



## OpenADR 2.0 Developers Workshop

The OpenADR 2.0 Developer's Workshop provides both a conceptual and detailed technical understanding of what OpenADR is and how it works. Participants will become familiar with OpenADR technology, certification profiles a and b, the formal conformance certification program, and the pre-certification test tools and services available from the OpenADR Alliance and QualityLogic.

### What People Say

"We had a wonderful experience working with QualityLogic. They have in-depth knowledge of the OpenADR specification and everyone looks up to them for guidance on difficult OpenADR specification issues."

– Sunil Sodah, Honeywell

"QualityLogic's knowledge of the specification, the conformance rules and the schemas is unique among the members of the OpenADR Alliance. They helped the OpenADR Alliance set the standard for how a smart grid standard should be implemented and certified."

– Rolf B., OpenADR Alliance

### Workshop at a Glance

QualityLogic, the official test tool partner of the OpenADR Alliance, offers a two-day, on-site workshop for organizations interested in developing products or programs involving the OpenADR specification, including "a" and "b" profiles.

Participants will gain an in-depth understanding of OpenADR concepts, the various flavors of OpenADR VTNs and VENs, the certification profiles and requirements, and how to get started building an OpenADR-conformant product. Utility participants will gain an in-depth understanding of how to use OpenADR technology to implement their programs and how to evaluate, utilize and acquire OpenADR technology.

### On-Site Workshop Designed for

- Vendors developing OpenADR "a" or "b" products
- Vendors/system integrators/aggregators planning to acquire and use OpenADR compliant products
- End-user utilities, ISOs/RTOs and regulators specifying OpenADR products
- An online version of the course is also available at: <https://qualitylogic.thinkific.com/>

## Day one

Session Title	Session Description
Session 1: Background	<ul style="list-style-type: none"> <li>• Demand-Response, Program Examples</li> <li>• OpenADR Origins, OpenADR Alliance</li> </ul>
Session 2: Big Picture	<ul style="list-style-type: none"> <li>• VTN's and VEN's</li> <li>• Services, Exchange Patterns (Push vs. Pull)</li> <li>• A and B Profiles</li> <li>• Transports and Security</li> <li>• Deployment Models</li> </ul>
Session 3: OpenADR Events	<ul style="list-style-type: none"> <li>• Event Descriptor</li> <li>• Active Period</li> <li>• Event Signals</li> <li>• Event Targeting</li> </ul>
Session 4: OpenADR Reports	<ul style="list-style-type: none"> <li>• Telemetry Status and Usage</li> <li>• History, Custom</li> </ul>
Session 5: OpenADR Usage Patterns	<ul style="list-style-type: none"> <li>• Registration</li> <li>• Event Dispatch</li> <li>• Report Request and Delivery</li> <li>• Availability Changes</li> <li>• Live Demo</li> </ul>
Session 6: Misc Topics	<ul style="list-style-type: none"> <li>• OpenADR Best Practices</li> <li>• Certification</li> <li>• OpenADR and DER (Rule 21)</li> <li>• 2030.5 vs OpenADR</li> </ul>

## Day two

Session Title	Session Description
Session 7: OpenADR Technical Requirements	<ul style="list-style-type: none"> <li>• Profile Specifications</li> <li>• Schemas</li> <li>• PICS and Test Specification</li> </ul>
Session 8: Registration OADR Poll Services	<ul style="list-style-type: none"> <li>• Payloads</li> <li>• Exchange Patterns</li> <li>• Conformance Rules</li> </ul>
Session 9: Event Service	<ul style="list-style-type: none"> <li>• Payloads</li> <li>• Exchange Patterns</li> <li>• Conformance Rules</li> </ul>
Session 10: Report Service	<ul style="list-style-type: none"> <li>• Payloads</li> <li>• Exchange Patterns</li> <li>• Conformance Rules</li> </ul>
Session 11: Meter Data, Status, and Alarms	<ul style="list-style-type: none"> <li>• Metered Data from DERs</li> <li>• Status Information from DERs</li> <li>• Alarms from DERs</li> <li>• Error Handling</li> </ul>
Session 12: Test Harness and Certification	<ul style="list-style-type: none"> <li>• Test Harness User Guide, Setup and Configuration</li> <li>• Demo of Test Harness</li> <li>• Debugging Hints</li> </ul>
Session 13: Miscellaneous Topics	<ul style="list-style-type: none"> <li>• Development Resources</li> <li>• Security Guide</li> <li>• Tips and Tricks</li> </ul>

