

# 30-day Public Review for 5 Open Building Information Exchange (#OBIX) Committee Specification Drafts

Submitted by cesign on Wed, 2014-01-15 21:55

**Type:**

Public Review

The OASIS Open Building Information Exchange (oBIX) TC [1] members have recently approved five Committee Specification Drafts (CSDs) and submitted them for 30-day public review:

OBIX Version 1.1

Committee Specification Draft 02 / Public Review Draft 02

19 December 2013

Encodings for OBIX: Common Encodings Version 1.0

Committee Specification Draft 02 / Public Review Draft 02

19 December 2013

Bindings for OBIX: REST Bindings Version 1.0

Committee Specification Draft 02 / Public Review Draft 02

19 December 2013

Bindings for OBIX: SOAP Bindings Version 1.0

Committee Specification Draft 02 / Public Review Draft 02

19 December 2013

Bindings for OBIX: WebSockets Bindings Version 1.0

Committee Specification Draft 01 / Public Review Draft 01

19 December 2013

## Specification Overview:

OBIX v1.1 provides the core information model (expressed as an XDM) and interaction pattern for interactions with building control systems, or any control systems. The document specifies an object model used for machine-to-machine (M2M) communication which we name the Open Building Information eXchange (OBIX). It also describes the default XML encoding for OBIX.

Encodings for OBIX: Common Encodings v1.0 specifies different encodings for OBIX objects adhering to the OBIX object model. OBIX provides the core information model and interaction pattern for communication with

building control systems.

Specific implementations of OBIX must choose how to encode OBIX Information. The core specification describes an XML encoding, which is used in all examples in that document. The document specifies common alternate encodings, including CoAP, EXI, and JSON.

Bindings for OBIX: REST Bindings v1.0 specifies REST bindings for OBIX. The document describes the REST Binding, an interaction pattern that can be used in conjunction with XML, EXI, CoAP, and JSON encodings, as well as other encodings that may be specified elsewhere.

Bindings for OBIX: SOAP Bindings v1.0 specifies SOAP protocol bindings for OBIX. The document describes the SOAP Binding and includes a WSDL artifact.

Bindings for OBIX: WebSockets Bindings v1.0 specifies Web Socket protocol bindings for OBIX.

TC Description:

The OBIX (Open Building Information Exchange) specification enables enterprise applications to communicate with control systems (e.g. mechanical, electrical, security...) in buildings. Since OBIX 1.0 was released in 2006, it has found wide use as a semantic integration layer, in widespread use for communication between control systems, even within a building or site. OBIX is in wide use for gathering wide area situation awareness, in fleet management, and in perimeter security.

OBIX 1.1 is a refresh cycle that is intended to maintain full compatibility with the installed base of OBIX systems. The Technical Committee (TC) has re-written portions of the specification for improved clarity, and has increased the formal conformance sections. The intent of these changes is to improve interoperability between disparate implementations.

The structure of the OBIX Specification has changed. The core model of OBIX is in the OBIX 1.1 specification. Specific guidelines for Encodings, and for Bindings (REST, SOAP, and Web Sockets) are now in separate specifications. The Encoding specification has added the Constrained Application Protocol (CoAP) as a REST Binding. CoAP is a new IETF specification that is of growing interest to those implementing the Internet of Things in constrained environments, such as wireless sensor networks. The Encodings specification also adds JSON and EXI as two new lightweight options that extend the range of the REST interaction pattern. By moving Encodings and Bindings to separate specifications, the TC sought to make the core specification simpler while making it possible to define other encodings and bindings without revisiting the core.

The core specification now includes an XML Data Model (XDM) described using an XML Schema (XSD). The TC did not consider a normative schema in 2004; including one now will enhance the ability for developers to validate messages and develop code using standards modern toolkits. Reviewers are asked be sure to examine the enclosed schema, which is normative.

Two features have been added to revised specification. An OBIX 1.1 server is able to provide metadata on each control point if available. If this metadata is based on one or more published taxonomies, the metadata is so identified. An OBIX 1.1 server is also able to more compactly deliver large data-sets of telemetry, as for example, an OBIX Historian request for fine-grained interval data over a prolonged period. The model for these large data-sets is compatible with models described in the OASIS specification WS-Calendar and in the Report Services of OASIS Energy Interoperation.

The OBIX Watch functionality has been enhanced to handle the needs of smaller devices as well as of intermittent communications such as cell phones.

#### Public Review Period:

The public reviews start on 16 January 2014 at 00:00 GMT and end 14 February 2014 at 23:59 GMT. OBIX Version 1.1, Encodings for OBIX: Common Encodings Version 1.0, Bindings for OBIX: REST Bindings Version 1.0, and Bindings for OBIX: SOAP Bindings Version 1.0 were previously submitted for public reviews [2]. These 30-day reviews are limited in scope to changes made from the previous review. Changes are highlighted in the diff-marked PDF files [3].

This is an open invitation to comment. OASIS solicits feedback from potential users, developers and others, whether OASIS members or not, for the sake of improving the interoperability and quality of its technical work.

#### URIs:

The prose specification documents and related files are available here:

- OBIX Version 1.1

PDF (Authoritative):

<http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.pdf> [1]

HTML:

<http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.html> [2]

Editable source:

<http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.doc> [3]

XML schema:

<http://docs.oasis-open.org/obix/obix/v1.1/csprd02/schemas/> [4]

- Encodings for OBIX: Common Encodings Version 1.0

PDF (Authoritative):

<http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodin...> [5]

HTML:

<http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodin...> [6]

Editable source:

<http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodin...> [7]

- Bindings for OBIX: REST Bindings Version 1.0

PDF (Authoritative):

<http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-cs...> [8]

HTML:

<http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-cs...> [9]

Editable source:

<http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-cs...> [10]

- Bindings for OBIX: SOAP Bindings Version 1.0

PDF (Authoritative):

<http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-cs...> [11]

HTML:

<http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-cs...> [12]

Editable source:

<http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-cs...> [13]

WSDL file:

<http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/wSDL/> [14]

- Bindings for OBIX: WebSocket Bindings Version 1.0

PDF (Authoritative):

<http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websock...> [15]

HTML:

<http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websock...> [16]

Editable source:

<http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websock...> [17]

ZIP distribution files (complete):

For your convenience, OASIS provides complete packages of the prose specifications and related files in ZIP distribution files. You can download the ZIP files here:

- OBIX Version 1.1:

<http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.zip> [18]

- Encodings for OBIX: Common Encodings Version 1.0:

<http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodin...> [19]

- Bindings for OBIX: REST Bindings Version 1.0:

<http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-cs...> [20]

- Bindings for OBIX: SOAP Bindings Version 1.0:

<http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-cs...> [21]

- Bindings for OBIX: WebSocket Bindings Version 1.0:

<http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websock...> [22]

Additional information about the specification and the Open Building Information Exchange (oBIX) TC can be found at the TC's public home page:

<https://www.oasis-open.org/committees/obix/> [23]

Comments may be submitted to the TC by any person through the use of the OASIS TC Comment Facility which can be used by following the instructions on the TC's "Send A Comment" page, or directly at:

[https://www.oasis-open.org/committees/comments/index.php?wg\\_abbrev=obix](https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=obix) [24]

Comments submitted by TC non-members for this work and for other work of this TC are publicly archived and can be viewed at:

<https://lists.oasis-open.org/archives/obix-comment/> [25]

All comments submitted to OASIS are subject to the OASIS Feedback License, which ensures that the feedback you provide carries the same obligations at least as the obligations of the TC members. In connection with this public review of OBIX Version 1.1, Encodings for OBIX: Common Encodings Version 1.0, Bindings for OBIX: REST Bindings Version 1.0, Bindings for OBIX: SOAP Bindings Version 1.0 and Bindings for OBIX: WebSocket Bindings Version 1.0, we call your attention to the OASIS IPR Policy [4] applicable especially [5] to the work of this technical committee. All members of the TC should be familiar with this document, which may create obligations regarding the disclosure and availability of a member's patent, copyright, trademark and license rights that read on an approved OASIS specification.

OASIS invites any persons who know of any such claims to disclose these if they may be essential to the implementation of the above specification, so that notice of them may be posted to the notice page for this TC's work.

===== Additional references:

[1] OASIS Open Building Information Exchange (oBIX) TC

<https://www.oasis-open.org/committees/obix/> [23]

[2] Previous public reviews

- 30-day public review, 26 July 2013 for OBIX Version 1.1, Encodings for OBIX: Common Encodings Version 1.0, Bindings for OBIX: REST Bindings Version 1.0, and Bindings for OBIX: SOAP Bindings Version 1.0:

<https://lists.oasis-open.org/archives/tc-announce/201307/msg00010.html> [26]

- The comment resolution logs for these public reviews will be posted shortly.

[3] Redlined DIFF files:

- OBIX Version 1.1: <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02-diff...> [27]

- Encodings for OBIX: Common Encodings Version 1.0: <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodin...> [28]

- Bindings for OBIX: REST Bindings Version 1.0: <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-cs...> [29]

- Bindings for OBIX: SOAP Bindings Version 1.0: <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-cs...> [30]

[4] <http://www.oasis-open.org/who/intellectualproperty.php> [31]

[5] <http://www.oasis-open.org/committees/obix/ipr.php> [32]

<https://www.oasis-open.org/policies-guidelines/ipr#s10.2.3>

[33]

RF on Limited Terms Mode

**Associated TC:**

Open Building Information Exchange (oBIX)

**Deadline:**

Wed, 2014-01-15 - Fri, 2014-02-14

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**Links:**

- [1] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.pdf>
- [2] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.html>
- [3] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.doc>
- [4] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/schemas/>
- [5] <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodings-v1.0-csprd02.pdf>
- [6] <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodings-v1.0-csprd02.html>
- [7] <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodings-v1.0-csprd02.doc>
- [8] <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-csprd02.pdf>
- [9] <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-csprd02.html>
- [10] <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-csprd02.doc>
- [11] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-csprd02.pdf>
- [12] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-csprd02.html>
- [13] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-csprd02.doc>
- [14] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/wsdl/>
- [15] <http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websocket-v1.0-csprd01.pdf>
- [16] <http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websocket-v1.0-csprd01.html>
- [17] <http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websocket-v1.0-csprd01.doc>
- [18] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02.zip>
- [19] <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodings-v1.0-csprd02.zip>
- [20] <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-csprd02.zip>
- [21] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-csprd02.zip>
- [22] <http://docs.oasis-open.org/obix/obix-websocket/v1.0/csprd01/obix-websocket-v1.0-csprd01.zip>
- [23] <https://www.oasis-open.org/committees/obix/>
- [24] [https://www.oasis-open.org/committees/comments/index.php?wg\\_abbrev=obix](https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=obix)
- [25] <https://lists.oasis-open.org/archives/obix-comment/>
- [26] <https://lists.oasis-open.org/archives/tc-announce/201307/msg00010.html>
- [27] <http://docs.oasis-open.org/obix/obix/v1.1/csprd02/obix-v1.1-csprd02-diff.pdf>
- [28] <http://docs.oasis-open.org/obix/obix-encodings/v1.0/csprd02/obix-encodings-v1.0-csprd02-diff.pdf>
- [29] <http://docs.oasis-open.org/obix/obix-rest/v1.0/csprd02/obix-rest-v1.0-csprd02-diff.pdf>
- [30] <http://docs.oasis-open.org/obix/obix-soap/v1.0/csprd02/obix-soap-v1.0-csprd02-diff.pdf>
- [31] <http://www.oasis-open.org/who/intellectualproperty.php>
- [32] <http://www.oasis-open.org/committees/obix/ipr.php>
- [33] <https://www.oasis-open.org/policies-guidelines/ipr#s10.2.3>