

# P12 - ChemGrades FMPro DB

Making CCB's very important ChemGrades DB more robust, and enabling necessary increased functionality, especially for teaching faculty and students. Ensuring its long-term support and operation. Representing customer is Pat Hine (PatH).

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## See also

- [CCB Instruction's ChemGrades FMPro DB support procedures](#)

## Links

When completed, here's the URL for the read-only web access:

- <https://chemlabs.arts.cornell.edu/grades/>

Eval from 8/13/13:

- <https://chemlabs.csotest.arts.cornell.edu/grades/>

## Updates

None, as of 9/13/13.

## Projects anticipated to start-up, once everything is settled and working

### Enable NetID access to FMPro server

- For all TAs and for all staff.
- Expect prep work in fall 2013.
  - Thus, expect implementation/ cut-over no sooner than winter break.

## To do's for this project

See the following section for context related to these to-do's.

New as of 9/13/13:

## Scheduling Faculty meeting to present web service

Lead(s): **PatH**

- Proposed date: Thur, 9/26/13, 2:30pm
- With assistance from Dani in presenting.

## Add permission access to Grades web application

Lead(s): **Tu**

A control table in FMPro (or edit via web directly?) with who can see what via the Grades web application:

	Faculty	Grad TAs	Students
Course1			
Course2			
Course3			

## Decide on date to turn on web application for student use

Lead(s): **Pat**

Do after 1st prelim. Maybe Oct 31st, Thur.?

## Who do students contact if they have questions or concerns about the web site?

Lead(s): **Pat**

Decision from 9/13/13 discussion:

- Tu: Add link from web Grades to to CCB Courses page.
- Pat's office: Create an FAQ page on that Courses page.

Initial questions:

- What is done now for the Waiting List web application? Do same thing?
- Would it not be Path's office? If so, how communicate on the page?

## Change all TA access to be by NetID (and FMPro p/w), instead of their name

Lead(s): **PatH**

- **PatH** to make the appropriate updates soon.
- This is not to be confused with enabling true NetID-based access, using CU's NetID p/w's.
- PatH must reinforce to TA Grads that they should //not// use their true NetID p/w's!!

Decision from 9/13/13 discussion:

- Add (or find existing) field to hold TA name.
- In existing "TA" field (currently holding the TA name!), enter TA's NetID
- Ensure Pat enables ~"reset password on next use" checkbox.

## Test Path's restore procedure.

Lead: **PatH**

- Do ~end of Sept? (No later, please!)
- To be done by PatH. Presumably via self-service. :-)

Try with course 3570 (no TA data). Do with Dani.

## Ensure FMPro access by Cynthia

Lead(s): **PatH, MichaelH, and Roger**

- Report from Pat and Dan that Cynthia was not able to access the FM DB.
  - Tu asks: Was Cynthia in the AD group <as-chm-GradAdm>? Answer: No!
    - Oliver added her to the group, 9/13/13 and wrote her to tell her to try again.

Done:

- Ensure that all "single account set up for a whole course for use by many TAs" is cleaned up. (Legacy capability which is no longer needed. And confuses things now.)
  - **Dani** and **PatH**
- Ensure works from systems at: TA room, DanL, and Sam's.
  - **MichaelH**.

Previous:

## Done: Establish procedure for Path to update web-hosted data. "Push the button".

As of 10/17/16, this was done several years ago. (As of 8/16/13, function doesn't exist for Path.)

- Requires ODBC connection. Not possible at FMPro server; must be set up at FMPro client's computer.
  - Do for Path's computer. As backup, do on Sam's computer.
  - Current plan: For each computer, set ODBC up as system's Admin (vs. user) so ODBC accessible/ configured for any computer account.

## Done: Fulfilled Becky's needs of Grades DB

10/28/2013Mon: MichaelH completed this, following Oliver speaking with Becky and Pat.

LabSer's AD group (3 staff) added to access FMPro DB with read-only access. Access is done for specific classes:

- Setup AS-CHM-LabSvc to read only access of 1560, 2070, 2080, 2090, 2150, 2510, and 3010.

Becky confirmed access to relevant course via <grades.chem.cornell.edu>, within her FMPro (Mac) DB, and successful import.

Past notes:

- Any benefit in changing the current "export" process?
- Create appropriate "read-only" account for Becky to allow her to continue doing exports herself.
  - **Roger** (working with **Becky**)
  - Outline some options, for later focus. (Unlikely do any other changes right now!)

## Done: Enable Pat's "push" capabilities so her DB info can be seen on the web

Lead(s): **Tu**

- Tu will work with Roger.
  - Tu needs IP addresses. Roger can do the installs.
  - And Roger may have better alternatives. :-)

## Done: Confirm Path's MacroExpress scripts work with server-based FMPro.

Lead(s): **PatH**

- PathH to confirm right away.

## Done: Enable Path's remote access

Lead(s): **Oliver**

- ChemIT must do this. Oliver must do or assign.

## Done: Enable ChemIT staff's access to CCB FMPro DBs.

Lead(s): **Roger**

- Do via AD group. Enable only "Admin" accounts, not ChemIT staff's user accounts. (Right, Roger?)
- **Roger** to work with/ keep **Tu** informed.

## Done: Shut off access to old ChemIT-run instance (Win7 VM). "Legacy Grades".

Lead(s): **Roger**

- Per 8/15/13 meeting, do anytime. Not being used now- no current data and not being updated anymore.
- **Roger** to do.

# Decisions, processes, and procedures

## Make appropriate changes to source FMPro data

- Change all TA access to be by NetID (and FMPro p/w), instead of their name.
  - This keeps the access process the same as it was, but:
    - Enables the correct access restrictions via the web application.
    - Facilitates transition to trueNetID-based access, as a future project.

## Establish semester-start procedures and processes. Includes:

This fall, PatH's first pull is no sooner than 8/29/13 (Thur). Later for lecture-only courses.

- Initially populating the DB with PeopleSoft data via a PeopleSoft import. This is a one-time event each semester for each course. (Courses done at different times, depending on course.)
  - Do imports in productions course DBs.
    - Can zero out if mistake made. If major problem, contact Dani or Tu to revert to prior DB.
- At the beginning of the semester (add/ drop period), PatH will periodically grab copies of the back-ups so she can create statistics re: rate of enrollment changes.

## Establish semester-end procedures and processes. Includes:

- PatH pulls the final data from the backups.
  - **NOTE:** If an edit is done, must wait until that edit shows up in a backup (~ half a work day) and then that backup becomes the "final data" for that course.
- PatH zeroed out each of the ChemGrades DBs before the start of their next use.
  - PatH does this within FMPro, when she needs it done (varies by course).
- Cut off TA's access to FMPro.
  - PatH does this within FMPro, when she needs it done (varies by course?).
- Some courses must not show the grade of the final exam, per faculty member's requirement.
  - In those cases, PatH will simply not "push" her final data to the web (varies by course).
    - For these courses, grade changes for a student done after the last push (right before final exam grades entered into FMPro, ideally) will thus not show up on the web.
      - These are edge/ rare cases and PatH will inform the student of this fact.

## Establish DB revert procedure. Initiating request and subsequent restoration from back-up.

PatH has access to last 7 calendar days of backups, 2 times per day. So, 14 backup files per course at steady-state, whether changes were made or not.

- Backups are made for each course.
- Backups are made around noon (morning data changes) and in the evening (afternoon data changes).
- Each backup's name contains a date and time-stamp.
- Files are located on Instruction's file share (R:\ drive).

PatH can do any restore herself using FMPro, ensuring "low friction" access to the backup files (nobody to contact, not hoops to jump through).

- Zero out course data on the A&S FMPro server.
- Importing data from the correct course backup file.
  - Latest version would be from ~half a work day before.
- If PatH needs backup data older than what she has access to herself (> 7 days, so rare), she must contact Dani or Tu for them to get via back-ups of the SQL server data (or from EZ-Backup).
  - Note that A&S's EZ-Backup would itself only have the 3 prior versions. If course DB was changed each day, that's just three backups. If course DB rarely changed, then that can be a long time.

## Enable Pat's view of DB data from home.

The need for this has been reduced since many folks can self-serve, and PatH herself has view-only web access.

- Although the web version may be OK for view-only of some data, it's obviously not as flexible for searching. And there is no way for PatH to make changes through the web version.
- On occasions when PatH needs full access, we will enable Remote Desktop on PatH's main work computer. This way she can do everything she can do when she's at work.
  - She access her computer from off-campus via VPN.

As an alternative, if she knows she'll need it ahead of time, PatH can take a backup copy of any course on a FMPro computer for stand-alone access. This works as long as PatH doesn't make changes on the stand-alone DB that she later expects to see on the production, server-based DB, of course!

Rejected idea, for future reference: With FMPro installed on dept. laptop, access AS's FMPro server off-campus and do the work that way.

## Ensure security of FERPA data in Grades DB.

See Michael Hint's emails with Tu and Frank for more on this. Some thoughts, initially:

- FERPA-like data so ChemIT would appreciate understanding the ACL (see for subnet?) and firewall configurations.
  - ChemIT thinks there shouldn't be any off-campus access except via VPN. Thus take off of public net and put into 10-space. But there may be other factors to consider.
- Access to the FMPPro DB is controlled by NetID (AD groups). Once in, who else has access to Grades DB FMPPro DB itself?
  - Answer: Only accessible to authorized FMPPro users or groups.
    - If a user isn't authorized for a DB, they don't even get to see that the DB is available.
    - If a user enters the fully qualified name to the DB they can't see (because they aren't authorized within the DB), the DB still won't open.
- Ideal: Make all access via NetID/ NetID p/w, not via FMPPro DB's own controls.
  - Control NetID membership via Active Directory groups.
    - Start with Grad TA access, via the TA room kiosks? Also start with faculty access?
    - Once process confirmed, establish procedure for enabling and disabling NetID access to Grades FMPPro DB by grads and faculty
      - Can take ChemIT staff less than a minute to do this, and is effective immediately.
- Confirm FMPPro server access is correct: Functional and secure.
  - Confirm that only permitted staff can access Grades (and other CCB) DBs.
  - Confirm Becky can see what she needs to see.
    - Add a read-only account for Becky.
    - Becky will still be able to export her data, but no longer using Path/ the Admin account.
  - Confirm TAs can see/ edit what they need to edit for the TA room's computers.

## Clarify support and maintenance expectations

### For staff

Useful to distinguish between something breaking (worked yesterday!) and something new needed (consultation/ design/ implementation).

- For now, keep communications flowing directly between Path, Dani, and Tu.
  - De-bugging, tweaking, etc.
- After project is "completed" (~mid-Sept?), all requests (for breakage or new feature requests) are to go to ChemIT
  - In an emergency (time-sensitive situation), in addition to contacting ChemIT, Path may contact Dani or Tu.

Instructional staff are encouraged to involve A&S support staff if making structural changes to their DBs. And if Instruction staff make structural changes to any of their DBs, at the very least inform A&S staff as an FYI.

- Debugging a problem is easier if changes to the source DB is known up-front.
- There are many, many moving parts to this complex and interdependent system!

### A&S's role

- A&S is providing the FMPPro server hosting services.
  - This includes performing and confirming back-ups and restore procedures, especially focus on addressing an infrastructure problem at their end.
- A&S staff can Design/ Creation on a case-by-case basis
  - This will usually require Frank's approval.

### For students

Who do students contact if they have questions or concerns about the web site?

- What is done now for the Waiting List web application? Do same thing?
- Would it not be Path's office? If so, how communicate on the page?

## Keywords, for searching results

- FileMakerPro