



Kirk Stewart
Manager Applications

WECC Registry
13 October 2011
San Francisco

Acknowledgement and Disclaimer

- Acknowledgment: This material is based upon work supported by the Department of Energy under Award Number DE-OE0000364.
- Disclaimer: This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

What is a Registry at its Core?

- WECC's Registry Approach:
 1. A listing of Devices with an associated set of META data that defines each device.
 2. A listing of Measurements with an associated set of META data defining the measurement.
 3. A hierarchy that defines how the Devices and Measurements relate to each other.

WECC Registry Breakdown

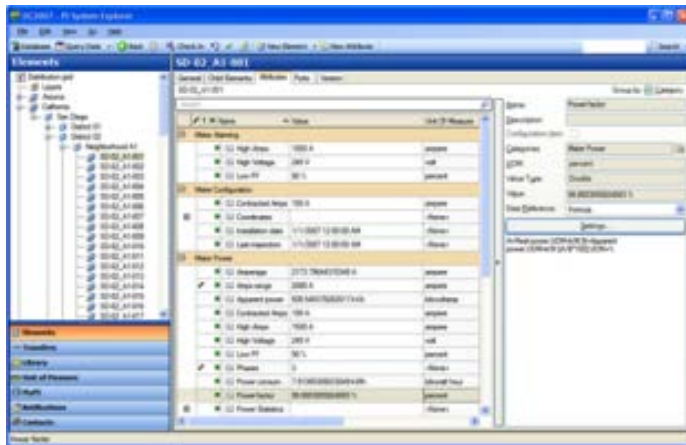
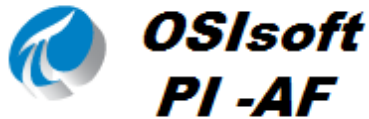
- Templates- A predefined named grouping of fields that define a particular object.
 - PMU Template
 - Measurement (Signal) Template
 - PDC Template
 - Line Template
 - Measurement (MW,MVAR, ETC) Template

WECC Registry Breakdown

- Hierarchy – A tree view relationship to group devices in a logical manner.
 - Our tree breakdown:
 - Company
 - Substation
 - Device
 - Measurements

WECC Selected Vendors

- Back End



- Front End

[HTTPS://WWW.WECCRC.ORG](https://www.weccrc.org)



PMU META Data

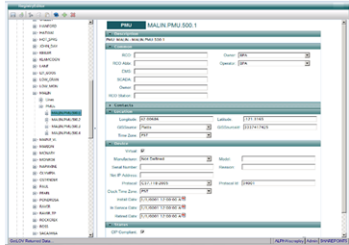
The screenshot displays the Windows Registry Editor interface. The left-hand pane shows a tree view of the registry, with the path **PMUs > MALIN.PMU.500.1** selected. The right-hand pane shows the configuration details for this PMU, organized into several sections:

- Description:** PMU: MALIN - MALIN PMU.500.1
- Common:** Fields for RCO, RCO Abbr., EMS, SCADA, Owner, and RCO Station. Dropdown menus for Owner and Operator are set to BPA.
- Location:** Fields for Longitude (42.00686), Latitude (-121.3165), GISSource (Platts), GISSourceId (3337417425), and Time Zone (PST).
- Device:** Fields for Virtual (checked), Manufacturer (Not Defined), Model, Serial Number, Revision, Net IP Address, Protocol (C37.118-2005), Protocol Id (34001), and Clock Time Zone (PST). Installation and service dates are all set to 1/1/0001 12:00:00 A.
- Status:** CIP Compliant (checked).

The taskbar at the bottom shows the user is logged in as Admin and the system is running on a machine named ALPHA/scropley. The system clock shows the date as 1/1/2001.

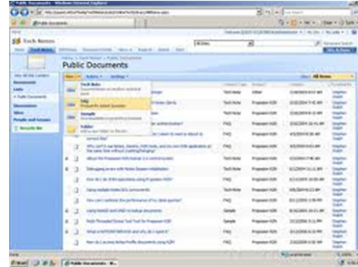


Member
Weccrc.org
Add/Update/Delete



Workflow

Change added
to Sharepoint
List



RC Impact



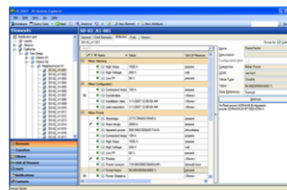
Updates Systems



RC Staff

If no RC system
impacts, PI-AF
updates instantly

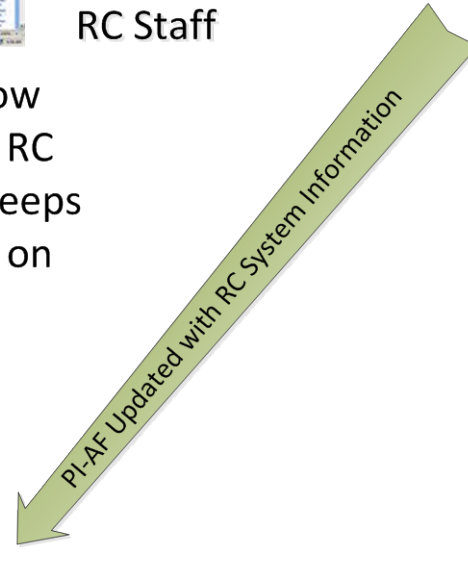
Sharepoint Workflow
notifies responsible RC
Staff of Change and keeps
Member up to date on
status



PI-AF

Contents:

1. All equipment in the West Wide System Model
2. GIS Mapping Data for WSM
3. Outage System (COS) cross reference to WSM
4. WSM Names to Member name equivalents
5. ICCP Mapping to WSM
6. PMU/PDCs/Signals



Questions?

