PS-80 Storing Data in the Right Place in Deltek Vision

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PS-80 Storing Data in the Right Place

Deltek INSIGHT 2012
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Connect more.

Deltek INSIGHT 2012

What it may feel like

Deltek Vision is a massive application.

How does it all work anyway?

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Outline

Presentation elements:

1. Deltek Vision Mission Critical Data Path
2. Key Database Concepts
3. A couple examples of what not to do… and what to do instead
4. Guidelines for storing data
5. User Defined Infocenter Example
6. If time… Project WBS concepts
7. Party!!

Mission Critical Data Path

Deltek Vision Data Path – Project based accounting

Project Setup

- 1. Client/Company
- 2. Contact
- 3. Opportunity

Project Execution

- 4. Project
- 5. Plan
- 6. Time Sheets
- 7. Accounting Transactions and general ledger
- 8. Invoices!
- 9. Receipts!

Project Review

- 10. Reports (analysis and review of data)

Key Terms

What?

What is an Entity?

- An entity is generally a thing. These are the “nouns” of a database.
- Examples: Client, contact, contract, project, employee (also: transaction or instance in time)…

What is an Attribute?

- An attribute is something that describes a thing. These are the adjectives of a database.
- Examples: Company name, number of employees, yearly revenue, corporate logo, social security number, height, weight (also: start date, end date, price, hourly wage)…

What is a Relationship?

- A relationship is when two entities are related to each other.
- Example: Clients (companies) have contacts, Projects have Transactions

Key Terms

Examples:

- Entity: Contact
- Attributes: Firstname, Lastname, SSN, Salary, Birthday

- Entity: Project
- Attributes: Project Number, Name, start date, end date, total contract amount

- Relationship: Contacts to Projects
  One project may have lots of contacts, the client sponsor, the architect

- Relationship: Projects to transactions
  Projects have many transactions
  (time sheet entries, expense entries, invoices)

Key Terms: Review

What?

What is an Entity?

- An entity will most often be a table

What is an Attribute?

- An attribute will be a column/field in that table

What is a Relationship?

- A relationship is when two tables are related to each other

Key Concepts

Questions so far? **Easy as pie… right?**

Example 1: Checklist

Examples of storing entities and attributes in Vision

Example 1: Opportunity Checklist

Dates or milestones in Opportunities:

Often, companies will want to store opportunity stages with their dates, in some order that matches a process of what they take the opportunity through.

1. **How some do it:**
   A set of fields, one for each stage in an opportunity, contract or project, or any process.

2. **How you should do it:**
   A series of rows in a grid, with the value labels sorted, and a corresponding number for each stage.

Example 1: Opportunity Checklist

A set of fields, one for each stage in an opportunity, contract or project, or any process.

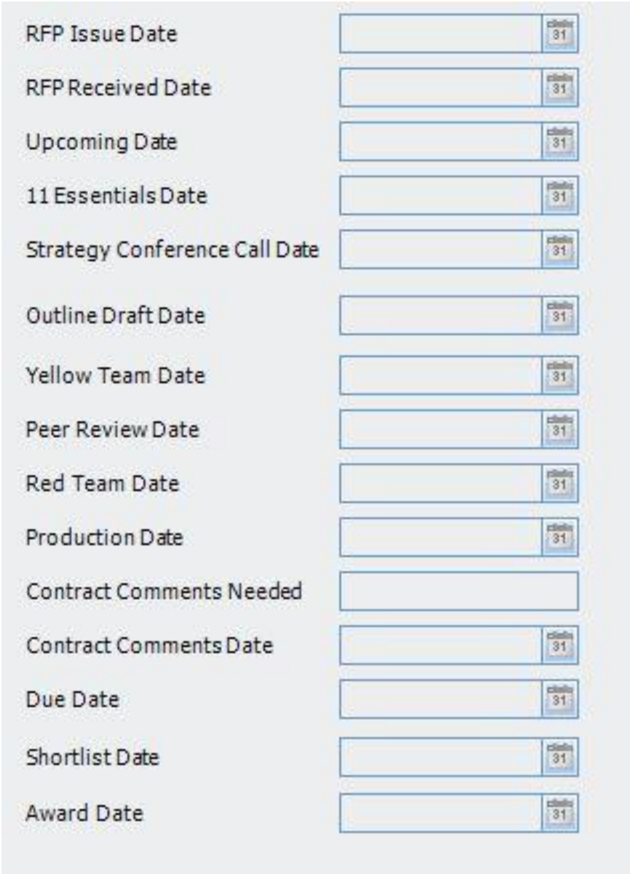
Problems:

1. Searching for opportunities, you need to know the name of each of these fields to use them.

2. If you develop reports on these fields… standard or favorites or even custom… then change your milestones, you have to change all your reports.

3. What if you don't need all the steps?

4. What if you have to repeat some steps?



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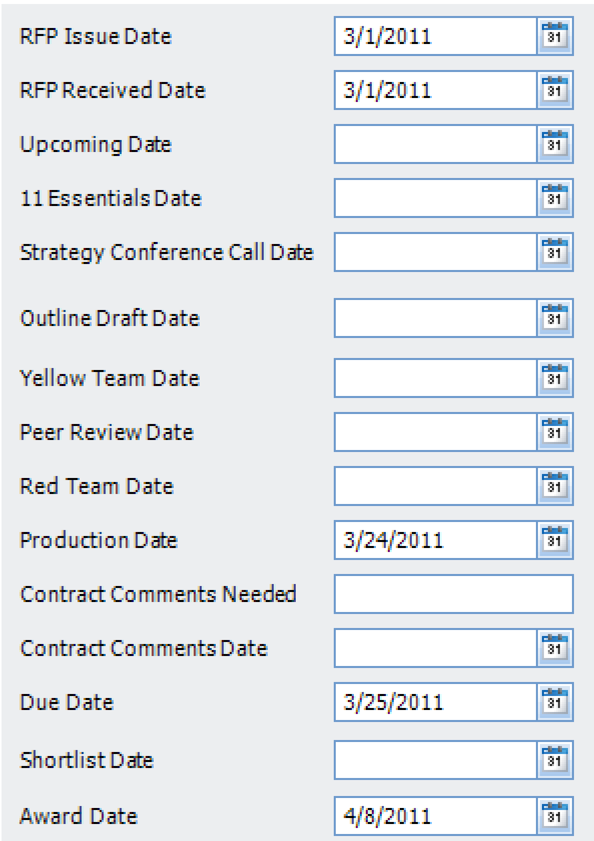
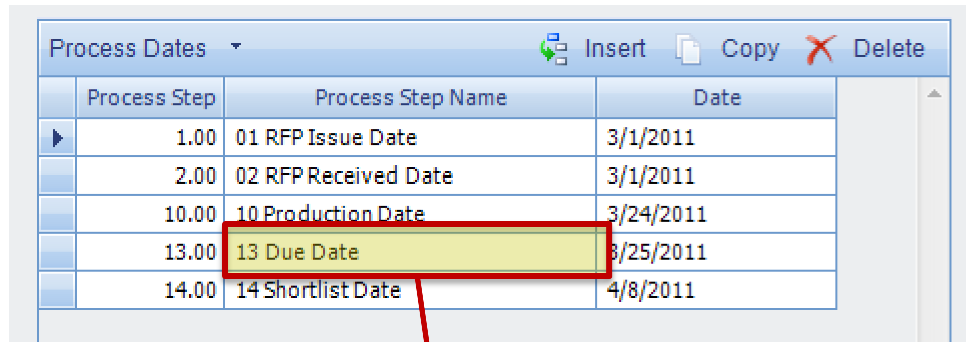
Example 1: Opportunity Checklist

What happens when we replace with a grid:



RFP Issue Date	3/1/2011
RFP Received Date	3/1/2011
Upcoming Date	
11 Essentials Date	
Strategy Conference Call Date	
Outline Draft Date	
Yellow Team Date	
Peer Review Date	
Red Team Date	
Production Date	3/24/2011
Contract Comments Needed	
Contract Comments Date	
Due Date	3/25/2011
Shortlist Date	
Award Date	4/8/2011



Process Dates Insert Copy Delete

Process Step	Process Step Name	Date
1.00	01 RFP Issue Date	3/1/2011
2.00	02 RFP Received Date	3/1/2011
10.00	10 Production Date	3/24/2011
13.00	13 Due Date	3/25/2011
14.00	14 Shortlist Date	4/8/2011

Pro Tip: use opportunity template to pre-populate this list with the steps you need.

Note: this field is a drop down box with all the process steps in it.

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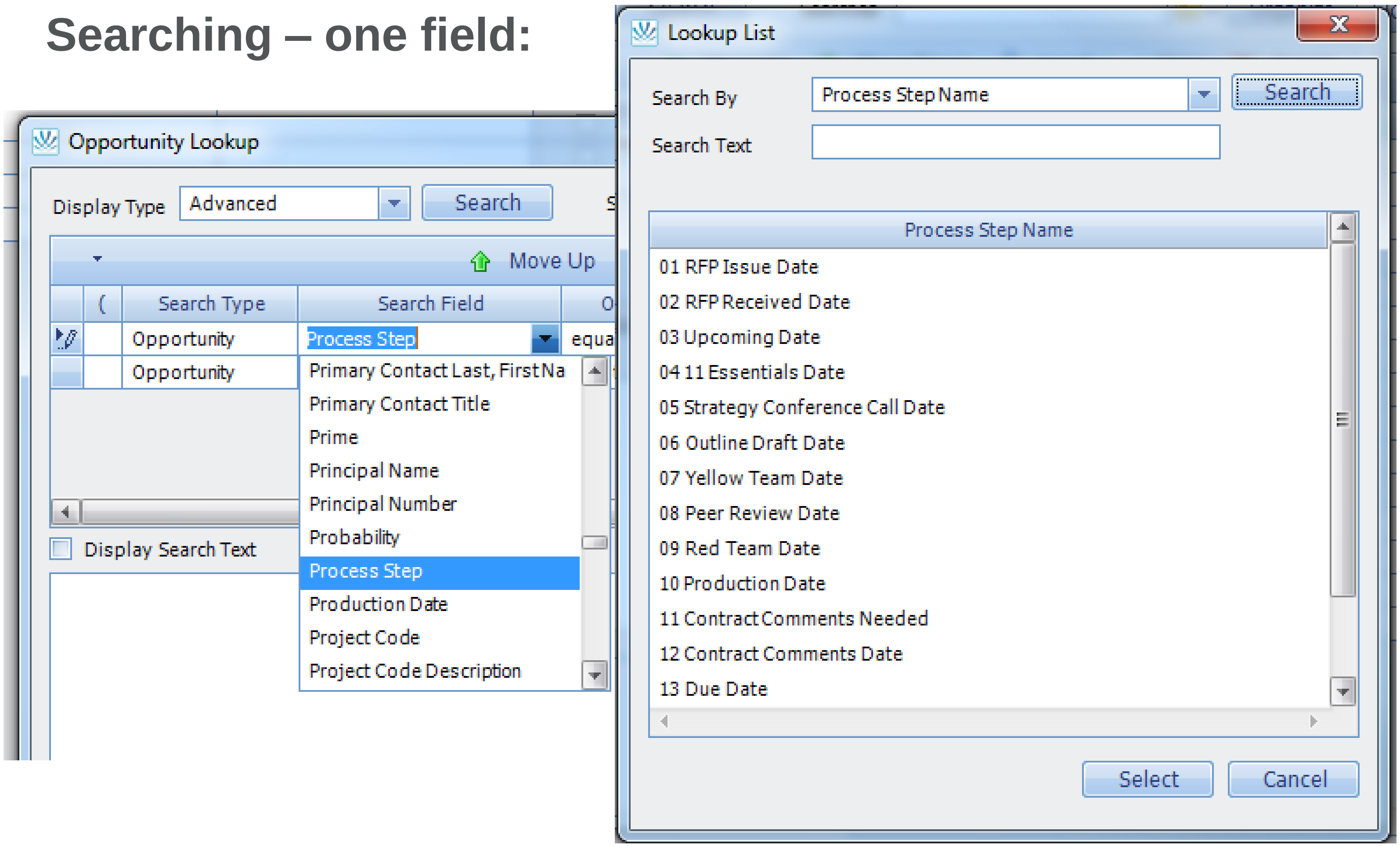
Example 1: Opportunity Checklist

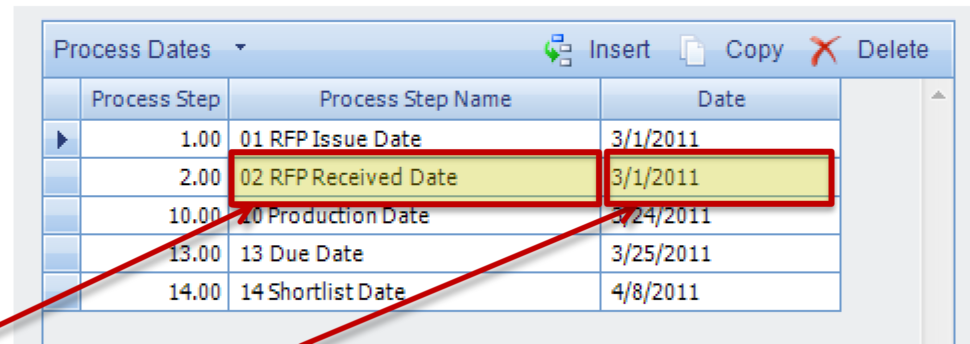
Searching – one field:



Example 1: Opportunity Checklist

Note:

For reporting/searching you'll need to take advantage of Vision's advanced search capabilities to test for the values of two fields in your grid at the same time.



From this example, you'll test for the label in this field, and the absence of a date in this field to show which opportunities have not yet reached this stage.

Example 1a: Project Checklist

Project check list what about this one?

All the issues from our first example:
- field names!
- sorting/grouping
- what order?

What's more:
- can't store dates
- can't store comments or other related data like who did it?


At Completion of Project

- [ ] Project Info Sheet
- [ ] Check workspaces for anything that belongs in files
- [ ] Consultant Electronic Drawing Files to P Drive
- [ ] Signed & Sealed CD's (PDF)
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- [ ] Create Meeting invite for final marketing session
- [ ] Create calendar reminder for Warranty Walk-thur

Warranty Walk-Thru - 60 Days past warranty date

- [ ] Check workspaces to ensure all documents are scanned
- [ ] Verify that we have electronic copies of submittals
- [ ] Send submittals to Owner
- [ ] Verify that we have electronic copies of Records Room items
- [ ] Scan any paper contract files
- [ ] Verify all contract files have been scanned
- [ ] Move Contract files to Archive drive

Gettin’ Serious

Example 2: Changing Contract Amount

Issues:

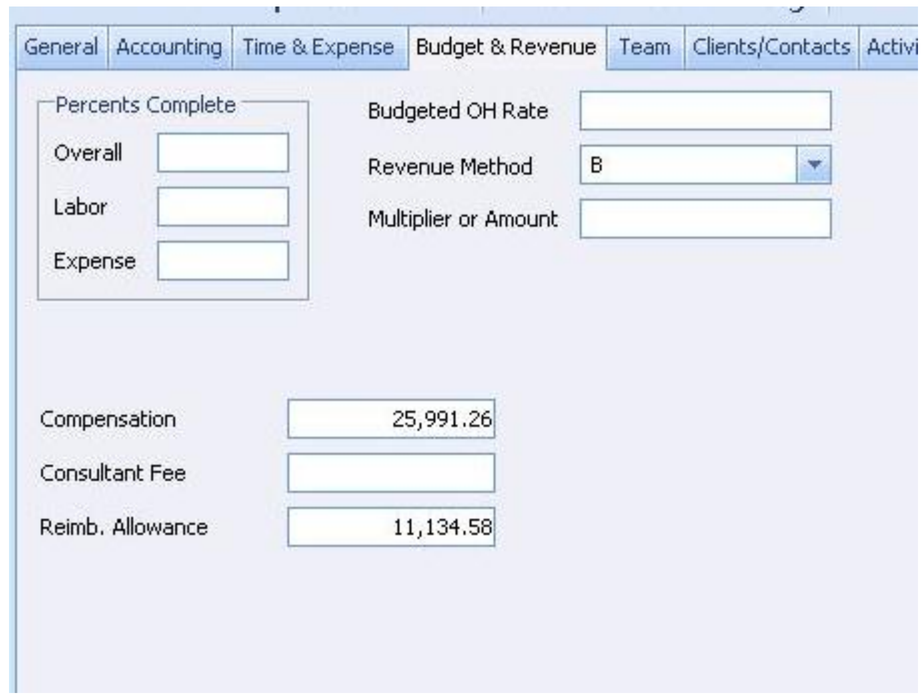
1. One field can’t store data that changes over time
2. You may not always want a new WBS element for each Change Order

How do we:

1. Store changes in these contract amounts over time

2. Track change order descriptions, source, date

Entity or attribute?



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Example 2: Changing Contract Amount

Solution:

1. Put change orders or contract changes in grid (assuming you're not storing it in individual WBS elements)

Contract History

Contract or CCN	Date Received	Description	Total Hrs	Labor	Con
CCN #1	7/27/2011	Work permits and NIB. NTE amount			
06 e 2	8/3/2011	2 BHS		56,225.51	
CCN #2	10/5/2011	Phase 3 70% design		76,736.10	
CCN #4	1/9/2012	Purchase Parts			
CCN #5	2/16/2012	Remote PLC location		2,600.00	
CCN #6	5/4/2012	Parts Credit Adjustment			
CCN#8	8/21/2012	Wireless Access Points Adder		[illegible]	

Insert

Total Cost	Target Profit	Profit %	Contract Amount
4,000.00	1,000.00	20.00	5,000.00
170,538.67	-9,818.67	-6.11	160,720.00
176,493.03	13,506.97	7.11	190,000.00
77,995.00	4,105.00	5.00	82,100.00
14,280.00	2,430.00	14.54	16,710.00
3,038.65	159.93	5.00	3,198.58
5,823.40	2,012.88	25.69	7,836.28

In this case change orders contain other info too like reimbursables and profit margins.

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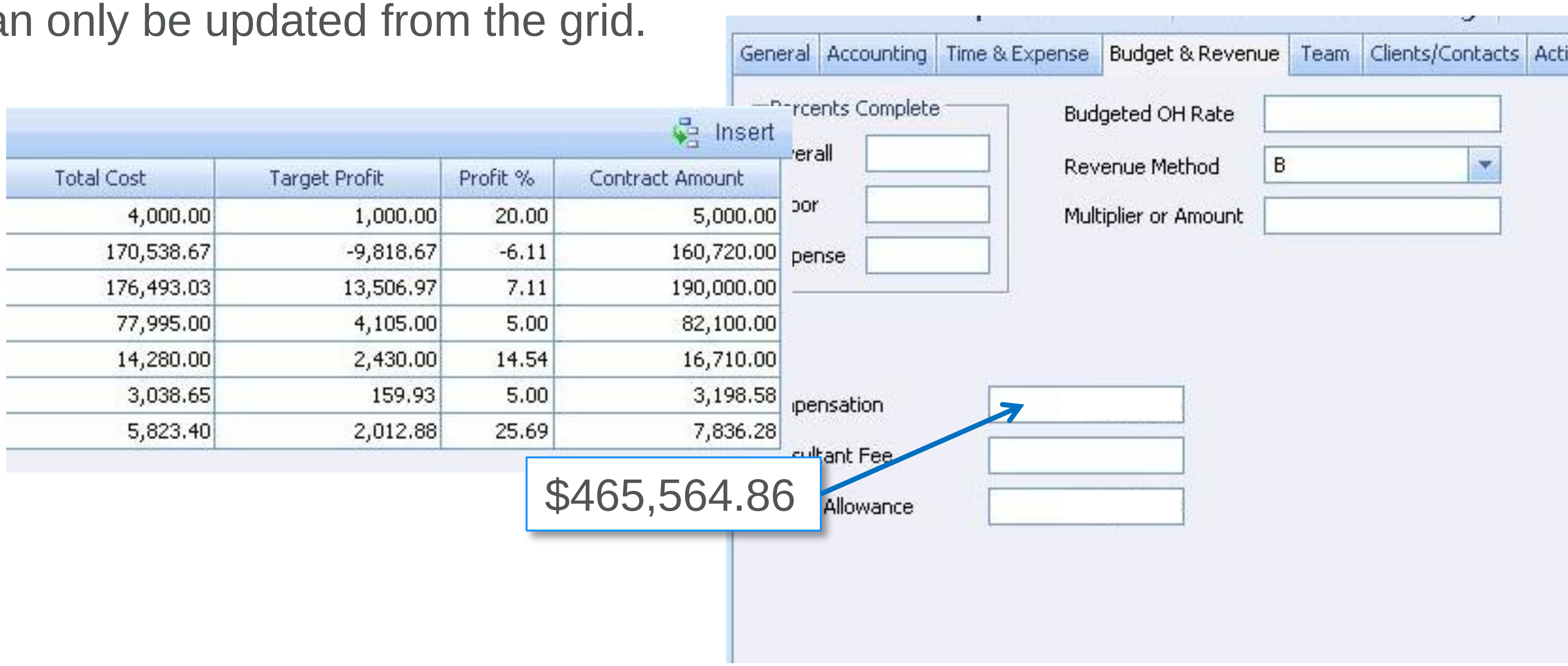
Example 2: Changing Contract Amount

Solution:

1. Put change orders or contract changes in grid (assuming you're not storing it in individual WBS elements)
2. Set up workflows to update the total contract amounts, disable those fields so they can only be updated from the grid.



Total Cost	Target Profit	Profit %	Contract Amount
4,000.00	1,000.00	20.00	5,000.00
170,538.67	-9,818.67	-6.11	160,720.00
176,493.03	13,506.97	7.11	190,000.00
77,995.00	4,105.00	5.00	82,100.00
14,280.00	2,430.00	14.54	16,710.00
3,038.65	159.93	5.00	3,198.58
5,823.40	2,012.88	25.69	7,836.28

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Concepts: Guidelines

Concepts: The Guidelines

Is it an entity or an attribute?

If it‘s an attribute then it's a field.

If it’s an entity then it's a grid or user defined infocenter.

Pro tip: If you can throw it at someone, then it’s an entity.

If it describes the thing you threw, then it’s an attribute.

Concepts: Modifiers

What is available and when should I use it?

- **tab** - for a group of related thoughts/ideas (attributes) or a new entity if it makes sense to be by itself
- **checkbox** - an on or off switch... if you make more than 2 or a 3 for a purpose, it should prob. be a grid (not this)
- **dropdown/lookup** - keeps data clean... use when you can
- **infocenter field** – contact, project, employee
- **user defined infocenter** – an entity that isn't directly related to one of the existing Vision entities (or one you've created an infocenter for)

Concepts: and more

Think About:

1. Is it an entity, or an attribute? (where does it belong… to another entity or is it stand alone? What relationships does it have?)
2. Is the data standardized like a title, a type or some kind of label? (use a lookup or a drop down)
3. Is it accessible to only some users? You can use a tab and security settings to isolate it.
4. How will you report on it?
5. How does it change over time? (probably not an attribute if it does)

User Defined Infocenters

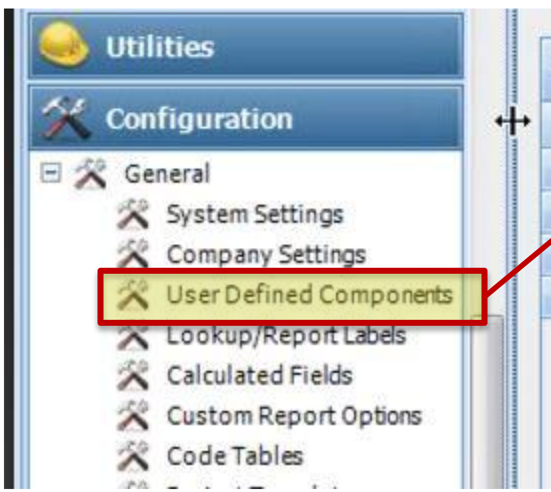
A good User Defined Infocenter… finally a way to manage company vehicles.

User Defined Infocenter Example

To create a User Defined Infocenter we use "User Defined Components".

We're going to create a User Defined Infocenter for Vehicles.

A Vehicle is an entity that has many attributes that need to be tracked independently.



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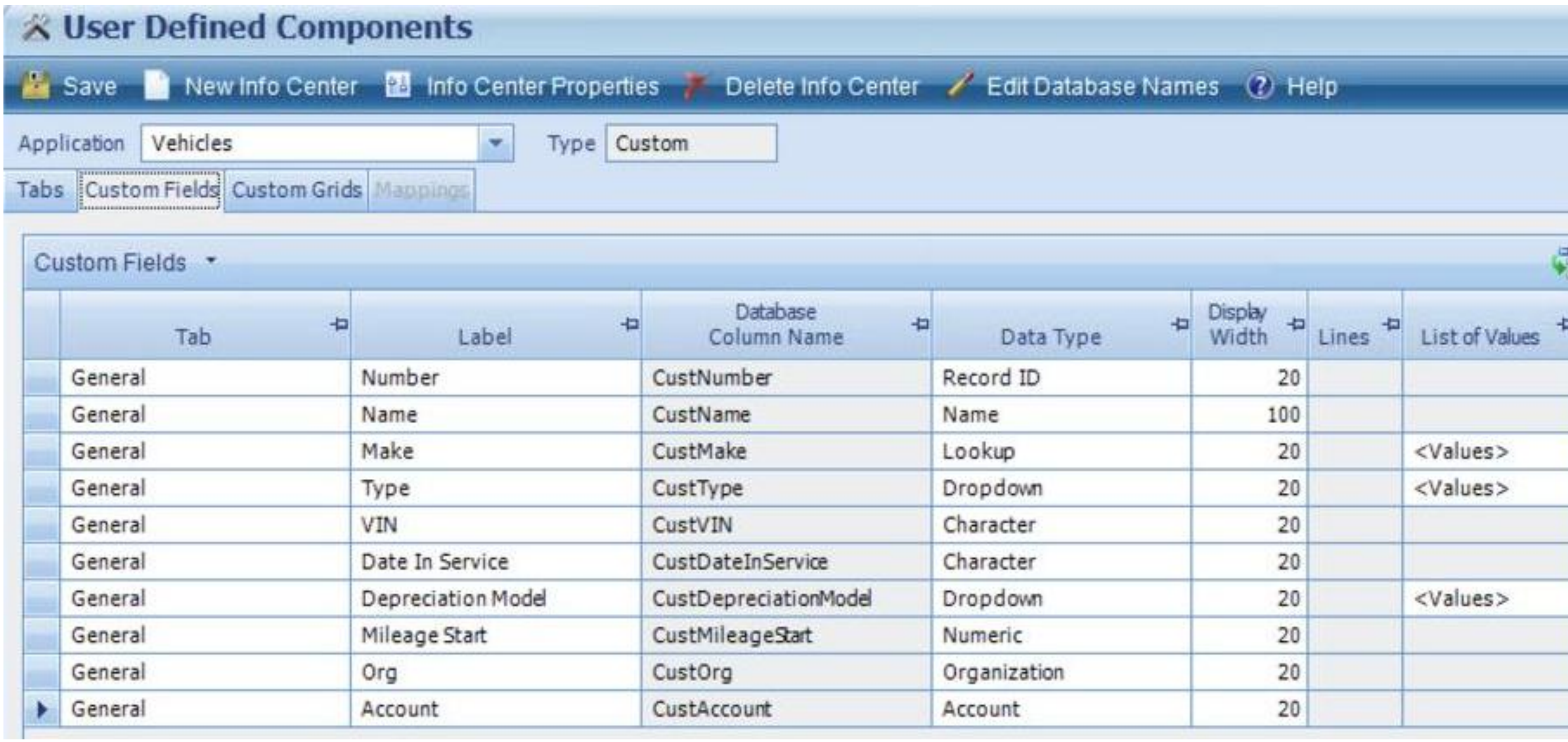
User Defined Infocenter Example

Here is the list of attributes for each Vehicle

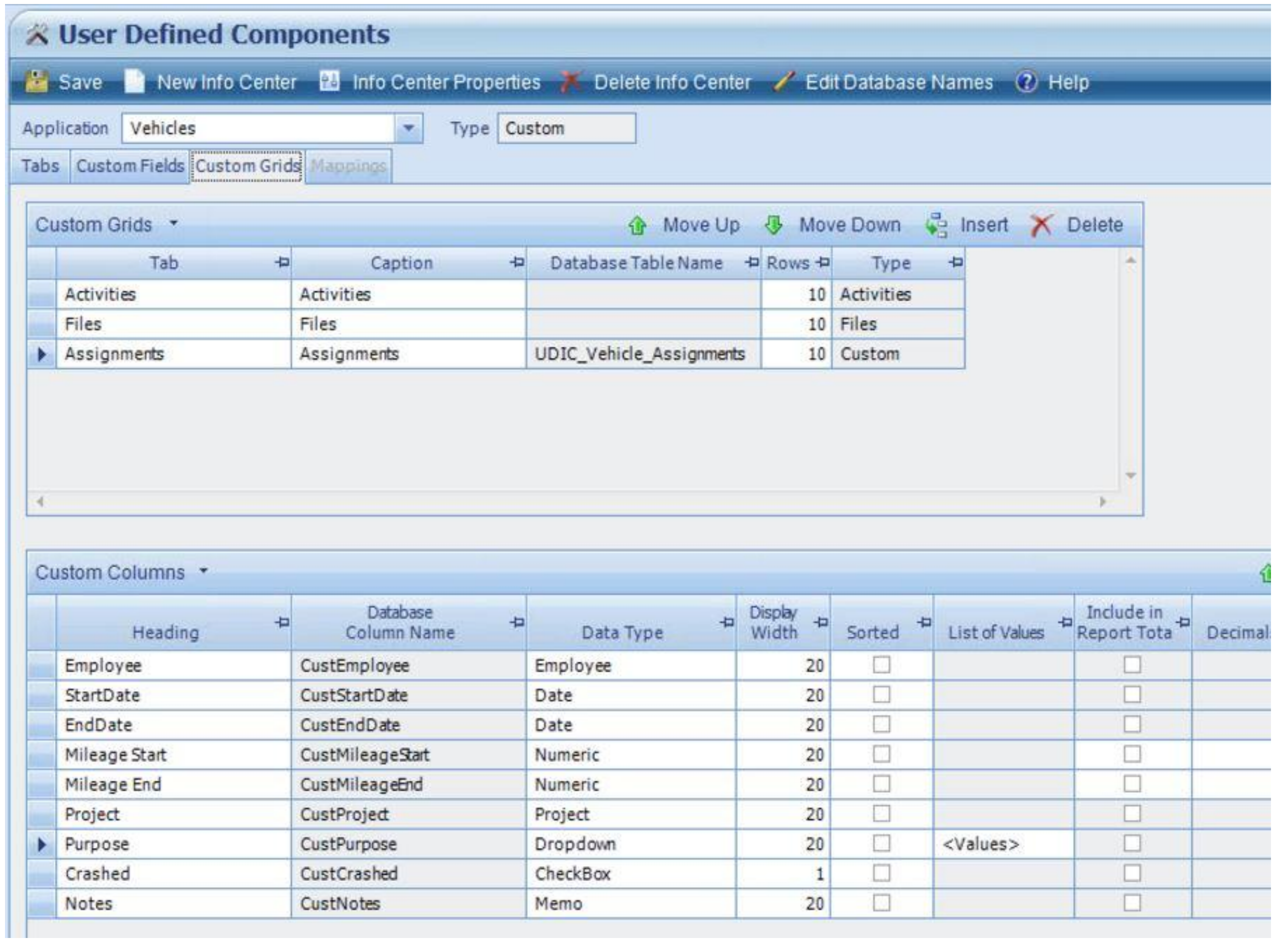


Tab	Label	Database Column Name	Data Type	Display Width	Lines	List of Values
General	Number	CustNumber	Record ID	20		
General	Name	CustName	Name	100		
General	Make	CustMake	Lookup	20		<Values>
General	Type	CustType	Dropdown	20		<Values>
General	VIN	CustVIN	Character	20		
General	Date In Service	CustDateInService	Character	20		
General	Depreciation Model	CustDepreciationModel	Dropdown	20		<Values>
General	Mileage Start	CustMileageStart	Numeric	20		
General	Org	CustOrg	Organization	20		
General	Account	CustAccount	Account	20		

User Defined Infocenter Example

A vehicle assignment

is also an entity, related to both Vehicle and Employee.



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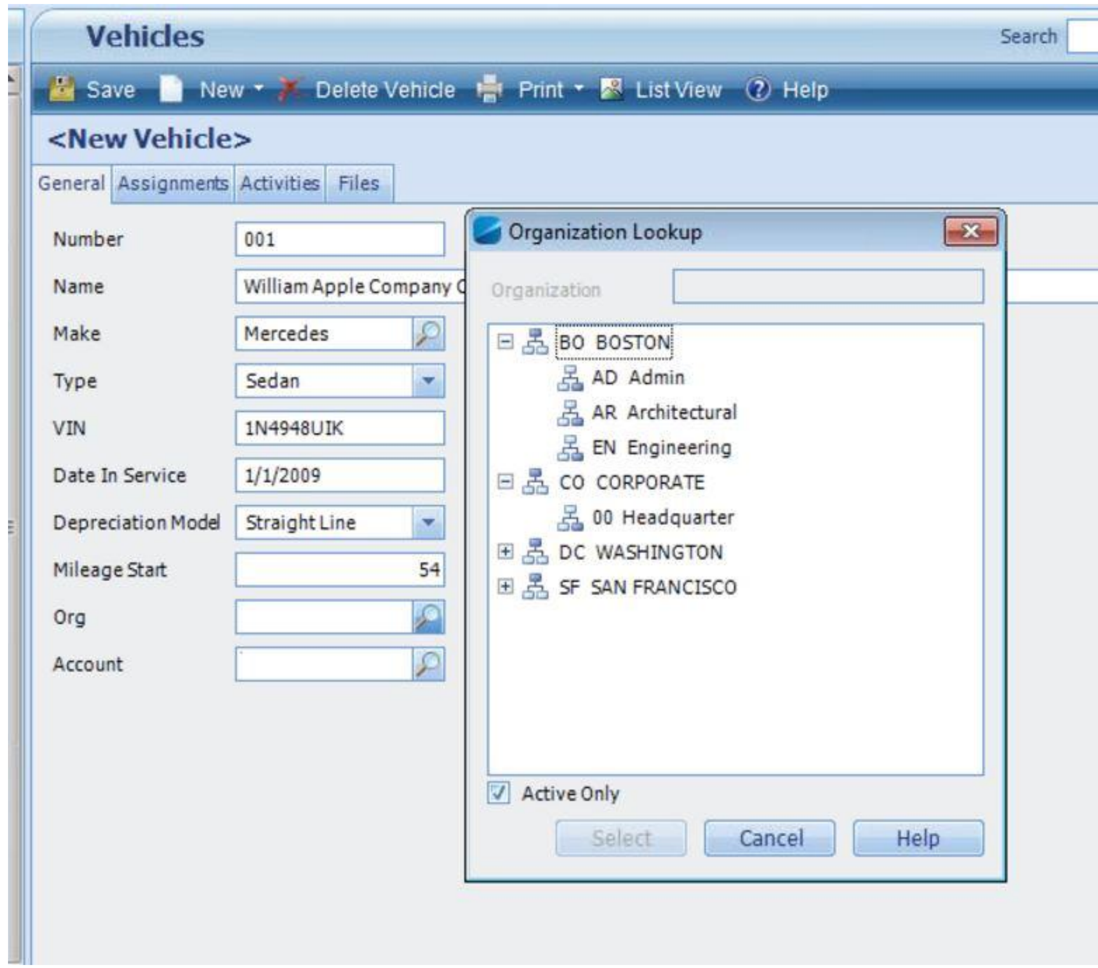
User Defined Infocenter Example

Once the infocenter is created, we can start filling out data about our vehicles.



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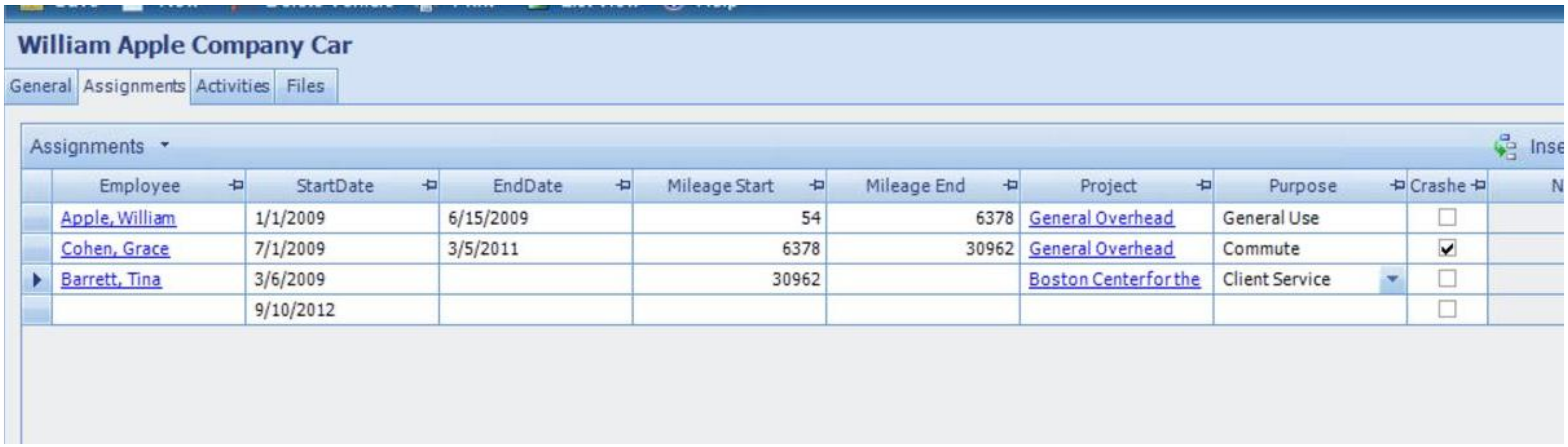
User Defined Infocenter Example

Lastly… we can track who uses the vehicles, and for which project.



Can you think of other examples for User Defined Infocenters?

User Defined Infocenter Example

User defined infocenter ideas:

Tracking the attributes of physical assets like cars, buildings, specialized equipment

Build an admin section that has workflow buttons or allows access to any other “click” admin function driven by administrators or IT

Marketing campaign effort, like direct mail. You could have many efforts for any one marketing campaign.

Properly track locations or buildings in a project. Now you can have a WBS that can track both the phase divisions and physical divisions of large projects.

Company Vehicles?

WBS + Labor Codes

They work together to give you good data.

And More: WBS + Labor Codes

Work Break Down Structure:

A work break down structure element is something you see in the project structure.

Vision traditionally refers to them as Projects, Phases and Tasks.

And More: WBS + Labor Codes

Work Break Down Structure:

General conventions:

Anything in this list should be able to have a price or some kind of estimate attached to it.

Employees should be able to relate these different project elements to the part of the project they are working on.

And More: WBS + Labor Codes

What are labor codes?:

If you can put an "ing" at the end of it, the it's going to be labor code.

Examples:
writing, reviewing, drawing, surveying, designing, typing, filing, talking, meeting

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And More: WBS + Labor Codes

The result:

Project
+ Phase
+ Task
+ Labor Code

Completely describes the time your employees spend on projects.

What's more, when these come out on invoices, they make sense.

Questions?

Thank You!

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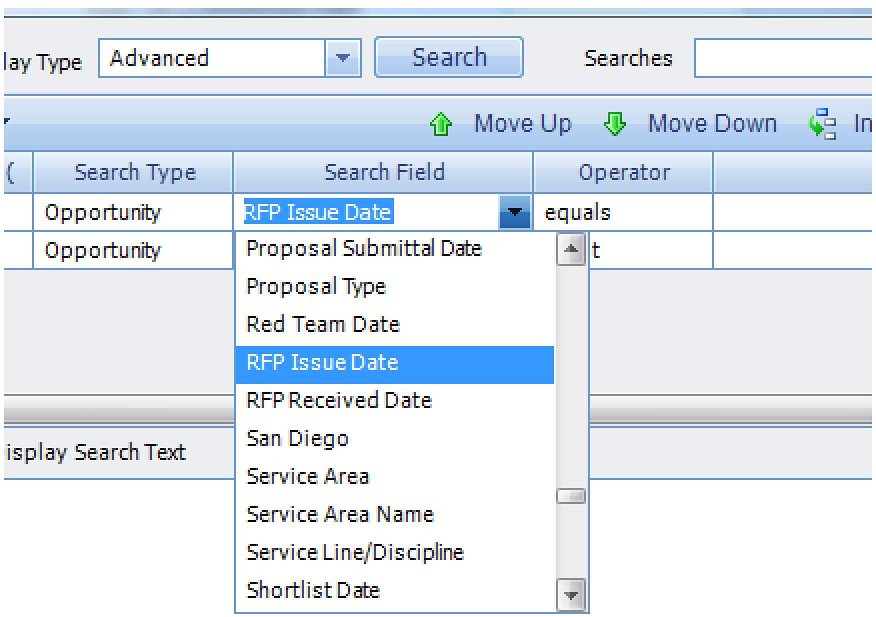
Contact:

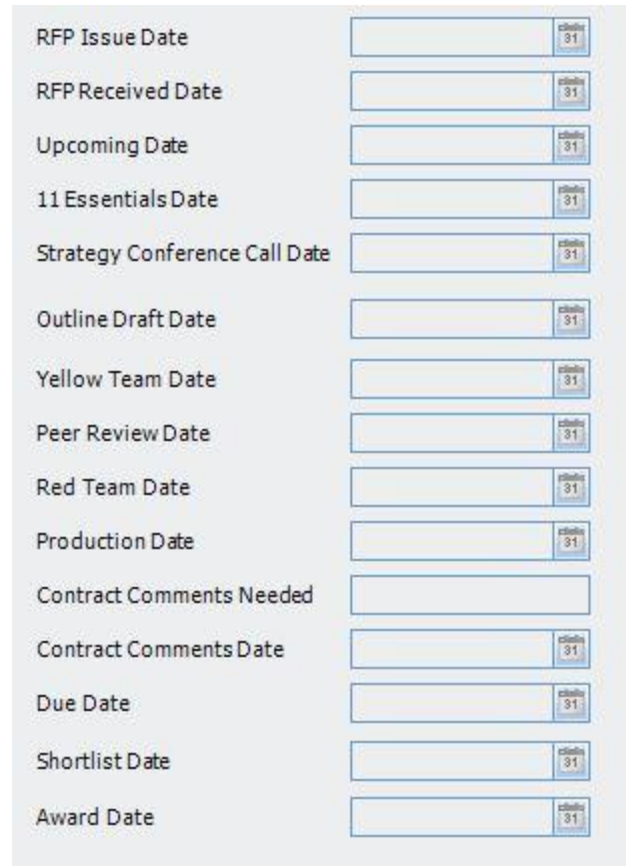
www.lorensaunders.com

www.saundersconsultinggroup.com

Example 1: Opportunity Checklist

Searching on these fields:





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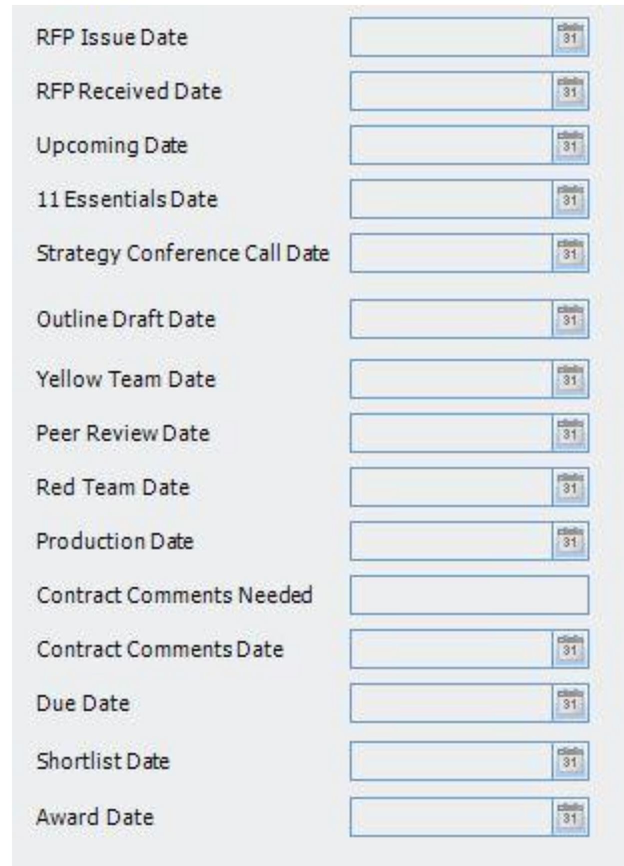

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Example 1: Opportunity Checklist

Opportunity milestones, the correct way:

Process Dates ▾ Insert Copy Delete

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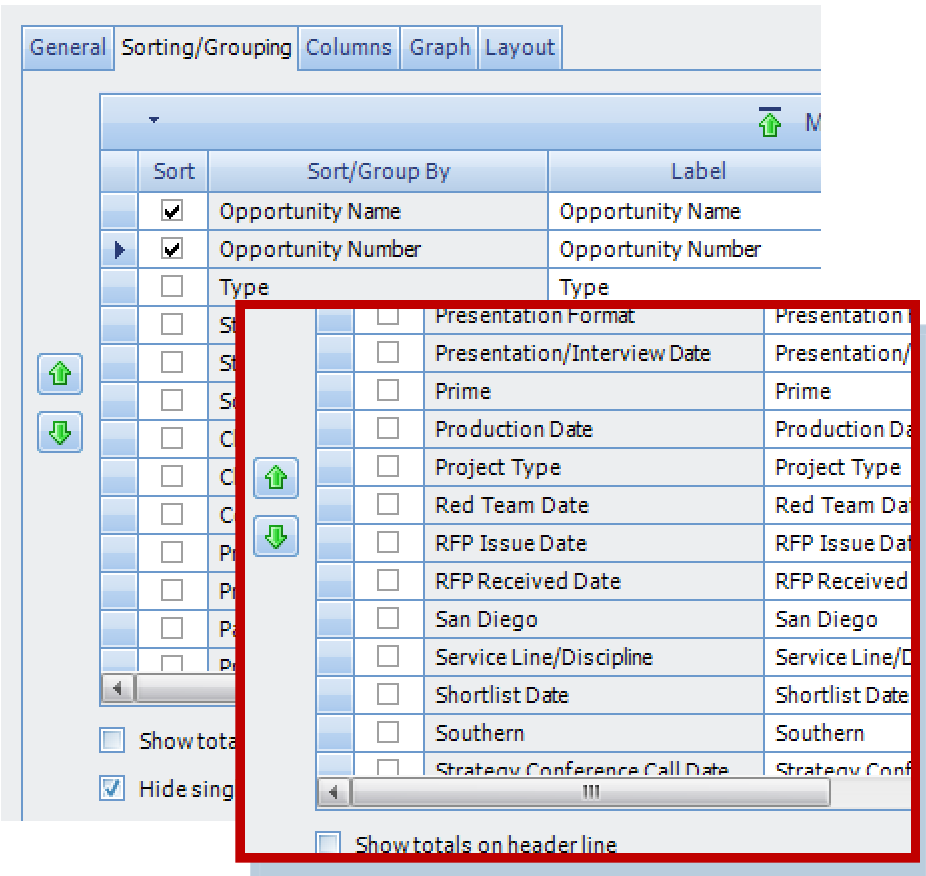
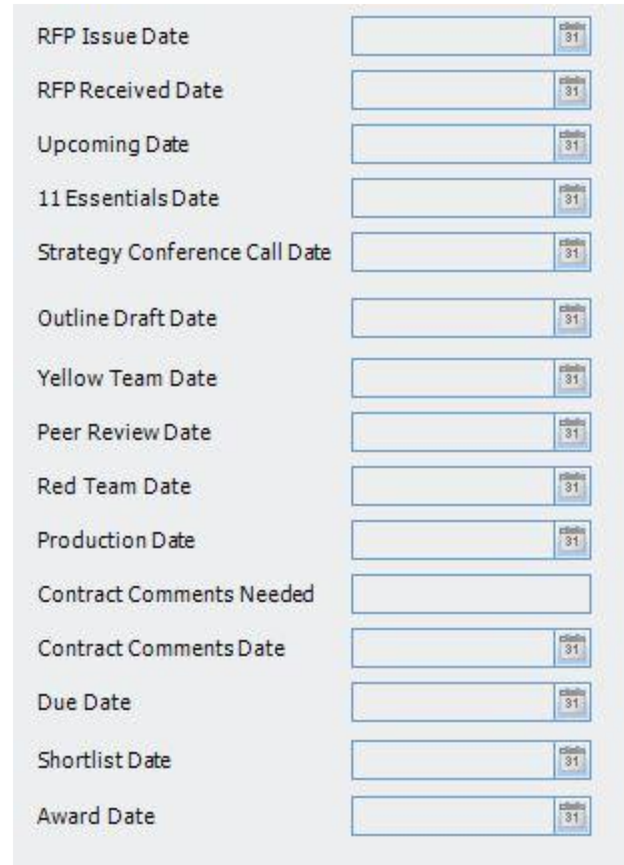
Example 1: Opportunity Checklist

Reporting on these fields:





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