NetID Data Overview and Troubleshooting

Data Flow Overview
MidPoint creates a directory table entry when a new midPoint account is created. Directory tables have awaiting activation, active, and expiration cycle accounts. The directory table entry is then removed 30 days after the midPoint account becomes expired using delayed delete. Once expired, it will remain in the table for 30 days with an active flag of “N” before being removed. Note that accounts that are Awaiting Activation also have an active flag of “N” until users activate their accounts.

Data originates from onboarding employees/associates and bringing in new applicants and students. Data is populated into source tables and consumed by midPoint. Data flow continues from midPoint to Postgres tables and then Boomi uses a view of the Postgres tables to populate Banner base tables. Base tables are used to populate the directory tables.

<table>
<thead>
<tr>
<th>eID Process - CURRENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently, Banner tables inform the existing eID system for individuals with a CSU affiliation. eID processes then populate WEID_dir_person_00, which then flows down to ODS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>midPoint Process – UPCOMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the cutover on July 21, midPoint will take over the legacy eID system for individuals with a CSU affiliation. (Note that CSUP affiliate identities are already managed by midPoint.) Initial account creation will be based off the WEID_dir_person_00 table. Once the accounts are all created in midPoint, Banner tables will be connected as the source tables moving forward. Banner tables will inform midPoint and then midPoint processes will populate the directory base tables, MIDP_DIR_PERSON and MIDP_DIR_INSTITUTION, which flow down to Banner Directory Tables and then ODS.</td>
</tr>
</tbody>
</table>

Relevant Tables and Views
Table and view detail in PRODUCTION is listed below, you can also check out dataflow in a diagram/visual. At the initial cutover, midPoint will use weid_dir_person_00 (Initial Person Data) to identify CSU person accounts. This will include all current accounts, including those currently in the expiration cycle. Once those accounts have been brought over, we will switch the primary person data source to the HR tables (Future Person Data Sources) since all accounts currently in the expiration cycle will already be in the midPoint tables.

Source Data (Banner, HR)
Fort Collins

- Initial Person Data (to bring in accounts currently active and in the expiration cycle)
  - weid_dir_person_00 (Fort Collins person data and livelag/deadlag dates)
  - eids_eiddata_00
- (checks for active eID using active_flag="Y", account_type="P" and admin_acct="N")
  - Future Person Data Sources (after disconnecting weid_dir_person_00)
    - csuh_hr_person_midpoint
    - csus_person_midpoint_v
  - Information Found Flags (student, employee, associate)
    - csuh_hr_emp_midpoint
    - csuh_hr_assoc_midpoint
    - csus_student_midpoint_v

midPoint Populated Base Tables
Base tables populated by midPoint are then used to construct the Banner Directory Views and Tables. The following tables identify the fields that midPoint sends to the base tables for the subsequent Directory Table population. Any additional fields in the downstream data are populated from other sources.

### midp_dir_person

<table>
<thead>
<tr>
<th>Source Field for midPoint</th>
<th>Directory Table Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>weid_dir_person_00.csuid</td>
<td>csu_id</td>
</tr>
<tr>
<td>weid_dir_person_00.ename</td>
<td>netid</td>
</tr>
<tr>
<td>weid_dir_person_00.int_ref_id_aries</td>
<td>pidm</td>
</tr>
<tr>
<td>weid_dir_person_00.last_name</td>
<td>last_name</td>
</tr>
<tr>
<td>weid_dir_person_00.first_name</td>
<td>first_name</td>
</tr>
<tr>
<td>weid_dir_person_00.middle_name</td>
<td>middle_name</td>
</tr>
<tr>
<td>weid_dir_person_00.preferred_first_name</td>
<td>preferred_first_name</td>
</tr>
<tr>
<td>weid_dir_person_00.professional_last_name</td>
<td>preferred_last_name</td>
</tr>
<tr>
<td>weid_dir_person_00.live_lag_start_date</td>
<td>netid_exp_cycle_start_date</td>
</tr>
<tr>
<td>weid_dir_person_00.dead_lag_start_date</td>
<td>netid_exp_cycle_end_date</td>
</tr>
<tr>
<td>weid_dir_person_00.int_ref_id_eiddata</td>
<td>int_ref_id_eid</td>
</tr>
<tr>
<td>eids_eiddata_00.creation_date</td>
<td>creation_date</td>
</tr>
<tr>
<td>midPoint calculated = netId + vpdi_code</td>
<td>midpoint_id</td>
</tr>
<tr>
<td>midPoint calculated = enabled and active affiliation</td>
<td>netid_active_flag</td>
</tr>
</tbody>
</table>

### midp_dir_institution

<table>
<thead>
<tr>
<th>Source Field for midPoint</th>
<th>Directory Table Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>weid_dir_person_00.csuid</td>
<td>csu_id</td>
</tr>
</tbody>
</table>
Directory Tables
- midp_directory (permanent table)
- midp_weid_dir_person (temporary table, 1 year)

ODS Tables and Views
- midp_directory
- midp_directory_all
- midp_directory_privacy
- (there may be others that stem from these)

What should and should not match?
We expect the data flowing into midPoint from the source tables to match directory table entries. If there are issues with data accuracy, that should be addressed in the source data itself.

Since multiple data sources are being used to initially create accounts and midPoint is already managing identities for CSU Pueblo, there are a few situations unique to the current environments that we know will not match current production data. Additionally, rules to include/exclude accounts vary slightly between tables. To help you during data validation, review the information below as to what is expected.

Should Match
Aside from the situations below, data in midp_weid_dir_person and midp_directory should match data in WEID_dir_person_00. Keep in mind that counts/information may vary slightly due to the timing and movement of production data. A few examples:

- People who activate, enter or complete the expiration cycle, etc. will continue to update the tables.
- Data updated in the base tables will not update ODS tables immediately.

Along with verifying directory table information, always check the upstream source data field to verify whether the source data is correct.

CSU Employee and Student Record Information
Information in each individual’s record should be consistent across the tables.
Will NOT Match

Banner PPRD and Banner PROD

Currently, Banner PPRD data represents data on June 7, 2023. Comparing data between Banner PPRD and Banner PROD will not be accurate. You will need to account for all data changes that may have happened between June 7 and today, which will be reflected in Banner PROD. Changes may include but are not limited to employee assignments ending or changing, new hires, newly admitted students, name changes, etc.

Dual Affiliates

Users who have dual affiliation with CSU and CSU Pueblo may be represented with a C# as their NetID instead of their CSU ename. This is an expected mismatch in production and cannot be corrected until the official cutover on July 21, 2023. More information on dual affiliates is available below.

Who are dual-affiliates and how do I validate their data?

Dual-affiliates are individuals who have an active affiliation at both campuses.

Before the cutover from eID to midPoint on July 21, all dual-affiliates will show up with a C# in instead of an ename in midPoint-populated production tables.

Since midPoint already handles CSU Pueblo accounts, midPoint currently only recognizes dual-affiliates using their Pueblo identity. At the cutover, the primary NetID described in the table below will be assigned to the users’ single identity record in midPoint (which will include both CSU and CSU Pueblo information).

<table>
<thead>
<tr>
<th>Dual-Affiliate Account Types</th>
<th>Default NetID Result After July 21, 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts that are Active at both campuses or Active at one and Awaiting Activation* w/ the other</td>
<td></td>
</tr>
<tr>
<td>Active with CSU and Awaiting Activation w/ CSUP</td>
<td>ename</td>
</tr>
<tr>
<td>Active at both with CSUP as their selected campus</td>
<td>C#</td>
</tr>
<tr>
<td>Active at both with CSU as their selected campus</td>
<td>ename</td>
</tr>
<tr>
<td>Active with CSUP and Awaiting Activation w/ CSU</td>
<td>C#</td>
</tr>
</tbody>
</table>

*Awaiting Activation is a state of accounts prior to being activated by the user through NetID Self-Service. Accounts are in this state when they are initially created for a new hire, applicant, student, or associate.
Detail on how AD and LDAP accounts will transition is available in this diagram. Please note that it has since been determined that employees from CSUP IT that transitioned to CSU as of July 1, 2023 will all retain their C#. Associated AD/LDAP and email accounts that will be decommissioned will remain active through September 29, 2023. Communication sent to dual affiliates can be reviewed here.

How do I know someone’s selected campus?

Selected campuses were determined based on CURRENT relationship(s) with both institutions. The primary role dictated the user’s selected campus.

Order of priority: faculty/staff, student, affiliate, applicant, awaiting activation (any)

For example, if someone is a staff member at CSU and an affiliate at CSUP, their selected campus defaults to CSU. In cases where the primary role cannot be determined, they default to the C#. Users in this scenario were given the opportunity to select their preferred ID (either C# or ename). Individuals who chose to retain the ID that is not the default for their situation were manually updated in the system. A matrix outlining this information is available here.

What constitutes an active account?

Active accounts have a current employee role in HR, admitted/enrolled student affiliation, applicant affiliation, or an affiliate role in HR. When an employee or affiliate’s assignment ends, a student graduates/leaves the University, or an applicant does not transition to a student (declines or not accepted) they enter the expiration cycle. At the end of the expiration cycle, their account expires.

CSU expiration cycle timelines:
- Student 365 days
- Employee 30 days
- Affiliate 30 days
- Applicant 45 days

CSUP expiration cycle timelines:
- All types 365 days

What about accounts in the expiration cycle?

Individuals whose accounts are in the expiration cycle at either campus default to their non-expiring campus account. For example, individuals in the expiration cycle at CSUP who are active at CSU will default to CSU as their selected campus. Individuals in the expiration cycle at CSU and active at CSUP will default to CSUP as their selected campus.

Is there a query I can use to identify dual affiliates?

No. Dual-affiliate queries are handled in the midPoint Postgres databases which are not available to campus users. Regular updates are available from our team. Please reach out to dave.hoffman@colostate.edu to request a current list.

Troubleshooting Scenarios

Start troubleshooting by reviewing the bullets below in order. If you cannot find a resolution, instructions are included.
Data in MIDP_DIRECTORY, MIDP_WEID_DIR_PERSON, or a subsequent ODS table/view does not match data in WEID_DIR_PERSON_00. (If a record is missing entirely, skip down to the next section)

- Are you trying to validate data in Banner PPRD? If so, check the same information against Banner PROD.
- Is it an expected data difference?
  - See expected data differences in What should and should not match?
- Still no resolution? Submit an issue.

Record(s) are missing from MIDP_DIRECTORY, MIDP_WEID_DIR_PERSON, or a subsequent ODS table/view.

- Are you trying to validate data in Banner PPRD? If so, check the same information against Banner PROD.
- Still no resolution? Submit an issue.

Submitting an Issue

If you cannot find a resolution or explanation for data differences using the information above, you can submit an issue to the project team.

Submit an issue

Please include the following information in your issue:

- Is the mismatched data a directory table field(s) populated by midPoint?
- Is the data missing or inaccurate in the upstream source field for midPoint?
- Which table(s) are you using?
- Any relevant queries.