

TRAINING GUIDE

Tablet: Cradle to Mobile Dashboard and Views



# Tablet Cradle to Mobile

#### User Interface - Dashboard and Views

There are 3 major components to mobile. These correlate to the 3 portions of the Lucity Web application. These 3 components are the dashboard, views and forms, and GIS.

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# Dashboard

The dashboard is comprised of multiple dashboard views which appear on the left side of the page:

#### **Android**



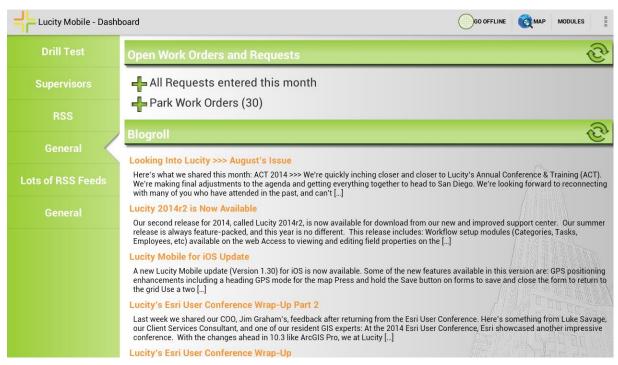
#### iOS



Selecting a view from the left side will display the dashboard view.

Notes:			
	<u> </u>		

#### **Android**



#### iOS

Pad ♀	4:30 PM	∦ 10% 🗀		
Dashboards	General	<b>Q</b> <u>1</u>		
Drill Test	Open Work Orders and Requests			
Supervisors	All Requests entered this month	(i) >		
RSS	Park Work Orders (30)	(i) >		
General	Blogroll			
Lots of RSS Feeds	Looking Into Lucity >>> August's Issue			
General	Here's what we shared this month: ACT 2014 >>> We're quickly inching closer and closer to Lucity Annual Conference & Training (ACT). We're making final adjustments to the agenda and getting everything together to head to San Diego. We're looking forward to reconnecting with many of you			
	Lucity 2014r2 is Now Available			
	Our second release for 2014, called Lucity 2014r2, is now available for download from our improved support center. Our summer release is always feature-packed, and this year is This release includes: Workflow setup modules (Categories, Tasks, Employees, etc) available.	no different.		
	Lucity Mobile for iOS Update			
	A new Lucity Mobile update (Version 1.30) for iOS is now available. Some of the new feature in this version are: GPS positioning enhancements including a heading GPS mode for the and hold the Save button on forms to save and close the form to return to the grid Use at	map Press		
	Lucity's Esri User Conference Wrap-Up Part 2			
	Last week we shared our COO, Jim Graham's, feedback after returning from the Esri User Here's something from Luke Savage, our Client Services Consultant, and one of our residence experts: At the 2014 Esri User Conference, Esri showcased another impressive conference.	ent GIS		
	Lucity's Esri User Conference Wrap-Up			

Dashboard views can contain Asset Trees, Data Drills, or RSS feeds. Reports and Links and embedded urls are not supported in the mobile dashboards. Quick lookups will be supported in a future Android release.

### RSS Feeds

This is an example of an RSS feed:

#### **Android**



#### iOS

iPad 중	4:34 PM
Dashboards	Lots of RSS Feeds
Drill Test	Lots of RSS
Supervisors	Web API in Aberdeen Scotland
RSS	For my last stop of my UK user group tour, I stopped in the town of ever been. It's at 57 degrees north latitude. That's the same as Juni
General	The group here in Aberdeen was a great group. I spoke about Web
Lots of RSS Feeds	Angular.js Talk in Glasgow Scotland
General	It's been a busy week. Today I got to spend the day in Glasgow and got to talk to a great group of developers about Angular is. They we

Hyperlinks will open the content in the default browser on the device (Chrome or Safari).

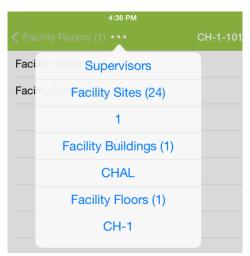
## Asset Trees and Data Drills

In the Lucity Mobile Android application, asset trees and data drills are displayed in a tree format.



In iOS tables and phones, asset trees and data drills are show in hierarchical views.





To drill into a data drill or asset tree item to see its children on Android, tap the . It will expand into a tree format which can be collapsed and expanded by tapping on the Plus or Minus.

To drill into a data drill or asset tree item in iOS, tap the  $\bigcirc$  . This varies based on iOS version. Some older (6.x) iOS versions use a blue arrow. It is likely that future iOS versions (iOS 8+) may also vary.

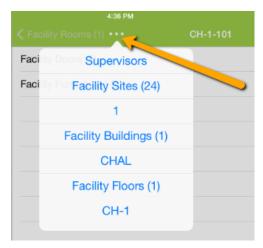


iOS only shows one level at a time. The parent level (Facility Rooms) is displayed here:



To navigate back up to the parent, tap on this parent navigation item. In the above screen capture "Facility Rooms (1)".

If you are nested several levels deep in the asset tree in iOS, a "..." will display. Tapping the "..." will display the entire parent hierarchy to make it easier to jump up to grand parent or great grandparent levels:

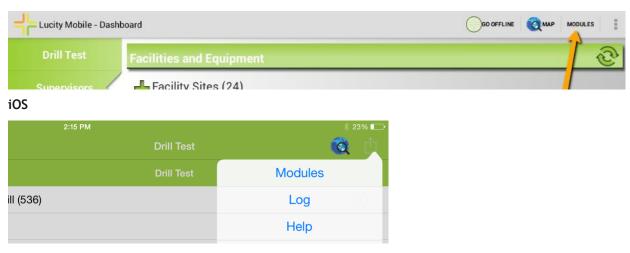


To launch a view from an asset tree or a data drill, tap the item (anywhere but the  $\stackrel{\bullet}{\bullet}$  or  $\stackrel{(1)}{\bullet}$ ). This will open a view (grid) to show the relevant records.

## Modules Menu

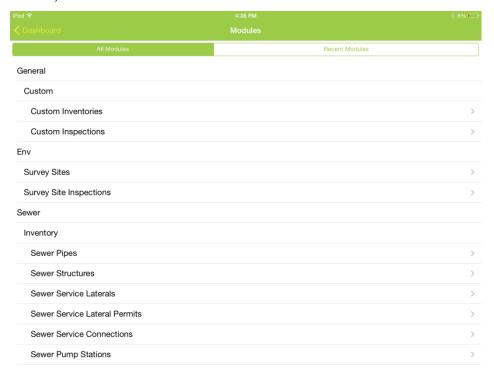
It is a good idea to configure user's dashboards to show the modules they typically will be accessing out in the field. It is a fast way to launch views to the pre-filtered relevant data for that user. To access views that are not in the dashboard or to access view data that is not in a dashboard frame, you can open the modules menu. This is accessed from the menu button on the dashboard.

#### **Android**



notes:	 	 	 	

The modules menu screen will show all modules which the user has available to them. If the user has Run permissions to the module and belongs to a group that ha permissions to the default view for the module, it will be available in the menu.



The user can also access the recent modules to quickly jump into modules that have recently been opened. On Android this shows recent modules opened from the modules menu or from the dashboard. On iOS this shows the recent modules opened from the modules menu.

#### **Android**



#### iOS



# Configuring Dashboards for Mobile Use

Configuring dashboards for use in the field is very similar to configuring them for use within Lucity Web. Configuring dashboards is beyond the scope of this session, but we will cover some topics specific to mobile (particularly offline mobile).

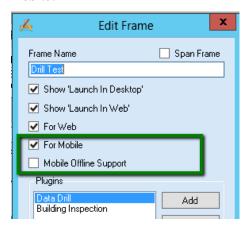
Users will use the same dashboard for Lucity Mobile that they use for Lucity Web, but you can configure individual frames to be accessible in the web or be accessible in mobile (or both). By default new frames are used by both mobile and web.

In Lucity 2015 and earlier releases you can configure dashboards like this:

To edit whether a frame is available in mobile, go to the user's dashboard (or to a Shared Tab in the templates option on Dashboard/Preferences). Select the tab and click Edit, or selected the Shared Tab and click Edit Tab.

Select the frame you want to edit from the list on the Edit Dashboard Tab List and click Edit.

The first 2 settings (show Launch...) are not relevant for mobile. The last 2 settings are important for mobile.

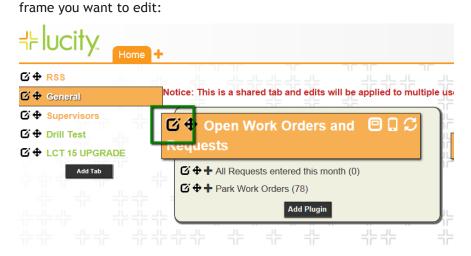


If "For Mobile" is checked the frame will exist on the user's mobile dashboard. If "Mobile Offline Support" is checked, it will appear on the user's offline mobile dashboard (Android only).

For Lucity 2015r2, these dashboard edits are made directly on the Lucity Web application:

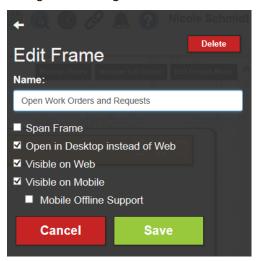
To edit your own, click Enter Design Mode

and click the edit button for the



Be aware that if you are changing a shared tab, you will be changing this setting for all users of that shared tab.

Change the setting to make it hidden or visible on the mobile device.

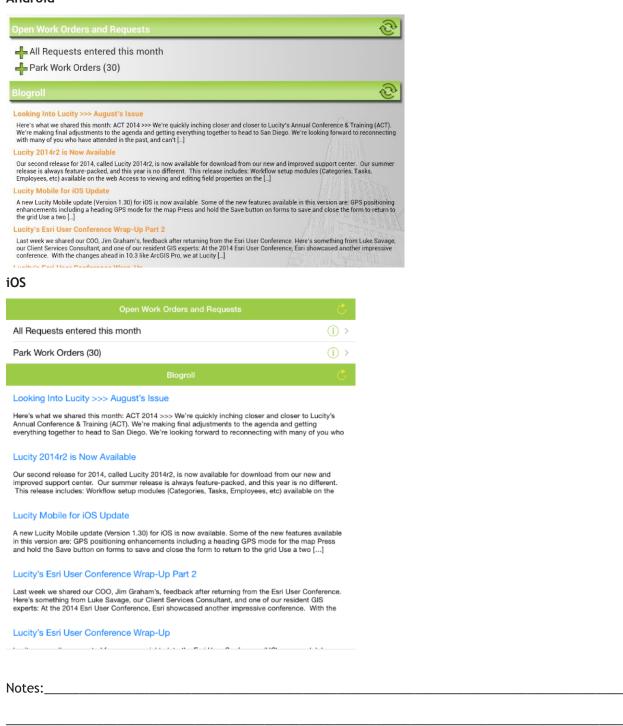


For both Lucity 2015 and earlier and Lucity 2015r2, these settings are effective immediately and do not require any server cache resets. The next time the user logs out and back into the mobile application, they will see the updates on their dashboard.

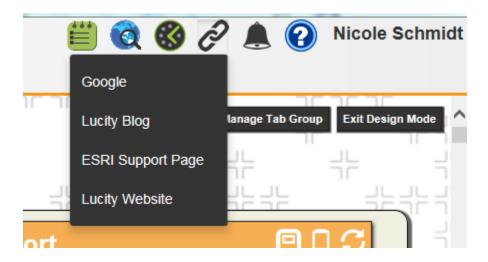
Dashboards will lay out differently on mobile than they will on the web application. Span Frame, for example, is not relevant on the dashboard. All dashboard frames will appear stacked in a single column for each dashboard view.

Notes:	 	 	

#### **Android**



Reports and Links are not supported in the mobile dashboards. Report frames are automatically excluded from the display. The mobile dashboard also does not show Links that are configured in Lucity. An example of the links menu is shown in the following screen capture from Lucity Web:



Notes:	 	 	 	

### Mobile Views

Views in the iOS and Android application contain the same data as views defined in the web application. The Android application shows the data in a single page list view that requires no scrolling:

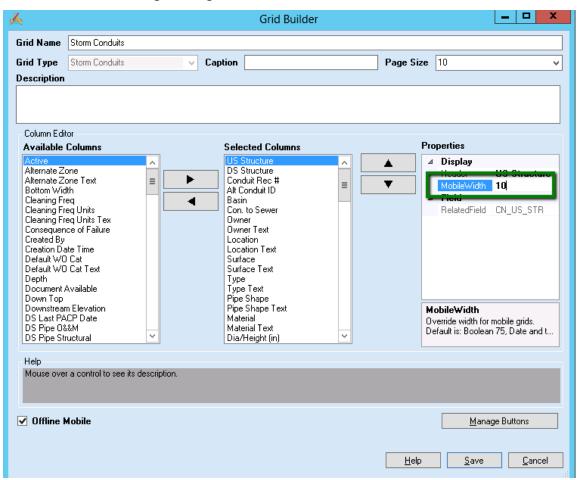


The iOS app is a grid that scrolls up and down/left and right:

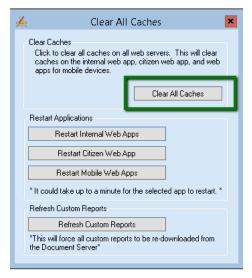


The width of columns in the iOS application can be customized when designing grids. By default the application uses the length of field as calculated from the maximum number of characters allowed. For date time fields it uses a value of 100. For Booleans the default is 75. In the above screen cap you may choose to make the category text and work order field smaller through this configuration to allow for more columns to display at any one time on the grid. This is accessed from the forms>>Grid

Manager menu in Lucity Administration tools or by clicking Edit when editing the View from the Forms>>View/Form Manager dialog

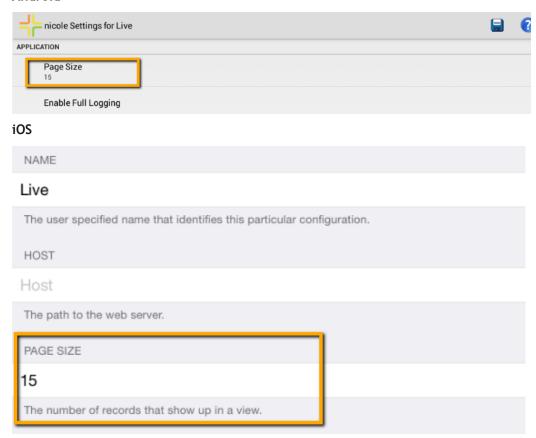


Changes to these settings require a cache reset which can be done by going to System>>Clear All Site Caches from the Lucity Administration Tools menu. Then have users log out and log back into the iOS application.



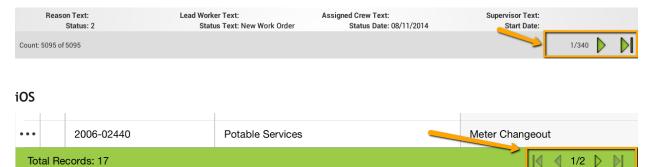
Both applications use paging and will only show a certain number of records at a time. The number of records shown can be modified in the settings:

#### **Android**



To page through records, use the paging navigation on the lower right hand side. The iOS client also supports paging using a two-finger swipe.

#### **Android**



To refresh the current data and get any new records that may have been added on the server since the view was opened, tap the refresh button.

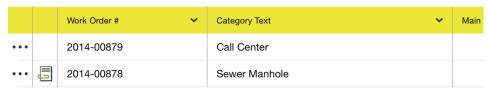


In Android this is a refresh button on the toolbar In iOS, the refresh is in the view menu.

<b>&lt;</b> Mod	ules	Work Orders	🛅 🌹 Q 🚊
	Work Order #	Category Text	Main Tasi ext <b>Refresh</b>
•••	2014-00879	Call Center	Dashboard
•••	2014-00878	Sewer Manhole	Log
•••	2014-00877	Admin	Help
	0014 00076	Causay Manhala	About

iOS also supports a pull down refresh.





To quickly search for information, each view supports a search function. The search searches all visible columns in the view for all records in current context. This context may be records returned from a dashboard data drill or asset tree, or may be from a filter, or may be all records.

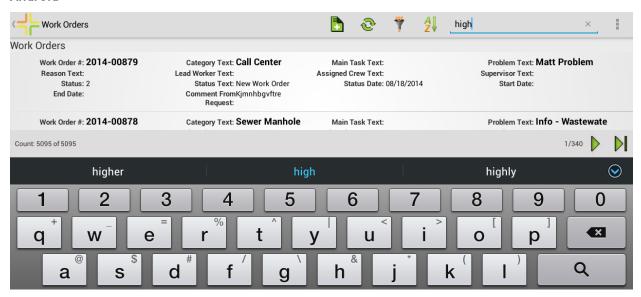
The search button is a magnifying glass in both applications



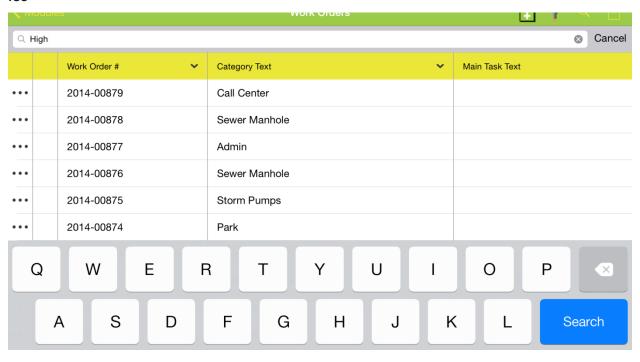
Notes:	 	 	 

Once the desired search text is entered, tap the Search button or the magnifying glass on the keyboard to initiate the search.

#### **Android**



#### iOS



Notes:		 

The total count of records is shown in the lower left. In Android both the filtered (from the find) record count is shown as well as the full record count:

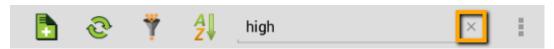


In the iOS app just the filtered record count is shown.



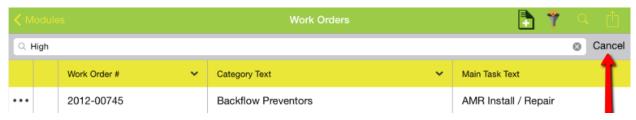
The paging works the same for both filtered and unfiltered data. To page through the filtered records use the record navigation at the lower right hand side of the form.

To clear a sort in Android, tap the "X"



Tapping the "X" again will close the search prompt and display the search button again.

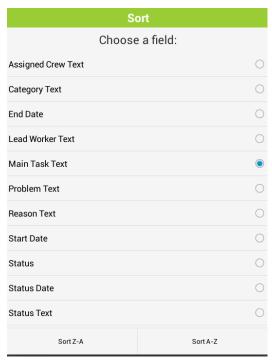
To clear the search in iOS, tap the search button again . This will re-open the search prompt:



Tap Cancel. This will clear the search and will close the search prompt.

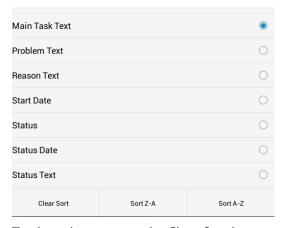
# Sorting

To sort data in the grid in Android, tap the . Select the desired sort column:



And tap the Sort Z-A or Sort A-Z button depending on whether you want the data sorted ascending or descending.

To view the current sort column, tap the sort button. It will display the current sort column. Sorts are only supported for only column at a time. Selecting a new sort will clear the existing sort.



To clear the sort, tap the Clear Sort button.

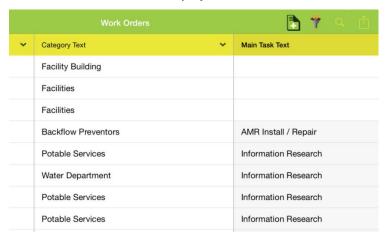
In iOS, sort data by tapping the column arrow



and select Sort Ascending or Sort Descending



When a column is sorted, the column header text appears bolded and the column has a slightly darker color than the rest of the display



Notes:	 	 

### **Filters**

Both the Android and iOS application support loading existing filters created in the web app. To load an existing filter, tap the filter button. By default the filters displayed will be the currently logged in user's own filters.

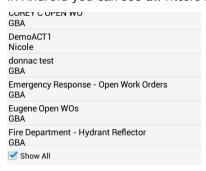
#### **Android**

	My Filters
cip Nicole	
DemoACT1 Nicole	
Mobile Sewer Work Nicole	
Nicole as Supervisor Nicole	
Nicole test1 Nicole	
Nicoles Work Loc Test Nicole	
Sunday ACT Nicole	
test route abc Nicole	
☐ Show All	Clear Filter

#### iOS



In Android you can see all filters by tapping the Show All button.



In iOS you can see all filters by tapping the "All filters" tab



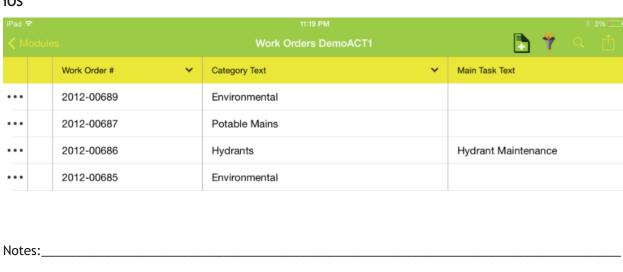
Selecting the filter closes the prompt and loads the filter. Paging and record counts work the same as they do for the find functionality.

The name of the filter selected will appear in the title bar of the view when there is a filter loaded.

#### **Android**



### iOS



To clear a filter, tap the filter button again and tap Clear Filter:



#### **Android**



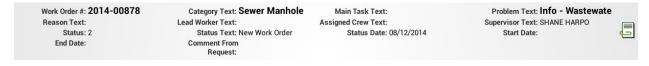
#### iOS



# Viewing attached documents

Records with documents attached will include a documents button. Tap this button to view any documents attached to a record.

#### **Android**



#### iOS



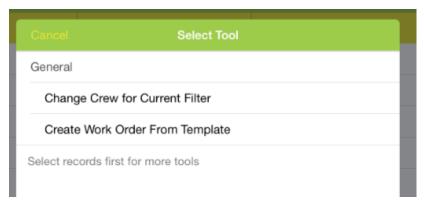
Documents are discussed further later in the session.

### Toolkits

Select toolkits are currently available in the mobile app. Some toolkits work on selected records and some toolkits work without a selection. Which toolkits are available will depend on the Lucity server version you have installed. Lucity is adding more toolkits with each server release. In general, toolkits will be added to major releases but not service packs.

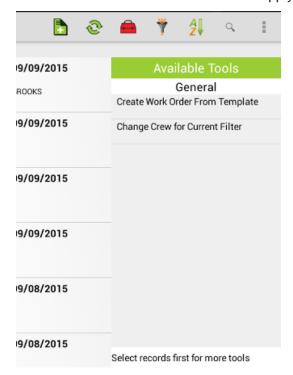


For example, if no records are selected in work orders, you may see the 2 following toolkits available for iOS.



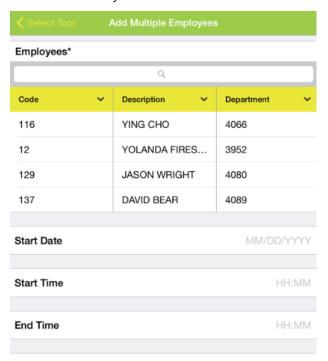
In iOS, if a record is selected the list will contain these items and additional items available for the selected records.

In Android, when a record is selected, the toolkit list only shows the items that are relevant to the selected records. Not toolkit items that apply to the current filter or all records.



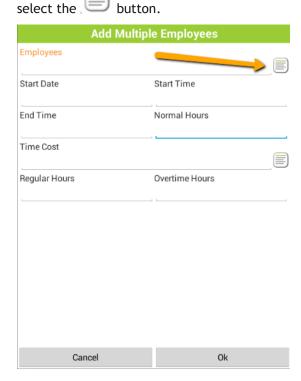
The list can also vary based on which records are selected and the permissions of the currently logged in user. This is the same behavior as the Lucity Web application.

Some toolkits may show a list:

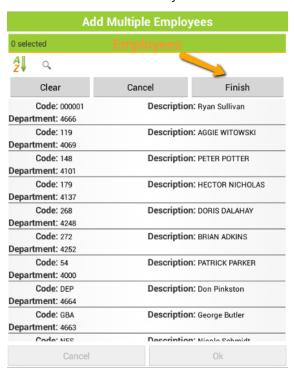


Search is supported in these lists and will find all records that contain the text entered. Select a record and click Okay.

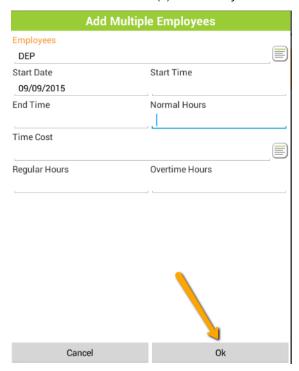
For Android, lists are shown in a window which overlays the toolkit window. To pick from the list,



The list of items will overlay the toolkit form. Select an item and click finish.



This will select the item(s) and take you back to the toolkit form to finish entering data.



Required toolkit fields are marked with an \*. These values must be populated before you will be allowed to execute the tool.

### Selection Mode

There are several tools and functions that are only available or may function differently when records are selected in the grid. In both Android and iOS, records are selected by pressing and holding the record (or one of the records) you are interested in. When you press and hold a record for a moment, you will notice the toolbar changing and the record color changes. In Android it changes to orange, in iOS it changes to a light blue or grey color.

#### **Android**

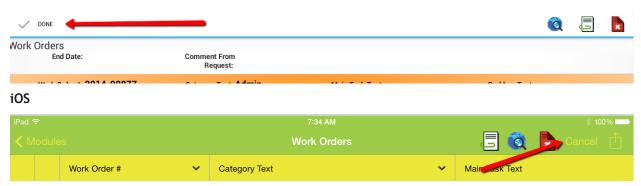


#### iOS



To leave selection mode, tap the Done in Android or the Cancel in iOS in the title bar of the application.

#### **Android**

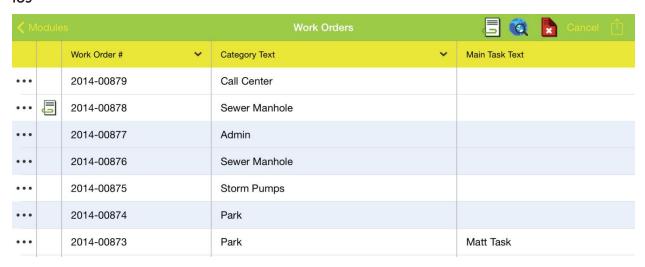


Once one record is selected and the application is in selection mode, additional records can be selected by tapping the record. It is not necessary to press and hold to select additional items.

#### **Android**



#### iOS



Note: Not all tools work on multiple selected items. Tools which only support a single selected item will prompt the user that the tool cannot be used on multiple items.

### Create Work Order

An additional tool available on requests and some inventory and inspection modules is Create Work

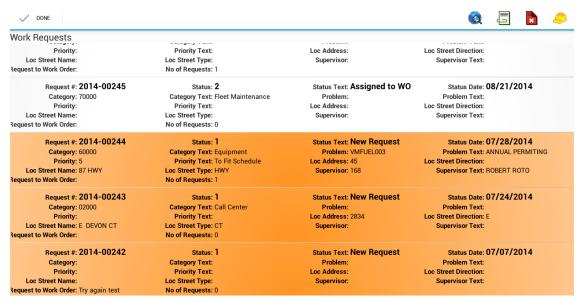
Order. This tool is available when one or more records are selected.



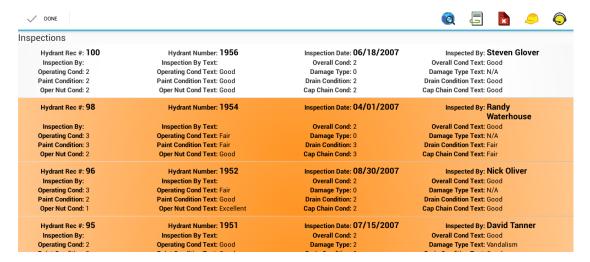


Tapping on the work order button generates the work order and opens a work order view to display the newly created work order

To create a work order from multiple requests, select all of the desired requests in the list (you can only choose requests from a single page) and tap the Create Work Order button. This will create one work order and associate all requests to that work order.



To create a work order from multiple inventory items or inspections, select all of the items and tap Create Work Order. This will create a work order and include all of the selected assets on the work order.



### Create Request

Creating a request can be done from inventory and inspection modules. Creating a request only works with a single selected item.

The iOS application works identically to the Android application for creating work orders. Select one or more requests or inventory items or inspections and tap the Work Order button:

When the work order is created, a work order view is opened showing the created work order.

Creating Requests in iOS also behaves the same as the Android application. Select the record you want to create a request for and tap the Create Request button. This tool only works on one selected record.

When the request is created a view will be opened displaying the created request.

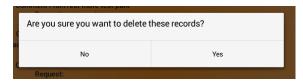
## Deleting records on the tablet

Deleting records on the iOS and Android tables can be done from selection mode as well. One or more records can be deleted. Press and hold a record to enter selection mode (if not already in selection mode)

Tap additional records you want to delete and tap the delete button.



#### **Android**

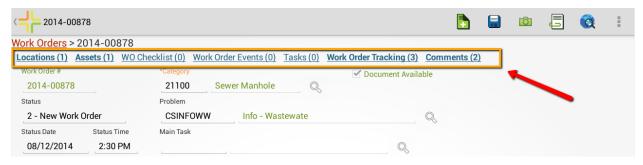


#### iOS



# Navigating child records

In Android, child records are accessed by tapping on the row to open the form. The available child views appear across the top of the form with the child view record counts.



In iOS, child records are accessed with the \*\*\* which will display a list of available child views.

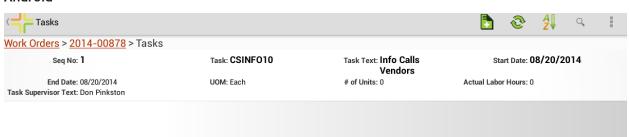


In iOS, if you select a child view from the childview list with no rows, it will immediately launch a data entry form.

Child views behave very similar to root level views but do not support filter and in some cases may not support adding or deleting depending on the child and the user's permissions.

This is the task child grid of work orders:

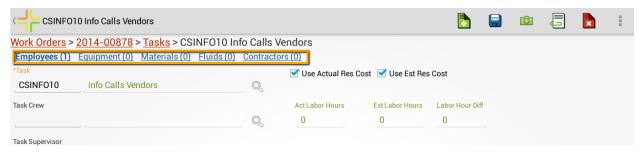
#### **Android**



#### iOS



Child views of tasks can be accessed the same way. In Android this is done by selecting the record to open the form and selecting the desired child view.



In iOS, child views are accessed with the button inline in the row.

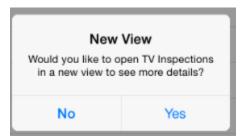
Notes:	 	 

# Open in a New View

Both applications support opening root level items in a new view. For example, if you want to open up and view TV inspection observations from the Pipe Inventory module, you can go to the TV inspection you are interested in and open it in a new view. The new view will allow you to view the TV observations.

In iOS, you can open in a new view by selecting the "..." button on a root level view item. This will prompt you for whether you want to open the item in a new view:





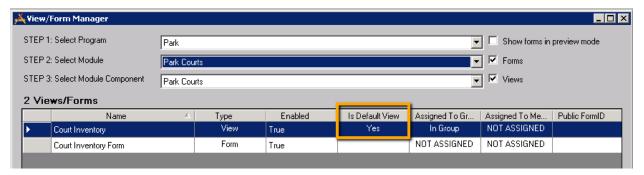
In Android, select the record you are interested in seeing in a new view and select the Open in a New View button:



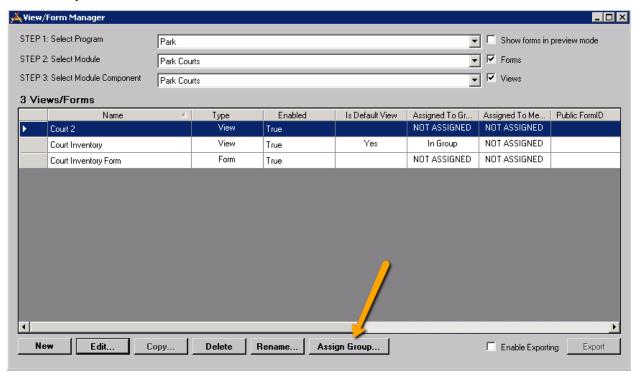
# Configuring Views for mobile

Views configured for the Lucity Web application will automatically be used by the tablet application. The system will automatically use the same views configured for the users in the mobile application that are used for the user in the web application.

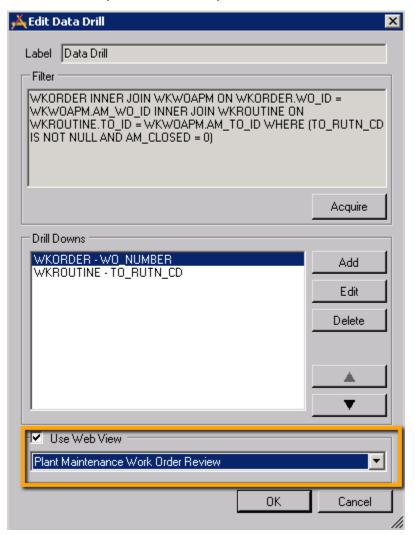
For most modules, the view that is opened from the modules menu is the global default view for the module. For work orders, views can be defined per rules group so that some user groups can use an alternate work order view.



It is important to ensure that the tablet users are in a security group that has been granted access to the view if you want them to be able to access it in the field.



The dashboard can be configured to use non-default views when configuring asset trees and data drills. For version Lucity 2014r2 and Lucity 2015:

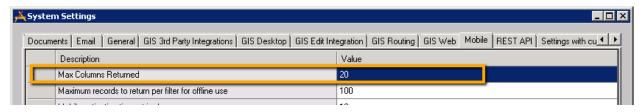


For Lucity 2015r2:



Refer to documentation from a Lucity Administration session for how to customize views and configure views for users.

In system settings you can configure the maximum number of columns shown in mobile for a view.



Views with more than 20 or 30 columns do not work well in the mobile application. They take too much display memory to render and take up too much space. This limit allows views to be defined for desktop usage with many columns, but still work well in mobile by only showing the first X columns.

In Lucity 2014r2 and earlier, changes made to views are not effective until the next application restart which happens nightly. In Lucity 2015r2, clearing the cache from the Lucity Administration tools System menu will clear the cache.

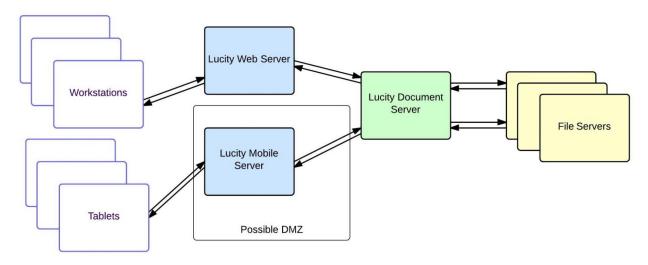
In a pinch, the Lucity Mobile Server application pool can be recycled on the web server to clear the cache. This is not recommended, however, if there are active mobile offline users because this may kill sync processes.

#### How user permissions affect views

The user used for this training has full permissions to all modules. Users without delete permissions will not have a delete button. Users without permissions to add and edit documents may also see slightly altered screens in the documents dialogs.

#### Documents

Lucity has developed a method of streaming documents from file shares on the network down to mobile devices even when the mobile device does not have direct access to the file server. Lucity Mobile client applications (iOS and Android) do not directly access any documents on the file server. All files are streamed through the Lucity Mobile Server product. The below diagram shows how document interactions work with Lucity Mobile:



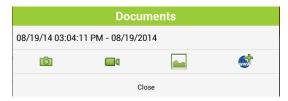
If the document server is not properly configured, uploads and downloads from the tablet will fail. It is easier to troubleshoot document upload/download issues with Lucity Web than with the tablet.

Notes:	 	 	 

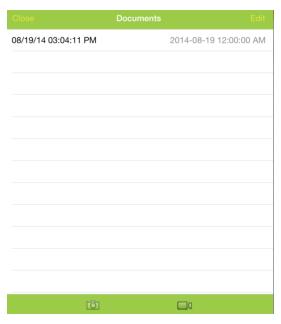
# Working with Documents in Views

Documents can be viewed or added while in selection mode. Select a record and tap the Documents button in the toolbar. This will open up a dialog displaying all existing documents attached to the record.

#### **Android**



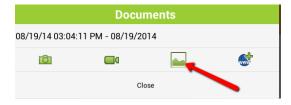
#### iOS



Documents and web links can be opened by tapping on the item in the document list.

Android supports adding images, videos, or web url attachments. The iOS application supports adding images and videos. Both mobile applications support taking a new picture/video or selecting an existing image/video from the gallery.

In Android, to attach an image or video from the gallery, tap the gallery button on the documents dialog:



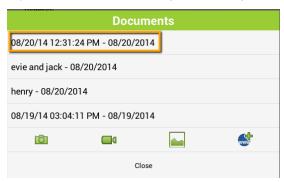
Depending on what apps are installed on the device, you may get prompted for which application to use for the gallery. In the case of this device, there are 2 possible image sources (gallery and photos). Gallery is available on every android device that has a camera installed. Many installations include the photos app as well and depending on what other apps are installed, there may be even more choices in this dialog:



Once you select a photo from the gallery or photos, you will be prompted for a description.



If you do not enter a description, the upload will have a description of the current date and time.



The document is uploaded to the server and is now available to all Lucity systems (web, mobile, desktop).

Notes:	 	 

To take a new image to attach to the record, tap the button. This will open the camera. Once the picture is taken, you will be prompted whether to discard or save the image. Tapping save will prompt for the optional description.



Tap Ok on the description to upload it to the server. Images captured directly are not saved to the device; they are uploaded directly to the server. To attach a video, tap the video button which will open the video recorder.



Tap the video button to record and when done, tap the stop button:



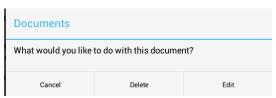
If you are satisfied with the video, tap the checkmark:



The system will prompt for an optional description.

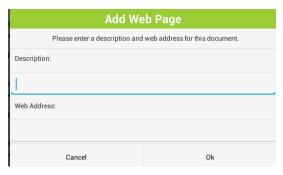
# Editing and Deleting Documents

To edit or delete a document, press and hold the document in the document list. This will prompt:



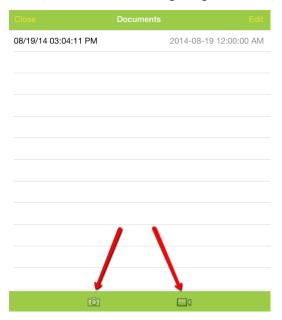
Editing allows you to edit the document description.

In Android you can also attach web urls to documents. Tap the substant to open a dialog to add a url to a document.



Notes:	 		

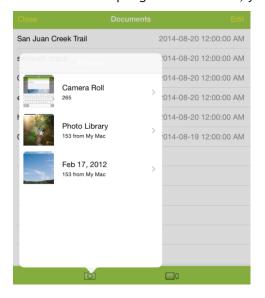
Documents can also be viewed and attached from forms as well. This is covered later in this session. In iOS, to attach an existing image or movie, tap on the movie or camera button.



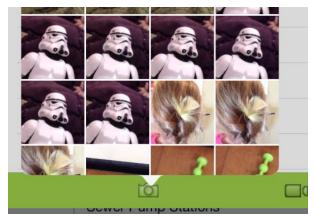
The application will prompt for whether you want to take new media or use existing from the Photo Library or Video Library.



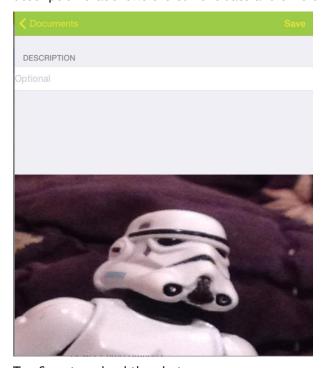
If there are multiple galleries defined, you will choose the gallery, and then choose the photo



Selecting the photo will display it and prompt for description (the photo may appear distorted in the preview; it is not uploaded like this).



The description is optional. If a description is not entered, the system will automatically add a description that shows the current date and time of the upload.



Tap Save to upload the photo.

To attach a new photo or video, tap the Photo or the Video button and select "Take Video" or "Take Photo"

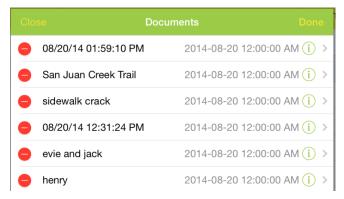
When the photo or the video has been taken, the display will allow you to preview the photo/video, retake the photo or video, or use the photo or video. These options are at the bottom of the screen.



Optionally enter a description and tap Save to upload the photo or video to the server. To edit or delete attachments, tap the Edit button



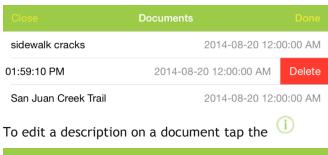
This will change the mode of the documents dialog into edit mode.



To delete a photo or video, tap the red minus. Then tap delete. This removes the photo from the record and deletes the source document from the server.



It is also possible to delete a document by swiping a document item from right to left. This will slide the text to the left and will display a delete button:





Change the description and tap save.

When done editing in the documents dialog, tap the "Done" button which will return to standard view mode on the list of available documents. You can then close the dialog by tapping "Close".

#### Forms Introduction

Views and child views and grandchild views (etc) may each have attached forms. These forms are accessible in the tablet application by tapping on a record in a view. Tapping on a record will open the form in both iOS and Android to allow for editing and viewing information on the form. Additionally, new records can be added in the tablet with the Add button which opens up a blank form (prepopulated with defaults).

Prior to going into detail on forms, it is helpful to review methods of navigating in the tablet application between views, forms, the dashboard, etc.

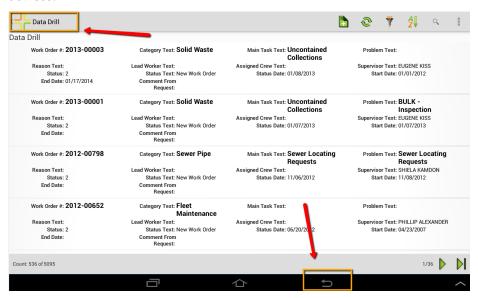
## Navigation

# Navigation in Android

In Android, navigation options are available in the menus, as well as in cookie trails, and by using the Android system back button (on the device or on the display).

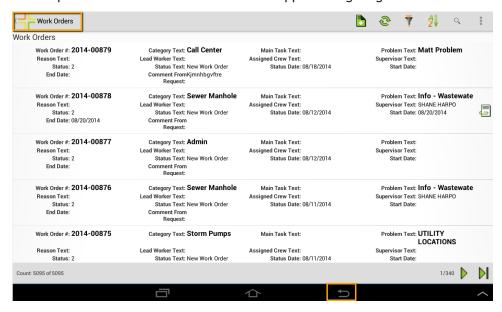
From the dashboard, there are buttons to get to GIS, a menu option to open the modules menu, and many links within the dashboard frames themselves to open up an alternate area in the Lucity Mobile application.

Once in a view from the dashboard frame link, navigate back to the dashboard by tapping the Lucity dashboard navigation button on the upper left. This will take the user back to the dashboard to the frame the user was on when launching the view. Alternately the system back button will also return the application to the dashboard. The location of the system back button can vary slightly between devices.



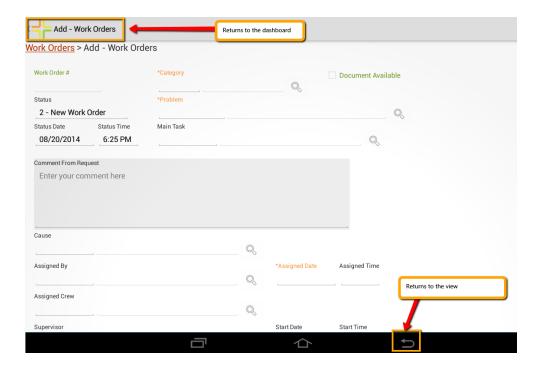
Notes:	 		 

Views opened from the modules menu also support navigating back to the dashboard in the same way.

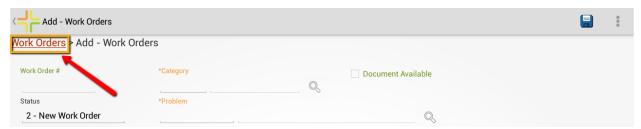


In most cases, the system back button will also close and cancel any open prompts like the documents list, or the filter list and is an alternative to tapping cancel or close.

When adding a new record from a view, the system will display a defaulted empty form. From the add form, the upper left navigation button will cancel the add and take the user back to the dashboard. The system back button will cancel the add and return to the view. Both of these will prompt if there are unsaved changes.



Additionally, a cookie trail is provided on forms to facilitate faster or more direct navigation. The case of a new work order it provides a link to go back to the work order view.



In more nested or complex navigation scenarios, it provides access all the way up the object tree for rapid access to parent or grandparent data. From this employee record, links are provided to look at the employees child view, the CSINFO10 task form, the work order task view, the work order form, or the work orders view.



In the above highly nested object, the Lucity navigation button in the upper left corner still returns the application to the dashboard.

## Navigation in iOS

The navigation in iOS is similar, but there is no system back button. Additionally, there is not a go to dashboard Lucity icon in the upper left hand corner. However, most screens in the iOS application provide a menu option to allow a user to easily jump back to the dashboard.

From the dashboard, views can be launched from dashboard items such as asset trees or data drills. When launched from an asset tree or data drill, the upper left navigation returns to the dashboard.

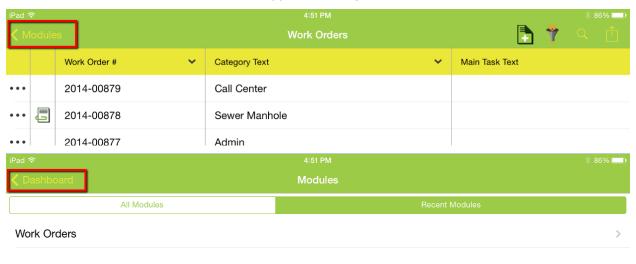


Notes:	 	 	

Additionally, all views have a "Dashboard" option in the menu.



When a view is opened from the modules menu, the upper left navigation returns to the modules menu. Then from the modules menu, the upper left navigation returns to the dashboard

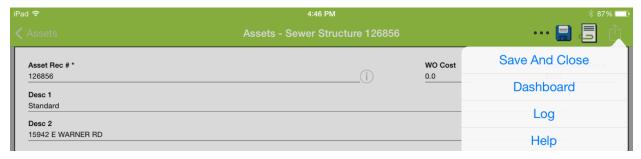


When in a form, the upper left navigation returns to the parent view.



Additionally, in iOS you can page through individual records while on a form. Instead of navigating back to the parent view to select a new record, you can use a two finger swipe from right to left to move forward records (and a two finger swipe from right to left to move back).

All forms also include the Dashboard link in the menu.



When in a child view, the navigation button returns to whatever the previous screen was. If the child view was opened from a parent view it will open the parent view.



If the child view was opened from a parent form, it will open the parent form.



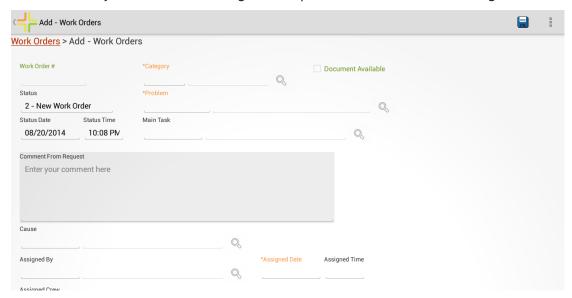
Notes:	 	 	

#### Forms in Detail

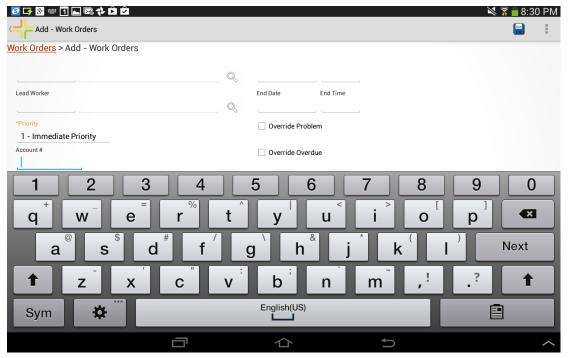
In the mobile applications forms are only accessed from views. There is no "menu" in mobile where forms can be launched directly.

# Adding Records

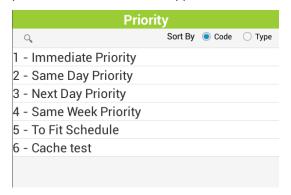
Views that support "Add" will include a button on the view. This will launch a form with any default values already populated. For example, on work orders the status will be defaulted to 2 New Work Order. Any system defaults that are configured or form level defaults will also be populated on the form. Read only fields are labeled in green. Required fields are labeled in orange.



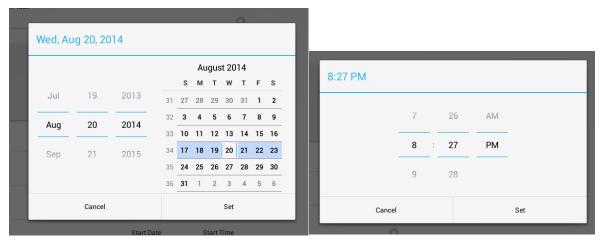
In Android, most fields support manually typing into the field if desired. Tap into the field area. This will bring up a keyboard to start typing.



Fields which only support picking values from a picklist (like simple code/type fields) will pop up a picklist when the field is tapped.



Date fields pull up a calendar to pick a date. Time fields pull up a time picker.



Some fields support picking values from a list and manually typing data into the field. These fields have a search button .



Tap on this search button to pick a value from a list.



Work flow setup items are slightly different than other picklist values because they depend on category. The Android application does not support Show All for work flow setup items. Users must first select a category before selecting a problem, supervisor, etc. Administrators need to ensure that all needed work flow setup items are already associated to the categories necessary.

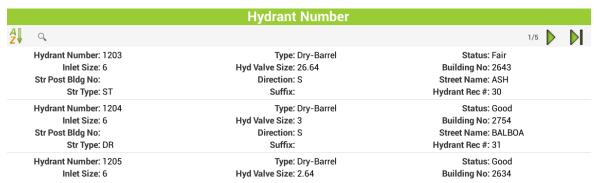
Category tree also allows both typing and picking a value. The category picklist is in tree format.



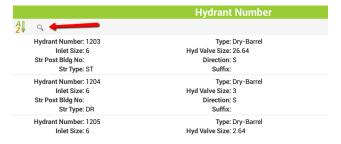
Some picklist fields have multiple fields, such as the work order asset child asset rec # picklist:



Another example of a picklist with multiple fields is the hydrant lookup on a hydrant inspection form. (Sometimes these are referred to as value lookups in Lucity)



Searching for data in these picklists can make it easier to find the record you are looking for.

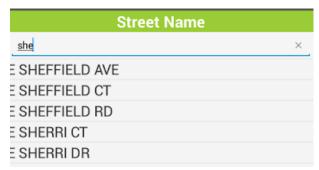


To search, tap the search button and type a full or partial search term.



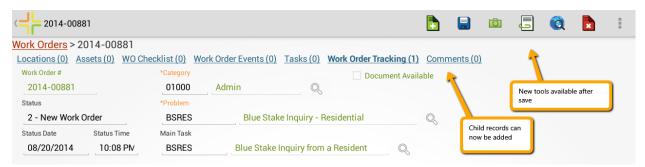
The search will look for any columns which include that text. Searches in the work order asset picklist work on limited columns (they do not work on description). Searches in other picklists will search all visible fields that contain the text such as the hydrant picklist shown above.

Street list is another large picklist where searching may be helpful to quickly find the desired street. For example, the Street Name field in the Work Order Location child



The application gets intermittent updates from the server when users tap in a new field or fill out values in certain fields. For example, when the problem is selected, main task will be filled in. This is done with continual communication with the server, but none of the edits made on the tablet are persisted until the Save button is tapped.

Tap the Save button to save changes. This will save the changes to the database and will update the form to show available child items which can be added

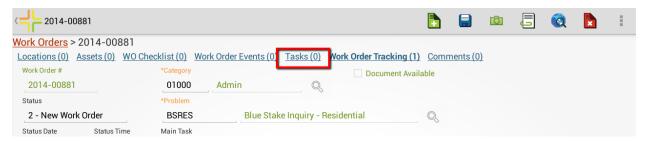


Additional records can be added directly from the form if multiple records need to be created. This is faster than navigating back to the view to add a new record.



## Adding Child Records

To add a child record, tap on the desired child in the cookie trail:



This will open a view with 0 or more records. If there are 0 records, it will look like this:



Records can be added by tapping on the in the middle of the form or the on the toolbar:

#### Tools available on forms

Once a record is saved, additional tools are available on a form:



Documents can be viewed and edited (the workflow for the forms document control and views document control is the same, see details earlier in this guide).

The document tool works the same, but an additional button for capturing a new image is available to allow users to rapidly attach a new photo to a record. Tap the button and proceed with photo capture.

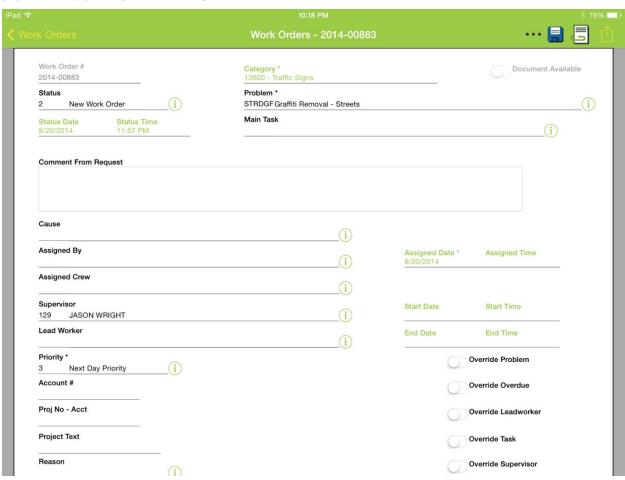
Records can also be deleted directly from a form

Notes:		 	

# Using Forms in iOS

Forms in iOS provide the same basic functionality as Android forms. Adding a record will automatically default values based on Lucity business rules, defined global defaults, as well as form level defaults. For example, the work order status is automatically defaulted.

Fields on the form which are readonly are greyed out. Fields on the form that are required are marked with an asterisk. Fields which support manually entering text are black, and fields which may only be populated by picking a value are green.



These forms support a pinch zoom feature allowing a user to zoom in and out of a form in iOS. This is particularly helpful when dealing with forms on an iPhone.

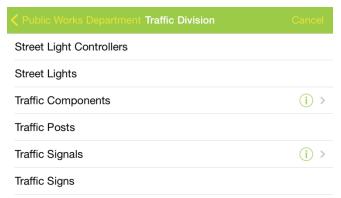
Notes:	 		

The category field in iOS can only be picked from the tree. It does not support manual typing:



To drill into category child items in the category tree tap the button. This varies based on iOS version. Earlier versions of iOS use a blue arrow. Later versions (iOS8+ may be slightly different).

Category items with child items will have the button

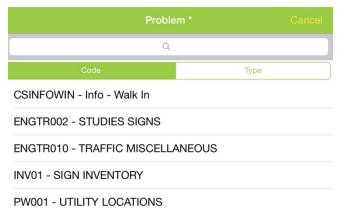


To navigate back up the tree use the navigation in the upper left corner of the category picklist dialog.

#### ✓ Public Works Department Traffice

Work flow setup picklist items other than Category support manually entering data or picking the value

from a list. To select a value from a list, tap the  $\bigcirc$  . This list will only show values that are associated to the category already selected.



These picklists support searching which can be helpful in very long lists such as material lists. Searches use contains and will find all items which have the text entered anywhere in the code or text portion of the code/type combination.

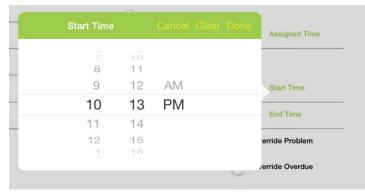


STRDGF - Graffiti Removal - Streets

STSNGF - Sign - Remove Graffiti

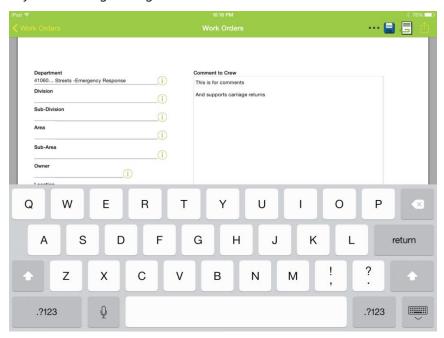
Date fields display a date select prompt. This opens when the field is tapped.



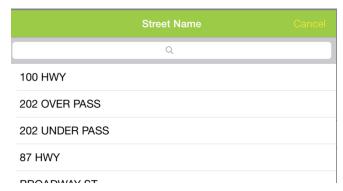


Notes:	 	 	 

Comment fields support multiple lines and carriage returns. The standard keyboard includes a "return" key for inserting carriage returns.

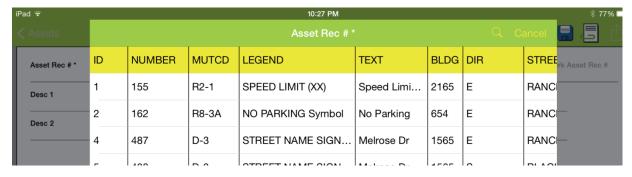


The street list control supports both manually typing a street as well as choosing one.



To search in the street list, enter a partial text. The control will search while typing.

The Asset Rec # in work order asset also supports manually typing or choosing from a picklist.



This picklist scrolls left/right and up/down and supports paging. To search in the work order asset list, tap the search button and type in the search prompt and tap the Search button on the keyboard.



Other lookups such as the hydrant lookup on the hydrant inspections form behaves the same way.

Once all of the data is filled in, tap the savebutton to persist the data to the server. To save and close a form and return to the parent view, press and hold the save button to save and close the form. There is also a menu option to save and close the record.



Notes:	 	 	 	

## Adding Child Records and Available Tools in iOS

Once the data is saved, the Child Views and Documents buttons on the toolbar may be used.



Note: Delete is not supported from forms in iOS; delete is only supported in the views.

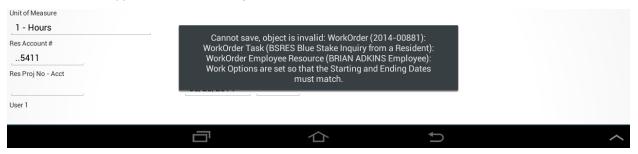
To continue adding child information, after saving the record, tap the Child Views tool and select a child from the list. Continue adding information until all desired information is entered. Data is saved to the server immediately upon tapping save on each form. It is not possible to leave a form without either canceling and discarding changes or saving them.

This varies from Android slightly. Android will, in some cases (such as edits to existing records) allow navigating away from a record (to add child records for example) without saving the parent. Before leaving the object tree Android will prompt about unsaved changes.

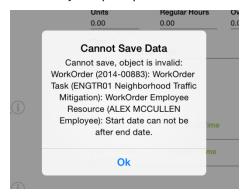
## Errors displayed on save

Both Android and iOS will display messages when a user tries to save a record with invalid data.

In Android these appear as toast messages:



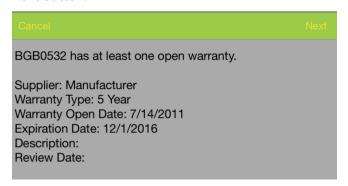
#### In iOS they are prompts

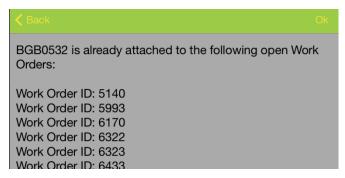


In both cases the record is not saved. The user must correct the problem and try the save again.

#### Warning Prompts

In addition to errors, the iOS application supports warning prompts. Warning prompts will display after tapping the save button. If there is more than one warning, they will be displayed one at a time with a Next button.





Once the full series of warnings is reviewed, an Ok button will be available. Tapping Ok will finish the save. Tapping cancel (or back and Cancel) will cancel the save.

The Android application will display a toast message with any warnings which will automatically fade away after displaying for a few seconds.

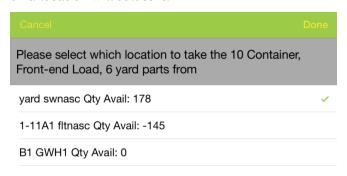
#### Parts Inventory Prompts

Both Android and iOS support parts inventory prompting when required. The parts prompt is displayed when a record is saved.

For this example, part 16775 Container, Front end Load, 6 yard is in parts inventory. Entering 10 units and tapping save prompts for which location to take the parts from:



The mobile application does not support designating multiple part locations for a single save. Tapping on a location will select it.



Tapping done will continue with the save and return to the form with the data saved.

Android works in an almost identical manner except that selecting a location from the parts prompt will immediately save and return to the saved data form. It is not necessary to tap done.



Tapping cancel will cancel the save and return to the unsaved form.

## Configuring Forms

Most forms configured for use in the web will be effective in the mobile without modification. The mobile applications adhere to the same settings that web adheres to on the form design including but not limited to:

- Limit lists
- Required Fields
- Default Values
- Hidden Fields

It may be a good idea to review the number of fields on forms that will be used heavily in the field. If fields are not used and are only on the form because they were imported with a template, consider removing these. It requires time and memory to render forms. Forms with upwards of 200 fields will draw slower on the device and panning around a form will be slower and may not be smooth if there are too many fields present.

In some cases, certain fields may scrunch up and overlap slightly on the mobile device. An algorithm is used by the mobile applications to convert form position defined in the web into form position in iOS and Android. In some cases the width differences of labels and special fields like date/time and Boolean fields may cause fields to not line up nicely on the form. In this case the solution is to adjust the form design in Lucity Administration Tools in the form designer.