

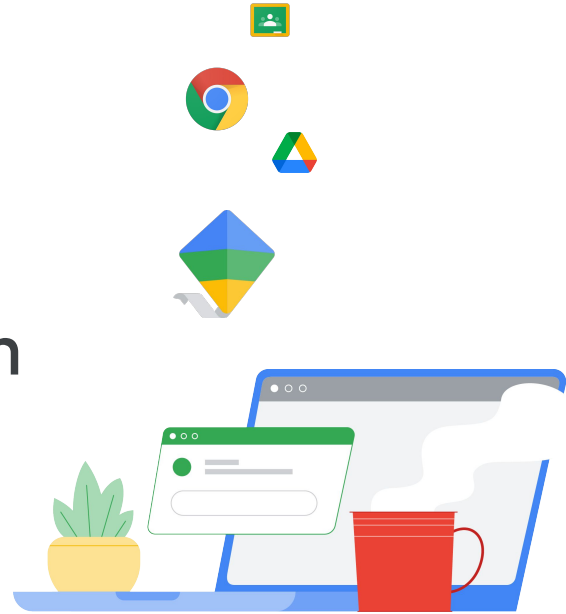


Deprovisioning of Accounts:

Internet2 NET+

Google Workspace for Education

April 6, 2023



Agenda

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Program and the Cloud
Storage Working Group

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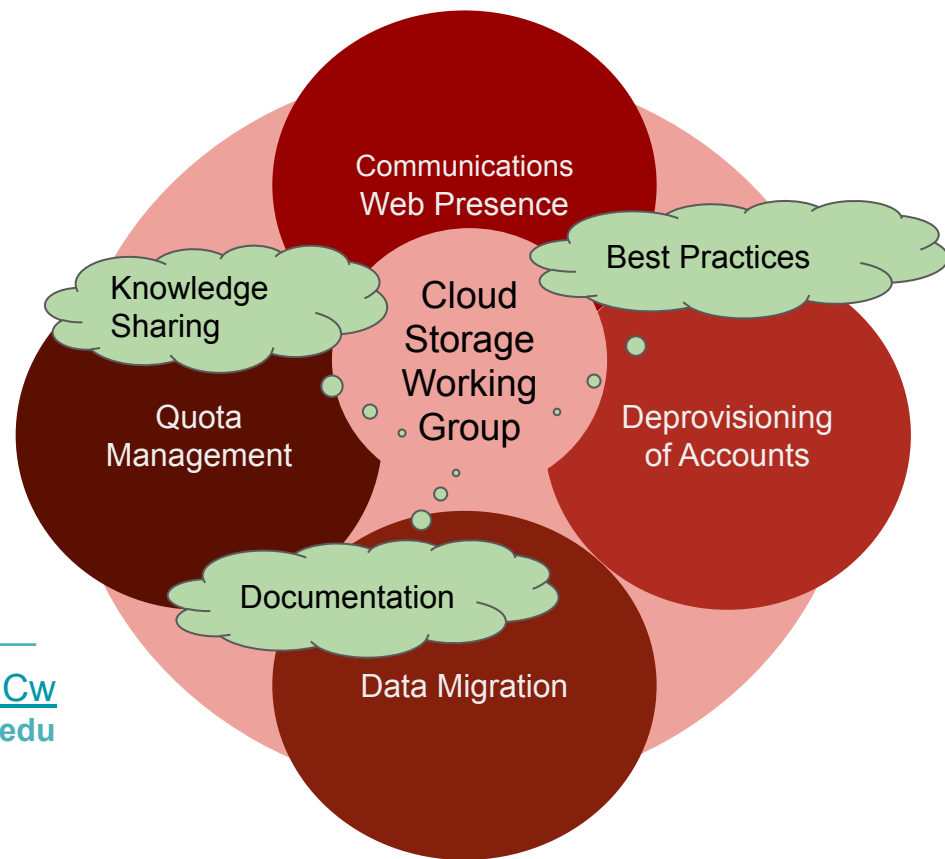
About the
Internet2 NET+ Program and the
Cloud Storage Working Group

Service Advisory Board



Cloud Storage Working Group

<https://spaces.at.internet2.edu/x/xoEgCw>
cloud-storage-working-group@internet2.edu



Cloud Storage Working Group - Deprovisioning of Accounts

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Participants:

- Chuck Boeheim, Cornell University - LEAD
- Amanda Caton, Lehigh University
- Andy Smith, The George Washington University
- Annette Aquino, Arizona State University
- Ben Poliakoff, Reed University
- Brian Cors, University of Michigan
- Chris Clements, San Diego State University
- Craig Hynes, Rutgers University
- Dana Voss, Internet2
- David Karnowski, University of Wisconsin-Madison
- Ian Crew, University of California - Berkeley
- Jake Burggraff, Arizona State University
- John Kelly, Notre Dame University
- Josh Casper, University of Minnesota
- Justin Booth, Michigan State University
- Justin Moore, Portland State University
- Justin Zemlyak, Indiana University
- Katie Weber, University of Minnesota
- Lee Alexander, University of Illinois - Urbana
- Marc Cogle, Rice University
- Mark Debonis, Virginia Tech University
- Matt Deal, North Carolina State University
- Mike Reeves, University of Minnesota
- Pirooz Jolani, The George Washington U
- Sabila Husain, Harvard University
- Steve Nguyen, University of Minnesota

02

Goal Assessment

What do you need to accomplish?

- Storage reduction
- License management
- End service for a population (e.g. alumni)
- Migrate to a different service
- Avoid breakage for collaborators
- Retain institutional data
- Comply with institutional retention rules

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Deprovisioning Actions

Most Common Steps

Prevent Access during holding period

- Set user quota to zero
- Turn off services
- Remove license
- Suspend user
- Rename user
- Change password, revoke tokens
- Remove Drive sharing with Drive Trust Rules
- Label or rename content for visibility

Warn Collaborators

- Rename user to show status
- Add label to files (requires license)
- Encourage users to make copy or move to shared drive

Remove Data

- Delete Drive Content with GAM
- Delete Drive Content with Vault retention rules
- Move content from Drive to a service account
- Delete account

See our document at <https://tinyurl.com/2t8vvpj9>

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Example Workflow 1

Cornell University

Workflow Goals

- Background: Cornell is staying with a Edu + plan, and managing storage down to a ~1 PB cap
- Prevent access by account owner when affiliation ends
- Staged approach to allow time to transfer content
- Signal in multiple ways to collaborators that content is at risk
- Choose actions that are easily reversible

Stage 1

- Move user to OU with zero quota, most services off.
- Account named to formerly-<netid>@cornell.edu
- Tokens, passwords, etc revoked
- Manager notified if exists
 - Use Drive Transfer if Manager requests content

Stage 1B

- Attempt to notify internal collaborators
 - Reminders at 30 days and 60 days
 - Suggested action: make a copy

Stage 2

- Move to OU with Drive Trust Rules that prevent sharing
 - Files disappear from collaborators
 - Reversible by moving account out of OU
 - Except: content not visible in Shared With Me

Stage 3

- Account is deleted
- Account recoverable for 20 days

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Example Workflow 2

North Carolina State University

Workflow Goals

- Prevent access by account owner when affiliation ends
- Staged approach to allow time to transfer content
- Signal in multiple ways to collaborators that content is at risk
- Choose actions that are easily reversible

Stage 1

- Suspend the user
- Move user to an OU with
 - zero quota
 - all services off
- Collaborators with Editor on the suspended users files can move them to a Shared Drive

Stage 2a

- Label all files in Drive owned by the account
 - Collaborators can search for Shared With Me and <label> to identify files we will delete
- Collaborators with Editor on the files can move them to a Shared Drive

Stage 2b

- Labeling requires temporarily assigning the account
 - A license
 - Access to Drive
 - Sufficient Quota
- Group membership is the easiest way to enable Drive and high quota

Stage 3

- All Drive and Gmail data in the account is Trashed
 - Allows 30 days of additional notifications to Drive collaborators
 - At this point, collaborators must make a copy

Stage 4

- Delete the account

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Example Workflow 3

University of California Berkeley

Workflow Goals

- Much the same as Cornell and NC State
- Not a complete workflow yet
- Highlighting a couple of things we may do differently

Stage 1: Understanding collaborations

- Wanted something similar to the [Box Collaborations Report](#) to help:
 - Understand how our users are using the service
 - Inform strategies and decision-making
 - Inform our users about the shared content they will be losing access to
- Google doesn't offer a similar report, so we wrote our own script to generate it
 - Still beta, testers needed. Request access to [this doc](#) to test.
- Due to the way Google handles ownership in MyDrive, the “inform our users” part will be hard:

Number of items that will be going away	Total count	Count of groups	Count of users
<100	33,765	2,194	31,571
>=100, <1,000	13,717	151	13,566
>=1000, <5,000	4,560	24	4,536
>=5,000	501	0	501

Stage 3: Deleting accounts

- *Yes, I skipped Stage 2*
- Deleting accounts a little differently to avoid “orphaned files” problem.
- Before deleting:
 - Add a note to the description of the folder noting who it belonged to and when it was deleted
 - Transfer ownership of all folders to a holding account
 - Folder objects are zero quota in MyDrive
 - Have a cleanup script running in holding account to remove any folders that no longer have any current collaborators.

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Additional Considerations

Additional Considerations

Interactions with Vault

Need to do some programming. (At least feed CSVs to GAM)

Other data that goes away or becomes ownerless

- Secondary calendars, repeating calendar events
- Scholar
- Play
- GCP projects?
- Analytics properties?
- YouTube
- Google Colaboratory (Colab)?

Resources

[Deprovisioning of Accounts wiki site](#)

[Deprovisioning of Accounts workgroup email](#)

[Public folder with Deprovisioning of Accounts Examples and Documentation](#)

[Stuff Google Workspace admins \(especially new ones\) should be aware of/sign up for](#)

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Q&A