

# Accessing Data Yourself

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In this workbook, we'll show you how easy it is to retrieve data from the *Lucity* desktop and web products. We'll demonstrate how to use Filters and Queries in the desktop and the web, find records, select data, and export into various formats. We will also cover helpful tools, like loading subsets or viewing relationships. This should help new users easily find the data they are looking for as well as provide existing users with a quick refresher course.

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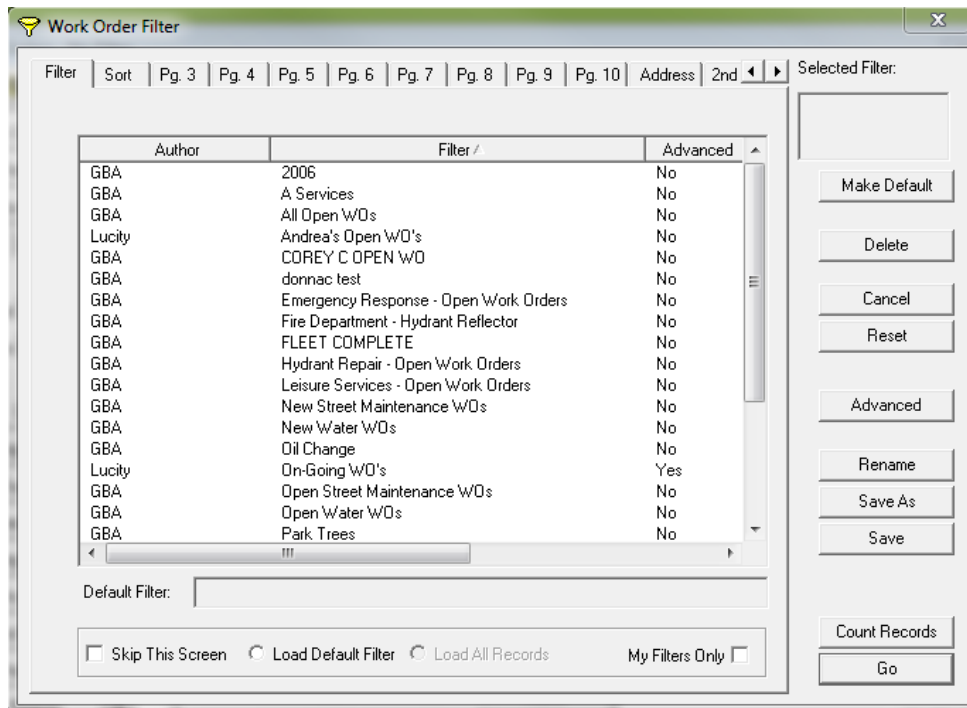
# Desktop

## Filters, Locate and Browse

### Loading and Defaulting Filters

How to display all the open work orders in a department?

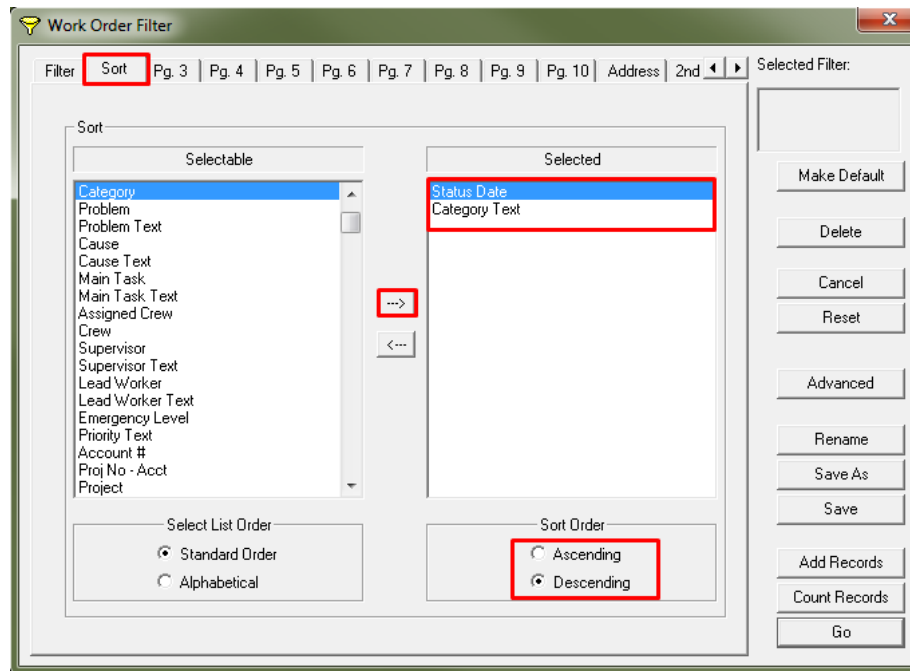
- When opening any module, the first display you will see before the records display is a filter screen. This is where you decide which particular records you would like to load. From here you can select existing filters or create your own.



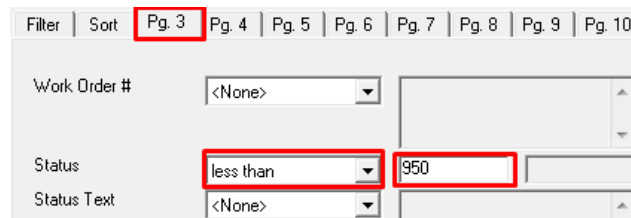
- If you select “Go”, this will load all the records in the Lucity system. Record 1 of 3281  
By default, these records will load sorted by Rec #, starting with the oldest records.
- In most cases, we are not going to want to load all the records. For instance, with work orders, we don’t necessarily care about work orders from last year, or canceled work orders, or work orders from other departments. Let’s create a filter to load only the open work orders for a particular department.

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- The second tab of our filter screen displays a sort order for the records that we will be loading. We will want to see all of our work orders in status date order, descending from newest to oldest, and then sorted by ascending Category text. This allows us to see the newest work orders first, and also groups by category.



- On Pg. 3 of the work order filter screen, go to the “Status” fields. You can see that picklist fields are filterable by either their code (numeric) or text fields. Because we will be doing a range of statuses (open, on-going, etc.) it is easier to use the numeric field. Select ‘Less Than’ from the drop-down menu, and fill in 950 for the value.



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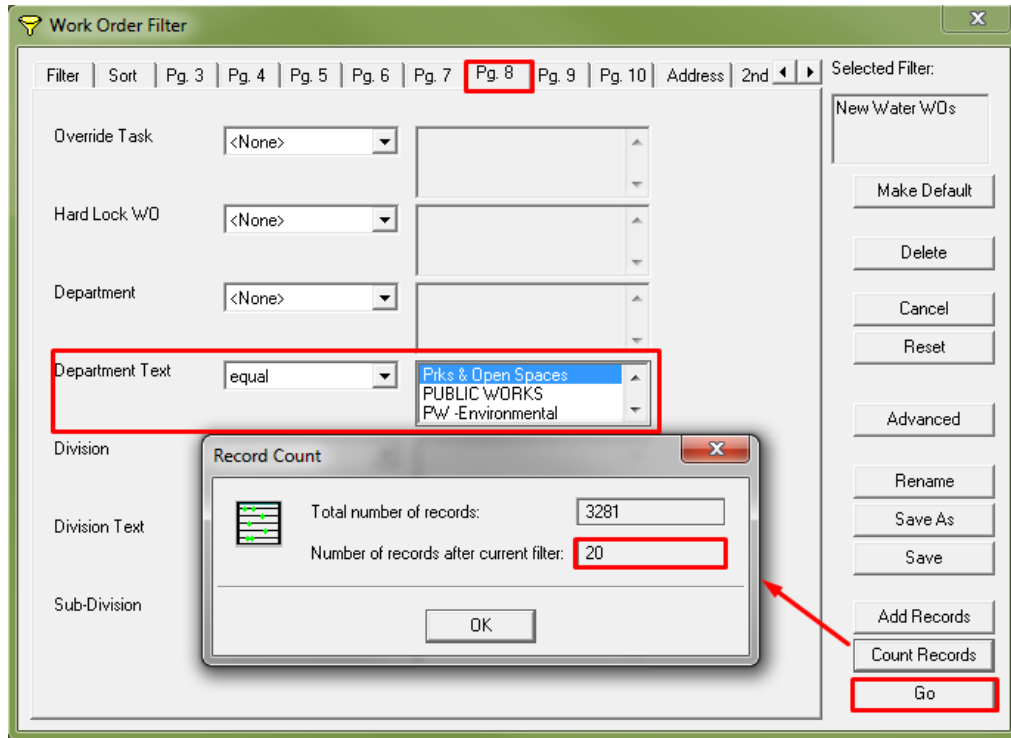
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- Look through the tabs until you find the “Department” field. The fields are displayed in the order you see them in the work order module. For department, let’s search by text. Select ‘equal’ from the drop and then scroll through the list to find “Prks & Open Spaces”. Our statement is looking for all work orders with a status of less than 950, and in the Parks & Open Spaces department. Select “Count Records” to make sure your filter returns a valid count. Also, let’s go ahead and save this filter as “Open Park Work Orders” and then select “Go”.



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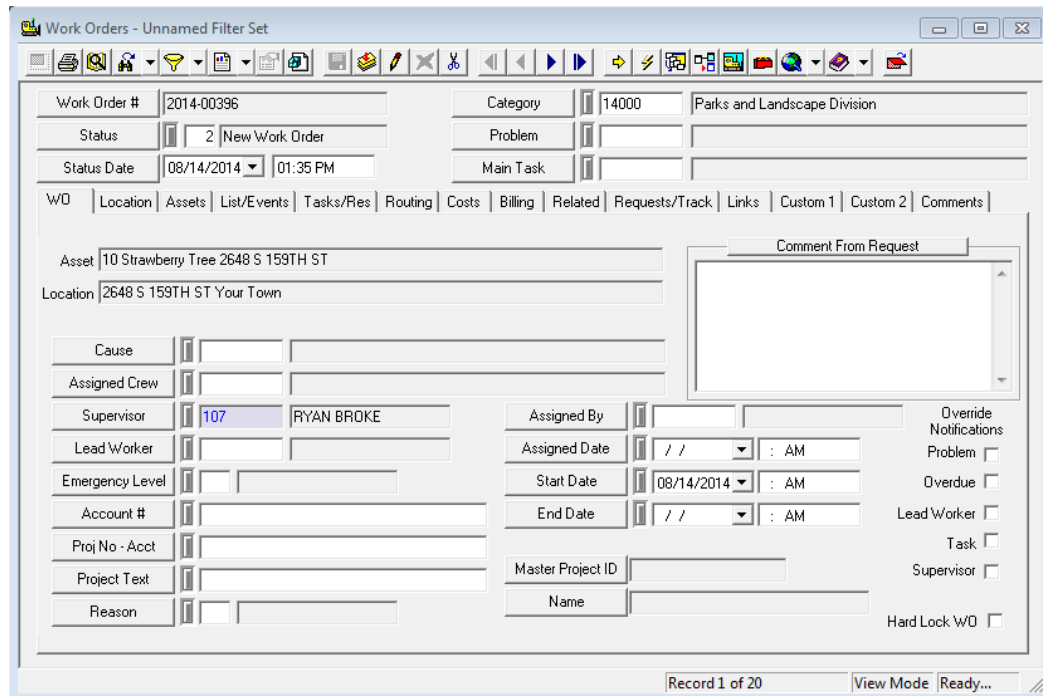
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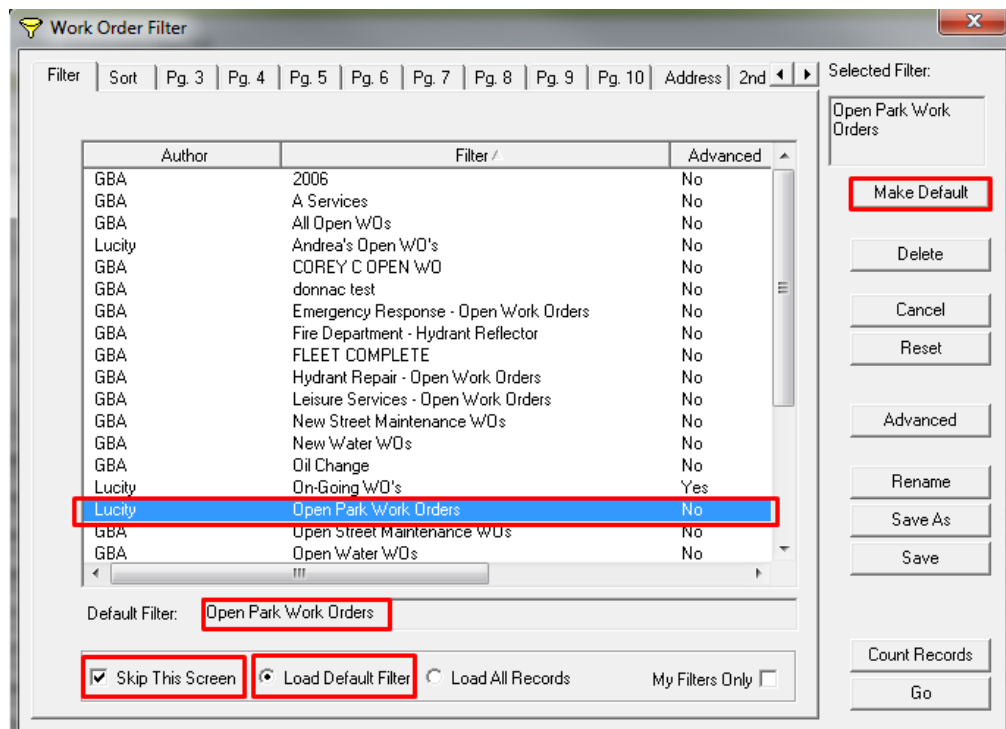
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- This will give you all of your parks department's open work orders records, showing most recent date first and grouped by category.





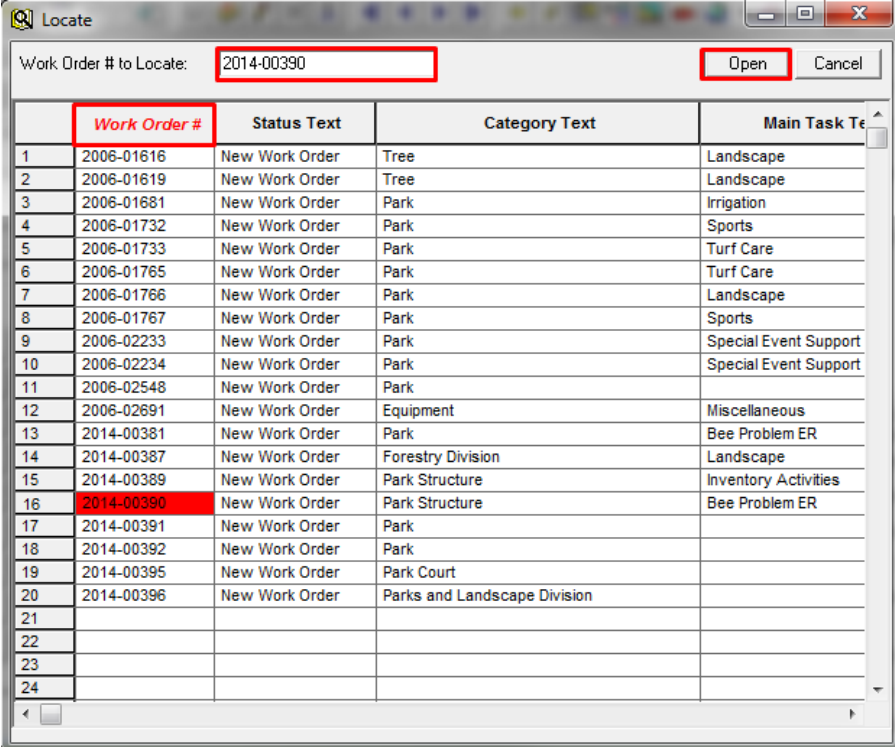
- If you want, you can set up your filter as the default filter. Use the filter button  to open up the filter screen. Find your filter in the list, and select "Make Default". Then select "Load Default Filter". This insures that whenever you open the filter screen and hit "Go", this filter will load. If you want to take it one step further, you can check the "Skip This Screen" option, so that your default filter loads every time you open the Work Order module.



## Locate

What if we are looking for a specific work order?

- There's a few ways we can identify a specific work order. You can use the arrow  buttons to go through all records in the filter one-by-one, and jump to the end or beginning of the record set. We could also go back to the filter button and narrow our filter down to a specific work order #, or add even more fields to narrow the work order criteria. We can also use the locate  button to see all the records in one view.




	Work Order #	Status Text	Category Text	Main Task Text
1	2006-01616	New Work Order	Tree	Landscape
2	2006-01619	New Work Order	Tree	Landscape
3	2006-01681	New Work Order	Park	Irrigation
4	2006-01732	New Work Order	Park	Sports
5	2006-01733	New Work Order	Park	Turf Care
6	2006-01765	New Work Order	Park	Turf Care
7	2006-01766	New Work Order	Park	Landscape
8	2006-01767	New Work Order	Park	Sports
9	2006-02233	New Work Order	Park	Special Event Support
10	2006-02234	New Work Order	Park	Special Event Support
11	2006-02548	New Work Order	Park	
12	2006-02691	New Work Order	Equipment	Miscellaneous
13	2014-00381	New Work Order	Park	Bee Problem ER
14	2014-00387	New Work Order	Forestry Division	Landscape
15	2014-00389	New Work Order	Park Structure	Inventory Activities
16	2014-00390	New Work Order	Park Structure	Bee Problem ER
17	2014-00391	New Work Order	Park	
18	2014-00392	New Work Order	Park	
19	2014-00395	New Work Order	Park Court	
20	2014-00396	New Work Order	Parks and Landscape Division	
21				
22				
23				
24				

*Note:* In the locate view, we retain our filterset, but NOT the sort order.

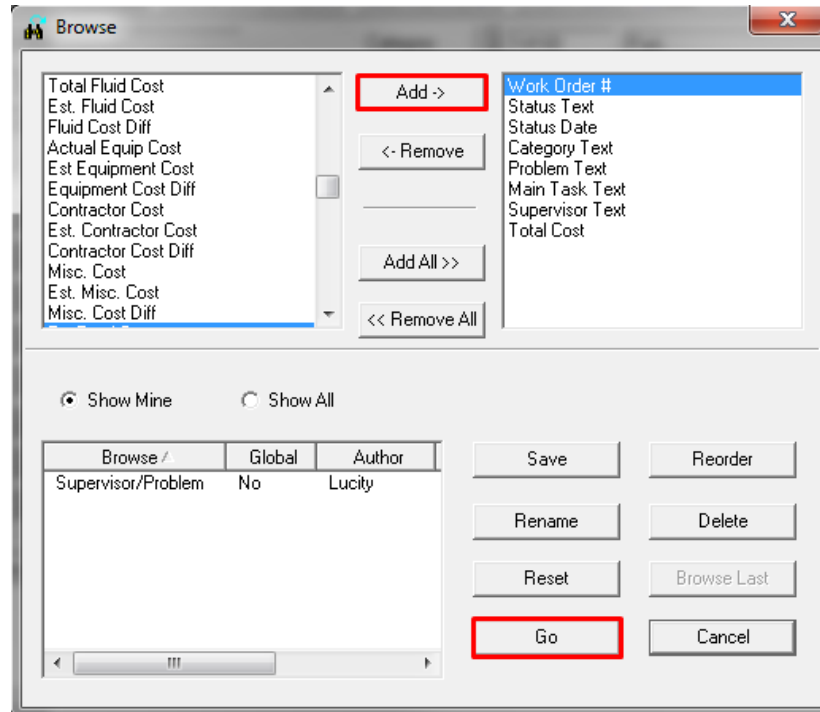
- You can use the search button at the top to begin searching for matching values in any field displayed. Use the scrollbar at the bottom to view additional fields. When you find the record you want, you can either double-click or select “Open” to jump to that record in your filter set.

## Browse

Now that we have this information, what can we do with it?


- Now that we have a list of all of our open work orders, we want to be able to pull that out of the system. Maybe you need to get it into a spreadsheet format, or e-mail the list to a supervisor. You can use the Browse  feature to create a custom, exportable view of your filter set, by defining the fields and order you want to see them in.

- The browse window will let you select all of the fields you need in your exported document. Add them to the window on the right. You can reorder as necessary. This allows you to only export the important information. Once you have your field list, click “Go”.



- The Browse display window looks similar to our locate view. However, this view retains the filter AND sort order of your records, and displays only the fields you selected.

Work Order #	Status Text	Status Date	Category Text
2014-00396	New Work Order	08/14/14	Parks and Landscape Division
2014-00395	New Work Order	08/11/14	Park Court
2014-00387	New Work Order	08/08/14	Forestry Division
2014-00391	New Work Order	08/08/14	Park
2014-00392	New Work Order	08/08/14	Park
2014-00389	New Work Order	08/08/14	Park Structure
2014-00390	New Work Order	08/08/14	Park Structure
2014-00381	New Work Order	08/05/14	Park
2006-02691	New Work Order	11/27/06	Equipment
2006-02548	New Work Order	11/14/06	Park
2006-02233	New Work Order	10/24/06	Park
2006-02234	New Work Order	10/24/06	Park
2006-01765	New Work Order	08/16/06	Park
2006-01766	New Work Order	08/16/06	Park
2006-01767	New Work Order	08/16/06	Park
2006-01732	New Work Order	08/07/06	Park
2006-01733	New Work Order	08/07/06	Park
2006-01681	New Work Order	08/01/06	Park
2006-01616	New Work Order	07/10/06	Tree
2006-01619	New Work Order	07/10/06	Tree

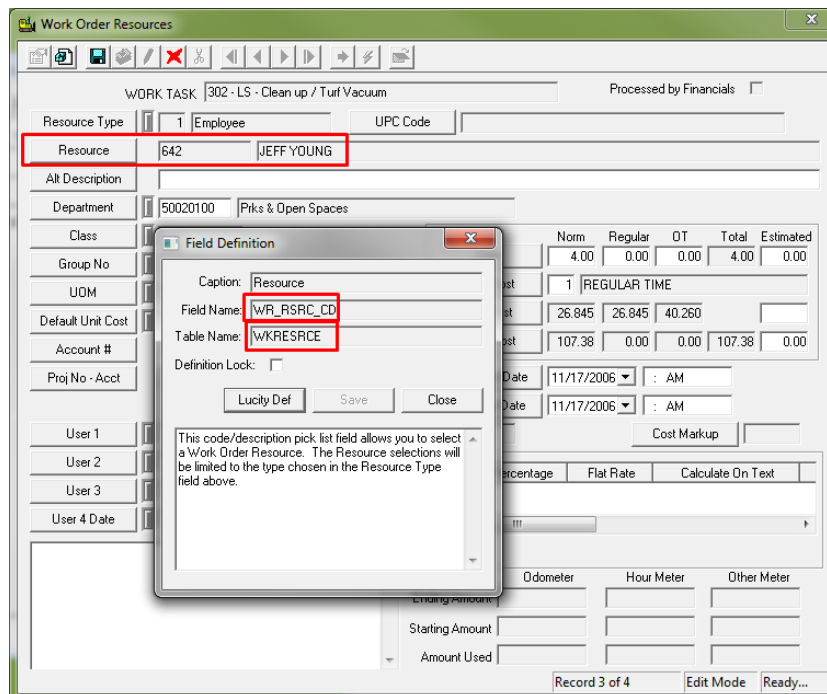
- You can then use the export  button to save this file as a simple, delimited text file. This file can then be opened up in a document or spreadsheet program, printed, or e-mailed.

## Advanced Queries and Reports

### Advanced Queries

How many work orders did Jeff Young work on in 2006?

- Sometimes the field you are trying to filter on is not available through the provided filter fields. It is possible to write advanced queries to query on child or linked tables. In this example, we will look at a child table (Work Order Resources) to determine what work orders a certain employee has been added as a resource.
- If you go to any child table, you can use the CTRL+Right-click function to get more information on a certain field. This allows you to see what the “behind-the-scenes” name is for each field. In the work order resource table, the resource name field is “WR\_RSRC\_TY”. You can see this module is pulling information from a table called WKRESRCE.



- After selecting the Filter button in a module, you can switch between “Standard” and “Advanced” filter views using the button on the right. This will display a field where you can create and customize advanced queries. The windows in the bottom display available table and field names, as well as SQL keywords and operators.
- Let’s start out with a Standard filter, and then add the advanced functionality to it. We know that we are looking for all work orders from the year 2006, which we can do using the standard filter tools. Use the “between” drop-down to look for a date range.

Status Date	between	01/01/2006
		12/31/2006

*Note:* Pay attention to which date fields you are using (status, start, end, etc).



- If we selected “Go” now, we would get all of the work orders in 2006. But we only want work orders where Jeff Young was a resource. Since this is not a work order field, but a work order resource field, we will have to use an advanced query. Click “Advanced”.

```

Advanced SQL | Report SQL |
SELECT * FROM
WKORDER WHERE WKORDER.WO_STAT_DT BETWEEN #01/01/2006# AND #12/31/2006#

```

- The filter view switches to show the SQL syntax behind the standard filter. Therefore, the date field is already filled in for us. Next, we will need to use a little bit of SQL knowledge to join the two tables together and query for Jeff Young as a resource. Be sure to save the query, and count records before you hit “Go”.

```


Advanced SQL | Report SQL |
SELECT * FROM
WKORDER WHERE WKORDER.WO_STAT_DT BETWEEN #01/01/2006# AND #12/31/2006#
AND WKORDER.WO_ID IN ( SELECT WKRESRCE.WR_WO_ID FROM WKRESRCE WHERE
WKRESRCE.WR_RSRC_TY = 'JEFF YOUNG' )

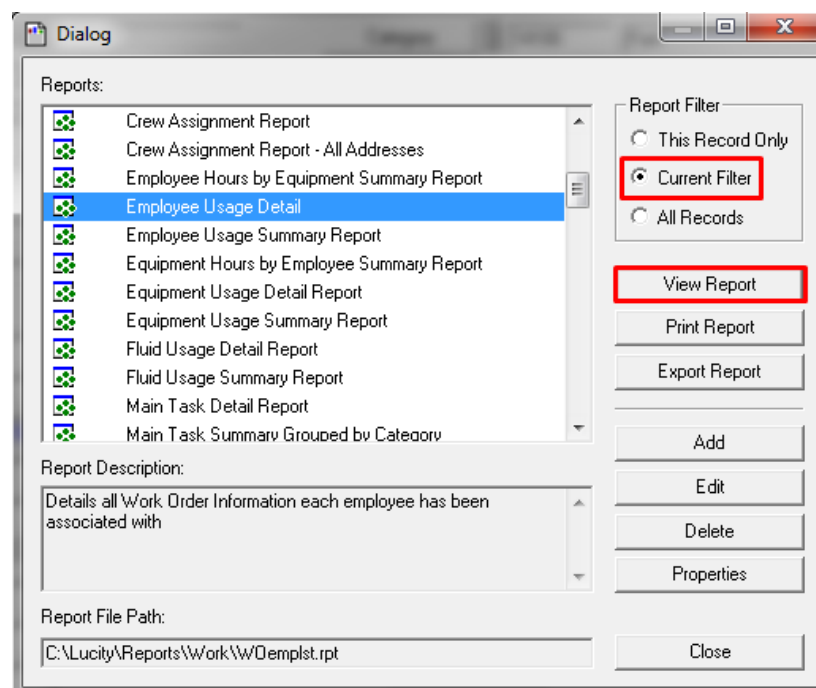
```

- We now have a filter set of 3 work order records that Jeff Young worked on in 2006.

## Reports

How many total hours did Jeff Young work in 2006?

- Reports are a convenient way to view and distribute data. Lucity provides a set of pre-defined reports in each module, and you may have your own custom reports added. You can use the reports to view information on your filtered records (all open work orders), or a particular record (e.g. one assigned to you as a supervisor).
- Let’s run an employee usage report on our filter set to get detailed summary of the work tasks, hours, and costs that Jeff Young worked. Click the report  button to access your reports.



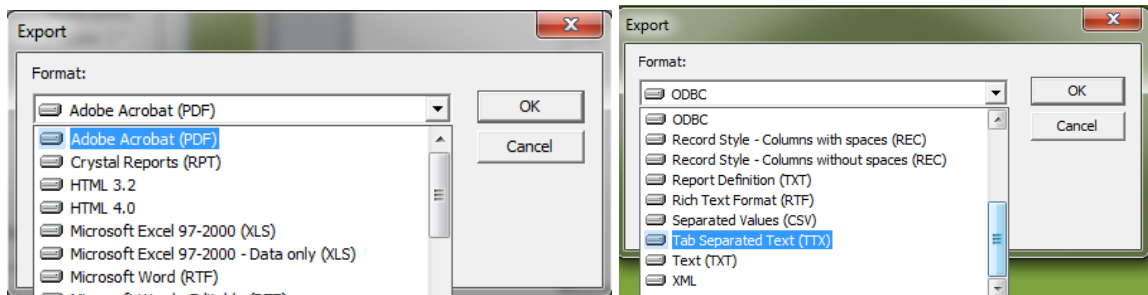
- We are going to select the “Employee Usage Detail” report, which is specifically designed to show us the exact information we are looking for. Run the report on the current filter, and then select “View Report”.

*Unit Cost	Units	*Total Cost	Work Order	Task	End Date
<b>642 JEFF YOUNG</b>					
\$28.85	22.50	\$604.01	2008-02233	001 - AD - Trails Maintenance	11/1/2008
\$28.84	7.50	\$201.34	2008-02234	302 - LS - Clean up / Turf Vacuum	
\$28.84	4.00	\$107.38	2008-02548	702 - SE - Set-up	
	<b>34.00</b>	<b>\$912.73</b>			
	<b>34.00</b>	<b>\$912.73</b>			

## Export a Report

What can I do with this report?

- There are a variety of ways that reports can be exported. You can print the report directly, or export the information to a number of saved file types:




- You can also e-mail the report directly by exporting with MAPI. This opens up a Send Mail screen where you can enter the recipients, subject, and include a message.

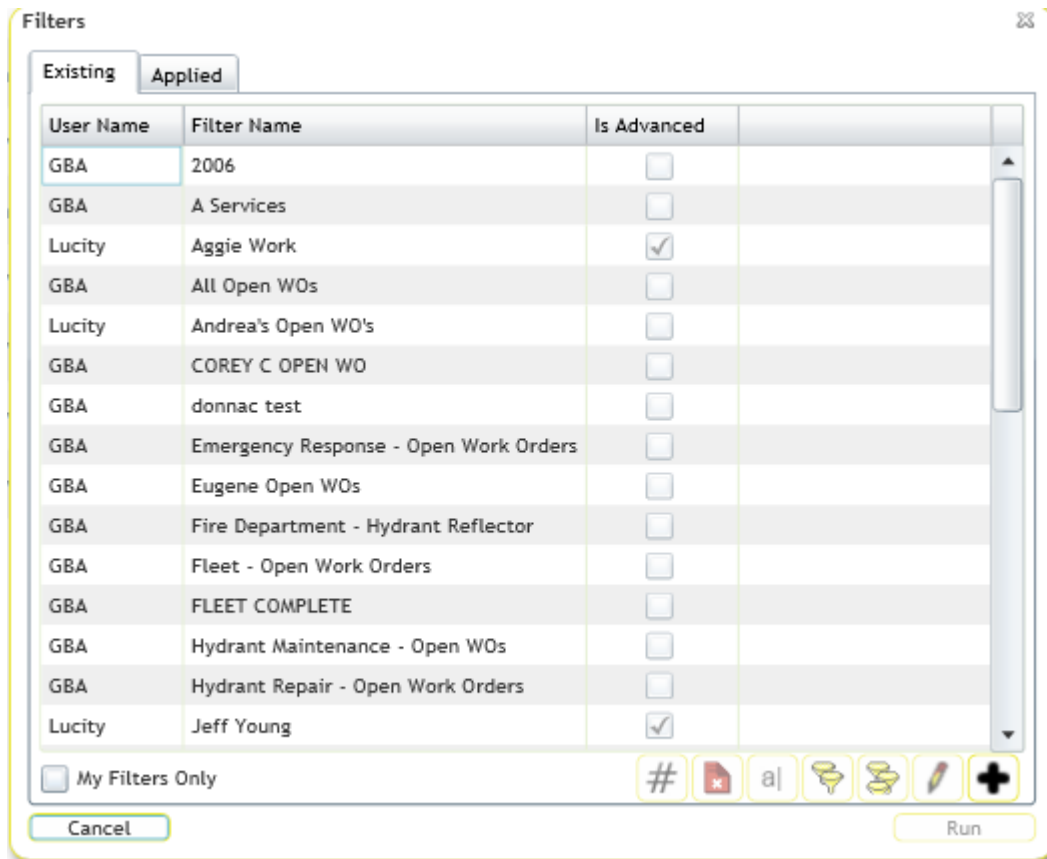
# Web

## Filtering and Sorting in Views and Grids

### Loading Filters

How many open work orders do we have?

- First, we will determine how many work orders we have. Click on the filter button  . From here you have the option to select a saved filter, view the current filter parameters, or create a new filter.



User Name	Filter Name	Is Advanced
GBA	2006	<input type="checkbox"/>
GBA	A Services	<input type="checkbox"/>
Lucy	Aggie Work	<input checked="" type="checkbox"/>
GBA	All Open WOs	<input type="checkbox"/>
Lucy	Andrea's Open WO's	<input type="checkbox"/>
GBA	COREY C OPEN WO	<input type="checkbox"/>
GBA	donnac test	<input type="checkbox"/>
GBA	Emergency Response - Open Work Orders	<input type="checkbox"/>
GBA	Eugene Open WOs	<input type="checkbox"/>
GBA	Fire Department - Hydrant Reflector	<input type="checkbox"/>
GBA	Fleet - Open Work Orders	<input type="checkbox"/>
GBA	FLEET COMPLETE	<input type="checkbox"/>
GBA	Hydrant Maintenance - Open WOs	<input type="checkbox"/>
GBA	Hydrant Repair - Open Work Orders	<input type="checkbox"/>
Lucy	Jeff Young	<input checked="" type="checkbox"/>

My Filters Only

Cancel Run

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- Click add **+** to create a new filter. Choose the module you are searching on (this includes child modules), the field, the operator, and the value. You can also add additional criteria, or view or edit the advanced query. You can then save or run the filter from here.

- This will load up a filter set of all of our open work orders.

**Work Orders**

WOs 10 1 of 141 GO > >>

	Work Order #	Status Text	Status Date	Category Text	Problem Text	Main Task Text	Supervisor Text	Le
	2014-00408	New Work Order	8/20/2014	Tree	E-mailed Request		BORIS ARANOV	
	2014-00406	New Work Order	8/19/2014	Sewer Pipe			RICK HONAS	
	2014-00404	New Work Order	8/18/2014	Sewer Pipe				
	2014-00402	New Work Order	8/18/2014	Sewer Pipe				
	2014-00401	New Work Order	8/18/2014					
	2014-00399	New Work Order	8/18/2014	Sewer Pipe			George Butler	
	2014-00398	New Work Order	8/15/2014	Sewer Pipe	Pipe Repair	Sewer Line Break Repair	RICK HONAS	Ca
	2014-00396	New Work Order	8/14/2014	Parks and Landscape Division			RYAN BROKE	
	2014-00395	New Work Order	8/11/2014	Park Court			FOREST SCHOTTERHEIM	
	2014-00392	New Work Order	8/8/2014	Park			DONALD BRICK	

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## Grid Filters & Sorting

How many of these open work orders are on a sewer asset?


- Each field within the grid has its own sort and filter functions to find records quickly. You can use these to sort the values numerically or alphabetically, or filter for a specific value or criteria. We will use these to narrow down our Open Work Order filter set for just Rick Honas' work orders.
- Go to the supervisor text field. Notice when you hover below the "Supervisor Text" title, two buttons appear, a sort and filter button. Let's use the filter button to only view the work orders where he is a supervisor.
- This will show us a view of all open work orders where the category contains the word sewer (Sewer Pipe, Sewer Structure, etc).
- We can use the sort button to reorder any field. Let's use the status date field to see when the oldest work order in a sewer category is.

*Note:* You can see which fields have active sorts or filters on them by the highlighted buttons on the toolbar.

Work Order #	Status Text	Status Date	Category Text	Problem Text	Main Task Text	Supervisor Text
		⬇	⬇			

## Creating and Loading Subsets

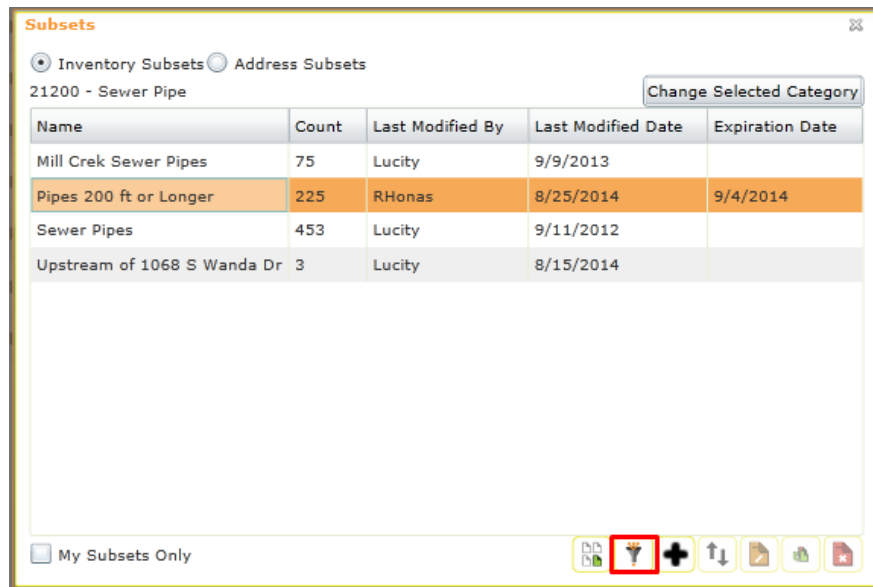
How many open work orders do we have where a sewer pipe is longer than 200 feet?

- Next let's use an asset module to define a subset, and then load it into our Open Work Order filter. Let's open up the Sewer Pipe module by going to Modules>>Sewer>>Inventory>>Sewer Pipes.
- Use your filters to search for all pipes with a Length of greater than or equal to 200.
- About half of our pipes meet this criteria. Let's create a subset using the subset button  .

Name	Count	Last Modified By	Last Modified Date	Expiration Date
Mill Creek Sewer Pipes	75	Lucity	9/9/2013	
Sewer Pipes	453	Lucity	9/11/2012	
Upstream of 1068 S Wanda Dr	3	Lucity	8/15/2014	

My Subsets Only  
 Filtered Set  Selected Records  
 Mark Permanent 9/4/2014 15  
 Name: Pipes 200 ft or Longer

- Save your subset. Now, go back to your Open Work Order filter. You can then load the subset you just created into your filter using the subset button. Select the appropriate inventory category, and then the load into filter button. Alternatively, you can open all work orders that include pipes in the subset, and then filter again for the open work orders.

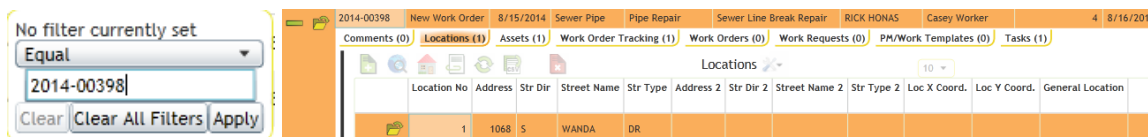



- We now have only 10 records displaying. Keep in mind that each of these work orders includes a sewer pipe over 200 feet, but there may be shorter pipes included as well.

## Property Viewer

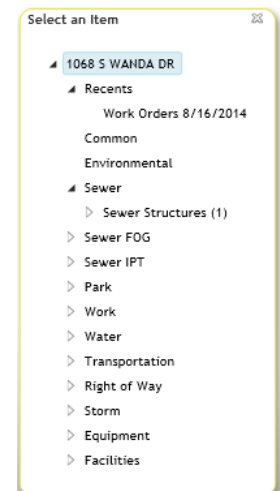
What other assets and work orders exist at a specific address?

- If we are going to do work at a specific address, you may want to see what other assets or historical work orders or requests exist at that location. Let's find a new work order and see the related information. We will use the filter function to find Work Order #2014-00398.



- We have an address for this work order. Let's use the Property Viewer  tool to see what else is here.

- We can also see that there is a sewer structure, and a recent work order at this same location.



## Filtering and Exporting

### Filters with Reserved Words

How many work orders do I still have open from last month?

- You can also use advanced queries with the web filter like in the desktop. This also allows you to take advantage of web-only “Reserved Words”. These allow you to input a string that dynamically pulls a filter set based on the time you run the filter, and also based on who is running it.
- First, let’s create a new filter. We are going to search for all open work orders with a status of less than 950, where the supervisor is Rick Honas, and the status date falls between the first and last day of last month. If we do a count, we see that this filter will return 5 records.

The screenshot shows the 'Add Filter' dialog box with the following configuration:

- Filter Name: (empty)
- Build-A-Filter: Advanced
- Criteria 1: Work Orders, Status, Less Than, 950
- Criteria 2: Work Orders, Supervisor Text, Equal, RICK HONAS
- Criteria 3: Work Orders, Status Date, Between, 8/1/2014 and 8/31/2014
- Count button: Record Count: 4, Copy, OK

Buttons at the bottom: Cancel, Count, Save, Run

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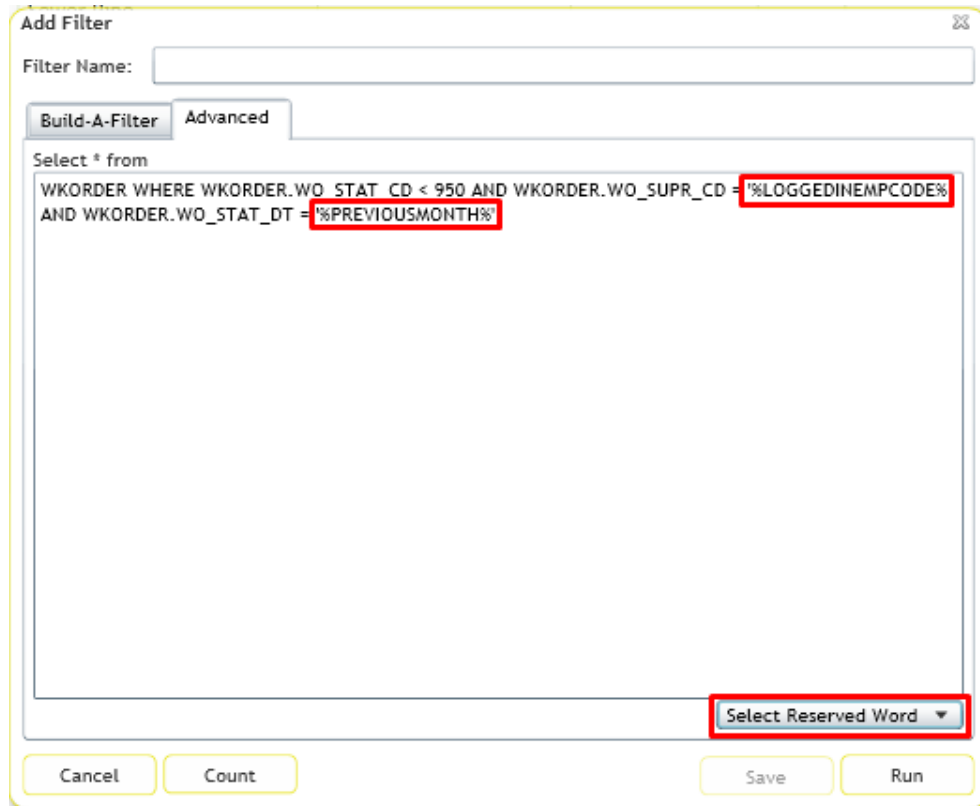
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- This filter is great, but will only return the results we want when we run it for Rick Honas, and the date range only applies to this month. We won't save this filter. Instead, let's switch to the advanced view.



- We can use the reserved word drop-down list to replace our supervisor with %LOGGEDINUSERID% so that the appropriate results will display for any supervisor that is logged in and runs this filter. We can also use %PREVIOUSMONTH% instead of a static date range, so that it will pull previous month records depending on the date that we run the filter. This way, the filter can be saved and never needs to be updated.

*Note:* For a complete list and descriptions of the reserved words available, see the help guide.

- You can see we get the same 4 results when we run this filter, and it will be correct for whoever or whenever we run this filter in the future.

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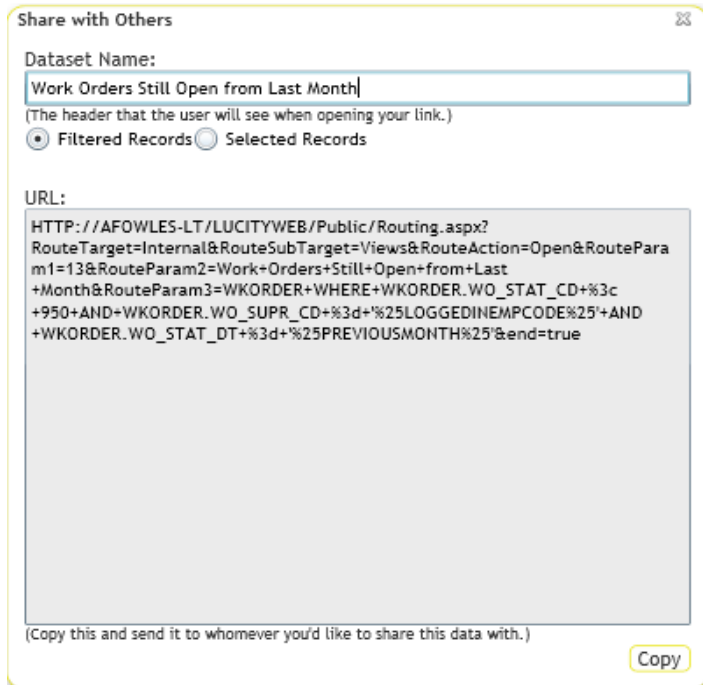
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## Sharing Views

How can I share what I am seeing with another Lucity user?

- If you have a set of records that you want to share with another Lucity user, you can use the Share with Others  button to create a shareable URL that will open up the same record set for another user.



Share with Others

Dataset Name:  
Work Orders Still Open from Last Month  
(The header that the user will see when opening your link.)

Filtered Records  Selected Records


URL:  
HTTP://AFOWLES-LT/LUCITYWEB/Public/Routing.aspx?  
RouteTarget=Internal&RouteSubTarget=Views&RouteAction=Open&RouteParam1=13&RouteParam2=Work+Orders+Still+Open+from+Last+Month&RouteParam3=WKORDER+WHERE+WKORDER.WO\_STAT\_CD+%3c+950+AND+WKORDER.WO\_SUPR\_CD+%3d+%25LOGGEDINEMPCODE%25+AND+WKORDER.WO\_STAT\_DT+%3d+%25PREVIOUSMONTH%25&end=true

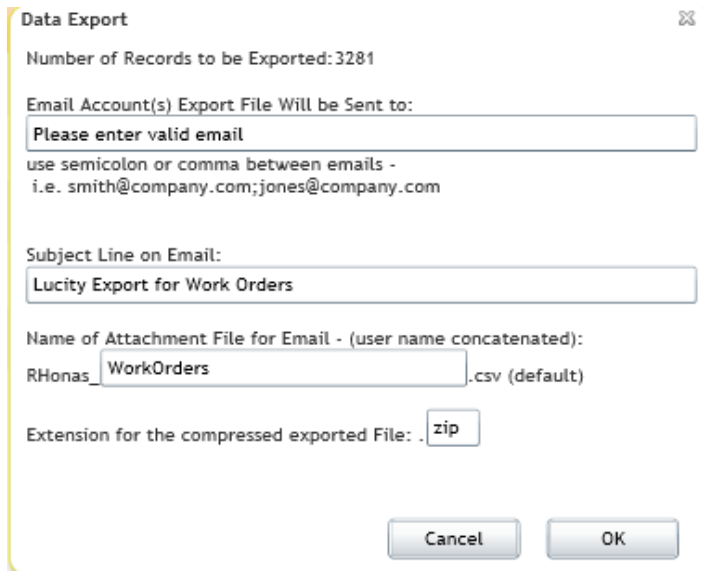
(Copy this and send it to whomever you'd like to share this data with.)

Copy

## Exporting Data

How can I get a copy of the records in my filter set for a non-Lucity user?

- If you need to get the data from a record set outside a Lucity (i.e., to e-mail to a contractor, or export for a bar graph in a spreadsheet program), you can export the current filter set by e-mailing a zip file that contains a delimited text file. This is done using the Export Current View  button.
- You can define the recipient's e-mail address, the e-mail subject, the name of the file (prefaced with Username\_), and change the zip file's extension (to get past an e-mail filter).



Data Export

Number of Records to be Exported: 3281

Email Account(s) Export File Will be Sent to:  
Please enter valid email  
use semicolon or comma between emails -  
i.e. smith@company.com;jones@company.com

Subject Line on Email:  
Lucity Export for Work Orders


Name of Attachment File for Email - (user name concatenated):  
RHonas\_WorkOrders.csv (default)

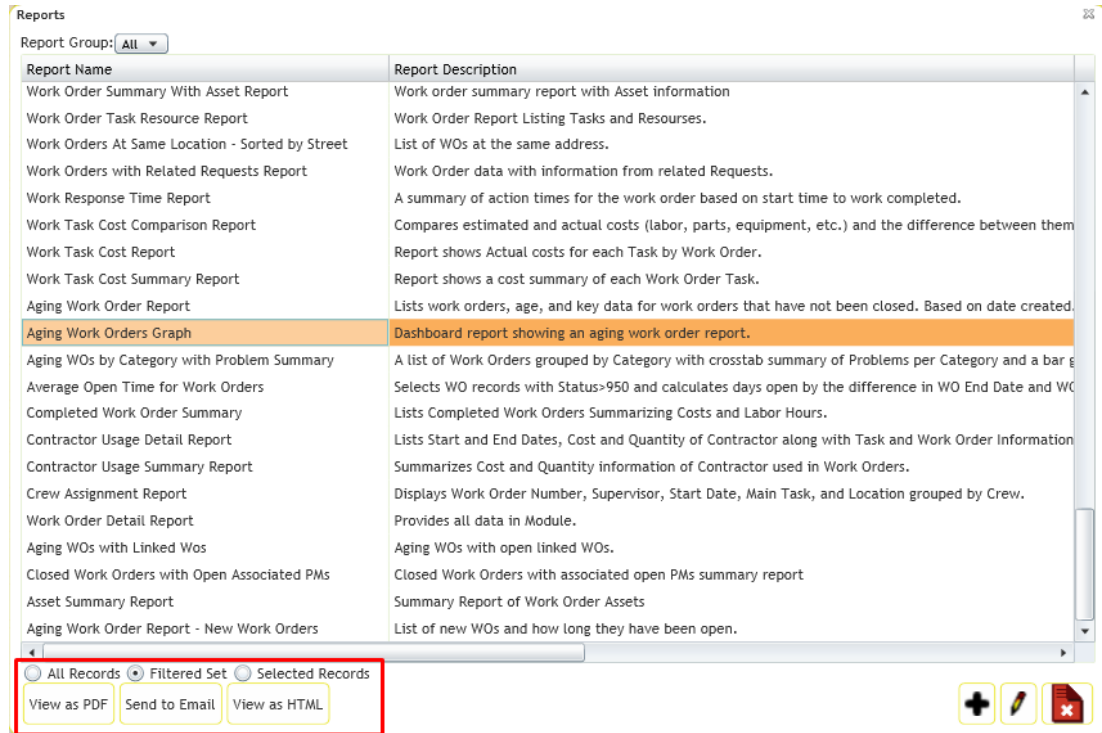
Extension for the compressed exported File: zip

Cancel OK

## Web Reports

How can run a report to let us know the ages of our open work orders?

- First, you will need to set up an applicable filter. Let's look at all of our open work orders. Run the saved filter for all open work orders.
- Next, we will use the reports  button to select a report from our available web reports. Let's choose the Aging Work Orders Graph report.



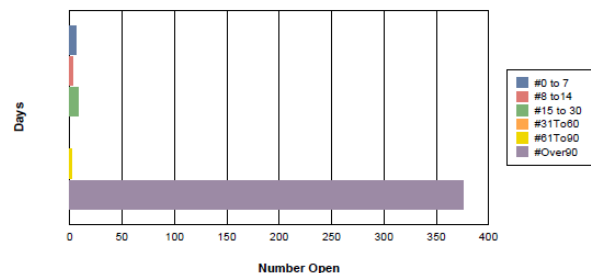
Report Name	Report Description
Work Order Summary With Asset Report	Work order summary report with Asset information
Work Order Task Resource Report	Work Order Report Listing Tasks and Resources.
Work Orders At Same Location - Sorted by Street	List of WOs at the same address.
Work Orders with Related Requests Report	Work Order data with information from related Requests.
Work Response Time Report	A summary of action times for the work order based on start time to work completed.
Work Task Cost Comparison Report	Compares estimated and actual costs (labor, parts, equipment, etc.) and the difference between them
Work Task Cost Report	Report shows Actual costs for each Task by Work Order.
Work Task Cost Summary Report	Report shows a cost summary of each Work Order Task.
Aging Work Order Report	Lists work orders, age, and key data for work orders that have not been closed. Based on date created.
<b>Aging Work Orders Graph</b>	<b>Dashboard report showing an aging work order report.</b>
Aging WOs by Category with Problem Summary	A list of Work Orders grouped by Category with crosstab summary of Problems per Category and a bar g
Average Open Time for Work Orders	Selects WO records with Status>950 and calculates days open by the difference in WO End Date and WO
Completed Work Order Summary	Lists Completed Work Orders Summarizing Costs and Labor Hours.
Contractor Usage Detail Report	Lists Start and End Dates, Cost and Quantity of Contractor along with Task and Work Order Information
Contractor Usage Summary Report	Summarizes Cost and Quantity information of Contractor used in Work Orders.
Crew Assignment Report	Displays Work Order Number, Supervisor, Start Date, Main Task, and Location grouped by Crew.
Work Order Detail Report	Provides all data in Module.
Aging WOs with Linked Wos	Aging WOs with open linked WOs.
Closed Work Orders with Open Associated PMs	Closed Work Orders with associated open PMs summary report
Asset Summary Report	Summary Report of Work Order Assets
Aging Work Order Report - New Work Orders	List of new WOs and how long they have been open.

All Records
  Filtered Set
  Selected Records

- We have a few options. You can run the report on all, filtered, or selected records. Let's choose the Filtered Set. You can also choose how you want to create the report: as a pdf, sending it to an e-mail address, or viewed as HTML. Let's view a pdf file.

### Aging Work Order Report

8/25/2014



*Note:* You can run any number of reports on your data. If you have a custom report you use in the desktop, it will need to be web-enabled before you can run it on the browser.