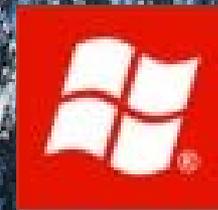


Mobile Field Data Collection with Smartphones and Tablets

By Matt McPheeters (Form Guru) and Tony Orozco



Many Products to Choose From

Why We Chose GoCanvas



Ideal Mobile Form/ CDEC Interface

Design Forms

Pre Measurement Observations

- 10-2 Observation Time
- List Item Detail
 - Pre Meas Observation Ty
 - Observation Type
 - List Item Detail
 - Pre Meas Device R
- 1.5 Read
- 1.5 Accuracy

Available Forms

canvas

- 2 Peg Test version 1
- Discharge Measurement version 9
- Hydro Gage Inspection version 6
- Snow Survey Notes version 3

Click to synchronize!
Last Sync Time: 09/05/2013 22:35

canvas

* Depth	20
* Length of Core	18
* Earth Plug	1
* Weight of Empty Tube (tare)	35
* Weight of Tube and Core	45
Corrected Depth	19.00
Corrected Core	17.00
Core % of Depth	89.47
Snow Water Equivalent (SWE)	10.00
Density %	52.63

18% Next

Advanced List allows a list of responses for A single field.

They can be nested

Department of Water Resources
CALIFORNIA DATA EXCHANGE CENTER

HOME | QUERY TOOLS | PRECIPITATION | RIVER FORECAST | RIVER STAGES | RESERVOIRS | SNOW

Canvas form design for cross platform data collection

Save Cancel Add Screen Show Outline Help

App Outline

- Site Information
 - Site
 - Site Name
 - Date
 - Measurement Number
 - Rated Flow
 - Hydrographer
 - Party
- Pre Measurement Observations
 - Observation Time
 - List Item Detail
 - Pre Meas Observation Ty
 - Observation Type
 - List Item Detail
 - Pre Meas Device R
 - Read
 - Accuracy
- Location
 - Location
 - Gage Proximity
 - Feet from Gage
- Measurement Type
 - Meter Type
- Measurement Details**
 - Discharge (CFS)
 - Rated Flow
 - Flow difference
 - % difference from Rated Flow
 - Width
 - Area
 - Vel
 - GH at zero flow estimate (PZF)

Edit Screen: Measurement Details

Discharge (CFS)	0.0	[Menu] [X]
Rated Flow	=SUM()	[Menu] [X]
Flow difference	=((1 + 2) * 3)	[Menu] [X]
% difference from Rated Flow	=((1 + 2) * 3)	[Menu] [X]
Width	0.0	[Menu] [X]
Area	0.0	[Menu] [X]
Vel	0.0	[Menu] [X]
GH at zero flow estimate (PZF)	0.0	[Menu] [X]

Palette

- Text Box
- Integer
- Decimal
- Date
- Time
- Value List
- Checkbox
- Multi-Line Text
- Static Text
- Image Capture
- Summary
- Calculation
- Signature
- Drawing
- GPS

Preview

Site Information Pre Measurement Ot Location Measurement Type **Measurement Details** AA / PYGMY

Data Types available

Current PG&E Canvas/Hydstra interface

Field Collected Data (Any Platform)

- Full functionality off network
- Collect all day and sync when in service range (cell network or wifi)

Canvas Servers

- API for querying and retrieving data in XML
- Reference data can be uploaded for use in field

Hydstra (Scheduled Task)

- Checks for data every 4 hours
- Uploads reference data to Canvas every day



How Many Words are Pictures Worth?



Pacific Gas and Electric Company

POWER GENERATION O&M WATER MANAGEMENT DEPARTMENT

Station Number
 Date 2012/12/27 13:05:00 Party cnsc,Silvera
 Width 13 Area 39.4 Vel 5.07 GH 1.73 Disch 200
 Method 0.6 #Sects 22 GH change 0.00 feet in hours
 Type of meter Meter # Weight 50 lb @ .55 ft above wt
 Meas Q -> GH is 0.02 feet Below rating Plots 1.11 % diff. from rating

GAGE READINGS							
Time	DCP primary	RTU telemetry	Inside (ISS)	TAPE	WWG	_____	Outside (OSS)
1305			DCP:1.73±0.01				



Always Carry Paper and a Clipboard

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SENSOR CONTROL NOTES

Drainage Basin _____
Snow Sensor _____ Calif. No. _____
Party _____
Date ____/____/____ Time _____

*DISTANCE BETWEEN SAMPLE POINTS	# SAMPLE NUMBER	DEPTH OF SNOW INCHES	LENGTH OF CORE INCHES	WEIGHT OF SNOW TUBE	WEIGHT OF TUBE AND CORE	WATER CONTENT INCHES	DENSITY PERCENT	REMARKS (SEE BELOW)

Snow Manometer _____
Precipitation Manometer _____
Current Temp. (°F) _____
Min. Temp. (°F) _____
Max. Temp. (°F) _____

Remarks: _____



Drainage Basin _____
Snow Sensor _____ Calif. No. _____
Party _____
Date ____/____/____ Time _____

*DISTANCE BETWEEN SAMPLE POINTS	# SAMPLE NUMBER	DEPTH OF SNOW INCHES	LENGTH OF CORE INCHES	WEIGHT OF SNOW TUBE	WEIGHT OF TUBE AND CORE	WATER CONTENT INCHES	DENSITY PERCENT	REMARKS (SEE BELOW)

Snow Manometer _____
Precipitation Manometer _____
Current Temp. (°F) _____
Min. Temp. (°F) _____
Max. Temp. (°F) _____

Remarks: _____

**This was just an introduction.
More next year?**

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