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**Information technology —
Metadata Interoperability and Bindings (MDIB) —
Part 47: PHP API binding**

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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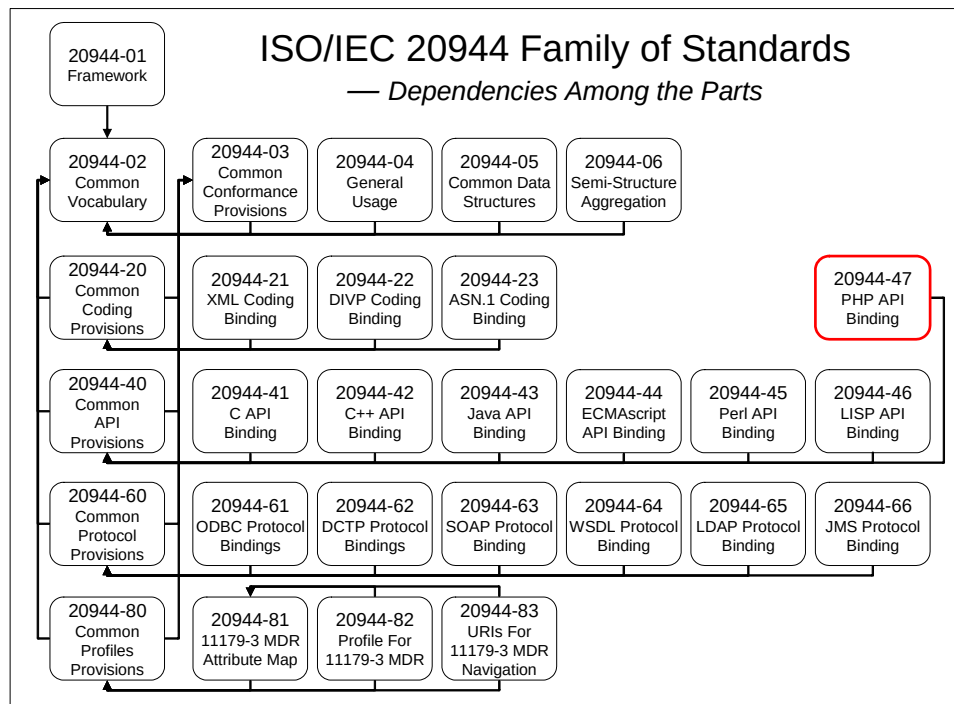
ISO/IEC 20944 consists of the following parts, under the general title *Information technology — Metadata Interoperability and Bindings (MDIB)*:

- *Part 01: Framework*
- *Part 02: Common vocabulary*
- *Part 03: Common provisions for conformance*
- *Part 04: Generic usage*
- *Part 05: Common data structures and services*
- *Part 06: Semi-structured aggregation*
- *Part 20: Common provisions for coding bindings*
- *Part 21: XML coding binding*
- *Part 22: DIVP coding binding*
- *Part 23: ASN.1 coding binding*
- *Part 40: Common provisions for application programming interface (API) bindings*
- *Part 41: C API binding*

- *Part 42: C++ API binding*
- *Part 43: Java API binding*
- *Part 44: ECMAScript API binding*
- *Part 45: Perl API binding*
- *Part 46: LISP API binding*
- *Part 47: PHP API binding*
- *Part 60: Common provisions for protocol bindings*
- *Part 61: ODBC protocol binding*
- *Part 62: DCTP protocol binding*
- *Part 63: SOAP protocol binding*
- *Part 64: WSDL protocol binding*
- *Part 65: LDAP protocol binding*
- *Part 66: JMS protocol binding*
- *Part 80: Common provisions for profiles*
- *Part 81: Attribute mapping for 11179-3 MDR metamodel*
- *Part 82: Profile for 11179-3 MDR metamodel*
- *Part 83: URI suffixes for 11179-3 MDR metamodel navigation*

Introduction

The following diagram shows the organization of the ISO/IEC 20944 family of standards with this Part highlighted.



Organization of ISO/IEC 20944 family of standards.

This Part of ISO/IEC 20944 specifies the PHP API binding, based upon the common API binding specified in Part 40.

Information technology — Metadata Interoperability and Bindings (MDIB) — Part 47: PHP API binding

Editor's Note: Each part of 20944 is marked with a common sequence number ("[Release Sequence #N]") to indicate they are synchronized and harmonized among themselves. The mark "[Release Sequence #N]" does not imply that there are a complete set of N-1 prior drafts for any particular Part.

1 Scope

This Part of this International Standard specifies the PHP programming language API binding for the 20944 family of standards.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 20944-02:—¹, *Information technology — Metadata Interoperability and Bindings (MDIB) — Common vocabulary*²

ISO/IEC 20944-40:—³, *Information technology — Metadata Interoperability and Bindings (MDIB) — Common provisions for application programming interface (API) bindings*

¹ To be published.

² The international standards, technical reports, and drafts of the 11179, 20943, and 20944 series are available at
<http://metadata-standards.org/11179>
<http://metadata-standards.org/20943>
<http://metadata-standards.org/20944>

³ To be published.

3 Terms and definitions

The 20944 family of standards consolidates its terminology into a single part. The terminology of Part 02 is included via normative reference.

3.1

referenced data interchange specification

data model that is being used for a defined interoperability binding

NOTE The term *referenced data interchange specification*, defined in 20944-02, is used throughout the 20944 family of standards to reference the data model that is being used for the bindings. The *referenced data interchange specification* is tied to the bindings via normative reference, e.g., some other standard defines a data model and uses 20944, via normative reference, to provide some coding, API, or protocol bindings. For Part 82, the *referenced data interchange specification* refers to the 11179-3 metamodel. Part 04 of this International Standard, explains how other standards and specifications may use or re-use portions of the 20944 family of standards.

4 API mapping

The binding-independent API of Part 40 is mapped to the ECMAScript programming language according to the following rules.

4.1 Datatype mapping

The datatypes of Part 40 are mapped as follows:

Part 40: Binding-Independent	Part 47: PHP API Binding
mdib_handle	string
characterstring	string
pointer	reference
str8	string
str16	string
str32	--
int8, uint8, int16, uint16, int32, uint32, int64, uin64, int128, uint128	numeric
real32, real64, real80	numeric
procedure	procedure

4.2 Function parameter mapping

The parameters of Part 40 are the same as the parameters for this Part.

4.3 Function return mapping

The return values of Part 40 are mapped as follows:

Part 40: Binding-Independent	Part 47: PHP API Binding
state(success,failure)	numeric, success=0, failure=-1
characterstring	string
str8	string
str16	string
str32	--
int8, uint8, int16, uint16, int32, uint32, int64, uint64, int128, uint128	numeric
real32, real64, real80	numeric

4.4 Function exception mapping

The function exceptions of Part 040 are mapped as follows:

Part 40: Binding-Independent	Part 47: ECMAScript API Binding
bad_conversion	mdib_get_error_number()

5 Procedure call signatures

5.1 Session establishment services

5.1.1 Connect

Synopsis

```
function mdib_connect
(
    $target, // repository to connect to
    $options // connect options
)
```

5.1.2 Disconnect

Synopsis

```
function mdib_disconnect
(
    $session // session handle
)
```

5.1.3 Open

Synopsis

```
function mdib_open
(
    $session, // session handle
    $node, // portion of repository to open
    $options // connect options
)
```

5.1.4 Close

Synopsis

```
function mdib_close
(
    $session // session handle
)
```

5.2 Session parameter services

5.2.1 Get path

Synopsis

```
function mdib_get_path
(
    $session // session handle
)
```

5.3 Security services

5.3.1 Request Authorization/Authentication

Synopsis

```
function mdib_request_auth
(
    $session, // session handle
    $auth_type, // auth type
    $auth_options // auth options
)
```

5.3.2 Response Authorization/Authentication

Synopsis

```

function mdib_response_auth
(
    $session, // session handle
    $auth_type, // auth type
    $auth_handler // auth handler function
)

```

5.4 Data transfer services

5.4.1 Get value

Synopsis

```

function mdib_get_value
(
    $session, // [in] session handle
    $src_identifier, // [in] src object name
    $dst_label_type, // [in] saved label: typeof
    &$dst_label_ptr, // [out] saved label: ptr to
    $dst_type_type, // [in] saved type: typeof
    &$dst_type_ptr, // [out] saved type: ptr to
    $dst_object_type, // [in] saved value: typeof
    &$dst_object_ptr, // [out] saved value: ptr to
    $dst_proplist_type, // [in] saved proplist: typeof
    &$dst_proplist_ptr, // [out] saved proplist: ptr to
)

```

5.4.2 Typed get value

Synopsis

```

function mdib_get_value_as_str8
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_str16
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_int8
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_uint8
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

```

```
function mdib_get_value_as_int16
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_uint16
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_int32
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_uint32
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_int64
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_uint64
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_real32
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)

function mdib_get_value_as_real64
(
    $session, // [in] session handle
    $src_identifier // [in] src object name
)
```

5.4.3 Put value

Synopsis

```
function mdib_put_value
```

```
(
    $session, // [in] session handle
    $src_identifier, // [in] src object name
    $src_label_type, // [in] assigned label: typeof
    $src_label_ptr, // [in] assigned label: ptr to
    $src_type_type, // [in] assigned type: typeof
    $src_type_ptr, // [in] assigned type: ptr to
    $src_object_type, // [in] assigned value: typeof
    $src_object_ptr, // [in] assigned value: ptr to
    $src_proplist_type, // [in] assigned proplist: typeof
    $src_proplist_ptr, // [in] assigned proplist: ptr to
)
```

5.4.4 Typed put value

Synopsis

```
function mdib_put_value_as_str8
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_str16
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_int8
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_uint8
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_int16
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_uint16
(
```

```

    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_int32
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_uint32
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_int64
(
    $session, // [in] session handle
    $dst_identifier, // [in] dst object name
    $src_value // [in] src value
)

function mdib_put_value_as_uint64
(
    $session, // [in] session handle
    $dst_identifier // [in] dst object name
    $src_value // [in] src value
)

mdib_put_value_as_real32
(
    session, // [in] session handle
    dst_identifier, // [in] dst object name
    src_value // [in] src value
)

mdib_put_value_as_real64
(
    session, // [in] session handle
    dst_identifier, // [in] dst object name
    src_value // [in] src value
)

```

5.5 Miscellaneous

5.5.1 Make Object message

Synopsis

```
function mdib_make_object
```

```
(
    $session, // [in] session handle
    $src_identifier, // [in] src object name
    $src_label_type, // [in] assigned label: typeof
    $src_label_ptr, // [in] assigned label: ptr to
    $src_type_type, // [in] assigned type: typeof
    $src_type_ptr, // [in] assigned type: ptr to
    $src_object_type, // [in] assigned value: typeof
    $src_object_ptr, // [in] assigned value: ptr to
    $src_proplist_type, // [in] assigned proplist: typeof
    $src_proplist_ptr, // [in] assigned proplist: ptr to
)
```

5.5.2 Remove Object message

Synopsis

```
function mdib_remove_object
(
    $session, // [in] session handle
    $src_identifier, // [in] src object name
)
```

5.5.3 Link Object message

Synopsis

```
function mdib_link_object
(
    $session, // [in] session handle
    $src_identifier, // [in] src object name
    $dst_identifier, // [in] dst object name
    $link_type // [in] link type: soft, hard
)
```

5.5.4 List Object message

Synopsis

```
function mdib_list_object
(
    $session, // [in] session handle
    $src_identifier // [in] src object name (wildcard)
)
```

6 Conformance

A conforming implementation shall conform to:

- the requirements of ISO/IEC 20944-03
- the requirements of ISO/IEC 20944-40
- the requirements of this Part