Penn Budget Planning & Analysis

User Guide for Oracle Planning and Budgeting Cloud System (PBCS)

Contents

User Access: The Planning Access form is available on the Budget Office website and must be submitted with approval from the designated access administrator in each school or center. The form should be submitted to request new user access, modifications to existing access, or removal of access. New users will receive confirmation of access via email, along with instructions for testing base functionality.

User Training: The Budget Office is available to offer budget guidance and Smart View training when needed. Schools and centers often have specific protocols and procedures for budgeting within their organizations, and in most cases, the most specific training can be provided by other Planning users within your school or center. If additional support is required, please contact your assigned Budget Analyst.

Budget Guidance: Budgeting resources can be found in the Budgeting Guide section of the Budget Office website, in addition to specific guidelines for the Planning system in this document. For budget questions that are not specific to the Planning system, school and center staff should direct budget questions to their assigned Budget Analyst.

Log-In Process: Use the URL shown below, and when prompted, enter the identity domain shown below and login through the Penn WebLogin two-step credentials screen using your PennKey and PennKey password. The URL can be bookmarked; depending on web browser privacy settings, you might be prompted to enter the identity domain for each new session. The URL is also available on the Budget Office website.

> **Planning URL:** https://planning-a183374.pbcs.us2.oraclecloud.com/HyperionPlanning/

> **Identity Domain:** a183374

Recommended Browser: The most recent version of Firefox ESR.

Planning Support: Support for the University's Planning system is led by the Budget Office. Please direct questions or issues specific to using the Planning system to PLANNINGHELP-L@LISTS.UPENN.EDU. If reporting an issue, please include details such as the account combination (Org, Fund, Object, Program, Cref), the version/scenario/year (example: Working Forecast FY20), specific data entry form or report, and any screenshots or documentation displaying the issue.

System Availability: The Planning system (via the web and the Smart View Excel add-on) will generally be available daily from 7:00am to midnight. Overnight processes run most evenings beginning around midnight and are typically complete by 7:00am; the status of these processes is visible in the Planning Data section of the Data Warehouse load status page. Outages or other accessibility issues will be communicated to Planning users via email.

> **Daily Schedule:** PennHist and GAAPHist are updated with information from the general ledger by 7:00am each morning. Planning projections for revenue and expense are uploaded to the Data Warehouse each night and appear in the FINQUERY universe. Person-level plans for salary expense are uploaded to the Data Warehouse every night and appear in the RSALMGT universe.

> **Annual Schedule:** In mid-July, after the close of 13th month, the oldest fiscal year is dropped (after we have reached 10 years) and the new fiscal year is added. The starting carryforward

positions are populated and the original (Spring) budget for the current year is copied by the Budget Office to the Working Forecast. Starting carryforwards are refreshed in August and finalized in September once the books are officially closed. In September, AIF income for all endowment funds is populated by the Budget Office based on the spending rule.

Forecasts are due September 15 (Q1), January 15 (Q2), and April 15 (Q3). The Budget Office balances the forecasts to make sure that all internal object codes net to zero, then copies the forecasts to the Fall, Winter, or Spring version, depending on the quarter. Five-year budgets are due at the end of October. The five-year budgets are balanced in early November, copied to Fall, and reconciled with the long-term model maintained by the Treasurer's Office in preparation for the Trustee's December meeting.

The budget for the upcoming fiscal year is sent to the University's general ledger in mid-June each year and copied from Working to Spring. The budget uploaded to the ledger comes back as the Final Budget.

System Overview: The Planning system consists of four data cubes: two Block Storage Option (BSO) cubes where data entry occurs (Revexp and Salary) and two Aggregate Storage Option (ASO) cubes where the data entry is aggregated and combined for querying purposes with actuals from the Data Warehouse (PennHist and GAAPHist). PennHist reflects data on an RCM basis, while GAAPHist reflects data on a GAAP basis.

When users enter data into the Revexp and Salary cubes using the standard data entry forms in Planning (on the web or through the Smart View Excel add-on), the data is saved and pushed immediately to PennHist, where it can be viewed through the Planning Reports or through ad hoc Smart View queries in Excel. Some processes associated with data entry require business rules or data loads that occur overnight (e.g., "Tweak on Steroids"-style data entry forms, investment overhead, dependent tuition); in these cases, the data will be pushed to PennHist overnight and available for viewing through the Planning Reports or Smart View queries the following morning.

The Planning system allows for data entry only at the bottom-most (zero-level) of the account combination selection. Users must select a zero-level member of the following dimensions: Organization, Fund, Object, Program, Cref, and Employee (if using a Salary data entry form). Data is entered by users into the Working Forecast (for the current fiscal year) and Working Budget (for the next five fiscal years). The Working version is considered the "live" version of the forecast and budget. At various times throughout the fiscal year, the Budget Office preserves copies of the forecast and budgets (Fall, Meeting, Spring, Final); these versions are visible through ad hoc queries in the Smart View Excel add-on. The Meeting version is the initial version of the budget discussed at the Center's budget meeting; the Final or Spring version corresponds to the final approved budget submission. Typically, the only difference between the Final version and the Spring version is that the Spring version includes input assumptions, while the Final version reflects only the data that was uploaded to the general ledger.

Chart of Accounts and Planning Dimensions: The University chart of accounts (COA) is represented in Planning as dimensions called Orgs, Funds, Objects, Programs, and Center References (Crefs). Valid options for most COA segments (org, fund, program, and cref) are automatically added to Planning

during the overnight process. The object dimension is maintained separately and requires manual updates to Planning.

Fund: Fund follows the RCM Fund Group rollups. For performance reasons, individual grant funds are not included in Planning (for data entry or for actuals). Instead, grants projections are entered in Fund-599998 for all non-federal grants and in Fund-599999 for all federal grants.

Object: Object code includes the objects from the ledger, plus several assumption objects (e.g., Faculty FTEs, Staff FTEs, Course Units, Space) and Gifts to Endowment. A selection of revenue and expense object codes are available in Planning for data entry into the forecast and budget, as detailed in RCM Template 1A. All object codes are available in PennHist for detailed analysis of actuals.

CNAC: There is no CNAC segment in Planning; instead, the center is derived as the parent of the org, and NAC-0 is implied for all budgets and forecasts, with some exceptions (activity in Capital Gift funds is moved to NAC-1, and Gifts to Endowment become Obj-4400 with an offsetting Obj-1710 in NAC-2). NAC (0 or 1) is shown as a separate segment in PennHist. NAC-2 is not included in PennHist but does appear in GAAPHist.

BC: There is no BC segment in Planning, and the value for BC is derived based on the fund as part of the Data Warehouse load each night. This is hardcoded logic; please notify the Budget Office if you create a new fund with a BC of 2.

Planning includes several other (non-COA) dimensions, as described below.

Year: The fiscal year appears in Planning as FY followed by the two-digit fiscal year (e.g., FY20). Planning contains data projections for the current fiscal year and the five upcoming budget years, as well as actual data back to FY10. A new year is added in late July each year.

Version: Version refers to the source of the data. Data from the general ledger is displayed in Planning as the Final version. Data entered by users in the forecast and budgets is displayed in Planning as the Working version. Snapshots of the Working version are taken at various times during the year and saved as versions Fall, Meeting, or Spring to preserve copies for comparison purposes.

Scenario: Scenario refers to the type of data. Forecast is the short-term outlook, for the current fiscal year. Budget is the proposal for the upcoming year and four years following (five in total). Actual is the actual from BEN. Operating is the BEN operating budget (after doing data entry in BEN), and Encumbrance is the BEN encumbrance.

Time Period: Time Period refers to periods within the fiscal year. Planning contains the twelve months (the thirteenth month, ADJ, is part of June in Planning), four quarters (Q1, Q2, Q3, Q4), YTD, and YearTotal. YTD includes the months from July through the most recently completed month (e.g., in mid-February, YTD includes July though January). YearTotal includes data for the prior months and current month. Some of these time periods are displayed in reports, and all of these time periods are available in Smart View ad hoc queries of PennHist data (actuals, projections). June is the default time period on the standard data entry forms, and data entered into June should represent the full year value.

Employee: Employee is used for person-level budgeting on the salary data entry forms. Most schools and centers budget their faculty and staff as a pool by using the surrogate employee PENNID-0001ANY (0001-Any one or no one). Some schools budget by person and have arranged to have employee-level detail loaded to Planning. The employee dimension is organized by home org (HORG), originating from Workday data.

Setting User Preferences: The account combination selections within data entry forms are populated based on initial User Preferences selections in Planning. New users must set these preferences in order to access data entry forms. Once logged into the Planning system on the web, choose the Tools icon and then choose User Variables.

Populate the Member column by typing directly into the field using the syntax shown below or by choosing a selection from the tree menu (icon at the far right of the field). In most cases, users will want to set these preferences at the highest possible level so that all available account options will be visible in the data entry forms.

CREF: CREF-xx, where xx is your school/center number (to selects all available CREFs); or CREF-xx-yyyy, where yyyy is the one Cref you want to budget.

Fund: FUND-CX0012 (to select all operating budget funds); or ENDOW-xx or GIFT-xx, where xx is the school/center number (selects all available endowment or gift funds); or FUND-yyyyyy, where yyyyyy is the one Fund you want to budget.

Employee: PennID-0001ANY (selection shows as "0001-Any one or no one"); or HORG-zzzz, where zzzz is the Home Org parent of the people you want to budget by person.

Organization: ORG-zzzz, where zzzz is the highest Org parent to which you have access.

Program: PROG-All Programs; or PROG-yyyy, where yyyy is the one Program you want to budget.

These User Preferences selections can also be made via the Smart View Excel add-on. After connecting to PennPlan through the Shared Connections panel, right click on PennPlan and choose User Preferences, then click User Variables. Follow the instructions detailed above.

Smart View Excel Add-On: Smart View is a Microsoft Office add-on for Windows operating systems. Through Excel, users can use the Smart View add-on to do data entry, run reports, and create ad hoc queries.

Smart View Installer: The installer is available with a valid PennKey at this link.

Smart View Installation Instructions: Your LSP may need to assist with the installation process. In general, any previously installed version of Smart View from 11.1.2.5.500 or earlier should be uninstalled from Add/Remove Programs first, and the machine should be restarted before installing the new version. Any previously installed version of Smart View from 11.1.2.5.520 or later does not need to be uninstalled first, and any user (even one without administrative rights) can install it. Install Smart View using all default selections, and then configure the tool in Excel to point to our server for any new connections. From the Excel Smart View ribbon, choose Options, Advanced, and paste the following URL in the Shared Connections URL field:

https://planning-a183374.pbcs.us2.oraclecloud.com/workspace/SmartViewProviders

Connecting to Smart View: To make a new ad hoc sheet in Excel, open a blank spreadsheet. From the Smart View ribbon, choose Panel, Shared Connections, and then after signing in with your PennKey and PennKey password, choose the EPM Cloud provider. Expand the menu tree: from PennPlan, choose PennHist and then Connect, then Ad hoc analysis. The Planning Ad Hoc ribbon appears when a connection is established. If starting from a blank sheet, Smart View will open a default template, with some dimensions displayed in the cells and others in a floating POV (point-of-view) box. These dimensions can also be typed directly into the sheet to eliminate the need for the floating POV box; click Refresh to update the sheet after making dimension changes. Users can also set up a template structure before connecting the Excel Sheet through the Panel/EPM Cloud.

The following dimensions must be present in a Smart View sheet that is connected to PennHist. Specific member selections within each dimension can either be typed directly into the Excel sheet (with appropriate syntax) or selected from a menu by choosing the Member Selection button on the Planning Ad Hoc ribbon. Syntax and select examples are displayed below.

- **Years:** FYXX
- **Scenarios:** Actual, Budget, Forecast, Operating (the BEN operating budget after doing data entry in BEN), Encumbrance (the BEN encumbrance)
- **Versions:** Working, Meeting, Final, Fall, Spring
- **Time Periods:** YearTotal (which shows to-date data), YTD (which shows data through the most recent completed month), Q1, the first three letters of a specific month (Dec)
- **Organization:** Org-zzXX (where zz is the school/center number, to view data for the parent org and its children), Org-yyyy (where yyyy is the specific org)
- **CREF:** Cref-zz (where zz is the school/center number, to view data for all crefs in that center), Cref-zz-yyyy (where zz is the school/center number and yyyy is the specific cref)
- **Program:** Prog-Prog (to view data for all programs), Prog-yyyy (where yyyy is the specific program)
- **Fund:** Fund-CX0012 (to view data for all Operating Budget Funds), Fund-yyyyyy (where yyyyyy is the specific fund)
- **NAC:** Smart View can be used to query actuals in PennHist in NAC-0 or NAC-1 (but not NAC-2), and all data entry into the Planning system is entered by default into NAC-0. The syntax in Smart View is either NAC, NAC-0, or NAC-1, depending on the desired data results.
- **Object:** Obj-K088 (to view the RCM Operating Surplus/Deficit), Obj-CUM (to view cumulative cash position), Obj-yyyy (where yyyy is the specific object)

Set Smart View Default Settings: From the Smart View ribbon, click the Options button.

1. On the Member Options tab, check Include Selection, Preserve Formulas and Comments, Formula Fill, and Preserve Formula on POV Change.
2. On the Data Options tab, uncheck any suppression of rows and columns, change #NoData/Missing Label to #NumericZero, check Submit Zero, and uncheck Suppress Missing blocks.

3. On the Advanced Tab, check Disable Smart View in Outlook, and Use Double-click for Operations.
4. On the Formatting Tab, select Use Excel Formatting and check Move Formatting on Operations.

Pull down the arrow to the right of the OK button and choose Save as Default Options, then OK.

In addition, after connecting to Smart View, users may also want to click the Change Alias button on the Planning Ad Hoc ribbon to confirm that the selected alias table is Default (instead of None or Previous). The selection of the Default alias table will ensure that the text tags associated with dimension members display on the Smart View sheet.

Data Entry through Smart View: Users can access data entry forms in Smart View (in addition to or instead of using data entry forms through a web browser). To access data entry forms, make sure to first review the Setting User Preferences section of this manual. Open a blank Excel sheet. From the Smart View ribbon, choose Panel, Shared Connections, and then after signing in with your PennKey and PennKey password, choose the EPM Cloud provider. Expand the menu tree: within PennPlan, expand Library to see the folders containing the data entry forms. Double click to open the desired data entry form, and use the POV selections to navigate to the zero-level dimensions. Click the Refresh button to display results for newly selected dimensions. Data entry can be entered in the pale yellow cells, and cells turn a deeper yellow/light orange to indicate data changes. To save data changes, click the Submit Data button on either the Smart View ribbon or the Planning ribbon. The updated cells will revert back to the pale yellow color to indicate that changes have been saved.

Reports through Smart View: Users can access Planning reports in Smart View (in addition to or instead of accessing reports through a web browser). To access reports, **o**pen a blank Excel sheet. From the Smart View ribbon, choose Panel, Shared Connections, and then after signing in with your PennKey and PennKey password, choose the Reporting Settings provider (instead of EPM Cloud). Reports are located in the RCM folder.

Refresher for Returning Users: If you are an infrequent user of the Planning system, the following steps should be undertaken each year to ensure that you have appropriate access for the budget season.

- Confirm that you have the correct org access in Planning: Run report A4-YTD Analysis. Select each org or org parent that you have access to and confirm that the data match what you see in BEN. Submit a Planning Access form to request updates/changes to your user access.
- Review the Setting User Preferences section in this manual before using the data entry forms.
- Useful reports to review before beginning data entry include:
  - The A7-Account Detail-Non-Compensation and A8-Account Detail-Compensation reports to remind yourself of which account combinations are forecasted and budgeted.
  - The A9P-Closing Summary-Prior Year report to evaluate the accuracy of last year's forecast compared to last year's actual performance.
  - The A4-YTD Summary report to review current fiscal year actual performance YTD (through the most recent completed month), as well as the Calculated Forecast projection based on current year performance relative to prior year performance (Formula: current fiscal year YTD / prior fiscal year YTD * prior fiscal year actual).

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Planning Reports: From the Planning home screen on the web, choose the Reports icon to enter the repository. The default view calls up a list of reports ordered by alphanumeric prefix. The prefix designations are intended to prioritize a number of our most commonly used reports deemed crucial to the budget process. In the upper corner near the Refresh button, there is an icon for enabling Tree view. This may assist with navigation and displays the report folders. The first letter of the report name relates to various report groups:

> **A = Primary**; for example, reports appearing in the budget briefing books. This group also includes a closing summary and reports used to retrieve detailed account combinations that make up a forecast or budget.

> **B = Secondary**; for example, reports that can be run for a specific Fund. There are a number of potentially useful reports in this group but they tend to be more situational than reports located within the 'A' group.

> **X = School-specific reports**; this list has grown in number over the years. If you notice any are obsolete or redundant when compared to reports in the two groups above, please let us know so we can delete them.

When presented with the report list in the repository you'll notice three icons to the right of each report name. The three icons represent options for running the report in either HTML, PDF, or Excel format. Running a 'Book' combines several separate reports into one consolidated set and can be run using only the PDF format (example: A6B-Budget Book).

Launching into PDF format is most common and also most suitable for viewing or printing a report. HTML format is useful for exporting report results to Excel (see account detail section below). HTML format allows for drilling down on a row in some reports since rows often contain high level parent Objects. Excel format allows for some manipulation of the report results, such as filtering or sorting, and is most useful for the account detail reports (A7, A8, B03, B03C).

When prompted to enter report parameters, keep in mind that report runtime performance can often be maximized by choosing the lowest possible levels for the parameters. For example, choose the desired RCM category object K-parent (e.g., K009-Tuition and Fees) or a specific object code, limit the CREF parameter to just your school or center Crefs (e.g., Cref-zz where zz is your school/center number), and/or choose a specific fund group parent (e.g., Fund-CX0004-Designated Investment Income Funds) or a specific fund.

Below you'll find some recurring concepts that exist throughout several of the reports.

> **POV (Point of View):** A set of selectable report parameters where you can specify the data you'd like to see. For summary reports that produce a pre-determined set of pages based on Fund groups, the primary parameter for the report results is often the Org. In several of the reports you also have the option of selecting a Program or CREF if needed. To get started, we recommended that you run the highest Org level available according to your security access. For some users the access level could be an entire school or center, a department, or one specific Org.

Fund Groups: A few of our most commonly used report summaries produce a standard set of Fund aggregations along with a page at the end for the 000000 Fund. A reference document outlining these Fund groups can be found here:
http://www.budget.upenn.edu/dlDocs/fund_aggregations.pdf

1-Page Format: This is an informal name referring to a report format where the rows on each page conform to a standard set of summarized RCM categories. A reference document outlining the various Object aggregations included in the 1-Page Format can be found here:
https://budget.upenn.edu/wp-content/uploads/RCM-Single-Page-Format.pdf

Reports by Purpose: Planning reports are designed to aid users during the forecasting and budgeting process. The following reports are recommended for the purposes described:

Review the current year forecast: YTD Analysis is a summary report in the 'A' group and is ideally suited for reviewing the current year forecast compared to YTD actuals. The report provides annual totals for the past two years, YTD totals for both the current and prior year, and a number of variance columns providing context for your year-end projections.

YTD Analysis-Selectable Fund is in the 'B' group if interested in reviewing the forecast for a singular Fund.

Review next year's budget and the out-years: Budget Analysis is a summary report in the 'A' group and is probably our most comprehensive summary report for reviewing the five-year plan. This report provides annual totals for the past two years, the Budget/YTD Actual/Forecast totals for the current year, next year's Budget and out-year Budgets, and a number of growth or variance columns for comparing the span of years appearing in the report.

Budget Analysis-Selectable Fund is in the 'B' group if interested in reviewing budgets for a singular Fund.

Review detailed account combinations that add up to the totals appearing in the summary reports: Account Detail reports can be utilized for finding this information, and they are located within the 'A' group: one for non-compensation and one for compensation object codes. The non-compensation report can be run for Obj-K088 or any sub-parents or child objects. The compensation report can only be run for Obj-K056 or sub-parents or child objects within the RCM compensation category.

Review line detail for a specific RCM category (such as Tuition or Current Expense): Account Detail reports allow for selecting an Object or Object parent. Similarly, the results can be limited to a specific Fund or Fund group as well.

Review faculty or staff FTE totals: Input Assumptions is a summary in the 'A' group for faculty, staff, and student FTEs along with various other inputs such as course units and square footage. You'll find instructions for preparing Input Assumptions here:
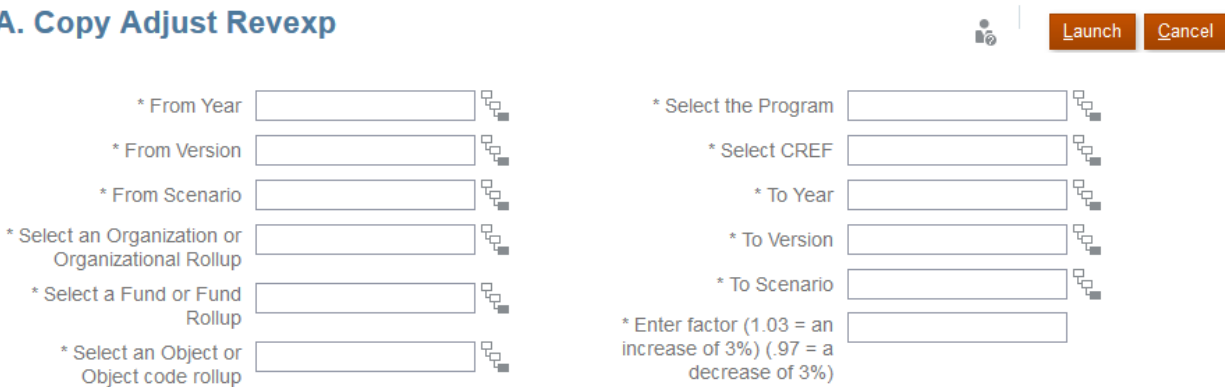
https://budget.upenn.edu/wp-content/uploads/Input_Assumptions_Instructions.pdf. Current year actual data can be queried through Smart View; the dimension selections are located in the Object member selection menu, in the Assumptions category.

Produce the reports included in the budget meeting briefing books: <u>Budget Book</u> is located in the 'A' group and is capable of producing a consolidated set of the following reports: Input Assumptions, Performance & Balances, Budget Analysis, YTD Analysis, and Multi-Year Summary.

If you believe you have everything set up correctly, but you're still having a problem running/exporting reports or you believe there's something wrong with your data, please write to PLANNINGHELP-L@LISTS.UPENN.EDU. When doing so, please provide as much information as possible such as a description of the issue, the versions of your operating system/MS Office/browser, and screenshots showing the problem or error you encountered.

Copy Adjust Business Rule: There are two business rules – "A. Copy Adjust Salary" and "A. Copy Adjust Revexp" – that allow users to copy their forecast and budget data from one year to the next. Click the Rules icon on the Planning home screen, locate the desired business rule, and click the Launch button. A screen will appear with parameter fields.

A. Copy Adjust Revexp

| | Launch | Cancel |

* From Year
* From Version
* From Scenario
* Select an Organization or Organizational Rollup
* Select a Fund or Fund Rollup
* Select an Object or Object code rollup

* Select the Program
* Select CREF
* To Year
* To Version
* To Scenario
* Enter factor (1.03 = an increase of 3%) (.97 = a decrease of 3%)

Before you select the information in the boxes, it is a good practice to write down the parameters for the data you want to move. This way, you can double check that the fields are correct before launching the business rule. These business rules are powerful and dangerous since they can wipe out your data.

Year: It is recommended that you copy only from the current fiscal year forward (rather than from a prior fiscal year).

Version: It is recommended that you copy only from a Working version to a Working version.

Object: For the Copy Adjust Salary rule, enter an individual salary object code (e.g., Obj-5010) or Obj-K052 for all salary objects. For the Copy Adjust Revexp rule, copy by RCM category object parent (e.g., K009-Tuition and Fees, K035-Total Revenues and Transfers, K088-RCM Operating (Surplus)/Deficit); the Revexp rule is written to exclude Obj-4710P and Obj-4755 (prepopulated AIF endowment values) when copying at the k-parent level.

Factor: Enter a factor of 1.00 to simply copy data from one year to another. You can also increase or decrease the copy by a factor as described next to the field.

Click the Launch button; you should see a message that confirms the successful completion of the rule. The copied data will be visible immediately in the data entry forms and in the A7-Account Detail-Non-Compensation and A8-Account Detail-Compensation reports, but it will not be available in PennHist (visible in other reports and through ad hoc queries in Smart View) until the following day.