

WELCOME TO
CONNECT



CONNECT



Business
Analytics/DSS
Basics for
Financial
Management



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Getting Started

Creating a Connection

1. Click on "Data".

2. Click on "Get Data".

3. Click on "From Database".

4. Choose "From Analysis Services".

The screenshot shows the Microsoft Excel interface with the 'Data' ribbon selected. The 'Get Data' dropdown menu is open, showing the 'From Database' option selected. The 'From Analysis Services' option is highlighted in the sub-menu.

Creating a Connection

1. Enter your database server.

2. Enter logon credentials.

The screenshot displays the Microsoft Excel interface with the 'Data' tab active. A 'Data Connection Wizard' dialog box is open, titled 'Connect to Database Server'. The dialog prompts the user to 'Enter the information required to connect to the database server.' It features two main sections: '1. Server name' with a text box containing 'B:214.108.135', and '2. Log on credentials' with two radio button options. The second option, 'Use the following User Name and Password', is selected. Below this, there are text boxes for 'User Name' (containing '\dssconnect') and 'Password' (masked with dots). At the bottom of the dialog, there are four buttons: 'Cancel', '< Back', 'Next >', and 'Finish'. The 'Next >' button is highlighted with a blue border. The background shows the Excel ribbon with 'Data' selected and a spreadsheet grid.

Choosing a Cube

1. Choose an analytics database.

2. Choose the cube you want to use.

Data Connection Wizard

Select Database and Table

Select the Database and Table/Cube which contains the data you want.

Select the database that contains the data you want:

NWERPLAB_DSS_FM_Analytics

Connect to a specific cube or table:

Name	Description	Modified	Created	Type
Annual Budgeting		2/14/2024 6:18:03 PM		CUBE
AP Invoice		2/14/2024 6:19:18 PM		CUBE
Assets		2/14/2024 6:17:50 PM		CUBE
Contracts		2/14/2024 6:18:12 PM		CUBE
General Ledger		2/14/2024 6:37:02 PM		CUBE
Government Reporting		2/14/2024 6:17:52 PM		CUBE
Inventory		2/14/2024 6:17:50 PM		CUBE

Cancel < Back **Next >** Finish

Saving Your Connection

File Home Insert Page Layout Formulas **Data** Review View Automate Help

Get Data From Text/CSV From Picture Queries & Connections From Web From Table/Range Existing Connections

Get & Transform Data

A1

1. Name your connection.

Data Connection Wizard ? X

Save Data Connection File and Finish

Enter a name and description for your new Data Connection file, and press Finish to save.

File Name:
3.214.108.135 NWERPLAB_DSS_FM_Analytics General Ledger.odc **Browse...**

Save password in file

Description:
(To help others understand what your data connection points to)

Friendly Name:
3.214.108.135 NWERPLAB_DSS_FM_Analytics General Ledger

Search Keywords:

Always attempt to use this file to refresh data

Excel Services: Authentication Settings...

2. Click "Finish". **Finish**

Choosing Pivot Table Position

Import Data

Select how you want to view this data in your workbook.

Table

PivotTable Report

PivotChart

Only Create Connection

Where do you want to put the data?

Existing worksheet:

New worksheet

Add this data to the Data Model

1. Choose the desired start cell for the pivot table. → =A\$1

2. Click "OK". → OK Cancel

Using a Previous Connection

1. Click "Data".

2. Click "Existing Connections".

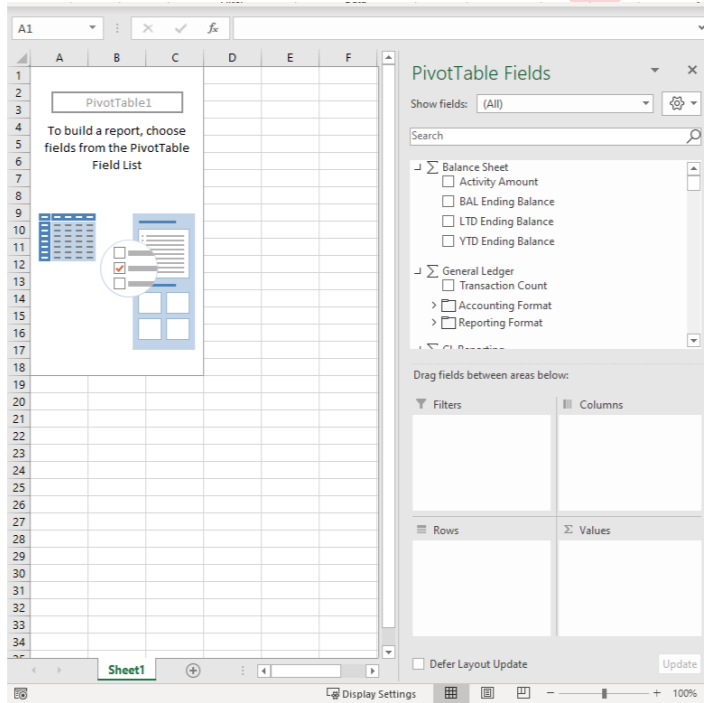
3. Choose your previous connection.

4. Click "Open".

The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The 'Existing Connections' dialog box is open, displaying a list of connections. The connection '3.214.108.135 NWERPLAB_DSS_FM_Analytics General Ledger' is highlighted. The dialog box has tabs for 'Connections' and 'Tables', and a 'Show:' dropdown set to 'All Connections'. The list includes connections from the network and local computer. The 'Open' button is highlighted with a red callout.

Anatomy of a Pivot Table

Main Elements of Pivot Table Editing



To edit your pivot table, click into the pivot table's area on the worksheet. The PivotTable Fields panel will appear on the right.

As you add fields to your table, it will resize itself on the worksheet to accommodate the columns and rows it needs.

Pivot Table Filters

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable Fields task pane is open on the right, showing the following configuration:

- Show fields:** (All)
- Search:** (empty)
- Fields:**
 - Journal Reference
 - Journal Type
 - Process Status
 - Sub Ledger
 - Properties
 - Journal Transactions
 - Journal Description
- Drag fields between areas below:**
- Filters:**
 - Sub Ledger
 - Process Status
- Columns:**
 - Σ Values
- Rows:**
 - GL Account
- Σ Values:**
 - Transaction Count
 - Actual Amount
- Defer Layout Update
-

The PivotTable data is as follows:

GL Account	Transaction Count	Actual Amount
1010.0010.0000 - Cash And Cash Equivalents	2,010	(208,339,642.36)
1010.0180.0000 - Due From Other Funds	190	(18,018.75)
1010.0510.0000 - Accounts Payable	4	0.00
1010.0550.0000 - Due To Other Funds	1,322	213,802,165.46
1010.0860.0000 - Fund Balance	80	(10,607,606.78)
1010.0990.0000 - Prior Yr Res For Enc Cont	18	(3,337,359.52)
1010.8150.4400.1023 - Foundations	3	525.00
1010.8150.4400.1024 - Digging Charge	3	(2,100.00)
1010.8150.4400.1025 - Sale Of Lots	1	8,740.00
1010.8150.4400.1026 - Sale Of Spaces	9	(7,840.00)
1010.8150.4700.1085 - Miscellaneous	5	2,505.00
1010.8150.6100.1100 - Regular Hours	17	5,590.12
1010.8150.6100.1105 - Longevity	1	(2,000.90)
1010.8150.6100.1110 - Higher Position Pay	3	(3,587.25)
1010.8150.6100.1200 - Overtime Hours	3	(1,783.12)
1010.8150.6100.2300 - Worker's Comp.	4	334.94
1010.8150.6100.2400 - Hospitalization	3	(659.30)
1010.8150.6100.2700 - Unemployment Comp.	36	36,142.30
1010.8150.6400.1000 - Stationery & Office Supp.	3	149.00
1010.8150.6400.1500 - Petroleum Supplies	92	26,222.14
1010.8150.6400.1600 - Garage Auto Parts & Labor	94	103,737.81
1010.8150.6400.2200 - Mtce. Of Facilities	19	834.52

Filters allow you to narrow down the presented data to activity that matches the filtered characteristics.

Fields added as Filters will appear above the main PivotTable with dropdown menus in adjacent cells.

Pivot Table Filters

You can search for specific items.

Expand "All".

Check the desired items to filter to.

You can filter on multiple desired items.

Search Sub Ledger

- All
 - Accounts Payable
 - Annual Budget
 - Asset Management
 - Bank Reconciliation
 - General Ledger
 - Licensing
 - Miscellaneous Billing
 - None

Select Multiple Items

OK Cancel

Pivot Table Rows

Sub Ledger

Row Labels	Transaction Count	Actual Amount
1010.0010.0000 - Cash And Cash Equivalents	2,010	(208,339,642.36)
1010.0180.0000 - Due From Other Funds	190	(18,018.75)
1010.0510.0000 - Accounts Payable	4	0.00
1010.0550.0000 - Due To Other Funds	1,322	213,802,165.46
1010.0860.0000 - Fund Balance	80	(10,607,606.78)
1010.0990.0000 - Prior Yr Res For Enc Cont	18	(3,337,359.52)
1010.1010.0000 - Foundations	3	525.00
1010.1010.0000 - Digging Charge	3	(2,100.00)
1010.1010.0000 - Sale Of Lots	1	8,740.00
1010.1010.0000 - Sale Of Spaces	9	(7,840.00)
1010.1010.0000 - Miscellaneous	5	2,505.00
1010.1010.0000 - Regular Hours	17	5,590.12
1010.1010.0000 - Longevity	1	(2,000.90)
1010.1010.0000 - Higher Position Pay	3	(3,589.22)
1010.1010.0000 - Overtime Hours	1	0.00
1010.1010.0000 - Worker's Comp.	3	(1,783.12)
1010.1010.0000 - Hospitalization	4	334.94
1010.1010.0000 - Unemployment Comp.	3	(659.30)
1010.1010.0000 - Contractual Service	36	26,142.30
1010.1010.0000 - Stationery & Office Supp.	92	26,222.14
1010.1010.0000 - Petroleum Supplies	94	103,737.81
1010.1010.0000 - Garage Auto Parts & Labor	19	834.52
1010.1010.0000 - Mtce. Of Facilities		

Rows added to pivot table

PivotTable Fields

Show fields: (All)

Search

- Journal Reference
- Journal Type
- Process Status
- Sub Ledger
- > Properties
- Journal Transactions
- Journal Description

Drag fields between areas below:

Filters: Sub Ledger, Process Status

Columns: Values

Rows: GL Account

Values: Transaction Count, Actual Amount

Defer Layout Update

Update

Add rows to your pivot table by checking the box next to a pivot table field or by dragging it into the Rows box.

In the shown example, GL accounts are the content for each row, so each possible GL account has its own row, and shows all of the Values data related to it.

Pivot Table Rows – Multiple Rows

GL Account	Amount
2061.0860.0000 - Fund Balance	1 (24,486.01)
B100 General Administration	
2061.8100.6300.1500 - Contractual Service	1 0.00
2061.8100.8100.1600 - Education And In Service	5 0.00
2081 Clerk of Court Computerization	
2081.0010.0000 - Cash And Cash Equivalents	246 (589,678.67)
2081.0550.0000 - Due To Other Funds	210 672,891.27
2081.0860.0000 - Fund Balance	14 (11,043.16)
2081.0990.0000 - Prior Yr. Res. For Exp. Cont.	3 (22,291.06)
E700 Clerk Of Courts	
2081.E700.1210.6100.1100 - Regular Hours	8 697.14
2081.E700.1210.6100.1105 - Longevity	1 (456.18)
2081.E700.1210.6100.1110 - Higher Position Pay	2 (240.96)
2081.E700.1210.6100.1400 - Retirement	1 0.00
2081.E700.1210.6100.2300 - Worker's Comp.	3 (512.77)
2081.E700.1210.6100.2400 - Hospitalization	3 (388.94)
2081.E700.1210.6100.2700 - Unemployment Comp.	2 (213.26)
2081.E700.1210.6300.1500 - Contractual Service	8 17,172.00
2081.E700.1210.6300.2400 - Computer Consultant	6 0.00
2081.E700.1210.6300.3411 - OH Dept. of Public Safety	1 0.00
2081.E700.1210.6700.1000 - Capital Outlay	1 0.00
2081.E700.1210.9000.1000 - Advances Out	2 9,743.47
2081.E700.1210.9000.2800 - Transfer to Comp Abs	9 875.00
2081.E700.1210.9000.2810 - Transfer to Payroll Pay	9 1,447.00

If you have selected more than one field for your Rows field group, the data will be broken down and presented in hierarchical format.

In the example, we have broken the data down by Organization Set first, and within that, each GL account belonging to that organization set.

Pivot Table Values

Row Labels	Transaction Count	Actual Amount
1010.0010.0000 - Cash And Cash Equivalents	2,010	(208,339,642.36)
1010.0180.0000 - Due From Other Funds	190	(18,018.75)
1010.0510.0000 - Accounts Payable	4	0.00
1010.0550.0000 - Due To Other Funds	1,322	21,000.00
1010.0860.0000 - Fund Balance	80	(10,000.00)
1010.0990.0000 - Prior Yr Res For Enc Cont	18	(3,337,359.52)
1010.B150.4400.1023 - Foundations	3	525.00
1010.B150.4400.1024 - Digging Charge	3	(2,100.00)
1010.B150.4400.1025 - Sale Of Lots	1	8,740.00
1010.B150.4400.1026 - Sale Of Spaces	9	(7,840.00)
1010.B150.4700.1085 - Miscellaneous	5	2,505.00
1010.B150.6100.1100 - Regular Hours	17	5,590.12
1010.B150.6100.1105 - Longevity	1	(2,000.90)
1010.B150.6100.1110 - Higher Position Pay	3	(3,589.22)
1010.B150.6100.1200 - Overtime Hours	1	0.00
1010.B150.6100.2300 - Worker's Comp.	3	(1,783.12)
1010.B150.6100.2400 - Hospitalization	4	334.04
1010.B150.6100.2700 - Unemployment Comp.	3	(6,000.00)
1010.B150.6300.1500 - Contractual Service	36	36,142.30
1010.B150.6400.1000 - Stationery & Office Supp.	3	149.00

PivotTable Fields

Show fields: (All)

Search

YTD Ending Balance

General Ledger

Transaction Count

Accounting Format

Actual Amount

Adopted Budget

Amended Budget

Drag fields between areas below:

Filters: Sub Ledger, Process Status

Columns: Σ Values

Rows: Σ Values, Transaction Count, Actual Amount

Defer Layout Update

Update

Value fields contain the numerical data that an average user will likely want to report on.

Most frequently, value fields contain dollar amounts in the FM cubes, or in some cases, total transaction counts.

Only fields inside the Σ (Sigma) Value groups can be set as Values.

Pivot Table Columns

The screenshot displays an Excel PivotTable with the following structure:

Sub Ledger	Process Status	Transaction Count	Actual Amount
1010.0010.0000 - Cash And Cash Equivalents		2,010	(208,339,642.36)
1010.0180.0000 - Due From Other Funds		190	(18,018.75)
1010.0510.0000 - Accounts Payable		4	0.00
1010.0550.0000 - Due To Other Funds		1,322	213,000.00
1010.0860.0000 - Fund Balance		80	(10,507,056.74)
1010.0990.0000 - Prior Yr Res For Enc Cont		18	(3,337,359.52)
1010.B150.4400.1023 - Foundations		3	525.00
1010.B150.4400.1024 - Digging Charge		3	(2,100.00)
1010.B150.4400.1025 - Sale Of Lots		1	8,740.00
1010.B150.4400.1026 - Sale Of Spaces		9	(7,840.00)
1010.B150.4700.1085 - Miscellaneous		5	2,505.00
1010.B150.6100.1100 - Regular Hours		17	5,590.12
1010.B150.6100.1105 - Longevity		1	(2,000.90)
1010.B150.6100.1110 - Higher Position Pay		3	(3,589.22)
1010.B150.6100.1200 - Overtime Hours		1	0.00
1010.B150.6100.2300 - Worker's Comp.		3	(1,783.12)
1010.B150.6100.2400 - Hospitalization		4	0.00
1010.B150.6100.2700 - Unemployment Comp.		3	0.00
1010.B150.6300.1500 - Contractual Service		36	36,142.30
1010.B150.6400.1000 - Stationery & Office Supp.		3	149.00

The PivotTable Fields task pane on the right shows the following configuration:

- Filters: Sub Ledger, Process Status
- Columns: Transaction Count, Actual Amount
- Rows: (Empty)
- Values: Transaction Count, Actual Amount

Red callout boxes highlight:

- Value columns:** Points to the 'Transaction Count' and 'Actual Amount' columns in the PivotTable.
- Value groups:** Points to the 'General Ledger' field group in the PivotTable Fields task pane.
- Select your value fields.:** Points to the 'Transaction Count' and 'Actual Amount' fields in the Values box of the PivotTable Fields task pane.

The Columns field group box will, by default, just show the Values that have been assembled in the Values box.

Pivot Table Columns – Subdividing Values Data

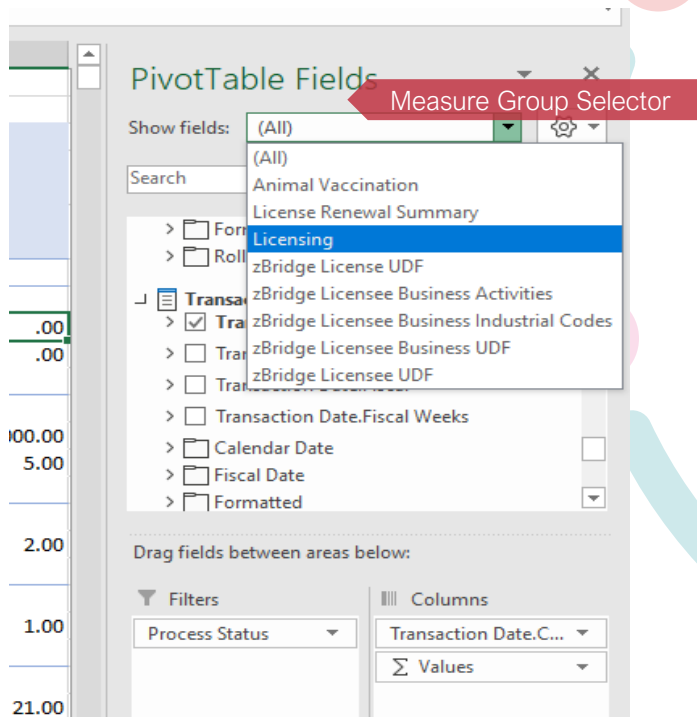
Sub Ledger	General Ledger	Column Labels						Total Transaction Count	Total Actual Amount
Process Status	Posted	Fiscal Calendar 2018		Fiscal Calendar 2019		Fiscal Calendar 2020			
Row Labels	Transaction Count	Actual Amount	Transaction Count	Actual Amount	Transaction Count	Actual Amount			
1010 General Fund									
1010.0010.0000 - Cash And Cash Equivalents	285	(27,512,970.89)	278	(29,451,944.49)	285	(25,934,233.22)	848	(82,899,148.60)	
1010.0180.0000 - Due From Other Funds	28	(2,638.29)	27	(2,397.66)	26	(2,317.31)	81	(7,353.26)	
1010.0510.0000 - Accounts Payable	1	17.38			2	0.00	3	17.38	
1010.0550.0000 - Due To Other Funds	191	26,024,526.80	171	27,605,277.60	179	30,302,604.47	541	83,932,408.87	
1010.0860.0000 - Fund Balance	10	(1,484,515.38)	10	(494,574.17)	12	(3,210,994.55)	32	(5,190,084.10)	
1010.0990.0000 - Prior Yr Res For Enc Cont	3	(262,106.01)	2	(578,525.12)	1	(412,726.38)	6	(1,253,357.51)	
B150 Cemetery									
1010.8150.4400.1023 - Foundations			1	50.00			1	50.00	
1010.8150.4400.1025 - Sale Of Lots			1	8,740.00			1	8,740.00	
1010.8150.4400.1026 - Sale Of Spaces	1	(2,000.00)	1	(8,740.00)	2	1,350.00	4	(9,390.00)	
1010.8150.4700.1085 - Miscellaneous			1	5.00			1	5.00	
1010.8150.6100.1100 - Regular Hours			5	3,589.22	5	0.00	10	3,589.22	
1010.8150.6100.1110 - Higher Position Pay			3	(3,589.22)			3	(3,589.22)	
1010.8150.6100.2300 - Worker's Comp.			1	142.11			1	142.11	
1010.8150.6300.1500 - Contractual Service	5	50.00	5	1,575.00	10	570.00	20	2,195.00	
1010.8150.6400.1000 - Stationery & Office Supp.	3	149.00					3	149.00	
1010.8150.6400.1500 - Petroleum Supplies	12	3,957.04	12	3,126.83	14	1,962.69	38	9,046.56	
1010.8150.6400.1600 - Garage Auto Parts & Labor	14	15,775.49	13	10,083.70	16	9,664.55	43	35,523.74	
1010.8150.6400.2200 - Mtce. Of Facilities	1	0.00	2	166.56	7	14.63	10	181.19	
1010.8150.6400.2400 - Reg Supplies	1	0.00	2	602.96	2	0.00	5	602.96	
1010.8150.6500.1000 - Telephone Expense					2	0.00	2	0.00	
1010.8150.6500.1100 - Electric Service					2	0.00	2	0.00	
1010.8150.6700.1800 - New Equipment	1	0.00					1	0.00	
1010.8150.7100.1000 - Leases	8	2,068.40					8	2,068.40	

Additional fields can be added to the Columns box.

This subdivides out the Values into separate groups of columns for each possible result of the chosen additional fields.

The example shows individual values sets for 2018, 2019 and 2020.

Measure Groups



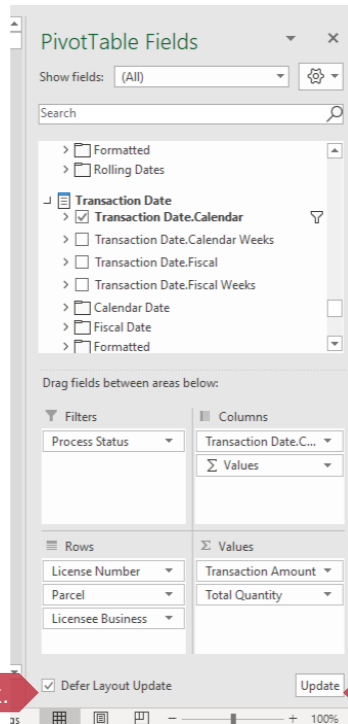
Analytics cube data is generally grouped into measure groups.

Measure groups are clusters of data that connect to each other.

Choosing a specific measure group is an efficient way to narrow down the fields you may want to work with, and to ensure that all your chosen fields are compatible.

Items from different measure groups are not guaranteed to connect to each other. However, various fields are present in multiple measure groups.

Automatic vs. Deferred Layout Update



Normally, your pivot table will automatically restructure itself each time you add or change one of the fields or filter settings.

If a table contains a great deal of data (generally multiple tens of thousands of rows or more), it may take a long time to update.

Checking the “Defer Layout Update” option will keep the table from updating automatically, allowing you to make several changes in succession.

Press the “Update” button when you want to update the table.

Live Demonstration



CONNECT

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