OpenADR 2.0a
Protocol Implementation
Conformance Statement (PICS)

Version 1.1.0
Valid for Certification as of February 22, 2016

Manufacturer:	Zen Within Pty Ltd
Product Type:	VEN
Product Name:	IP bridge
Firmware Revision:	1.0
Tested OpenADR 2.0a Profile Spec version:	1.1

Disclaimer:
The information provided in this document can be made available to the general public in order to identify the tested versions, features and options.

By signing this document, the manufacturer confirms that all information provided in this document is correct and the applicable features have been tested.

Manufacturer Name: _Zen Within Pty Ltd_

Representative Name and Title: _Grant Hatamosa, Product Manager_

Signature: _____

Date: _11 May - 2016_

Revisions:

Version	Changes	Date/Editor
1.0.6	• Corrections	11/7/2015 JZ
1.1.0	• Version Change Only	2/22/2016

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Introduction

The purpose of this PICS document is to provide a mechanism whereby a supplier of an implementation based on the following requirements provides information about the implementation in a standardized manner.

These requirements are drawn from the OASIS Energy Interoperation standard and related schemas. With the exception of OpenADR Alliance schema extensions, payloads generated by OpenADR 2.0a implementations should validate against the Energy Interop schemas.

Information provided by the supplier will be used to assess the implementations compliance to the requirements as well as to configure the certification tests performed on the implementation.

References

- OpenADR 2.0a Profile Specification 1.1
- OpenADR 2.0a Test Specification V1.0.5
- OpenADR 2.0a Schema

Abbreviations and Conventions

The PICS information is comprised of information in a tabular format as follows:

- **Item Column** – A number which identifies the item in the table
- **Capability Column** – A brief description of the requirement
- **Reference Column** – A reference to a specific requirement in the specification
- **Status Column** – Contains notations regarding the requirements
    - M – Mandatory
    - O – Optional
    - n/A – Not applicable
    - X – Prohibited
    - O-i – Qualified Optional (mutually exclusive or selectable options from a set identified with the same "I" value)
    - C-i –Conditional (status dependent on support of other optional requirements , identified in footnotes at bottom of table with "i" being a reference integer for the footnote(s))
- **Support Column** – Yes or No, or N/A of no answer is required.
- **Values Allowed Column** – Optional column representing set of values allowed
- **Values Supported Column** – Optional column where supplier can indication a set of values supported by the implementation

Instructions for Completing the PICS

The first part of the PICS document, System Identification, is to be completed as indicated with the information necessary to fully identify both the supplier and the implementation.

The main part of the PICS document is a fixed format questionnaire. Answers to questionnaire items are to be provided in the rightmost column by simply marking an answer to indicate a choice, typically y or n.

If an implementation fails to support a mandatory item, or supports a prohibited item, the supplier should provide supplementary information with the PICS document explaining the rational for the exception.

NOTES:
- OpenADR2.0a does NOT have any optional features. However there are payload elements that can be left out of the messages (payloads) -> Optional Payload Elements.
- If an implementation includes a VTN and a VEN interface, <u>EACH interface much be submitted in a separate PICS document</u>.
- All certified products will be posted on the OpenADR Alliance website. A manufacturer can request to delay the web posting for up to 3 months. (see below)

Documents required for final certification

- This PICS document
- Manufacturers Declaration of Conformity
- Completed Test Report from appointed test house
- Product marketing description for website (50 words)
- Product picture or logo if applicable
- Web link to product

If you would like to postpone posting your product on the OpenADR Alliance website for a period of time (maximum 3 months), please fill out the following section.

_____ (Manufacturer) herewith requests that the submitted product shall not be posted on the OpenADR Alliance product web page until _____ (date, max 3 months from submittal).

Name: _____

Signature: _____

Implementation and Supplier Information

Date of Statement	05-MAY-2016
Product Name	Zen IP Bridge
Product Model Number	Zen-Bridge-1
Firmware Version	1.0
Non-Default Hardware Configuration (if applicable)	N/A
Non-Default Software Configuration (if applicable)	N/A
Supplier Name, Address, Phone, Email	Zen Within Pty. Ltd. 436 Elgar Road, Box Hill, VIC, Australia 3029 james.muraca@zenthermostat.com
Contact name, email, phone for questions	James Muraca james.muraca@zenthermostat.com

Global Statement of Conformance

Requirement	Support
Are all mandatory capabilities supported for the indicated roles supported by this implementation? (Must be 'yes' to obtain certification)	[X]Yes [ ]No

Roles

Item	Role	Status	Support
1	VEN	O-1	[X]Yes [ ]No
2	VTN	O-1	[ ]Yes [X]No

0-1) Must answer Yes to one Role. A device may be both a VEN and a VTN, however, in this case two PICS documents must be submitted.

Profiles

VTN	Status	Support	VEN	Status	Support
"A" Profile	M	[ ]Yes [X]No	"A" Profile	M	[X]Yes [ ]No

Note: Must answer Yes for Roles supported (VEN and/or VTN)

Transports

VTN	Status	Support	VEN	Status	Support
Simple HTTP	M	[ ]Yes [X]No	Simple HTTP	M	[X]Yes [ ]No

Note: Must answer Yes for Roles supported (VEN and/or VTN)

Message Exchange Patterns

VTN	Status	Support	VEN	Status	Support
Push	M	[ ]Yes [X]No	Push	O-1	[ ]Yes [X]No
Pull	M	[ ]Yes [X]No	Pull	M	[X]Yes [ ]No

0-1) A VEN Implementation must support pull, and can optionally also support push
Note: Must answer Yes for at least one exchange pattern for each Roles supported (VEN and/or VTN)

Core Operation Requirements

Indicate the operation sequences supported.

Item	Service	App Level Exchange Sequence	Reference	Status	Support
1	EiEvent Push	VTN: oadrDistributeEvent VEN: oadrCreatedEvent (2) VTN: oadrResponse		C-1	[ ]Yes [X]No [ ]N/A
2	EiEvent Pull	VEN :oadrRequestEvent VTN: oadrDistributeEvent VEN: oadrCreatedEvent (2) VTN:oadrResponse		C-1	[X]Yes [ ]No [ ]N/A

1) Push implementations must support items 1. Pull implementations must support item 2.
2)The oadrCreatedEvent application layer response is conditional based upon the state of the oadrResponseRequired element in each event contained in the OadrDistributeEvent payload.

Core Operation Payload Schema Conformance

For each payload generated by an implementation, indicate if it conforms to the indicated schema.

Item	Requirement	Reference	Support
1	oadrDistributeEvent validates against the Alliance "A" profile schema	Alliance Schema	[ ]Yes [X]No [ ]N/A
2	oadriCreatedEvent validates against the Alliance "A" profile schema	Alliance Schema	[X]Yes [ ]No [ ]N/A
3	oadrRequestEvent validates against the Alliance "A" profile schema	Alliance Schema	[X]Yes [ ]No [ ]N/A
4	oardResponse validates against the Alliance "A" profile schema	Alliance Schema	[ ]Yes [X]No [ ]N/A

Note: VTNs generate items 1 and 4, Push VENs item 2, and Pull VENs items 2 and 3.

Alliance "a" Profile Detailed Requirements

In addition to the requirements defined by the schema, the OpenADR 2.0a has a detailed set of conformance rules that define the expected behavior of VTN and VEN implementations. As these rules already reflect the testable requirements, there is no need to relist them here. Please refer to the OpenADR 2.0a Profile Specification while reviewing the following conformance rules

Conformance Rule	Roles	Reference	Status	Support	
1	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
2	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
3	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
4	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
5	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
6	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes	[ ]No
7	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
8	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
9	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
10	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
12	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes	[ ]No
13	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
14	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
15	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
16	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
17	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
18	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes	[ ]No
19	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes	[ ]No
20	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes	[X]No
21	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes	[ ]No

22	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
23	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
25	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
27	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
29	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
30	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
31	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
32	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
33	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
35	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
36	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
37	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
38	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
40	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
41	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
42	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
43	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
44	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
45	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
46	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
47	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
48	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
49	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	O	[X]Yes [ ]No
50	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
51	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No

52	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
53	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
54	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
55	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
56	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
57	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
58	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
59	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
60	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
61	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
62	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
63	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No
64	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
65	VEN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
66	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
67	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
68	VEN VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[X]Yes [ ]No
70	VTN	OpenADR 2.0a Profile Spec, Section 11.2	M	[ ]Yes [X]No

Note: Items 54, 55, and 64 apply to a pull VEN only. Item 66 applies to a push VTN Only.

Implementation Capabilities and Configuration

For each of the questions below, indicate if the implementation has the necessary functionality, configurability, and documentation to successfully complete the certification testing process.

Item	Description	Support
1	Does the implementation being submitted for certification support the capabilities outlined in the DUT Implementation Limits section of the OpenADR 2.0a Test Specification documentation? Note that these limits do not imply minimum market needs for a "a" profile implementation.	[X]Yes [ ]No
2	Does the implementation being submitted for certification support methodologies necessary to trigger specific actions during test execution as outlined in the DUT Configuration Requirements section of the OpenADR 2.0b Test Specification documentation?	[ ]Yes [X]No
3	Have you attached documentation to this PICS statement regarding how to configure the implementation as outlined in Appendix A of the OpenADR Certification Test Harness User Guide?	[X]Yes [ ]No
4	Does the implementation being submitted for certification have pre-installed x.509 certificates from the OpenADR/NetworkFX portal?	[X]Yes [ ]No
5	Does the VEN's being submitted for certification must have host authentication of the X.509 client certificate CN field disabled in order to avoid complex reconfiguration of the test harness and Openfire server? Answer No if not testing a VEN	[ ]Yes [X]No

Optional Test Case Guidelines

Can the push VEN be configured to do and Async oadrRequestEvent? If no, skip test case E0_0290	[ ]Yes	[X]No
Can the VTN implementation set oadrResponseRequired to never? If no, skip test cases E2_0468, E2_0480, E2_0498, E3_0468, E3_0480, and E3_0498	[ ]Yes	[X]No
Can the VTN set a ramp up period? If no, skip test cases E2_0527 and E3_0527	[ ]Yes	[X]No
Can the VTN send an event with multiple intervals in an event? If no, skip test case E2_0432 and E3_0432	[ ]Yes	[X]No
Can the VTN set an event's priority? If no, skip test case E2_0510, E3_0510, E2_ 0520, and E3_0520	[ ]Yes	[X]No
Can the VTN be configured to set at least one eiTarget sub elements including partyID, resourceID, venID, or groupID? If no, skip test cases E2_0435 and E3_0435	[ ]Yes	[X]No
Does the device support configuration of the VTN to randomize events using the startafter element? If no, skip test cases E2_0685, E3_0685	[ ]Yes	[X]No

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