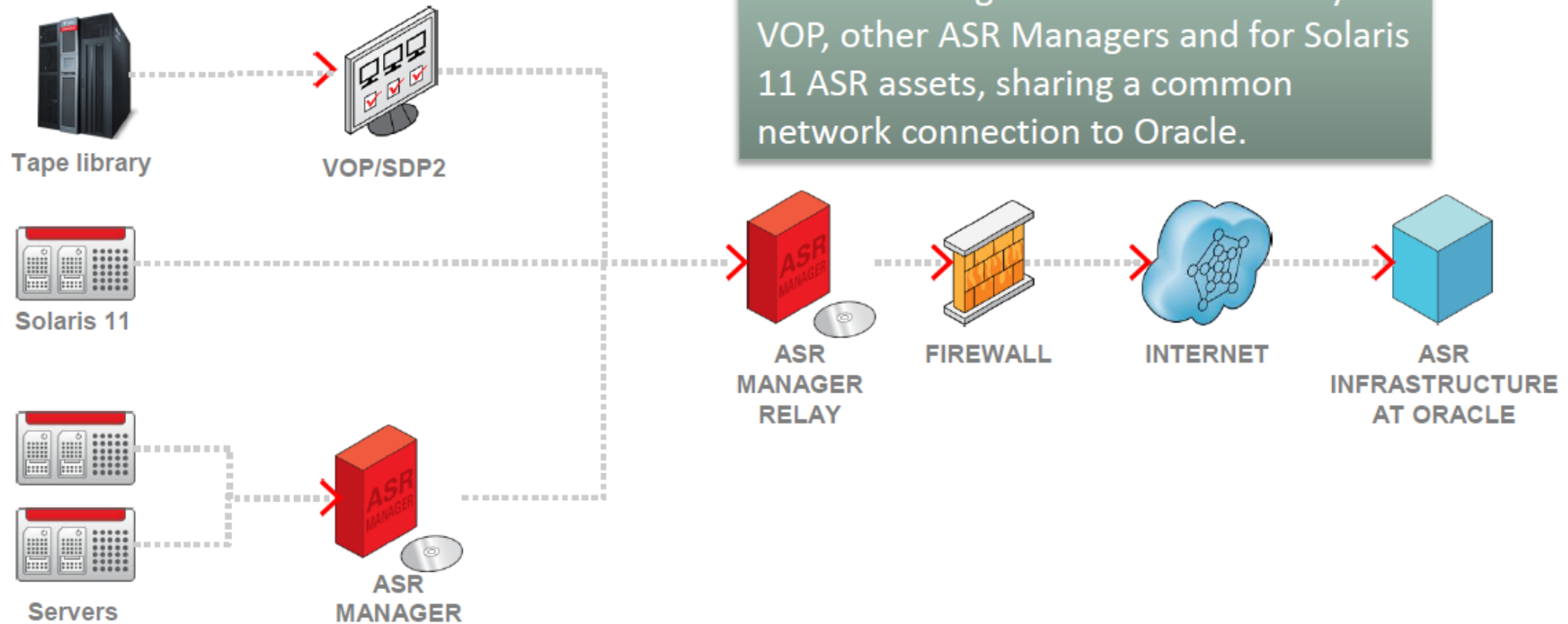




# How does Oracle Auto Service Request (ASR) work?



# The ASR network



An ASR Manager can serve as a relay for VOP, other ASR Managers and for Solaris 11 ASR assets, sharing a common network connection to Oracle.

# Managing ASR Assets

My Oracle Support | Settings: Perso...

ORACLE MY ORACLE SUPPORT

Welcome, Miriam | Contact Us | Sign Out

Dashboard | Knowledge | Service Requests | Patches & Updates | Community | Certifications | Settings | More...

Search Knowledge Base

Settings: Personal and Administration

Last refreshed 2 hours, 51 minutes

Settings

- Personal
  - Personalization
  - Account & Privileges
  - Hot Topics E-Mail
  - Service Request Profiles
  - On Demand Environments
- Administrative
  - Pending ASR Activations
  - Pending User Requests
  - Support IDs & Privileges
  - Audit
  - Manage Users
  - Assets**
  - Manage Deactivated Systems & Targets
  - Custom System Properties

Assets

17130947

Asset Name

Serial Number	Asset Name	Product Name	Host Name	Support Identifier	Contact Name	ASR Status
	Cores2	S7410 Family	cores2-art1		Carl	Active
	Wayne	SFV215,1x1.5,1G...			Wayne	Active
		X4100 M2:2x2220...			Jason	Active
		X4100:2x252 4x1...	ASR-Asset2		Angelo	Active
	Wayne	SFV215,1x1.5,1G...	unknown		Wayne	Active - No Heartbeat
		SE T5220 BASE 6...				Pending
		SE T5120 BASE 6...				Pending
		X4240; 1x2347HE...				Pending
		X2270; 1xE5540,3x...				Pending
		SFV830 4@900 M...				Pending
		2x80R,2x1.2GHz/8...				Pending
		SE T5120 8CR 1.2...				Pending
		FJ T5120 4CR 1.2...	unknown			Pending
		SFV210,1x1GHz,5...				Pending

Show Asset Details for

Create SR

Revert

Serial Number

Contact Name Optional

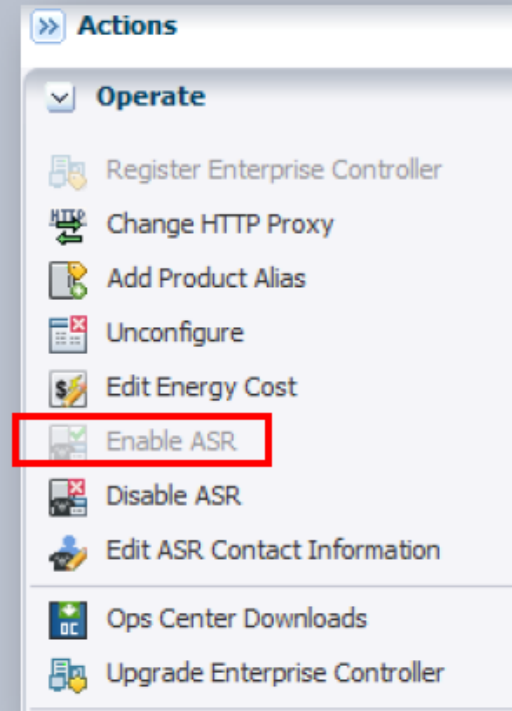
# Enterprise Manager Ops Center and ASR

Easily implement ASR for assets managed by Ops Center

- Enable ASR for all assets managed by Ops Center (with **one click**)
- Fault event telemetry sources automatically configured
- Ops Center assigns ASR Contacts and completes My Oracle Support activation



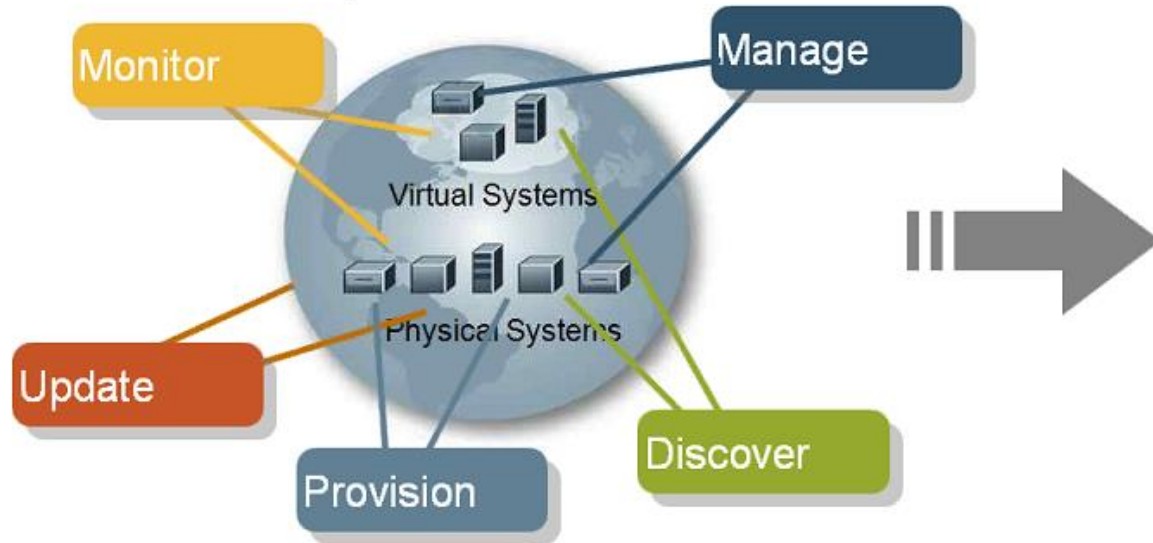
<http://www.oracle.com/technetwork/oem/ops-center>



# Foundation of EM Ops Center

## Integration of Key Lifecycle Management Functions

Point products, scripts,  
manual processes



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ENTERPRISE MANAGER  
OPS CENTER



# Oracle Enterprise Manager Ops Center

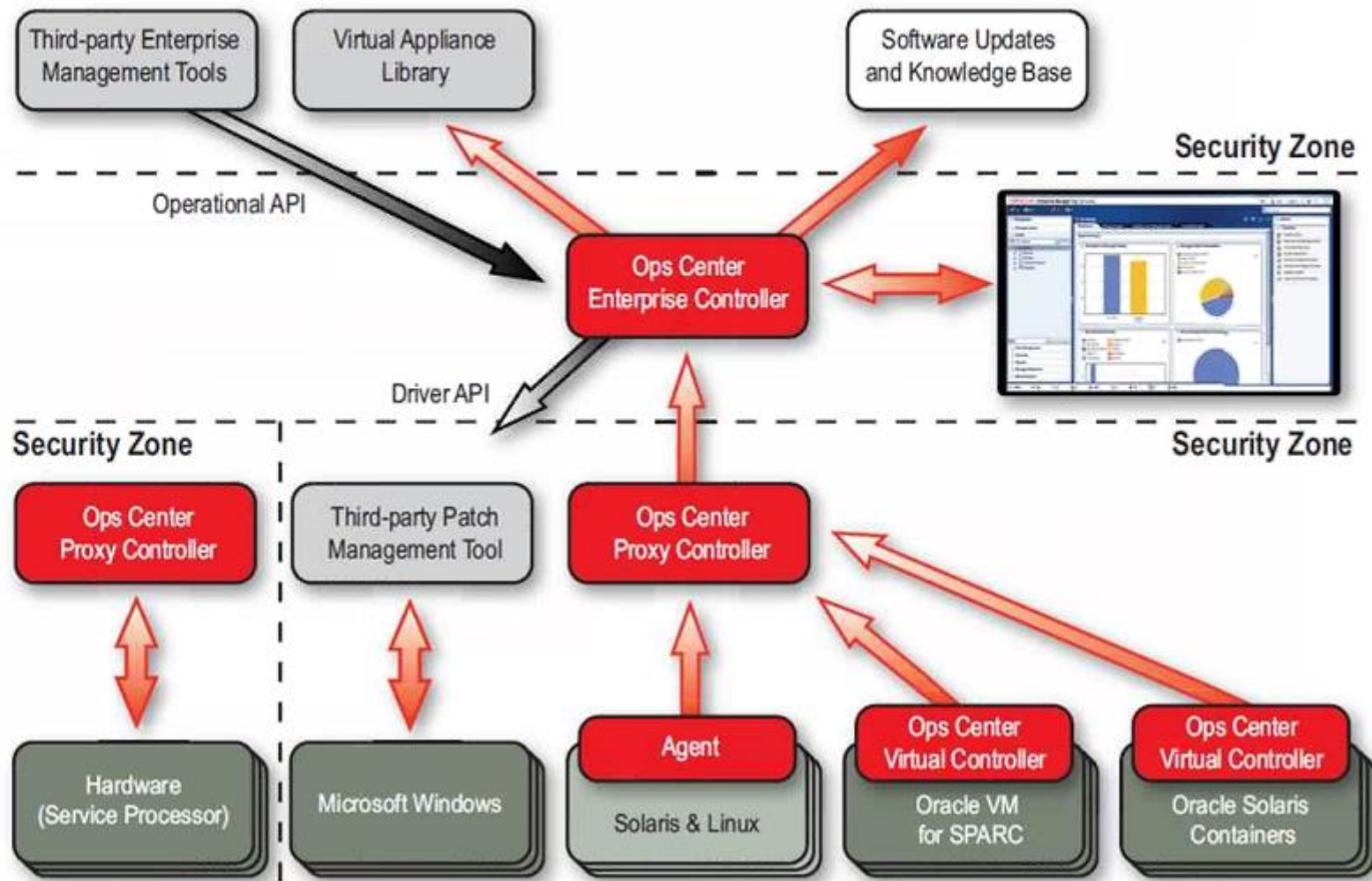
Complete Management for Oracle Hardware, OS & Virtualization



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ENTERPRISE MANAGER  
OPS CENTER **12<sup>C</sup>**

- Datacenter Discovery
- Virtualization Management
  - Oracle VM for x86/SPARC, Zones, Containers
- Configuration Management
  - Patch OS, Update Firmware, Configuration Compliance and Reporting
- Operating System Analytics
- Maintenance
  - Health Checks, Remote Management, Phone Home

# Scalable and Secure Architecture



# Why customers should utilize these tools



- Enables customer to be proactive and reduce unplanned down time
- Faster resolution times for Service Requests



# Oracle Platinum Services



**Certified Configurations on  
Oracle Engineered Systems**

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PREMIER SUPPORT

**NO ADDITIONAL COST**

**ORACLE**

**Fault Monitoring**



**Diagnose & Restore**

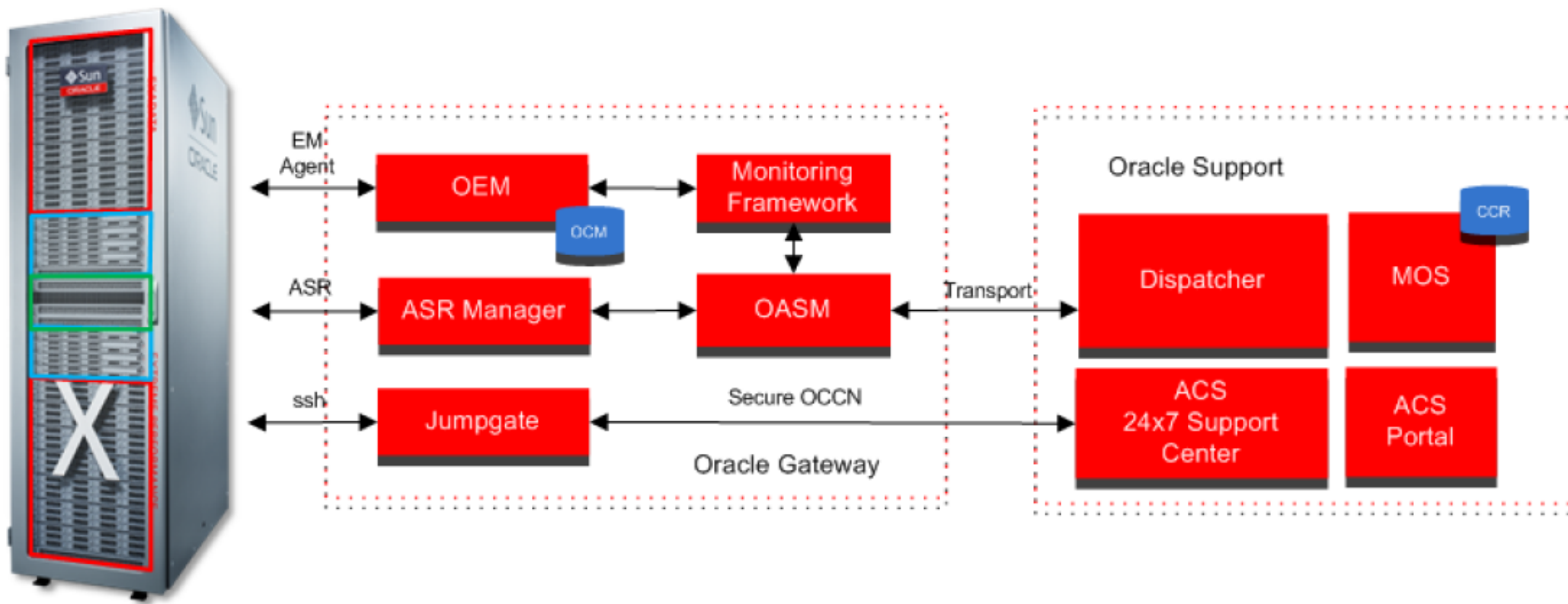


**Update & Patch Deployment**

# Platinum Services – Key Features and Benefits

	Features	Benefits
Fault Monitoring	24x7 Fault monitoring	Fastest identification, notification and restoration of issues
	Event filtering and qualification	Focus on critical events
	Reporting on event management	Full visibility into faults detected by Oracle
	A single global knowledge base, tool set and client portal	Leverage Oracle's deep IP of your system
Respond and Restore	24/7 Response Times: <ul style="list-style-type: none"> <li>• 5-min fault notification</li> <li>• 15-min restoration or escalation to development</li> <li>• 30-min joint debugging</li> </ul>	Highest level of response with the fastest path to issue restore
	Escalation process and hotline with dedicated escalation managers	Expert support staff available 24x7
Update and Patch	Assess and Analyze – produce quarterly patch plan	Proactive identification of best practice configuration for optimal performance
	Plan and Deploy - Proactively plan and deploy recommended patches every quarter across all system & software components	Minimize business disruption and ensure systems performance

# Platinum Architecture Overview



OEM: Oracle Enterprise Manager  
 ASR: Automatic Service Request  
 OASM: Oracle Automated Service Manager  
 ACS: Advanced Customer Services

OCCN: Oracle Continuous Connected Network  
 MOS: My Oracle Support  
 OCM: Oracle Configuration Manager  
 CCR: Customer Configuration Repository



# Hardware and Software

ORACLE®

# Engineered to Work Together