

Standardize. Automate. Simplify.

OpenADR 2.0 – Technical Update

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80 certified devices

- OpenADR 2.0b in "CD" (Commend Draft) status at IEC
- Test harness upgrade started
- Working on finalizing the DR Program guide
- Working on adding additional test labs

Europe update



Certified Devices

- New database in place with search functionality
- Products.openadr.org
- Working on refining the search and an input mechanism for marketing information

FILTER PRODUCTS -		Search for products
SERVER		
Cloud Based	Cloud Based Control	Stand Alone
CLIENT		
EMS	Cloud Based Control	Controller
EMC	EMS	Gateway
HVAC	Lighting	Refrigeration
Thermostat		
BUSINESS TYPE		
Agricultural	Commercial	Industrial
Residential	Small/Medium Business (SMB)	
OPENADR PROFILE		
OpenADR 2.0a	OpenADR 2.0b	OpenADR 2.0a+b
ADVANCED SORTING >		
Filter products		



OpenADR in the IEC

The OpenADR Alliance has been active in several IEC working groups

- IEC PC118 recently published the OpenADR 2.0b Profile Specification as IEC/PAS 62746-10-1. Now in CD phase to become a Technical Specification
- IEC PC118 and **TC57 WG 21** are working on adapting OpenADR into the CIM framework
- IEC TC65 WG17 (Industrial Automation) is leaning on OpenADR 2.0 functionality



Test harness update

- Starting in May 2015
- Three main purposes
 - Fixing bugs that have been submitted, generally minor runtime changes
 - Implement changes that the working groups have identified (from out Mantis bug tracking database). Mostly clarifications and tightening up the spec
 - Implementing DR Program templates defined by the DR Program Guide
- Timeframe late summer
- Test harness licensees will be notified. Depending on the extend of the changes there might be a charge for extra features



DR Program Guide

Currently OpenADR 2.0 defines the communications interface

- No specific DR Program Definitions & Restrictions
- Very flexible
- Many Implementers (VTN & VEN) seek
 more Guidance and Harmonization

Implementation Working Group started work to expand the domain of the protocol

- Define common DR program goals and objectives
- Reduce the complexity by defining common OpenADR-based DR programs
- Create a decision tree for implementers to select the relevant program to support
- Create testable DR program templates







VTN (Utility,

Aggregator, DR

Operator)



VEN (C&I, SMB, Residental)

Current Work Items

- Collected existing and planned DR Program information
 - All input is still welcome!
- Reviewed Japanese requirements
- Filtered program parameters to establish common criteria
- Define OpenADR 2.0 DR Profiles
- Vendor Guide document 80%
- Still need: Payloads, RFI templates, additional descriptions





Intertek Pleasanton, CA

Open for new test service providers
 Korea and Japan locations established
 Interest from some US labs, start training
 Looking at some European locations also



Europe

Some opportunities in Europe

- Lots or renewables and also EVs in some countries
- Utilities are unclear what to do
- Media Opportunities in Germany
 - □ June in Berlin Media briefings about Smart Grid
 - January in Frankfurt Media event
- USEF Universal Smart Energy Framework <u>www.usef.info</u>
 - Organization that tries to define "Services" for Smart Grid entities
 - Created their own protocol but realized that this is not going to be acceptable
 - Evaluating OpenADR as their protocol



Thank You!

Q&A

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