



NVISION LAYOUT DESIGN
SFS VERSION 8.9

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NOTE:All nVision development is done within PeopleTools, and not on the web version of SFS. Additional software will be needed in order to create nVision reports. Contact your SFS campus security administrator to start the authorization process to load this software.

Understanding PS/nVision

PS/nVision (nVision) enables you to retrieve information from the Shared Financial System (SFS) into a Microsoft Excel spreadsheet, as information in a form that helps you see the big picture while exploring the details. You can use familiar Excel commands to format and analyze the data. By using nVision, you can spend your time analyzing results, rather than summarizing data and entering it into spreadsheets.

Working with PS/nVision

nVision doesn't just work with spreadsheets, it works within them. You access the nVision features directly from a special nVision menu within Excel. Because nVision works from within Excel, you'll use the familiar Excel commands for inserting formulas, formatting, and graphics.

Understanding Reports and Layouts

Each Excel spreadsheet created with nVision is a report layout. A report layout is a template used to create a report with data from SFS. Every report created is based on a report layout. When a report is run, nVision uses the specified layout to determine what data to retrieve for the report and how to display it. The following will better explain nVision components you will have to understand to create successful report layouts.

Layout

- The 'blueprint' for your report within nVision.
- Contains the elements of your report (both nVision elements (i.e. criteria) and Excel elements (i.e. formatting))
- Has an .xnv extension

Scope (optional)

- Filters for information regarding what data will be included in a report
- Can be used to create multiple instances of the same report, for different criteria (i.e. running the same report for different departments or funds)

Report Request

- Place where the run time specifics are stored for the report – business unit, as of date, report instance name, etc.

Instance

- The result of running the report request with the layout, the actual report.
- Is a Microsoft Excel spreadsheet (.xls extension)

Review of TimeSpans, Ledgers, and Chartfields and Trees

Most nVision reports require TLC – Timespan, Ledger, and Chartfield. Here is a review these fundamental concepts.

Ledger -

PeopleSoft General Ledger stores the results of transactions on the Ledger table. Within the Ledger table, there is a field called LEDGER. Information is grouped by different ledgers, depending on the transactions. The LEDGERS used in SFS include the following:

ACTUALS – Actual transactions

STD_BUDGET – Budget transactions

CC_DET_ENC – Encumbrance transactions (stored in the LEDGER_KK table)

FIN_RPTG – Transactions used to create the annual financial statement

REPORTS – Asset management transactions

ACCRUAL – Used by UWMIL to enter monthly accrual transactions

Timespans

The ledger data is stored as net activity for a specific period and accounting period. To pull Ledger information into an nVision report, a tool is needed to extract data for a specific period or range of periods. Timespans are this tool.

Some common timespans used in SFS include –

- YTD - Year to date transactions (period 1 to current period)
- BAL - Balance sheet information (period 0 to current period)
- PERn – One period information where n = period

There are also some timespans that contain period 998 (adjustment) information.

To review the timespans in SFS, navigate to Set Up Financials/ Supply Chain → Common Definitions → Calendars/Schedules → TimeSpans. The set ID for all timespans in SFS is SHARE. (See Appendix __ for additional information on TimeSpans)

Chartfields

Chartfields are commonly known as the accounting string. Chartfields include Account, Fund, Department, Fund, Program, Class, and Project.

Trees

A tree is used to view a data hierarchy. All trees are built on a single field (such as Account or Department). nVision reports can use trees to select specific ranges of chartfields as opposed to hard coding this information into the nVision report. This also limits the maintenance of the report; once the tree is updated, the report is also updated.

When defining field criteria to use in a layout, there are 3 options: Selected Tree Nodes, Selected Detail Values, or All Detail Values. The first option uses a tree to specify data. The other options, Selected Detail Values and All Detail Values, retrieves data from the table you specify instead of a tree.

Chartfield information is stored in the following tables:

Account – GL_ACCOUNT_TBL
Department – DEPT_TBL
Fund – FUND_TBL
Project – PROJECT
Program – PROGRAM_TBL
Class – CLASS_TBL

For additional tree information, refer to the Tree Manager manual.

Developing an nVision report

The majority of work in creating an nVision layout is in the planning stage. The following steps should be followed when creating nVision layouts. The more layouts built, the quicker the planning steps will take, but they are still important to review.

- | | | |
|----------------|---|---|
| Planning Stage | { | <ol style="list-style-type: none">1. Develop a layout blueprint2. Determine if the layout will be a Matrix or Tabular layout3. Determine and document all necessary criteria and Excel formulas |
| Building Stage | { | <ol style="list-style-type: none">4. Navigate to nVision5. Create a layout6. Create a Report Request7. Add a scope (if necessary)8. Run the Report9. Add the layout to the nVision bolt-on, if necessary |

Develop the layout blueprint

The first step in creating an nVision layout is to develop the layout blueprint. Figure out how the report should look. For our example, let's say we want to create a report that shows the Budget Amount, Posted Total Amount, Encumbrances, and the remaining balances for several departments.

For this example, we would layout our report as follows:

B	C	D	E	F
Business Unit				
Department Balances				
as of Dec.				
31, 2008				
	Budget	Total Expenses	Encumbrances	Balance
Departments				
↓				

Determine if the layout will be a Matrix or Tabular layout

There are two types of report layouts in PS/nVision - tabular layouts and matrix layouts. The major difference between these layouts is how they specify what data to retrieve from the database. In general, tabular layouts lend themselves to detailed reporting, while matrix layouts are more appropriate for summarized reporting.

Tabular layouts are the simpler of the two layout types. They are created using a predefined query. The columns in the report correspond to the fields returned by the query; the rows in the report correspond to the rows in the query result set.

A tabular layout will essentially return the same information as a PeopleSoft Query, however, you can format, create totals and include a pivot table in the nVision layout, so when you run the query, these are automatically created.

Matrix layouts have data selection criteria associated with columns and rows in the spreadsheet, creating a criteria matrix. The data retrieved for an individual cell is determined by an intersection of the criteria for its column and its row. Like tabular layouts, a matrix layout can use a column from a predefined query (this is commonly called a mixed layout). Most matrix layouts based on the ledger table. Matrix layouts require at least one TimeSpan, at least one Ledger, and at least one Chartfield as criteria. Drilldown capabilities are only available with matrix layouts.

Our example above will be a matrix query, as we want to use multiple ledgers and departments to create the report. (We will look at creating a Tabular layout later.)

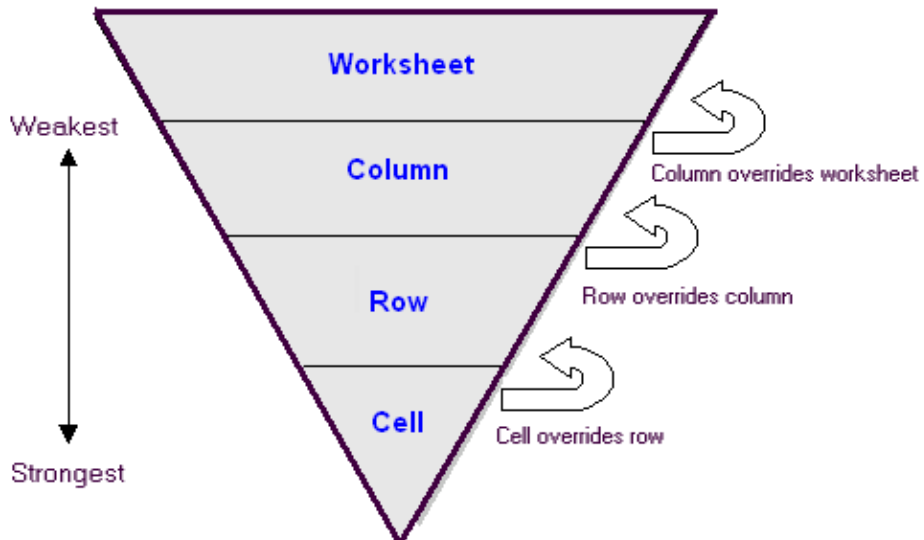
Determine and document all necessary criteria

In this step, determine what criteria are needed for the layout: Query for tabular layouts, TimeSpan, Ledger, and Chartfield for Matrix layouts, along with variables and labels for both.

Criteria for Matrix layouts

Use criteria at the worksheet level to specify defaults for the entire worksheet. This is done by entering data in Cell A1, known as the brick.

Criteria conflicts based on its placement. Worksheet criteria is the weakest, followed by column, row, and finally, cell criteria is the strongest. For example, if the ACTUALS ledger was placed at the worksheet level, and STD_BUDGET in Column C, Column C would contain STD_BUDGET information, while the rest of the worksheet would contain ACTUALS information.



This diagram shows that if something is entered as a default for the entire spreadsheet and nothing else conflicts with the entry, that setting is global for the entire worksheet. However, if something is defined at the row level that conflicts, then that row’s criteria is reflected for that row, but the global worksheet setting is shown for the rest of the worksheet. When planning your template, putting the global settings in once at the worksheet level will save set-up time and processing time.

Placing criteria in an individual cell affects the efficiency of the report, so use them only when necessary.

In our example, we may document our blueprint as follows:

B	C	D	E	F
Business Unit				
Department Expenses				
As of date				
	Budget	Total Expenses	Encumbrances	Balance
Departments				

Common Criteria – TimeSpan – YTD
- Account – Expense values from ACCOUNT tree.

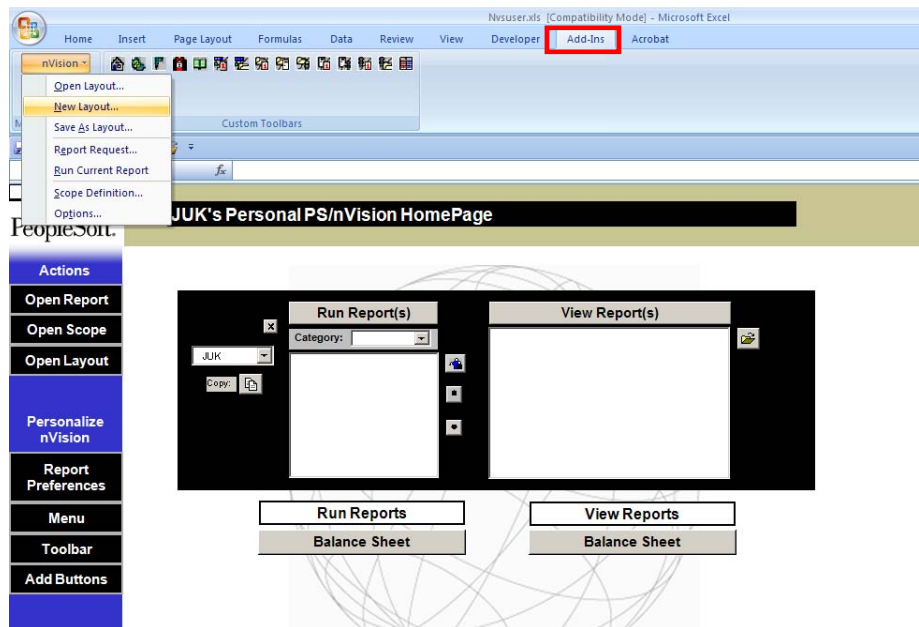
Column D – STD_BUDGET ledger
Column E – ACTUALS ledger
Column F – CC_DET_ENC ledger
Column G – Formula (Budget – Actuals – Encumbrances)

Rows – Departments Use a DEPARTMENT tree to get information department information.

The blueprint has a TimeSpan (YTD), Ledgers (STD_BUDGET, ACTUALS, and CC_DET_ENC), and Chartfields (ACCOUNT and DEPARTMENT), everything needed to define a matrix layout.

Navigate to nVision and create layout

nVision layouts are created in the client version of People Tools, and not on the web. PeopleTools will need to be installed in order to create and modify layouts.. Once you have this software, go to nVision from the Windows Start menu, the page should look similar to the following:



(note: This is a screenshot using Excel 2007. If you are using a previous version, the nVision menu will be on the menu bar, and not under Add-Ins.)

To create a new layout, click on Add-Ins → nVision → New Layout. Enter a layout name and press OK. The main difference in this spreadsheet is row 1 and column A are hidden. This is where nVision puts its code, so these are hidden from your view (to view these, select Add-Ins → nVision → Options... from the Excel menu, then check the box that says 'Show Row and Column Criteria'.)

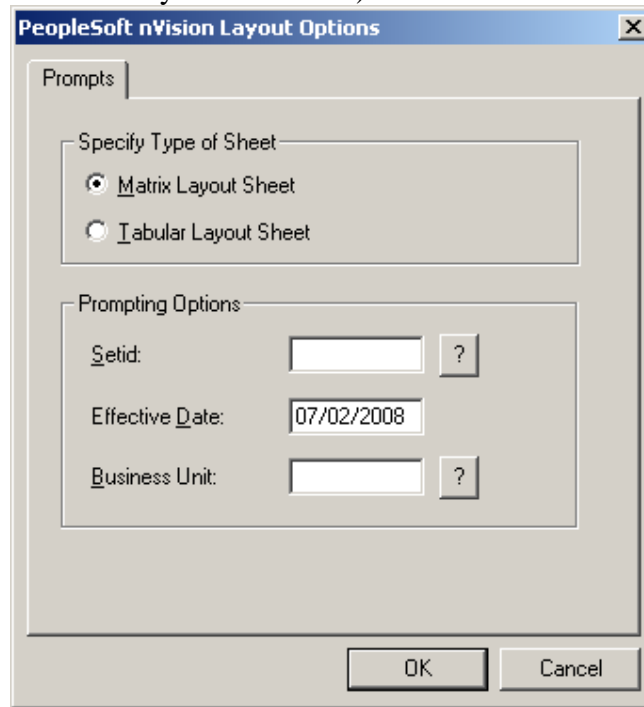
If a blueprint spreadsheet was created in Excel, this can be converted; however, no information can be entered in row 1 or column A. To save this as an nVision layout, select Add-Ins → nVision → Save as layout from the Excel menu. The file will have a .xnv extension. **DO NOT USE THE EXCEL SAVE BUTTON TO SAVE AN NVISION LAYOUT**, as it will be saved as an excel spreadsheet, and not an nVision layout.

Creating a Matrix Layout - walkthrough

Data selection is the heart of the PS/nVision layout. As previously mentioned, the database values retrieved for a matrix-based report are the results of intersecting criteria defined in the matrix layout. These criteria tell PS/nVision exactly which database values to retrieve and where to put them.

You can specify data selection criteria at the level of the entire spreadsheet, a row or column, or an individual cell. Generally, you specify criteria at the highest level applicable. So, if you have criteria that apply to the entire worksheet, you specify them at the worksheet level; if you have criteria that are unique to a single cell, you apply them to that cell only.

With the layout open, double click on a cell to begin. The Layout Options box will appear (or select nVision → Layout Definition):

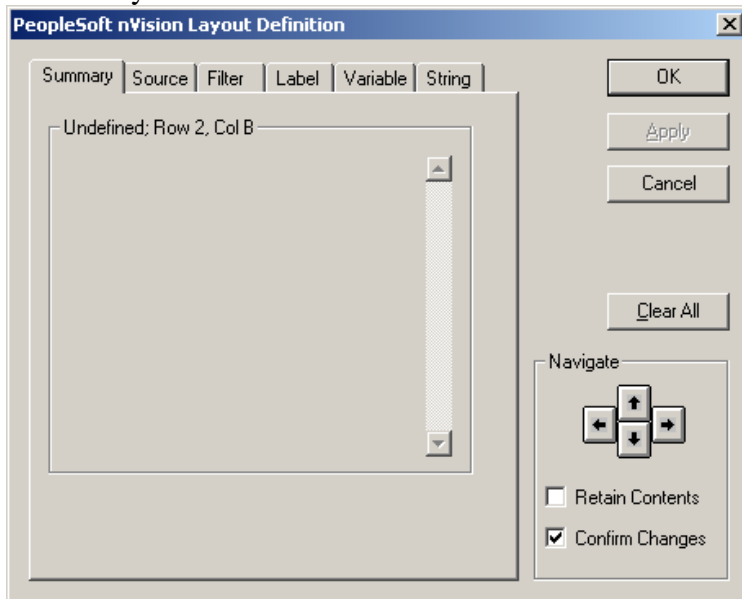


Specify the type of nVision layout created (Matrix or Tabular) as well a SetID, effective date, and Business Unit. These are used for chartfield values and trees used within the nVision layout. It is recommended for the Set ID and business unit to enter your campus abbreviation.

The effective date entered here will be used as the effective date for chartfields and trees. You can only use chartfields and trees that are active on the effective date entered. Also, you cannot use anything that is future dated, such as a tree. For example, if you enter an as of date of 07/02/07, but you created a new department tree on 07/02/08, the account will not be selectable in the layout.

Click OK, and the Layout Definition dialog box appears. This is where you will choose the criteria.

Five of the six tabs are used to select criteria and add fields to the layout. The sixth tab is a summary tab which shows all the selections for the cell/row/column entered.



Summary – This tab displays the information about the contents of the selected area (cell, row, column or worksheet.)

Source – This tab allows you to select either a Query or Ledger and TimeSpan.

Filter – This tab is where you select specific chartfields and set nPlosion options

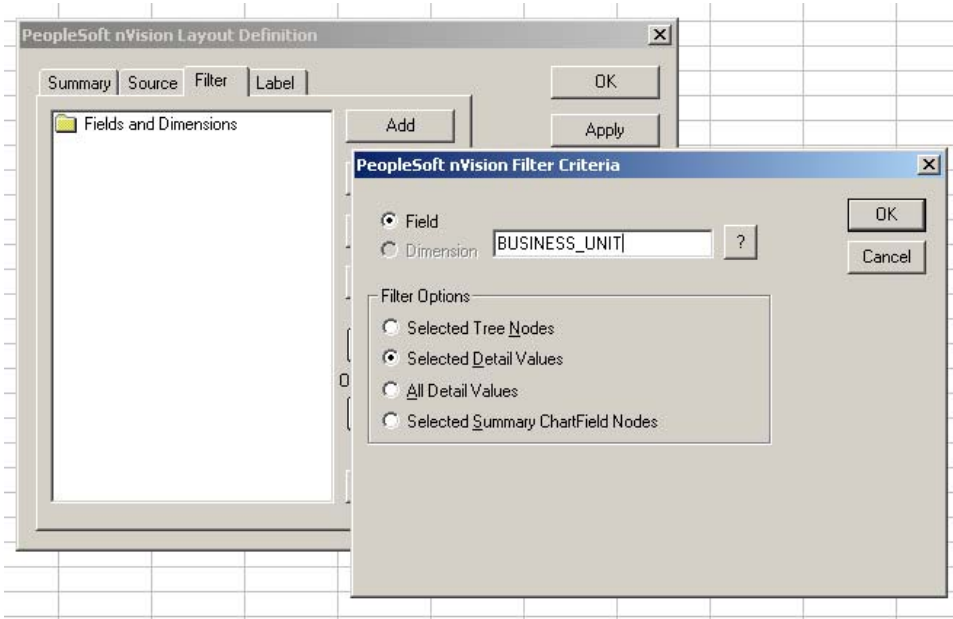
Label – This tab is where you can set the labels that are used.

Variable – This tab is where you select nVision specific variables

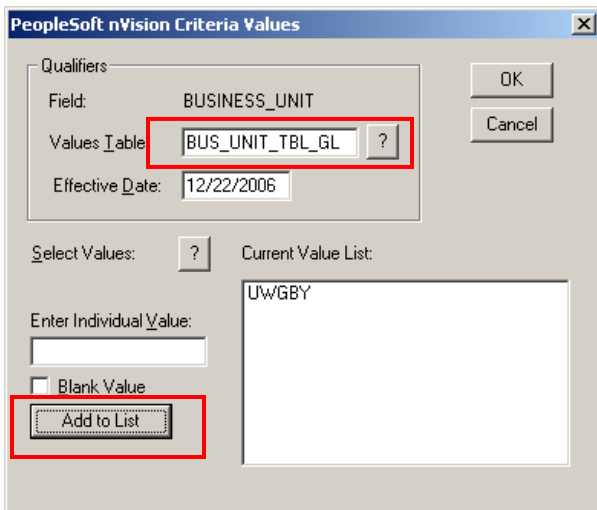
String – This tab allows you to create multi-lingual layouts. You will not need to use this tab with SFS.

There are four arrow buttons on the right hand side of the Layout Definition dialog box. Use these to navigate in the layout when defining criteria, clicking in a cell does not move the cursor as it normally does.

To place criteria, start with the worksheet defaults (place these in the brick). To walk through our example, start in A1. We know the Business Unit to use (for this example, UWGBY). Use the navigation arrow, navigate to A1, the entire screen will be shaded. Click on the Filter tab and select Add, and enter BUSINESS_UNIT

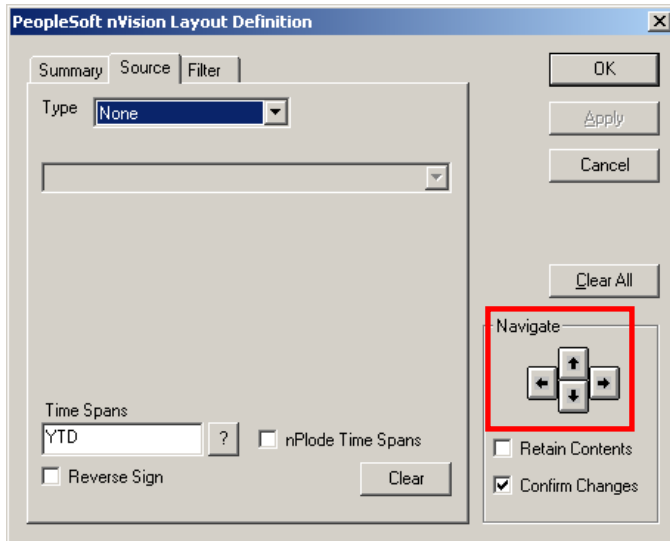


Searching on Business Unit will return each combination of Business Unit with Ledger. Ignore the Ledger column, as this has no impact on the field selected. Simply select the Business Unit field. Since we are selecting a specific Detail Value, in the filter options, select Selected Detail Values, then press OK. The screen will change, click on the search button on the values table and select BUS_UNIT_TBL_GL. In the Enter Individual Value box, enter UWGBY, then press 'Add to List'.



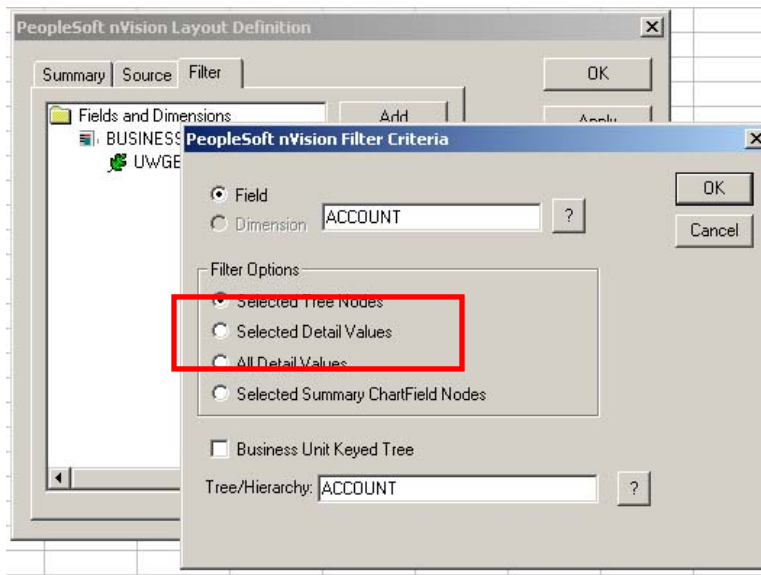
In this example, there are two more worksheet defaults, TimeSpan (YTD), and Chartfield (ACCOUNT, using ACCOUNT tree, EXPNESES tree node)

The TimeSpan is on the Source tab. Enter this in cell A1.

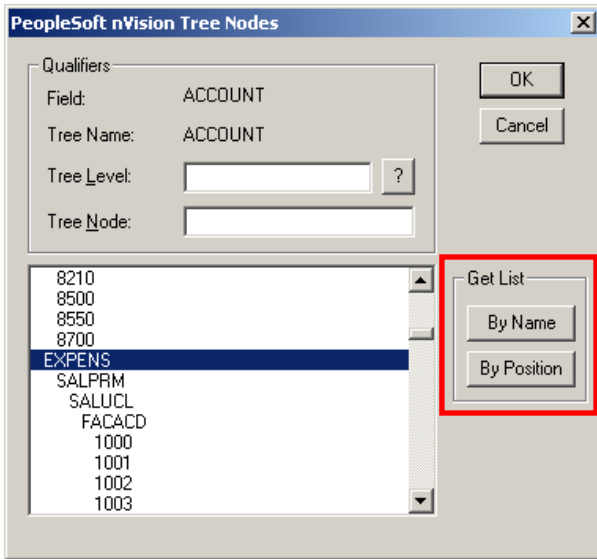


Use the Navigation buttons on the Layout Definition page to navigate through the nVision layout.

The Account Chartfield will be added the same way as the Business Unit, except a tree is used.

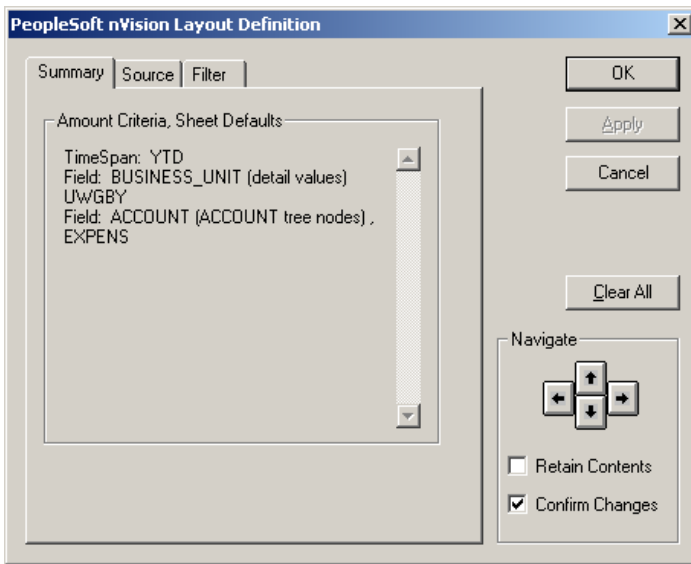


Press OK, then select the tree node(s) to use in the layout.



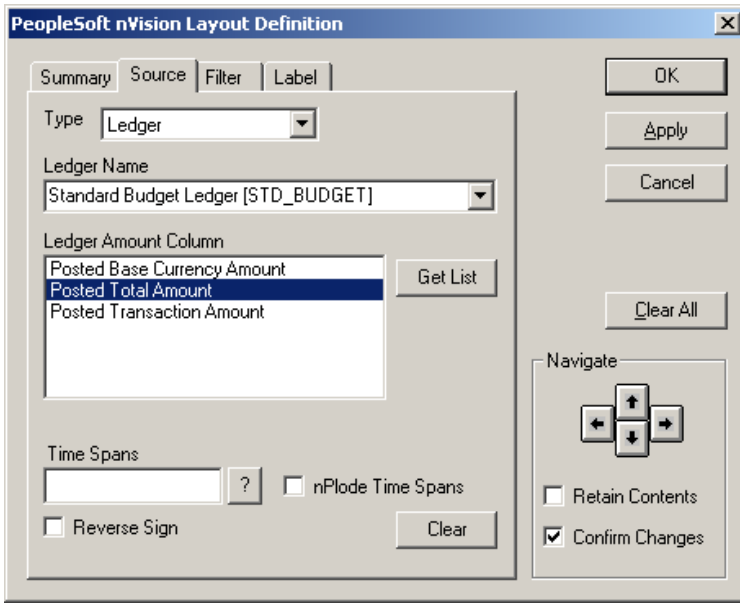
Use the Get List by Name and by Position buttons to sort the tree nodes. Highlight the node by clicking once on it. Select as many nodes as needed, then press OK.

The Summary tab will show these updates.



Adding column information

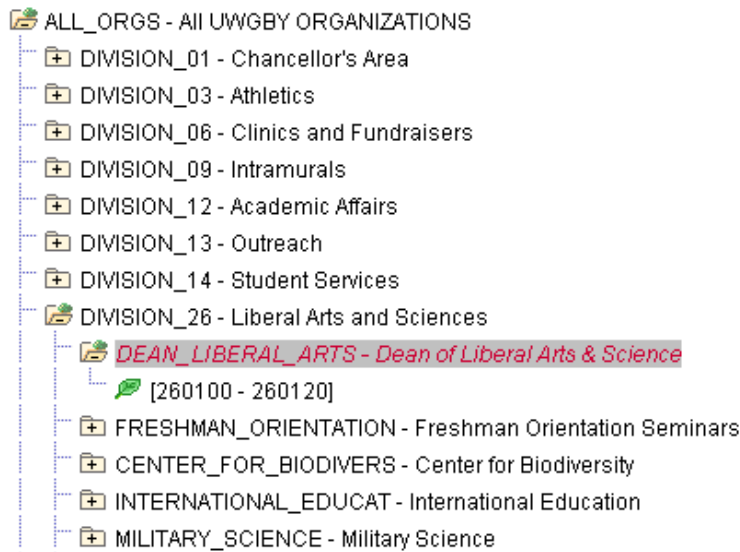
Now, begin to enter the column information, which will contain Ledger information. Use the arrow keys to navigate to column D (ensure the entire column is selected) From the Source tab, select Ledger from the dropdown list, and then select the STD_BUDGET ledger. Press the 'Get List' button to see the tree Amount Columns, and select the Posted Total Amount (always select this field).



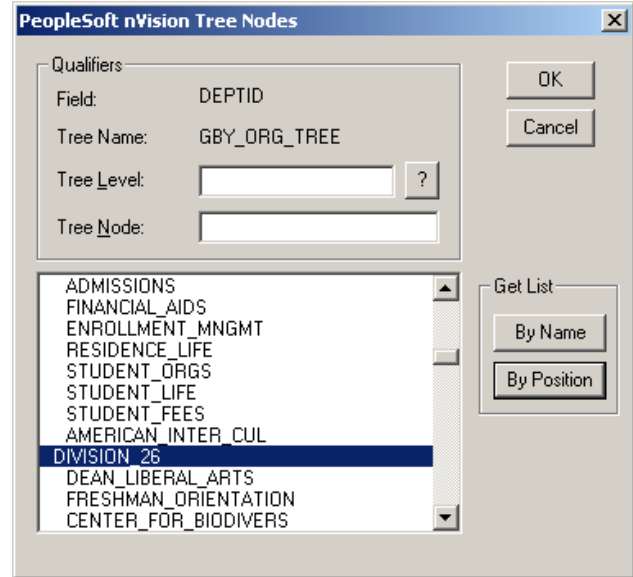
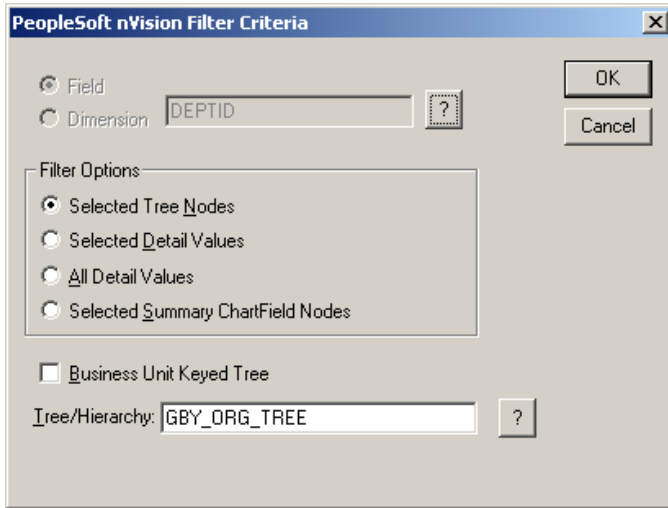
Continue on column D and E for the other ledgers (CC_DET_ENC and ACTUALS).

Adding row criteria

In each row, we are going to show specific departments. Select row 7 (or where the first department should appear) with the arrow keys and go to the filter tab. Just as we did for the overall sheet defaults for business unit and account, we will select the department levels. In our example, we are using the GBY_ORG_TREE. The tree structure looks like the following:



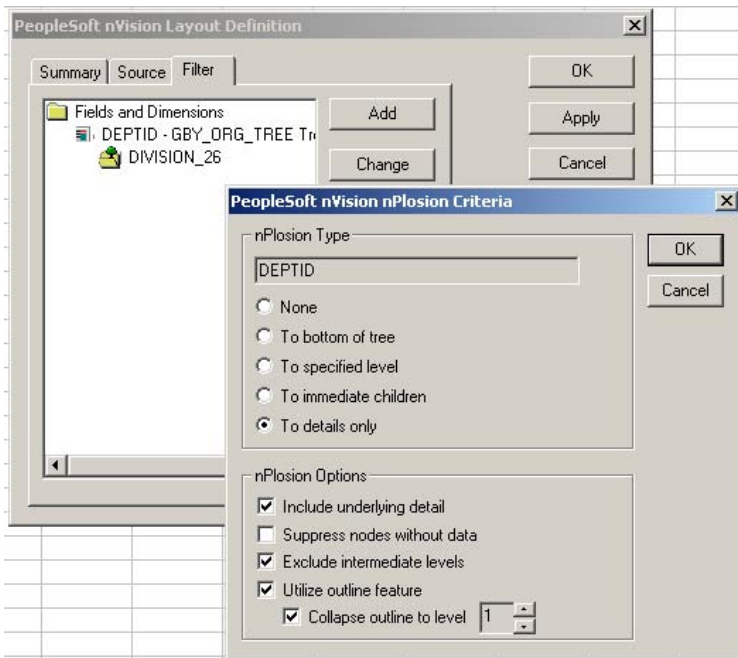
The layout will bring back departments for a particular division (in this instance – Division 26). To do this, we will select the DEPTID from the filter tab, then select ‘ DIVISION_26.



nPloding rows

This report will use nPlosion, which will automatically create individual rows or columns for each detail value defined in the criteria. The layout contains one division, but the layout should bring back the detail departments, and not one number.

To enable nPlosion, navigate back to the Filter tab where the department is specified. Click on the DEPTID line, and press the nPlosion button. Select 'to Details only', then press OK. (for more information on nPlosion, refer the section below.)



Adding descriptions

In column B, add department numbers, so select the labels tab, and in the description from tree node, enter DEPTID.

PeopleSoft nVision Layout Definition

Summary Label

Retrieve Label

Field on Detail Value Table:
DEPTID

Field on Tree Node Table:

Runtime Options

Put labels in blank cells only

Resize column for labels

Clear

OK

Apply

Cancel

Clear All

Navigate

Retain Contents

Confirm Changes

In Column C, add the label if DESCR to the **DETAIL VALUE** table

PeopleSoft nVision Layout Definition

Summary Label

Retrieve Label

Field on Detail Value Table:
DESCR

Field on Tree Node Table:

Runtime Options

Put labels in blank cells only

Resize column for labels

Clear

OK

Apply

Cancel

Clear All

Navigate

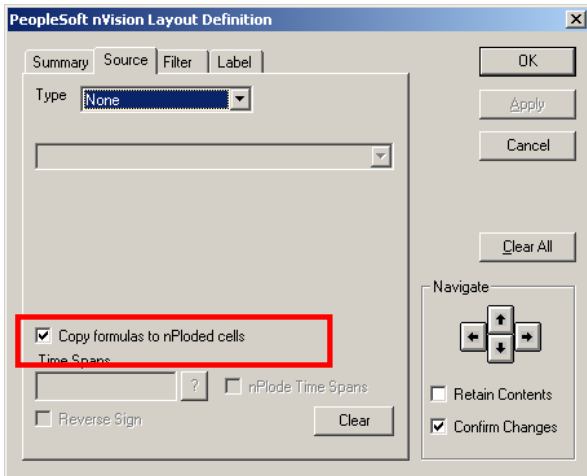
Retain Contents

Confirm Changes

Also, make sure you have added column headings, if you haven't done so yet in the design stage.

Create formulas and format cells

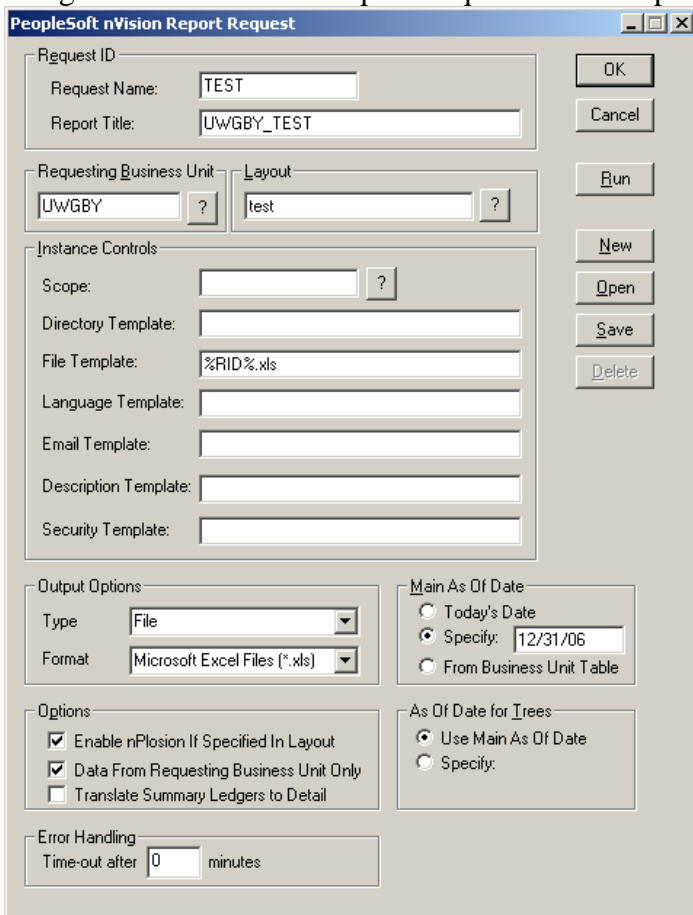
There is one formula in the layout, the balance column. Create the Excel formula in the first line that will have data in it. Navigate to highlight the entire column, and select the Source tab, and check 'Copy formulas to nPloded cells'.



Format the cells (currency, text position, size, etc) for the layout at this time too.

Create the report request and run the request to test the layout

nVision layouts do not contain data; they are simply a reusable template for different reports. To use a layout and create a report, you will need a report request. The navigation is nVision → Report Request... The report request looks like the following:



There are many fields on the report request, but it is pretty straightforward, and not every field needs to be completed. Each field is defined below:

Request Name – Identified the report name. A unique report name must be used for each report request, and are only 8 characters long.

Report Title – This title is what lists allowing you to select the request appear on prompts.

Requesting Business Unit – The Business Unit the report request belongs to. You can retrieve information for this business unit along or for multiple business units, depending on your security. This field corresponds with the ‘Data from Requesting Business Unit only’ checkbox in the options section.

Layout – The layout the report request is referencing.

Scope – This is where to define the scope used in the report (optional)

Directory Template – Specified the directory in which to place the report instance.

File Template – Specifies the name of the .xls report the report request creates. By default, it is the report name.

Language Template – Not used.

E-Mail template – Not currently used.

Description Template - Specifies the name that will appear in the Report Manager when the report request is run via the web.

Security Template – Not currently used.

Enable nPlosion – If you are using nPlosion in your layout, this checkbox needs to be selected to enable nPlosion for the report instance

Type – Specifies the output option. If running via the client, select file. If running via the web, select web or window.

Format – Specifies whether the report will be saved as an Excel (.xls), or .html file.

Data from Requesting Business Unit only – Specifies whether only information for the Requesting Business unit will be shown in the report. Typically, this box should be checked unless you are doing cross-campus reporting.

Translate Summary Ledgers to Detail – If you are using a summary ledger in your layout, selecting this would bring back the details as opposed to the summary information. This

is uncommon to check this box, and user will likely not create reports via summary ledgers.

Main as of Date – Specifies the periods that will be returned with the TimeSpans used in the layout. For example, if you use a TimeSpan of YTD in the layout, the Main as of Date will determine what fiscal year the information is returning, based on that date. If 9/30/08 was entered in this field, I would see Fiscal Year 2009 information from July 2 to Sept 30. If I entered 7/1/08, I would see Fiscal Year 2008 data for Periods 1-13.

Remember that Ledger Data is stored by Accounting Period, so entering 09/02/08 and 9/30/08 will return the same results; nVision will bring back the entire activity for period 3.

(If you are using a tabular layout, this field can be ignored.)

As of Date for Trees – Specifies the date to use for the trees in your layout. Typically, this would stay at Main as of Date, meaning it defaults to whatever was entered above.

Run the Report

Complete the fields on the report request, then press Run. The completed report will run in the window and be an Excel spreadsheet.

Creating a tabular layout

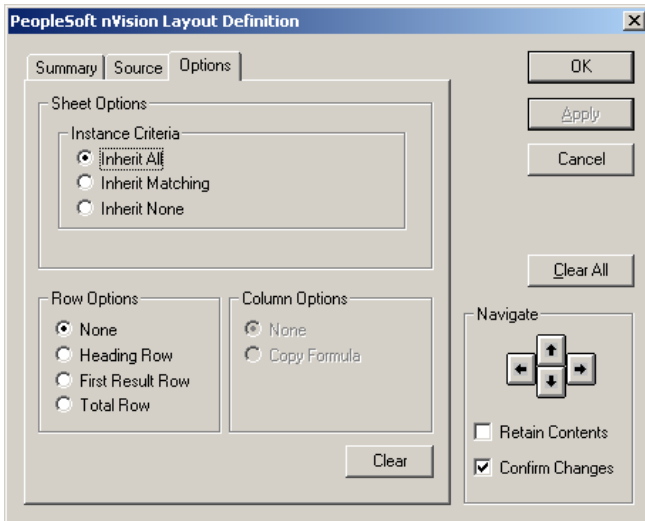
As previously mentioned, tabular layouts do not rely on row and column intersections to retrieve data, it requires a predefined PeopleSoft query. The benefit of a tabular layout is that it allows you to retrieve balances from any table in SFS, not just the Ledger balances. If you use a scope with a tabular layout, an instance will be generated for each scope instance.

For example, a report is required that will contain all expenses for a specific account (such as subscriptions). Eventually, you may want to break this information down some, but for now, let's say it is for the entire business unit.

First, create the PeopleSoft query using the journal header and line table records. (If the layout is only going to be run on the client, you can have prompts in your query. However, **if you are going to run this report on the web, you cannot have prompts in the query.** (See user guide on setting up nVision reports to run on the web for more information.) Then, when you create the new layout, select tabular layout vs. matrix layout. The layout definition box is now different, with new tabs:

On the source tab, select Query instead of Ledger. Find the query in the list of queries (enter the first couple letters of your query to find it more quickly.)

Navigate to row 3 and click the Options tab, the following will appear:



We will talk about the Sheet Options later. The Row options determine which rows contain the column headings, which contain the results, and which contain totals.

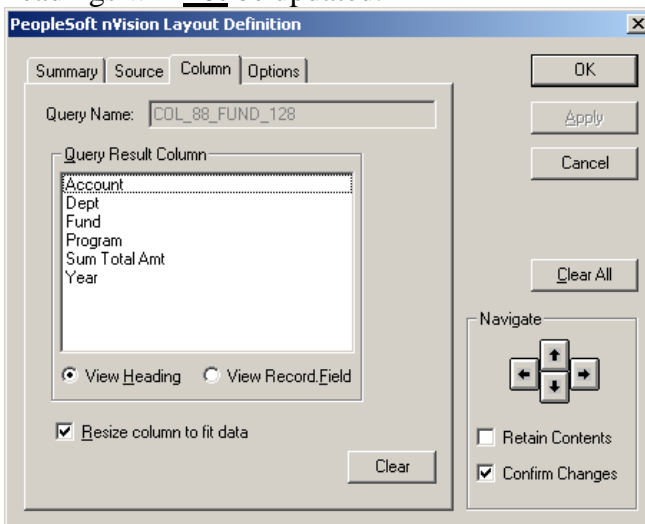
Heading row – This row displays the column headings. If one is not selected, row 3 is the default heading row.

First Result Row – This row displays the first result from your query.

Total Row – (optional). This row contains any totals you want to include in your report. You must manually create the Excel totals.

Next, navigate to the different columns, then in the column tab, select which column from your query should be displayed in the nVision layout. You do not need to select every column that is in the query.

The heading will automatically entered, however, if you change column order, the headings will **not** be updated.



The report request is set up the same as it was for the matrix layout.

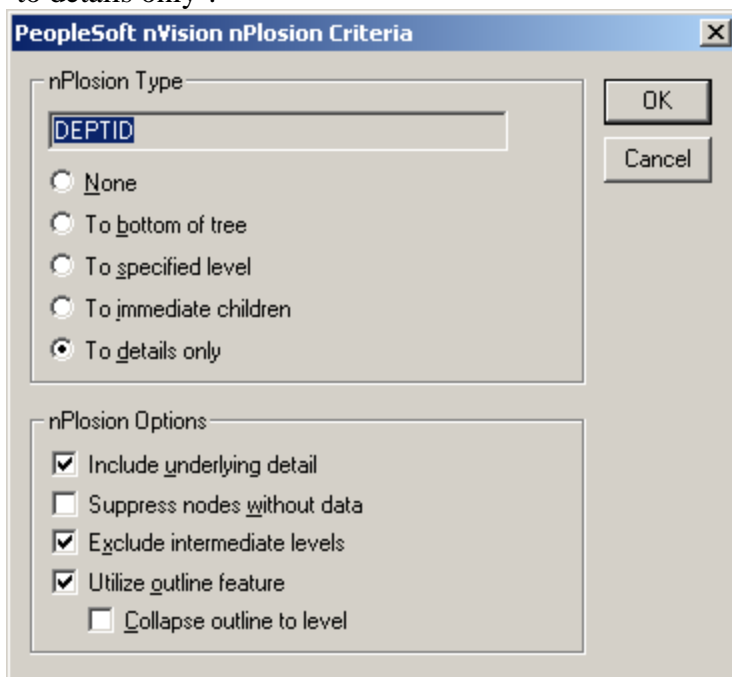
nPlosion

nPlosion can automatically create columns or rows on the report for each value that uses a tree in your criteria. You must use a tree for your chartfield if you want to use nPlosion. You can also use nPlosion to expand multi-period TimeSpans.

Instead of entering each detail value on a separate line to see the department's balance, nPlosion will automatically create these values, as was done in the example above. The detail rows will be inserted above the row where the nPloded criteria is specified.

nPlosion types

There are four types of nPlosion that can be used in your layout. The default nPlosion is 'to details only'.



nPlosion types:

To details only – This nPlodes all detail values (actual chartfield) from a given node. If the nploded data contains multiple nodes, the details will be listed sequentially.

To immediate children - This will nPlode one level below selected node.

To specified level – This method allows you to nPlode down the tree from a specified node. You can retrieve any branch of data from the tree.

To bottom of tree – This allows you to nPlode all the way to the bottom of the tree from a specified node. If you include detail with this option, all child nodes will also be displayed.

There are also several nPlosion options

Include underlying detail – When nPloding from a tree node to a lower node or to the bottom of the tree, these options will also include all of the detail and summary child nodes for each node selected.

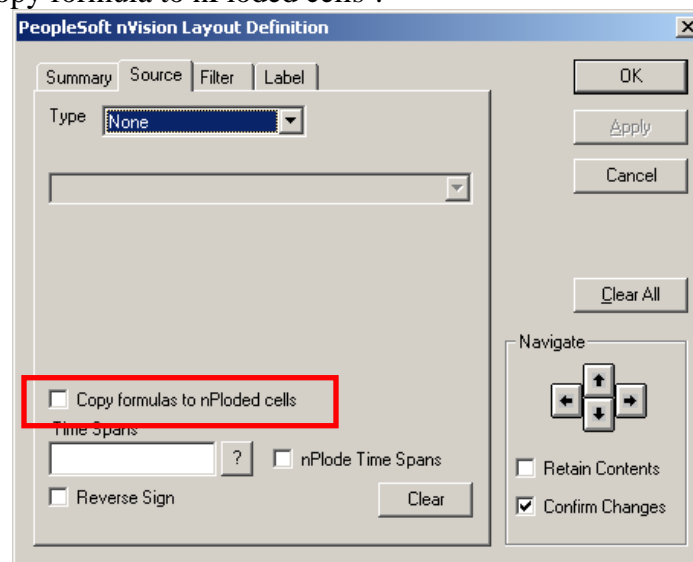
Suppress nodes without data – If a node has a zero value, it will not be seen in the report instance

Exclude intermediate levels – When nPloding from a node to another level or to the bottom of the tree, the intermediate children will be excluded.

Utilize outline feature – This will use the Excel outline functionality to roll up the detail information. It also gives you the option to collapse or open the outline to a defined level.

Copy formulas to nPloded cells

Layout may contain formulas. If this is the case, and nPlosion is used, make sure to check the box 'copy formula to nPloded cells'.

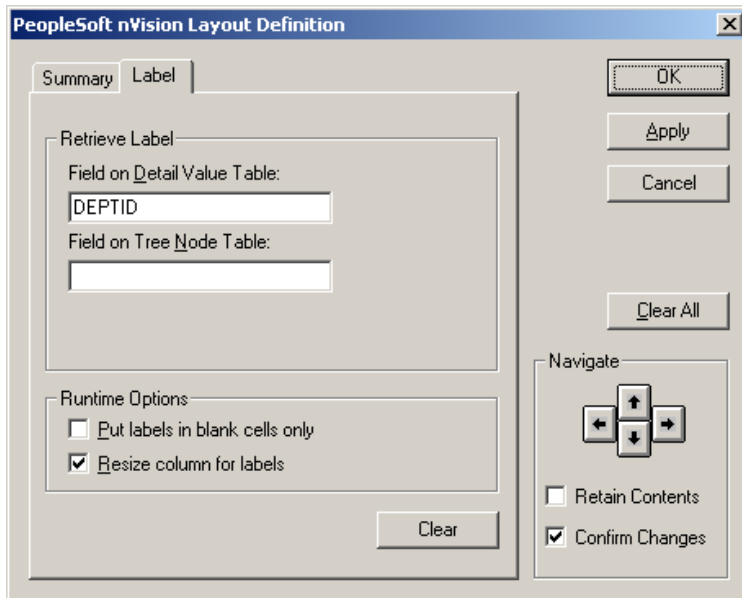


Labels

Labels can be used with nPlosion or without. The labels feature will add descriptive information that corresponds to the filter criteria defined for the rows and columns. nVision will use the tree node or detail value to look up additional information in the value table.

Report labels are useful when using nPlosion, as the labels will be dynamic and created at run time.

Labels are defined on the Label tab.



If criteria are defined in a row, the corresponding labels would be placed in a column. Use the 'Field on Detail Value Table' if you want to label the nPloded rows or columns of node-based filter criteria. Enter either the field name itself or a descriptive field from the detail value table, which is defined in the tree structure.

If you are labeling filter criteria based on tree node values, use the Field on Tree Node Table field to specify a label source. For detail or summary tree node values, enter either *TREE_NODE* or *DESCR*, as these are the only descriptive fields on the *TREE_NODE_TBL* (as delivered).

For node-oriented trees, enter either the field name itself or another descriptive field from the table that supplies the node values, as defined in the tree structure. For example, for filter criteria based on nodes in the *DEPT_SECURITY* tree, you might use *DEPTID*, *DESCR*, or *SHORTDESCR*

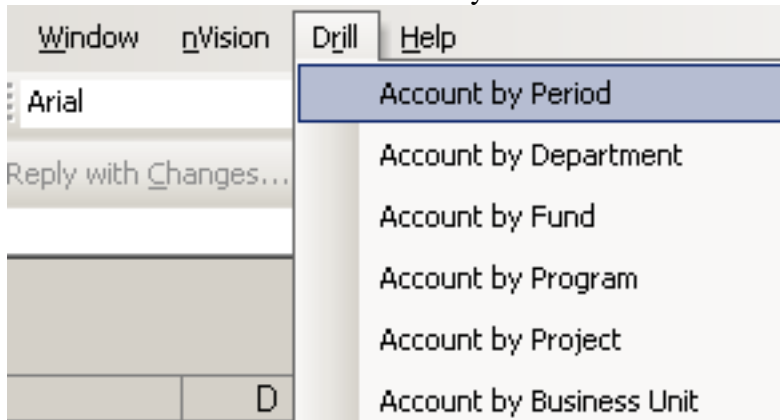
Drilldown

Drilldown gives the user the ability to slice and dice information to analyze the data as they need to. Drilldown enables you to select a cell in your report and expend it according to new criteria contained in the drilldown layout. On the client version of nVision, drilldowns are run using a built-in Excel menu (Drill).

There are two main types of drilldowns, matrix and tabular. In SFS, matrix drilldowns give you a further refinement of a number, such as account by period. For example, if my nVision report was as seen below (this is a simple – all departments for a campus and total expenses):

	B	C	D	DX
2				
3	Dept ID	Descr		Expenses
115	305000	SOCIAL WORK*GENERAL		18603.78
116	305005	IV-E ELIGIBLE		19518.08
117	306000	PHYSICAL EDUC*GENERAL		8816.27
118	330100	ASSOC VC-IS*GENERAL		37582.67
119	331000	LIBRARY*GENERAL		118654.2
120	331001	ACCESS SERVICES		3823.68
121	331003	PROCESSING		703.85
122	331004	AUTOMATION		16833.61
123	331010	LIBRARY*ST HELP		3197.38
124	331030	LIBRARY*BK CAPTL		8398.48
125	332000	COMP&INFO TECH*GENERAL		98147.25
126	332005	CIT*IT TRNG		4767.64

If a user wants to see additional information which makes up the total expense amount, drilldown allows this. Say someone wants to look at the 18,603.78 total selected above to analyze the accounts and accounting periods the amounts were posted. Select Drill... from the menu and select Account by Period.

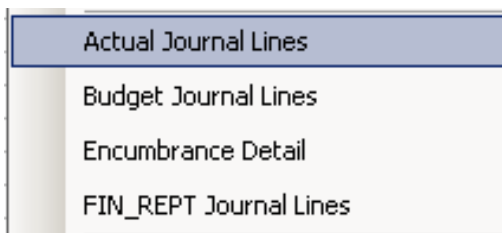


nVision runs the new report based upon that number:

	B	C	D	E	F	G
2						
3	Breakdown by Account & Period					
4						
5	Account	Description		2007-1	Amount	
6	1003	Faculty - Summer		3,241	3,241	
7	1051	Academic Staff - Annual		4,682	4,682	
8	1531	Classified - Hourly		1,787	1,787	
9	1601	LTE - Hourly		1,230	1,230	
10	1903	Fac/Acad- Social Security		201	201	
11	1904	Fac/Acad- Medicare		47	47	
12	1905	Fac/Acad- Group Health		1,903	1,903	
13	1907	Fac/Acad - Retirement		441	441	
14	1938	Classified - Social Security		14	14	
15	1939	Classified - Medicare		3	3	
16	1940	Classified - Group Health		1,226	1,226	
17	1941	Classified - Group Life		1	1	
18	1942	Classified - Retirement		33	33	
19	1943	Classified-Income Continuation		1	1	
20	1975	Academic-Fringe-Gift/Fed Trf		2,084	2,084	
21	1979	Classified-Fringe-Gift/Fed Trf		912	912	
22	1983	LTE-Fringe-Gift/Fed Trf		566	566	
23	2623	Services - Miscellaneous		121	121	
24	3930	Transfer-Ovrhead Allow-133&144		114	114	
25		Expenses		18,604	18,604	

Additional drilldowns can be run from this, or any other report. Run as many drilldowns as needed to better understand the data. Since it is a new report, the original report is still available.

The tabular drilldown runs a predefined query based on the number selected. In SFS, this typically is journal line information. You run the drilldown the same way, the only difference is that nVision runs a query and returns the results of the query. The client version has the following tabular drilldowns available:



For example, the 121 is selected and the Actual Journal Lines drilldown is selected from the Drilldown list, a tabular report with the detail journal information will be seen:

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	Drilldown to the Actual Ledger Journal Line Detail					Drilldown to the Actual Ledger Journal Line Detail								
3	Subtotal by Fund	Subtotal by Department	Subtotal by Account	Subtotal by Acctg Period	Sort by JRLN DT									
4														
5	Journal Id	Jrnl Date	Fund	Program	Department	Account	Proj id	Period	Amount	or JRLN DEF	Line #	Jrnl Hdr Status	Fiscal Year	Jrnl Line Descripti
6	AP00156554	2006-07-28	144	2	305000	2623	144PM22	1	120.53	00106212	20	Posted	2007	FRAMI
7									120.53					
8														
9														

Drilldowns are not available from a tabular layout, including a tabular drilldown.

Scopes

Scopes allow you to create multiple instances of the same report using a single report request. Each instance will contain data for a specific chartfield value, such as fund, department, program, or a combination of field values. The reports will share the same layout, but contain data unique to the scope's value. Whenever you use scope to produce multiple instances of a report, use PS/nVision variables in the layout headings to identify the content of each report. As noted above, scopes are optional when creating an nVision report.

When you define a new scope, you must decide:

- The field(s) the scope should be based upon (department, fund, etc)
- Whether the instances should reflect detail or summary data
- How many instances should be generated?

For our example, we will look at a department based scope.

To create a new scope, select nVision → Scopes

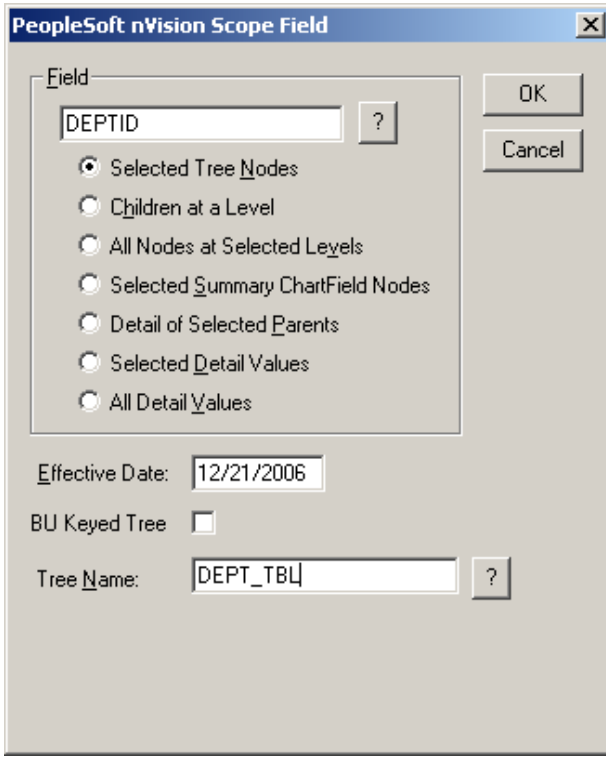
To define a new scope:

- Select New.

The screenshot shows the 'PeopleSoft nVision Scope Definition' dialog box. It has a title bar with a close button. The main area contains several input fields and buttons. The 'Scope ID' field is empty. The 'Scope Name' field contains 'DIV_26'. The 'Description' field contains 'Division 26 Departments'. The 'TableSet ID' field contains 'UWGBY'. The 'Field Combination Table' field is empty. The 'Business Unit' field contains 'UWGBY'. There are buttons for 'New', 'Open', 'Save', 'Delete', 'OK', and 'Cancel'. At the bottom, there are two empty boxes labeled 'Fields' with 'Add' and 'Delete' buttons below them.

- Enter a scope name and a description.
 - o You may use up to ten characters for the scope name and up to thirty characters for the scope description.
- Enter the set ID for this scope (Departments are business unit specific, so enter your business unit).

- Add fields to the screen by clicking the Add button. The Scope Field dialog box appears.



For each field you add to a scope, you specify the source of the field values and the values to use. This process is similar to defining field criteria in a matrix layout. Each of the radio buttons on the Scope Field dialog box selects a different set of values for building your scope:

Tree Node (Summary) Instances: Selected Tree Nodes, Children at a Level, All Nodes at Selected Levels.

Used with Summary Ledgers only: Selected Summary ChartField Nodes.

Detail Value (Detail) Instances: Detail of Selected Parents, Selected Detail Values, All Detail Values.

Field	Enter a field to add to your scope	DEPTID
Selected Tree Nodes	Select this option to create an instance for each tree node that you choose. When you type the field name, you are prompted to enter a tree name and level.	Whatever department tree used, select the tree node for your report. One instance will be created for each node (node can be at any level in tree)
Children at a Level	Select this option to create an instance for each tree node at a specified tree level that is a child of the parent node.	A report instance will be created for all children of

	The parent nodes need not be the immediate parent of nodes at the specified level. When you type the field name, you are prompted to specify a tree name and level.	the tree node selected (one level down, not necessarily all detail).
All Nodes at Selected Levels	Select this option to create an instance for every node at each selected level. When you type the field name, you are prompted to specify a tree name and level.	A report instance will be created for all nodes at a specific tree level (this will vary depending on how the tree is built).
Selected Summary ChartField Nodes	Not used	
Detail of Selected Parents	Select this option to create an instance for each detail value associated with the specified tree nodes.	A report instance will be created for each department under the tree node selected.
Selected Detail Values	Select this option to create an instance for each detail value that you specify. This option activates the Value Table field, where you can specify the table that contains the values that you want to select.	The DEPT_TBL will be used vs. a tree. Enter the specific departments to use in the report.
All Detail Values	Select this option to create an instance for all detail values. This option activates the Value Table field, where you can specify the table that contains the values that you want to use.	All departments will have a summary report created (use caution on this one, as this could potentially create thousands of reports. This should be run when using a field with a small number of values, such as fund or program).

Once the scope is created, enter it in the report request under scope. Also remember to add a scope label to the name of the report so the name is unique. For more information on labels, refer to Appendix A.

Multiple Scope Fields

If the scope is based on two or more fields (such as department and fund), nVision will create an instance for each combination of the two fields. For example, if a scope was created that had three departments and two funds, a total of 6 reports would be created, one for each combination. An instance will be created even if no activity has been recorded for the Chartfield combination.

To create a scope with multiple fields, add two fields to the same scope.

PeopleSoft nVision Scope Definition

Scope ID
 Scope Name: DEPT_FUND
 Description: Specific Depts and Funds

TableSet ID: UWGBY ?
 Field Combination Table: ?

Business Unit: UWGBY ?

Fields:
 DEPTID
 FUND_CODE

FUND_TBL Selected Values:
 101
 128

Buttons: New, OK, Open, Cancel, Save, Delete, Add, Delete

In this example, there are 3 departments – 010100, 010110, 011000, and two funds, 101 and 128. Six reports will be created, with the following combinations:

Fund	Dept
101	010100
128	010100
101	010110
128	010110
101	011000
128	011000

Be careful when setting up your scopes, especially if you select ‘All Detail Values’, or a large node from a tree. When creating a scope with multiple chartfields, the total number of reports can quickly grow too many reports if you incorrectly create scope.

To use a scope, add it to the Report Request on the Scope line.

PeopleSoft nVision Report Request

Request ID
 Request Name: TEST
 Report Title: test nVision report

Requesting Business Unit: UWADM ?
 Layout: ?

Instance Controls:
 Scope: ADHOC ?
 Directory Template:
 File Template: %SFV%.xls
 Language Template:

Buttons: OK, Cancel, Run, New, Open, Save, Delete

*If using a Scope in your layout, make sure to change the file template to a scope variable so each report instance is unique (refer to appendix A for more information).

Using a scope with a tabular layout

You can use a scope for a tabular report the same way you can for a matrix report. The query information will be limited by the values entered in the scope, or multiple reports will be created based on the scope. Again, if you are using a scope in your tabular layout, make sure you are using a scope variable in the file name (on the report request) to create unique file names.

Using a Query with Matrix Layout

Using a query as selection criteria allows nVision to create matrix reports on non-ledger based information.

When using a query in a matrix layout, there are a couple of rules you must follow:

Column

1. The query must include at least one aggregate (i.e. sum or count) column.
2. You must include the aggregate as part of the query.
3. The aggregate column must have a heading for identification (i.e. Sum Total Amount).
4. Generally speaking, queries used in matrix reporting should not contain much criteria, as the matrix layout will limit the information returned in the results. This allows you to reuse a shell query for many different layouts.

You specify the query in a matrix the same way you select a ledger, except change the dropdown list from Ledger to Query, then select your query and the aggregate field.

The other options chosen in the report dictates the information that will be returned in the report. For example, if you had a query on journal totals, then selected the department as row criteria, only the selected departments would be returned (for the Ledger and TimeSpan selected.)

APPENDIX A – nVision Variables

You insert PS/nVision variables into the layout to display heading information that might change from report to report, or between report runs. For example, you could use a variable to automatically insert the report ID you specify in the Report Request dialog box, so you do not restrict this layout to a single purpose. Remember that your layout may be used with a scope that changes its contents, which could make a hard-coded title misleading.

You can define variable criteria at the cell level only—one variable per cell—and the variable must be the only element in that cell.

When inserting a variable into a cell, you select it from the Variable tab of the Layout Definition dialog box. Because there are many different variables to choose from, the dialog box displays them by category. Tables describing the variables in each category follow.

When you use a variable, it must be enclosed within percent signs (i.e. %RTT%). The following omits these percent signs.

Report Request Variables

Most of the values returned by these values are defined on the Report Request dialog box.

Variable	Returned Value	Sample Value	Remarks
DTS	Detail or Summary (nPlosion enabled or disabled)	S	Defined on the Report Request dialog box. S=Summary (nPlosion disabled). D=Detail (nPlosion enabled).
ICT	Instance Counter	1	Starts at 1 and is incremented by 1 for each additional instance.
IDN	Instance Directory Name	C:\USER\NVISION\INSTANCE	Full path. Defined on the Report Request dialog box (by the Directory Template field).
IFN	Instance Output File Name	<varies>.XLS	Defined on the Report Request dialog box (by the File Template field). The .XLS extension is included.
LYN	Layout Name	<varies>	Defined on the Report

Variable	Returned Value	Sample Value	Remarks
			Request dialog box. (Does not include the .XNV extension.)
OPR	User ID	JUK	Provided by the PeopleSoft security tables.
RID	Report Name	<varies>	Defined on the Report Request dialog box.
RTT	Report Title	<varies>	Defined on the Report Request dialog box.

Date and Time Period Variables

These values help you label layouts where different accounting periods are reported in each instance.

Variable	Name	Sample Value	Remarks
APA	Period Abbreviation	DEC	
APN	Period Name	December	
ASD	As of Reporting Date	2006-12-31	Defined on the Report Request dialog box.
AST	As of Tree Date	2007-01-01	Defined on the Report Request dialog box.
FY2	Year (YY)	07	
FY4	Year (YYYY)	2007	
PED	End Date of Current Period	2006-12-31	
PER	Accounting Period	6	

Scope-Related Variables

These values help you label layouts for which you have defined a report scope. A scope is used to define multiple instances of a report based on different field values. For example, you could produce an instance of an expense report for each department, or an operations summary for each business unit.

Variable	Name	Sample Value	Remarks
BUV	Business Unit Name	UWSUP	Defined on the Report Request dialog box.
BUN	Business Unit Description	University of Wisconsin – Superior	
SCN	Scope Name	DEPARTMENT	
SCD	Scope Description	CHANCELLOR	
SFN	Scope Field Name	DEPTID	
SFV	Scope Field Value	CHANCELLOR	
SFD	Scope Field Description	Chancellor Depts	
STN	Scope Tree Name	SUP_DEPT_TREE	
STD	Scope Tree Description	Superior – All Departments	
SLN	Scope Tree Level Name	DIVISION	
SLD	Scope Tree Level Description	Instances for each division	

Variables from Report Request

PeopleSoft nVision Report Request

Request ID
Request Name:
Report Title:

Requesting Business Unit: ?
Layout: ?

Instance Controls
Scope: ?
Directory Template:
File Template:
Language Template:
Email Template:
Description Template:
Security Template:

Output Options
Type:
Format:

Main As Of Date
 Today's Date
 Specify:
 From Business Unit Table

Options
 Enable nPlosion If Specified In Layout
 Data From Requesting Business Unit Only
 Translate Summary Ledgers to Detail

As Of Date for Trees
 Use Main As Of Date
 Specify:

Error Handling
Time-out after minutes

Buttons: OK, Cancel, Run, New, Open, Save, Delete

APPENDIX B – nVision design rules/tips

- Different ledgers cannot be combined in one field (i.e. ACTUALS and CC_DET_ENC).
- Different TimeSpans cannot be combined in one field.
- nPloded rows or columns cannot be combined with non-nPloded rows or columns.
- If any field criteria are specified in an individual cell, all field criteria should be specified in the cell, no field criteria will be inherited from the row, column, or worksheet.
- If you are using trees in your nVision layout, do not use more than 3 trees for performance reasons.
- Take advantage of report variables and relative timespans to minimize layout maintenance.
- When creating trees, try not to use special characters in the descriptions, nVision has problems with some of these.
- Try to create your nVision report in the upper left hand corner on the Excel spreadsheet. Don't start the report in Column J, row 20, for example. nVision has to look through all these cells first before it gets to your first criteria.

APPENDIX C – Matrix vs. Tabular Layout Comparison

Feature/Function	Matrix Layout	Tabular Layout
Data sources	Multiple queries and ledgers; labels.	Single query.
Data	Numbers in matrix, text in labels and variables.	Text and numbers.
Data delivery	Matrix intersections of field criteria and queries (amounts) of label and field criteria (text).	Selected query result columns, one data row per spreadsheet row.
Layouts	One per workbook.	Multiple worksheets per workbook.
Selection criteria	Scope Business Unit Effective Dates Query/Ledger TimeSpan Field Label String	Scope Query
PS/nVision variables	Yes	No
Scope	Multiple instances from the layout workbook.	Multiple instances from the layout workbook.
nPlosion	Rows and columns.	None
Drilldown from instance	Yes	No
TimeSpans	Yes, with data keyed by year, period.	No
Number of layout sheets allowed	One	Many

APPENDIX D - nVision Codes

As mentioned in this manual, nVision places code in Column A and Row 1. For more experienced users, that code can be added or modified without using the layout definition box.

<u>nVision Code</u>	<u>Meaning</u>
%,	The start of an nVision command
S	TimeSpan
L	Ledger
F	Chartfield
T	Select Tree Nodes
M	Selected Summary Chartfield Nodes
V	Select Detail Values
-	All Detail Values
R	Reverse Sign
N	Tree Node
X	nPlode
C	Copy Formula for nPlosion
Q	Query
C	Column (Aggregate field from Query)

Labels: A#\$

= Labels in Blank Cells Only

T = True

F = False

\$ = Resize Columns for Labels

T = True

F = False

Example AFT = Labels, Blank Only = False, Resize = True

F = Field on Detail Values Table

U = Field on Tree Node Table