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).

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**

- PatH 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 created 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 accasions 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 FMPro DB is controlled by NetID (AD groups). Once in, who else has access to Grades DB FMPro DB itself?
  - Answer: Only accessible to authorized FMPro users or groups.
    - If a user isn't authorized for a DB, they dont' 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 wont' open.
- Ideal: Make all access via NetID/ NetID p/w, not via FMPro DB's own controls.
  - Control NetID membership via Active Directory groups.
    - Start with Grad TA access, via theTA room kiosks? Also start with faculty access?
    - Once process confirmed, establish procedure for enabling and disabling NetID access to Grades FMPro DB by grads and faculty
      - Can take ChemIT staff less than a minute to do this, and is effective immediately.

- Confirm FMPro 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 exports 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 FMPro 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