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# Electronic Court Filing Web Services Service Interaction Profile Version 4.1

## Committee Specification 01

## 29 September 2023

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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-courtfiling/ecf-webservices/v4.1/cs01/wsdl/.
  - CourtRecordMDE.wsdl
  - FilingAssemblyMDE.wsdl
  - FilingReviewMDE.wsdl
  - ServiceMDE.wsdl
- WSDL example files: https://docs.oasis-open.org/legalxml-courtfiling/ecf-webservices/v4.1/cs01/wsdl/examples/.
  - CourtRecordMDE-ImplementationExample.wsdl
  - FilingAssemblyMDE-ImplementationExample.wsdl
  - FilingReviewMDE-ImplementationExample.wsdl

    o 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-courtfiling/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 2.0*. Edited by Adam Angione. 21 September 2008. http://docs.oasis-open.org/legalxml-courtfiling/specs/ecf/v4.0/ecf-v4.0-webservices-spec/ecf-v4.0-webservices-v2.0-spec-cd01.html
- *Electronic Court Filing 4.0 Web Services Service Interaction Profile Version 2.01*. Edited by Adam Angione. 09 August 2011. http://docs.oasis-open.org/legalxml-courtfiling/specs/ecf/v4.0/ecf-v4.0-webservices-spec/v2.01/ecf-v4.0-webservices-spec-v2.01.html

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-courtfiling/ecf/v4.1/ecf-v4.1.html.

**Declared XML namespaces:**

- urn:oasis:names:tc:legalxml-courtfiling:schema:wsdl:CourtRecordMDE-4.1
- urn:oasis:names:tc:legalxml-courtfiling:schema:wsdl:FilingAssemblyMDE-4.1
- urn:oasis:names:tc:legalxml-courtfiling:schema:wsdl:FilingReviewMDE-4.1
- urn:oasis:names:tc:legalxml-courtfiling:schema: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-courtfiling#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-courtfiling/.

This specification is provided under the RF on Limited Terms Mode of the OASIS IPR Policy, the mode chosen when the Technical Committee was established. For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the TC's web page (https://www.oasis-open.org/committees/legalxml-courtfiling/ipr.php).

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:**

When referencing this document, the following citation format should be used:

**[ECF-WS-SIP-v4.1]**

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**Notices:**

# Table of Contents

# 1 Introduction

This document defines a Service Interaction Profile, as called for in section 5 of **[ECF-v4.1]**.  The purpose of the Web Services Service Interaction Profile is to provide a web service-based system in conformance with the WS-I Basic Profile 1.1 (**[WS-I BP 1.1]**) and Basic Security Profile 1.0 (**[WS-I BP 1.0]**) for use with the **[ECF-v4.1]** specification. This version improves security support for tokens, attachments, and rights management through inclusion of WS-Security 1.1 and adds supports for message splitting and assembly through inclusion of WS-Reliable Messaging 1.0. This specification requires an active network connection between the sending and receiving MDEs.

## 1.1 Relationship to ECF 4.1 Specifications

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

- Service interaction profile specifications defining communications infrastructures within which electronic filing transactions can take place.

- Document signature profile specifications that define mechanisms for stating or proving that a person signed a particular document.

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

## 1.2 Relationship to other XML Specifications

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

- W3C XML Schema 1.0 (**[Schema Part 1, Schema Part 2]**).

- W3C Namespaces in XML (**[Namespaces]**).

- W3C Simple Object Access Protocol (SOAP) 1.1 (**[SOAP 1.1]**).

- W3C Web WSDL 1.1 (**[WSDL 1.1]**).

- W3C *XML-Signature Syntax and Processing (***[XMLSIG]***)*.

- *W3C SOAP 1.1 Binding for MTOM 1.0*

- WS-I Basic Profile Version 1.1.

- WS-I Basic Security Profile Version 1.0.

- OASIS WS-Reliable Messaging 1.0.

The use of each of these specifications is described below.

### 1.2.1 W3C XML Schema 1.0

The W3C XML Schema 1.0 (**[Schema Part 1, Schema Part 2])** specification defines an application 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.

## 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.

## 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.

## 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 WDSL, 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.

## 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.

## 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.

## 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 Packging (XOP)
86 specifications (**[XOP]**), is REQUIRED for compliance with the web services service interaction profile.

## 1.2.8 WS-I Basic Security Profile 1.0

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

- E0002 - Security Tokens - Security tokens MUST be specified in additional security token profiles. (NOTE:  This will be determined in Court Policy)

- R3103 - A SIGNATURE MUST be a Detached Signature as defined by the XML Signature specification.

## 1.2.9 WS-ReliableMessaging Version 1.1

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

## 1.3 Terms and Definitions

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


The key terms used in this specification include:

**Attachment**

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

**Callback message**

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

**Document**

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

**Docketing**

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

**Filer**

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

**Filing**

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

**Major Design Element (MDE)**

A logical grouping of operations representing a significant business process supported by ECF 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.

**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.

**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.

**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.

**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 structures defined in the ECF 4.1 specification.

**Receiving MDE**

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

**Sending MDE**

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

**Synchronous response**

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

## 159 1.4 Symbols and Abbreviations

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

161 **ECF 4.1**

162 OASIS LegalXML Electronic Court Filing 4.1

163 **MDE**

164 Major Design Element

165 **OASIS**

166 Organization for the Advancement of Structured Information Standards

167 **SOAP**

168 Simple Object Access Protocol

169 **XML**

170 eXtensible Markup Language

171 **W3C**

172 World Wide Web Consortium

173 **WSDL**

174          Web Services Description Language

175 **WS-I**

176          Web Services Interoperability Organization

## 1.5 Normative References

177

178 **[ECF-v4.1]**

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

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183 Mechanism, http://www.w3.org/TR/soap12-mtom/, W3C Recommendation, January 2005.

184 **[Namespaces]**

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186 2009.

187 **[RFC2045]**

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191 N. Freed, *Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types*,
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219 **[WSDL 1.1]**

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222 **[WS-I BP1.1]**

223 K. Ballinger, D. Ehnebuske, C. Ferris, M. Gudgin, M. Nottingham, C. K. Liu, P. Yendluri, *Basic Profile*
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226 **[WS-I BSP 1.1]**

227 M. McIntosh, M. Gudgin, K. Scott Morrison, A. Barbir, *Basic Security Profile Version 1.1 (Final Material)*,
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229 **[WS-RM 1.1]**

230 *WS-ReliableMessaging 1.1*, 15 November 2004, OASIS Standard, http://docs.oasis-open.org/wsrm/ws-
231 reliability/v1.1/wsrm-ws_reliability-1.1-spec-os.pdf

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234 Recommendation, November 2008.

235 **[XMLENC]**

236 D. Eastlake, J. Reagle, *XML Encryption Syntax and Processing*, http://www.w3.org/TR/xmlenc-core/,
237 W3C Recommendation, December 2002.

238 **[XMLSIG]**

239 D. Eastlake., J. Reagle, D. Solo, *XML-Signature Syntax and Processing*, http://www.w3.org/TR/xmldsig-
240 core/, W3C Recommendation, June 2008.

241 **[XOP]**

242 M. Gudgin, N Mendelsohn, M Nottingham, H Ruellan, *XML-binary Optimized Packaging*,
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244 ## 1.6 Non-Normative References

245 **[JRA WS-SIP]**

246 *Global Justice Reference Architecture Web Services Service Interaction Profile 1.1*,
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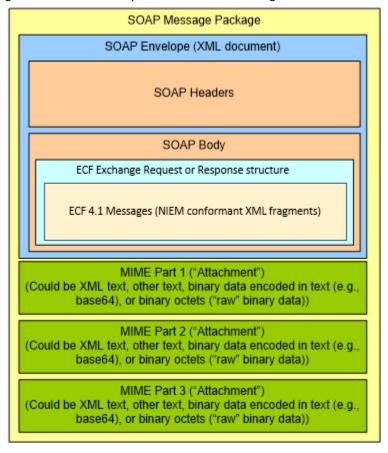
249

# 250 2 Profile Design

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

## 255 2.1 Service Interaction Profile Identifier

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

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

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

## 264 2.2 Transport Protocol

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

270

271                Figure 1. SOAP Envelope with ECF 4.1 Messages and Attachments



272

## 2.3 MDE Addressing

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

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

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

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

## 2.4 Operation Addressing

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

## 2.5 Request and Operation Invocation

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

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

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

## 2.6 Synchronous Mode Response

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

## 2.7 Asynchronous Mode Response

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

## 2.8 Message/Attachment Delimiters

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

## 2.9 Message Identifiers

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

## 2.10 Message Non-repudiation

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

## 2.11 Message Integrity

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

## 2.12 Message Confidentiality

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

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

## 2.13 Message Authentication

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

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

## 2.14 Message Reliability

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

## 2.15 Message Splitting and Assembly

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

354

## 2.16 Transmission Auditing

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

359

# 3 Service Definitions

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.

These WSDL files import the xsd/wrappers.xsd schema file provided in **[ECF-v4.1].**

# 366 4 Conformance

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

# Appendix A. (Informative) Acknowledgments

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

**Participants:**

Philip Baughman, Tyler Technologies, Inc.

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Ryan Foley, i3-ImageSoft, LLC

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Jim Price, Arizona Supreme Court

Brock Rogers, File & ServeXpress

385 # 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:<br><br>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<br>Gary Graham | Replace references to ECF 4.0 with 4.1. |
| Wd03 | 2022-09-12 | James Cabral<br>Gary Graham | Minor changes to front matter, section 2,5 and D-1. |
| WD04 | 2022-11-17 | James Cabral<br>Gary Graham | Minor typo change to 2.5. |
| CSD01 | 2022-12-07 | James Cabral<br>Gary Graham | Committee Specification Draft approved for public review |
| WD05 | 2023-05-10 | James Cabral<br>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<br>Gary Graham | Removed reference to support for bulk filing in Section 1. |

386

# 387 Appendix C. (Informative) Example Implementation

388 This non-normative section provides an example WSDL implementation of this service interaction profile.
389 This is also included in the `CourtRecordMDE-ImplementationExample.wsdl` file included with this
390 specification. Note that the following is for illustrative purposes only.

391

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

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

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

</definitions>
```

413

414 The WSDL files provided in the /wsdl folder on this specification import the wrappers.xsd file provided in
415 the /xsd folder of the Core specification. The <import> statements in the WSDL files assume that the
416 /xsd folder and /wsdl folder share a common parent folder. If not, it will be necessary to update the
417 <import> statements in the provided WSDL files.

# Appendix D. (Informative) Example Transmissions

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

## D.1 Operation Invocation

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

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"

--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope

<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <wrappers:ReviewFiling>
          <wrappers:ReviewFilingRequest>
            <core:CoreFilingMessage>
                    …
            </core:CoreFilingMessage>

            <payment:PaymentMessage>
                    …
            </payment:PaymentMessage>
          </wrappers:ReviewFilingRequest>
        </wrappers:ReviewFiling>
    </env:Body>
</env:Envelope>

--boundary
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment1

...Lead Document...
--boundary—
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment2

...Connected Document...
--boundary--
```

## 470    D.2 Synchronous Response

471    This is an example of a MessageReceiptMessage synchronous response.

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"

--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope

<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <wrappers:ReviewFilingResponse>

            <message:MessageReceiptMessage>
                  …
            </message:MessageReceiptMessage>

        </wrappers:ReviewFilingResponse>
    </env:Body>
</env:Envelope>
```

## D.3 Asynchronous Response

This is an example of a NotifyFilingReviewComplete asynchronous response.


```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"


--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope


<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <wrappers:NotifyFilingReviewComplete>
           <wrappers:NotifyFilingReviewCompleteRequest>
             <reviewcb:ReviewFilingCallbackMessage>
                 …
             </reviewcb:ReviewFilingCallbackMessage>

             <receipt:PaymentReceiptMessage>
                 …
             </receipt:PaymentReceiptMessage>
           </wrappers:NotifyFilingReviewCompleteRequest>
        </wrappers:NotifyFilingReviewComplete>
    </env:Body>
</env:Envelope>


--boundary
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment1

...Lead Document...
--boundary—
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment2

...Connected Document...
--boundary--
```

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