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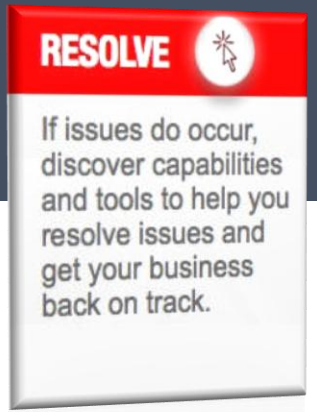

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Troubleshooting Tools & Diagnostics

Resolve your Oracle Service Requests faster using ASR

Wayne A. Seltzer
ASR Product Manager
Oracle Services

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Auto Service Request Session Outline

- What is Auto Service Request?
- Setting up the ASR software
- Configuring your ASR assets
- Activating and managing assets in My Oracle Support
- Testing ASR
- Questions/Answers

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What is Auto Service Request (ASR)?

- ASR resolves problems faster by automatically creating Service Requests when specific hardware faults occur on qualified server, storage and engineered systems products.
- Feature of Oracle Premier Support for Systems and Hardware Warranty plans.
- No additional cost
- Details: http://oracle.com/asr

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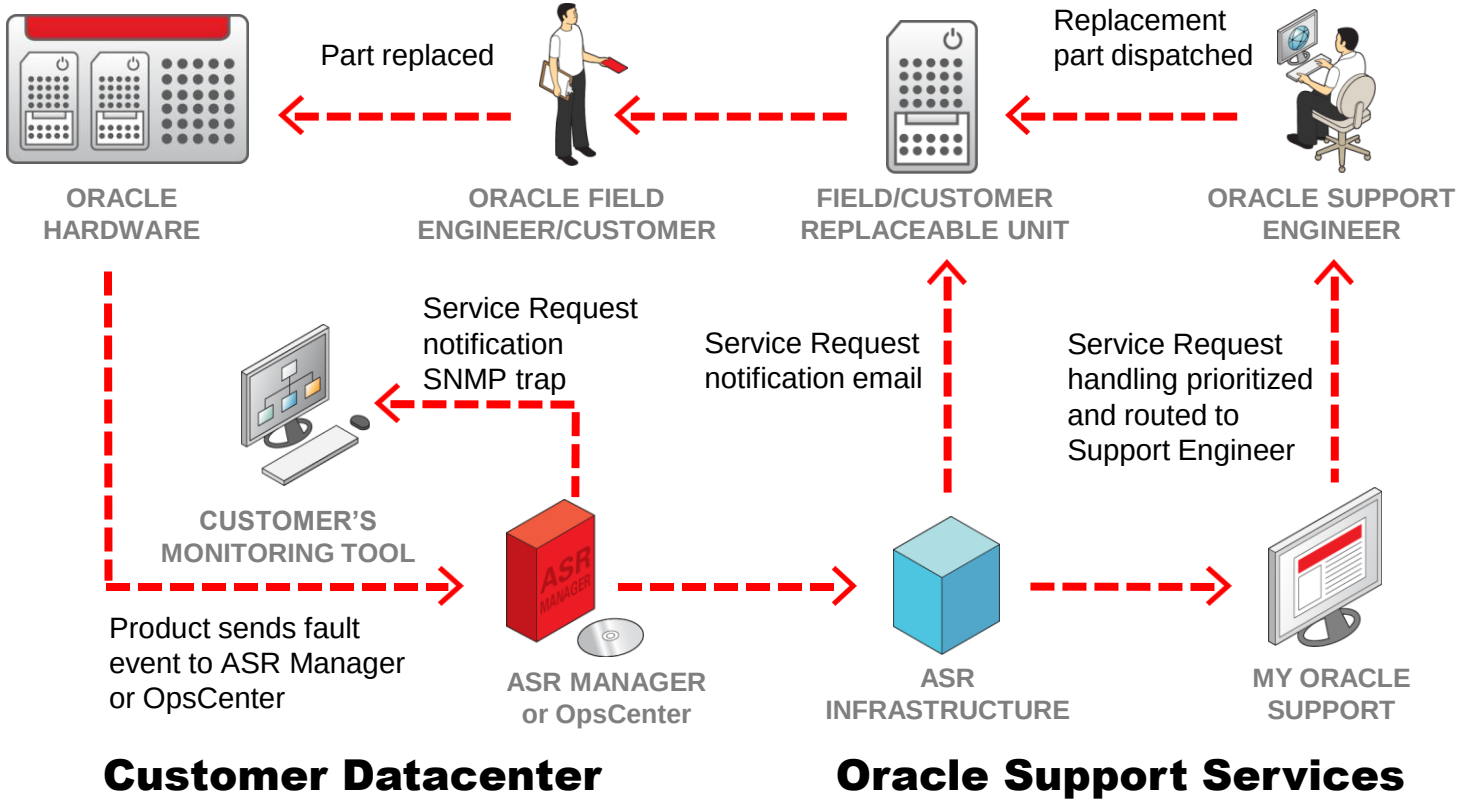
How does ASR work?



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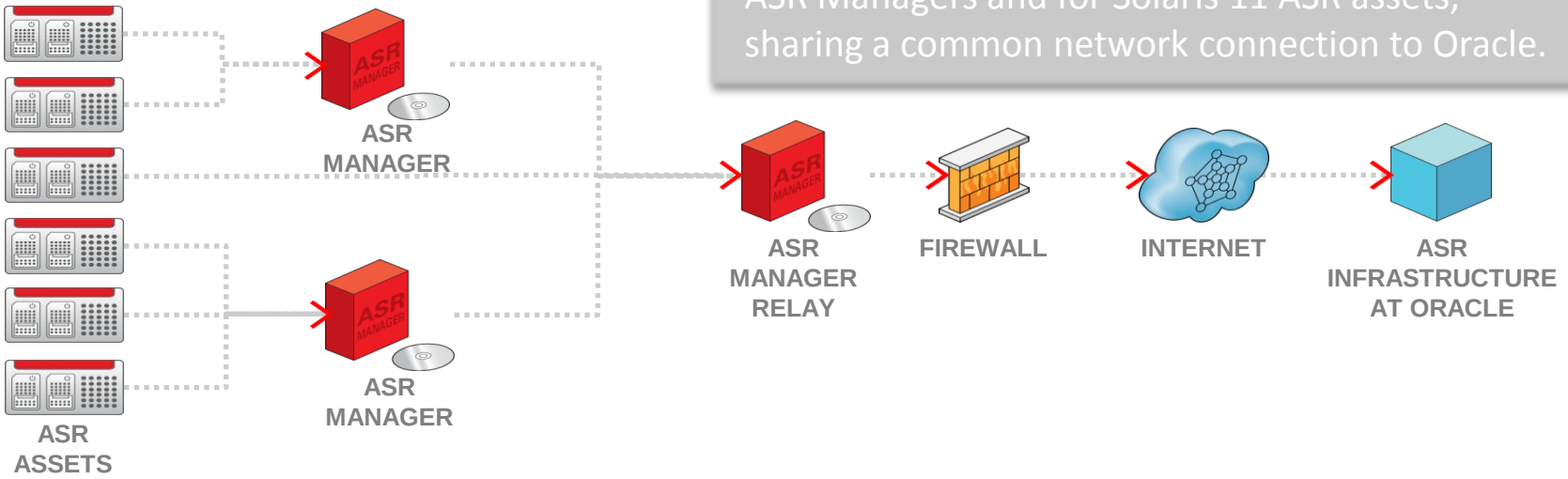
ASR Manager Relay

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



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ASR Fault Coverage

Faults covered by ASR*	Faults not covered by ASR
Fault events that require support services action from Oracle: ✓ System controller (SC) faults ✓ CPU, memory, hard drives, power supplies, center plane, expander board, system boards, I/O boards, fan trays * Fault coverage is system-dependent	Fault events that do not require Support Services action from Oracle: ✓ CPU utilization, file system full, file system unmounted, proactive recommendations for firmware, patches… ✓ Operating system and other software failures ✓ Fault events that don't have appropriate event telemetry

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ASR Manager Security and Privacy

- Minimal data collected
  - System identity – serial number, hostname, platform
  - No IP addresses
  - Fault symptoms
  - Root cause diagnostics (e.g., suspect FRU list)
- Aggregation layer allows you to audit and control Auto Service Request behavior
- Secure, outbound only communications
  - Leverages SSL for transport layer encryption
  - Message signing via public/private key algorithm

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ASR Installation and Configuration

- Servers and Engineered Systems (Exadata, Exalogic, Exalytics, ODA)
  - ASR Manager
    - Typically one ASR Manager per datacenter
  - Or, Enterprise Manager OpsCenter
- ZFS Storage Appliance products
  - “Phone Home” configuration part of web-based management interface, built into the product
- StorageTek Tape Libraries and Disk products
  - SDP (Service Delivery Platform)
  - Installed by Oracle field engineer
- Pillar Axiom Storage products
  - “Call-Home” enabled by Oracle field engineer
- Solaris 11
  - “asr-notify” part of Solaris 11 installation
  - Connects directly to Oracle or via ASR Manager Relay

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ASR Manager Installation and Asset Activation

ASR Manager host(s):

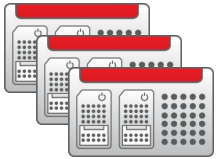
- Solaris or Oracle Linux
- Direct or proxied Internet connection
- Can support many assets
- Install two small packages
- Run “asr register”

Server assets:

- Configure iLOM to send SNMP traps to ASR Manager
- Run “asr activate_asset”

Engineered Systems:

- Use system-provided ASR configuration scripts



My Oracle Support: Enter Contacts and approve ASR activation

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ZFS Storage Appliance ASR Setup

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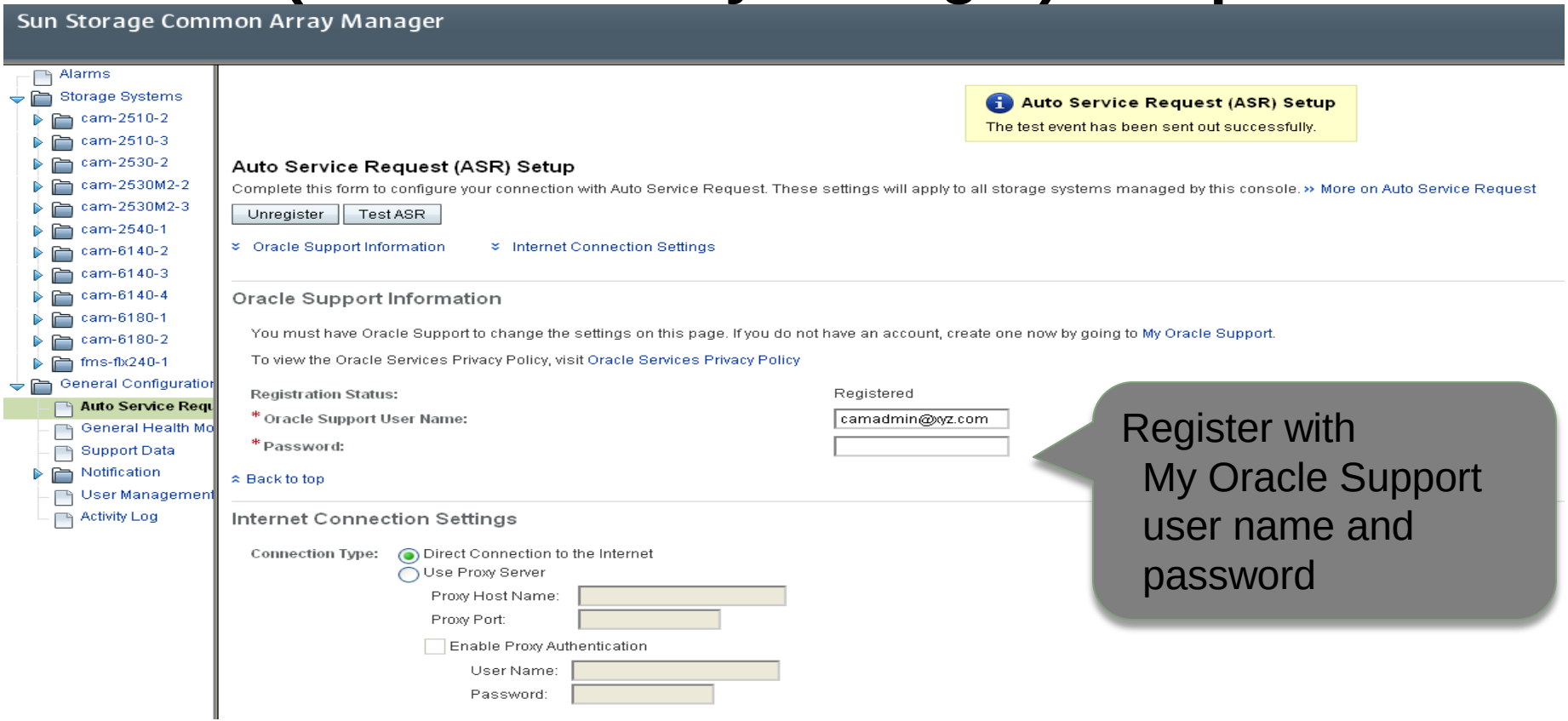
CAM (Common Array Manager) setup



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Exadata fault telemetry sources

X4170 / X4800 database server iLOMs

X4270 / X4275 storage server iLOMs

Exadata storage software

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Managing ASR Assets using My Oracle Support

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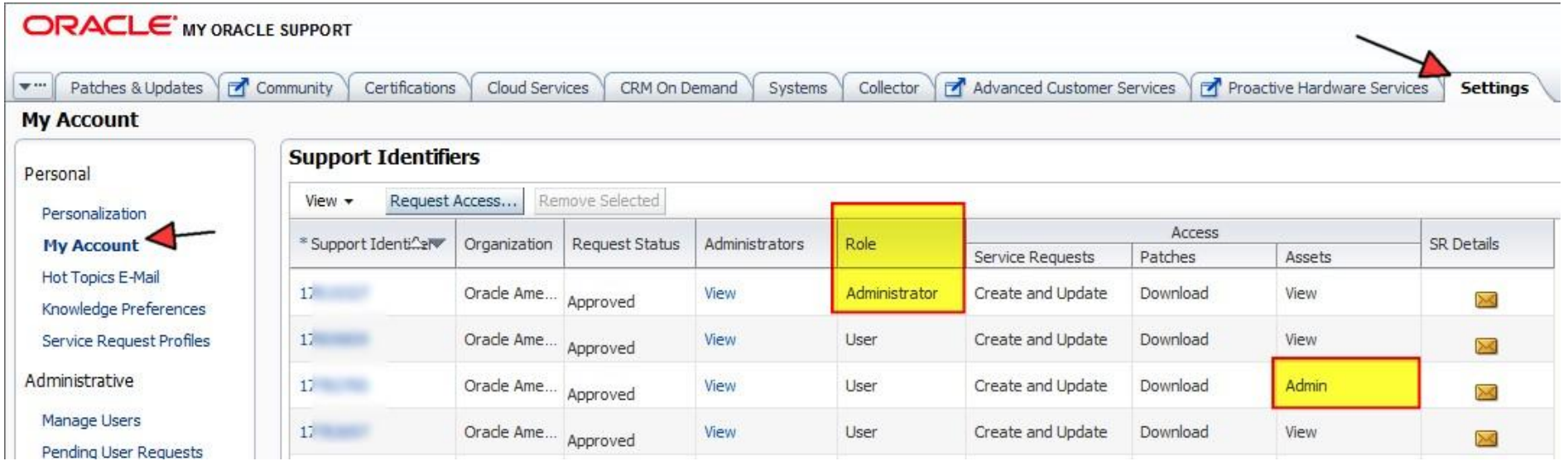
Verifying Support Identifier access



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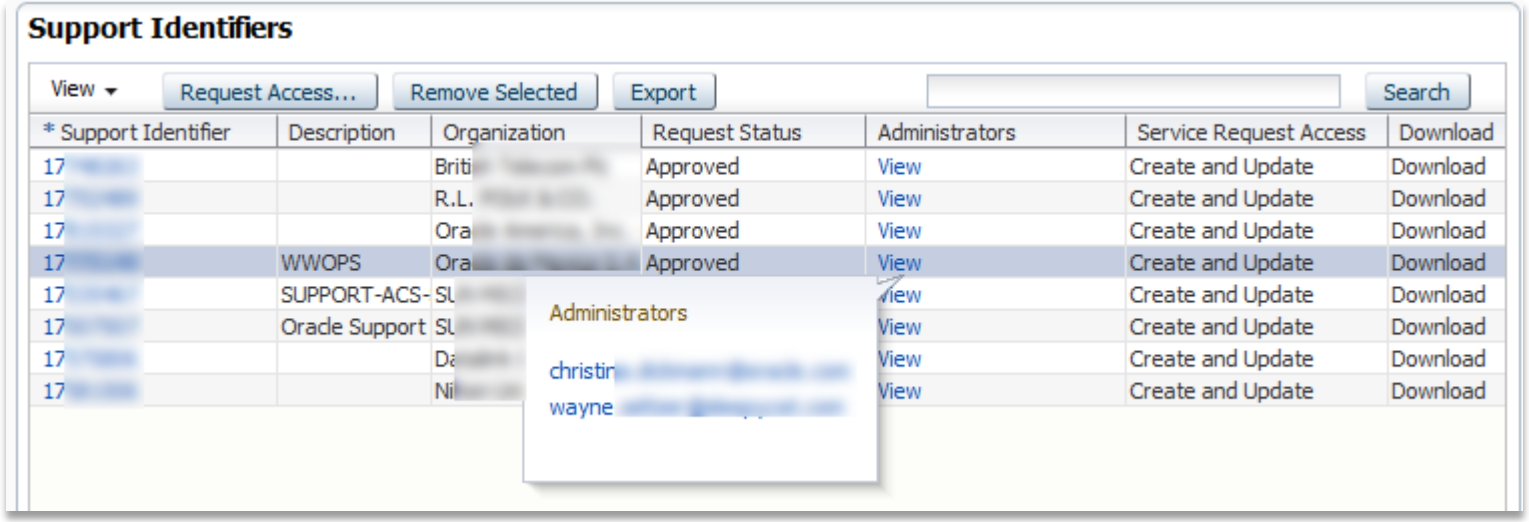
Contacting the Administrator



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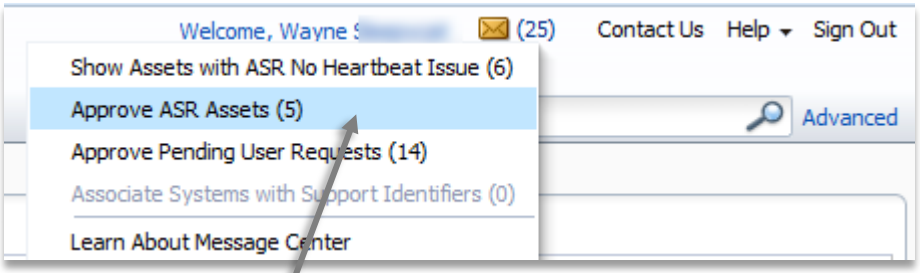
Approving ASR Activations



Message Center indicates assets waiting for ASR activation approval

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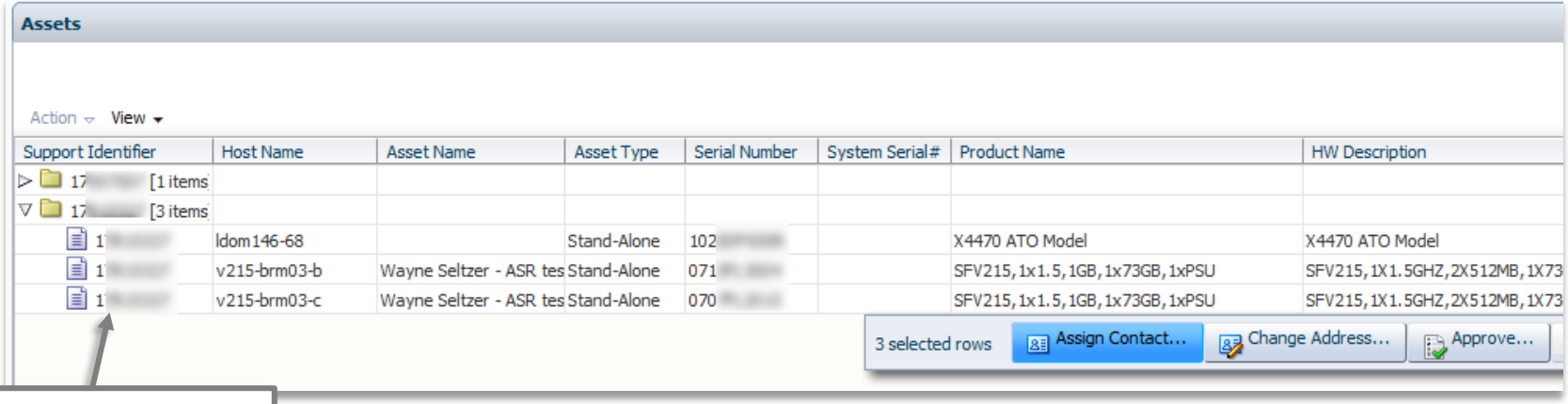
Managing Multiple Assets



Select one or more assets

Perform operations on selected assets

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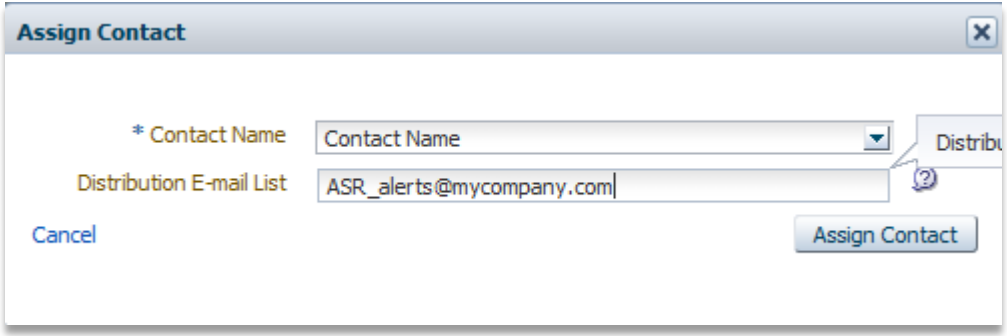
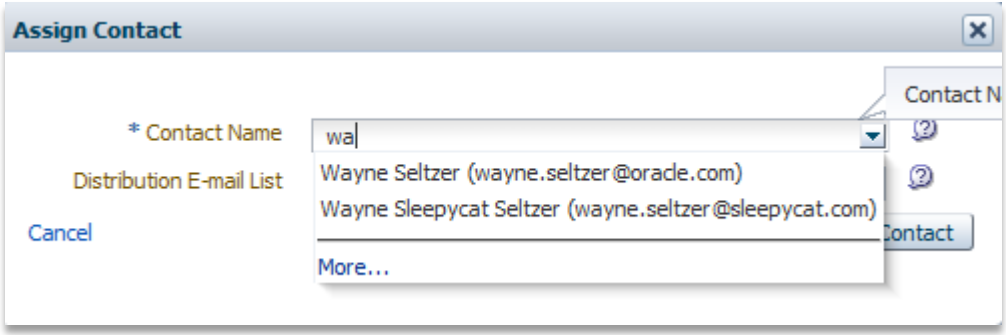
Assign Contact



Assign a Contact and
Option Distribution E-mail list



Contacts must have access to the asset's Support Identifier with "View Asset" and "Create Service Request" privileges

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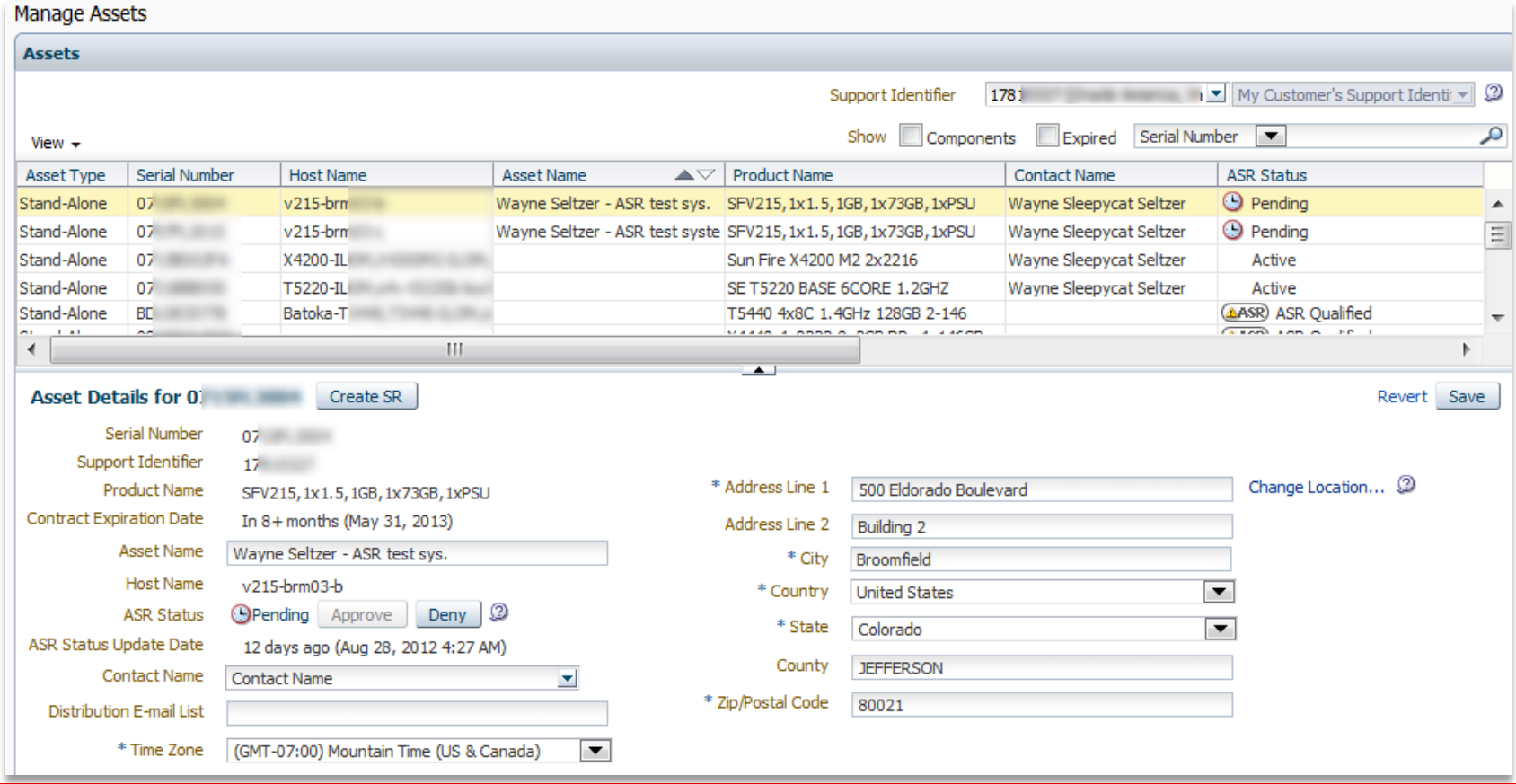
Asset Details and ASR Status information



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ASR Status and Action Required

Status	Description	Action required
Active	Indicates the asset is sending in alerts and SRs are being created.	No additional action required
Pending	Awaiting Activation and additional action required.	Associate Contact to asset to activate.
Active – No Heartbeat	Oracle has not heard from the system for 50 hours	Validate connectivity to Oracle
Active – Contract Pending	The asset is active but requires a support contract to enable ASR.	Renew support contract
Inactive	Asset was ASR active but was turned off	Reactive if asset needs to report issues.

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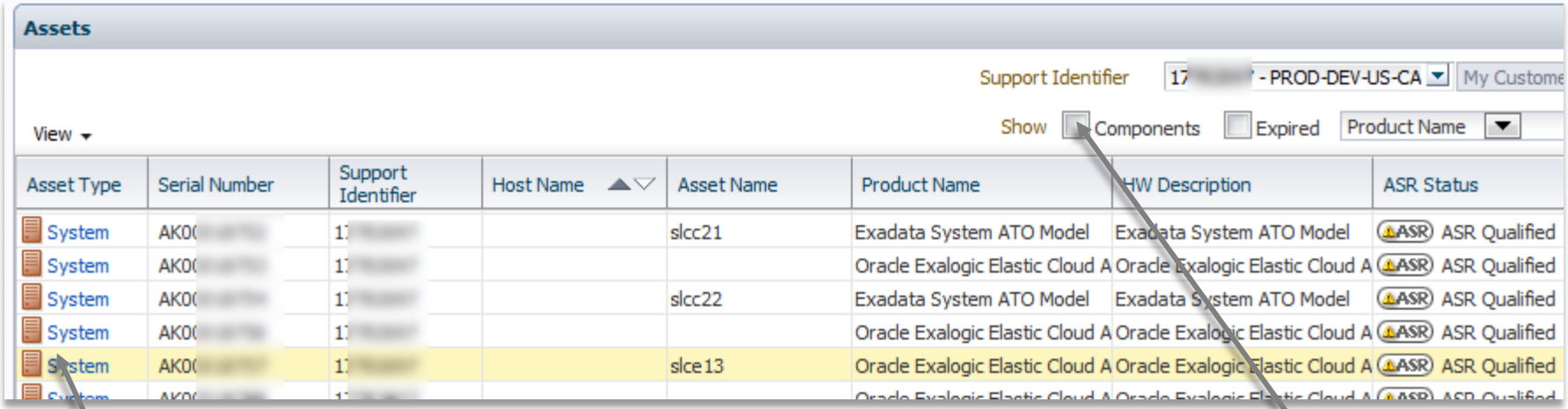
Engineered Systems in My Oracle Support



Engineered Systems display top-level assets only. Click “System” link to display all the component assets of the System on one screen

Check “Show Components” to show top-level **and** component assets.

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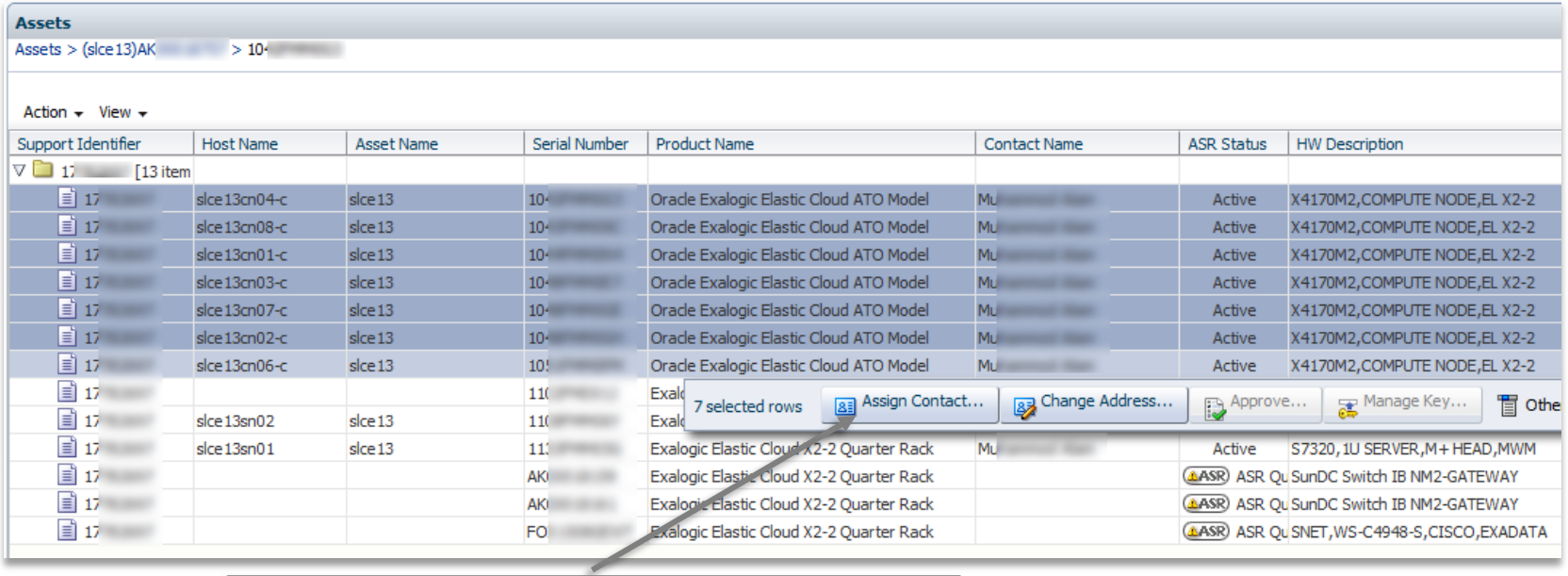
Engineered Systems Asset Management



Select multiple components of an Engineered System and perform operations on all of them at one time

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Testing your ASR implementation

- Sending a test event:
  - Server and Exadata products:
    - Use the ASR Manager command:
      - `asr send_test -h <hostname>`
    - Some products can send tests from the iLOM user interface
      - See the product-specific documentation
  - CAM – Common Array Manager
    - Use the “Test ASR” button:

- Test response:
  - ASR will send responses to the email address used to register the ASR Manager or CAM software.

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ASR test email response - failed

Subject: Oracle ASR: Warning - Test Service Request failed

From: no.reply@oracle.com

Serial#: 12345678

Oracle Auto Service Request (ASR) was unable to verify Service Request because:

Pending activation approval in My Oracle Support

The Oracle Auto Service Request documentation can be accessed on http://oracle.com/asr.
Please use My Oracle Support https://support.oracle.com for assistance.

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ASR test email response - success

```
Subject: Oracle ASR: *Test* Service Request
From: no.reply@oracle.com

  Serial#: 12345678

  Service Request test-create was successful.

  The Oracle Auto Service Request documentation can be
  accessed on http://oracle.com/asr.
  Please use My Oracle Support https://support.oracle.com
  for assistance.
```


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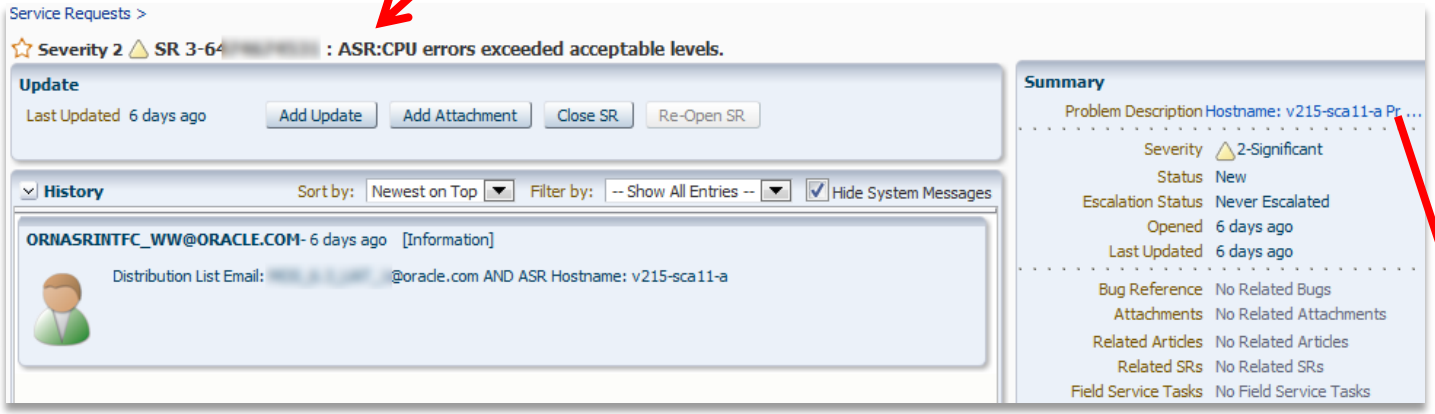
ASR Service Request in My Oracle Support



Problem Description

Hostname: v215-sca11-a
Product Type: SUNW,SUN-FIRE-V215 SPARC SYSTEM
Summary:ASR:CPU errors exceeded acceptable levels.

The number of errors associated with a CPU has exceeded acceptable levels.
NOTE: Please include the asset's Distribution Email list,
MOS_6.3_UAT_1@oracle.com
in all customer communications regarding this SR.

Alerts received in last 30 days (limit 10)
Date Summary SR
03 Sep 2012 13:18:56 ASR:CPU errors exceeded acceptable lev 3-6474674521

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How to request ASR installation and configuration support

- If you need assistance with installing and configuring ASR on any system, log a Hardware Service Request:
  - Step 1:
    - Select Hardware SR type
    - Enter a serial number for any hardware asset entitled to ASR
  - Step 2:
    - Problem Type:
      “**My – Auto Service Request configuration and installation issue**”

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Summary

- Use My Oracle Support to manage all ASR assets:
  - Servers, Storage, Tape, and Engineered Systems (Exadata, etc.)
- To manage assets you need to have the Administrator role and view assets.
- “Pending ASR Activations” shows which assets require additional information to active.
- “Assets” displays the ASR activation status.
  - “Active”
  - “Active – No heartbeat”
  - “Pending”
  - “Deactivated”

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ASR and Support Provider Partners

- Partner's Responsibilities for ASR Assets:
  - The Partner manages their Customers' ASR assets using My Oracle Support.
    - The Customer **cannot** directly manage ASR assets
- ASR Contact Assets
  - The Partner must designate a My Oracle Support account in the Partner's organization who will be the Contact for their Customer's ASR assets.
  - ASR email notifications are sent to the Contact.
- Support Identifiers (SIs)
  - The Partner's My Oracle Support account(s) must have administrator privileges on the Partner SIs associated with their Customers' SIs.

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ASR and Partner Service Requests

- When a fault event occurs on an indirect customer's asset, ASR creates a DRAFT Service Request.
- The Partner is notified that the draft Service Request has been created via email to the asset's Contact, and the optional distribution email list.
- The Customer is **not** directly notified about the fault event and the draft Service Request.
- It is the Partner's responsibility to determine the service response.
- If the Partner requires assistance from Oracle Support, they use My Oracle Support to promote the draft Service Request to a Technical Service Request.

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Ready to Connect?

- http://oracle.com/asr
  - Review the documentation
    - User Guide
    - Quick Start Guides
    - White Paper
    - Products qualified for ASR
  - Download the ASR Manager, or
  - Enterprise Manager OpsCenter

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Additional Resources

- My Oracle Support resources
  - http://support.oracle.com
  - Search knowledge for “ASR” or ID 1402646.1
  - Oracle Communities:
    - http://communities.oracle.com
      - “Auto Service Request”

Oracle employees: http://asr.oraclecorp.com/

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My Oracle Support Community and ASR

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Q&A

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DISCOVER more about Support Best Practices

http://www.oracle.com/us/support/best-practices/overview/index.html

ACT Get Proactive

Access best practices, capabilities, and tools available for your products by visiting the Get Proactive portfolio product pages at My Oracle Support (Article ID 432.1)

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