

Pittsburgh Public Schools

# Standard Operating Procedure

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## Data Warehouse Annual Rollover

Office of Information and Technology

OIT-003

## Data Warehouse School Year Rollover Process

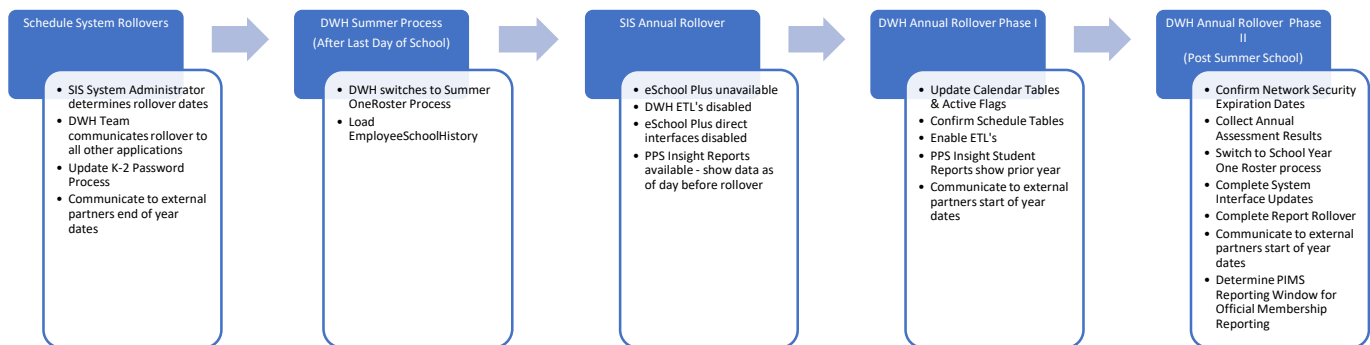
### Overview

Each year, the student information system (SIS) go through a series of steps to “roll over” the systems in preparation for the new school year. In general, current school year data is moved to historic tables and the main tables are emptied or reset to prepare for the new school year

The rollover of the SIS has a cascading effect on the data systems dependent on data from the SIS. Some of these systems can be rolled over at the same time as the SIS, while others cannot be rolled over until after Summer School is complete.

This document outlines tasks and considerations that the Data Warehouse & Reporting team must complete as part of the DWH annual rollover process.

### DWH Annual Rollover Tasks





# Expect great things.

## Schedule System Rollovers

### SIS System Administrator determines Rollover Dates

The Office of Technology Student Information System Administrator works with PPS staff to schedule the system rollover. The SIS rollover typically occurs the second week of July. At this time, the SIS is unavailable to users while the system is reset for the new school year. Existing data is moved to historic tables and current tables are prepped for new data entry.

### DWH Team communicates rollover to all other applications

District system administrators, process owners, and vendors are emailed notifications of the district annual rollover timeline and asked to communicate any issues or concerns.

### Update K-2 Password Process

In 2017-18 a process was implemented to automatically create passwords for students in K-2 (DW-2267). During the rollover to the 2018-19 SY we did not disable this process. As a result the passwords for K-2 students changed once they were promoted to a new grade level during the rollover. This reset the passwords for students enrolled in summer programs and using OneRoster applications (DW-2761). Next year we'll develop a process to prevent this from happening.

### Communicate to External Partners End of Year Dates

Prior to the end of the school year we need to communicate to the Port Authority the dates for the last day of school so they can ensure that the bus passes are available until that day and turned off afterwards. A similar process is done immediately after the rollover when we communicate to Port Authority the dates for the start of the school year.

## DWH Summer Process (Last Day of School)

### DWH switches to Summer One Roster Process

After the last day of the regular school year, the DWH team switches to the Summer School One Roster process.

Many One Roster apps will continue to be used during Summer School (school id 300) and Summer Dreamers (school id 100).

A number of schools run summer programs with students who were enrolled during the school year. As a result One Roster applications need to display enrollment as it looked at the end of the prior school as well as summer school enrollment.

Starting on the first full day after the last day of the regular school year we put the Summer One Roster process into production. We have a SSIS package called:

*\SSIS\OneRosterSummer\OneRosterSummer\OneRosterSummer.dtsx*

Special Note: In order to accommodate the extended school year, the dates of any academic session that includes Q4 must be extended to the end of the first week of August. Q4 end date is sourced from the DimCalendar table. In order to extend Q4 to accommodate Summer School we hardcode the Q4 end date in the AcademicSessions.csv Summer One Roster file. This date changes each year and should be updated each year prior to putting the OneRosterSummer SSIS package into production.

For summer (last day of school to approx. 2 weeks after the final day of summer school – first or second week of August) we run this SSIS package instead of the regular school year One Roster SSIS package:

*\SSIS\OneRoster\OneRoster\OneRoster.dtsx*

### *PPS Summer Programs using Student Curriculum and Assessment Applications*

Summer Program	Application(s)
<b>Credit Recovery</b>	Edgenuity, scheduling in eSchool Plus Summer School DB
<b>Summer Dreamers</b>	Read 180, Edmentum, did not schedule in 17/18 – used student rosters as of end of 17/18 SY or vendor managed roster changes
<b>Little Dreamers</b>	iRead, scheduling in eSchool Plus Summer School DB

### Load EmployeeSchoolHistory

- Create a copy of EmployeeSchool and load into EmployeeSchoolHistory.

- This table is used by the EER Summary Reports and PL Exec Summary report in Leadership Reports.

SIS Annual Rollover

eSchool Plus Unavailable

The Student Information System Administrator turns off access to eSchool Plus once the annual rollover process has begun. <add note that summer school db is still available> All processes running against the SIS should be turned off. The DWH team also disables many of the district data exchanges and the nightly ETL.

DWH ETL's Disabled

*Status of Jobs in DWH Operational Schedule During SIS Rollover*

<b>Operational Processes</b>	<b>Status During Rollover</b>
PPSDW -> eSchool Plus	Disabled
eSchool Plus -> Access 411	Disabled
eSchool Plus <-> SRC	Disabled
PPSDW -> SRC	Disabled
eSchool Plus HAC Acct Creation	Disabled
DHS -> PPSDW	Running
Edmentum -> PPSDW	Running
PrimeroEdge -> PPSDW	Running
IEP Writer -> PPSDW	Running
PeopleSoft -> PPSDW	Running
PPSDW -> B3	Disabled
PPSDW -> VEO	Disabled
PPSDW -> IEP Writer	Disabled
PPSDW -> One Roster (SY Process)	Disabled
PPSDW -> One Roster (Summer Process)	Disabled
PPSDW -> Data Roster	Disabled
PPSDW -> Performance Matters	Disabled
PPSDW -> Performance Matters (PD)	Running
PPSDW -> Innerlink	Disabled
PPSDW -> DIBELS	Disabled
PPSDW -> OWLTS	Disabled
PPSDW -> Destiny	Disabled
PPSDW -> Naviance	Disabled
PPSDW -> Parent Hotline	Disabled
PPSDW -> Compass	Disabled
PPSDW -> Read Naturally	Disabled
PPSDW -> Peachjar	Disabled
PPSDW -> Student Active Directory	Disabled
PPSDW -> PrimeroEdge	Disabled
PPSDW -> Discover PPS	Disabled
PPSDW -> Pittsburgh Promise	Disabled
PPSDW -> DHS	Disabled
SRC -> PPSDW	Disabled
PPSDW -> Fitness Grams	Disabled
Bloomboard -> PPSDW	Running

Transportation Mapquest	Disabled
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PPS Insight Reports Available

***Status of PPS Insight Leadership Reports During SIS Annual Rollover***

<b>PPS Insight Leadership Report Name</b>	<b>Status During Rollover</b>
<b>Attendance Rate Executive Summary</b>	As of end of prior school year
<b>Attendance Rate Student Detail</b>	As of end of prior school year
<b>Referral Executive Summary</b>	As of end of prior school year
<b>Suspension Rate Executive Summary</b>	As of end of prior school year
<b>School Suspension Detail</b>	As of end of prior school year
<b>Special Education Misconduct</b>	As of end of prior school year
<b>Attendance for Charter School (ADM)</b>	Always shows prior month run with option to run next month
<b>Evaluation Classifications</b>	Shows HR staffing data as of day before
<b>Promise Readiness Executive Summary</b>	As of end of prior school year
<b>Promise Readiness School Roster</b>	As of end of prior school year
<b>College Readiness Executive Summary</b>	As of end of prior school year
<b>College Readiness School Roster</b>	As of end of prior school year
<b>College Readiness Teacher Roster</b>	As of end of prior school year
<b>Classroom Teacher Annual Rating Form</b>	Administrators will see staffing as of the date the report was run
<b>Classroom Teacher Effectiveness Report</b>	Administrators will see staffing as of the date the report was run
<b>2012-13 Classroom Teacher Preview ARF</b>	Preview Reports from 2012-13
<b>2012-13 Classroom Teacher Preview EER</b>	Preview Reports from 2012-13
<b>Classroom Teacher Effectiveness Summary</b>	Staffing as of the year the report/rating was delivered
<b>Classroom Teacher Performance level Executive Summary</b>	Staffing as of the year the report/rating was delivered
<b>Non-Teaching Professional Annual Rating Form</b>	Administrators will see staffing as of the date the report was run
<b>Non-Teaching Professional Effectiveness Report</b>	Administrators will see staffing as of the date the report was run
<b>School Leader Annual Rating Form</b>	Administrators will see staffing as of the date the report was run
<b>School Leader Effectiveness Report</b>	Administrators will see staffing as of the date the report was run

## DWH Annual Rollover – Phase I

The DWH ETL should not resume until:

1. DW prep for the new school year is complete. This includes table maintenance to account for new and/or closed schools, new school groupings, changes in leadership, etc.
2. Reports have been reviewed and any necessary maintenance – due to school and/or leadership changes – completed
3. A backup of the DW production database has been taken
4. Confirm Transportation exchange

## Update School & Calendar Tables & Active Flags

- Update Schools
  - DimSchools - Manually update prior year's CurrentFlag and ActiveFlag = 0
  - New schools will be automatically added to DimSchools as part of the ETL, with the properly set CurrentFlag and ActiveFlag
  - Closed schools will enter DimSchools with ActiveFlag = 0
  - Update Magnet indicators. The ETL sets this to -1. This needs to be updated for Discover PPS to run successfully.
  - Check PPSO.dbo.MngBridgeSchoolLocations. New schools should be inserted and closed schools should be deleted. This table should always reflect the current school year's open schools and their locations. This table is used to build the employee school view.
  - Check on Changes to school names or configurations
    - Identify and document new school groupings
    - Insert new school group records to DimSchoolGroup
      - Set CurrentFlag = 0 for prior school year
    - Insert new records to BridgeSchoolGroupAssignment
    - Update CurrentGroupKey for past school years:
      - Set CurrentGroupKey = GroupKey for CurrentSY Where SY < CurrentSY and SchoolID matches
      - Set CurrentFlag = 0 for prior school year
  - Update school keys once new records are loaded to DimSchools
    - Note that school key will not be available until after the ETL is rerun and new school records for the current school year are inserted into DimSchools. This is ok – new records can be inserted to BridgeSchoolGroupAssignment and the current year's school key can be updated once the ETL is run
  - Review VWPPSSchools to validate that schools and groupings look accurate
- Update the calendar tables with as much known data as possible. These updates can also be done post rollover: quarter dates, blue dates, start and end date of the school year, etc.
  - Once eSchool Rollover is complete, check to see if SCHOOL\_YEAR column for our DISTRICT changed (REG\_District)
  - Update the calendar tables with as much known data as possible. These updates can also be done post rollover: quarter dates, blue dates, start and end date of the school year, etc.



- DimCalendar – Rakend fills in using School Calendar provided by Tiffany. Verify data is filled in appropriately. Verify that start and end dates for the school year match DimSchoolCalendar
- DimSchoolCalendar  
For PPS schools, this table is loaded as part of the ETL, and will be completed for the new school year once the ETL is restarted
- Once calendars are run, verify that all schools have the correct number of membership days
- QuarterDates (PPSSO)  
Update with the quarter dates for the new school year
- MngBlueDates  
Update with the blue dates for the new school year (every 20<sup>th</sup> school day of the SY)
- MngSchoolYear (PPSSO)  
Update with the start and end dates of the school year – use the eSchoolPlus calendar dates
- Once calendars are run, verify that all schools have the correct number of membership days
- Confirm transportation
  - We may have a new transportation system in 18/19. If so, the student data load to VEO transportation includes summer school students. Once the rollover occurs the summer school students may stop appearing in the student load. We need to look into how to ensure that students enrolled in summer school for the CY remain in the extract until the end of summer school.

#### Confirm Student Schedule Tables

- Schedules will not be finalized until very close to the first day of school, if not after. The DW will not see schedule data come through for the new school year until schedules are finalized.
- **Before the ETL runs**, delete STG and STGPrev tables for the student schedule load for all schools *except 100 and 300*. If this is not done, and data is being loaded from eSchoolPlus (or another system where prior school year schedule data is moved to history tables), then the previous school year's data will be deleted once the ETL is restarted. The ETL will assume that data in the Prev table – that's not in the STG table – should be deleted
- Reset the prior school year's records with course end dates and Active Flag for all schools except Summer Schools (100 and 300)
  - Set course end date = last day of school for that school year where the current end date = 20991231
  - Set Active Flag = 0 for all records for that school year

Enable ETL's

Status of Jobs in DWH Operational Schedule Post Phase I Rollover

Operational Processes	Status Post Phase I
PPSDW -> eSchool Plus	Running
eSchool Plus -> Access 411	Running
eSchool Plus <-> SRC	Running (SRC turns on after we do one run of ETL – send first set of data to SRC)
PPSDW -> SRC	Running * (Remind SRC to disable MagnetSRCUpload to Magnet section of SRC)
eSchool Plus HAC Acct Creation	Running
DHS -> PPSDW	Running
Edmentum -> PPSDW	Running
PrimeroEdge -> PPSDW	Running
IEP Writer -> PPSDW	Running
PeopleSoft -> PPSDW	Running
PPSDW -> B3	Running
PPSDW -> VEO	Running
PPSDW -> IEP Writer	Running
PPSDW -> One Roster (SY Process)	Disabled
PPSDW -> One Roster (Summer Process)	Running
PPSDW -> Data Roster	Running
PPSDW -> Performance Matters	Disabled
PPSDW -> Performance Matters PD	Running
PPSDW -> Innerlink	Running
PPSDW -> DIBELS	Running
PPSDW -> OWLTS	Running
PPSDW -> Destiny	Running
PPSDW -> Naviance	Disabled
PPSDW -> Parent Hotline	Running
PPSDW -> Compass	Running
PPSDW -> Read Naturally	Running
PPSDW -> Peachjar	Running
PPSDW -> Student Active Directory	Running
PPSDW -> PrimeroEdge	Running
PPSDW -> Discover PPS	Mostly Disabled – Staff table should be refreshed year round (except during rollover). Enrollment data resumes on Oct 1.
PPSDW -> Pittsburgh Promise	Running
PPSDW -> DHS	Disabled
SRC -> PPSDW	Disabled (remains disabled until after magnet lottery runs)
PPSDW -> Fitness Grams	Running
Bloomboard -> PPSDW	Running



Status of PPS Insight Reports

***Status of PPS Insight Leadership Reports Post Phase I Rollover***

<b>PPS Insight Leadership Report Name</b>	<b>Status During Rollover</b>
<b>Attendance Rate Executive Summary</b>	As of end of prior school year – disabled until first blue date
<b>Attendance Rate Student Detail</b>	As of end of prior school year – disabled until first blue date
<b>Referral Executive Summary</b>	As of end of prior school year – disabled until first day of school
<b>Suspension Rate Executive Summary</b>	As of end of prior school year – disabled until first day of school
<b>School Suspension Detail</b>	As of end of prior school year – disabled until first day of school
<b>Special Education Misconduct</b>	As of end of prior school year – disabled until first day of school
<b>Attendance for Charter School (ADM)</b>	Always shows prior month run with option to run next month
<b>Evaluation Classifications</b>	Shows HR staffing data as of day before
<b>Promise Readiness Executive Summary</b>	As of end of prior school year – disabled until first blue date
<b>Promise Readiness School Roster</b>	As of end of prior school year – disabled until first blue date
<b>College Readiness Executive Summary</b>	As of end of prior school year – disabled until first blue date
<b>College Readiness School Roster</b>	As of end of prior school year – disabled until first blue date
<b>College Readiness Teacher Roster</b>	As of end of prior school year – disabled until first blue date
<b>Classroom Teacher Annual Rating Form</b>	Administrators will see staffing as of the date the report was run
<b>Classroom Teacher Effectiveness Report</b>	Administrators will see staffing as of the date the report was run
<b>2012-13 Classroom Teacher Preview ARF</b>	Preview Reports from 2012-13
<b>2012-13 Classroom Teacher Preview EER</b>	Preview Reports from 2012-13
<b>Classroom Teacher Effectiveness Summary</b>	Staffing as of the year the report/rating was delivered
<b>Classroom Teacher Performance Level Executive Summary</b>	Staffing as of the year the report/rating was delivered
<b>Non-Teaching Professional Annual Rating Form</b>	Administrators will see staffing as of the date the report was run
<b>Non-Teaching Professional Effectiveness Report</b>	Administrators will see staffing as of the date the report was run
<b>School Leader Annual Rating Form</b>	Administrators will see staffing as of the date the report was run

## School Leader Effectiveness Report

Administrators will see staffing as of the date the report was run

### DWH Annual Rollover – Phase II (Post Summer School)

#### Confirm Network Security Expiration Dates

- ⊖ Check all ETLs with Network Security team and ensure expiration dates are reset and that logins won't expire until next 7/31 (~~DW-2756~~)

#### Collect Annual Assessment Results

- Work with Director of Gifted & Talented (K. Henderson) to get:
  - AP Scores
  - IB Test Results (DW-2757)
- Load into PPSDW
- Create extract of AP Data to Naviance (DW-2783)
- Create extract of AP and IB Data to Performance Matters (DW-2784 [AP])

#### Update Network Assignments:

- Recipients of Discipline Audit Reports (DW-2837)
- Update VWPPSSchools (DW-2788)

#### Perform eSchool Plus Summer School Rollover

Approximately 2 weeks after summer school ends (1<sup>st</sup> or 2<sup>nd</sup> week of August) the eSchool Plus sys admin will rollover the summer school to the next school year.

#### Switch to School Year One Roster Process (DW-2597)

Before switching to school year process be sure to end date the summer school schedules in DimStudentSchedule so they aren't picked up as active in SY One Roster.

For summer (last day of school to approx. August 5) we turn off the Summer One Roster SSIS package and turn back on the regular school year One Roster SSIS package:

***\SSIS\OneRoster\OneRoster\OneRoster.dtsx***

#### Complete System Interface Updates

The following tasks should be during the DWH rollover:

- Send new Address file to SRC (~~DW-2430~~)
- Send listing of all active schools (PPS, charter, privates, etc.) to IEP Writer (DW-2785)
- Send listing of current entry and withdraw codes to IEP Writer (DW-3138)
- Send listing of all active PPS Schools (including addresses) to Pearson (orgs.csv with Easy Bridge additional fields) (DW-2787)
- Send listing of all active schools (PPS, charter, privates, etc.) to DHS
- Run current NSC Graduation Data Extract (DW-2668)

#### Complete Report Rollover

- Update SDR Security Groups – HR provides listing of school leaders for upcoming year (DW-2814 & DW-3200)

- Verify that school and/or school configuration changes do not affect the current reports. Example: if a school with two IDs is merging into one ID, verify that the correct ID is used in report data sets.
- Update VWPPSSchools with new Network Assignments (DW-2788)
- Schedule College Readiness & Promise Readiness Reports for first membership date (DW-2729)
- Schedule Attendance & Misconduct Reports for first day of school (DW-2728)

#### Communicate to External Partners Start of Year Dates

Prior to the start of the school year we need to communicate to the Port Authority the dates for the first day of school so they can ensure that the bus passes are available to students on that day

#### Determine PIMS Reporting Window for Official Membership Reporting

In early August we need to reach out to the district PIMS Coordinator (currently Carol Jessep) to find out what dates the state has published for the Official Membership reporting deadline. Report.OfficialMembership holds enrollment records for students as of the Official Membership date each school year. The PIMS Coordinator reports Official Membership numbers to the state during the reporting window and adjustments to enrollment numbers are made over the weeks of the reporting window. We should be refreshing Report.OfficialMembership (which is used to populate Discover PPS) throughout the reporting window and stop refreshing it on the last day of the reporting window. Since the dates of the window change each year and the state doesn't publish them until sometime in August we need to work with the PIMS Coordinator each year to determine what dates we should run the refresh scripts.

*Status of Jobs in DWH Operational Schedule Post Phase II Rollover*

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PPSDW -> eSchool Plus	Running
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eSchool Plus <-> SRC	Running
PPSDW -> SRC	Running * ( <i>Remind SRC to disable Magnet.SRCUpload to Magnet section of SRC</i> )
eSchool Plus HAC Acct Creation	Running
DHS -> PPSDW	Running
Edmentum -> PPSDW	Running
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<b>School Leader Effectiveness Report</b>	Administrators will see staffing as of the date the report was run



