

Managing Installation Tasks Using RT

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The Problem

- Installation workload had grown
- More, smaller orders coming in
- Multiple groups involved, with dependencies
- Confusion, dropped work, stalls

Project Management SW?

- Tends to be heavyweight
- Manages one project well, not many
- Learning another tool

Can RT do it?

- RT manages tasks well
- RT has requestors, owners, dependencies, time tracking
- Everyone was familiar with it
- Is this the “hammer syndrome”?

Designing the Installation Queue

- Single queue set up
- Each ticket has fields to check off:
 - Order Status
 - Hostname
 - DNS
 - Rack
 - Power
 - Network ... and a few more

Create a new ticket

Show basics · Show details

^ Create a new ticket

Queue: Installation Status: Owner:

Requestors:

Cc:

*(Sends a carbon-copy of this update to a comma-delimited list of email addresses. These people **will** receive future updates.)*

Admin Cc:

*(Sends a carbon-copy of this update to a comma-delimited list of administrative email addresses. These people **will** receive future updates.)*

Subject:

<p>Hostname <i>Enter multiple values</i></p>	<input type="text" value="KP01"/> <input type="text" value="KP02"/>	<p>OS Install <i>Select one value</i></p>	<input type="text" value="(no value)"/> <input type="text" value="Required*"/> <input type="text" value="Completed"/>
<p>Project <i>Select one value</i></p>	<input type="text" value="-"/> <input type="text" value="(no value)"/>	<p>Req <i>Enter one value</i></p>	<input type="text"/>
<p>Order Status <i>Select one value</i></p>	<input type="text" value="(no value)"/> <input type="text" value="Requirements"/> <input type="text" value="Ordering"/> <input type="text" value="Vendor"/> <input type="text" value="Arrived"/>	<p>PlanningBudget <i>Enter one value</i></p>	<input type="text"/>
<p>Power <i>Select one value</i></p>	<input type="text" value="(no value)"/> <input type="text" value="Required*"/> <input type="text" value="Completed"/>	<p>PlanningNetwork <i>Enter one value</i></p>	<input type="text"/>
<p>Network <i>Select one value</i></p>	<input type="text" value="(no value)"/> <input type="text" value="Required*"/> <input type="text" value="Completed"/>	<p>PlanningPower <i>Enter one value</i></p>	<input type="text"/>
<p>Rack <i>Select one value</i></p>	<input type="text" value="(no value)"/> <input type="text" value="Required*"/> <input type="text" value="Completed"/>	<p>PlanningProposal <i>Fill in one wikitext area</i></p>	<input style="height: 40px;" type="text"/>
		<p>PlanningRackspace <i>Enter one value</i></p>	<input type="text"/>

#53576: Two X2200 servers for KIPAC

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^ Ticket metadata

∨ The Basics

^ Custom Fields

Hostname:	(no value)
Project:	KIPAC
Order Status:	Ordering
Power:	Completed
Network:	Required*
Rack:	Completed
Arrays:	(no value)
DNS:	Required
OS Install:	Required*
Req:	127280
PlanningBudget:	(no value)
PlanningNetwork:	2 Gb ports
PlanningPower:	2 2 amp circuits
PlanningProposal:	(no value)
PlanningRackspace:	2 RU

∨ Reminders

∨ Dates

^ Links

Depends on:
Depended on by:

Parents:

Children:

- [53577](#): DNS::Two X2200 servers for KIPAC [new]
- [53578](#): Network::Two X2200 servers for KIPAC [new]
- [53579](#): OS::Two X2200 servers for KIPAC [new]
- [53580](#): Power::Two X2200 servers for KIPAC [resolved]
- [53581](#): Rack::Two X2200 servers for KIPAC [resolved]

Refers to:
Referred to by:

∨ People

^ Attachments

T-US-881048-B.pdf

- [Wed Sep 06 12:39:25 2006 \(57.7k\) by boeheim](#)

Child Tickets for Sub-tasks

- Create a child ticket for each required step
- Assign child ticket to responsible party
- Tasks can proceed in parallel if possible
- Each person can maintain own queue of requests
- Resolving a child ticket updates parent status

Attachments and Links

- PDFs or spreadsheets with specs, layouts, etc can be attached to the ticket
- Link to purchasing system to track status of order
- Any other web bookmark can be stored in the ticket as well

Installation Dashboard

- Need an overview of what's in progress
- Need to slice it to see what's waiting for any given group
- Need to summarize requirements for power, space, etc.

Found 27 tickets

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#	Subject Requestors	Status Last Updated	Owner Project	Order Status Req	Rack Needs	Power Needs	Network Needs	OS Install	Arrays
55825	sulky51 server/disks for Atlas richard.mount@slac.stanford.edu	open 24 min ago	yangw		Completed	Completed	Completed	Required*	Required*
55988	More disk space needed for 'bbr-tstmssql' gapon@SLAC.Stanford.EDU	open 5 hours ago	boeheim BaBar						Required*
55461	oappsrv3: Machine Configuration Request ian@SLAC.Stanford.EDU	new 21 hours ago	shirley						
54731	Request Two Machines Be Configured in EPN2-DMZ2 ian@SLAC.Stanford.EDU	new 21 hours ago	shirley						
54568	Machine Install in EPN2-UNIX ian@SLAC.Stanford.EDU	open 21 hours ago	shirley BSD	Arrived	Completed	Completed	Completed		Completed
42796	servers for our DNS name services randy@slac.stanford.edu	open 21 hours ago	shirley Infra						
55962	Web server for IEPM cottrell@slac.stanford.edu	open 24 hours ago	boeheim		Required*	Required*	Required*	Required*	
55961	MCCORA2-MGT Added helpdesk@slac.stanford.edu	new 24 hours ago	shirley						
54740	Two X4100 servers for networking cottrell@slac.stanford.edu	open 26 hours ago	boeheim	Vendor 127169	Completed 2 RU	Completed 2 2 amp circuits	Required* 2 Gb ports	Required*	
53175	Interactive and Build machines boeheim@slac.stanford.edu	open 36 hours ago	ljm BaBar	Arrived 125486	Completed	Completed	Required*	Required*	
53576	Two X2200 servers for KIPAC marshall@SLAC.Stanford.EDU	open 2 days ago	boeheim KIPAC	Ordering 127280	Completed 2 RU	Completed 2 2 amp circuits	Required* 2 Gb ports	Required*	
44368	New sulky50 for LCD development boeheim@slac.stanford.edu	open 2 days ago	boeheim LCD	Arrived 125494	Completed	Completed	Completed	Required*	Completed
55857	Upgrading/convertng datamove27 shirley@slac.stanford.edu	new 3 days ago	shirley						
51427	New TIS Servers travis@SLAC.Stanford.EDU	open 3 days ago	shirley TIS	Arrived 125495	Completed	Completed	Completed	Required*	
45453	[Fwd: LSST-DEV02.SLAC.STANFORD.EDU Added] becla@SLAC.Stanford.EDU	open 3 days ago	boeheim LSST	Arrived 125467	Completed	Completed	Completed	Required*	Required*
50034	Installation for Dave Aston, RD, of 8 batch systems, yili0129-yili0136 randy@slac.stanford.edu	open 4 days ago	neal RD	Arrived 125492	Completed	Completed	Completed	Completed	

Found 8 tickets

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#	Subject Requestors	Status Last Updated	Owner Project	Order Status Req	Rack Needs	Power Needs	Network Needs	OS Install	Arrays
55962	Web server for IEPM cottrell@slac.stanford.edu	open 24 hours ago	boeheim		Required*	Required*	Required*	Required*	
52499	db-serv[01-04] X4100 installation George Crane crane@slac.stanford.edu, hogabmi@SLAC.Stanford.EDU	open 7 days ago	shirley BSD	Arrived 125498	Completed 4 RU	Required* 4 2amp circuits	Required* 4 Gb ports	Required*	
54833	New Windows Systems btscott@SLAC.Stanford.EDU	open 9 days ago	btscott		Required*	Required*	Required*		
52443	New surrey for BaBar group space boeheim@slac.stanford.edu	open 10 days ago	boeheim BaBar	Ordering 126915	Required*	Required*	Required*	Required*	
54732	Three new BaBar file servers -- purpose TBD gpdf@SLAC.Stanford.EDU	open 2 weeks ago	boeheim	Vendor 127169	Required* 18 RU	Required* 18 2amp circuits	Required* 3 Gb ports	Required*	Required*
53196	Install database servers crane@slac.stanford.edu	new 2 weeks ago	boeheim	Arrived 125498	Required* 16 RU	Required* 16 2 amp circuits	Required* 5 Gb ports	Required*	Required*
53189	Install mysql servers crane@slac.stanford.edu	new 2 weeks ago	boeheim BSD	Arrived 125498	Required* 6 RU	Required* 6 2 amp circuits	Required* 6 Gb ports	Required*	
53998	New file server for RD group boeheim@slac.stanford.edu	new 2 weeks ago	boeheim RD	Vendor 127169	Required* 4 RU	Required* 4 2 amp circuits	Required* 1 Gb port	Required*	Required*

● where power = 'Required'

Another step: Planning Queue

- Lead times for power upgrades can be long
- Networking needs time to plan infrastructure
- Starting when orders are placed is too late
- Try to capture possible orders as soon as groups mention them to us

Queue Design

- Modeled on Installation queue without the workflow
- Added information about how many amps, square feet, network ports, might be needed
- Move to the Installation queue when it becomes an order

#54295: SL8500 Library

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^ Ticket metadata

^ The Basics

Id: 54295
Status: new
Left: 0 min
Priority: 0/0
Queue: Planning

^ Custom Fields

Hostname: (no value)
Project: BaBar
PlanningProposal: Begin conversion from Powerhorn tape robots to SL8500 libraries, and to T10000 tape drives. Proposal acquires one library, 6500 slots, eight tape drives, and trades in one Powderhorn library, which we are currently not using.
PlanningBudget: \$44K
PlanningNetwork: (no value)
PlanningPower: (no value)
PlanningRackspace: 6x12ft

^ Reminders

New reminder:

Subject:
Owner:
Due (yyyy/mm/dd): [Choose a date](#)

^ Dates

Created: Thu Sep 14 17:41:56 2006
Starts: Not set
Started: Not set
Last Contact: Not set
Due: Not set
Closed: Not set
Updated: [Thu Sep 14 17:44:00 2006 by boeheim](#)

^ Links

Found 9 tickets

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#	Subject Requestors	Status Last Updated	Owner Project	Starts	Budget	Rackspace	Network	Power
54295	SL8500 Library boeheim@slac.stanford.edu	new 3 weeks ago	boeheim BaBar	Not set	\$44K	6x12ft		
54297	BaBar fall disk purchase gpdf@SLAC.Stanford.EDU	new 3 weeks ago	boeheim BaBar	Not set	\$400K	6 racks	35 Gb ports	105 2 amp outlets
54300	KIPAC Lustre Servers marshall@SLAC.Stanford.EDU	new 3 weeks ago	randym KIPAC	Not set			5 Gb ports	
54302	Networking and Security machines gtb@slac.stanford.edu	new 3 weeks ago	boeheim Infra	Not set				
54303	GLAST CY06 IFC Disk Purchase richard@SLAC.Stanford.EDU	new 3 weeks ago	boeheim GLAST	Not set	\$200K	1 rack	6 Gb ports	18 2 amp circuits
54304	GLAST FY07 purchase plans richard@SLAC.Stanford.EDU	new 3 weeks ago	boeheim GLAST	Not set		4 racks	68 Gb ports	88 2 amp outlets
54298	ATLAS Tier 2 initial purchase young@slac.stanford.edu	open 3 weeks ago	boeheim ATLAS	Not set	\$400K	4 racks	61 Gb ports	160 2 amp outlets
54299	KIPAC IB Cluster marshall@SLAC.Stanford.EDU	open 2 weeks ago	randym KIPAC	Not set		128 RU	128 Gb ports	128 2 amp outlets
54834	30 Windows Systems in December btscott@SLAC.Stanford.EDU	new 10 days ago	btscott	Not set				