



Electronic Court Filing Web Services Service Interaction Profile Version 4.1

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Additional artifacts:

This document is one component of a Work Product that also includes:

- WSDL files: <https://docs.oasis-open.org/legalxml-courtfilling/ecf-webservices/v4.1/csd02/wSDL/>
 - [CourtRecordMDE.wsdl](#)
 - [FilingAssemblyMDE.wsdl](#)
 - [FilingReviewMDE.wsdl](#)

- ServiceMDE.wsdl
- WSDL example files: <https://docs.oasis-open.org/legalxml-courtfileing/ecf-webservices/v4.1/csd02/wsdl/examples/>
 - CourtRecordMDE-ImplementationExample.wsdl
 - FilingAssemblyMDE-ImplementationExample.wsdl
 - FilingReviewMDE-ImplementationExample.wsdl
 - ServiceMDE-ImplementationExample.wsdl

Related work:

This specification replaces or supersedes:

- *Web Services Messaging Profile 1.0 Specification*. Edited by Roger Winters. November 15, 2005. <https://docs.oasis-open.org/legalxml-courtfileing/specs/ecf/v3.0/ecf-v3.0-webservices-spec/ecf-v3.0-webservices-spec-cd01.doc>
- *Web Services Service Interaction Profile 1.1 Specification*. Edited by Roger Winters. July 10, 2007. <http://www.oasis-open.org/committees/download.php/29417/ecf-v3.1-webservices-spec-cd01.zip>
- *Electronic Court Filing 4.0 Web Services Service Interaction Profile Version 2.010*. Edited by Adam Angione. ~~10 May 2011~~. 21 September 2008. <http://docs.oasis-open.org/legalxml-courtfileing/specs/ecf/v4.0/ecf-v4.0-webservices-spec/v2.01/csprd01/ecf-v4.0-webservices-v2.0-spec-v2.01-csprd01-cd01.html>
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This specification is related to:

- *Electronic Court Filing Version 4.1*. Edited by James Cabral, Gary Graham, and Philip Baughman. Latest stage: <https://docs.oasis-open.org/legalxml-courtfileing/ecf/v4.1/ecf-v4.1.html>.

Declared XML namespaces:

- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:AppInfowsdl:CourtRecordMDE-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:AppellateCasewsdl:FilingAssemblyMDE-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:BankruptcyCasewsdl:FilingReviewMDE-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CaseListQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CaseListResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CaseQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CaseResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CitationCase-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CivilCase-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CommonTypes-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CoreFilingMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CourtPolicyQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CourtPolicyResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:CriminalCase-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:DocumentQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:DocumentResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:DomesticCase-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FeesCalculationQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FeesCalculationResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FilingListQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FilingListResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FilingStatusQueryMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:FilingStatusResponseMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:JuvenileCase-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:MessageReceiptMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:PaymentMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:PaymentReceiptMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:RecordDocketingCallbackMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:RecordDocketingMessage-4.1
- urn:oasis:names:tc:legalxml-courtfileing:schema:xsd:ReviewFilingCallbackMessage-4.1

- ~~urn:oasis:names:tc:legalxml-court filing:schema:xsd:ServiceInformationQueryMessage-4.1~~
- ~~urn:oasis:names:tc:legalxml-court filing:schema:xsd:ServiceInformationResponseMessage-4.1~~
- ~~urn:oasis:names:tc:legalxml-court filing:schema:xsd:ServiceReceiptMessage-4.1~~
- ~~urn:oasis:names:tc:legalxml-court filing:schema:xsd:MessageWrappers~~ [wsdl:ServiceMDE-4.1](#)

Abstract:

This document defines a Service Interaction Profile, as defined in section 5 of the LegalXML Electronic Court Filing 4.1 (ECF 4.1) specification. The Web Services Service Interaction Profile may be used to transmit ECF 4.1 messages between Internet-connected systems.

Status:

This document was last revised or approved by the OASIS LegalXML Electronic Court Filing TC on the above date. The level of approval is also listed above. Check the “Latest stage” location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Technical Committee (TC) are listed at https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=legalxml-court filing#technical.

TC members should send comments on this specification to the TC’s email list. Others should send comments to the TC’s public comment list, after subscribing to it by following the instructions at the “Send A Comment” button on the TC’s web page at <https://www.oasis-open.org/committees/legalxml-court filing/>.

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Note that any machine-readable content ([Computer Language Definitions](#)) declared Normative for this Work Product is provided in separate plain text files. In the event of a discrepancy between any such plain text file and display content in the Work Product’s prose narrative document(s), the content in the separate plain text file prevails.

Citation format:

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[ECF-WS-SIP-v4.1]

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Table of Contents

1	Introduction.....	5
1.1	Relationship to ECF 4.1 Specifications	5
1.2	Relationship to other XML Specifications	5
1.2.1	W3C XML Schema 1.0.....	5
1.2.2	W3C Namespaces in XML	6
1.2.3	W3C Simple Object Access Protocol (SOAP) 1.1.....	6
1.2.4	W3C Web Services Description Language (WSDL) 1.1	6
1.2.5	W3C XML- <i>Signature Syntax and Processing</i>	6
1.2.6	WS-I Basic Profile 1.1	6
1.2.7	W3C SOAP 1.1 Binding for MTOM 1.0	6
1.2.8	WS-I Basic Security Profile 1.0	7
1.2.9	WS-ReliableMessaging Version 1.1.....	7
1.3	Terms and Definitions.....	7
1.4	Symbols and Abbreviations	8
1.5	Normative References	9
1.6	Non-Normative References	10
2	Profile Design	11
2.1	Service Interaction Profile Identifier	11
2.2	Transport Protocol	11
2.3	MDE Addressing	12
2.4	Operation Addressing	12
2.5	Request and Operation Invocation	13
2.6	Synchronous Mode Response	13
2.7	Asynchronous Mode Response.....	13
2.8	Message/Attachment Delimiters.....	13
2.9	Message Identifiers.....	13
2.10	Message Non-repudiation.....	13
2.11	Message Integrity	13
2.12	Message Confidentiality.....	13
2.13	Message Authentication	14
2.14	Message Reliability.....	14
2.15	Message Splitting and Assembly.....	14
2.16	Transmission Auditing	14
3	Service Definitions.....	15
4	Conformance	16
	Appendix A. (Informative) Acknowledgments	17
	Appendix B. (Informative) Revision History	18
	Appendix C. (Informative) Example Implementation	19
	Appendix D. (Informative) Example Transmissions	20
	D.1 Operation Invocation	20
	D.2 Synchronous Response	21
	D.3 Asynchronous Response	22
	Appendix E. Notices.....	23

1 Introduction

2 This document defines a Service Interaction Profile, as called for in section 5 of **[ECF-4-y4.1]**. The
3 purpose of the Web Services Service Interaction Profile is to provide a web service-based system in
4 conformance with the WS-I Basic Profile 1.1 (**[WS-I BP 1.1]**) and Basic Security Profile 1.0 (**[WS-I BP**
5 **1.0]**) for use with the **[ECF-4-y4.1]** specification. This version ~~adds support for bulk filings.~~ improves
6 security support for tokens, attachments, and rights management through inclusion of WS-Security 1.1
7 and adds supports for message splitting and assembly through inclusion of WS-Reliable Messaging 1.0.
8 This specification requires an active network connection between the sending and receiving MDEs.

9 1.1 Relationship to ECF 4.1 Specifications

10 The ECF 4.1 specification describes the technical architecture and the functional features of an electronic
11 court filing system, that is, features needed to accomplish electronic filing in a court, pointing out both
12 normative (required) and non-normative (optional) business processes it supports. The non-functional
13 requirements associated with electronic filing transactions, and actions and services needed to
14 accomplish the transactions, such as network structures and security infrastructures, are defined in
15 related specifications, namely:

- 16 • Service interaction profile specifications defining communications infrastructures within which
17 electronic filing transactions can take place.
- 18 • Document signature profile specifications that define mechanisms for stating or proving that a person
19 signed a particular document.

20 This specification represents an ECF 4.1 service interaction profile based on web-services. It is intended
21 for implementation in conjunction with the ECF 4.1 specification and at least one ECF 4.1 document
22 signature profile specification. Specifically, in this service interaction profile, the implementation details
23 for each of the Major Design Elements (MDEs), operations, and messages defined in the ECF 4.1
24 specification, are defined in Web Services Description Language (WSDL).

25 1.2 Relationship to other XML Specifications

26 Consistent with the ECF 4.1 principle of leveraging other existing, non-proprietary XML specifications
27 wherever possible, this service interaction profile specification leverages previous specifications for web
28 services messaging and security including the following:

- 29 • W3C XML Schema 1.0 (**[Schema Part 1, Schema Part 2]**).
- 30 • W3C Namespaces in XML (**[Namespaces]**).
- 31 • W3C Simple Object Access Protocol (SOAP) 1.1 (**[SOAP 1.1]**).
- 32 • W3C Web WSDL 1.1 (**[WSDL 1.1]**).
- 33 • W3C XML-Signature Syntax and Processing (**[XMLSIG]**).
- 34 • W3C SOAP 1.1 Binding for MTOM 1.0
- 35 • WS-I Basic Profile Version 1.1.
- 36 • WS-I Basic Security Profile Version 1.0.
- 37 • OASIS WS-Reliable Messaging 1.0.

38
39 The use of each of these specifications is described below.

40 1.2.1 W3C XML Schema 1.0

41 The W3C XML Schema 1.0 (**[Schema Part 1, Schema Part 2]**) specification defines an application
42 protocol for imposing constraints on the storage layout and logical structure of data objects using text tags

43 or “markup.” Compliance with the requirements of the XML Schema 1.0 specification is REQUIRED for
44 compliance with this service interaction profile.

45 **1.2.2 W3C Namespaces in XML**

46 The W3C Namespaces in XML (**[Namespaces]**) specification defines conventions for defining and
47 referring to separate XML tags. Compliance with the requirements of the Namespaces in XML
48 specification is REQUIRED for compliance with this service interaction profile.

49 **1.2.3 W3C Simple Object Access Protocol (SOAP) 1.1**

50 The W3C SOAP 1.1 (**[SOAP 1.1]**) specification defines message exchange patterns and message
51 structures for use with XML. Compliance with the requirements of the SOAP 1.1 specification is
52 REQUIRED for compliance with this service interaction profile.

53 **1.2.4 W3C Web Services Description Language (WSDL) 1.1**

54 The W3C WSDL (**[WSDL 1.1]**) specification enables the description of services as sets of endpoints
55 operating on messages. Compliance with the requirements of the WSDL 1.1 specification is REQUIRED
56 for compliance with this service interaction profile.

57 An MDE implementation MUST consist of a **[SOAP 1.1]** web service that implements the SOAP HTTP
58 binding for that MDE’s portType from the corresponding MDE WSDL document provided with this
59 specification (e.g. *CourtRecordMDE.wsdl*). Further, the implementation MUST be accompanied by an
60 implementation-specific WSDL document that imports the namespace defined in the MDE WSDL, and
61 defines a `<wsdl:service>` element containing a `<soap:address>` element with a `location` attribute
62 whose value provides an HTTP URL at which the MDE implementation can be invoked.

63 (Note that in the previous paragraph, a namespace prefix of “wsdl” is assumed to map to the
64 <http://schemas.xmlsoap.org/wsdl/> namespace, while the namespace prefix of “soap” is
65 assumed to map to the <http://schemas.xmlsoap.org/wsdl/soap/> namespace.)

66 An example (non-normative) implementation-specific WSDL document for each MDE (e.g.
67 *wsdl/examples/CourtRecordMDE-ImplementationExample.wsdl*) is provided with this
68 specification.

69 **1.2.5 W3C XML-Signature Syntax and Processing**

70 The W3C XML Signature Syntax and Processing (**[XMLSIG]**) specification defines representations of
71 signatures of Web resources, portions of protocol messages (anything that may be referenced by a URI),
72 and procedures for computing and verifying such signatures. Compliance with the requirements of the
73 XML Signature Syntax and Processing specification is REQUIRED for compliance with this service
74 interaction profile.

75 **1.2.6 WS-I Basic Profile 1.1**

76 The WS-Interoperability Basic Profile 1.1 (**[WS-I BP 1.1]**) specification defines a set of best practices for
77 implementing interoperable web services. Compliance with the requirements of the **[WS-I BP 1.1]**, with
78 the exceptions noted in Section 1.2.7, is REQUIRED for compliance with this service interaction profile.

79 **1.2.7 W3C SOAP 1.1 Binding for MTOM 1.0**

80 The SOAP 1.1 Binding for MTOM 1.0 (**[SOAP MTOM 1.0]**) defines a set of best practices for
81 implementing interoperable serialization of the SOAP envelope and its representation in the message.
82 This binding MUST be used as a replacement for the WS-I Attachments Profile 1.0 and the W3C Simple
83 SOAP Binding Profile in the WS-I Basic Profile **[WS-I BP 1.1]**. Compliance with the requirements of the **[**
84 **SOAP MTOM 1.0]** and the specifications that this binding references, the SOAP Message Transmission
85 Optimization Mechanism (MTOM) (**[MTOM]**) and the W3C XML-binary Optimized Packaging (XOP)
86 specifications (**[XOP]**), is REQUIRED for compliance with the web services service interaction profile.

87 1.2.8 WS-I Basic Security Profile 1.0

88 The WS-Interoperability Basic Security Profile Version 1.0 (**[WS-I BSP 1.0]**) complements **[WS-I BP 1.0]**
89 and defines a set of best practices for implementing interoperable and secure web services. With the
90 exception of the requirements for use of the WS-I Attachments Profile 1.0 and the W3C Simple SOAP
91 Binding Profile 1.0, compliance with the requirements of **[WS-I BSP 1.0]** is REQUIRED for compliance
92 with this service interaction profile. However, in many cases, **[WS-I BSP 1.0]** is underspecified. The
93 following options in **[WS-I BSP 1.0]** are REQUIRED for compliance with this web services service
94 interaction profile:

- 95 • E0002 - Security Tokens - Security tokens MUST be specified in additional security token profiles.
96 (NOTE: This will be determined in Court Policy)
- 97 • R3103 - A SIGNATURE MUST be a Detached Signature as defined by the XML Signature
98 specification.

99 1.2.9 WS-ReliableMessaging Version 1.1

100 The WS-Reliability 1.1 (**[WS-RM 1.1]**) specification complements **[WS-I BP 1.1]** and defines a set of
101 extensions for exchanging SOAP messages with guaranteed delivery, no duplicates, and guaranteed
102 message ordering.

103 1.3 Terms and Definitions

104 The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD
105 NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described
106 in **[RFC2119]**.

107

108 The key terms used in this specification include:

109 **Attachment**

110 Information transmitted between MDEs that is of an arbitrary format, and is related to the [ECF 4.1](#)
111 message(s) in the transmission in a manner defined in the ECF 4.1 specification. An attachment
112 may be in XML format, non-XML text format, encoded binary format, or un-encoded binary
113 format.

114 **Callback message**

115 A message transmission returned by some operations some time after the operation was invoked
116 (asynchronously).

117 **Document**

118 Represents an electronic version of the paper that would have been sent as paper.

119 **Docketing**

120 The process invoked when a court receives a pleading, order, or notice, when no errors in
121 transmission or in presence of required content have occurred, and when the pleading, order, or
122 notice is recorded as a part of the official record.

123 **Filer**

124 Attorneys or pro se litigants are individuals who assemble and submit Filings (data and
125 documents).

126 **Filing**

127 Electronic document collection that has been assembled for filing on a designated court case.

128 **Major Design Element (MDE)**

129 A logical grouping of operations representing a significant business process supported by ECF
130 4.1. Each MDE operation receives one or more [ECF 4.1](#) messages, returns a [ECF 4.1](#)

131 synchronous response message, and optionally sends an [ECF 4.1](#) asynchronous response
132 message back to the original sender.

133 **Message**

134 Information transmitted between MDEs that consists of a well-formed XML document that is valid
135 against one of the defined message structure schemas in the ECF 4.1 specification. A message
136 may be related to one or more attachments in a manner defined in the ECF 4.1 specification.

137 **Message Transmission**

138 The sending of one or more [ECF 4.1](#) messages and associated attachments to an MDE. Each
139 transmission must invoke or respond to an operation on the receiving MDE, as defined in the
140 ECF 4.1 specification.

141 **Operation (or MDE Operation)**

142 A function provided by an MDE upon receipt of one or more [ECF 4.1](#) messages. The function
143 provided by the operation represents a significant step in the court filing business process. A
144 sender invokes an operation on an MDE by transmitting a set of [ECF 4.1](#) messages to that MDE,
145 addressed to that operation.

146 **Operation signature**

147 A definition of the [ECF 4.1](#) input message(s) and [ECF 4.1](#) synchronous response message
148 associated with an operation. Each [SOAP](#) message is given a name and a type by the operation.
149 The type is defined by a single one of the ~~message~~ structures defined in the ECF 4.1
150 specification.

151 **Receiving MDE**

152 In an Electronic Court Filing operation, the MDE that receives the request with the operation
153 invocation performs the operation and sends the response.

154 **Sending MDE**

155 In an Electronic Court Filing operation, the MDE that sends the request including the operation
156 invocation and receives the response with the results of the operation.

157 **Synchronous response**

158 A message transmission returned immediately (synchronously) as the result of an operation.
159 Every operation has a synchronous response.

160 **1.4 Symbols and Abbreviations**

161 The key symbols and abbreviations used in this specification include:

162 **ECF 4.1**

163 OASIS LegalXML Electronic Court Filing 4.1

164 **MDE**

165 Major Design Element

166 **OASIS**

167 Organization for the Advancement of Structured Information Standards

168 **SOAP**

169 Simple Object Access Protocol

170 **XML**

171 eXtensible Markup Language

172 **W3C**

173 World Wide Web Consortium

174 **WSDL**
175 Web Services Description Language
176 **WS-I**
177 Web Services Interoperability Organization

178 **1.5 Normative References**

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245 **1.6 Non-Normative References**

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250

251 2 Profile Design

252 This section describes the design of the Web Services Service Interaction Profile and identifies how it
253 satisfies the requirements of a document signature profile listed in Section 5 of the **[ECF-4-v4.1]**
254 specification. In addition, this profile is intended for compatibility with the Global Justice Reference
255 Architecture Web Services Service Interaction Profile **[JRA WS-SIP]**.

256 2.1 Service Interaction Profile Identifier

257 Each ECF 4.1 service interaction profile MUST be identified with a unique URI which is used in the ECF
258 4.1 court policy to identify the service interaction profile(s) that a given MDE supports. The ECF 4.1 Web
259 Services Service Interaction Profile will be identified by the following URI:

260 `urn:oasis:names:tc:legalxml-courtfiling:schema:xsd:WebServices-4.1`

261 ~~All~~**With the exception of PaymentMessage and PaymentReceiptMessage, all** ECF 4.1 messages sent
262 via this service interaction profile MUST include this URI in the `<SendingMDEProfileCode>` element.
263 In addition, any court supporting this service interaction profile MUST include this URI in the
264 `<SupportedMessageProfile>` element in the **CourtFiPolingcyResponseMessage**.

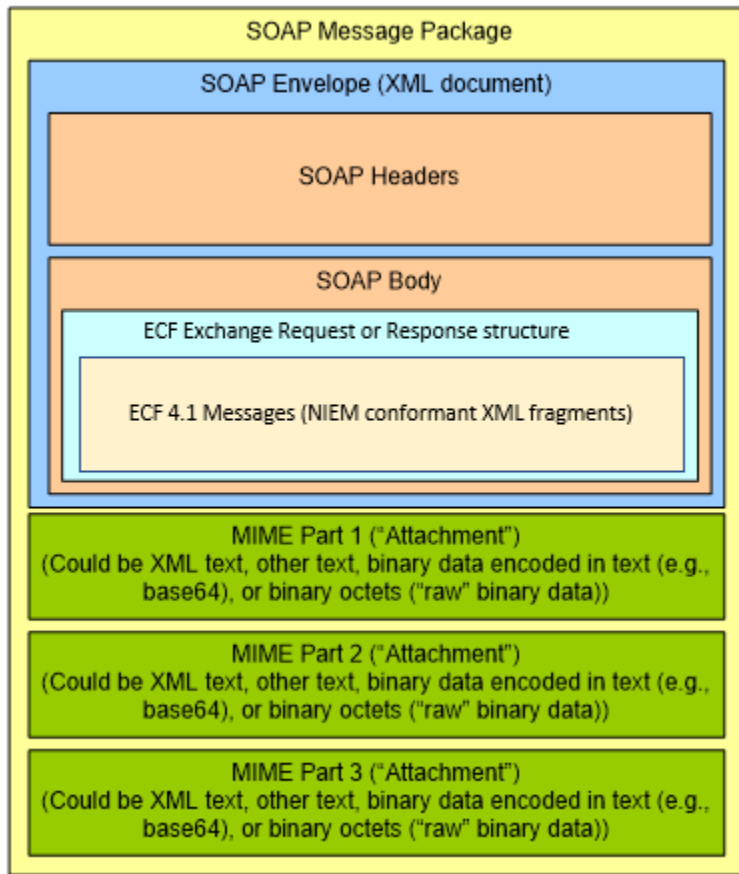
265 2.2 Transport Protocol

266 Each ECF 4.1 message transmission sent using this service interaction profile MUST be encapsulated in
267 a SOAP message over the HTTP 1.1 protocol as defined in the **[WSI-I BP 1.1]** and **[SOAP MTOM]**
268 specifications. Figure 1 illustrates the containment of ECF 4.1 messages and attachments within a SOAP
269 Message Package. For compliance with this specification, a SOAP envelope MUST contain one or more
270 **ECF 4.1** messages and MAY contain one or more attachments.

271

272

Figure 1. SOAP Envelope with ECF 4.1 Messages and Attachments



273

274 2.3 MDE Addressing

275 Each ECF message transmission sent using this service interaction profile MUST identify the sending and
 276 receiving MDEs with universally unique address identifiers. The identifier for each MDE will be assigned
 277 by the organization that manages the MDE and MUST be the HyperText Transfer Protocol (HTTP) or
 278 HTTP over Secure Socket Layer (SSL) permanent URL for the MDE web service.

279 This URL MUST be the value of the `location` attribute of the `<soap:address>` element contained within
 280 the `<wsdl:service>` element that binds the MDE's portType to a service, and that is defined in the
 281 implementation-specific WSDL document discussed in section 1.2.4 above.

282 For instance, a conformant MDE ID of a web service at courts.wa.gov using HTTP over SSL on port 8000
 283 would be as follows:

284 `https://courts.wa.gov:8000`

285 2.4 Operation Addressing

286 Each message transmission MUST either identify the operation being invoked or be a synchronous
 287 response to a previous request. Each operation MUST be either a REQUIRED operation as defined in
 288 the ECF 4.1 specification or an OPTIONAL operation identified as supported by the court through the
 289 current machine-readable court policy. The response to a request for an operation not supported by the
 290 court MUST be reported using the ECF 4.1 `<ErrorCode>` element in the core message and MAY also
 291 include a `SOAPFault` in the SOAP envelope.

292 2.5 Request and Operation Invocation

293 Each message transmission MUST identify the operation being invoked within the SOAP Body only; the
294 (qualified) operation name MUST be the qualified name of the first child element of the SOAP body
295 element, as called for in section 7.1 of the **[SOAP 1.1]** specification.

296 An MDE implementation MAY allow message transmissions that include a SOAPAction HTTP header.

297 In compliance with the **[WSI-I BP 1.1]** specification, a receiving MDE MAY NOT rely on the value of the
298 SOAPAction HTTP header in processing the message.

299 2.6 Synchronous Mode Response

300 Synchronous responses to requests MUST be encoded using the MIME binding defined in Section 3 of
301 the **[SOAP MTOM 1.0]** specification.

302 2.7 Asynchronous Mode Response

303 The receiving MDE MUST deliver the asynchronous response to a request sent using the web services
304 service interaction profile by sending the asynchronous response to the sending MDE via the web
305 services service interaction profile. The response message transmission MUST conform to the rules for
306 message transmissions established in section 2.5 of this specification above.

307 2.8 Message/Attachment Delimiters

308 The ECF 4.1 messages MUST be encapsulated in the SOAP Body. All other attachments MUST be
309 included in separate MIME parts as shown in Figure 1. The delimiters between the message and the first
310 attachment, and between attachments, MUST comply with the rules for delimiting MIME parts as defined
311 in **[RFC2045]**.

312 2.9 Message Identifiers

313 Each MIME part that includes an attachment MUST have a unique "Content-ID" as defined in **[RFC2045]**
314 that uniquely identifies the content within that part.

315 2.10 Message Non-repudiation

316 The SOAP message MAY include a digital signature applied to the SOA Body and all MIME parts that
317 contain messages or attachments. The digital signature MUST be conformant with Section 8 of the **[WS-I
318 BSP 1.0]** specification which references the **[XMLSIG]** specification. The algorithms defined by
319 **[XMLSIG]** support non-repudiation of the signer and signing date through a digital signature created
320 using the signer's private key. Because the sender is the only one with access to the private key and the
321 date is included in the signature, receivers can be reasonably assured of the signer and signing date.

322 2.11 Message Integrity

323 The algorithms defined by **[XMLSIG]** support message integrity through inclusion of a public-key-based
324 digital signature. Because the signing date and message hash are included in the signature and the
325 entire signature is computed using the sender's private key, the receiver can compare the hashes to
326 verify that the message has not been altered since it left the control of the sender on the specified date.

327 2.12 Message Confidentiality

328 If the Filing Review MDE supports the filing of confidential filings and publishes the court's public key in
329 court policy, messages and attachments MAY be encrypted for filing into the court according to Section 9
330 of the **[WS-I BSP 1.0]** specification which references the **[XMLENC]** specification. Because the Filing
331 Review MDE is the only one with access to the court's private key, filers can be reasonably assured that
332 only the Filing Review MDE will be able to read the message or attachment.

333 This mechanism MAY be used to protect sensitive or confidential information in a filing such as the
334 **FilingPaymentMessage**. However, this specification does NOT support the transmission of messages
335 and attachments encrypted with the court's public key to other parties in the case. Any messages and
336 attachments transmitted to other parties MUST be either encrypted with the party's public key or not
337 encrypted. This specification and the ECF 4.1 specification do NOT define the exchange or publication of
338 public keys by persons or organizations other than the court.

339 2.13 Message Authentication

340 Each MDE MAY define HTTP credentials for authentication to access the operations supported by that
341 MDE. If authentication is required, the sending MDE MUST include the credentials in the request as
342 defined in **[RFC2617]**.

343 For instance, the Filing Review MDE MAY assign user ID and password pairs to each supported Filing
344 Assembly MDE, and require authentication for ReviewFiling operations but not query operations. In that
345 case, each Filing Assembly MDE would include the user ID and password assigned to them in each filing.

346 2.14 Message Reliability

347 If a court expresses support for message reliability in human-readable court policy, a sending MDE MAY
348 include reliability extensions to the SOAP envelope as defined in the **[WS-RM 1.1]** specification. An MDE
349 that receives a request with a SOAP envelope that includes reliability extensions MUST include reliability
350 extensions as defined by **[WS-RM 1.1]** in the response.

351 2.15 Message Splitting and Assembly

352 WS-Reliable Messaging defines mechanisms by which messages MAY be split into multiple pieces that
353 are assigned sequence numbers and transmitted separately by the RM Source (sending MDE) and
354 reassembled into the complete message by the RM Destination (receiving MDE).

355

356 2.16 Transmission Auditing

357 An implementation of the web services message profile MUST ensure that the complete SOAP message,
358 including the SOAP envelope, any attachments, and signatures, is available to the receiving MDE for
359 persisting and auditing purposes.

360

361

3 Service Definitions

362

Implementation by each MDE of this service interaction profile MUST be described in WSDL file that imports the service definitions from the corresponding MDE WSDL file included with this specification.

363

364

365

[These WSDL files import the xsd/wrappers.xsd schema file provided in \[ECF-v4.1\].](#)

366

367

4 Conformance

368
369
370

An implementation conforms with the ECF 4.1 Web Services SIP if the implementation meets the requirements identified by capitalized key words [RFC2119] in Sections 1 and 2 and publishes a WSDL as required in Section 3.

371 **Appendix A. (Informative) Acknowledgments**

372 The following individuals have participated in the creation of this specification and are gratefully
373 acknowledged:

374 **Participants:**

- 375 Philip Baughman, Tyler Technologies, Inc.
- 376 James Cabral, InfoTrack US
- 377 Eric Eastman, InfoTrack US
- 378 Ryan Foley, i3-ImageSoft, LLC
- 379 Gary Graham, Arizona Supreme Court
- 380 Barbara Holmes, National Center for State Courts
- 381 George Knecht, InfoTrack US
- 382 James McMillan, National Center for State Courts
- 383 Enrique Othon, Tyler Technologies, Inc.
- 384 Jim Price, Arizona Supreme Court
- 385 Brock Rogers, File & ServeXpress

Appendix B. (Informative) Revision History

Revision	Date	Editor	Changes Made
Wd01	2022-06-18	James Cabral	Changes to ECF 4.01 Web Services SIP 2.01: Split the previous WSDL into separate files for each MDE; changed the WSDLs to use document literals, (aligning operation names and root elements) and include a SOAP action in the binding; fixed reference to MTOM specification.
Wd02	2022-08-23	James Cabral Gary Graham	Replace references to ECF 4.0 with 4.1.
Wd03	2022-09-12	James Cabral Gary Graham	Minor changes to front matter, section 2,5 and D-1.
WD04	2022-11-17	James Cabral Gary Graham	Minor typo change to 2.5.
CSD01	2022-12-07	James Cabral Gary Graham	Committee Specification Draft approved for public review
WD05	2023-05-10	James Cabral Gary Graham	Added a README.txt file in /wsdl. Fixed broken link in Section 1.6. defined namespaces and references to Related Work in the front matter, citations to ECF 4.1 throughout, and names of specific messages. Clarified references to ECF 4.1 vs SOAP messages throughout. Added guidance in Appendix C for linking the WSDL files and wrappers.xsd. Updated Figure 1. Clarified the user of xsd/wrappers.xsd in Section 3.
WD06	2023-06-23	James Cabral Gary Graham	Removed reference to support for bulk filing in Section 1.

388

Appendix C. (Informative) Example Implementation

389

This non-normative section provides an example WSDL implementation of this service interaction profile.

390

This is also included in the `CourtRecordMDE-ImplementationExample.wsdl` file included with this

391

specification. Note that the following is for illustrative purposes only.

392

393

394

```
<definitions
  targetNamespace="urn:oasis:names:tc:legalxml-courtfiling:schema:wsl:CourtRecordMDE-
ImplementationExample-4.1"
  xmlns:wsmpt="urn:oasis:names:tc:legalxml-courtfiling:schema:wsl:CourtRecordMDE-4.1"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:wsl="http://schemas.xmlsoap.org/wsdl/"
  xmlns="http://schemas.xmlsoap.org/wsdl/">

  <import namespace="urn:oasis:names:tc:legalxml-
courtfiling:schema:wsl:CourtRecordMDE-4.1" location="CourtRecordMDE.wsdl"/>

  <service name="CourtRecordMDEService">
    <port name="CourtRecordMDE" binding="wsmpt:CourtRecordMDESoap">
      <soap:address location="https://localhost/..."/>
    </port>
  </service>
</definitions>
```

413

414

415 The WSDL files provided in the /wsdl folder on this specification import the wrappers.xsd file provided in

416 the /xsd folder of the Core specification. The <import> statements in the WSDL files assume that the

417 /xsd folder and /wsdl folder share a common parent folder. If not, it will be necessary to update the

418 <import> statements in the provided WSDL files.

419 Appendix D. (Informative) Example Transmissions

420 This non-normative section provides an example transmission that demonstrates an operation invocation,
421 a synchronous response, and an asynchronous response using this service interaction profile. Note that
422 these examples are for illustrative purposes only.

423 D.1 Operation Invocation

424 This is an example of a request including a ReviewFiling operation invocation.

425

```
426 MIME-Version: 1.0
427 Content-Type: Multipart/Related; boundary=boundary;
428   type="application/xop+xml";
429   start="Envelope"
430   start-info="text/xml"
431
432 --boundary
433 Content-Type: application/xop+xml;
434   text/xml; charset="UTF-8"
435 Content-Transfer-Encoding: 8bit
436 Content-ID: Envelope
437
438 <?xml version='1.0' ?>
439 <env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
440   <env:Body xmlns:types="http://example.com/some-namespace">
441     <wrappers:ReviewFiling>
442       <wrappers:ReviewFilingRequest>
443         <core:CoreFilingMessage>
444           ...
445         </core:CoreFilingMessage>
446         <payment:PaymentMessage>
447           ...
448         </payment:PaymentMessage>
449       </wrappers:ReviewFilingRequest>
450     </wrappers:ReviewFiling>
451   </env:Body>
452 </env:Envelope>
453
454 --boundary
455 Content-Type: application/pdf
456 Content-Transfer-Encoding: binary
457 Content-ID: Attachment1
458
459 ...Lead Document...
460 --boundary-
461 Content-Type: application/pdf
462 Content-Transfer-Encoding: binary
463 Content-ID: Attachment2
464
465 ...Connected Document...
466 --boundary--
467
468
```

469

470

471 D.2 Synchronous Response

472 This is an example of a MessageReceiptMessage synchronous response.

```
473 MIME-Version: 1.0
474 Content-Type: Multipart/Related; boundary=boundary;
475     type="application/xop+xml";
476     start="Envelope"
477     start-info="text/xml"
478
479 --boundary
480 Content-Type: application/xop+xml;
481     text/xml; charset="UTF-8"
482 Content-Transfer-Encoding: 8bit
483 Content-ID: Envelope
484
485 <?xml version='1.0' ?>
486 <env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
487     <env:Body xmlns:types="http://example.com/some-namespace">
488         <wrappers:ReviewFilingResponse>
489
490             <message:MessageReceiptMessage>
491                 ...
492             </message:MessageReceiptMessage>
493
494         </wrappers:ReviewFilingResponse>
495     </env:Body>
496 </env:Envelope>
497
```

498

499

500 D.3 Asynchronous Response

501 This is an example of a NotifyFilingReviewComplete asynchronous response.

502

```
503 MIME-Version: 1.0
504 Content-Type: Multipart/Related; boundary=boundary;
505     type="application/xop+xml";
506     start="Envelope"
507     start-info="text/xml"
508
509 --boundary
510 Content-Type: application/xop+xml;
511     text/xml; charset="UTF-8"
512 Content-Transfer-Encoding: 8bit
513 Content-ID: Envelope
514
515 <?xml version='1.0' ?>
516 <env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
517     <env:Body xmlns:types="http://example.com/some-namespace">
518         <wrappers:NotifyFilingReviewComplete>
519             <wrappers:NotifyFilingReviewCompleteRequest>
520                 <reviewcb:ReviewFilingCallbackMessage>
521                     ...
522                 </reviewcb:ReviewFilingCallbackMessage>
523
524                 <receipt:PaymentReceiptMessage>
525                     ...
526                 </receipt:PaymentReceiptMessage>
527             </wrappers:NotifyFilingReviewCompleteRequest>
528         </wrappers:NotifyFilingReviewComplete>
529     </env:Body>
530 </env:Envelope>
531
532 --boundary
533 Content-Type: application/pdf
534 Content-Transfer-Encoding: binary
535 Content-ID: Attachment1
536
537 ...Lead Document...
538 --boundary-
539 Content-Type: application/pdf
540 Content-Transfer-Encoding: binary
541 Content-ID: Attachment2
542
543 ...Connected Document...
544 --boundary--
545
```

546

547

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