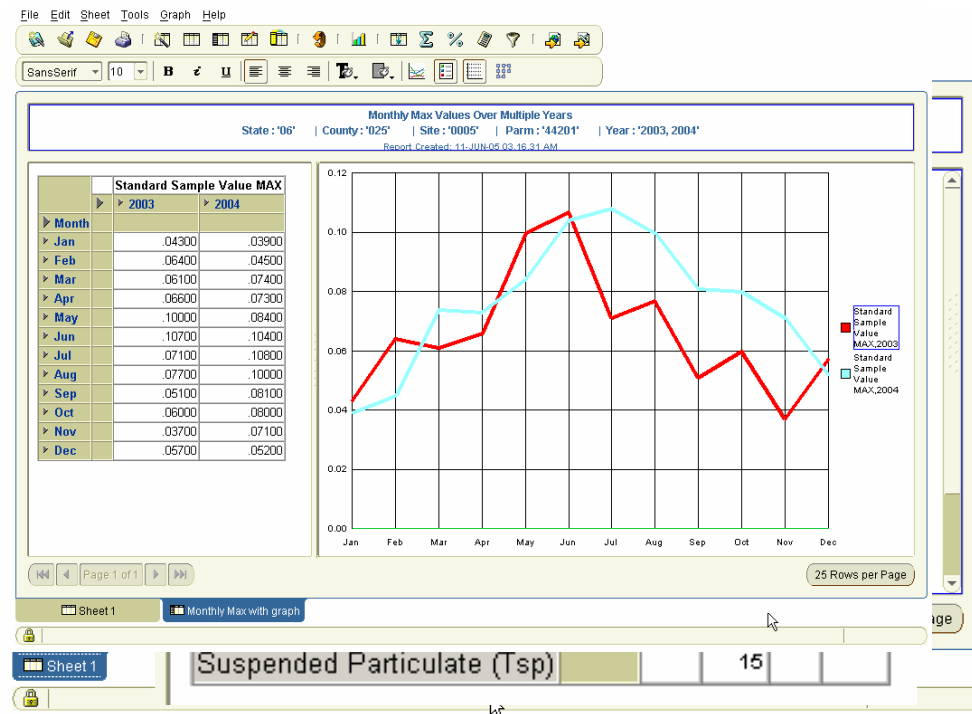# Using Discoverer as the AQS ad hoc Query Tool

Goals for this class

- Overview of building a query
- Editing an existing query
- Build a query to answer a typical question
- Questions

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What Can Discoverer Produce?

- Data Listing Reports
- Cross-Tabulation Reports (Pivot Tables)
- Graphs & Charts

Key Terminology

Interface to database = End User Layer
Grouping of Tables = Business Area
Group of worksheets = Workbook

Tables	➡	**Folders**
Columns	➡	**Items**
Rows	➡	**Records**
Queries	➡	**Worksheets**

What you need

- **AQS userid and password**

- **Java-enabled Web browser (Sun Java 1.5 update 11 recommended)**

- **url: https://iasint.rtpnc.epa.gov/discoverer/plus**

Starting Discoverer Plus

https://iasint.rtpnc.epa.gov/discoverer/plus

Create a Connection

Successful connection

Create/Open a Workbook

Creating a New Workbook

- Use the Workbook Wizard

- Start with a simple goal in mind – e.g., **Find the states in your region**
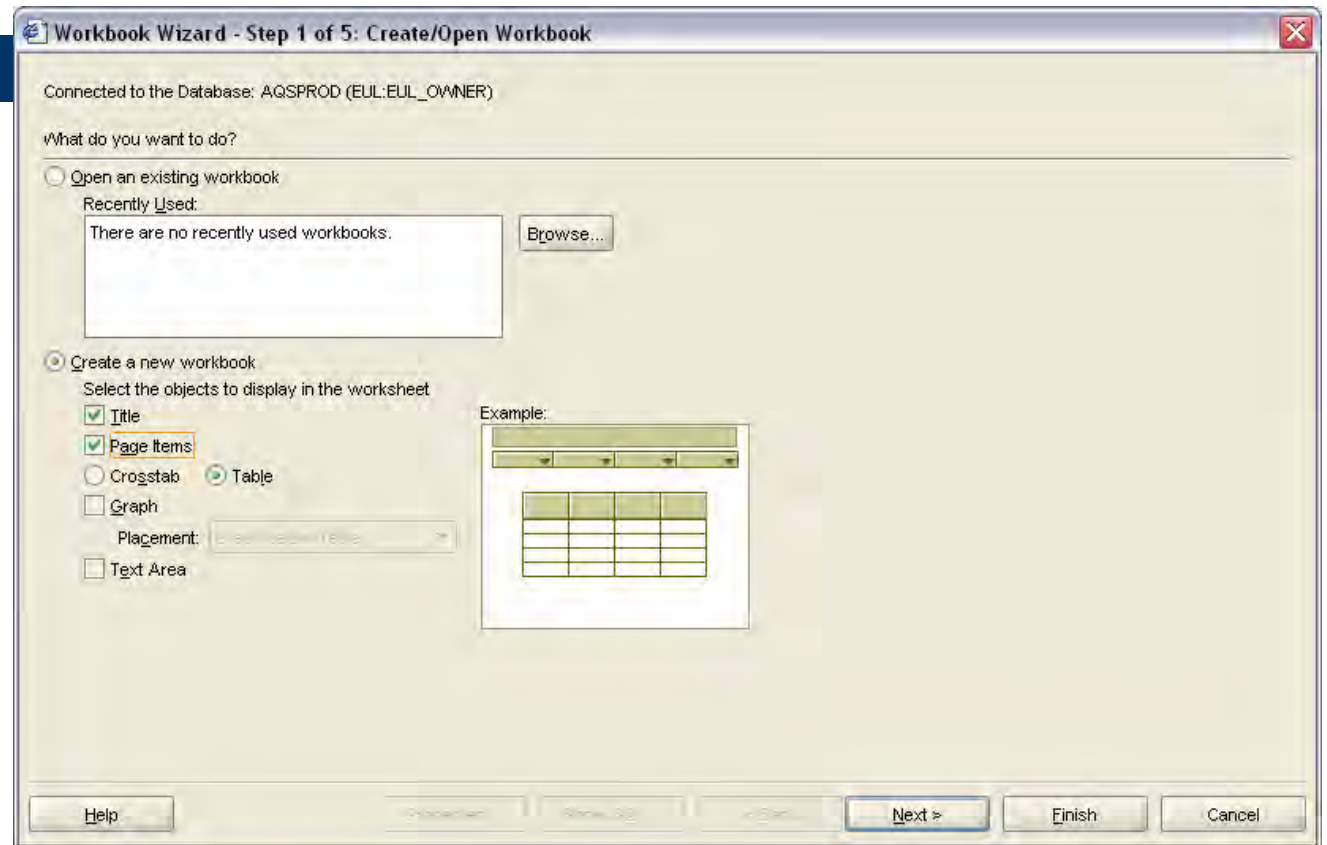
Selecting Items

- AQS basic is the simplest Business Area
- Scroll through list of folders
- Expand a folder to see its items
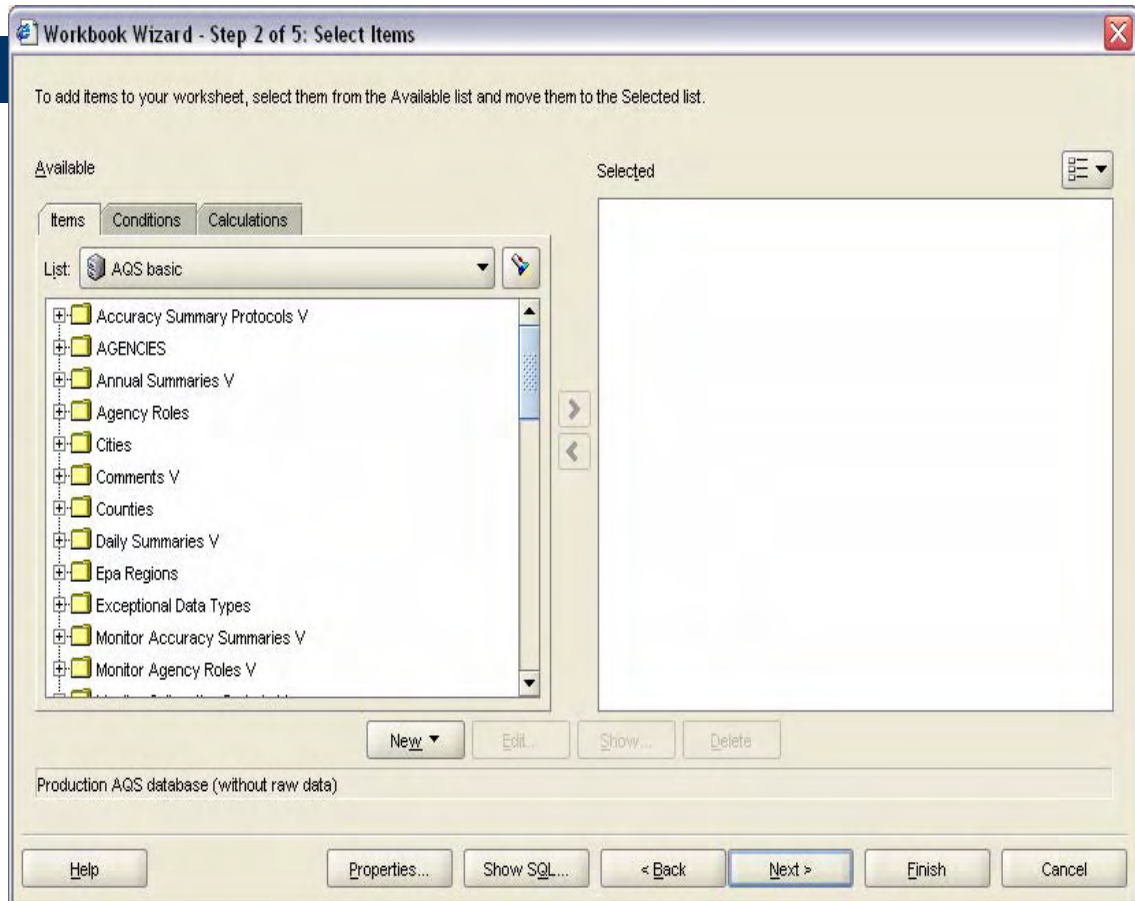
Selecting Items, cont'd

- Highlight items and **move** them to the **Selected** side by clicking on the right arrow
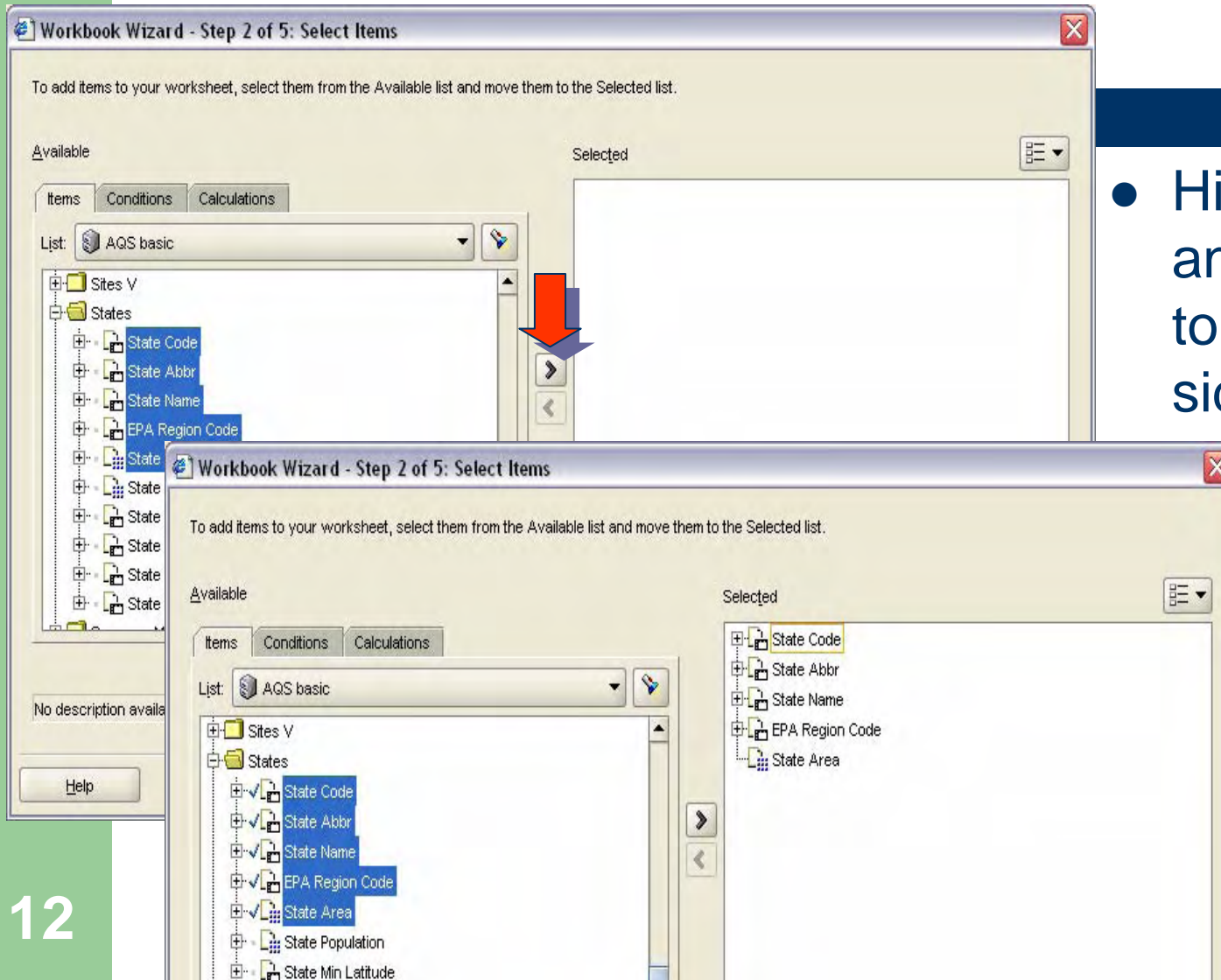
Conditions
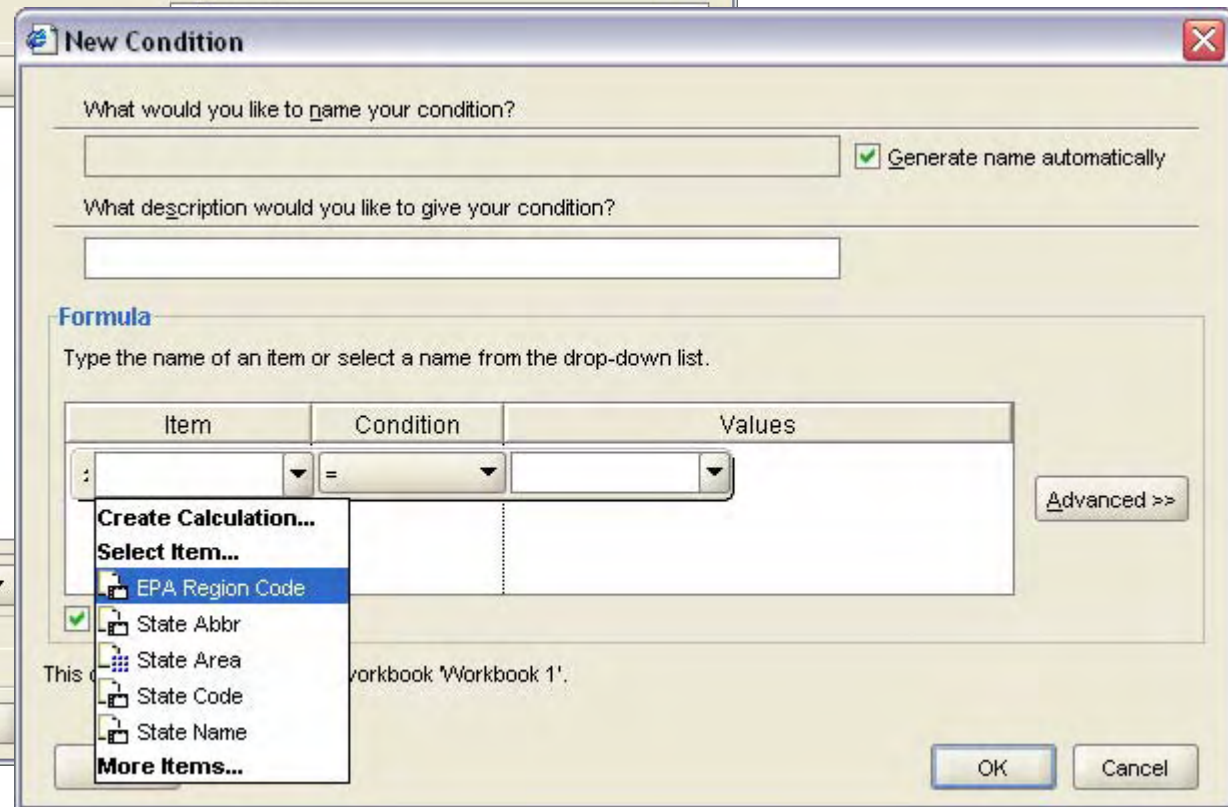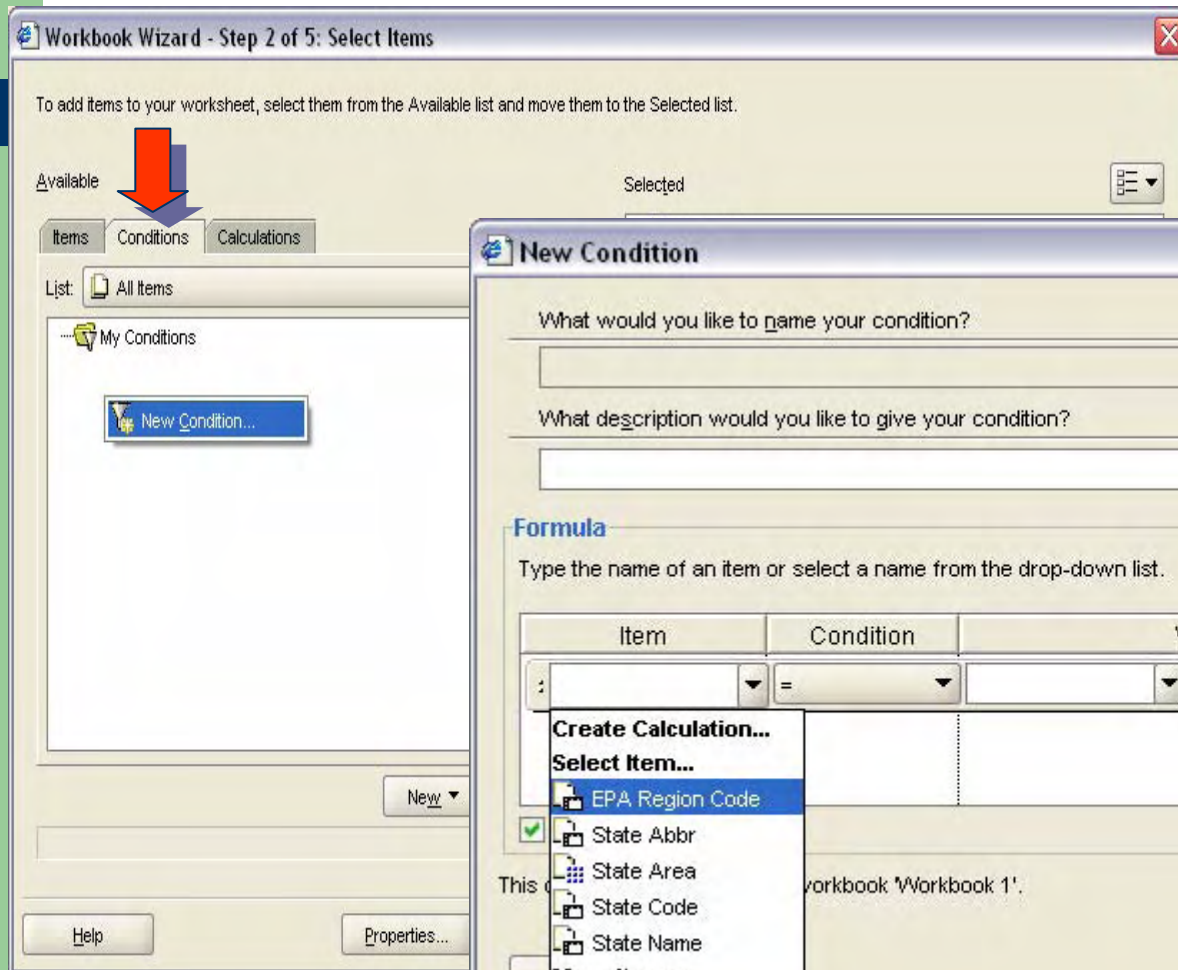
Conditions, cont'd

New Condition

What would you like to name your condition?

(EPA Region Code = '04')   ☑ Generate name automatically

What description would you like to give your condition?

Formula

Type text in single quotes or select a value from the drop-down list. Multiple values must be separated by commas.

| Item	Condition	Values
States.EPA Region Code ▼	= ▼	'04' ▼

Advanced >>

☑ Case-sensitive

This condition is located in the workbook 'Workbook 2'.

Help   OK   Cancel

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Conditions, cont'd

Calculations

Workbook Wizard - Step 2 of 5: Select Items

To add items to your worksheet, select them from the Available list and move them to the Selected list.

Available

Items	Conditions	Calculations

List: All Items

- My Calculations
- My Percentages
- My Totals
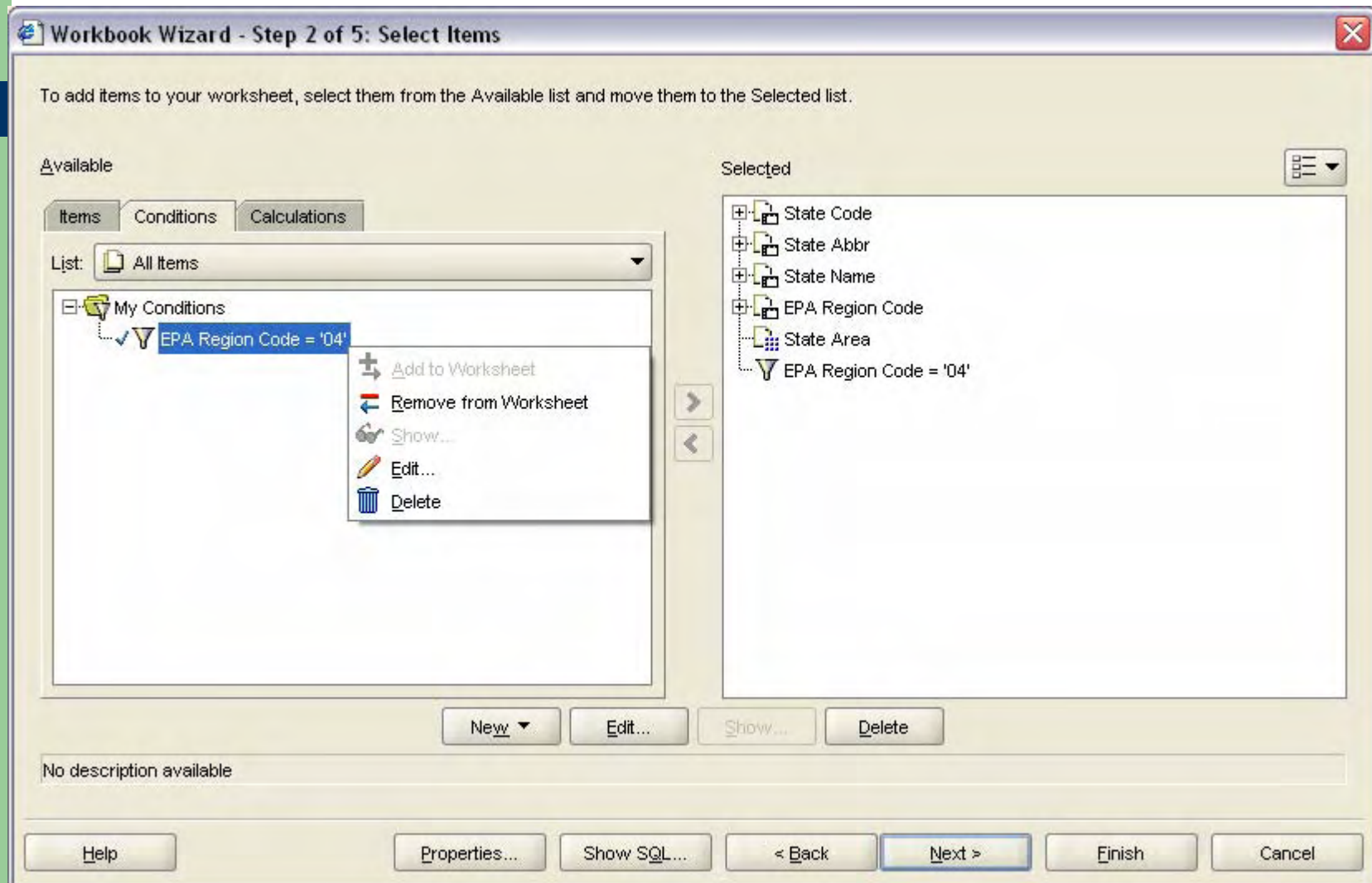 - New Total...

No description available

New Total

Which Item would you like to create a total on?

State Area ▼

What kind of total do you want?

f(x) Sum ▼

Adds all the values.

Where would you like your total to be shown?

⦿ Grand total at bottom
○ Subtotal at each change in:

State Code ▼

☐ Don't display total for a single row

Do you want to calculate totals within each page?

⦿ Calculate totals within each page.
○ Calculate totals across all pages.

Example

	M1	M2	n1	n2
1	AA	aa1	10	10
2		aa2	10	10
3	BB	bb1	10	10
4		bb2	10	10
5				40

The example above shows a Sum total calculated from sample data.

What label do you want to be shown?

Sum ▼ Format Heading...

☑ Generate label automatically   Format Data...

Help   OK   Cancel

Help   Properties...   Show SQL...   < Back   Next >   Finish   Cancel
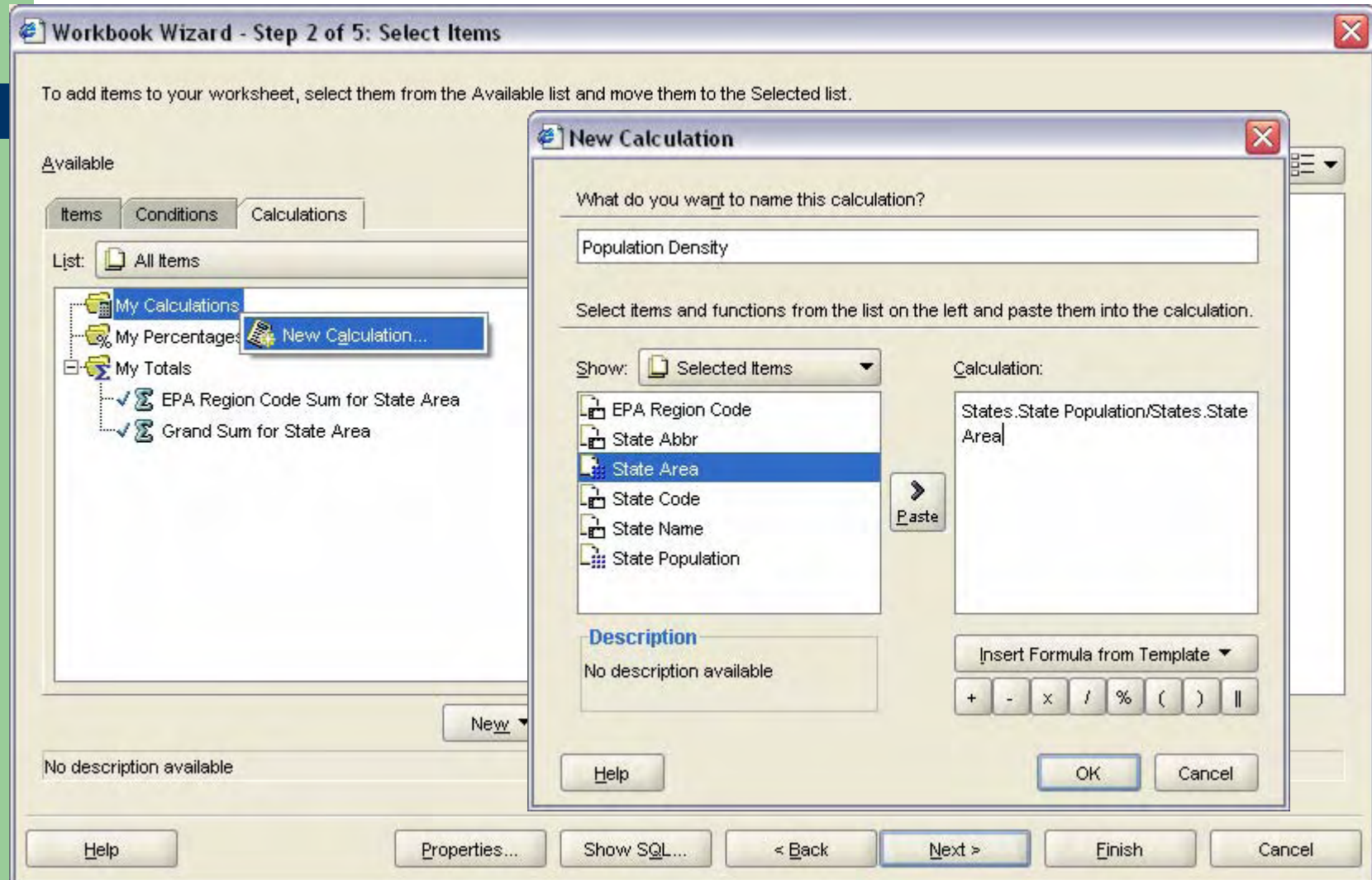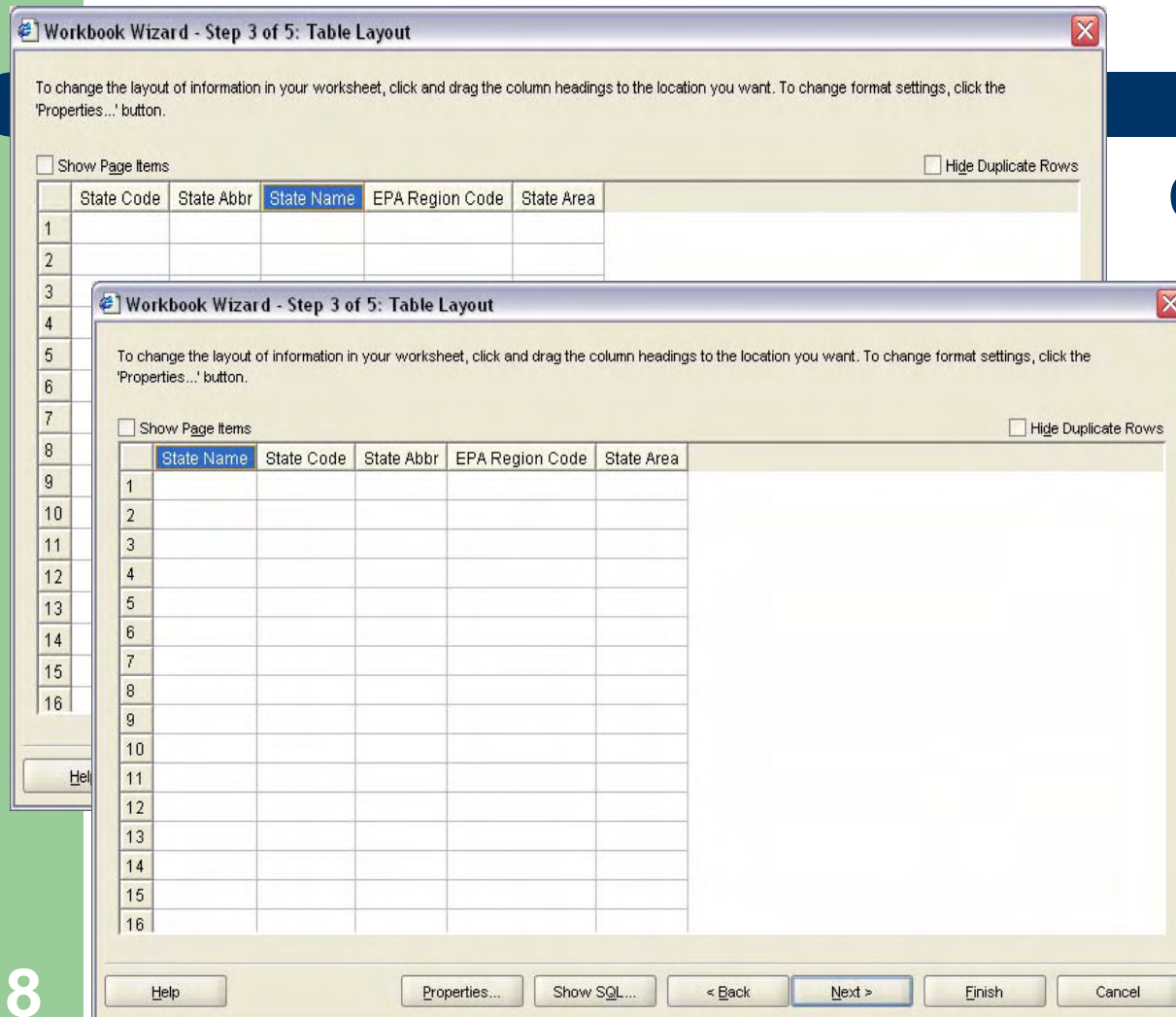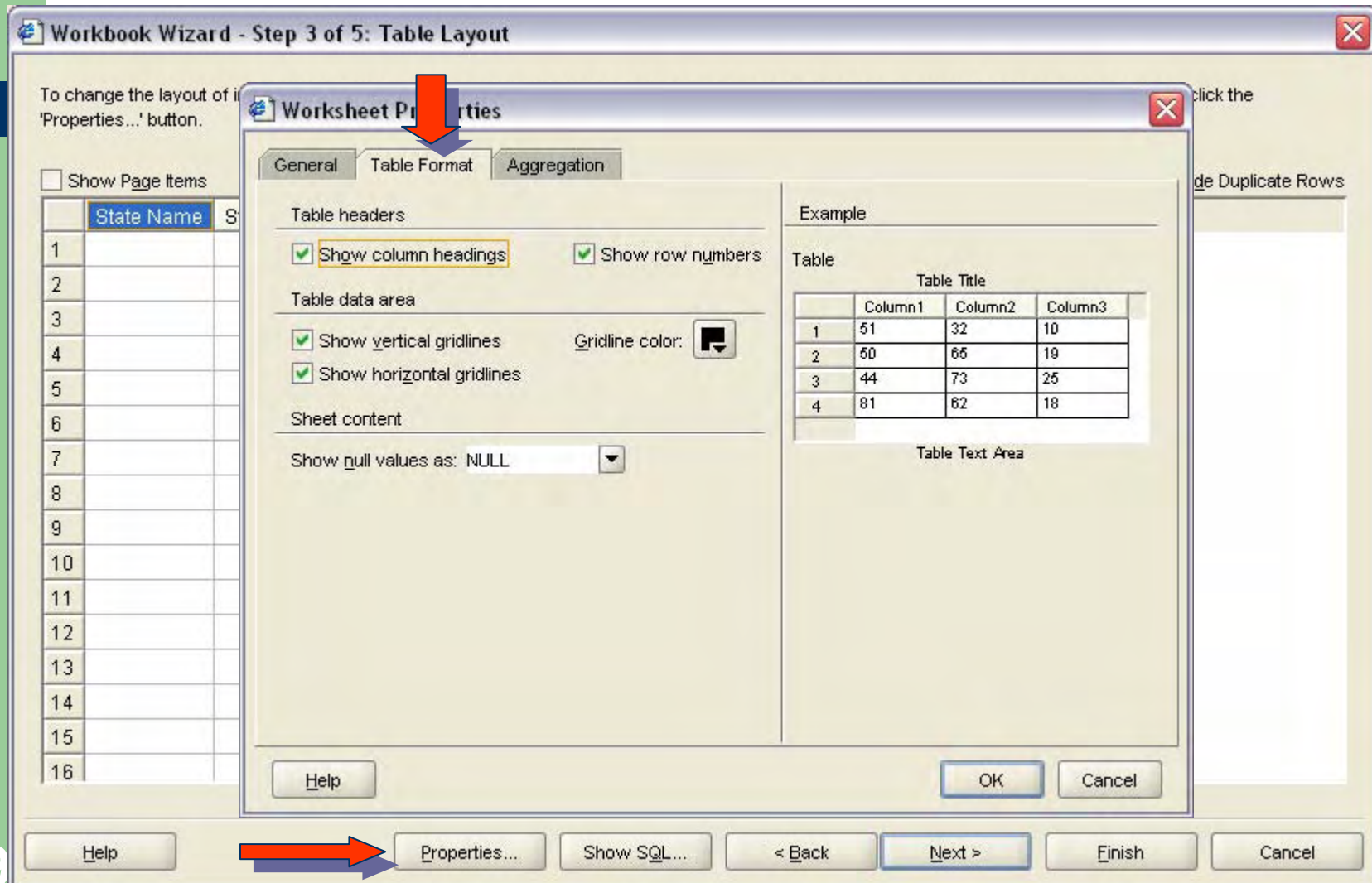
Calculations, cont'd

Table Layout

Click and drag
headings to
desired order

Table Layout, cont'd

Workbook Wizard - Step 3 of 5: Table Layout

To change the layout of i... click the
'Properties...' button.

☐ Show Page Items   de Duplicate Rows

State Name	S
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Worksheet Properties

General | Table Format | Aggregation

Table headers

☑ Show column headings   ☑ Show row numbers

Table data area

☑ Show vertical gridlines   Gridline color: ⬛

☑ Show horizontal gridlines

Sheet content

Show null values as: NULL

Example

Table

Table Title

	Column1	Column2	Column3
1	51	32	10
2	50	65	19
3	44	73	25
4	81	62	18

Table Text Area

Help   OK   Cancel

Help   Properties...   Show SQL...   < Back   Next >   Finish   Cancel

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Sorts

Results

Demonstration

- Editing an existing query
- Developing new queries