Automating Banner at Foothill-De Anza CCD using EnterpriseSCHEDULE

Creating Banner jobs and work streams that automate time consuming and error prone daily tasks using the customized EnterpriseSCHEDULE Job Scheduling application

California Community Colleges CHIEF INFORMATION SYSTEMS OFFICERS ASSOCIATION

CALIFORNIA COMMUNITY COLLEGES BANNER GROUP

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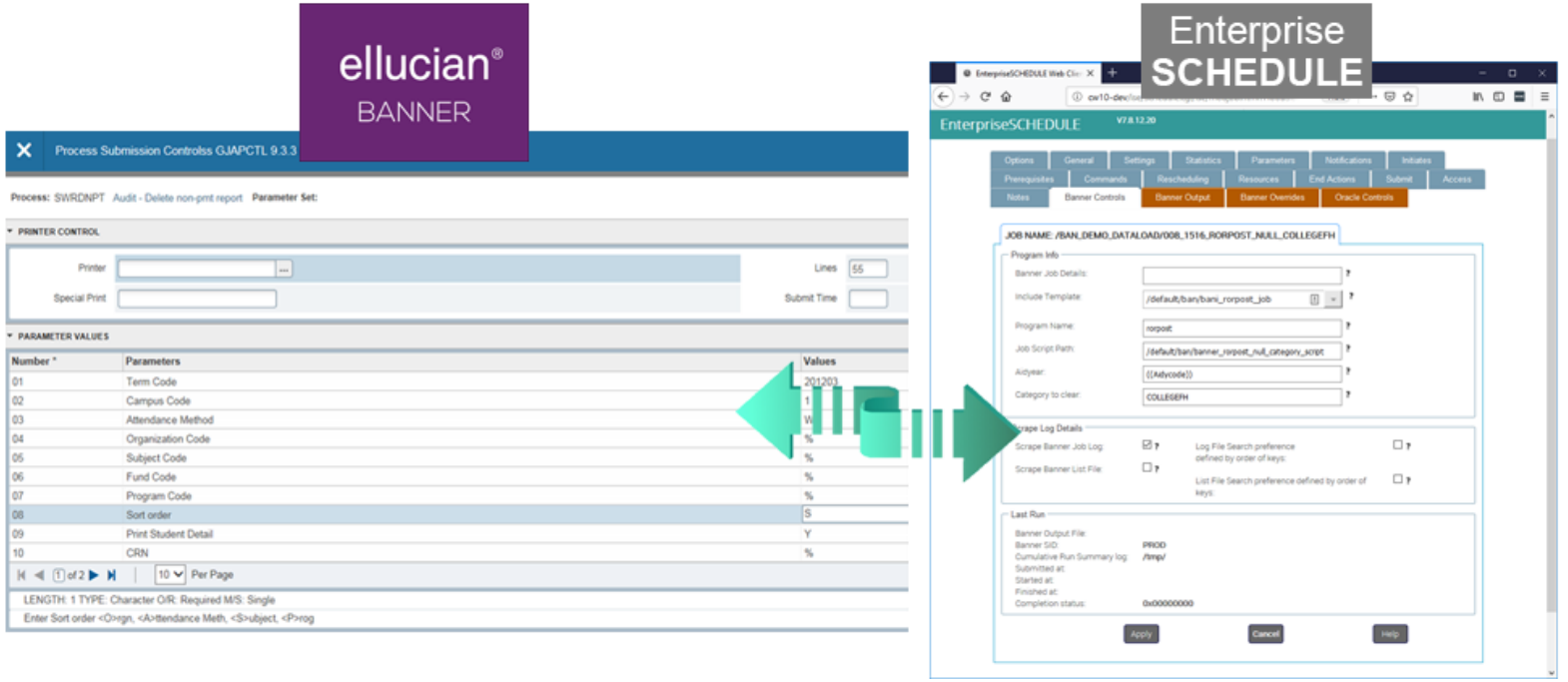
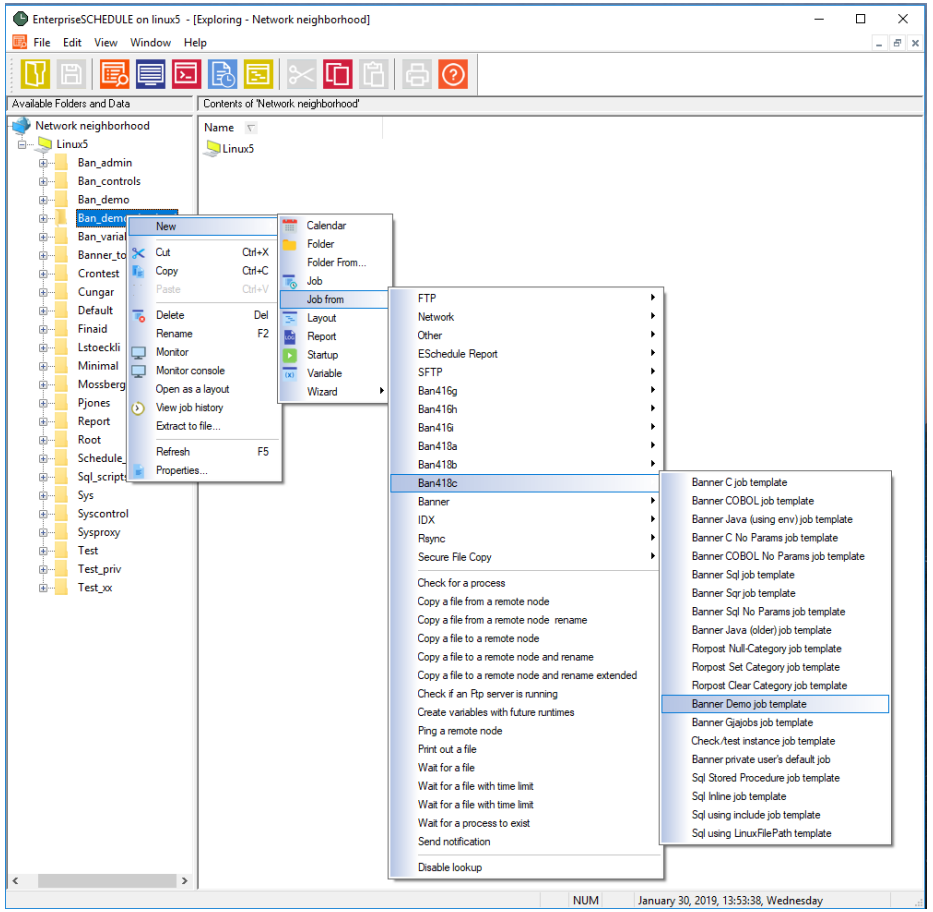
Tight integration with Banner

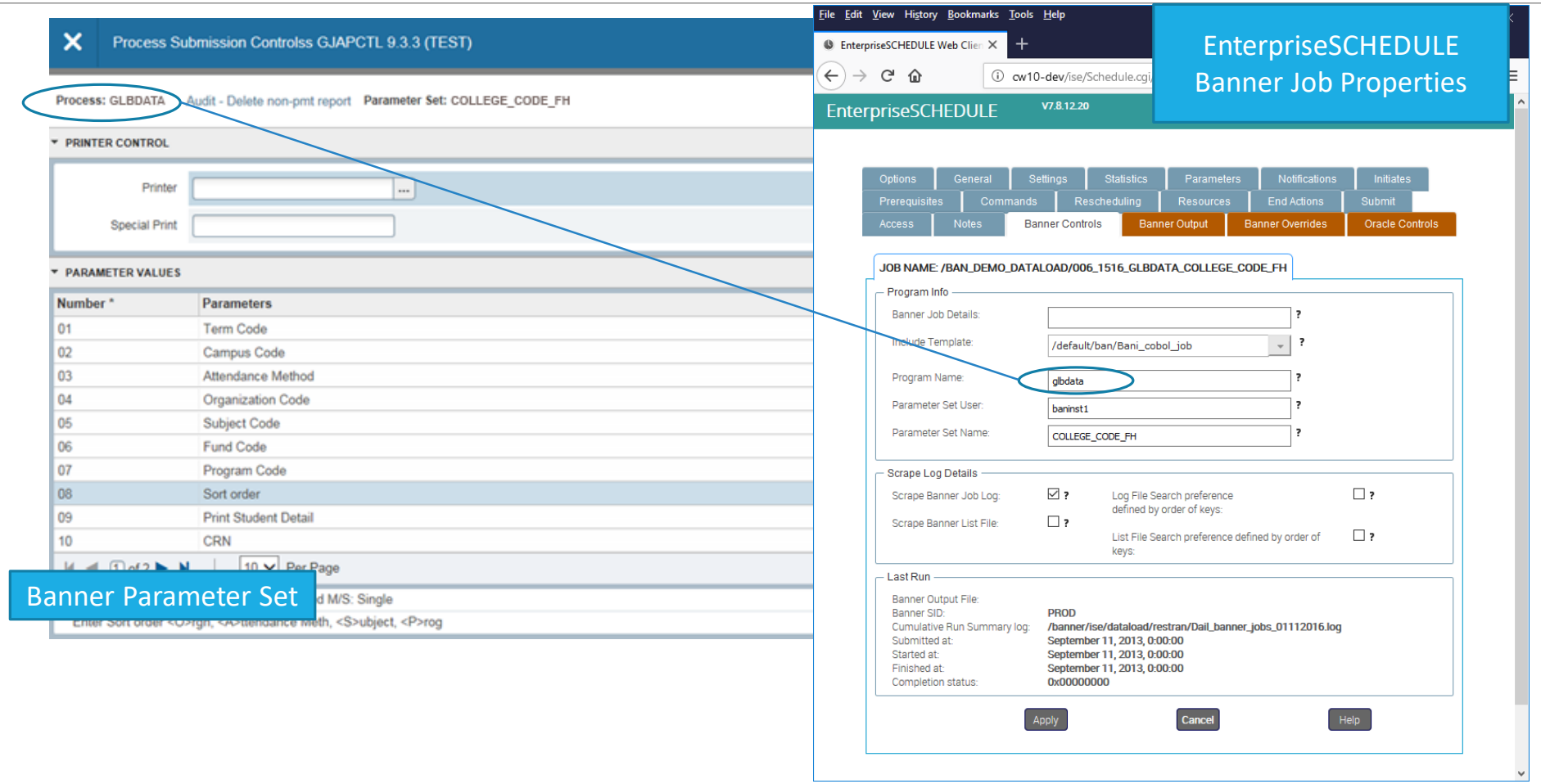
Preconfigured prototype jobs are ready to automate with a minimal amount of configuration of Banner parameters like Program name and Parameter set name



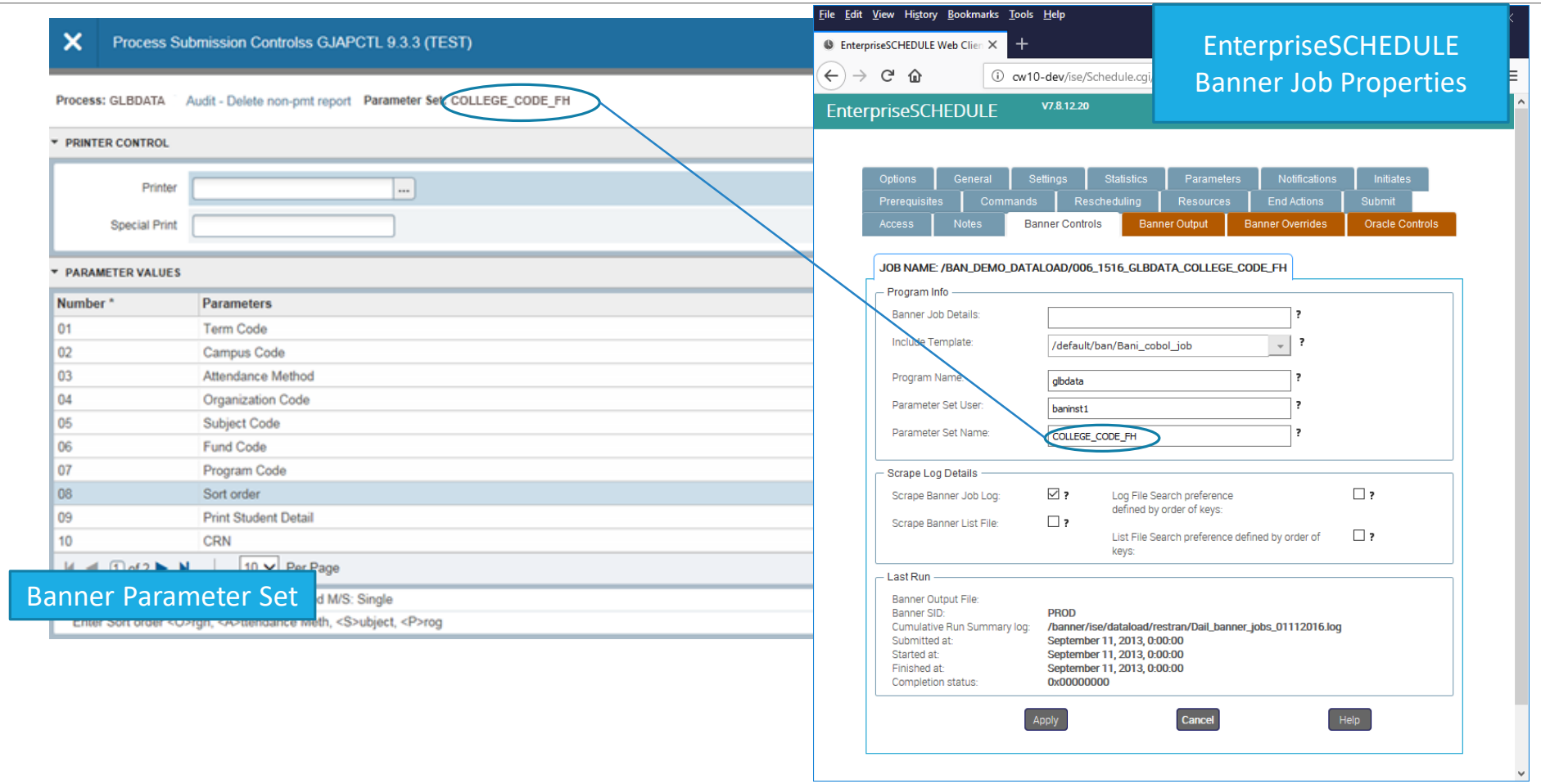
Quickly and easily Create Banner jobs from an extensive list of preconfigured templates



Process name is designated in job definition



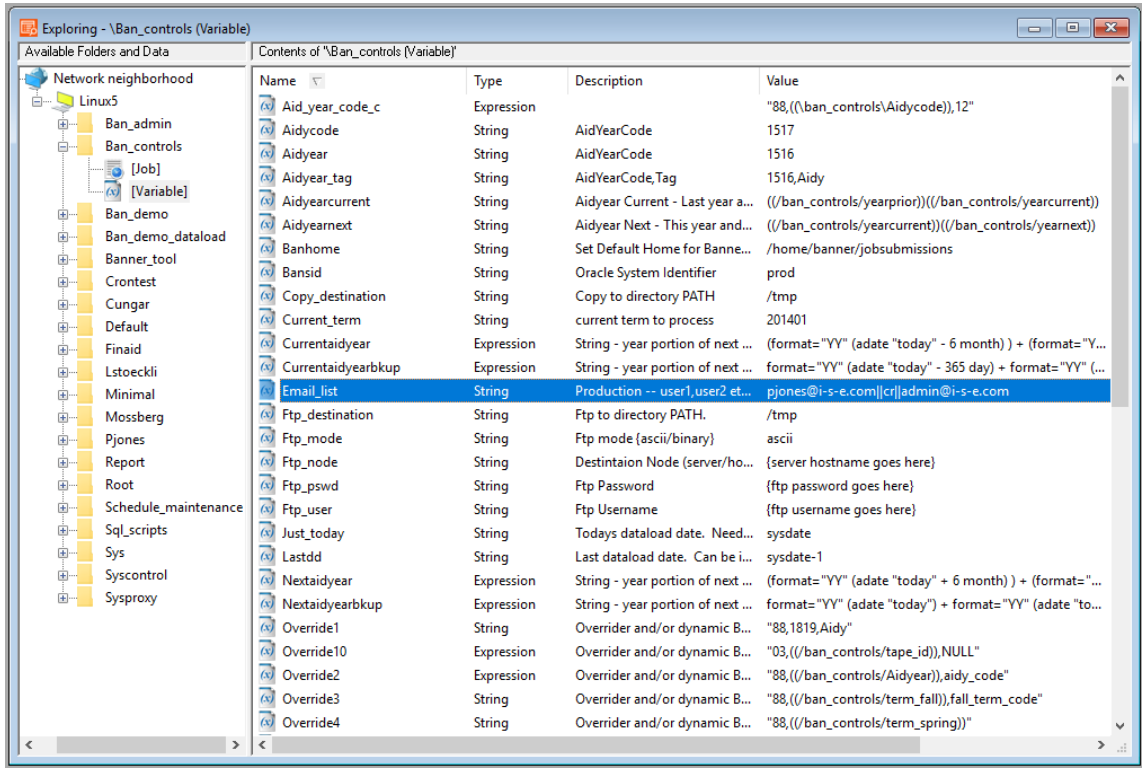
Parameter set is loaded at runtime based on designation in job definition



Banner job creation and implementation example

1

Set up variables that apply to all or some of your jobs



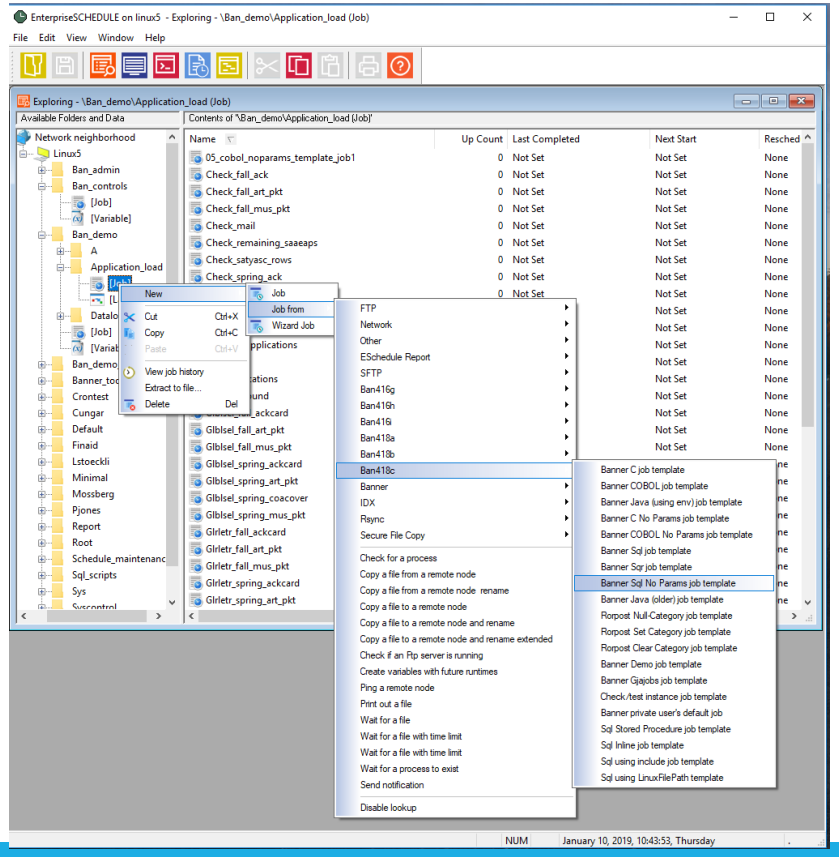
Examples

- ❑ Aid Year
- ❑ Term
- ❑ Username
- ❑ Password/Wallet
- ❑ Overrides
- ❑ FTP destination

Banner job creation and implementation example

2

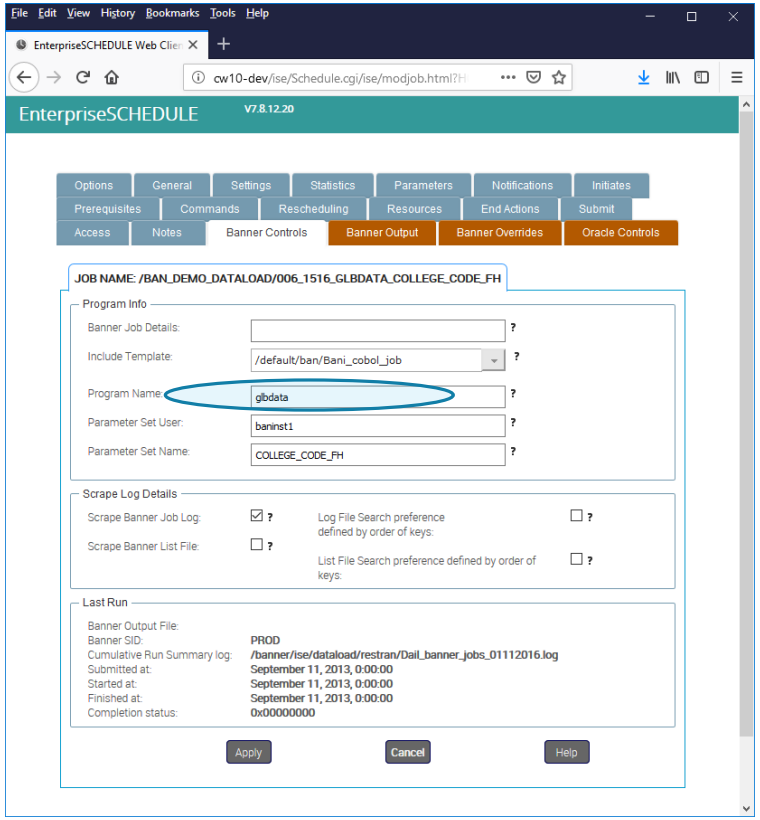
Create/clone a new job from the existing template list



Banner job creation and implementation example

3

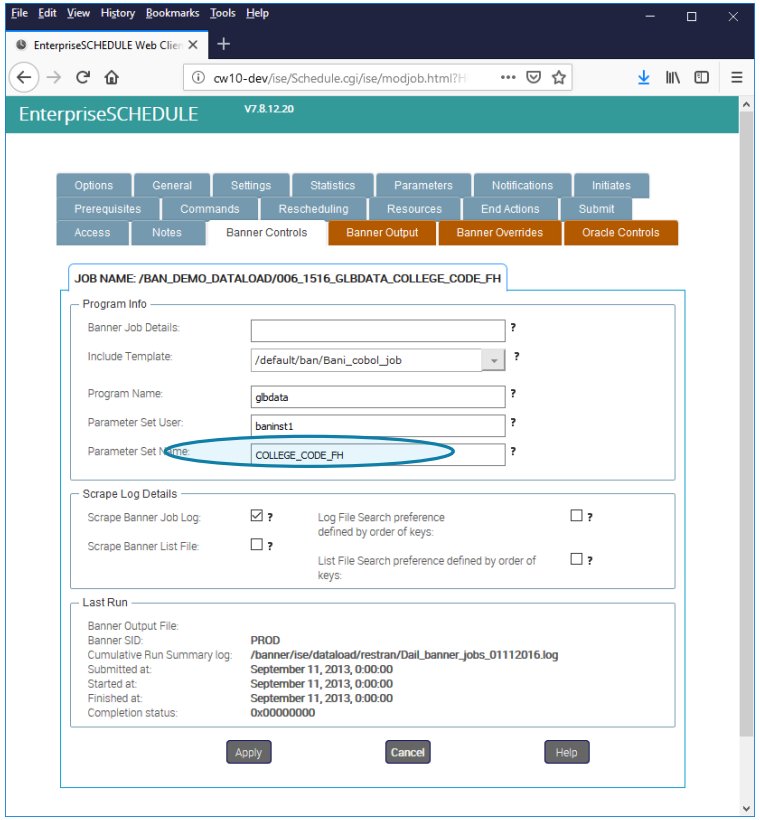
Assign the process/program name



Banner job creation and implementation example

4

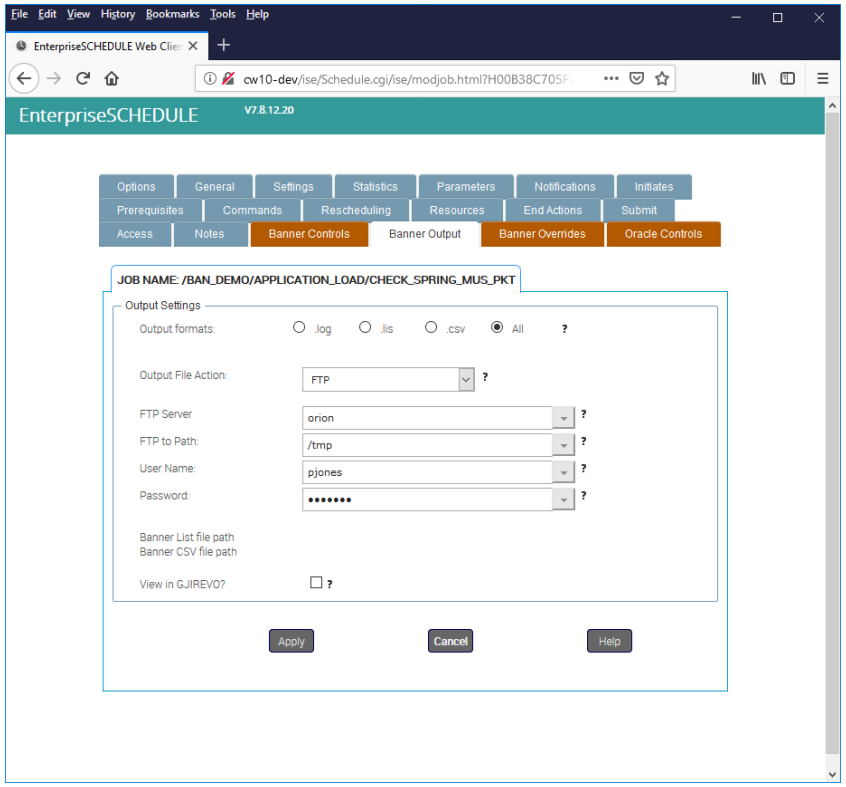
Assign the parameter set



Banner job creation and implementation example

5

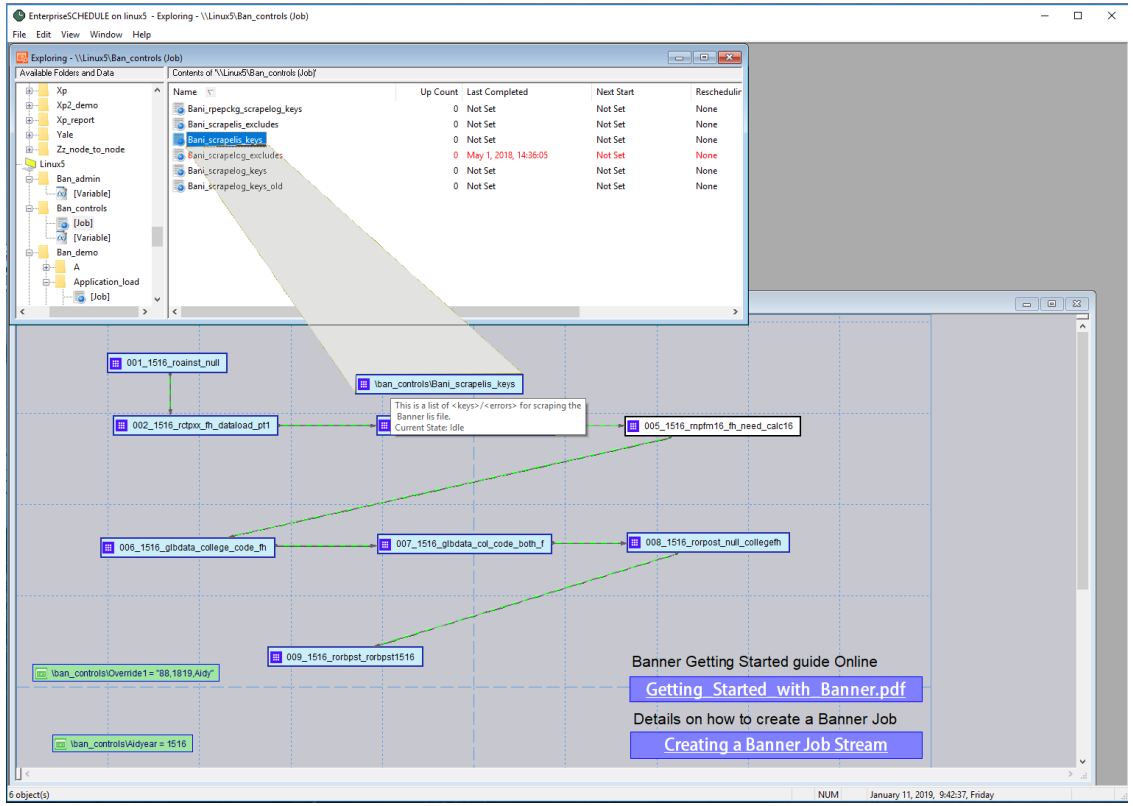
Set output file type and actions



Banner job creation and implementation example

6

Optionally drag the job into a layout and connect to other jobs using initiate lines



FOOTHILL-DE ANZA
Community College District

EnterpriseSCHEDULE at Foothill-De Anza Community College District

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Foothill-De Anza Community College District
Fall 2019 - End of Term Credit Headcount

Gender	Count	Percent
Male	14,768	47.7%
Female	15,817	51.1%
Unrecorded	369	1.2%
Total	30,954	100.0%

Ethnicity	Count	Percent
African American	1,304	4.2%
Asian	11,185	36.1%
Filipino/a	1,842	6.0%
Latino/a	8,512	27.5%
Native American	122	0.4%
Pacific Islander	292	0.9%
White	6,429	20.8%
Unrecorded	1,268	4.1%
Total	30,954	100.0%

Enrollment Status	Count	Percent
First-time Student	4,681	15.1%
First-time Transfer	4,703	15.2%
Returning Student	4,259	13.8%
Continuing	15,394	49.7%
Special Admit (K-12)	1,917	6.2%
Total	30,954	100.0%

Day Eve Status	Count	Percent
Day	28,154	91.0%
Evening	2,800	9.0%
Total	30,954	100.0%

Full/Part-time*	Count	Percent
Full-time	12,190	39.4%
Part-time	18,764	60.6%
Total	30,954	100.0%

District of Residence^	Count	Percent
Foothill Service Area	3,016	9.7%
De Anza Service Area	4,187	13.5%
San Jose-Evergreen CCD	7,492	24.2%
West Valley-Mission CCD	6,608	21.3%
San Mateo CCD	1,437	4.6%
Gavilan Joint CCD	448	1.4%
Other California CCD	4,459	14.4%
Out of State	3	0.0%
Foreign - F1 and Other	3,304	10.7%
Total	30,954	100.0%

Age	Count	Percent
19 or less	6,932	22.4%
20 - 24	12,919	41.7%
25 - 29	4,511	14.6%
30 - 34	2,270	7.3%
35 - 39	1,407	4.5%
40 - 49	1,471	4.8%
50 - 59	894	2.9%
60 +	546	1.8%
Unrecorded	4	0.0%
Total	30,954	100.0%

Mean Age	Median Age	Modal Age
25.8	22.0	19.0

Highest Education	Count	Percent
Not a HS Grad	417	1.3%
Special Admit (K-12)	1,571	5.1%
Adult School	130	0.4%
HS Diploma	18,295	59.1%
Passed GED	771	2.5%
CA Certificate	316	1.0%
Foreign Secondary	2,705	8.7%
AA/AS	1,176	3.8%
BA/BS or higher	4,805	15.5%
Unrecorded	768	2.5%
Total	30,954	100.0%

Educational Goal	Count	Percent
Transfer after AA/AS	12,788	41.3%
Transfer without AA/AS	6,486	21.0%
AA/AS	2,628	8.5%
Vocational Degree	71	0.2%
Vocational Certificate	1,087	3.5%
Formulate plans, goals	574	1.9%
New career	971	3.1%
Advance in job	815	2.6%
Maintain certificate/license	319	1.0%
Educational development	1,325	4.3%
Improve basic skills	498	1.6%
Credit for HS or GED	414	1.3%
Undecided	1,234	4.0%
Unrecorded	1,744	5.6%
Total	30,954	100.0%

Foothill-De Anza Community College District
Fall 2019 - End of Term Credit Headcount

City	Count	Percent
San Jose	11,864	38.3%
Sunnyvale	3,097	10.0%
Santa Clara	1,726	5.6%
Mountain View	1,300	4.2%
Cupertino	1,228	4.0%
Palo Alto	927	3.0%
Milpitas	666	2.2%
Los Altos/Los Altos H	610	2.0%
Redwood City	522	1.7%
Fremont	494	1.6%
East Palo Alto	440	1.4%
Saratoga	372	1.2%
Campbell	330	1.1%
San Francisco	306	1.0%
San Mateo	265	0.9%
Los Gatos	256	0.8%
Menlo Park	243	0.8%
Morgan Hill	223	0.7%
San Luis Obispo	208	0.7%
Union City	190	0.6%
Newark	164	0.5%
Gilroy	143	0.5%
Santa Cruz	122	0.4%
Hayward	99	0.3%
San Carlos	99	0.3%
Oakland	92	0.3%
All Other Cities	4,968	16.0%
Total	30,954	100.0%

Attempted Units	Count	Percent
0.00 - 02.9	1,245	4.0%
03.0 - 05.9	9,793	31.6%
06.0 - 08.9	2,539	8.2%
09.0 - 11.9	5,187	16.8%
12.0 - 14.9	6,666	21.5%
15.0 - 17.9	3,354	10.8%
18.0 - 20.9	1,890	6.1%
21.0 +	280	0.9%
Total	30,954	100.0%

Average Units Attempted
9.58

Note: Attempted Units is defined as all units for which a student is enrolled at census.

Earned Units	Count	Percent
0.00	4,623	14.9%
0.25 - 02.9	1,068	3.5%
03.0 - 05.9	8,896	28.7%
06.0 - 08.9	2,423	7.8%
09.0 - 11.9	4,557	14.7%
12.0 - 14.9	5,091	16.4%
15.0 - 17.9	2,515	8.1%
18.0 - 20.9	1,531	4.9%
21+	250	0.8%
Total	30,954	100.0%

Average Credits Earned
7.89

FOOTHILL
COLLEGE

Foothill College – the problem

The ISIR/CADAA dataload process – a twice a week process – was too time intensive with too many manual steps.

The Foothill College 'dataload' process is actually:

- everything from the step 1 of importing the applications through baseline Banner,
- some institutional steps,
- aid period assignment,
- budgeting assignments,
- all actionable C-codes,
- college specific 'follow-up' items,
- all the way to CCPG awarding,
- and an initial email to students.

This is a series of baseline processes, popsels, and RORPOST steps – up to 58 steps – that generally took the better part of a day each time we did it.

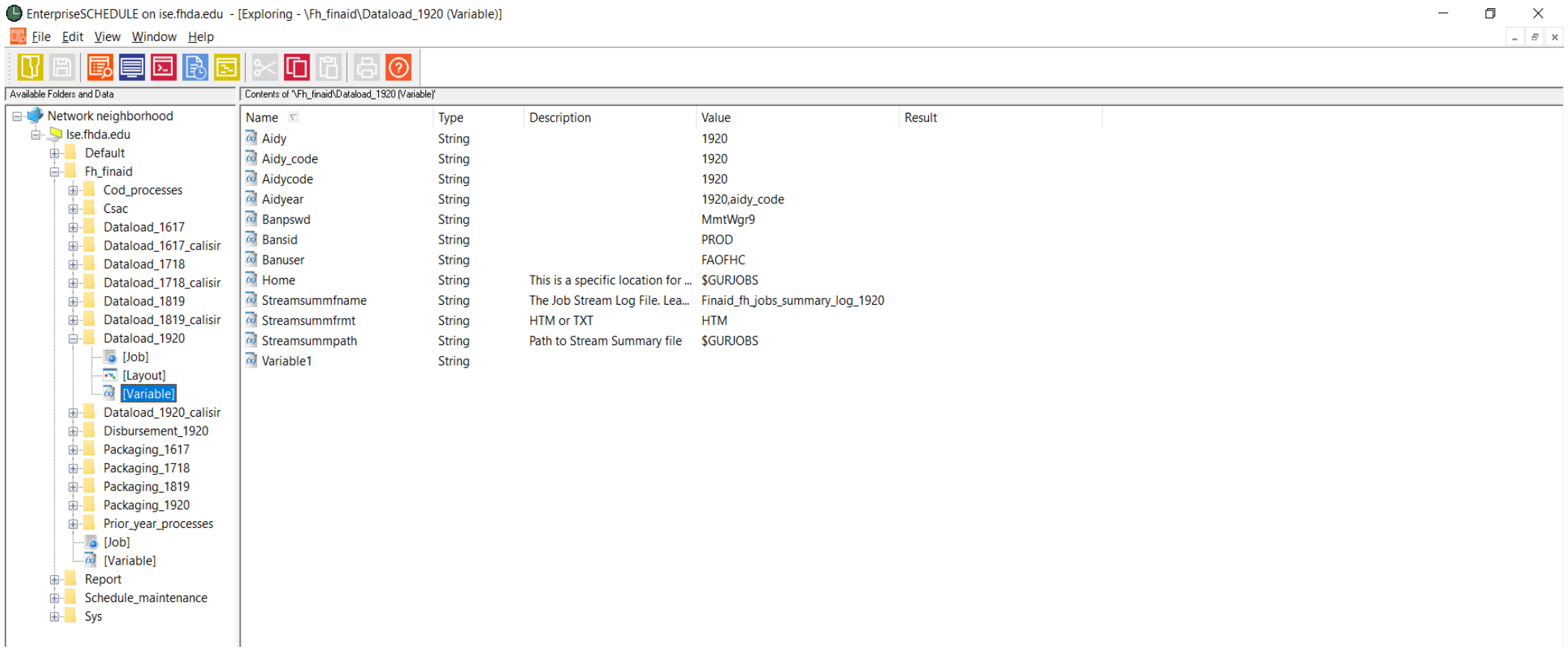
Foothill College – the solution

ISE allowed our institution to:

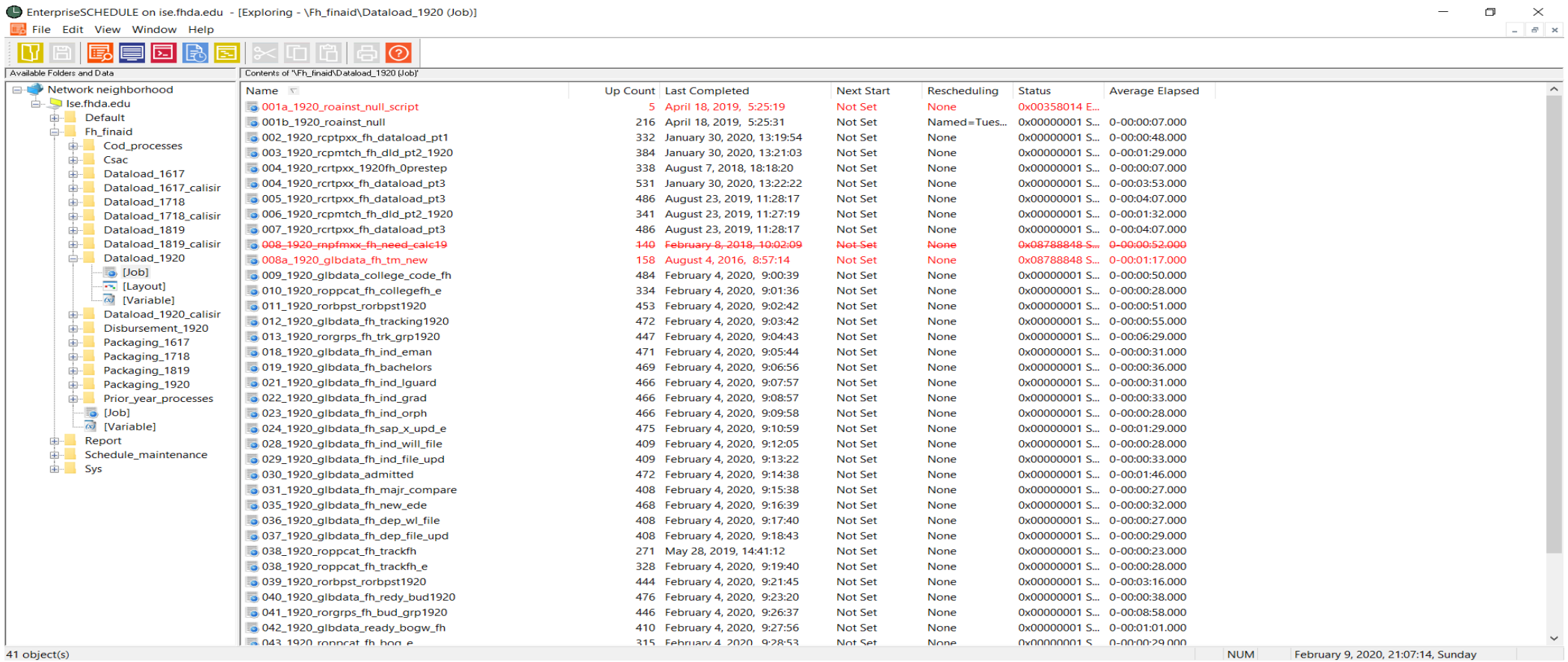
- reduce the typical human input to retrieving the file from EdConnect or WebGrants,
- triggering step 1 (we chose to keep step 1 as a manually triggered step),
- working suspense,
- then restarting the sequence.

Overall 5+ minutes, not counting the time to work suspense (a necessary manual process).

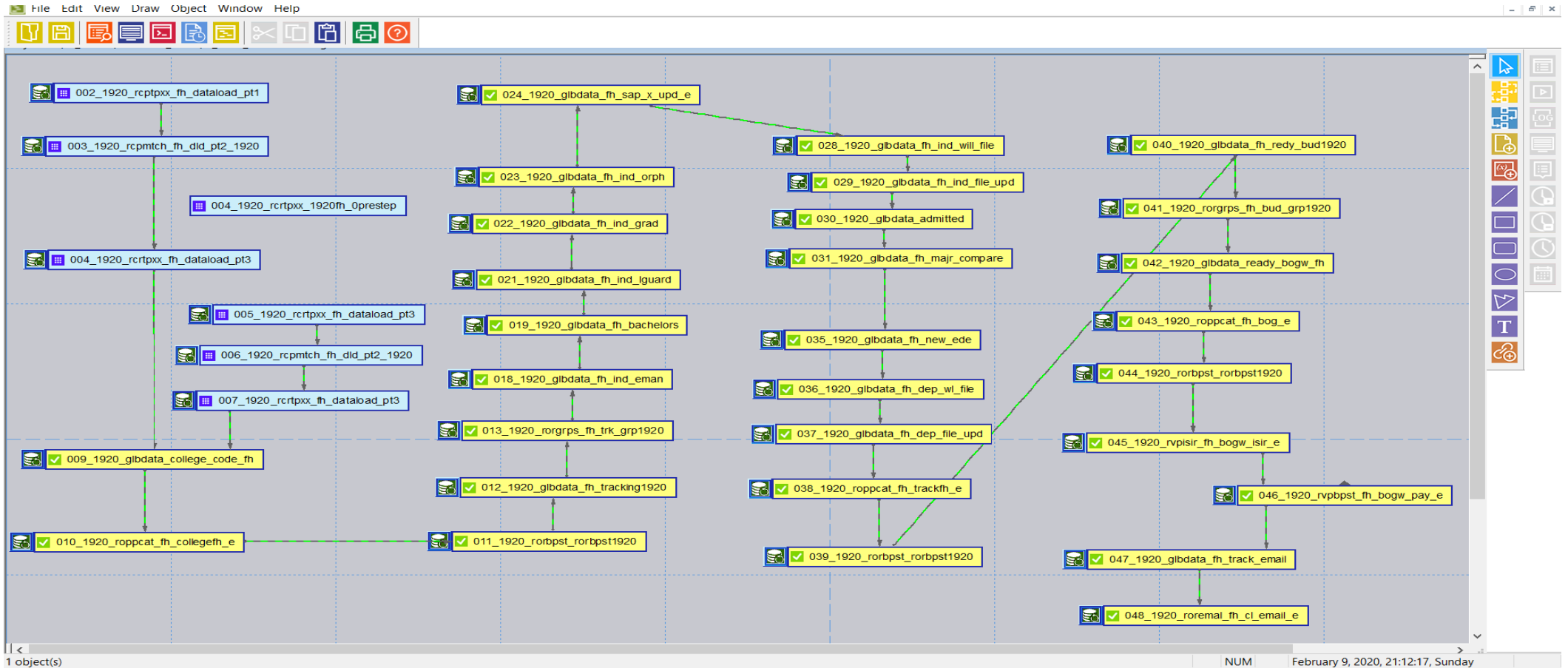
Foothill College – the solution continued



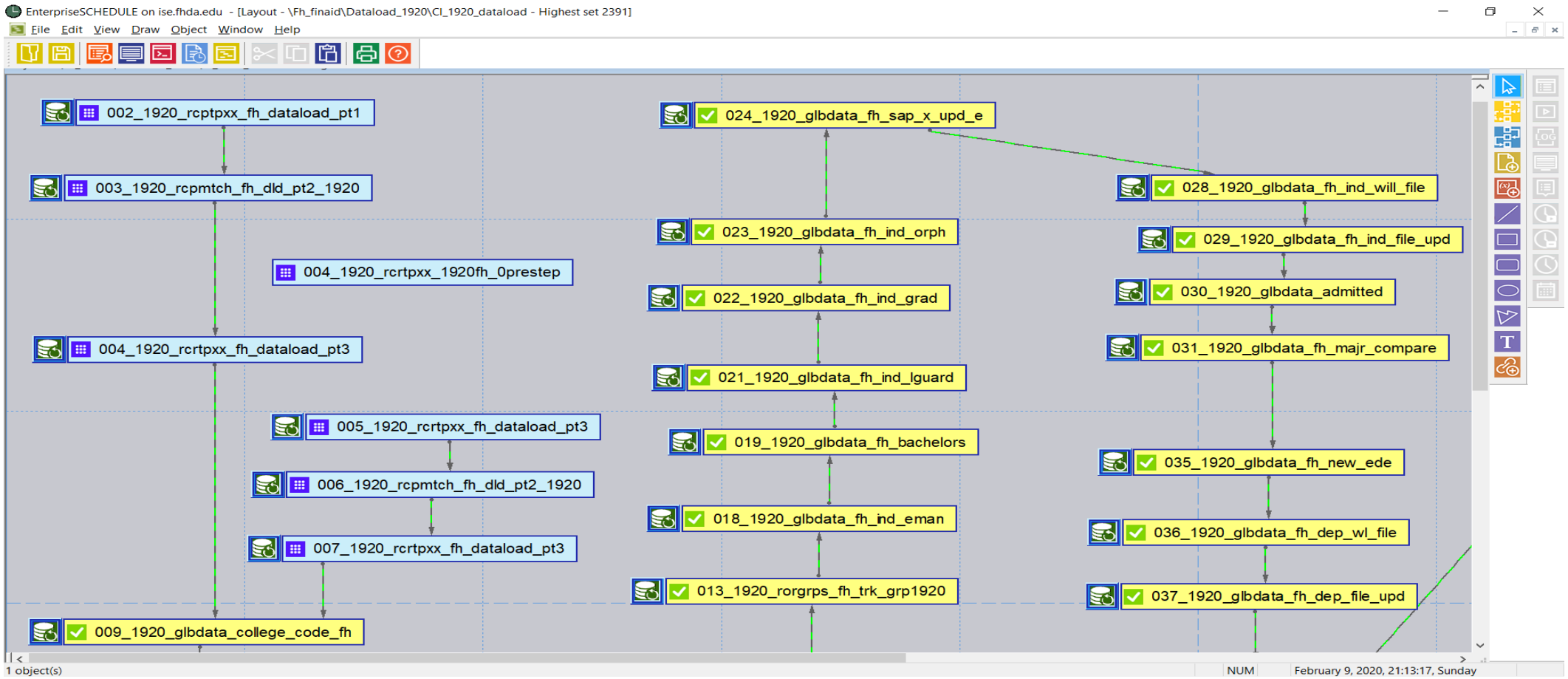
Foothill College – the solution continued



Foothill College – the solution continued



Foothill College – the solution, close up

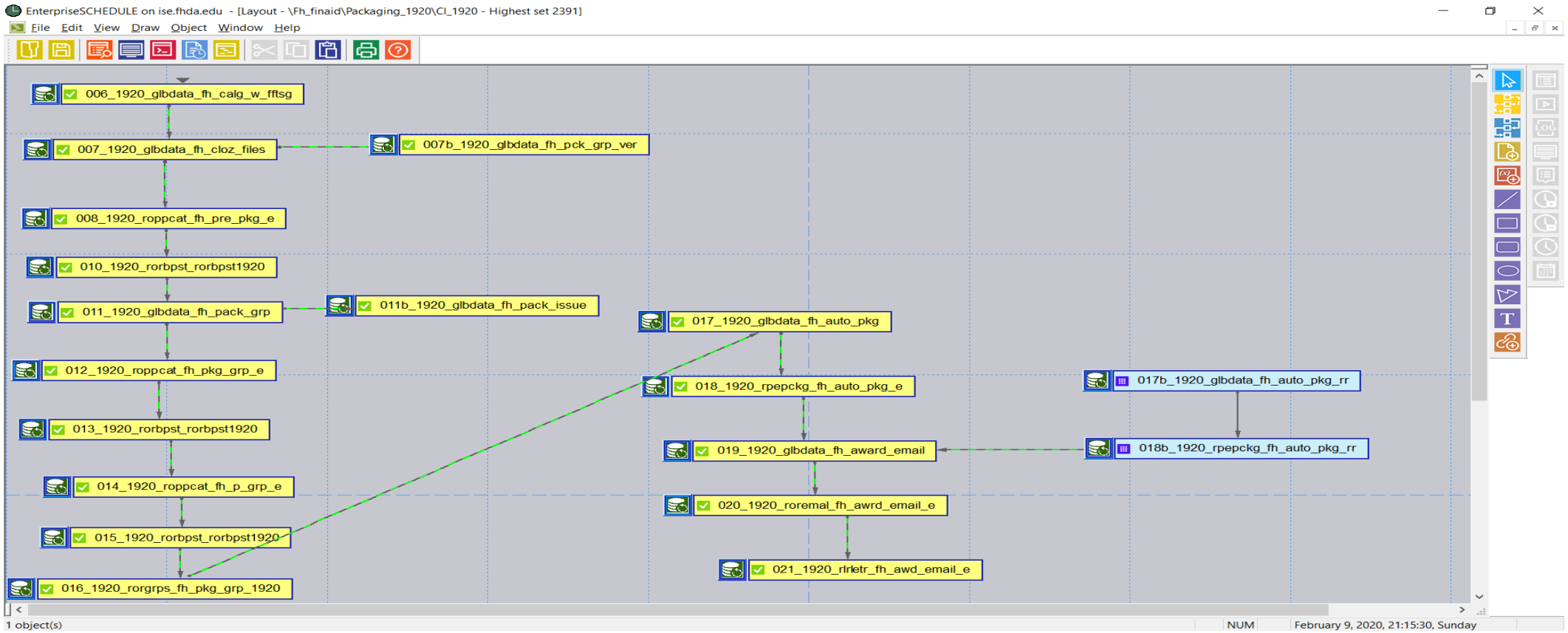


Foothill College – the expansion

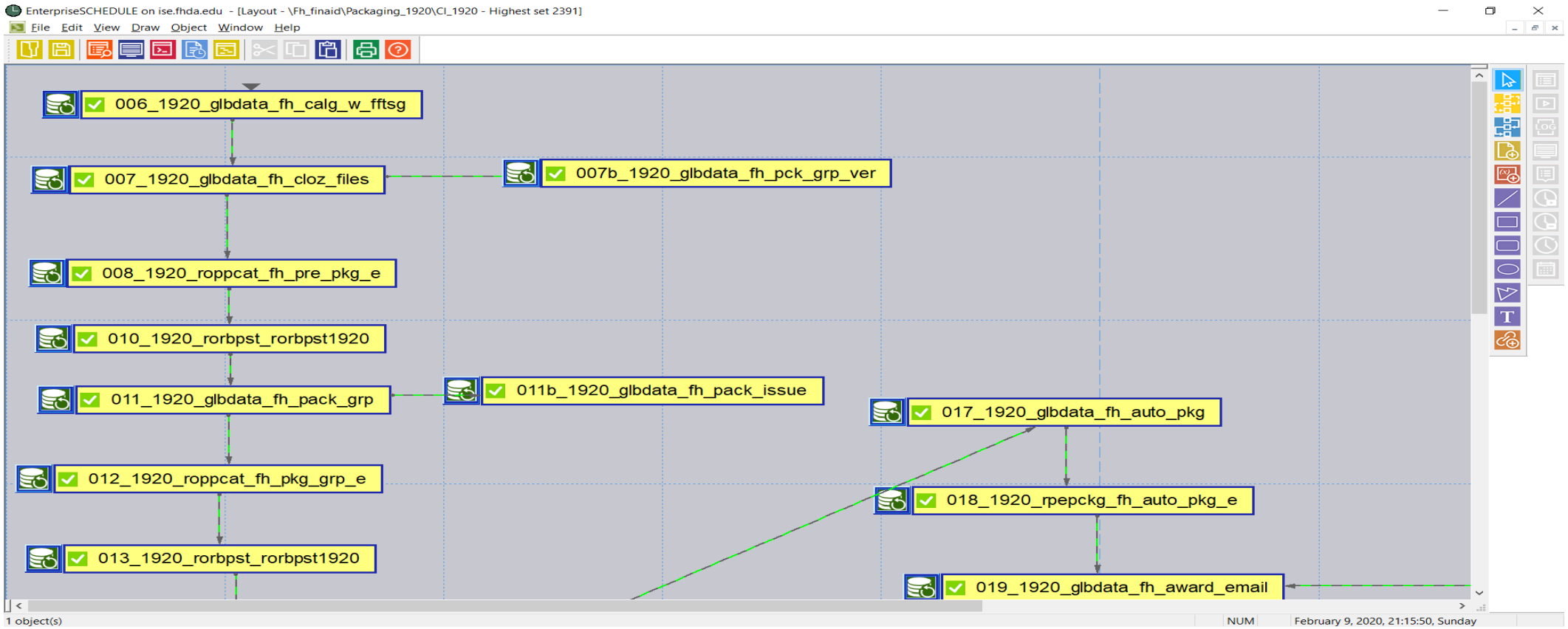
That ‘freedom’ actually allowed our office to build out a second series of processes to:

- take those same files from the CCPG/e-mail to packaging groups,
- SSCG addition,
- running fund packaging groups (if the file is complete),
- and a secondary e-mail indicating the file has been awarded.

Foothill College – the expansion

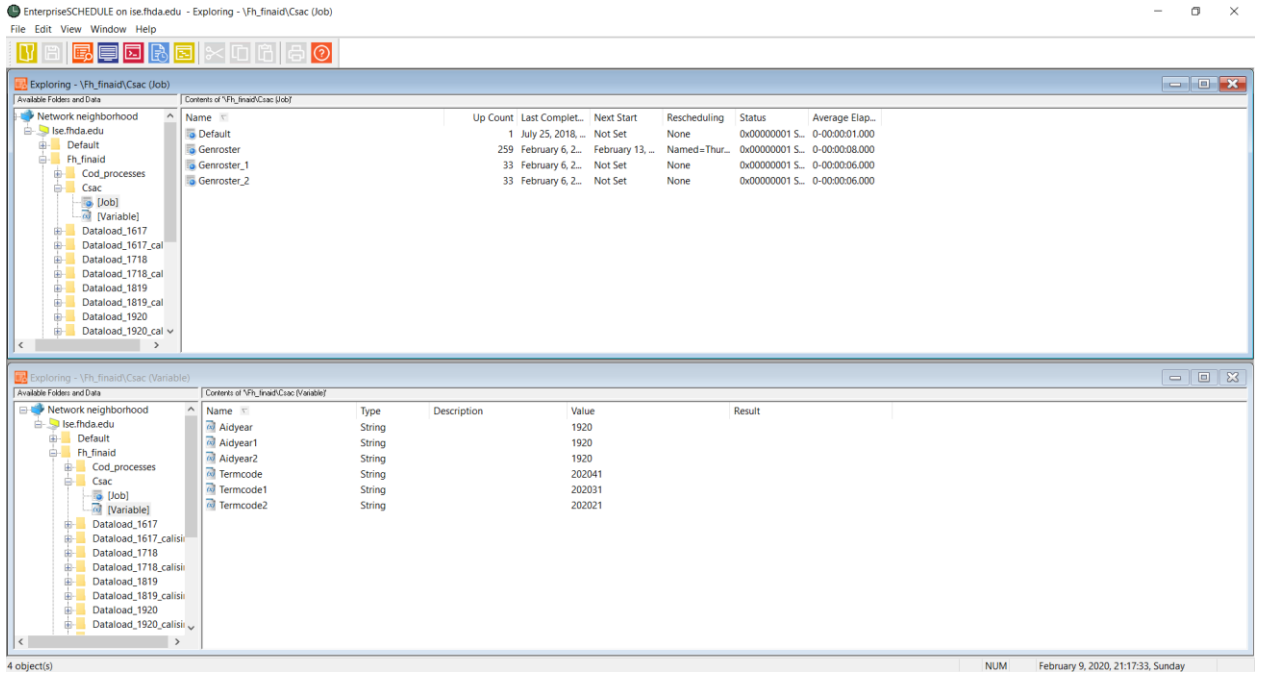


Foothill College – the expansion, close up



Foothill College – the expansion continued

We then further built out a process that runs (auto-scheduled) the payment records of the Cal Grant program for batch uploads to WebGrants. Each week it auto runs for each term, providing us with a properly formatted upload file, if any payments occurred for that term during that week.



Foothill College – the present & near future

We (Financial Aid Office and our ETS - Tech group) have built out a process that runs an auto-scheduled job through the ISE solution that provides us with a properly formatted upload file of the payment records of the Cal Grant program for batch uploads to WebGrants.

The Foothill Admissions and Records Office has an auto-scheduled job that does the term grade rolls each day after the first run is manually triggered.

The Financial Aid Office and ETS are currently also building out a scheduled program to run our weekly disbursement process at hours with lower system demands. This has had a couple test runs and is nearing completion.

More ideas are ‘storyboarded’ all the time on how to maximize our usage.

FOOTHILL-DE ANZA
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Automating Banner at ETS and A&R office using EnterpriseSCHEDULE

Creating Banner jobs and work streams that automate time consuming and error prone daily tasks using the customized EnterpriseSCHEDULE Job Scheduling application

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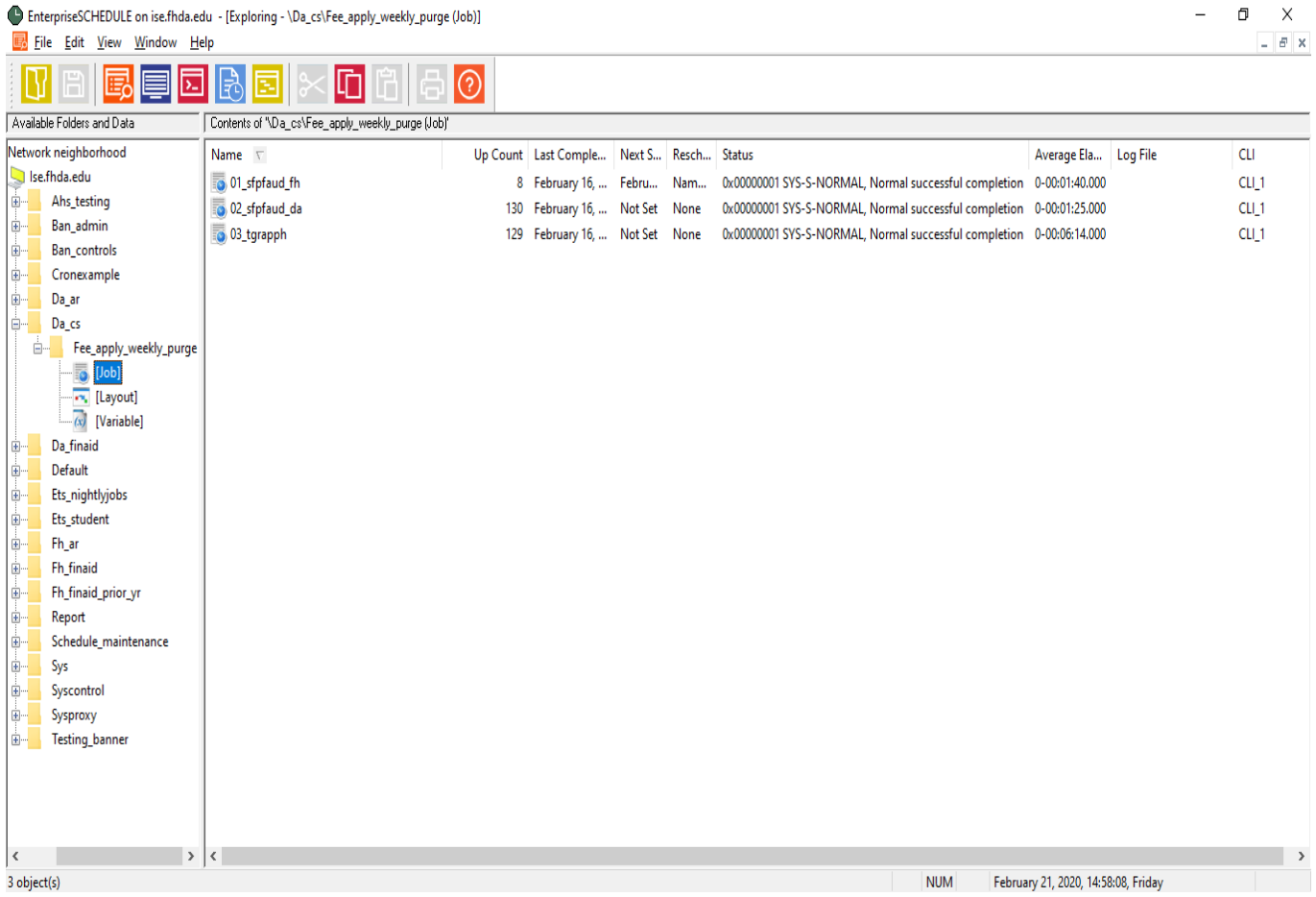
ETS (Educational Technology Services) – Implemented ISE in the following areas

1. Chain of Baseline jobs
2. On demand SQLs
3. Stored procedures
4. Cron jobs

ETS – Chain of Baseline jobs Fee Assessment + Application of Payment Weekly Purge

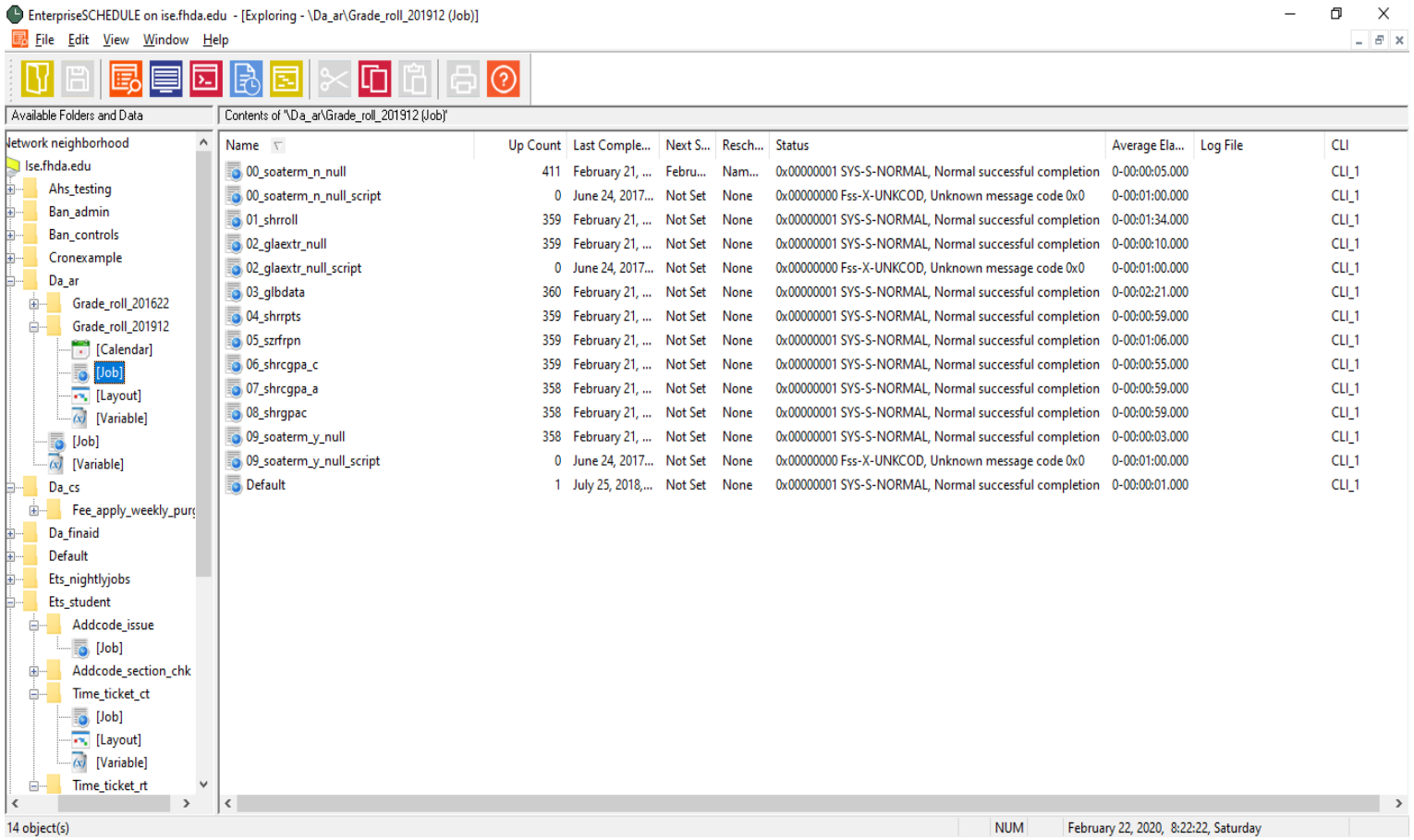


1. SFPFAUD - Purge Fee Assessment Audit

2. TGRAPPH – Application of Payments Archive History

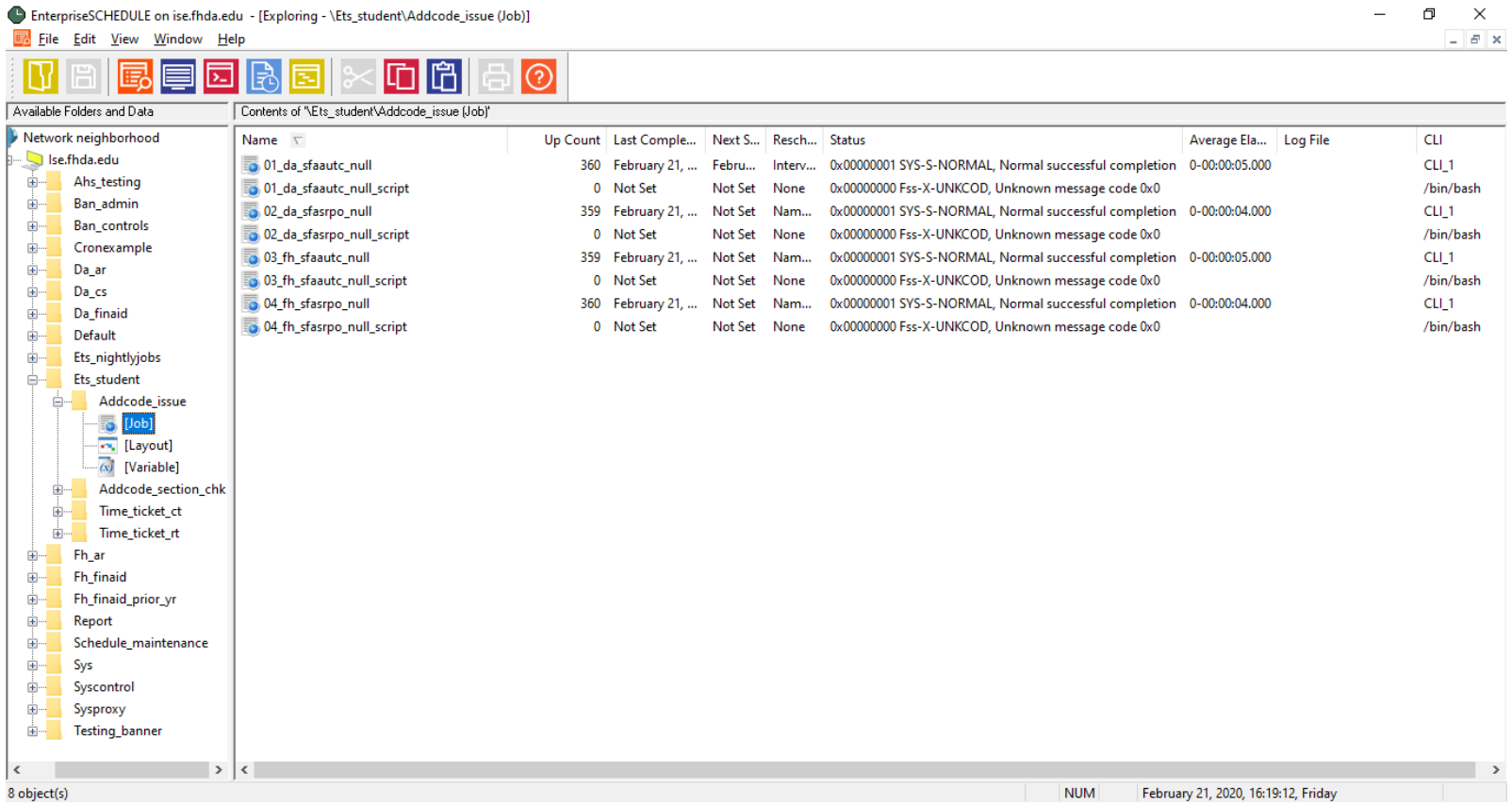
```
#
((comment*))
override1="01,"((Termcode_fh))",NULL"
export override1
#
((endcomment*))
override1="02,sysdate,NULL"
export override1
```

ETS – Chain of Baseline jobs Grade Roll at A&R Office



1. SOATERM_SCRIPT
2. SHRROLL
3. GLBDATA
4. SHRRPTS
5. SZRFRPN
6. SHRCGPA
7. SHRGPAC
8. SOATERM_SCRIPT
9. Initial run – Manual
10. Follow-up runs - Scheduled

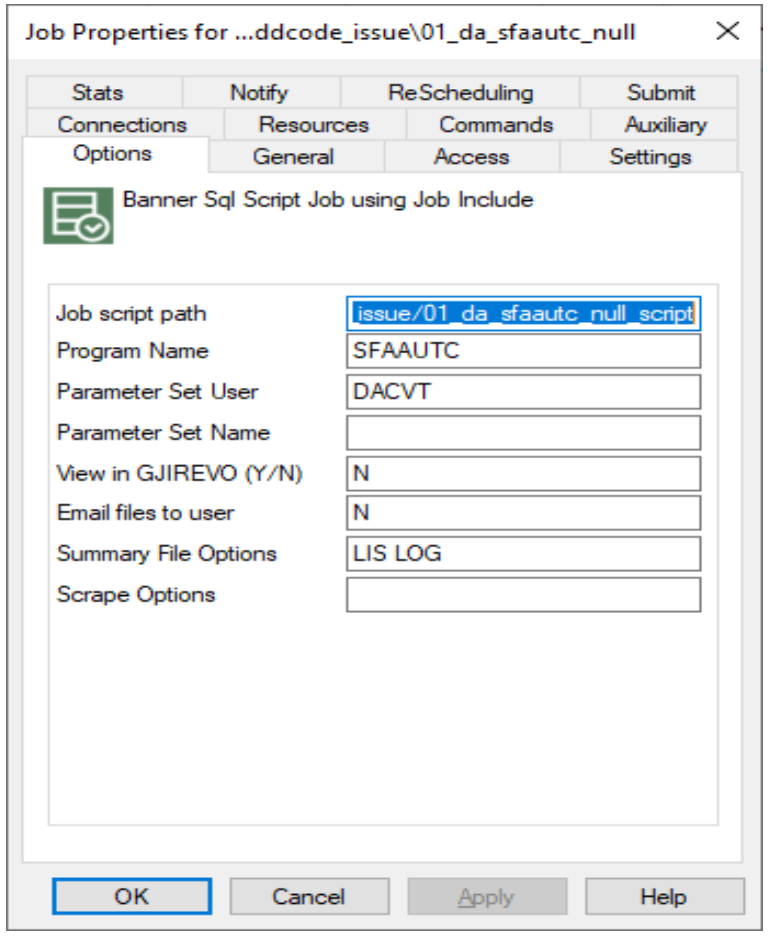
ETS – On Demand SQLs
Add Code issue



1. SFAAUTC – Registration Add Authorization Codes

2. SFASRPO – Student Registration Permit - Override

ETS – On Demand SQLs
A pair of jobs to complete one SQL command



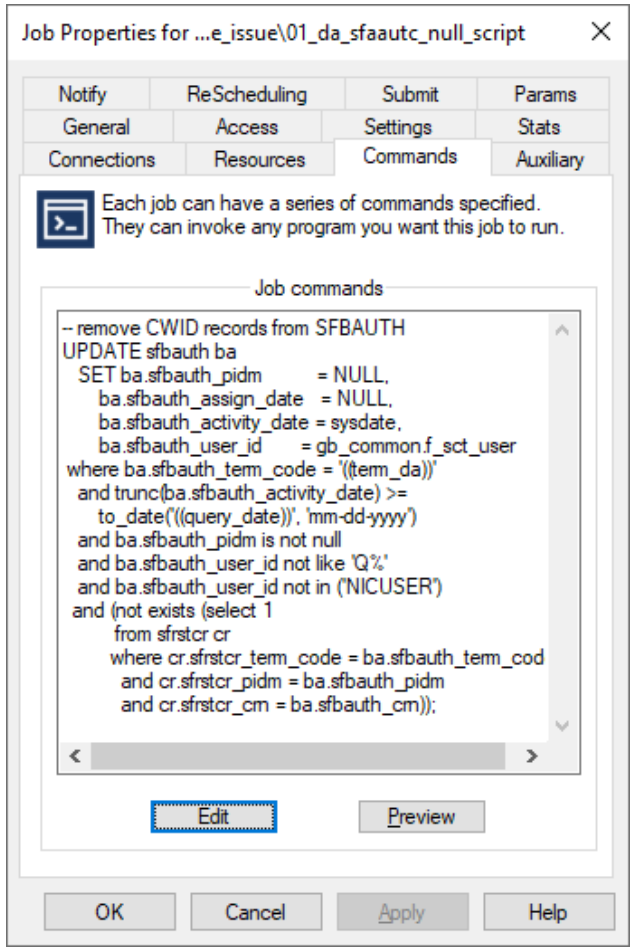
1. 01_da_sfaautc_null

2. 01_da_sfaautc_null_script

3. The “Job Script Path” of the NULL job is pointing to the “file path” of the NULL_SCRIPT:

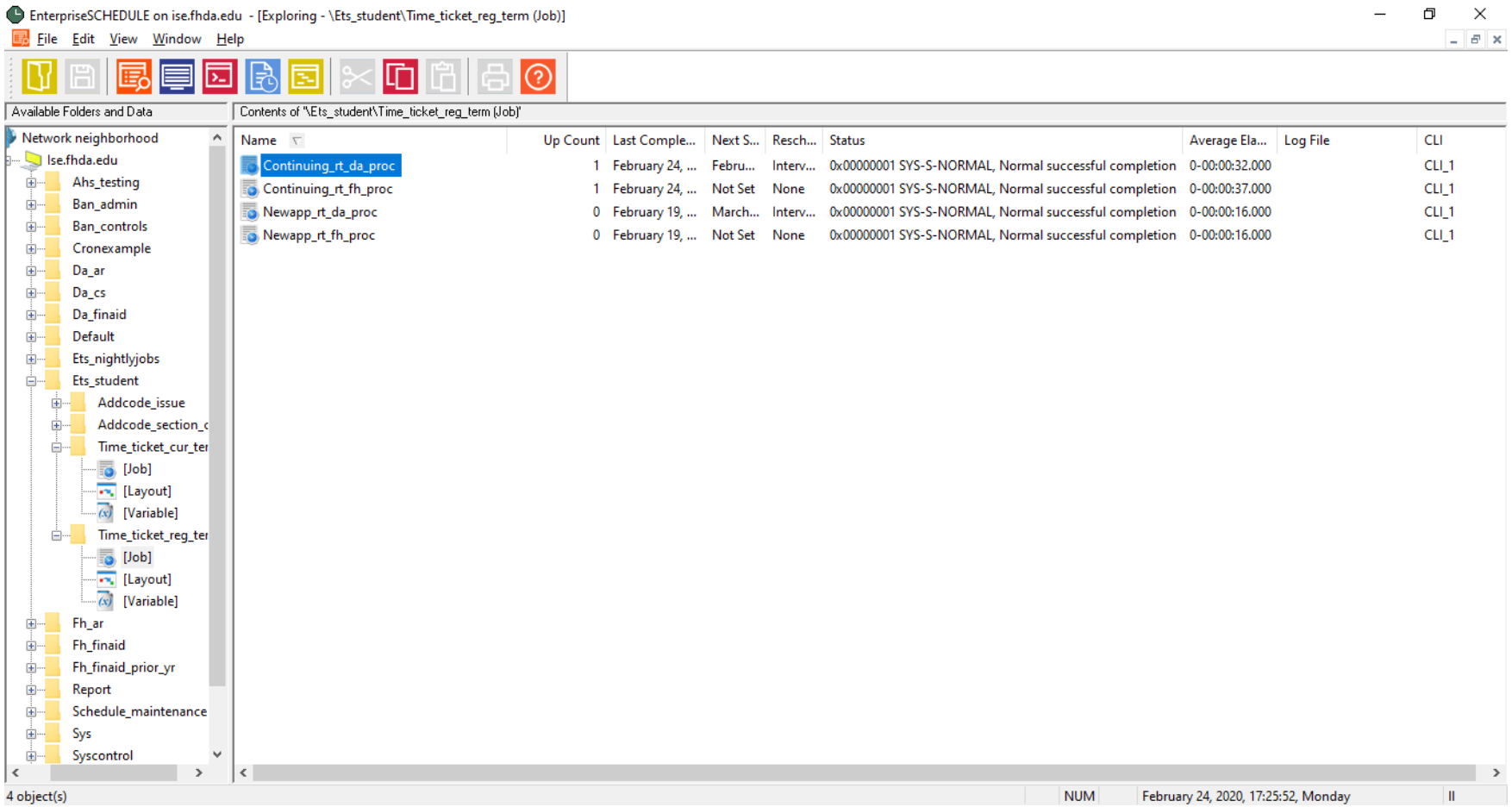
/ets_student/addcode_issue/01_da_sfaautc_null_script

ETS – On Demand SQLs
the SQL Statement in the NULL_SCRIPT job



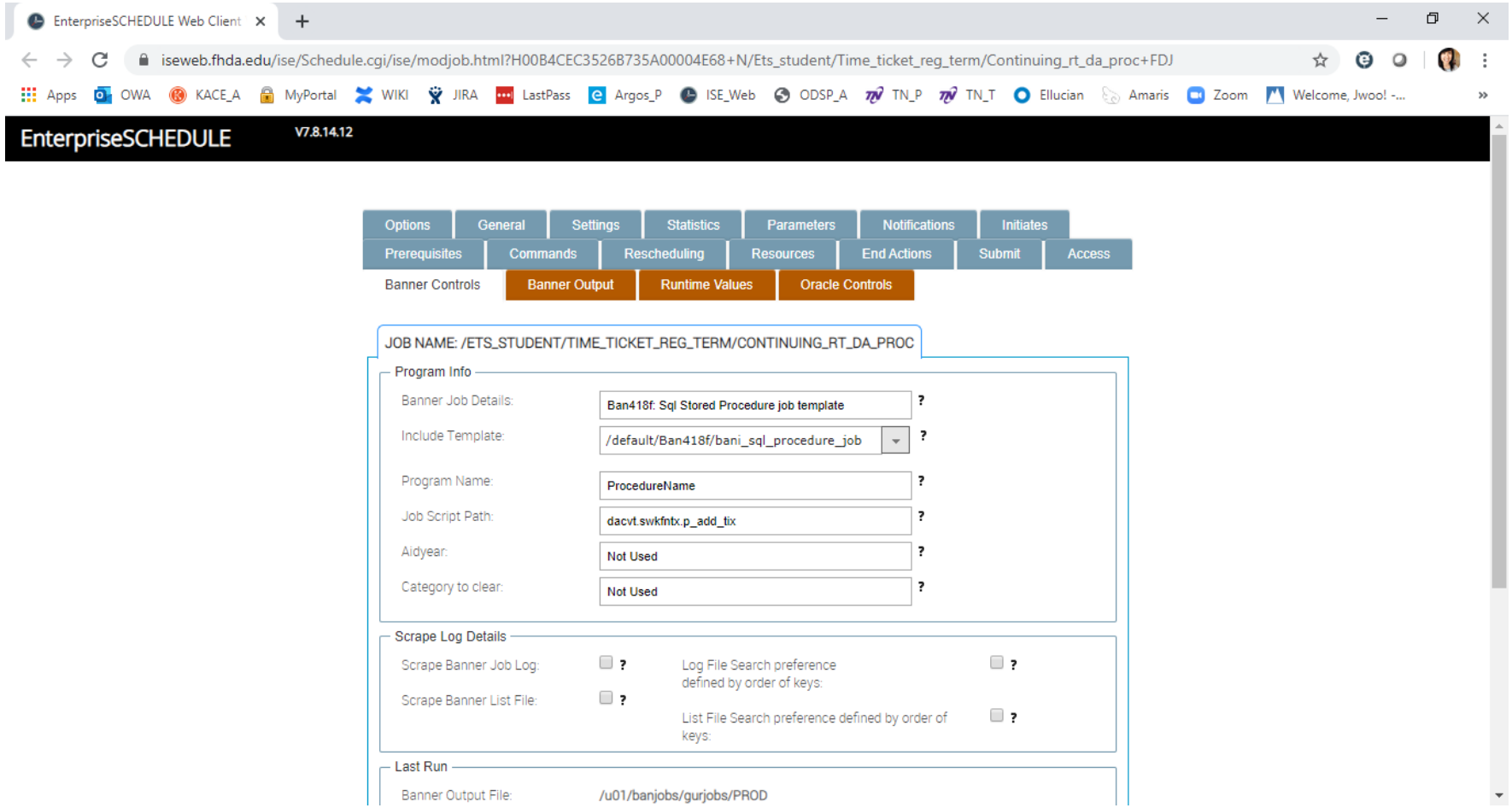

```
UPDATE sfbauth ba
   SET ba.sfbauth_pidm           = NULL,
       ba.sfbauth_assign_date    = NULL,
       ba.sfbauth_activity_date  = sysdate,
       ba.sfbauth_user_id        = gb_common.f_sct_user
 where ba.sfbauth_term_code = '((term_da))'
   and trunc(ba.sfbauth_activity_date) >=
       to_date('((query_date))', 'mm-dd-yyyy')
   and ba.sfbauth_pidm is not null
   and ba.sfbauth_user_id not like 'Q%'
   and ba.sfbauth_user_id not in ('NICUSER')
   and (not exists (select 1
   from sfrstcr cr
         where cr.sfrstcr_term_code = ba.sfbauth_term_code
           and cr.sfrstcr_pidm = ba.sfbauth_pidm
           and cr.sfrstcr_crn = ba.sfbauth_crn));
```

ETS – Stored procedures
Time Ticket jobs - converted from Cron jobs

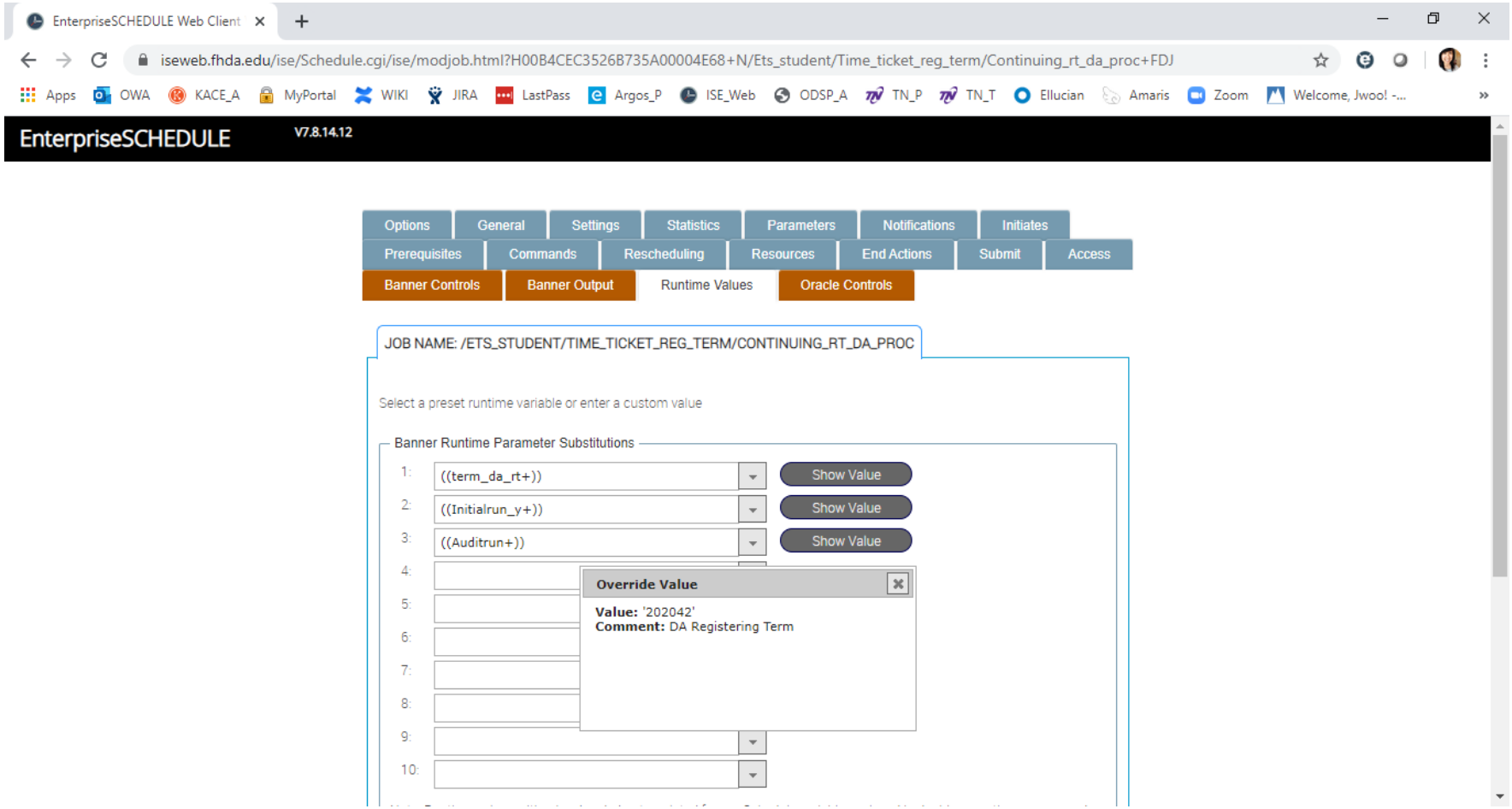


1. Continuing students
2. New students

ETS – Stored procedures
Job script path – Procedure path



ETS – Stored procedures
Runtime values



ETS (Educational Technology Services) – Implementing more ISE usage in the following areas

1. Chain of Baseline jobs
2. On demand SQLs
3. Stored procedures
4. Converting Cron jobs
5. Web clients

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Thank you!

Questions & Comments

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