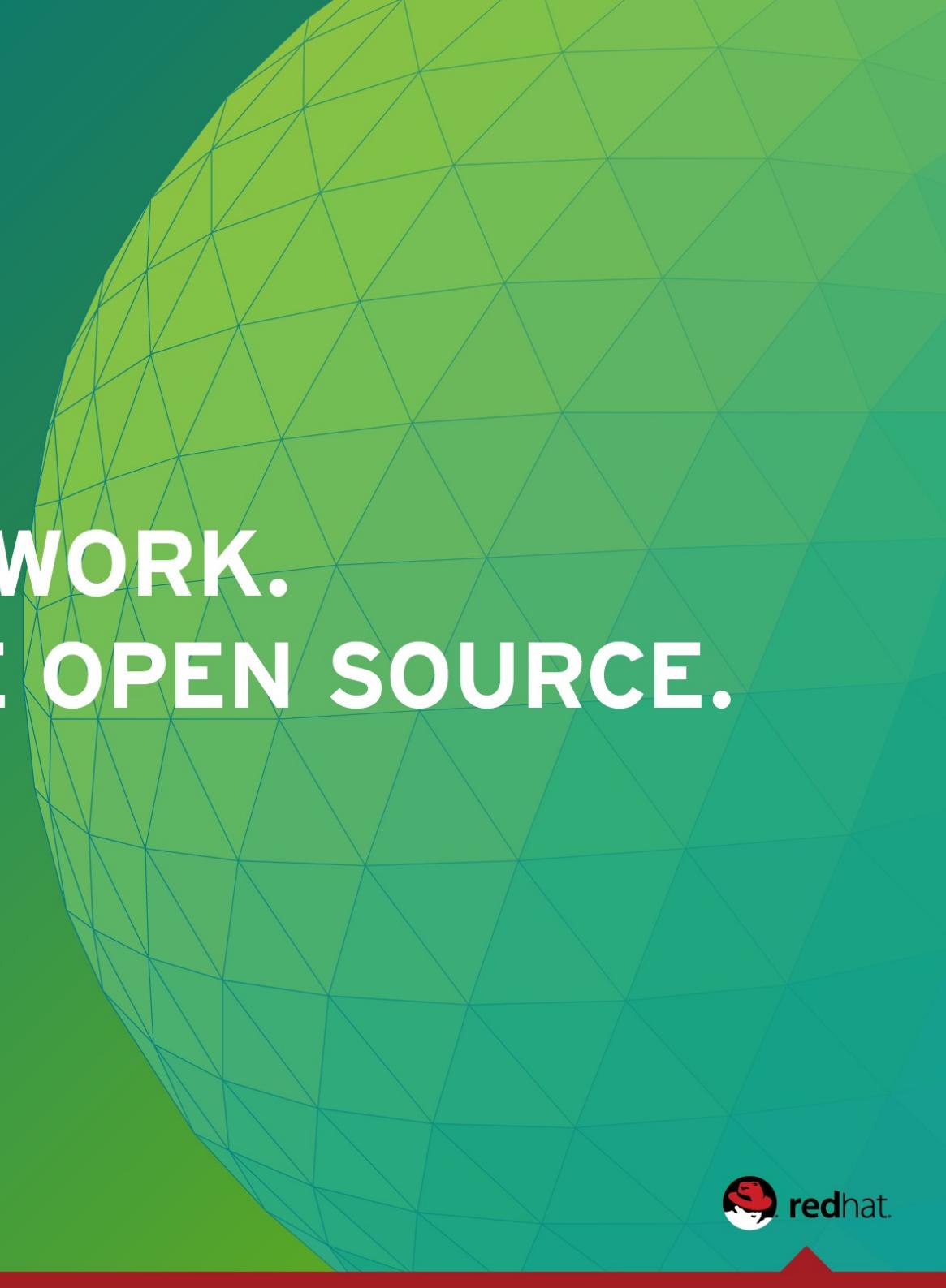


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June 11-14, 2013  
Boston, MA





# **Red Hat Subscription Tools: Easier Management & Faster Issue Resolution**

Keith Robertson: Senior Software Engineer, Red Hat

Bryan Kearney: Manager, Software Engineering, Red Hat

Thursday, June 13, 2013



# Subscription Asset Manager

On Premise Subscription Management Tooling

# Subscription Asset Manager

**SAM is an on-premise subscription management tool for customers included with your RHEL Subscription.**

# Main Feature

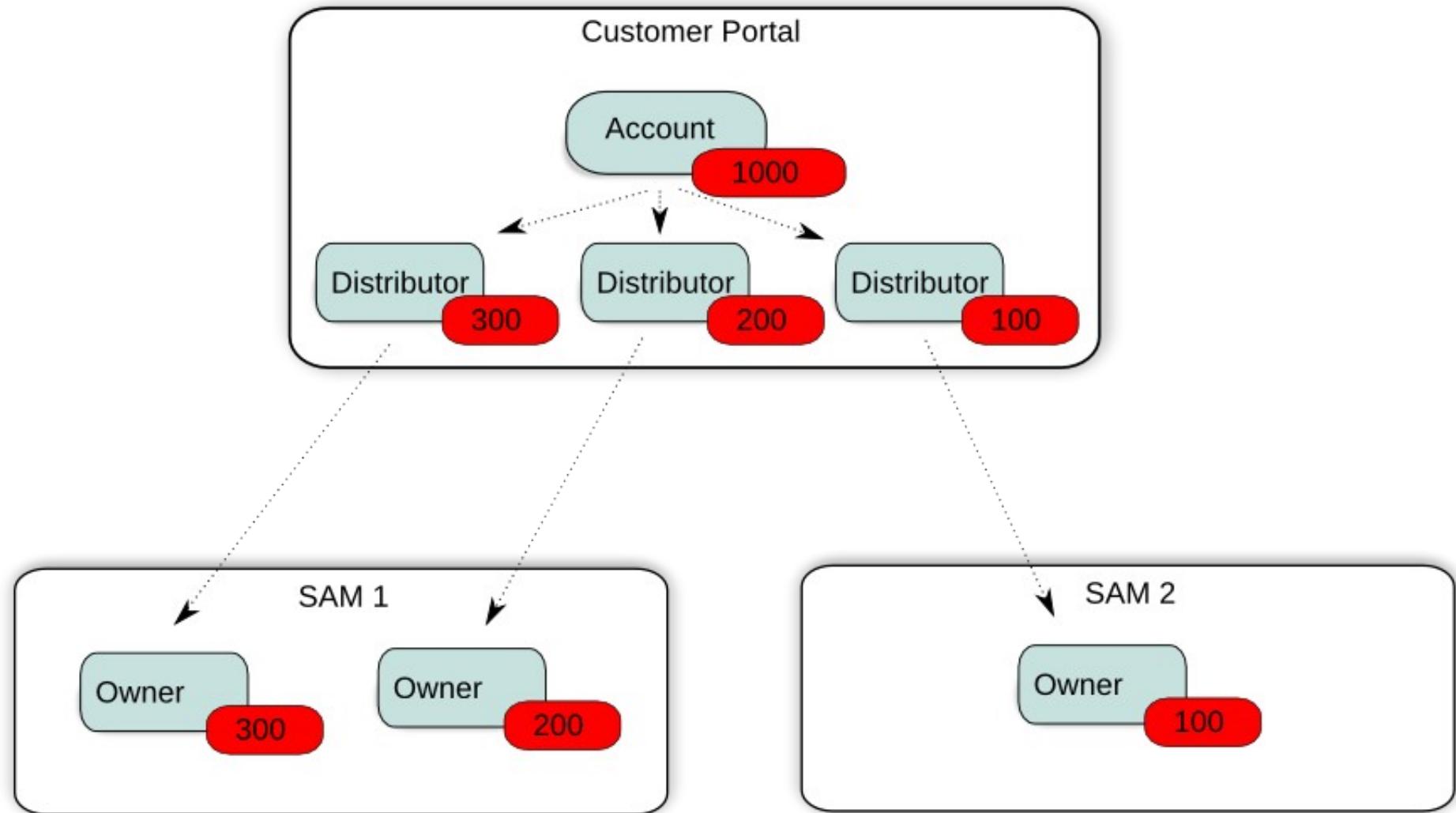
**Track your subscription  
from customer portal  
to machine**

# Did you go to the Satellite 6 Talk?

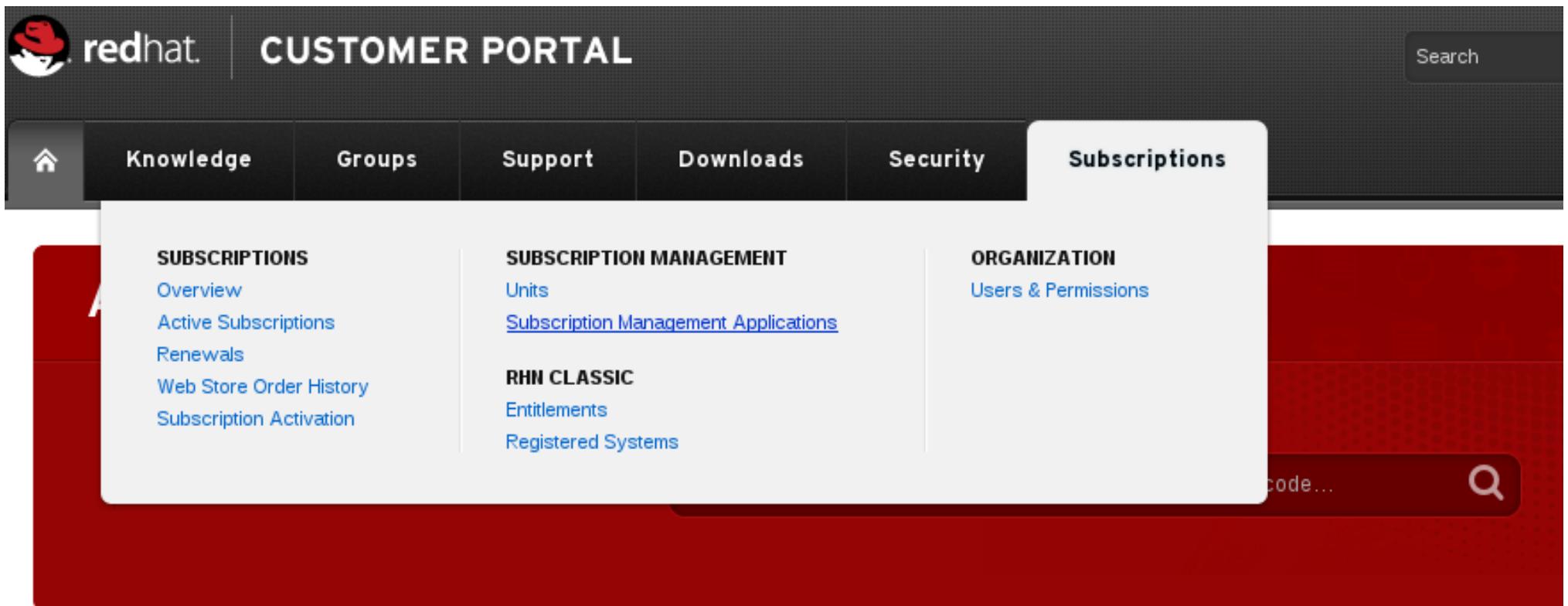
## All the Subscription Features are in Satellite 6

- + Content Management
  - + Puppet
  - + Provisioning

# Exporting and Multi Tenancy



# Creating the Manifest – access.redhat.com



The screenshot shows the Red Hat Customer Portal interface. At the top, there is a dark header with the Red Hat logo and the text "CUSTOMER PORTAL". On the right side of the header is a search bar. Below the header is a navigation bar with several tabs: "Home" (which is the active tab, indicated by a white background), "Knowledge", "Groups", "Support", "Downloads", "Security", and "Subscriptions". The "Subscriptions" tab is also highlighted with a white background. The main content area is divided into three columns. The left column is titled "SUBSCRIPTIONS" and contains links to "Overview", "Active Subscriptions", "Renewals", "Web Store Order History", and "Subscription Activation". The middle column is titled "SUBSCRIPTION MANAGEMENT" and contains links to "Units" and "Subscription Management Applications". The right column is titled "ORGANIZATION" and contains a link to "Users & Permissions". At the bottom right of the content area is a search bar with a placeholder "Search code..." and a magnifying glass icon.

**SUBSCRIPTIONS**

- Overview
- Active Subscriptions
- Renewals
- Web Store Order History
- Subscription Activation

**SUBSCRIPTION MANAGEMENT**

- Units
- [Subscription Management Applications](#)

**RHN CLASSIC**

- Entitlements
- Registered Systems

**ORGANIZATION**

- [Users & Permissions](#)

Search code... 

# access.redhat.com

The screenshot shows the Red Hat Customer Portal interface. At the top, there is a navigation bar with links for Home, Knowledge, Groups, Support, Downloads, Security, and Subscriptions. The Subscriptions link is highlighted. Below the navigation bar, a breadcrumb trail shows the path: Subscriptions > Subscription Management > Subscription Management Applications > BKTest. The main content area is titled "BKTest". It displays the following information:

Type: Subscription Asset Manager Organization  
UUID: 930dfa74-195e-4c92-b322-9ece1420721b

Below this, there are two tabs: "Attached Subscriptions" (selected) and "Identity Certificate". On the right side of the main content area, there are two buttons: "Download manifest" and "Delete this subscription management application".

At the bottom of the main content area, there is a table showing attached subscriptions:

	Subscription Name	Contract Number	Quantity Attached	End Date
<input type="checkbox"/>	Red Hat Employee Subscription	2595446	10	12/31/2021
<input type="checkbox"/>	60 Day Self-Supported Red Hat OpenStack Tech Preview	10131488	1	06/04/2013

Below the table, a message says "Displaying attached subscriptions 1-2 of 2". To the right of the table, there are navigation icons for the table.

At the bottom left, there is a button labeled "Remove Selected".

# **RED HAT®**

## Subscription Asset Manager



Faster Issue Resolution through  
Integrated Red Hat Subscription Services

# Integrated Red Hat Subscription Services

Subscription benefits and services become an integrated part of the product experience – creating added value and a differentiated product experience

- Benefits
  - Smarter products with automated diagnostic services for dynamic real-time engagement
  - Proactive notifications when a “suspect” or “known error” condition is found
  - Quicker issue resolution
  - User friendly dashboard with visual cues
- Results
  - A seamless and differentiated Red Hat subscriber experience that improves product satisfaction and user adoption, and increases consumption of subscription benefits

# In-product support tool: Red Hat Access

- Red Hat Access - automated functionality that enables you to get quicker help, answers, and proactive services using exclusive Red Hat knowledge, resources, and functionality
  - Red Hat Access: Search - Conveniently access exclusive Red Hat knowledge and solutions
  - Red Hat Access: Support - Create, manage, and update your Red Hat support cases
  - Red Hat Access: Diagnose - Access exclusive on-line diagnostic services to easily perform problem determination on error codes, stacktraces, and logs
  - Red Hat Access: Analyze - Automate log file analysis using Red Hat on-line diagnostic services

# Red Hat Access embedded in RHEV

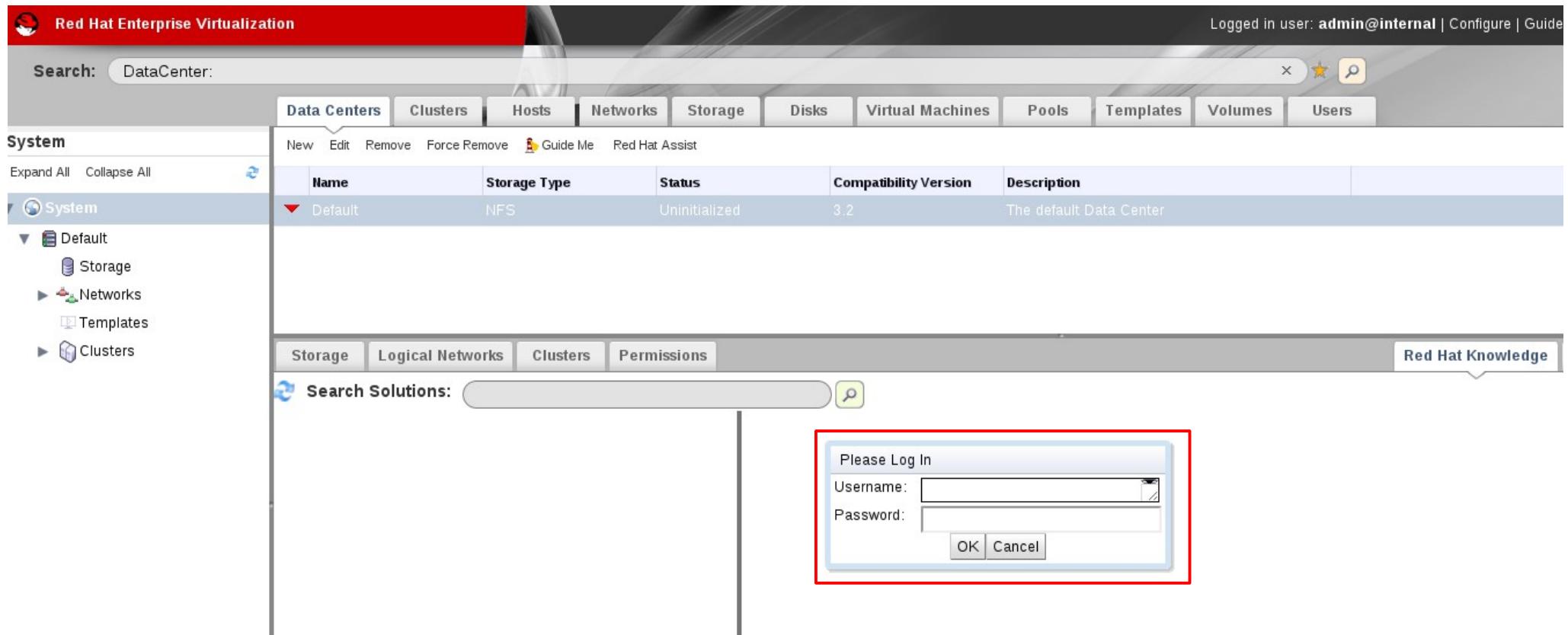
- Features
  - Seamless integration
  - Easier to connect and engage
  - Diagnostic services
  - Zero configuration
- Release
  - 3.2.0.z

# Red Hat Access

## Exclusive content

### Red Hat Access embedded in RHEV

- Use Red Hat Customer Portal ID access services.



The screenshot shows the Red Hat Enterprise Virtualization (RHEV) management interface. The top navigation bar includes the Red Hat logo, the title "Red Hat Enterprise Virtualization", and a user session indicator "Logged in user: admin@internal | Configure | Guide". The main menu bar contains tabs for Data Centers, Clusters, Hosts, Networks, Storage, Disks, Virtual Machines, Pools, Templates, Volumes, and Users. The "Data Centers" tab is selected. On the left, a sidebar titled "System" shows a tree structure with "Default" expanded, listing Storage, Networks, Templates, and Clusters. The main content area displays a table for Data Centers with one row: "Default" (Storage Type: NFS, Status: Uninitialized, Compatibility Version: 3.2, Description: The default Data Center). Below the table are tabs for Storage, Logical Networks, Clusters, and Permissions. A search bar for "Search Solutions:" is present. In the bottom right corner, a modal dialog box is displayed with the title "Please Log In", containing fields for "Username" and "Password", and "OK" and "Cancel" buttons. This dialog is highlighted with a red box.

# Red Hat Access

## Advanced subscription services through customer menus

### Red Hat Access embedded in RHEV

The screenshot shows the Red Hat Enterprise Virtualization (RHEV) management interface. At the top, there is a red header bar with the text "Red Hat Enterprise Virtualization" and a "Feedback" link. Below the header, a search bar contains the text "DataCenter:". The main navigation bar includes tabs for "Data Centers", "Clusters", "Hosts", "Networks", "Storage", "Disks", "Virtual Machines", "Pools", "Templates", and "Volumes".

On the left, a sidebar titled "System" shows a tree structure with "Default" selected. Under "Default", there are nodes for "Storage", "Networks", "Templates", and "Clusters".

The main content area displays a table for "Data Centers". The table has columns for "Name", "Storage Type", "Status", "Compatibility Version", and "Description". A single row is shown for "Default", which has "NFS" as its storage type, is in an "Uninitialized" status, and is at compatibility version 3.2. The "Description" is "The default Data Center".

A context menu is open over the "Default" data center row. The menu items are: "New", "Edit", "Remove", "Force Remove", "Guide Me", "Red Hat Access", "Re-Initialize Data Center", and "Red Hat Access". The "Red Hat Access" item is highlighted with a red box.

At the bottom of the interface, there is a "Search Solutions" bar with the query "rhev data center failure" and a "Red Hat Knowledge" section. The knowledge section has a title "RHEV SPM fails to start due to corrupted file system" and a "Issue:" section describing a problem with RHEV-M (2.1) and its Storage Pool Manager (SPM) when adding a second iSCSI target.

# Red Hat Access: Search

## Instant access to knowledge

### Red Hat Access embedded in RHEV

Storage Logical Networks Clusters Permissions Red Hat Knowledge Red Hat Documentation Events

Search Solutions: Data Center 'Non Responsive'

Logged in as: rhn-support-sshumak

Invalid status on Data Center. setting status to Non-Responsive

After restarting hypervisor data storage became inaccessible

Hosts that were moved to non-operational state do not return automatically to up state

A Data Center in a RHEV 3.0 environment is in a 'Non Responsive' state and Virtual Machines cannot be started.

RHEV storage became unavailable after NFS storage filled up

How to invoke HA-Singleton MBean in a cluster in JBoss EAP 5.x

RHEV: The only host on the cluster is non-operation and cannot do "Confirm 'Host has been Rebooted'"

Are there any licensing and technical limitations for running JBoss Enterprise SOA-P on Amazon Virtual Private Cloud ?

Data Center and Hypervisor becomes non-responsive after losing access to iso storage domain on RHEV 2.2

While trying to add disks to the virtual

**A Data Center in a RHEV 3.0 environment is in a 'Non Responsive' state and Virtual Machines cannot be started.**

**Issue:**

After a network-related issue, a Data Center remained in a 'Non Responsive' state. All Storage Domains, Hosts and active VMs were in an 'Up' state and appeared to be functioning fine. However, no new Virtual Machines could be started or cloned, etc.

**Environment:**

- Red Hat Enterprise Virtualization 3.0.5
- Red Hat Enterprise Linux 6.3 hosts.
- VDSM 4.9.113.1.

**Resolution:**

- 1) All of the Virtual Machines running on the host that was the SPM were manually migrated to another host.
- 2) The host that was the SPM was placed into maintenance mode.
- 3) The other host (in this case there were only two hosts in this cluster) then contended for and became the SPM.
- 4) The host that was in maintenance mode was then reactivated.
- 5) The Data Center transitioned to the 'Up' state.
- 6) New VMs could then be started.

**Root Cause:**

The problem was that there was no current Storage Pool Manager (SPM), even though the database indicated that there was.

# Red Hat Access: Support

## Integrated support engagement

### Red Hat Access embedded in RHEV

**Red Hat Access**

Logged in as: rhn-support-sshumake

Create New Case    Modify Existing Case

**Recommendations**

- RHEV 2.2 StoragePoolMasterNotFound: Cannot find
- Unable to add NetApp NFS based storage domain to
- RHEV Storage domain is marked as offline and will not
- How to add a new FCP Storage Domain RHEV 2.x ?
- How to remove Data Center if local storage domain is

**Issue:**

I am unable to remove DC while local SD is in use.

**Environment:**

Red Hat Enterprise Virtualization 3.1

**Resolution:**

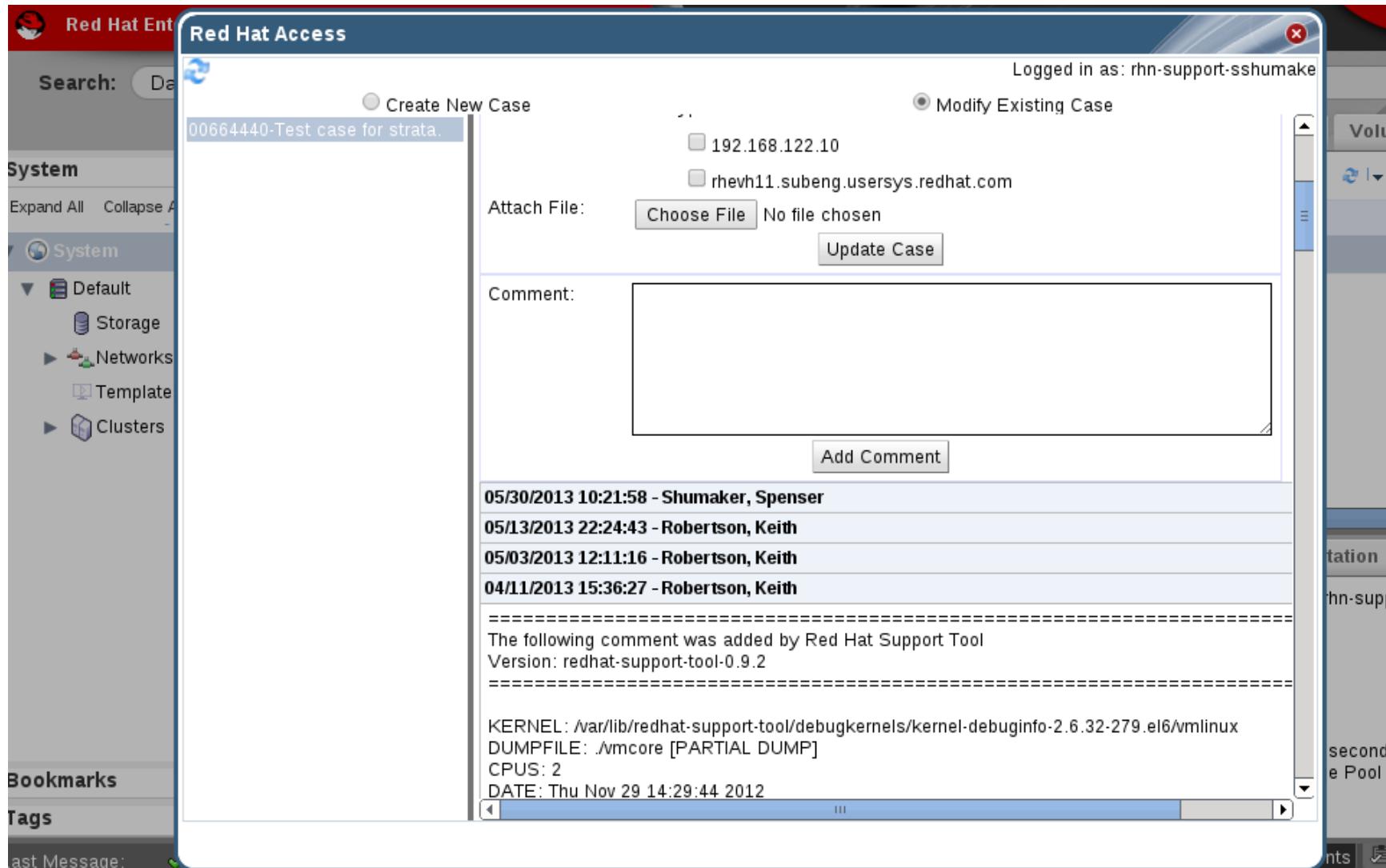
Select "STORAGE" label  
click The "STORAGE Domain" which need to be remove  
Click "Data Center"  
Put "data center" to Maintenance mode for the one which need to remove

Select "Data Centers" label  
click the "Data center" which need to remove.  
right click , then remove

# Red Hat Access: Support

## Integrated support engagement

### Red Hat Access embedded in RHEV



# Red Hat Access: RHEL

- Red Hat Support Tool
- Features
  - Console access to knowledge base
  - Console access to diagnostic services
  - Console access to support cases
  - Zero configuration
- Release
  - RHEL 5.10, 6.5, and 7.0
  - Technology preview download:
    - <http://people.redhat.com/kroberts/>

# Red Hat Access: Search

## Full access to the Knowledgebase from the console

### Red Hat Access embedded in RHEL

- Search for and view knowledge content directly from the console.
- Anytime anywhere.

```
Welcome to the Red Hat Support Tool.
Command (? for help): search How to configure device mapper multipath

Type the number of the solution to view or 'e' to return to the previous menu.
1 [ 66281:VER] How to configure device mapper multipath
2 [ 16976:VER] How do I configure Device Mapper Multipath on my iSCSI LUNS?
3 [ 47894:VER] How do I setup multipath on a system that already has LVM configured?
4 [ 3689:VER] How to setup device-mapper multipathing in Red Hat Enterprise Linux ?
5 [ 272153:VER] How to create Oracle ASM disks using DM Multipath devices in Red Hat Enterprise Linux 6?
6 [ 194133:UNV] How to set up persistent owner/group/mode permission on multipath devices in Red Hat Enterprise Linux 6?
7 [ 6387:VER] How to configure the iscsi-initiator in Red Hat Enterprise Linux?
8 [ 10163:VER] How do I add raw device mapping in Red Hat Enterprise Linux 5?
9 [ 2989:VER] Why do I see 'found duplicate pv' warnings when using LVM with multipath storage in RHEL?
10 [ 97323:WIP] How to install Red Hat Enterprise Linux version 5 (RHEL5) boot from SAN with multipath
11 [ 65960:UNV] Is there an easy way to set a proper LVM filter?

11 of 23 solutions displayed. Type 'm' to see more, 'r' to start from the beginning again, or '?' for help with the codes displayed in the above output.
Select a Solution: [
```

# Red Hat Access: Analyze

## Log file analysis using Red Hat diagnostic services

### Red Hat Access embedded in RHEL

- Automatic problem determination on log files
- JBoss server log
  - 4 faults have been discovered
  - Analyze via Red Hat's on-line diagnostic services

```
Welcome to the Red Hat Support Tool.
Command (? for help): analyze server.log

Type the number of the symptom to view,
ALL to send the entire contents for analysis,
or 'e' to return to the previous menu.
1  [6]  2013-02-01 07:23:34,454 ERROR [org.jboss.seam.exception.Exceptions] handled and logged exception
          javax.el.ELException: java.lang.NullPointerException
2  [156] 2013-02-01 07:23:36,209 ERROR [org.jboss.seam.exception.Exceptions] handled and logged exception
          javax.el.ELException: java.lang.NullPointerException
3  [608] 2013-02-01 07:26:47,053 ERROR [org.ajax4jsf.component.AjaxViewRoot] Error processing faces event for th
e component createANewCase:productSelectionMenu
          javax.faces.event.AbortProcessingException: /supportCase/newCase.xhtml @39,92 valueChangeListener="
#{createCase.productChanged}": java.lang.NullPointerException
4  [727] 2013-02-01 07:26:47,070 ERROR [facelets.viewhandler] Error Rendering View[/supportCase/newCase.xhtml]
          com.sun.facelets.tag.TagAttributeException: /supportCase/newCase.xhtml @57,44 test="#{slaOptions.si
ze() gt 1}" null
No more symptoms to display
Select a Symptom: ■
```

# Red Hat Access: Diagnose

## Kernal core file analysis

### Red Hat Access embedded in RHEL

- On-site analysis
- (Future) Off-site with support for application cores

```
[root@localhost ~]# redhat-support-tool
Welcome to the Red Hat Support Tool.
Command (? for help): btextract --all ~/vmcore
```

Select the crash command output to view or 'e' to return to the previous menu.

- 1 Output from crash 'bt -a'
- 2 Diagnose 'bt -a' output
- 3 Output from crash 'bt -e'
- 4 Output from crash 'foreach bt'
- 5 Output from crash 'log'
- 6 Output from crash 'ps'
- 7 Output from crash 'files'

Selection:

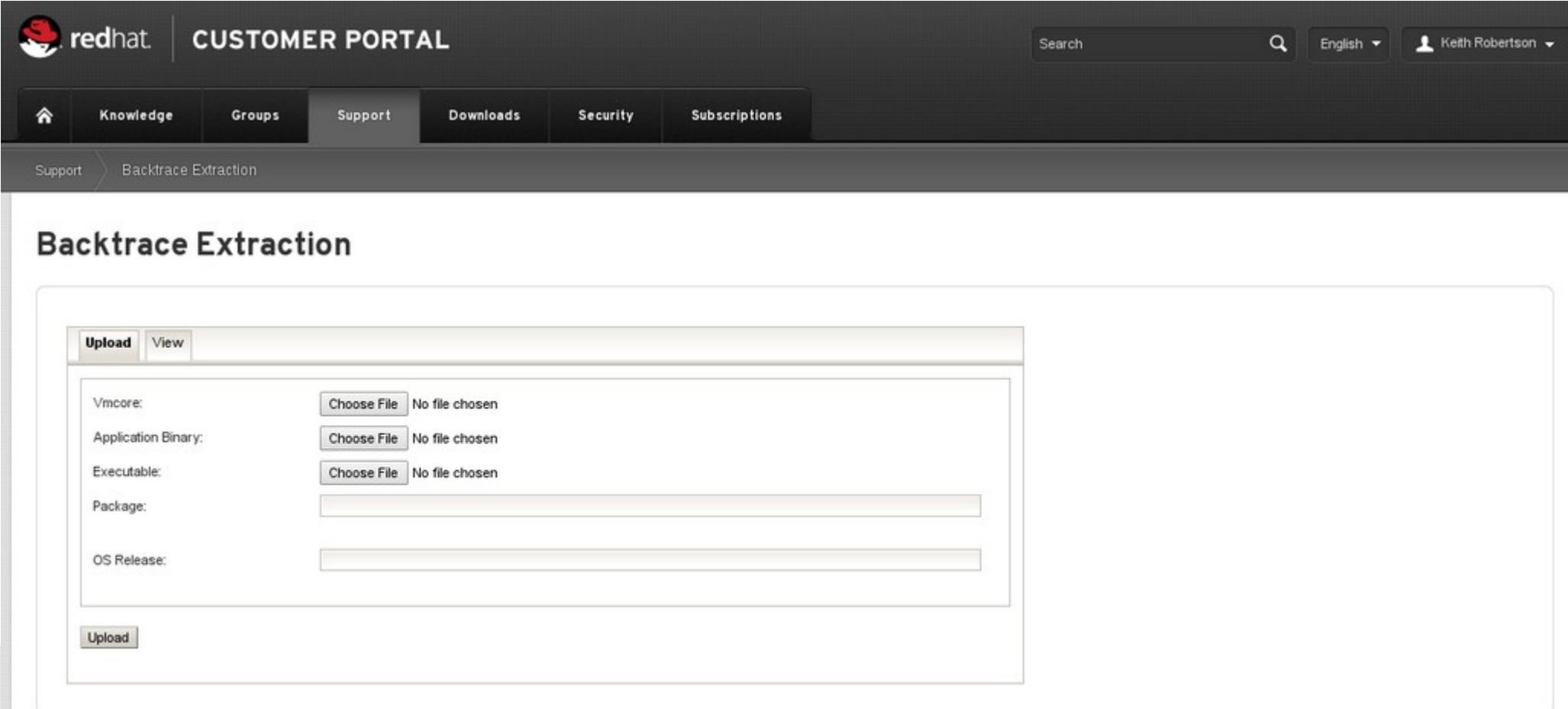
# Red Hat Access: Diagnose (soon)

## On-line core file analysis

### Red Hat Access embedded in RHEL

#### Portal Backtrace Extraction

- Kernel and application cores
- Integrated into tools

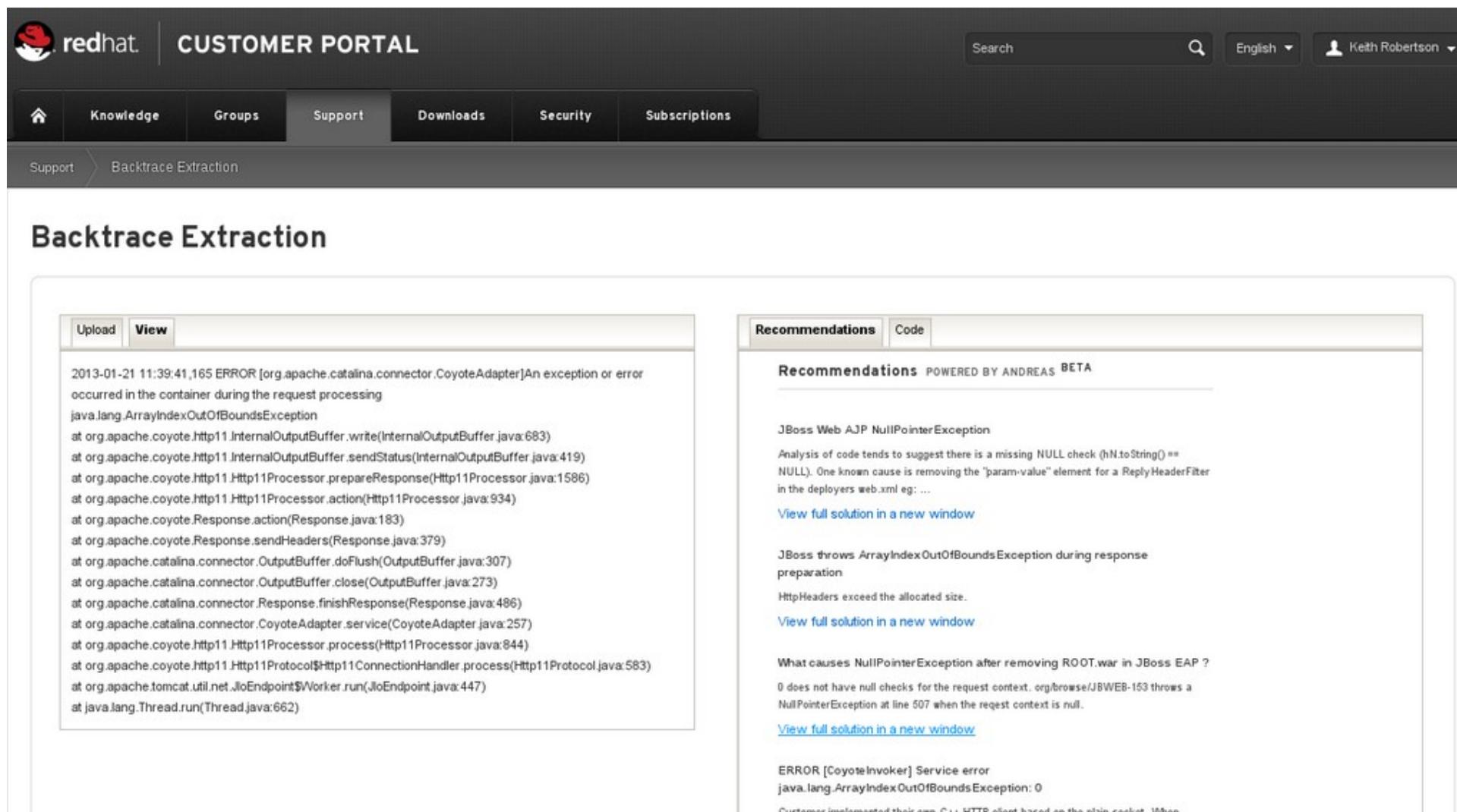


The screenshot shows the Red Hat Customer Portal interface. At the top, there is a navigation bar with the Red Hat logo, the text "CUSTOMER PORTAL", a search bar, language selection ("English"), and a user profile ("Keith Robertson"). Below the navigation bar, a secondary navigation bar includes links for "Home", "Knowledge", "Groups", "Support", "Downloads", "Security", and "Subscriptions". The "Support" link is highlighted. A breadcrumb trail indicates the user is in the "Support" section, specifically under "Backtrace Extraction". The main content area is titled "Backtrace Extraction". It features a form with several input fields: "Vmcore:" with a "Choose File" button and a "No file chosen" message; "Application Binary:" with a "Choose File" button and a "No file chosen" message; "Executable:" with a "Choose File" button and a "No file chosen" message; "Package:" with a text input field; and "OS Release:" with a text input field. At the bottom of the form is a "Upload" button.

# Red Hat Access: Diagnose (soon)

## On-line core file analysis (continued)

### Red Hat Access embedded in RHEL



The screenshot shows the Red Hat Customer Portal interface. At the top, there is a navigation bar with links for Home, Knowledge, Groups, Support, Downloads, Security, and Subscriptions. The Support link is currently selected. Below the navigation bar, a breadcrumb navigation shows 'Support > Backtrace Extraction'. The main content area is titled 'Backtrace Extraction' and displays a stack trace for a Java exception:

```
2013-01-21 11:39:41,165 ERROR [org.apache.catalina.connector.CoyoteAdapter]An exception or error occurred in the container during the request processing
java.lang.ArrayIndexOutOfBoundsException
at org.apache.coyote.http11.InternalOutputBuffer.write(InternalOutputBuffer.java:683)
at org.apache.coyote.http11.InternalOutputBuffer.sendStatus(InternalOutputBuffer.java:419)
at org.apache.coyote.http11.Http11Processor.prepareResponse(Http11Processor.java:1586)
at org.apache.coyote.http11.Http11Processor.action(Http11Processor.java:934)
at org.apache.coyote.Response.action(Response.java:183)
at org.apache.coyote.Response.sendHeaders(Response.java:379)
at org.apache.catalina.connector.OutputBuffer.doFlush(OutputBuffer.java:307)
at org.apache.catalina.connector.OutputBuffer.close(OutputBuffer.java:273)
at org.apache.catalina.connector.Response.finishResponse(Response.java:486)
at org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:257)
at org.apache.coyote.http11.Http11Processor.process(Http11Processor.java:844)
at org.apache.coyote.http11.Http11Protocol$Http11ConnectionHandler.process(Http11Protocol.java:583)
at org.apache.tomcat.util.net.JIoEndpoint$Worker.run(JIoEndpoint.java:447)
at java.lang.Thread.run(Thread.java:662)
```

On the right side of the page, there is a 'Recommendations' section. It shows a heading 'Recommendations POWERED BY ANDREAS BETA' and three items:

- JBoss Web AJP NullPointerException**  
Analysis of code tends to suggest there is a missing NULL check (hN.toString() == null). One known cause is removing the 'param-value' element for a ReplyHeaderFilter in the deployers web.xml eg: ...  
[View full solution in a new window](#)
- JBoss throws ArrayIndexOutOfBoundsException during response preparation**  
HttpHeaders exceed the allocated size.  
[View full solution in a new window](#)
- What causes NullPointerException after removing ROOT.war in JBoss EAP ?**  
0 does not have null checks for the request context. org/browse/JBWEB-153 throws a NullPointerException at line 507 when the request context is null.  
[View full solution in a new window](#)

At the bottom of the page, there is a footer with the Red Hat logo and the text '#redhat #rhsummit'.

# Red Hat Access: Support

## Support case interaction from the console

### Red Hat Access embedded in RHEL

- Open a new support case.
- Attach files to existing support cases.
- Read case comments
- Add new comments to existing support cases.

```
Command (? for help): listcases

Type the number of the case to view or 'e' to return to the previous menu.
 1 [Waiting on Customer]  Test case for strata.
1 of 13 cases displayed. Type 'm' to see more.
Select a Case: 1

Type the number of the section to view or 'e' to return to the previous menu.
 1 Case Details
 2 Modify Case
 3 Description
 4 Case Discussion
 5 Recommendations
 6 Get Attachment
 7 Add Attachment
 8 Add Comment
End of options.
Option: 1
```

# Red Hat Access: Support

## Support case interaction from the console

### Red Hat Access embedded in RHEL

```
Welcome to the Red Hat Support Tool.
Command (? for help): help addcomment

Usage: addcomment -c CASENUMBER <comment text here>

Use the 'addcomment' command to add a comment to a case.
Options:
  -h, --help            show this help message and exit
  -c CASENUMBER, --casenumber=CASENUMBER
                        The case number from which the comment should be
                        added. (required)

Examples:
- addcomment -c 12345678 Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed
- addcomment -c 12345678

Command (? for help): addcomment -c 123456
Type your comment. Ctrl-d on an empty line to submit:
Thank you for your help with my multipath problems!
```

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Questions?



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