Computing & IT for A&A and KICP

Indico: https://indico.uchicago.edu/category/14/

Zoom for this meeting:

https://uchicago.zoom.us/j/94032467738?pwd=cWxDYUorWUM0ZGN1a3Z0ckFua1prQT09

11/1/22

Attending:
Apologies:

Notes

- A&A/KICP Liaison (TomC)
  -
  -
  -
- Departmental A&A/KICP updates (Carolyn)
  - Any unresolved Astro Support issues requiring discussion?
  - Legacy SPT group servers
  -
  -
- Updates from Desktop Support (Steven, Tom)
  -
  -
  -

10/24/22

Attending: Carolyn, Rob
Apologies:

Notes

- Any unresolved Astro Support issues requiring discussion?
  - disks for rein ordered for Gnedin
- Legacy SPT group servers - next steps
  - One racked, one will be racked later today hopefully
  - Negotiating currently with ITS/networking team to get 10G to row 32 in Hinds
- Meeting w/ Josh & Abbey later this week or next

10/11/22

Today's meeting: https://indico.uchicago.edu/event/202/
Attending:
Apologies:

Notes:

- Rob
    - Some priorities
        - We want to complete the equipment inventory
        - Build the the two "legacy SPT" servers and migrate data and services from the old equipment in ACC
            - rack location
            - switch? 1G or 10G
            - on the SciDMZ or behind the firewall? Will need exemptions, then.
            - sptoir - majority of users are not UChicago
                - how many users?
                - 20 users
                - changing rapidly
        - Work with Cornelia's group to retire departmental email servers
- TomC
    - Occasional tickets for Astro Group. Nick's issue about disks - any update?
        - Carolyn has been in contact;
- From Carolyn
    - Currently trying to get netbox onto freebsd and the biggest challenge so far has been upgrading python for some reason
    - Last couple of weeks have been account creation for people and tracking down which databases control which resources
    - Spent Friday working on fixing a network config for a website hosted in the department for fellowship applications whose mailer script to send notifications to applicants was not working properly
- From Steven
    - Moving (corrected) Don Lamb off Oddjob & Astro?
        - He seems OK with this.
        - Can we setup TBird to mail-as lamb@astro, @oddjob?
        - TomC - just needs passwords, working with his son.
            - Disambiguation: We have two emeritus Dons with email issues. Don York just needed passwords for kicp and astro, Carolyn and TC are working with his son (Maurice). Don Lamb is continually running into quota issues on oddjob.

    - PSD IT can get new SPT servers racked tomorrow (Wednesday) or later... we'll have to double-check on where to install though due to
- From TomI
    -

9/27/22

Attending: Tom, Tom, Carolyn, Steven, Judith

Agenda (list topics we need to discuss here)

- Carolyn's list of housekeeping
- New ticket from Nick Gnedin
    - What is the protocol for A&A/KICP members submitting issues to Carolyn? Do we encourage people to continue using the ticket system or to contact Carolyn directly? Or whichever they prefer? In any case, how would Carolyn prefer to keep track of open & resolved issues?
        - TomI: please don't have people contact her directly

Notes

- Carolyn
    - Working on inventory
    - Website certificates expiring - automating them
    - Mail has being used for monitoring, alerting
    - Port testing device - network subnet, vlan info.. need a device. will order: https://pockethernet.com/store/1/pockethernet
    - Compiling on-boarding
    - ldap servers - at least 3
        - concerns about policy compliance
- Discussing the interaction with A&A faculty
- Discussion of inventory management - Sunbird
- Steven - we don't have a central divisional service for end user devices

9/13/22

- Attending: Carolyn, Judith, Rob, Steven, Tom Indelli
    - Apologies: Tom Crawford
- Hello Carolyn!
    - Found backups running on a couple machines
    - Note about passwords -Tom notes local login root accounts
- Discussion of near term priorities

    - Carlstrom's group (Tom Crawford) has equipment in Accelerator who's contents need to be transferred to Hinds onto new hardware - i.e. the "legacy" SPT servers
    - One of these servers has arrived and is installed; the second has a two week time frame - tbc.
- Email lists
    - From Abby sounds like this is now in Elena's hands?
    - Tom reports we have an inventory of lists and aliases. Two mailman servers - box and oddjob. In addition a large number of aliases on kicp, which are being effectively used as distribution lists. See the text file.
- Email server retirement
    - Restarting the process for A&A servers
    - We have previously done this for theory. Math and Stats was the larger effort. They moved content to several services. This was wrapped up late summer last year.
    - Some users will be difficult
        - Carlstrom, York, Don Lamb (Carolyn met yesterday)
    - Bittitan tool was used in the past - to login to imap server as user, connect to whichever destination.
    - Delegate MX only? Been migrating to letsEncrypt
    - Help needed from ITS - yes.
        - need to setup a meeting with Dan and Paul and someone from the Windows team.
        - This will be a huge undertaking - will be disruptive to users.
        - Should we wait on this? Probably for now.
    - Need to get inventory of email servers.
    - There was a directory server across machines? Probably not, but UIDs seem to be consistent with Valerie's LDAP. (At least two)
- User management on unix machines
    - change auth to university LDAP?
    - N.B. Hull accounts, but cVPN.
    - Also - could use a bastion host.
- Any unresolved Astro Support issues requiring discussion
    - only 6 open atm
    - will need additional license
- Anything notable regarding resolved/closed Astro Support issues?
- Onboarding Carolyn
    - Last hired in 2006, don't have up-to-date onboard process
    - Documenting: Keys to Hinds offices, grouper & AD group additions, access to PSD IT Documentation, etc.
    - Acquire computer hardware. Office Desktop, laptop?
- Carolyn
    - working on github documentation

    - wants to run a DNS server - to facilitate automation; Tom notes ITS will not delegate. ITS will provide a zone that can be managed.
    - Need to reach out to ITS who manages Infoblox (Ramu and Mike Ruel)
- Crowdstrike
    - We install on everything that comes through desktop support office
    - The machines we *can* put it out to already have it
    - Enlist departmental IT staff to do this
    - Concerns about the registration token getting shared outside the university - leading to unauthorized reporting into our crowdstrike reporting console.
        - will bring this up with Cornelia

7/29/22

Tom, Steven, Rob

- Agreed to send announcement to A&A/KICP to restrict Valeri's access
    - Tom will coordinate with Josh/Rocky/Abby
- Tom Indelli will then field unix server issues from the Astro Group queue
- Triaging tickets - only four left. Nothing in the Astro Group is on fire.
- Will interview a promising candidate for the sys admin 2 position

03/09/22

Meeting on SPT relocation from ACC to Hinds:
https://docs.google.com/document/d/1exfUV19JHqSZIUohrDYcHUkE03n5FUqAEZRBvXi-3EQ/edit?usp=sharing

01/31/22 - 3:30PM

Zoom Meeting URL:

Supporting Documents:

Valeri's (Old) Job Description:
https://docs.google.com/document/d/1gM7tqdaukgnFI_DS19gcNUjTqSsN_qj-/

Proposed Job Description:
https://docs.google.com/document/d/1ngQB3H5-QlENDk3j7BIuuazFYaqe-p_Ys3g6Z7caubg/edit

Agenda:

Discuss how this position will operate in practical Terms.

- Scope of Support?
- Areas to be deferred to other groups?

Determining who is responsible for the following duties in an interim capacity should help outline the scope of support for the Astro Sys Administrator position.

- Email issues:
- Software licenses:
- Hardware problems:
- Software problems:
- Purchasing Hardware:
- Maintenance of Clusters:

Discuss the language of new Job Posting for this position.

Notes:

“EUD” refers to End-User Devices {Desktops & Laptops, typically running Windows & Mac OS}

PSD Computing contact: psdds@uchicago.edu (psdds = PSD Desktop Support) or https://psdsupport.uchicago.edu

- Email issues:
    - Dept. Email
        - Near-term support?
        - Transitional Support: Future Astro SysAdmin will facilitate Mail retirement.
        - Long-term support: ITS will support forwarding after Dept. Email retired.
    - UChicago Email support: PSD Computing & ITS
- Software licenses:
    - New Licensing: ITS Licensing
    - Local Licensing Servers? (PSD Computing likely operates same)
- Hardware problems:
    - EUDs: PSD Computing
    - Servers & Storage: ?
- Software problems:
    - EUD Software: PSD Computing
    - Enterprise Software:
- Purchasing Hardware:
    - Near-term support: PSD Computing, though we prefer this is limited to consultation.
- Maintenance of Clusters:

12/10/21

Coordinates and Agenda

Coordinates

- MCP 215
- Zoom Meeting https://uchicago.zoom.us/j/96157818168?pwd=RUVnZlJMMkRtQTBrSkp4VUhHWi8zZz09
    - Meeting ID: 961 5781 8168
    - Passcode: 4856446

Attending: Tom Crawford (AA), Rob Gardner (PSD Dean's Office), Steven Bandyk (PSD IT Desktop), Tom Indelli (PSD IT Desktop), Judith Stephen (Gardner's lab and SPT computing)

Documents:

- Google Drive: https://drive.google.com/drive/u/0/folders/1BJJUWlYtTwIEOlUCDWSZgPoixacm70wB
- Summary of services: https://docs.google.com/document/d/1IMHz4xEcSo4b0Fz83tDIUkXi3Zf3587W/edit
- Server inventory: https://docs.google.com/spreadsheets/d/1KPlDbNRSCcXNfmWcTtuCbi_vj4K2j0mb/edit?usp=sharing&ouid=104506837197854772549&rtpof=true&sd=true
- Valeri's job description: https://docs.google.com/document/d/1gM7tqdaukgnFI_DS19gcNUjTqSsN_qj-/edit?usp=sharing&ouid=104506837197854772549&rtpof=true&sd=true

Agenda

- What support is needed by SPT?
- What support is needed by A&A and KICP more broadly?
- Relocation of legacy SPT servers in Accelerator?
- Next Steps

Needed SPT Support (Tom Crawford)

SPT folks have put together this list. The machines in question are primarily the "number-crunchers" **spt.uchicago.edu**, **sptcloud.uchicago.edu**, **sptoir.uchicago.edu**, and

sza.uchicago.edu, but Valeri also maintained some public webpages and wiki servers for the collaboration.

Task	How to cover?
Root stuff like user accounts	Tom Crawford has sudo
Hard reboots	Judith? (TC can do if someone shows him.) PSD Computing has access to HindsDC. Can we set up virtual console or similar? Dell DRAC?
Failed Hardware, need physical access - e.g., if a disk accidentally fills up, it might malfunction, disks don't auto remount after reboot	
License Servers maintenance (IDL, HFSS, Solidworks)	This is actually a KICP/A&A-wide issue, not specific to SPT (or SPT legacy). Someone from PSD computing (Tom I.?) to operate until Valeri replacement is hired. What about backup? Effective backup of pole wikis at Pole, but more generally we don't know.
Wiki Support (air.uchicago.edu - clusters; sptpol; spt3g)	Need help from someone who has access to flame.uchicago.edu (the physical machine that hosts pole).
SPT public website (pole.uchicago.edu)	Brad B. has direct pole access and is mostly maintaining the website. When others need to contribute, BB or TC can open a temporary ssh tunnel.
Automatic backups of user directories	The only auto backups have been of /dataX/home. TC has been manually backing up other spt and sptcloud /data directories and will continue (and possibly adding sptoir).
SPT CVS/SVN repos; mysql database; SPTOIR condor	Sudo privilege + systems knowledge / googling. Could use some preventative investigation of what tools are installed.

- Tom Indelli notes administrative access needs to be given - where can we get it?
- Question about what to do with ~ 1 PB of legacy data. Tom will re-assess and identify what needs to be saved. Post this, we'll size up what replacement equipment would look like rather than relocate.
- Hard reboots. Judith can be point, Steve can be the Second.
- Indelli: can setup monitoring

- PSD Computing Slack instance - create a channel: #spt-interim (Steven, Tom(s), Rob, Judith)
- Mail list: spt-interim@lists.uchicago.edu
- Passwords: Steven has a solution OnePassword vault
- Indelli will investigate the lisc server (jet.uchicago.edu)
- pole/flame - where is it located? hosts the website. Probably in Hinds.
- Backups?
    - n.b. pole gets replicated to the south pole
    - but what about other systems?

Broader Support in A&A and KICP

Lets review at a high level what Valeri was responsible for and how to respond. Rocky wants an answer to "who do I call? I don't want to submit a trouble ticket."

- Hosts and Services document
- From the "number crunchers":

hostname [.uchicago.edu]	**owner**	**location**	**technical contact**
alethea	Wakely, Scott	HINDS S004	Wakely, Scott
frigg	Gnedin, Nick	HINDS S004	Gnedin, Nick
gev	Privitera, Paolo	HINDS S004	Privitera, Paolo
ghostwheel	Kravtsov, Andrey	HINDS S004	Kravtsov, Andrey
lofn	Gnedin, Nick	HINDS S004	Gnedin, Nick
nazgul	York, Don	HINDS S004	York, Don
opus	Privitera, Paolo	HINDS S004	Privitera, Paolo
rein	Kravtsov, Andrey	HINDS S004	Kravtsov, Andrey
ulysses	Wakely, Scott	HINDS S004	Wakely, Scott
zenigata	Grandi, Luca	HINDS S004	Grandi, Luca
zev	Privitera, Paolo	HINDS S004	Privitera, Paolo
stars	Kron, Richard	HINDS S004	Berthoud, Mark
orion	E.W. Kolb, J.E.Carlstrom	HINDS S004	sysadmin@astro
hex	Gladders,Michael	HINDS S004	Gladders,Michael
holometer	Meyer, Stephan	HINDS S004	Meyer, Stephan
lambda	Chen, Hsiao-Wen	HINDS S004	Chen, Hsiao-Wen
lipwig	Gladders,Michael	ERC 527	Gladders,Michael
jet	E.W. Kolb, J.E.Carlstrom	HINDS S004	sysadmin@astro
nanna	Gnedin, Nick	ERC 409	Gnedin, Nick

rigoletto	Kolb, Edward	ERC 481	Kolb, Edward
spt	**Carlstrom,John**	**ACC server room**	**Carlstrom,John**
sptoir	**Carlstrom,John**	**ACC server room**	**Carlstrom,John**
sptcloud	**Carlstrom,John**	**ACC server room**	**Carlstrom,John**
sza	**Carlstrom,John**	**ACC server room**	**Carlstrom,John**
vetinari	Gladders,Michael	ERC 527	Gladders,Michael
wave	McMahon, Jeff	ERC 588	McMahon, Jeff
ufo	Gnedin, Nick	ERC 430	sysadmin@astro

- We discuss a need for outreach to A&A to gather priorities and organize a program of work. Tom Crawford will form a committee to discuss, and communication.
- There is also the sysadmin@astro list. Route to psdds@ so everyone in PSD sees it, and a ticket is generated.

Relocation of SPT Servers in Accelerator

- The deadline is March - so we have some time.
- In parallel, Tom Crawford will assess data needs to be retained.
- Gardner's lab will help with spec'ing out configurations so that essential servers (services) can be preserved and the old help can finally be disposed of.
- Judith will take some photos of the current inventory.

Next Steps

- Setup Slack channel communication for SPT help (Steven, TomI)
- Establish a computing committee in A&A to help prioritize work and establish communication (Tom)
- Assess storage requirements from legacy servers in Acc (Tom)
- Work on replacement job description (Rob, Susan H, and with A&A leadership and committee)

Appendix (Valeri's Job Description)

Job Description: Valeri Galtsev, Senior System Administrator
Kavli Institute for Cosmological Physics
Department of Astronomy and Astrophysics

Reviewed by John Carlstrom and Valeri Galtsev on March 22, 2021

Maintain the KICP and Astronomy Computing Infrastructure.

Work with the administration to purchase suitable computational hardware and software for the KICP and Astronomy.

Maintain both hardware and software in optimal condition; upgrade/patch/replace items as needed and as allowed by budgetary constraints.

Install, configure, upgrade, maintain, monitor and tune performance for Windows, Macintosh, Linux, and UNIX operating systems, utility software and server hardware including installation of patches and services.

Work with individual KICP and Astronomy investigators to create and maintain suitable computing environments/clusters to support the individual projects.

Work with individual investigators to purchase computers and software for day-to-day use (e.g., laptops).

Install and maintain signage server and peripheral equipment (signage screens).

Investigate and purchase appropriate site Licenses for KICP and Astronomy use.

Work with UChicago ITServices to maintain optimal network performance.

Maintain security and access control on KICP and Astronomy electronic intellectual property.

Provide individual computer support as necessary.

Maintain KICP and Astronomy printing environment, ensuring members the ability to print as required.

Provide other IT support for KICP and Astronomy as necessary (ceiling projectors, meeting rooms etc)