

RT for CompServ Ticket

# #30: setup new ESX nodes

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## New messages

There are unread messages on this ticket. You can [jump to the first unread message](#) or [jump to the first unread message and mark all messages as seen](#).

## Ticket metadata

### The Basics

Id: 30  
Status: resolved  
Priority: 90/  
Queue: Net Projects

### Reminders

New reminder:

Subject:   
Owner:   
Due:  [Calendar](#)

### Custom Fields

Location: *(no value)*  
Instructional Emergency?: *(no value)*  
Why Stalled: *(no value)*  
Priority: *(no value)*  
Tech Plan Initiative #: 6  
Project Type: Operational  
Net Work Areas: *(no value)*  
Project Initiator: *(no value)*  
Project Expected Outcomes: *(no value)*  
Project Assessed Outcomes: *(no value)*

### Dates

Created: Tue Jun 23 15:30:15 2009  
Starts: Not set  
Started: Tue Jun 23 16:01:57 2009  
**Last Contact:** Tue Jan 19 07:41:22 2010  
Due: Not set  
Closed: Tue Jan 19 07:41:22 2010  
Updated: **Tue Sep 25 16:19:43 2012 by Jhouse**

### People

Owner: Paul Sullivan  
Requestors: Jay Chalfant  
Cc:  
AdminCc:

### Links

### Graph

- Depends on: [\(Create\)](#)
  - [543: \(gchesy\) setup new ESX nodes - new LUN numbers for VMs \[resolved\]](#)
- Depended on by: [\(Create\)](#)
  - [304: \(nicholas\\_kartsioukas\) Create VM for LAMP Class usage \[resolved\]](#)
  - [325: \(rrosa\) Instruction WSUS Server- PC Admin Image Patching \[rejected\]](#)
- Parents: [\(Create\)](#)
- Children: [\(Create\)](#)
  - [3199: \(psulliva\) set up 3rd VMware ESX node: escher-06 \[resolved\]](#)

[Create](#)  Ticket in

**History**

Brief headers — [Full headers](#)

#	Tue Sep 25 16:19:43 2012	<b>Janice House - Tech Plan Initiative # 6 added</b>
#	Tue Sep 25 16:19:43 2012	<b>Janice House - Project Type Operational added</b>
#	Tue Sep 06 11:58:04 2011	<b>Jay Chalfant - Member ticket #3199 added</b>
#	Tue Jan 19 07:41:22 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Tue Jan 19 07:41:22 2010	<b>Paul Sullivan - Status changed from 'open' to 'resolved'</b>
#	Tue Jan 19 07:41:22 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Tue Jan 19 07:41:22 2010	<b>Paul Sullivan - Correspondence added</b>
		<p>Yes, as we discussed I'm balancing them. It's not for performance reasons but because it would cut in half the number of VMs that would go down if something happens to one of the hosts.</p> <p>re-closing the ticket.</p>
#	Mon Jan 18 10:38:48 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Mon Jan 18 10:38:48 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Mon Jan 18 10:38:48 2010	<b>The RT System itself - Status changed from 'resolved' to 'open'</b>
#	Mon Jan 18 10:38:47 2010	<p><b>Jay Chalfant - Correspondence added</b></p> <p><b>Subject:</b> RE: [Computer Services Work Orders #30] setup new ESX nodes</p> <p><b>Date:</b> Mon, 18 Jan 2010 10:38:47 -0800</p> <p><b>To:</b> "RT ComputerServices" &lt;cs@cuesta.edu&gt;</p> <p><b>From:</b> "Jay Chalfant" &lt;jchalfan@cuesta.edu&gt;</p>
		<p>Are the nodes load balanced?</p>
#	Sat Jan 16 14:23:59 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Sat Jan 16 14:23:59 2010	<b>Paul Sullivan - Status changed from 'open' to 'resolved'</b>

[Download \(untitled\) / with headers](#)  
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[Download \(untitled\) / with headers](#)  
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#	Sat Jan 16 14:23:59 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Sat Jan 16 14:23:59 2010	<b>Paul Sullivan - Correspondence added</b>
	I finished re-creating the VMs mentioned below. Project is now complete.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 72b
#	Tue Jan 12 10:28:04 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Tue Jan 12 10:28:04 2010	<b>Paul Sullivan - Correspondence added</b>
	After extensive testing, all appears well except that I will need to re-create VMX files for three of the VMs: pearlsides mermaid seamonkey  The reason for this is that the disk type was changed from Bus Logic to LSI logic after the VM was created. This causes problems vmotioning for whatever reason. I have already tested this fix with Thresher.  I'm going to do this after hours. Once that is done, the ticket can be closed.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 427b
#	Tue Jan 12 09:22:22 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Tue Jan 12 09:22:22 2010	<b>Paul Sullivan - Correspondence added</b>
	All VMs have now been migrated to the new hardware.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 51b
#	Fri Jan 08 15:21:04 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Fri Jan 08 15:21:04 2010	<b>Paul Sullivan - Correspondence added</b>
	No, there are currently only a few VMs on escher-05. It could be load balanced if desired.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 90b
#	Fri Jan 08 14:49:01 2010	<b>The RT System itself - Outgoing email recorded</b>
#	Fri Jan 08 14:49:01 2010	<b>Jay Chalfant - Correspondence added</b>
	<b>Subject:</b> RE: [Computer Services Work Orders #30] setup new ESX nodes <b>Date:</b> Fri, 8 Jan 2010 14:48:37 -0800 <b>To:</b> "RT ComputerServices" <cs@cuesta.edu> <b>From:</b> "Jay Chalfant" <jchalfan@cuesta.edu>	
	Is load balanced between nodes?	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 32b

#	Fri Jan 08 13:27:52 2010	The RT System itself - Outgoing email recorded
#	Fri Jan 08 13:27:52 2010	Paul Sullivan - Correspondence added
	I finished rebuilding escher-04. Both nodes are now fully functional.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 69b
#	Fri Jan 08 10:54:56 2010	The RT System itself - Outgoing email recorded
#	Fri Jan 08 10:54:56 2010	Paul Sullivan - Correspondence added
	Moved over more VMs this morning and I'm in the process of rebuilding escher-05 now on the new drives provided by IBM.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 118b
#	Thu Jan 07 13:30:34 2010	The RT System itself - Outgoing email recorded
#	Thu Jan 07 13:30:34 2010	The RT System itself - Outgoing email recorded
#	Thu Jan 07 13:30:34 2010	Paul Sullivan - Correspondence added
	<b>RT-Send-CC:</b> gchesy@cuesta.edu	
	I have finished re-building escher-04 with the new drives from IBM.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 176b
	I am beginning to vmotion VMs onto 04 now, and once I have moved everything, I'll be rebuilding escher-05.	
#	Mon Dec 07 11:23:30 2009	Paul Sullivan - Priority changed from '10' to '90'
#	Mon Dec 07 10:48:00 2009	Jay Chalfant - Dependency on ticket #543 added
#	Fri Nov 13 14:11:15 2009	The RT System itself - Outgoing email recorded
#	Fri Nov 13 14:11:15 2009	Paul Sullivan - Correspondence added
	escher-03 now has no active VMs on it. I have unplugged the fiber from it, to avoid any conflicts if a VM tries to start up.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 124b
#	Fri Nov 13 12:41:02 2009	The RT System itself - Outgoing email recorded
#	Fri Nov 13 12:41:02 2009	Paul Sullivan - Correspondence added
	Grant gave clearance on ipstor2 VMs, so I have begun moving some of those too.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 78b
#	Fri Nov 13 08:21:34 2009	The RT System itself - Outgoing email recorded
#	Fri Nov 13 08:21:33 2009	Paul Sullivan - Correspondence added

	Pearlsides is now working properly.	<a href="#">Download (untitled) / with headers</a> text/plain 35b
#	Fri Nov 13 07:28:44 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Fri Nov 13 07:28:43 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Fri Nov 13 07:28:43 2009 <b>Paul Sullivan - Correspondence added</b> <b>RT-Send-CC:</b> gchesy@cuesta.edu	
	I have moved all windows VMs on ipstor1 onto escher-04. All are running smoothly, except in the case of pearlsides, I cannot get into disk management to create the swap partition or upgrade vmware tools. I was forced to create the pagefile on its data lun.  It appears to be working otherwise. Need to discuss that with Grant.	<a href="#">Download (untitled) / with headers</a> text/plain 327b
#	Wed Nov 11 10:40:00 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Wed Nov 11 10:39:59 2009 <b>Paul Sullivan - Correspondence added</b>	
	After speaking with Grant, he confirmed that VMs on ipstor1 can now be moved. I have the list of Hosts and LUN Numbers so that I can begin moving them.  I would like to start this by coming in early on Friday, with Jay's approval. I'm going to speak with him about that.	<a href="#">Download (untitled) / with headers</a> text/plain 271b
#	Wed Nov 11 08:44:45 2009 <b>Paul Sullivan - Priority changed from '90' to '10'</b>	
#	Mon Nov 02 14:20:06 2009 <b>Jay Chalfant - Dependency by ticket #325 added</b>	
#	Mon Oct 26 13:07:27 2009 <b>Paul Sullivan - Priority changed from (no value) to '90'</b>	
#	Mon Oct 26 11:16:24 2009 <b>Paul Sullivan - Dependency on ticket #321 deleted</b>	
#	Wed Oct 21 13:45:09 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Wed Oct 21 13:45:08 2009 <b>Paul Sullivan - Correspondence added</b>	
	escher 05 is now set up. I'm going to get started on the IBM director agent, and grant is moving ntp2 and ntp3 back to escher 04 and 05.	<a href="#">Download (untitled) / with headers</a> text/plain 136b
#	Wed Oct 21 12:39:16 2009 <b>The RT System itself - Outgoing email recorded</b>	
	Wed Oct 21 12:39:16 2009 <b>Paul Sullivan - Correspondence added</b>	

#	escher 04 is done aside from disk monitoring. starting on escher 5, and then I'll come back to the disk monitoring.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 115b
#	Tue Oct 20 14:44:46 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Tue Oct 20 14:44:45 2009 <b>Paul Sullivan - Correspondence added</b>	
#	ntp has been moved back to escher-01 and escher-02. I am now beginning the process of setting up escher-04 with esx 3.5	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 119b
#	Fri Oct 16 08:33:27 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Fri Oct 16 08:33:26 2009 <b>Paul Sullivan - Correspondence added</b>	
#	We have decided to go with ESX 3.5. Based on what we have already seen, esx 4 doesn't appear to be stable for production yet.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 125b
#	Fri Oct 16 08:31:49 2009 <b>Paul Sullivan - Dependency on ticket #321 added</b>	
#	Tue Oct 13 09:51:13 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Tue Oct 13 09:51:13 2009 <b>Paul Sullivan - Correspondence added</b>	
#	Due to an event with storage yesterday, escher-04 crashed hard. It also, had a problem with a failed DAS Disk.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 407b
#	I was initially considering a rebuild of escher-04 after the crash, but Grant and I are confident that the crash was just a result of the SAN storage being unavailable.	
#	If the system is behaving normally, after replacing the faulty disk, we are going to let it be. If not, I'll rebuild the OS.	
#	Mon Oct 12 08:10:45 2009 <b>Paul Sullivan - Dependency by ticket #304 added</b>	
#	Fri Oct 09 17:32:35 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Fri Oct 09 17:32:35 2009 <b>Paul Sullivan - Correspondence added</b>	
#	Escher-03 is powered off. all vms not yet migrated are on 01 and 02.	<a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 68b
#	Fri Oct 09 13:10:50 2009 <b>The RT System itself - Outgoing email recorded</b>	
#	Fri Oct 09 13:10:49 2009 <b>Paul Sullivan - Correspondence added</b>	

<p>We have started moving VMs over to Escher 04 and 05, with good results thus far.</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 81b</p>
<p># Wed Jul 29 07:25:04 2009 <b>The RT System itself - Outgoing email recorded</b></p>	
<p># Wed Jul 29 07:25:04 2009 <b>Paul Sullivan - Correspondence added</b></p>	
<p>Defective drive replaced.</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 25b</p>
<p># Mon Jul 27 08:20:54 2009 <b>The RT System itself - Outgoing email recorded</b></p>	
<p># Mon Jul 27 08:20:54 2009 <b>Paul Sullivan - Correspondence added</b></p>	
<p>One of the drives failed on escher04 over the weekend. I assume this has to do with all of the over temp alerts we received. I've filed a case with IBM to get a replacement drive.</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 179b</p>
<p># Wed Jul 22 09:40:57 2009 <b>The RT System itself - Outgoing email recorded</b></p>	
<p># Wed Jul 22 09:40:57 2009 <b>Paul Sullivan - Correspondence added</b></p>	
<p>Correct, there are no serious issues with the current farm that would necessitate an immediate move to the new nodes. It's just an issue of capacity.</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 150b</p>
<p># Wed Jul 22 09:33:48 2009 <b>The RT System itself - Outgoing email recorded</b></p>	
<p># Wed Jul 22 09:33:47 2009 <b>Jay Chalfant - Correspondence added</b> <b>Subject:</b> RE: [Computer Services #30] setup new ESX nodes <b>Date:</b> Wed, 22 Jul 2009 09:33:46 -0700 <b>To:</b> "RT ComputerServices" &lt;cs@cuesta.edu&gt; <b>From:</b> "Jay Chalfant" &lt;jchalfan@cuesta.edu&gt;</p>	
<p>This sounds acceptable to me. Apart from the limited total capacity, I'm not aware of any serious issues with the current farm.  Advise if there is an issue I should consider.</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a> text/plain 176b</p>
<p># Tue Jul 21 15:02:45 2009 <b>The RT System itself - Outgoing email recorded</b></p>	
<p># Tue Jul 21 15:02:44 2009 <b>Paul Sullivan - Correspondence added</b></p>	
<p>I resolved the problem with direction from vmware</p>	<p><a href="#">Download (untitled)</a> / <a href="#">with headers</a></p>

and was able to conduct the test. We've concluded that vmotion between hosts with different vm swap volumes only works inconsistently. As a result, the migration of VMs will need to be delayed until the new storage is available and we can make a lun big enough to fit swap for all VMs.

text/plain 336b

# Tue Jul 21 08:29:25 2009 **The RT System itself - Outgoing email recorded**

# Tue Jul 21 08:29:24 2009 **Paul Sullivan - Correspondence added**

Since our new storage isn't yet available, we don't have the space for one large swap lun. So, we are going to set up a smaller one for both esx servers and load balance.

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To determine if vmotion would work with this configuration I was running a test, but, I ran into problems getting the default swap location changed in the new version of virtual center. I've filed a ticket with support.

# Mon Jul 20 16:21:15 2009 **The RT System itself - Outgoing email recorded**

# Mon Jul 20 16:21:13 2009 **Paul Sullivan - Correspondence added**

ntp and syslog are configured. next step is getting storage assigned.

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text/plain 69b

# Mon Jul 20 14:46:29 2009 **The RT System itself - Outgoing email recorded**

# Mon Jul 20 14:46:29 2009 **Paul Sullivan - Correspondence added**

With direction from VMWare support, I contacted IBM to get a firmware downgrade and downgraded the firmware on escher04 and escher05. This fixed the irq error we were receiving.

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text/plain 179b

# Thu Jul 16 13:52:56 2009 **The RT System itself - Outgoing email recorded**

# Thu Jul 16 13:52:56 2009 **Paul Sullivan - Correspondence added**

I've opened a ticket with vmware to resolve an error message we are getting on boot up. It doesn't seem to affect operation of the host, but I'd like to get it cleared up.

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text/plain 586b

The current version of the IBM systems director agent is not yet compatible with esx 4. Once a new version is released, I will be able to get disk monitoring set up. I am not inclined to block on that.



Also, Grant is going to update ntp settings on escher-04 and 05 so they can take over as ntp1 and ntp2.

Once ntp is fixed, and I have a resolution from vmware on that error message, we will be moving forward.

# Wed Jul 15 14:23:13 2009 **The RT System itself - Outgoing email recorded**

# Wed Jul 15 14:23:13 2009 **Paul Sullivan - Correspondence added**

escher-05 is ready as well. I am currently trying to get disk monitoring set up for 04 and 05 before proceeding though.

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# Wed Jul 15 09:15:34 2009 **The RT System itself - Outgoing email recorded**

# Wed Jul 15 09:15:33 2009 **Jay Chalfant - Correspondence added**

**Subject:** RE: [Computer Services #30] setup new ESX nodes  
**Date:** Wed, 15 Jul 2009 09:15:31 -0700  
**To:** "RT ComputerServices" <cs@cuesta.edu>  
**From:** "Jay Chalfant" <jchalfan@cuesta.edu>

Good reivew. Thank you.  
  
-J

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# Tue Jul 14 15:45:41 2009 **The RT System itself - Outgoing email recorded**

# Tue Jul 14 15:45:41 2009 **The RT System itself - Outgoing email recorded**

# Tue Jul 14 15:45:41 2009 **Grant Chesy - Correspondence added**

**CC:** RT ComputerServices <cs@cuesta.edu>, Network Admins <NetAdmin@cuesta.edu>

**Subject:** RE: [Computer Services #30] setup new ESX nodes  
**Date:** Tue, 14 Jul 2009 15:45:02 -0700  
**To:** Jay Chalfant <jchalfan@cuesta.edu>  
**From:** Grant Chesy <gchesy@cuesta.edu>

Paul and I looked at the power.

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There are not that many hosts left in the rack where the first of the two hosts were plugged in, even if something like 3 lprs = 1 ibm for power load we are ok.

The total power (which is more scary to me), we measured by looking at the total load reported on the UPS. It was at 70% and went up to 72% with one IBM powered up.

There are about 50 devices (hosts, switches, arrays) in there, so

average % load per device in the room is around 1.5% of the UPS load, so these new hosts are in the ball-park.

g

On Tue, 2009-07-14 at 15:37 -0700, Jay Chalfant wrote:

- > Has anyone reviewed power load on the circuit these were attached to?
- >
- > As we discussed, there are 20A circuit breakers between hosts and the
- > Symmetra. I don't want to find out the hard way we overload a circuit.
- >
- > -J

# Tue Jul 14 15:37:28 2009 **The RT System itself - Outgoing email recorded**

# Tue Jul 14 15:37:28 2009 **Jay Chalfant - Correspondence added**

**CC:** "Network Admins" <NetAdmin@cuesta.edu>

**Subject:** RE: [Computer Services #30] setup new ESX nodes

**Date:** Tue, 14 Jul 2009 15:37:25 -0700

**To:** "RT ComputerServices" <cs@cuesta.edu>

**From:** "Jay Chalfant" <jchalfan@cuesta.edu>

Has anyone reviewed power load on the circuit these were attached to?

[Download \(untitled\) / with headers](#)  
text/plain 216b

As we discussed, there are 20A circuit breakers between hosts and the Symmetra. I don't want to find out the hard way we overload a circuit.

-J

# Tue Jul 14 13:53:12 2009 **The RT System itself - Outgoing email recorded**

# Tue Jul 14 13:53:12 2009 **Paul Sullivan - Correspondence added**

Finished setting up escher-04, except for SAN storage(waiting on Grant for that). I'm starting on escher-05 now.

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# Mon Jul 13 07:23:19 2009 **The RT System itself - Outgoing email recorded**

# Mon Jul 13 07:23:19 2009 **Paul Sullivan - Correspondence added**

I forgot to update on Saturday. I successfully upgraded to vSphere 4 on stingray 2. We are now able to manage esx 4 hosts, which is what the new servers will be set up as.

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text/html 188b

# Thu Jul 09 16:46:56 2009 **The RT System itself - Outgoing email recorded**

# Thu Jul 09 16:46:56 2009 **Paul Sullivan - Correspondence added**

On Tue Jun 23 15:30:15 2009, jchalfan wrote:

> When they come in.

>

> I will also use this to reference other VM-related cases that are

> dependent on

> the new ESX nodes.

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text/html 806b

The servers arrived today. Robert and I racked them this morning. I verified we have open network/fc ports for one of them only, so the other can't be hooked up until escher-03 is disconnected.

I configured ports appropriately on 34.1 for escher-04. We are awaiting on completion of the setup of new disk arrays before storage for lun metadata, vmx, and swaps files can be created.

This weekend, I'll be performing the upgrade of VirtualCenter on stingray in preparation for the new hosts, which will be set up with esx v4.

#

Tue Jun 23 16:01:57 2009 **Paul Sullivan - Status changed from 'new' to 'open'**

#

Tue Jun 23 15:30:15 2009 **The RT System itself - Outgoing email recorded**

#

Tue Jun 23 15:30:15 2009 **Jay Chalfant - Ticket created**

**Subject:** setup new ESX nodes

When they come in.

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text/html 136b

I will also use this to reference other VM-related cases that are dependent on the new ESX nodes.