



**What's New  
in 2016**

# Follow Along Icons



Desktop



Web



Toolkit



Mobile

# System Changes

- SQL Server 2005 **no** longer supported
- Internet Explorer 9 **no** longer supported.
- Windows Mobile Lucity PDA Barcode app **no** longer supported.
- Must use Lucity Mobile versions 2.0+ for Lucity 2016 (iOS and Android)
- PACP/MACP TV Imports **must** use the Lucity Import and Update tool.

# System Changes

- Relative Document Pathing **no** longer supported; this was setup in Lucity Client Maintenance
- Field Definitions that have been customized **must now be locked**.
- The FieldDef.mdb database is **no** longer used and **no** method to import them from MS Access in bulk. Field definitions are **now** stored directly in the database.

# Module Enhancements

# Module Enhancements



Desktop

Web

- Added More User-Defined Fields to many inventory/inspection modules. All inventory/inspection modules should have at least 60 user-defined fields.

# Module Enhancements



Desktop

Web

## Equipment Inventory

- In Equipment Parts Grid, Users can now select a record and use the **Open in Another View** button to jump to the related **Work Material** record



# Module Enhancements

Desktop  
Web



Home Equipment x +




Equipment ID	Equipment ID Text	Operating Status Text	Equipment Type
WA-VHT-2700	Vapor Heater	Operational	WATER TREATME
<u>Costs (0)</u> <u>Insurance Costs (0)</u> <u>Fluids (0)</u> <u>Hour Rollbacks (0)</u> <u>Other Meter Rollbacks (0)</u>			
	Material Text	Quantity	
W-WAS-STL-95	WASHER, LOCK SPLIT 5/8" STEEL	1.00	



# Module Enhancements



## Plant Process

-  Standardized module to make it an Asset Module
  - Unique ID
  - Create WO, Request, PM
  - Show in GIS
  - All other standard features

# Module Enhancements



Desktop



Web

## Plant

-  In Plant Processes, Added **Subprocesses** to enable users to link processes with a parent-child relationship. Works like equipment dependents.

# Module Enhancements

Desktop  
Web



## Plant Process Form

1

20 of 20



Plant Rec #\*

MB Middle Basin

Process\*

12-1

Replacement Date

Alternate Zone

Condition

Conseq of Failure

Default WO Cat

Est Replacement Cost

General Comment

Inspected Date

Maintenance Zone

Mitigation

Next Inspect Date

Operating Status

Original Cost

Parent Off-Line

Plant Process Rec #

62

Prob of Failure

Process ID

62

Process Sequence

2.10

Process Text

Grit Subprocess 1

Risk

0.00

Sub Type

Create a Plant Process with the highlighted items to make sure you can identify the process as a subprocess

# Module Enhancements

Desktop  
Web

Lucity™

Home Plant x Plant Process x +

2

Add newly created subprocess to the parent process as a dependant

Plant Rec #	WO Cat Rec #	Default WO Cat	Default WO Cat Text	No WO/PM/Req	Condition
2		PLNTP	Plant Process	<input type="checkbox"/>	

Roots (0) Parent (0) **Dependents (2)** Equipment (138)

Process ID	Process Text	Process	Par/Dep Rec #	Plant Process Dep Rec #
44	GRIT	12	2	44
52	SECONDARY	26	1	52

# Module Enhancements



## Sewer

### New Inspection Standards Compliance

- MACP v7.01
- PACP v7.01
- LACP v7.01

# Module Enhancements



Desktop



Web

## Storm

 New Inspection Standards Compliance

➤ PACP v7.01

# Module Enhancements



Desktop

Web

## Transportation

 Added linked **fields** to the following assets

- Anti-Icing Pump Houses
- Automatic Gates
- Camera Locations
- DMS
- PDMS
- Weather Stations
- Sensors
- Kiosks





# Module Enhancements

Desktop  
Web

## Trees/Parks

- In Park Inventory, Added grids to display related **Distribution** and **Recycled Water Meters**.

The screenshot shows the Lucity web application interface. At the top, there is a navigation bar with the Lucity logo and buttons for 'Home' and 'Parks'. Below the navigation bar is a toolbar with various icons representing different functions. The main content area displays a table of park inventory. The table has the following columns: Alt Park ID, Park Name, Status Text, Address, Street Direction, Street Name, and Street. The first row of data is highlighted in blue and contains the following information: Alt Park ID: 103, Park Name: UNNAMED OPEN SPACE-1, Status Text: (empty), Address: 7110 W, Street Direction: 99TH, Street Name: ST. Below the first row, there are three sub-headers: 'Park Parcels (0)', 'Recycled Meter Device (0)', and 'Water Meter Device (0)'. The 'Recycled Meter Device (0)' and 'Water Meter Device (0)' sub-headers are highlighted with a red box. The second row of data is partially visible and contains the following information: Alt Park ID: 106, Park Name: TOMAHAWK RIDGE.

Alt Park ID	Park Name	Status Text	Address	Street Direction	Street Name	Street
103	UNNAMED OPEN SPACE-1		7110 W	99TH	ST	
Park Parcels (0)		Recycled Meter Device (0)	Water Meter Device (0)			
106	TOMAHAWK RIDGE					

# Module Enhancements

Desktop  
Web

## Water-Distribution and Recycled

In Meter Device, Now can be linked to **Parks.**

The screenshot shows the Lucidity software interface. At the top left is the Lucidity logo. To its right are navigation buttons for 'Home' and 'Parks'. Below the navigation bar is a toolbar with various icons. The main content area displays a table with the following columns: Alt Park ID, Park Name, Status Text, Address, Street Direction, and Street Name. The first row of data is highlighted in blue and contains the following values: 103, UNNAMED OPEN SPACE-1, 7110 W, and 99TH. Below the table, there are three tabs: 'Park Parcels (0)', 'Recycled Meter Device (0)', and 'Water Meter Device (0)'. The 'Water Meter Device (0)' tab is highlighted with a red box. At the bottom of the interface, there is a footer with a 'Water Meter Device' label and a hammer icon.

Alt Park ID	Park Name	Status Text	Address	Street Direction	Street Name
103	UNNAMED OPEN SPACE-1		7110 W		99TH



Park Parcels (0) | Recycled Meter Device (0) | **Water Meter Device (0)** | Meter Invento

Water Meter Device

# Module Enhancements



## Water-Distribution

-  In AMR and Meter Devices, When **AMR and Meter Devices** are installed at a **Meter Location, Lucity** updates the devices' **XY coordinates** with the **Meter Location** record's XY coordinates.
-  Behavior also exists in **Raw** and **Recycled** Water modules

# Module Enhancements

- Desktop
- Web

lucity™ Home Water Flow Meter Locations (x)

Meter Location No	X Coordinate	Y Coordinate	Property ID Tag	Address	Di
NP0640-00013	2266727.19290431	241088.35240740			

Water Flow Meter Location Field Ties (0) Water Flow Meter Location Status History

AMR Number	Serial Number	Meter Device
TestingLocate001		

Water Meter Location AMR History (1)


lucity™ Home Water AMRs (x)

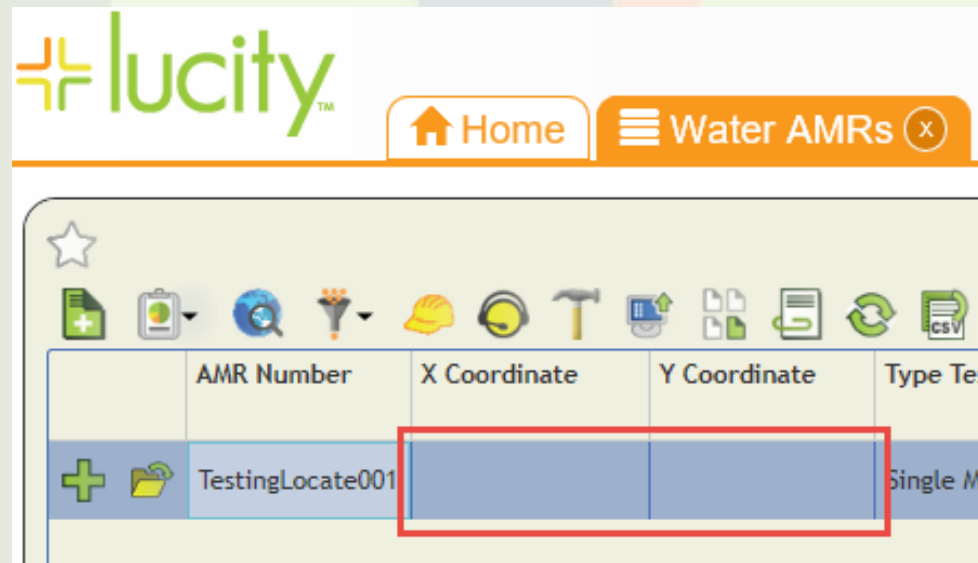
AMR Number	X Coordinate	Y Coordinate	Type Text
TestingLocate001	2266727.19290400	241088.35240700	Single M

# Module Enhancements





## Water-Distribution (Raw and Recycled)

 In AMR and Meter Devices, when **AMR and Meter Device** are removed from a **Meter Location**, the device's **XY Coordinates** are reset to zero.



The screenshot displays the Lucity web application interface. At the top, the Lucity logo is on the left, and navigation buttons for 'Home' and 'Water AMRs' are on the right. Below the navigation is a toolbar with various icons for file operations and data management. The main content area features a table with the following columns: AMR Number, X Coordinate, Y Coordinate, and Type Test. A red box highlights the X and Y coordinate fields for the entry 'TestingLocate001', which are currently empty.

	AMR Number	X Coordinate	Y Coordinate	Type Test
 	TestingLocate001			Single M

# Module Enhancements




Desktop



Web

## Water-Distribution

-  In Direct Hydrant Flushing, Created a new module that enables agencies to enter simple **Flushing** records that are tracked against a single **Hydrant**.



# Module Enhancements

Desktop  
Web

Open a Tab

Favorites

Menu



Modules



## Recent

- Water AMRs
- Water Flow Meter Locations
- Water Flow Meter Devices
- Park Meter Consumption Library
- Park Meter Consumption History
- Water Options
- Parks
- Street ITS Automated Gates
- Sewer Service Lateral Permits

Cancel

Inspections

Tests

+ System Valves

+ Control Valves

Water Nodes

+ Storage Facilities

+ Supply Sources

+ Vaults and Structures

+ Sample Stations

+ Pump Stations

Mainbreaks

- Flushing

Flushing Routes

History

Direct Hydrant Flushing

+ Raw Water

+ Recycled Water

+ Backflow Preventers

Water Loss

+ Water Sites

# Module Enhancements

Desktop  
Web

## Water-Distribution

In Hydrant Inventory, Added a grid to display related Direct Hydrant Flushing records.

The screenshot shows the 'View Builder' interface. At the top, there is a 'View Name' field containing 'Water Hydrants' and an 'Alternate View Name' field. Below this, a section titled 'Step 1: Select a Grid Type' contains a list of grid types with checkboxes. The 'Direct Hydrant Flushing' option is checked and highlighted with a red box. Other checked options include 'Water Hydrants', 'Water Hydrants Field Ties', 'Water Hydrants Associations', and 'Water Hydrant Replacements'. Other options include 'Water Hydrant Inspections', 'Water Hydrant Flow Tests', 'Water Construction Assets', 'Work Orders', 'Work Requests', 'PM/Work Templates', 'Water Comment Grid', 'Water Flushing Routes', and 'Water Flushing History'. There are also up and down arrow buttons at the bottom left of the list.

View Builder

View Name: Water Hydrants

Alternate View Name:


Step 1: Select a Grid Type

- Water Hydrants
  - Water Hydrants Field Ties
  - Water Hydrants Associations
  - Water Hydrant Replacements
  - Water Hydrant Inspections
  - Water Hydrant Flow Tests
  - Direct Hydrant Flushing
  - Water Construction Assets
- Work Orders
- Work Requests
- PM/Work Templates
- Water Comment Grid
- Water Flushing Routes
- Water Flushing History

# Module Enhancements



## Water-Distribution

-  In Work Options, Added an option (**In Flushing Route, Copy Hydrants, Valves or Pipes to Work Orders with Tool**) that directs the **Create Flushing History and WO** toolkit in the **Hydrant Flushing** module to copy the route's **Hydrants, Valves or Pipes** to the new **Work Order**.

# Module Enhancements

Desktop  
Web



## WATER

### General

- Integration with Facility
- Integration with Equipment
- Eden Meter Integration
- Populate Service Tap ID with Acct No and Tap No
- Force Uniqueness for Address and Tap No for Service Tap Record
- Update Main Break with Pipe Inventory Record Info
- In Flushing Route, Copy Hydrants to Work Orders with Tool
- In Flushing Route, Copy Valves to Work Orders with Tool
- In Flushing Route, Copy Pipes to Work Orders with Tool

### Backflow

The screenshot shows a software interface with a header bar containing 'Home' and 'Water Flushing Routes' with a close button and a plus sign. Below the header is a toolbar with icons for a toolbox, refresh, print, CSV, and delete. A table is displayed with columns for 'route ID', 'total Duration', and 'In'. A context menu is open over the table, showing two options: 'Create Flushing History and WO for Current Filter' and 'Create Flushing History and WO for Selected Records'. The table contains three rows of data:

route ID	total Duration	In
1	0.00	
2		<input type="checkbox"/>
3		<input type="checkbox"/>





# Module Enhancements



## Water-Distribution

- With these Work Options enabled, they have the same affect when the user clicks the **Create Work Order** button on the Flushing Route.

The screenshot shows the Lucidity software interface. The top navigation bar includes the Lucidity logo, a Home button, and a 'Water Flushing Routes' menu item with a close button (x) and a plus sign (+). Below the navigation bar is a toolbar with various icons, including a yellow hard hat icon which is highlighted with a red box. Below the toolbar is a table with the following columns: Route ID, Total Duration, Inactive Route, Zone Text, Reach, Type Text, and Reason.

	Route ID	Total Duration	Inactive Route	Zone Text	Reach	Type Text	Reason
 	1	0.00	<input type="checkbox"/>	Pressure Zone 1	Standard	Dead-End	Semi-
 	2		<input type="checkbox"/>	Pressure Zone 1	Standard	Low Point	Semi-

# Module Enhancements

Desktop  
Web

## Water-Distribution (Raw and Recycled)

In Supply Source, Now can be linked to **Water Pump** records.

The screenshot displays the Lucity web application interface. At the top, there is a navigation bar with the Lucity logo, a 'Home' button, and a 'Water Supply Sources' menu item with a close button and a plus sign. Below the navigation bar is a toolbar with various icons for actions like adding, deleting, and refreshing. The main content area shows a table of Water Supply Sources. The first row is highlighted in blue and contains the following data: Supply Number: WSS 00001, Supply Name: Ridgeway Reservoir, Building No: 5801, Address: (empty), Street Name: COLLEGE, Street Type: BLVD. A red box highlights the 'Water Supply Sources Associations (1)' link below the first row. Below this link is a table showing the association between the supply source and a water pump record.

Supply Number	Supply Name	Building No	Address	Street Name	Street Type	St
WSS 00001	Ridgeway Reservoir	5801		COLLEGE	BLVD	

Water Supply Sources Associations (1)

Asset Text	Record No	Unique ID
Pump	18	PU0014

# Module Enhancements



Desktop



Web

## Work

### Employee Cert and Classes

- Added new fields and functionality to both products making it easier to track Certifications, Classes and the costs of these classes.



# Module Enhancements

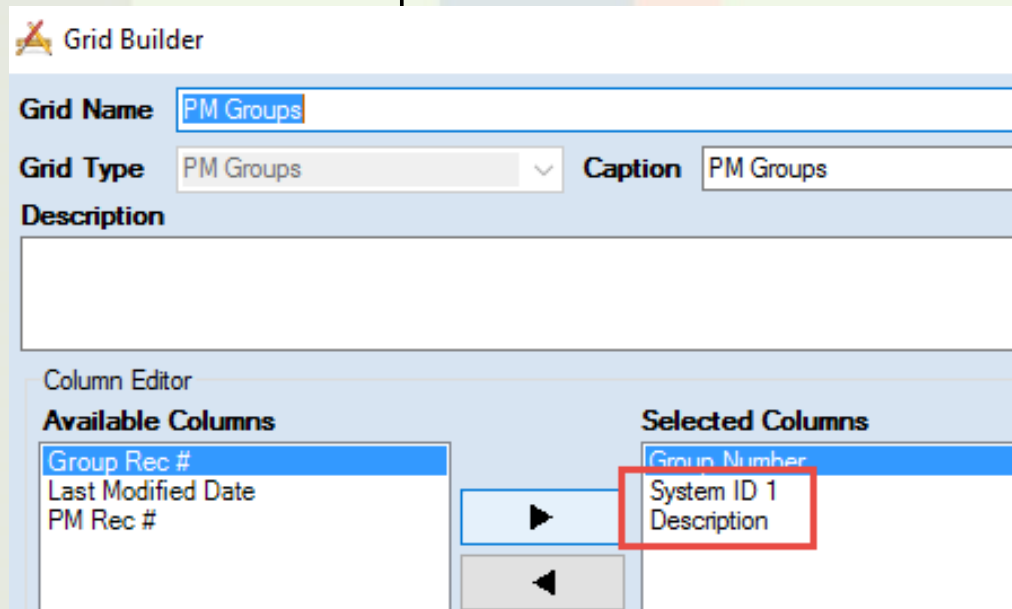


## Work

### PM/Template

#### ➤ Grouped PM

-  Added the **System ID 1** and **Description** fields so that the Grouped PM Asset Grid was more useful



The screenshot shows the 'Grid Builder' interface. At the top, there is a title bar with a small icon and the text 'Grid Builder'. Below this, there are several input fields and a dropdown menu. The 'Grid Name' field contains 'PM Groups'. The 'Grid Type' dropdown menu is set to 'PM Groups'. The 'Caption' field also contains 'PM Groups'. Below these fields is a large empty text area labeled 'Description'. At the bottom, there is a 'Column Editor' section with two columns: 'Available Columns' and 'Selected Columns'. The 'Available Columns' list includes 'Group Rec #', 'Last Modified Date', and 'PM Rec #'. The 'Selected Columns' list includes 'Group Number', 'System ID 1', and 'Description'. The 'System ID 1' and 'Description' items in the 'Selected Columns' list are highlighted with a red rectangular box.

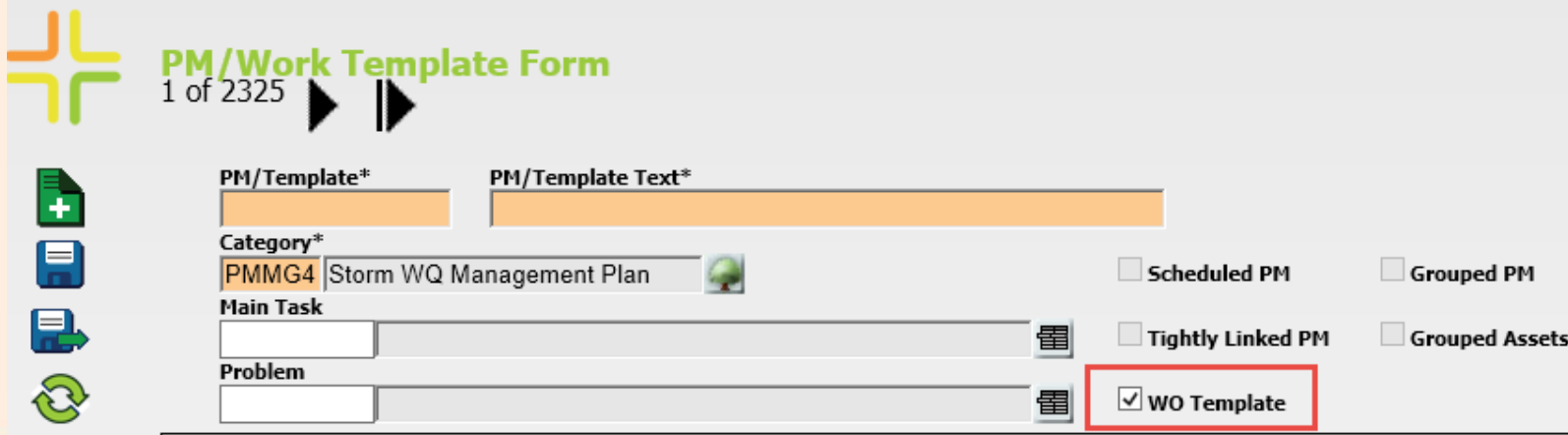
# Module Enhancements



## Work

### PM/Template

- Added a **WO Template** checkbox to indicate that the record can be used as a template for a new **Work Order**. Previously, all records not marked as a **Scheduled PM** were treated as templates



The screenshot shows the 'PM/Work Template Form' interface. The title bar indicates '1 of 2325' records. The form contains several fields and checkboxes:

- PM/Template\***: A text input field.
- PM/Template Text\***: A text input field.
- Category\***: A dropdown menu showing 'PMMG4 Storm WQ Management Plan' with a globe icon.
- Main Task**: A text input field with a list icon.
- Problem**: A text input field with a list icon.
- WO Template**: A checkbox that is checked and highlighted with a red box.
- Scheduled PM**: An unchecked checkbox.
- Grouped PM**: An unchecked checkbox.
- Tightly Linked PM**: An unchecked checkbox.
- Grouped Assets**: An unchecked checkbox.

# Module Enhancements

Desktop  
Web

## Work

### PM/Template

- Added a **PM Template** checkbox to indicate that the record can be used as a template for a new **PM**.



### PM/Work Template Form

2 of 2325



PM/Template\*

MB-VAC1005-\*365 D

PM/Template Text\*

INFLUENT VALVE ACTUATOR LP-P5 - 365 DAY / 6001 TO 10000

Category\*

USP5 Middle Basin Equipment

Scheduled PM

Grouped PM

Main Task

SWPT91 365 DAY / 6001 TO 10000 HOUR SERVICE

Tightly Linked PM

Grouped Assets

Problem

STPP00 Preventative Maintenance

WO Template

PM Template

# Module Enhancements



## Work

### PM/Template

- Added an **Inactive** checkbox to mark a record as inactive. These records do not appear in **Template** lists and are ignored by the **PM** service



### PM/Work Template Form

1 of 2325



PM/Template\*

PM/Template Text\*

Inactive

Category\*

PMMG4 Storm WQ Management Plan



Scheduled PM

Grouped PM

Main Task

Video: <https://www.youtube.com/watch?v=VAEAtHJITos>

# Module Enhancements



## Work

### PM/Template

- Added an **Affected PM** checkbox to indicate that the PM bases its schedule on another PM's schedule.



### PM/Work Template Form

1 of 2325



PM/Template\*

PM/Template Text\*

Category\*

PMMG4 Storm WQ Management Plan



Affected PM

Main Task



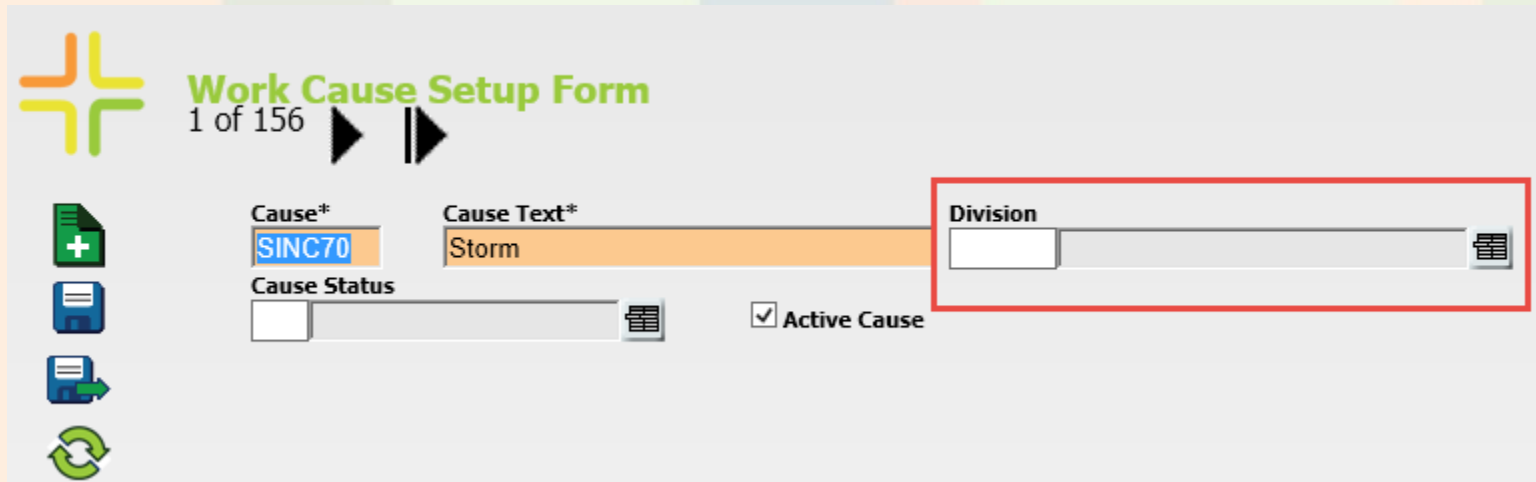
# Module Enhancements

 Desktop  
 Web

## Work

### Work Flow Setup Modules

- Cause, Contractor, Crew, Employee, Fluid, Material, and Task Setup
  - Added Division code/type fields



The screenshot shows the 'Work Cause Setup Form' interface. At the top left is a logo consisting of four colored lines (orange, yellow, green, blue) forming a cross shape. To the right of the logo, the text 'Work Cause Setup Form' is displayed in green, with '1 of 156' below it. Below the title are two navigation arrows. On the left side, there are four icons: a green document with a white plus sign, a blue document, a blue document with a green arrow, and a green circular refresh icon. The main form area contains several fields: 'Cause\*' with the value 'SINC70', 'Cause Text\*' with the value 'Storm', and 'Cause Status' with an empty dropdown menu. To the right of these fields is a 'Division' dropdown menu, which is highlighted with a red rectangular box. Below the 'Cause Status' field is a checkbox labeled 'Active Cause' which is checked.

# Module Enhancements



Desktop

Web

## Work

### Work Flow Setup Modules

#### ➤ Crew Setup

- Added an **Hours per Day** field. **Lucity** gives this field precedence over the **Lead Workers** or **Supervisor's Hours per Day** fields (in **Employee Setup**) or the **Hours per Day** option (in the **Work** program)
- Also added this field in Employee Setup to establish the number of hours per day the lead workers and supervisors work


# Module Enhancements








-  Desktop
-  Web







 Home

 Work Crew Setup  



	Crew	Hours per Day	Crew Text	Supervisor	Supervisor Text	Lead
	 CNS	8	Construction			
						



## Work Employee Setup Form

1 of 271  



Employee\*

Employee Name\*

Assigned Work

Employee Status

Full Time

Hours per Day

Active



# Module Enhancements



## Work

### Work Orders

- Added a **Project ID** field to enable users to manually link a **Work Order** to a **Project**. To do this, the **Work Order's Main Task** must match one of the **Project Tasks**



### Work Orders - Full Form



Work Order #

Status

 New Work Order 

Status Date

Status Time

Category\*

Problem

Project ID

 Annual Services 

Main Task

 ANNUAL SERVICE 

Work Order

# Module Enhancements



Desktop

Web

## Work-Project Management

 The **Project Management** modules were added to the **Lucity Web's Work** program in 2016. All enhancements requested during ACT 2015 have been completed in the Desktop. However, there are few modules missing tools still in the web.

# Module Enhancements



## Parts Warehousing

- For Part Transaction Logs, Lucity now tracks **quantity** and **unit costs** for each **Part** following every transaction in which the part is used.

The screenshot shows the Lucity software interface. At the top, there is a navigation bar with the Lucity logo, a 'Home' button, and a 'Part Transactions' button with a close icon and a plus sign. Below the navigation bar is a toolbar with icons for a star, a folder, a funnel, a refresh, and a CSV export. The main content area displays a table with the following columns: Date, Transaction Time, Qty., Unit Cost, Part ID, and Part D. The 'Qty.' and 'Unit Cost' columns are highlighted with a red box. The table contains two rows of data:

	Date	Transaction Time	Qty.	Unit Cost	Part ID	Part D
	1/22/2016		1.00	5.5600	W-SEAL-PVC-10	SEALE
	1/7/2016		1.00	35.0000	B-15-116	GARBA

# Module Enhancements




Desktop



Web

## Parts Warehousing

-  For Part Orders, Added a **Warehouse** field to specify the **Warehouse** for which the **Purchase Order** is being made.

# Module Enhancements

Desktop  
Web



Home

Part Purchase Orders

Vendors



PO Number	Warehouse ID	Warehouse Desc.
111009	OPB	Facilities

Edit - Part Purchase Orders - Internet Explorer

http://lsavage.ddns.net/LUCITYWEB/Protected/QuickSubmit.aspx?PID=2207&isEdit=true&isChild=false&R



## Part Purchase Orders Form

PO Number\*

111009

Date\*

3/23/2016

### General

Created By

a

Work Order #

Vendor ID\*

0006 Global Industrial

Vendor Invoice #

15-88795

Warehouse ID

OPB

Facilities

Status Code

1 Received



Items Cost

0.00

# Module Enhancements



## Parts Warehousing

-  When the **Warehouse** is specified, a list of  **Parts** display in the **Add Multiple Parts** tool must belong to the **Vendor** and be found in the **Warehouse**.

# Module Enhancements

Desktop  
Web



Home Part Purchase Orders Vendors

1

Specify Parts to Vendor

Vendor ID	Description	Company Name	Phone Number	Restrict PO List
0006	Global Industrial		1.888.978.7759	<input type="checkbox"/>

Vendor Parts (2)

Part ID	Vendor Part ID	Description
B-11-003	0000001	Battery C Alkaline
B-11-004	0000002	Battery D Alkaline



Home Part

2

In PO, add Multiple Parts in the Child Grid

PO Number	Warehouse ID	Warehouse Desc.
111009	OPB	Facilities

Parts (0) Receipts (0)

Parts

Add Multiple Items

Add Multiple Items

3


Select All of the Parts to associate to the PO

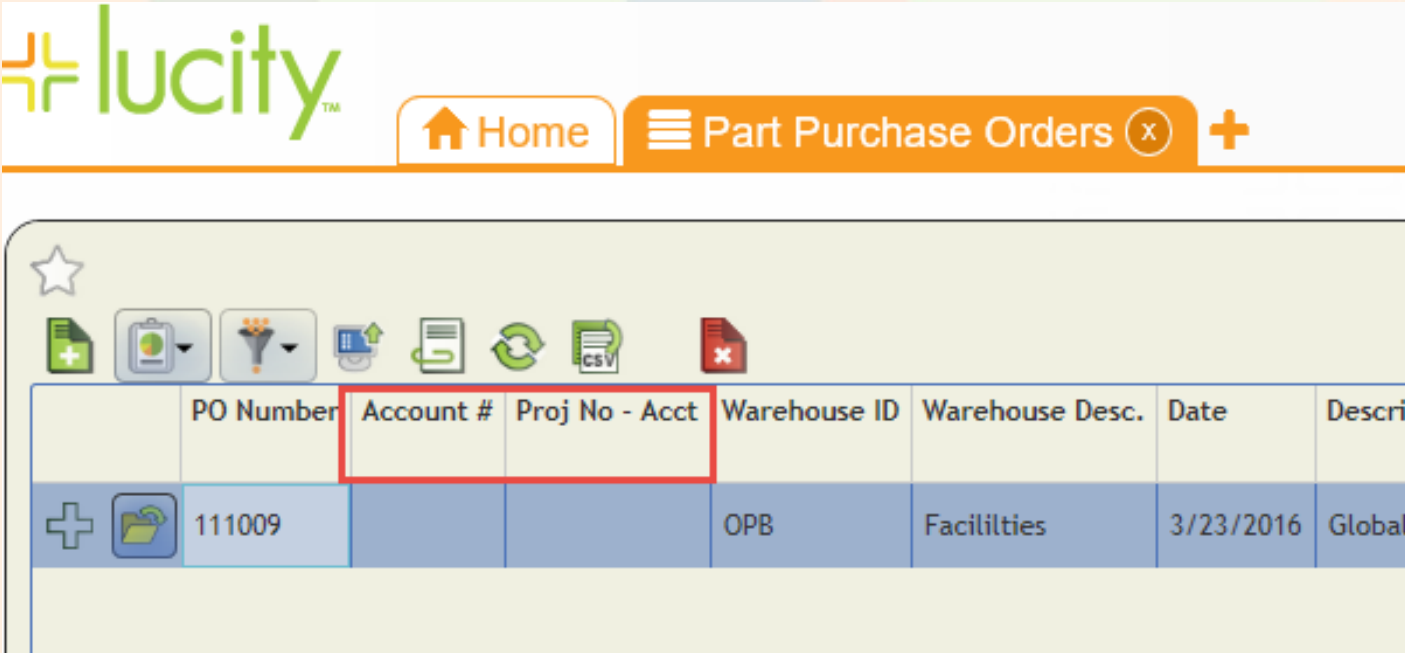
Part ID	Description	Vendor Part ID	Vendor Desc	UOM Code	UOM Descripti
B-11-003	BATTERY, C, ALKALINE 12/PKG	0000001	Battery C Alkaline	2	Each
B-11-004	BATTERY, D, ALKALINE 12/PKG	0000002	Battery D Alkaline	2	Each

# Module Enhancements



 Desktop  
 Web

## Parts Warehousing

  In Purchase Orders, Added **Account #** and **Project No-Acct** Fields.



The screenshot shows the Lucity software interface. The top navigation bar includes the Lucity logo, a 'Home' button, and a 'Part Purchase Orders' button with a close icon and a plus sign. Below the navigation bar is a toolbar with various icons for actions like adding, filtering, and exporting. The main content area displays a table of purchase orders. The table has the following columns: PO Number, Account #, Proj No - Acct, Warehouse ID, Warehouse Desc., Date, and Descri. The 'Account #' and 'Proj No - Acct' columns are highlighted with a red border. The first row of data shows a PO Number of 111009, Warehouse ID of OPB, Warehouse Desc. of Facilities, and Date of 3/23/2016.

	PO Number	Account #	Proj No - Acct	Warehouse ID	Warehouse Desc.	Date	Descri
 	111009			OPB	Facilities	3/23/2016	Global



# Administration Tool

# Administration Tool

## Activities Manager

- 🔧 Modified the interface to reflect changes in **Lucity's** Mobile Applications, which no longer requires activation codes. The **Active User Manager** now simply displays a list of devices that have an active license for **Lucity Mobile**.

# Administration Tool

Active User Manager

User	Application	Activation Date/Time	IP Address
a	Lucity Admin	3/29/2016 8:44:17 AM	10.0.13.5
a	Lucity Mobile REST	3/29/2016 8:44:59 AM	10.1.10.10

Refresh Delete Close

# Administration Tool

## System Settings

🔧 In the Security Tab, added the following settings.

- **Enable diag.html Server Information for debugging**, that disables part of the **Lucity Web** diagnostics page to protect server information if an agency runs **Lucity Web** over the open internet
- **How to Handle Frames for (Internal or Citizen) Web Pages** – to protect against the small threat of click-jacking

# Administration Tool

## System Settings

🔧 In the Security Tab, added the following settings. - Continued

- **Can users change Password from Mobile** setting to enable administrators to control whether users can change their **Lucity** passwords from mobile devices

# Administration Tool

System Settings

Appearance Designer Automation Documents Email General GIS 3rd Party Integrations GIS Desktop GIS I  
Mobile REST API SaaS Security Security - Passwords Settings with custom interface TimeSheet

Description	Value
▶ Add X-FRAME-OPTIONS to ALL Response Headers (recommended value is to le...	
Allows access to web services with certificate errors	FALSE
Block SQL for the Lucity Citizen Portal REST API	TRUE
Block SQL for the Lucity REST API	TRUE
Can Users Change Password From Mobile	FALSE
Disable DOS protection	FALSE
Enable Aggressive Javascript Injection Detection	FALSE
Enable diag.html Server Information for debugging (set to FALSE if Internal Web A...	TRUE
Flag that denotes if SSL is being used for ChangePassword feature	FALSE
How To Handle Frames for Citizen Web Pages (DENY, SAMEORIGIN, blank)	
How To Handle Frames for Internal Web Pages (DENY, SAMEORIGIN, blank)	
List of values that are not allowed in search filters to reduce risk of getting hacked.	(connectstrings)user_info ir
Regex for range of unicode characters allowed in SQL	[^u0000-^u007F]

# Administration Tool

## System Settings

- ✚ In the Security-Passwords Tab, added the following settings.
  - **Send an email to the user when their password changes**, that automatically alerts a user when his or her password changes.
  - **Allow easily guessed passwords**; when disabled, this prevents users from using common passwords like 'password', 'Lucity', etc.

# Administration Tool

## System Settings

Appearance   Designer Automation   Documents   Email   General   GIS 3rd Party Integrations   GIS Desktop   G  
Mobile   REST API   SaaS   Security   Security - Passwords   Settings with custom interface   TimeSheet

	Description	Value
<input type="checkbox"/>	Allow easily guessed passwords	FALSE
	Days before password expiration to warn user	10
	Days before password expiration to warn user with Email	3
	Maximum password age	99999
	Minimum Length For Passwords (Must be 1 or greater)	1
	Password must meet complexity requirements	FALSE
<input type="checkbox"/>	Send an email to the user when their password changes	TRUE



# Administration Tool

## System Settings

- ✂ In Documents Tab, added the following settings.
  - **Documents with file size greater than given size, are opened using file path. Default size is 500mb**, which limits the size of documents displayed within **Lucity**. If this document is above the set limit, the system provides a link to the document, rather than displaying it.
  - **Enable External Document Integration** setting to let administrators integrate **Lucity Web** with a third-party document-storage system.

# Administration Tool

## System Settings

Mobile	REST API	SaaS	Security	Security - Passwords	Settings with custom interface	TimeSheet	Web F
Appearance	Designer Automation	Documents	Email	General	GIS 3rd Party Integrations	GIS Desktop	GIS Edit In

Description	Value
Documents with file size greater than given size, are opened using file path. Default...	500
Enable External Document Integration	FALSE
Error to display if a file upload fails in the Citizen app	There was an error uploading the
List of document types that are allowed to be added to records	
List of document types that are allowed to be uploaded by citizens	jpg,gif,png,bmp
List of document types that are not allowed to be added to records	exe,com,dll,ocx,bat,reg,tmp,dat,.
Maximum size for uploaded document in mb (Citizen)	2

# Administration Tool

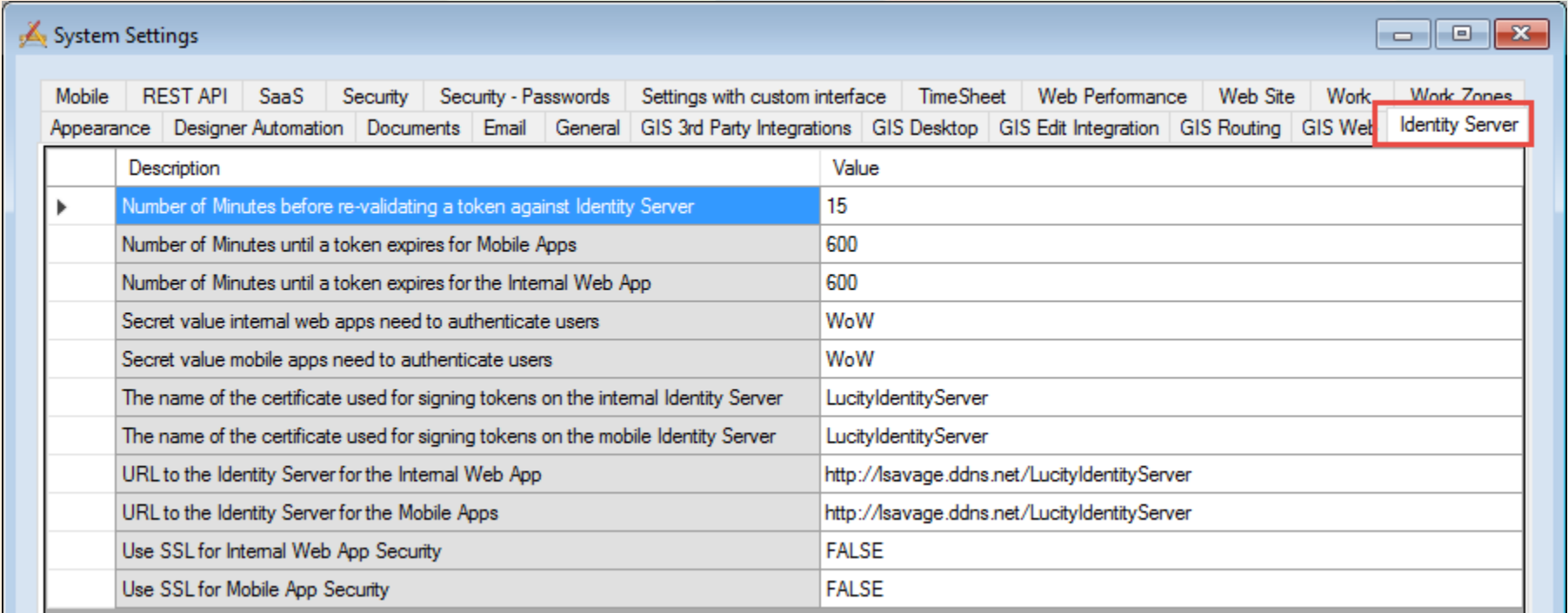
## System Settings

- 🚧 Introduced a new set of system settings for managing the **Identity Server**.
  - Used to identify, authenticate, and track Lucity user logins.
    - Token based security
    - Installed on the same server as Lucity Web and Lucity Mobile Server

# Administration Tool

## System Settings

🚧 Added a new tab for managing the **Identity Server**.



The screenshot shows the 'System Settings' application window. The 'Identity Server' tab is selected and highlighted with a red box. The main content area displays a table of settings for the Identity Server.

Description	Value
▶ Number of Minutes before re-validating a token against Identity Server	15
Number of Minutes until a token expires for Mobile Apps	600
Number of Minutes until a token expires for the Internal Web App	600
Secret value internal web apps need to authenticate users	WoW
Secret value mobile apps need to authenticate users	WoW
The name of the certificate used for signing tokens on the internal Identity Server	LucityIdentityServer
The name of the certificate used for signing tokens on the mobile Identity Server	LucityIdentityServer
URL to the Identity Server for the Internal Web App	http://savage.ddns.net/LucityIdentityServer
URL to the Identity Server for the Mobile Apps	http://savage.ddns.net/LucityIdentityServer
Use SSL for Internal Web App Security	FALSE
Use SSL for Mobile App Security	FALSE

# Administration Tool

## System Settings

- 🔧 In the Mobile tab, added a setting, **Update the offline (Android or iOS) cache nightly**, that directs the mobile server to cache offline data for the **Lucity** Android and iOS v2.0 applications every night.

# Administration Tool

## System Settings

Appearance		Designer Automation		Documents		Email		General		GIS 3rd Party Integrations		GIS Desktop		GIS Edit Integration		GIS R...	
Mobile		REST API		SaaS		Security		Security - Passwords		Settings with custom interface		TimeSheet		Web Performance		W...	
	Description																Value
▶	Log device latitude and longitude																FALSE
	Max Columns Returned																20
	Maximum number of days to store device location history																30
	Maximum records to return per request for mobile																100
	Update the offline Android cache nightly																TRUE
	Update the offline iOS cache nightly																FALSE
	Url for the Lucity Mobile Server Virtual Directory (Externally accessible version)																<a href="http://savage.ddns.net/LucityMobileServer">http://savage.ddns.net/LucityMobileServer</a>

# Administration Tool

## System Settings

- 🔧 In the REST API tab, added a setting, **Automatically push invalid request addresses to the General Location field**, that allows third-party developers to instruct the **Citizen Portal** REST API to automatically move an invalid address to the **General Location** field (if empty).

# Administration Tool

## System Settings

Appearance Designer Automation Documents Email General GIS 3rd Party Integrations GIS Desktop GIS Edit Integration GIS F  
Mobile REST API SaaS Security Security - Passwords Settings with custom interface TimeSheet Web Performance V

Description	Value
▶ Allow RequestNumber and Email queries to the Citizen Portal REST API without pr...	FALSE
Automatically push invalid request addresses to the general location field	FALSE
Default Public REST WKID	
Logon to use for anonymous REST API Access	RESTAPILogOn
Maximum records to return per request for rest api	50
Url for Citizen Portal REST API (optional, rarely required)	
Url for Internal REST API (required for internal web app)	http://savage.ddns.net/LucityWebRESTAPI
Url for REST API (optional, rarely required)	
Use an alternate coord system as the Default Coordinate System for Public REST ...	FALSE
Use extensionless URLs (only supported in IIS7+)	FALSE
Use ISO 8601 UTC DateTimes instead of ISO 8601 Local DateTimes For Citizen ...	FALSE
Use ISO 8601 UTC DateTimes instead of ISO 8601 local DateTimes For Internal ...	FALSE



# Administration Tool

## Reports

- Removed **Reports** in Lucity Administration because it is now managed in **Lucity Web**

# Administration Tool

## Reports For Sewer Pipes

All Reports ▾

Manage Report Groups

Report Name ↓	Report Description
Diversion and High Point Manholes Report	Prints all manholes that have more than one outgoing pipe
Elevation Report	Pipe by pipe summary of the data with elevations.
Network-Length of Sewer by Diameter Ranges	Pipe length summary totals by pipe diameter and Flow
Pipe Detail Report	Prints all data stored in Pipe Inventory Module.
Pipe Inventory Image Report	Prints images and data for Pipe Inventory.
Pipe Inventory Master with Connections	All data in the Pipe Inventory Module including Connections
Pipe Inventory with Observation Holes	Pipe by pipe summary of the data with elevations and flow
Pipe TV History Report	Displays Date, Time, Direction, Crew, Purpose, and Task
Pipe Without TV Inspections	Provides a list of Pipes that have not had Television Inspections
Pipes Master Report	All the data stored in the module.
Pipes Without Air Tests	One line summary of Pipes that have not had Air Tests
Pipes Without Mandrel Tests	One line summary of Pipes that have not had Mandrel Tests
Sewer Pipe Summary Report	One line summary for Sewer Pipe Inventory.

Add Quick Report

Add

Edit

Update

Download

Delete

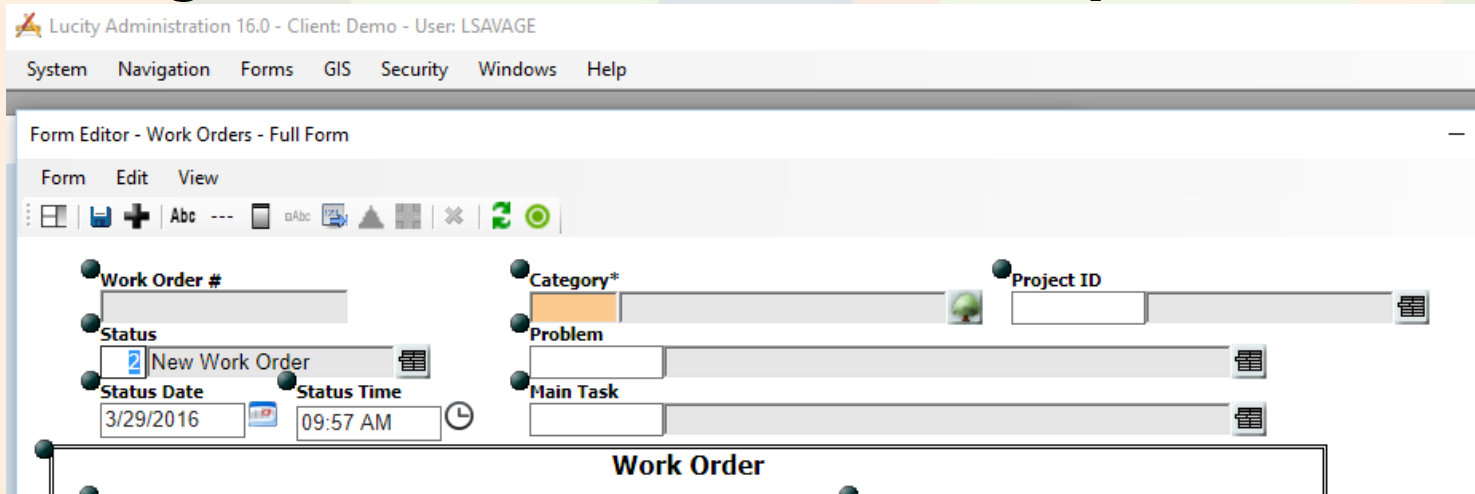
Close

Run

# Administration Tool

## Forms

✏️ Modified the **Editing Forms** feature so that users remain logged in and can see any changes made to the **Form** almost immediately after saving. The feature no longer kicks users out of **Lucity Web**.



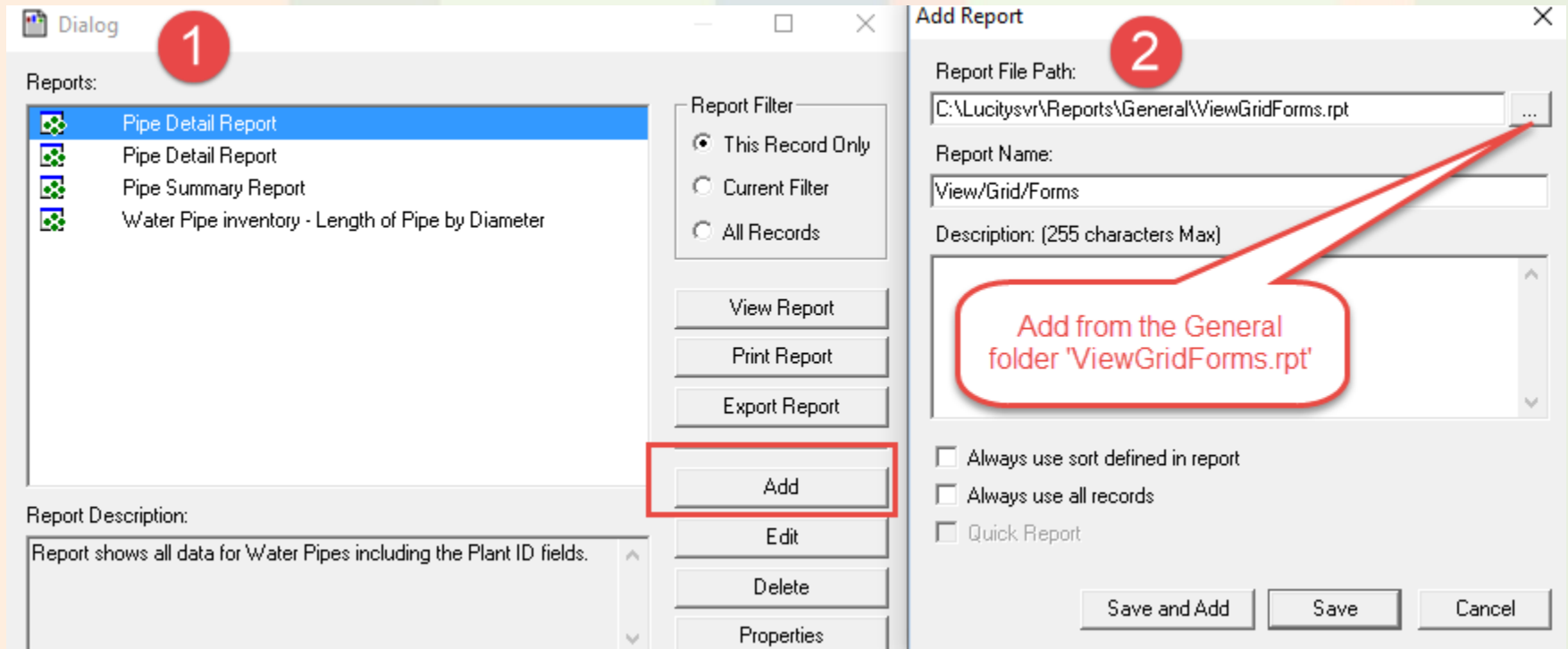
The screenshot displays the 'Lucity Administration 16.0 - Client: Demo - User: LSAVAGE' interface. The main window is titled 'Form Editor - Work Orders - Full Form'. The interface includes a menu bar with 'System', 'Navigation', 'Forms', 'GIS', 'Security', 'Windows', and 'Help'. Below the menu bar is a toolbar with icons for 'Form', 'Edit', and 'View'. The form itself contains several fields: 'Work Order #' (text input), 'Status' (dropdown menu with 'New Work Order' selected), 'Status Date' (calendar icon, value '3/29/2016'), 'Status Time' (clock icon, value '09:57 AM'), 'Category\*' (text input), 'Project ID' (text input), 'Problem' (text input), and 'Main Task' (text input). Each text input field has a small icon to its right, likely for saving or refreshing. The form is titled 'Work Order' at the bottom.

# Administration Tool

## Forms

- ✚ Added reports that display all of the **Views/Grids/Forms** that a user has created. These reports can be run from any **Lucity Web and Desktop** module

# Administration Tool



# Administration Tool

## Reports For Sewer Pipes 1

All Reports ▾

Manage Report Groups

Report Name ↓	Report Description
Diversion and High Point Manholes Report	Prints all manholes that have more than one outgoing
Elevation Report	Pipe by pipe summary of the data with elevations.
Network-Length of Sewer by Diameter Ranges	Pipe length summary totals by pipe diameter and Flow
Pipe Detail Report	Prints all data stored in Pipe Inventory Module.
Pipe Inventory Image Report	Prints images and data for Pipe Inventory.
Pipe Inventory Master with Connections	All data in the Pipe Inventory Module including Connec
Pipe Inventory with Observation Holes	Pipe by pipe summary of the data with elevations and t
Pipe TV History Report	Displays Date, Time, Direction, Crew, Purpose, and Ta
Pipe Without TV Inspections	Provides a list of Pipes that have not had Television In:
Pipes Master Report	All the data stored in the module.
Pipes Without Air Tests	One line summary of Pipes that have not had Air Tests
Pipes Without Mandrel Tests	One line summary of Pipes that have not had Mandrel
Sewer Pipe Summary Report	One line summary for Sewer Pipe Inventory.

Add Quick Report

Add

Edit

Update

Download

Delete

Close

Run

# Administration Tool

Add Report

2

Report Name:

View/Grid/Forms

Report Description:

Reports what View/Grid/Forms that a user has created

Subdirectory that Report will be stored in: (%CustomReportFolder%\Luke)

Luke

Lucy Web/Reports location in IIS  
Lucy Web Server

Choose File to Upload:

C:\inetpub\wwwroot\LucyWeb\Reports\General\ViewGridFormsWeb.rpt

Browse...

Optional Report Group: [none] v

Cancel

Save

# Administration Tool

## Reports For Sewer Pipes

3

All Reports ▾

Manage Report Groups

Report Name ↓	Report Description
Network-Length of Sewer by Diameter Ranges	Pipe length summary totals by pipe diameter and Flow
Pipe Detail Report	Prints all data stored in Pipe Inventory Module.
Pipe Inventory Image Report	Prints images and data for Pipe Inventory.
Pipe Inventory Master with Connections	All data in the Pipe Inventory Module including Connec
Pipe Inventory with Observation Holes	Pipe by pipe summary of the data with elevations and t
Pipe TV History Report	Displays Date, Time, Direction, Crew, Purpose, and Ta
Pipe Without TV Inspections	Provides a list of Pipes that have not had Television In
Pipes Master Report	All the data stored in the module.
Pipes Without Air Tests	One line summary of Pipes that have not had Air Tests
Pipes Without Mandrel Tests	One line summary of Pipes that have not had Mandrel
Sewer Pipe Summary Report	One line summary for Sewer Pipe Inventory.
Sewer Pipes Without Selected Task	List of Pipes that have not had the selected WO Task c
View/Grid/Forms	Reports what View/Grid/Forms that a user has created

Add Quick Report

Add

Edit

Update

Download

Delete

Close

Run Report

Run



# Administration Tool



Home Sewer Pipes View/Grid/Forms **4**

Parameters 100%

Main Report

**Lucity Web Views with Associated Forms and Grids** 3/29/2016 10:48 am

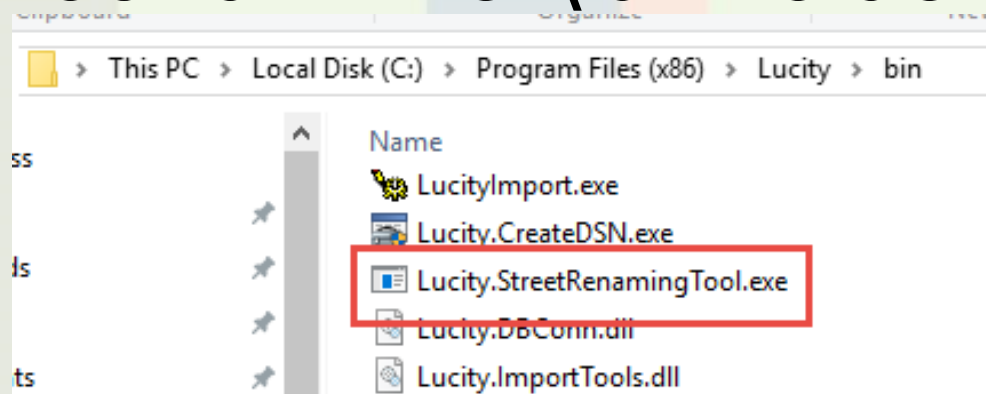
View	Grid	Forms	Module
<b>Accident Data Management</b>			
	Accident Data Management		Street Accident Data Management
<b>Account Numbers</b>			
	Account Numbers		Account Numbers
		Account Numbers Form	
<b>Activity Library</b>			
	Activity Library		Activity Library
		Activity Library Form	
	Activity Library Details		
		Activity Library Details Form	
<b>Auxiliary Equipment</b>			
	Auxiliary Equipment		Street Auxiliary Equipment
		Auxiliary Equipment Form	

Please wait while the document is being processed.

# Street Renaming Tool

# Street Renaming Tool

- 🖥️ This new tool lets administrators update a **Street Name System-Wide** to correct a misspelling or to change it to a completely new name.
- 🖥️ The tool is installed with **Lucity Desktop** and is found in the **\bin** folder.



Video: <https://www.youtube.com/watch?v=dQxZqB3fL98>





Desktop

# Module Enhancements



Desktop



Web

## Create PM/Template Tool

 Added the ability to create a new **Template** based on an existing **Template**.

# Desktop

Desktop  
Web

Fleet - No Filter



Fleet ID: Chev654 | Chev Tahoe 4x4 | Fleet Rec #: 72

Operating Status: | Class: | Model: |

Manufacturer: |

General | WO/PM/Req | Travel Log | Tracking | Tasks | Inspections | Fueling | Items | Specs | Purchase | Costs | Tires | Eval | Reset | Email | Custom | Custom 2 | Comments

Create PM

Based On:

Current Record  Entire Filtered Recordset

Select Template

PM/Template	PM/Template
PMAT001	PM Template

Need to have an existing PM Template and create PM Template from any asset

Fuel Type: |

Fuel Tank Size: | 0.00

Oil Type: |

Engine Oil Quantity: | 0.00

Odometer: |

Hourmeter: |



The image features a central horizontal band with a green, grass-like texture. This band is set against a background of vertical stripes in various colors: orange, light green, light blue, light green, light blue, light green, and orange. The stripes are arranged in a repeating pattern. The central green band is wider than the individual stripes. The overall design is clean and modern.

GIS



# GIS

- ArcGIS for Desktop 10.4 supported.
- ArcGIS for Server 10.4 **not** supported
- ArcGIS 10.2.2 - 10.3.1 **fully** supported

# GIS

- In ArcMap, Modified the **TV Observation Tool** to enable users to filter results by **Severity** rating.

✚ View TV Observations

Step 1: Select an inspection type:  
Sewer TV Inspections

Step 2: Specify a max inspection date:  
3/29/2016

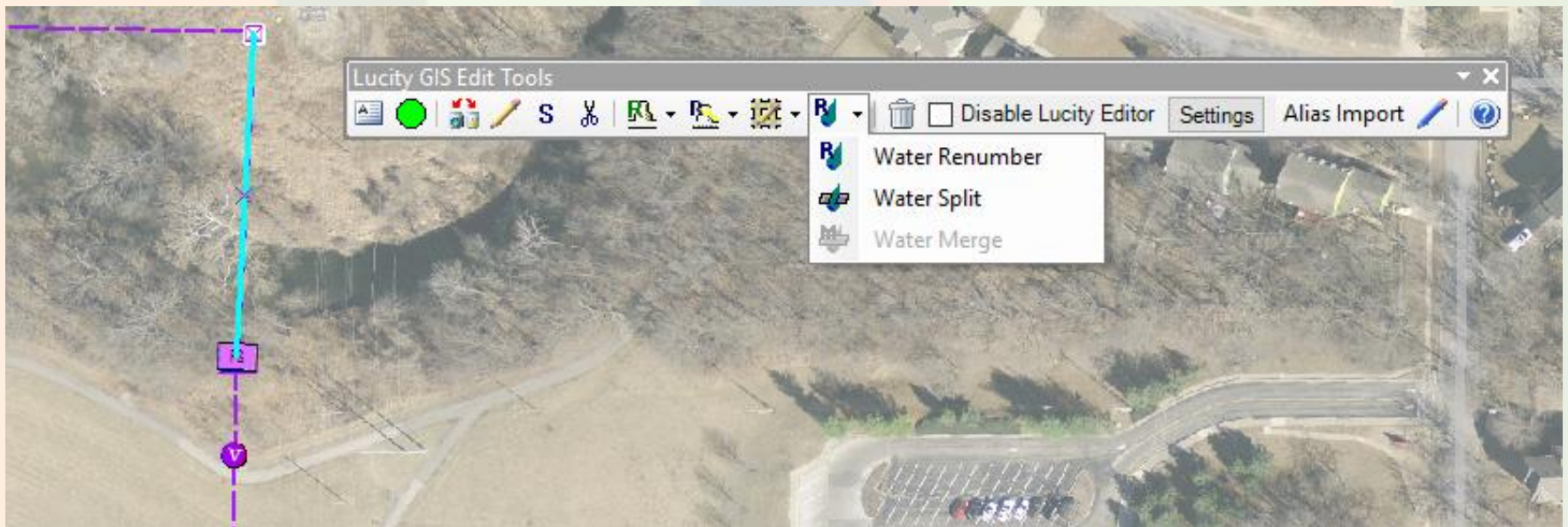
Step 3: Select a search criteria option:  
 All Pipes/Conduits  
 Currently Selected Pipes in Map 0  
 Inventory Filter  
 Inspection Filter

Step 4: Defects to include in results  
 Show all defects  
 Abandoned Survey  
 Alignment Down  
 Alignment Left  
 Alignment Left Down

Step 5: Severity ratings to include in results  
 Show all severity ratings  
 <Null>  
 1  
 2  
 3  
 4

# GIS

- In ArcMap, Configured the **Lucity Water Tools** (split, merge, renumber) to work with raw and recycled water features.



# GIS

- In ArcMap, Enhanced the **Show in Map** tool to display **Water Meter Devices**, **AMRs**, **Construction** record assets, **Water Flushing Route** assets, and **Work Permit** assets.

Water Meter Device - No Filter

Meter Dev Rec # 3    Device Number WM00001    Meter Type 7 Nutating-Disk

Attributes | Location/Status | AMR | Calibrations | Inspection | Construction | WD/PM/Req | Custom | Custom 2 | Comments

Manufacturer 9 Neptune    Operating Status 1 Operational

Model Number T-10    Alt Park ID

Serial Number WM00001

Size 1.5

Meter Set

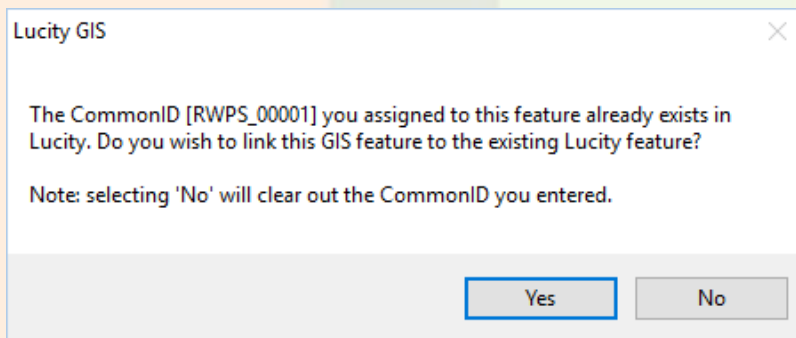
Associations

Asset Text	Record No	Unique ID
------------	-----------	-----------

# GIS

## ➤ In ArcMap, Configured the **Editor Extension** to:

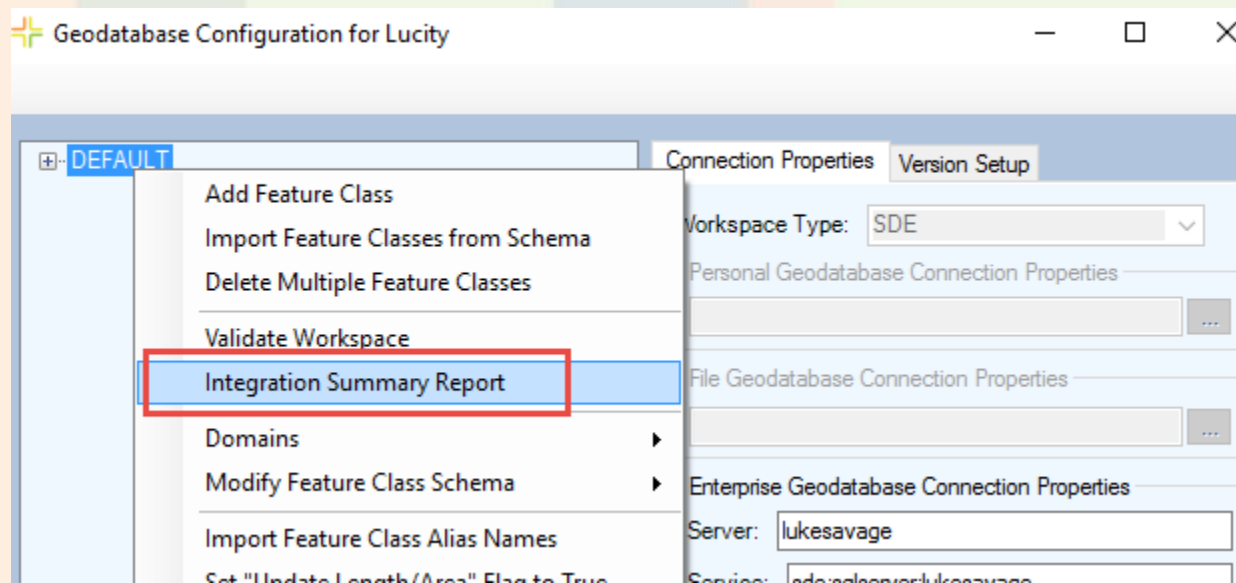
- Warn users if the **Common ID** they entered is a duplicate
- Permit **Default Values** mapped in the **Geodatabase Configuration** tool to be synced into **Lucy** when users add or edit a record



FieldName	DisplayName	Field Type	MaxMask	Feature Class Field Name	Field Lookup
AD_USER13	User 13	Double	-nnnnnnnn...		
AD_USER14	User 14	String	100x		
AD_USER15	User 15	String	50x		
AD_USER16...	User 16	Short	nynn	=0001	
AD_USER17...	User 17	Short	nynn		
AD_USER18...	User 18	Short	nynn		

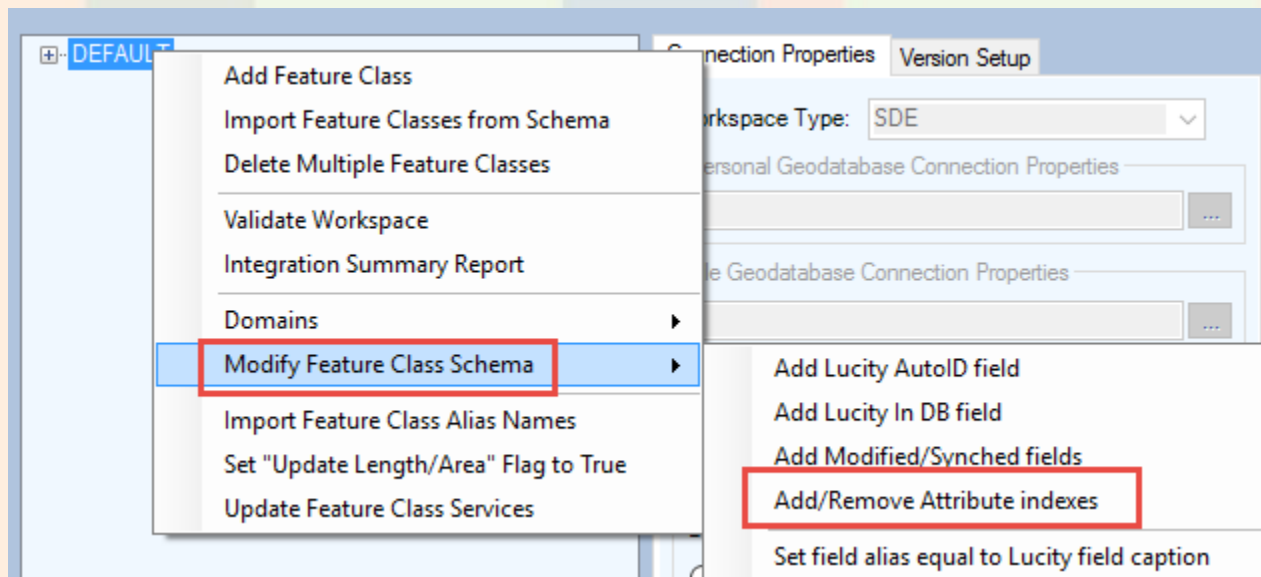
# GIS

- In ArcCatalog, Added an **Integration Summary Report** that displays information about the **Geodatabase Configuration**. This report can be run against the entire configuration or a single feature class.



# GIS

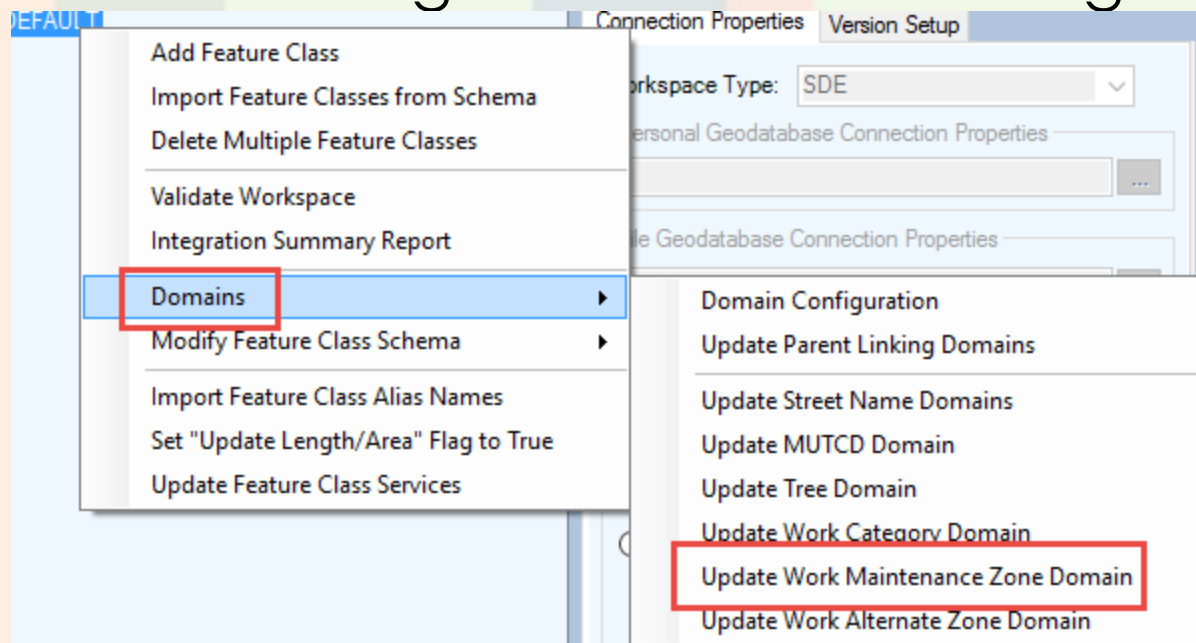
- In ArcCatalog, Added tools for adding or removing **Attribute Indexes**. Adding indexes for the **Common ID** (Facility ID) and **Auto ID** (Lucity ID) fields makes Lucity GIS tools run faster.



# GIS

## ➤ In ArcCatalog Domain Tools

- Added an **Update Work Maintenance Zone Domain** tool to create and assign domains for the **Work Maintenance Zone** fields. This tool can be run against the entire configuration.

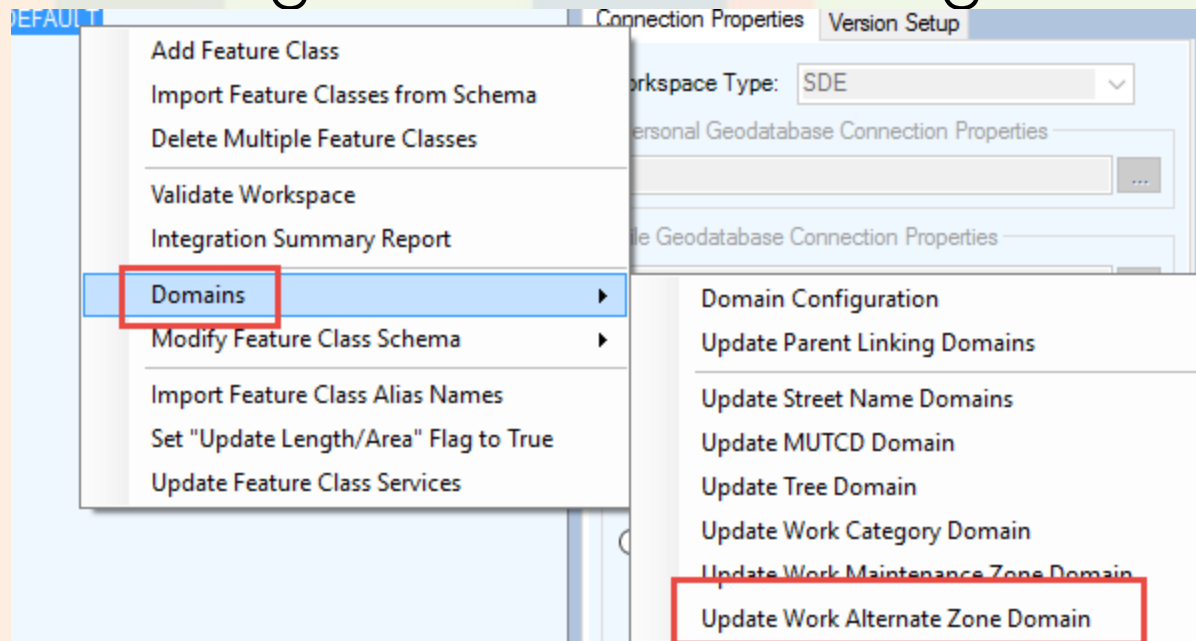




# GIS

## ➤ In ArcCatalog Domain Tools

- Added an **Update Work Alternate Zone Domain** tool to create and assign domains for the **Work Alternate Zone** fields. This tool can be run against the entire configuration.



# GIS

- In ArcCatalog Domain Tools
  - Added a **Show Current Values and Record Counts** option to the **Domain Configuration Tool** that is useful when managing domains. The option displays the number of records in GIS and **Lucity** using the various codes.

# GIS

## Resolve Domain Discrepancies

GIS Feature Class: `cmGeneralCustom`

GIS Field Name: `TYPE` Field Type: `esriFieldTypeInteger`

GIS Domain: `CMGENINV_GN_TYPE_CD_1`

Lucity Module: `General Custom`

Lucity Field Name: `GN_TYPE_CD` Field Type: `Short`

Lucity Picklist - `Type`

Code	Description
1	Emergency Siren
2	Monument
*	

>> Add value to Lucity >>

Repopulate Lucity to match GIS

<< Add value to GIS <<

Repopulate GIS to match Lucity

Close

Code	Description	GIS Code	Restricted?
1	Emergency Siren		<input type="checkbox"/>
2	Monument		<input type="checkbox"/>
*			<input type="checkbox"/>

Apply Changes

Show current values and record counts

Apply Changes

F1 for help

### Current GIS Values

Code	# of Records
1	10
2	30

### Current Lucity Values

Code	Description	# of Records
1	Emergency Siren	10
2	Monument	30

# GIS

## ➤ In ArcCatalog Scheduled Tasks

- Modified the module to support the **Reverse Geocode** spatial relationship.
- Updated the **Tasks**' import logic to account for the new **GIS Default** values required for the **GIS-to-Lucity** synchronization process

Scheduled Tasks

General Info  
Task Type: Sync- GIS to Lucity  Disabled

Filter Options  
 None (process all source records)  Filtered set  
Where Clause: [Select Filter](#)

Options  
 Only process records modified since last run  
Last Edited DateTime Field:   
 Insert record if it doesn't already exist  
 Enable number generator for imports  
 Enable spatial relates for imports  
 Update existing record  
 Delete previous inspection(s) for asset. (Only keep most recent inspection)

# GIS

## ➤ Lucity GIS Viewer

- Added measurement tools.



# GIS

## ➤ New **GIS Integrated** Modules

- Water Meter Device and AMR
  - ✓ Water Distribution
  - ✓ Recycled Water
  - ✓ Raw Water
- Plant Process

# Import and Update

# Import and Update

- 🖥️ Launching the Import and Update requires users to have a new **Admin > Import and Update > Run** permission.

The screenshot displays a configuration interface with two tabs: 'Modules View' and 'Permissions View'. The 'Modules View' tab is active, showing a list of modules with checkboxes. The 'Import and Update' module is highlighted with a red box. The 'Permissions View' tab is also visible, showing a list of permissions including 'General - Edit' and 'Run'.

Modules View	Permissions View
<input checked="" type="checkbox"/> Admin	General - Edit
<input checked="" type="checkbox"/> Activations	Run
<input checked="" type="checkbox"/> Data Quality	
<input checked="" type="checkbox"/> Import and Update	
<input checked="" type="checkbox"/> Lucity App Admin	
<input checked="" type="checkbox"/> Lucity IT Admin	
<input checked="" type="checkbox"/> Security Admin	

Video: <https://www.youtube.com/watch?v=FggJUUmTo77c>



The image features a central horizontal bar with a green grass-like texture. The word "Install" is written in a white, sans-serif font with a slight drop shadow, centered on this bar. The background consists of a series of vertical stripes in various colors: orange, green, light green, teal, red, and light blue. The entire composition is framed by a white border with rounded corners.

Install

# Install

## ➤ Lucity Desktop

- The **Desktop** installation now includes the **Lucity Security** and **Client Maintenance** programs. Previously, these programs were installed only with a complete install. This change does not pose a security risk, because each of these tools still require administrator credentials.
  - ✓ The **GIS Viewer** continues to be available only through the **Custom** install.

# Install

## ➤ Lucy Server

- In Client Maintenance, Modified the interface to include only one database tab per client to reflect the **Unified Database** as well as removed the **Documents** tab because **Lucity** no longer supports relative document pathing.

The screenshot displays the 'Client Configuration' window. On the left, under 'Installed Licenses', there is a list of 'Installed Clients' with 'Demo' selected. On the right, under 'Available Licenses', the 'Database Information' tab is active, showing details for the 'Lucity' database.

Application Information	
Application Version	16
Database Information	
Database Name	<b>Lucity</b>
Database Platform	SQL Server
Database Status	OK
Database Version	16

# Install

## ➤ Lucy Web

- Configured the system to automatically launch the **Lucy Web REST API** and **Lucy Identity Server** installations.

# REST API

# REST API

## ➤ Status Codes

- When a user is not authorized to perform an action due to permissions, the REST API now returns a **403 Forbidden** code. Previously, the system returned a **401 Unauthorized** code. **401** is now used only to indicate a failure to log into **Lucity** or an expired login session.

The image features a central horizontal banner with a dark green, textured background. The word "Security" is written in a white, sans-serif font with a slight 3D effect, centered on the banner. The background of the entire image consists of a series of vertical stripes in various colors: orange, green, light green, teal, red, and light blue. The banner itself is set against a white background with rounded corners.

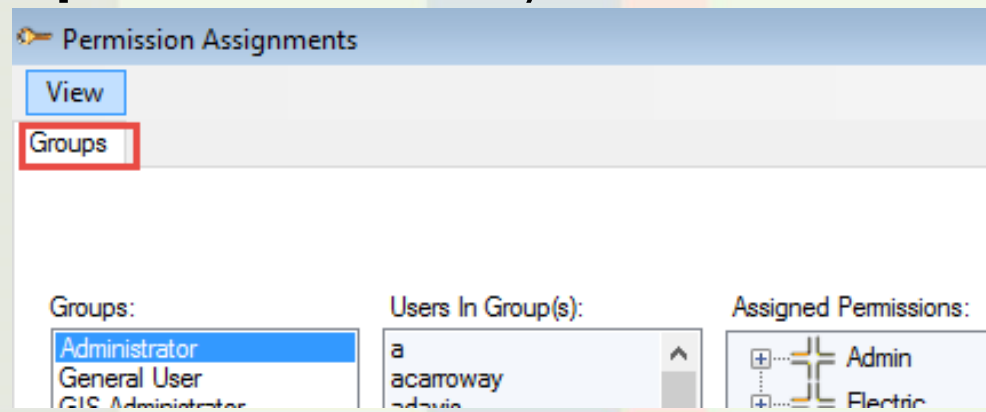
Security



# Security

## ➤ User Permissions

- **Lucity** no longer manages security using individual user permissions. Individual permissions were removed to simplify the **Security** program and improve overall performance of the product. Instead, users should obtain their permissions from the **Groups** in which they are members.





# Services

# Services

## ➤ Lucy Scheduler Service



- Now runs all **Lucy** background processes including nightly tasks and **PM** generation.
- No longer tracks nightly **PM** information in the **Lucy.dbo.SYSTEMLOG** table
- All of the scheduled tasks are being updated to use Lucy's **BackgroundTaskUser**



Web

# Web

- In version 2016, a single user can open multiple instance of **Lucity Web**, allowing him or her to display it on multiple monitors. Nevertheless, it is a violation of the **Lucity Software License Agreement** for users to share user logons.

# Web

- Dashboards

- Modified the **Manage Shared Tabs** tool to display each user's **Default Rules Group**.

# Web

## Manage Shared Tabs

Shared Tabs  Tab Groups

Users:

Name	User Name	First Name	Last Name	Department	Default Rules Group
Admin	/hoberg	Yulanda	Hoberg	Bridges	
Sewer	/wrose	Whitney	Rose	Water	
	/tremper	Vito	Tremper	Facilities	
	/higbee	Vernell	Higbee	Wastewater Plant	
	/hames	Vernetta	Hames	Water Distribution	
	/guffey	Vanda	Guffey	Storm	
	/goucher	Vera	Goucher	Water Distribution	
	/gibson	Victoria	Gibson		Administrator
	/cardinale	Vince	Cardinale	Water Distribution	
	/valessi	Venetta	Alessi	Fleet	
	/wheeler	Trey	Wheeler		Administrator
	/welsh	Tori	Welsh	Solid Waste	
	/tong	Thomas	Tong	Sewer Collections	

Page Size 50 1 of 6

Open Selected Group

Manage Selected Group Users

Delete Selected Group

Apply Selected Group to Selected Users

Done

# Web


## Dashboards

- Eliminated the **Dashboard reports** distinction, because all reports can now be displayed on the **Dashboard**.
- Added a **Map Plugin** that can display a **Lucity WebMap** on the **Dashboard**.
  - Frames can be set to **Show in Plugin Map**. When frames are toggled in this manner, **Data Drills, Quick Lookups, and Asset Hierarchy Tree** information will be displayed within the **Map Plugin** found on the same **Dashboard tab**, instead of opening in a module view.

Video: [https://www.youtube.com/watch?v=T\\_iR7QMHCeE](https://www.youtube.com/watch?v=T_iR7QMHCeE)



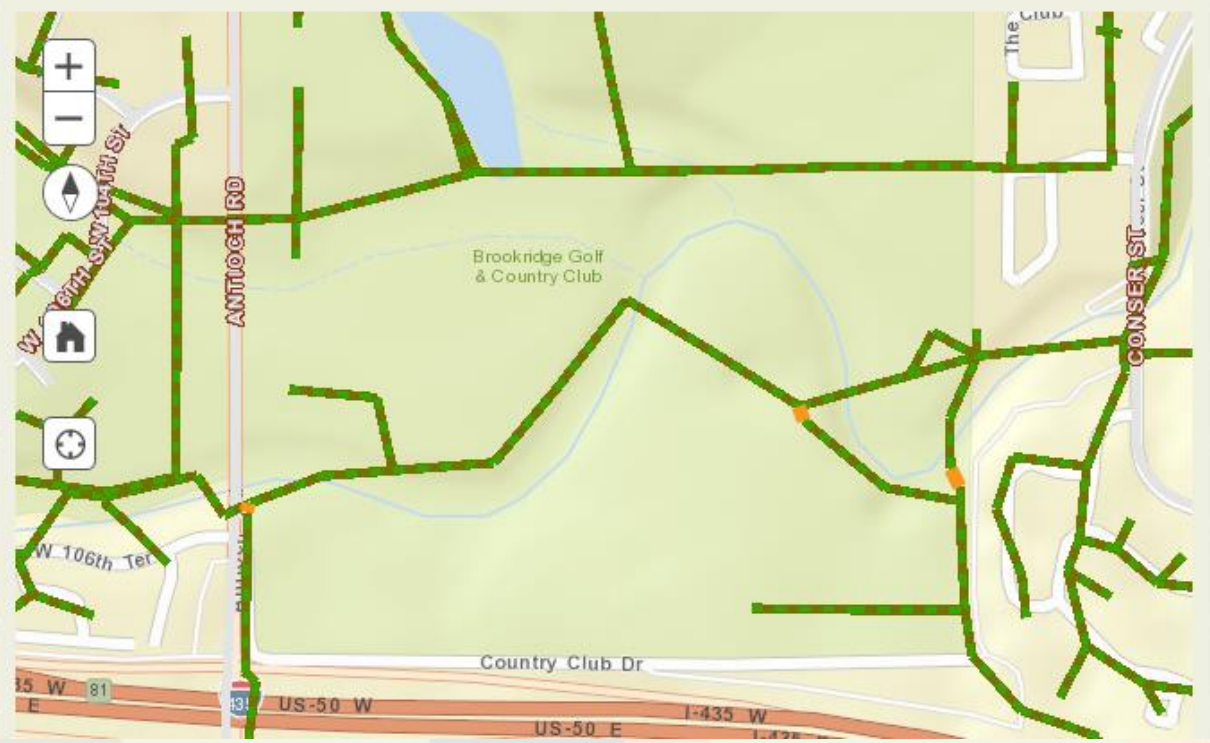
# Web

**Sewer Assets** 1 

— Sewer Pipes (47)

**Map** 2 

Now Showing: Sewer Pipes - ICM1-19





# Web

## 🌐 User Controls

- Enhanced the **Reset Password** function to display related password requirements.

The image shows a web application interface with two main components:

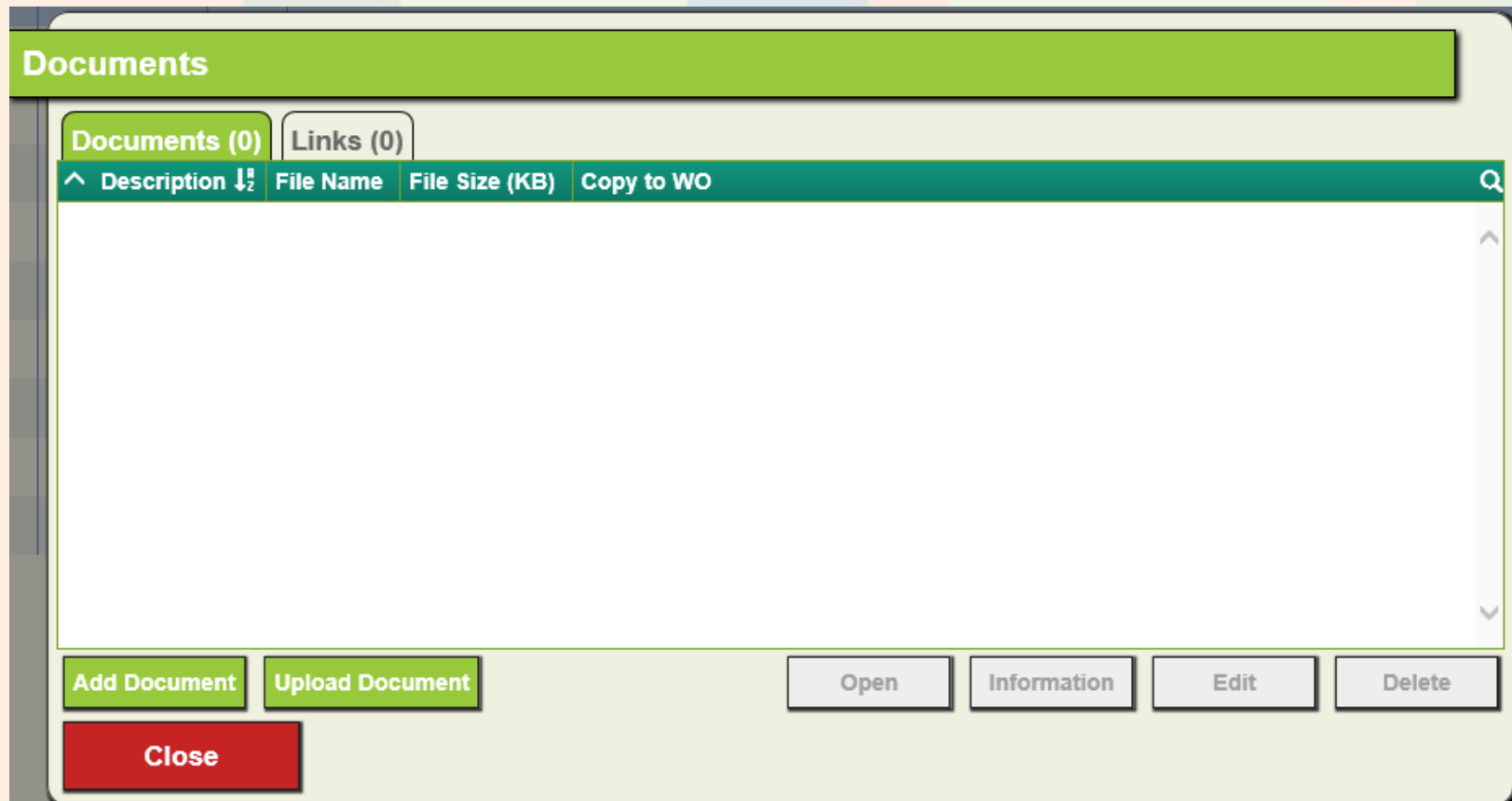
- Change Password (1):** A form with three input fields for 'Current Password', 'New Password', and 'Confirm New Password'. Below the fields is a checkbox labeled 'Show Password'. At the bottom are two buttons: a red 'Cancel' button and a green 'View Password Requirements' button, which is highlighted with a red border.
- Password Requirements (2):** A dialog box with a green header and a red 'Back' button at the bottom right. It contains the following text:
  - Password must have a minimum length of 1 characters.
  - Password must be updated after 99999 days.
  - Password is not allowed to be easily guessed which means that it cannot contain your login ID, your name, or your email, and it cannot be all the same character, a sequence of characters (abcdefg or 54321), or a value from the banned password list.

Video: <https://www.youtube.com/watch?v=B56i1C0HPTU>

# Web

- Views/Grids/Forms

- In Documents, Rewrote the tool using HTML



# Web

## Views/Grids/Forms

- In Documents, Added a **Carry Over to Work Order** option that links the document to any **Work Order** created from the related asset
- Added a **Always Open Document Directly** option that prevents the document server from opening the document.
  - Instead, the system displays a path to the document that the user can copy. This option is useful for large documents that would slow down document server.

Video: <https://www.youtube.com/watch?v=jk8G3T0DXVw>

Video End User: <https://www.youtube.com/watch?v=v9II5nTVW5s>

Video Admin: <https://www.youtube.com/watch?v=T1rmvzy4XIM>

# Web

## Upload Document 1

File:

C:\Users\lsavage\Pictures\Imagery.png

Browse...

Not Allowed: exe, com, dll, ocx, bat, reg, tmp, dat, scr, bak, acl, acm, cpl, ax

Description:

Imagery from near Asset

Carry Over to Work Order

Always Open Document Directly

Cancel

Upload

## Open File Directly 2

This file has been configured to be opened directly or is unable to be opened through the Document Server. This may not work on all browsers or machines. You can use the button below to attempt to open the file.

Copy Path

File Path: C:\LucityDocs\Water\WaterPipeInventory\1  
\Imagery.png

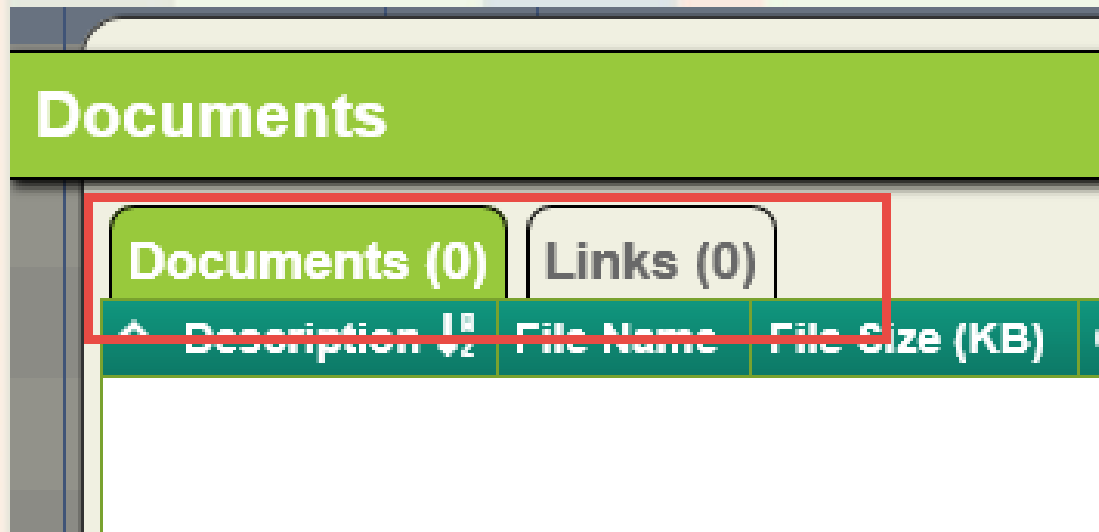
Close

Open File

# Web

- Views/Grids/Forms

- In Documents, Separated **Documents** and **Links** onto different tabs within the tool.

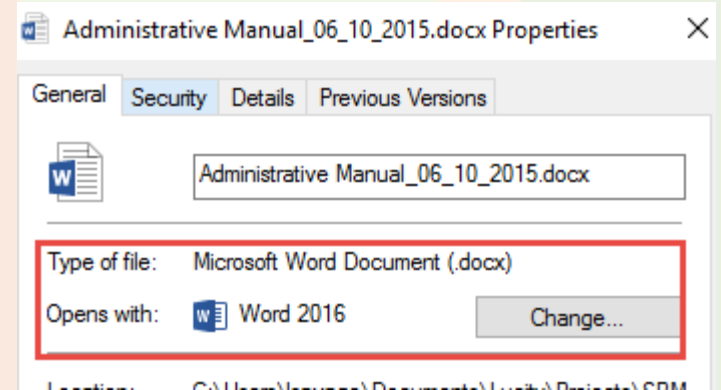
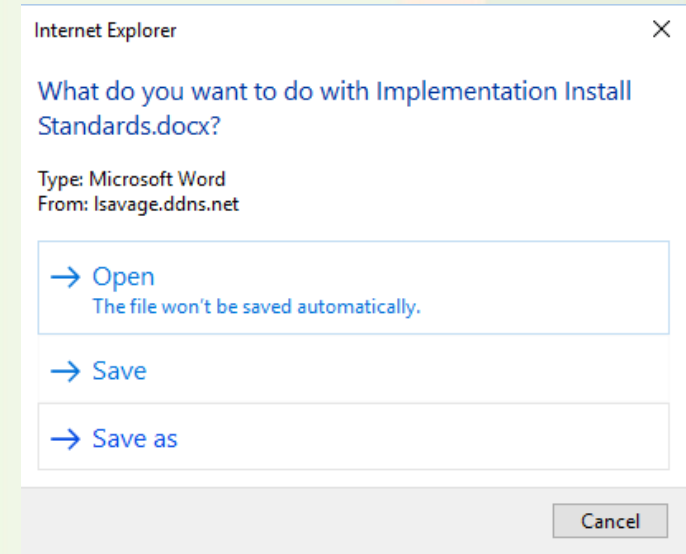


# Web

## Views/Grids/Forms

➤ In Documents, as mentioned, this tool is now HTML.

- The Lucity WebMap still uses Silverlight so viewing files are dependent on the default application assigned to the operating system. Please ensure that the file you are viewing on the workstation has a **default application** setup to view the file when using WebMap document controls.



# Web

## Views/Grids/Forms

- Added an **External Documents Tool** to enable agencies to integrate **Lucity** with a third-party document-management system.
  - Using this tool, an administrator can set a URL to pass values from a record in **Lucity** to an external document system.
  - The external document system can then pass back links to matching documents. As mentioned, this tool is now HTML.

Video: <https://www.youtube.com/watch?v=D8bqYRLg1gc&index=10&list=PL6gNKzCUXa1i5FzYTKujALOWgMzDYzf-n>

# Web



Home

Water Pipes (x)



Configure External Documents



00001

Pump Station



00002

System Valve

01775



# Web

## Filters

- Rewrote the tool using HTML.
- Added the ability to use reserved words in the **Filter Builder**.
- Allows editing of most existing filters using the **Filter Builder**.

Video: <https://www.youtube.com/watch?v=WmpSQJccyC8>

# Web

## Advanced Filter: Diameter - < 6"

WTPPIPE WHERE WTPPIPE.PP\_DIA < 6

Editing Existing Filter

Select Table Name:  ▼

Select Column Name:  ▼

Select Reserved Word:  ▼

Count

Save

Save As

Close

Run

# Web

## Reports

- Rewrote the tool using HTML.
- Added the ability to manage **Report Groups** in **Lucity Web**.
- Added the ability to download a copy of a report's **.rpt** file.
- Simplified the process of adding a **Quick Report**.

# Web

## Reports For Water Pipes

All Reports ▾

Manage Report Groups

Report Name ↓	Report Description
Pipe Detail Report	Report containing all pipe details
Pipe Detail Report	Report shows all data for Water Pipes including the
Pipe Summary Report	Summary of pipes sorted by pipe number
Water Pipe inventory - Length of Pipe by Diameter	Length of pipe for diameter ranges in inches by pre

Add Quick Report

Add

Edit

Update

Download

Delete

Close

Run





# Web

## Reports

- Changed the way Lucity refers to report views:
  - **Basic View** generates the first x number of pages of the report as basic **PDF**.
  - **Advanced View** generates the first page of the report and displays it on the **Dashboard**. Users can page through the report one page at a time, regardless of the number of pages.
    - ✓ Enables users to view parameters and export the report.

# Web

## Basic View

Page: 1 of 20 - + Automatic Zoom    

*Equipment Listing Report By Equipment ID* 2/20/2019  
11:29 AM

Equipment ID	Description	Serial #	Department	Asset
897		20138237	Facilities Maint.	
898		20138238	Facilities Maint.	
899		20138239	Facilities Maint.	
ME-000000	ME FACILITY		Middle Basin Maintenance	
ME-010000	ME SITE		Middle Basin Maintenance	
ME-010800	ME ADMIN UTILITIES ETC		Middle Basin Maintenance	
ME-010828	ME FENCING SYSTEM		Middle Basin Maintenance	
ME-010828	ME ROADS AND PARKING SYSTEM		Middle Basin Maintenance	
ME-020000	ME INFRASTRUCTURE		Middle Basin Maintenance	
ME-020800	ME INFRASTRUCTURE ADMIN		Middle Basin Maintenance	
ME-020845	ME HVAC SYSTEM		Middle Basin HVAC	
ME-020847	ME MECHANICAL SYSTEMS		Middle Basin Maintenance	
ME-020851	ME POTABLE WATER SYSTEM		Middle Basin Maintenance	
ME-020900	ME PROCESSES		Middle Basin Maintenance	
ME-030021	ME EXTRANEIOUS UV		Middle Basin Maintenance	
ME-030100	ME INFLUENT PROCESS		Middle Basin Maintenance	
ME-030101	ME SEWAGE PUMPING		Middle Basin Maintenance	
ME-030103	ME SCREENING SYSTEM		Middle Basin Maintenance	
ME-030140	ME ELECTRICAL SYSTEM		Middle Basin Electric	
ME-030145	ME HVAC SYSTEM		Middle Basin HVAC	
ME-030147	ME MECHANICAL SYSTEM		Middle Basin Maintenance	
ME-030148	ME POTABLE WATER SYSTEM		Middle Basin Maintenance	

Basic Reports View

**Basic View**

First 20 Pages

**Linked Report**

A link that opens the first 20 pages in another tab.

**Advanced View**

Display one page at a time, but not limited to the first 20 pages.

# Web

## Work Order Reports



Parameters | 100%

Advanced Report

Main Report

### Open Monthly Work Order Status Report by Category

Category:		A. Originally B. Closed C. Remaining D. Opened			<u>Opened Prior to Current Month</u>			<u>Opened in Current Month</u>			Total Opened
		A	B	C	D	B	C				
OB1000	HVAC	4	0	4	0	0	0	4			
OB2000	Plumbing	1	0	1	0	0	0	1			
OB2500	Custodial	3	0	3	0	0	0	3			
OB3000	Electrical	3	0	3	0	0	0	3			
OB6000	Building	5	0	5	0	0	0	5			
OB8500	Grounds Maintenance	4	0	4	0	0	0	4			
OF	Fleet Maintenance	20	0	20	3	0	3	23			
P60	Roads	14	0	14	0	0	0	14			
P80	Sidewalk	6	0	6	0	0	0	6			
PB1	Bridge Maintenance	1	0	1	0	0	0	1			
PLNTP	Plant Process	0	0	0	1	0	1	1			
PMCB	Catch Basin	9	0	9	7	0	7	16			
PMMG1	Storm WQ Commercial	1	0	1	0	0	0	1			
PMMG2	Storm WQ Construction	1	0	1	0	0	0	1			

# Web

## WebMap

- Enhanced the **Trace** tool to enable users to select **Sewer FOG** and **IPT Facilities** during a **Sewer Pipe** trace and to select **Storm BMP Assets** during a **Storm Conduit** trace.

Trace Options

Select Type of Trace:  
Downstream Segment

Units (Feet or # of Segments):  
1000

Include services in trace results

Include FOG facilities in trace results

Include IPT facilities in trace results

Clear previous trace results

Cancel OK

This screenshot shows the 'Trace Options' dialog box for a 'Sewer Pipe' trace. The 'Select Type of Trace' dropdown is set to 'Downstream Segment'. The 'Units' field is set to '1000'. Three checkboxes are checked: 'Include services in trace results', 'Include FOG facilities in trace results', and 'Include IPT facilities in trace results'. The 'Clear previous trace results' checkbox is also checked. The 'Include FOG facilities' and 'Include IPT facilities' options are highlighted with a red rectangular box.

Trace Options

Select Type of Trace:  
Downstream Distance

Units (Feet or # of Segments):  
1000

Include BMP assets in trace results

Clear previous trace results

Cancel OK

This screenshot shows the 'Trace Options' dialog box for a 'Storm Conduit' trace. The 'Select Type of Trace' dropdown is set to 'Downstream Distance'. The 'Units' field is set to '1000'. Two checkboxes are checked: 'Include BMP assets in trace results' and 'Clear previous trace results'. The 'Include BMP assets' option is highlighted with a red rectangular box.







# Web

## WebMap

### ➤ Show in WebMap

- Integrated the tool with **Water Flushing** records
- Integrated the tool with **Water Meter Devices** and **AMR Devices**

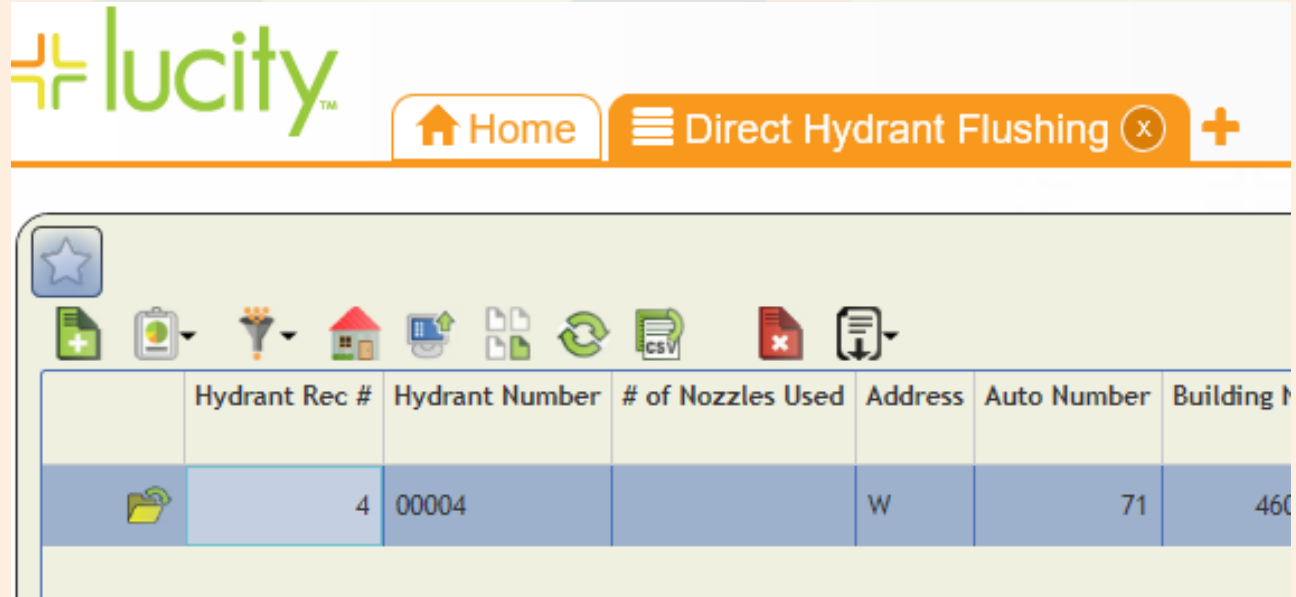
The screenshot displays the Lucity web application interface. At the top, the Lucity logo is on the left, and navigation buttons for 'Home' and 'Water Flushing Routes' (with a close icon) are on the right. Below the navigation bar is a toolbar with various icons, including a magnifying glass icon which is highlighted with a red box. Below the toolbar is a table with the following columns: Route ID, Total Duration, Inactive Route, Zone Text, Reach, Type Text, and Reason T. The table contains two rows of data.

	Route ID	Total Duration	Inactive Route	Zone Text	Reach	Type Text	Reason T
 	1	0.00	<input type="checkbox"/>	Pressure Zone 1	Standard	Dead-End	Semi-Ann
 	2		<input type="checkbox"/>	Pressure Zone 1	Standard	Low Point	Semi-Ann


# New Modules for Lucity Web/Mobile

# New Modules

- Equipment
  - Plant Process Dependents
- Water
  - Direct Hydrant Flushing



The screenshot displays the Lucity software interface. At the top left is the Lucity logo. To its right are navigation buttons: 'Home' and 'Direct Hydrant Flushing' (with a close icon 'x') and a plus sign '+'. Below the navigation bar is a toolbar with icons for a star, a green document with a plus sign, a clipboard, a hydrant, a house, a document with a plus sign, a document with a minus sign, a refresh icon, a CSV icon, a red document with an 'x', and a document with a downward arrow. Below the toolbar is a table with the following data:

	Hydrant Rec #	Hydrant Number	# of Nozzles Used	Address	Auto Number	Building N
	4	00004		W	71	460

Video: <https://www.youtube.com/watch?v=mkc7ekAFeqQ>

# New Modules

## ➤ Work

- Activity Library
- Activity Library Details
- Daily Inspection Bacti Tests
- Daily Inspection Construction Activities
- Daily Inspection Contractors
- Daily Inspection Easements
- Daily Inspection Equipment
- Daily Inspection Staff
- Daily Inspections

# New Modules

## ➤ Work-Continued

- Master Project Activities
- Master Project Activity History
- Master Project Management
- PO Details Linked to Projects
- Project Activities
- Project Activity History
- Project Budgets or Revenues
- Project Contract Approval Library
- Project Contract Approval Library Details

# New Modules

## ➤ Work-Continued

- Project Contract Details
- Project Contract Estimate Approvers
- Project Contract Estimate Details
- Project Contract Estimates
- Project Contract Link to Projects
- Project Contracts
- Project Cost Centers
- Project Expenditures
- Project Grants

# New Modules

## ➤ Work-Continued

- Project Invoice Details
- Project Invoice Link to Purchase Orders
- Project Invoice Payment Details
- Project Invoice Payments
- Project Invoices
- Project Management
- Project Purchase Order Change Orders
- Project Purchase Order Details
- Project Purchase Orders

# New Modules

## ➤ Work-Continued

- Project Subcontractors
- Project Tasks
- Project Tasks Sub-Tasks
- Work Task Setup Maintenance Zone Supervisor