



1 **eGov Profile**

2 **SAML 2.0**

3 **Version 1.5 Draft E**

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6 **Abstract:**

7 This document describes the eGovernment profile for SAML 2.0.

8 **Filename:**

9 LibertyAlliance_eGov_1.5_DraftE.odt

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57 (OISTE), Oslo University, Our New Evolution, PAM Forum, Parity Communications, Inc., PayPal,
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98 Introduction

99 Overview of eGov Profile

100 The eGov profile is a Liberty Alliance defined SAML 2.0 conformance specification for SP and IdP
101 applications operating in approved eGovernment federations and deployments. The eGov profile is
102 based on the SAML 2.0 specifications created by the Security Services Technical Committee
103 (SSTC) of OASIS. It constrains the base SAML 2.0 features, elements, attributes and other values
104 required for approved eGovernment federations and deployments. Unless otherwise specified,
105 SAML operations and features follow those found in the OASIS SAML 2.0 specifications.

106 This eGov profile *does not* reflect which aspects of SAML the individual governments must utilize
107 in their respective federations. Thus, it is not a deployment level profile. Information on deployment
108 level detail can be found in the “Comparison and Analysis” document produced by Liberty Alliance
109 SIG-eGov group. This eGov profile *does* reflect the SAML features that vendors must implement
110 within their product offerings to satisfy SP and IdP functionality necessary to be conformant to this
111 profile.

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143 **Draft History**

- 144 • Draft E
- 145 Removed "TEST" bullets added in Draft D.
- 146 • Draft D
- 147 Removed many requirements which were redundant to the base SAML requirements.
- 148 Clarified other requirements. Removed the document defined key word "SUPPORT" and not
- 149 only use RFC 2119 defined key words. Added "TEST" bullets stating how stated
- 150 requirements are currently tested in the Liberty test plan and what new test specifications are
- 151 needed.
- 152 • Draft C
- 153 Defined constrained conformance requirements for complying SPs and IdPs.
- 154 • Draft B
- 155 Based on initial feedback, this Draft placed requirements in align, nearly aligned and non-
- 156 aligned groups to determine where the differences were in terms of expectations.
- 157 • Draft A
- 158 First attempt to reconcile requirements of US, New Zealand and Denmark governments.
- 159 Utilized the "Comparison and Analysis of Government Web Browser SSO Profiles"
- 160 document produced by Liberty eGov SIG.
- 161 • eGov Profile 1.0
- 162 The eGov Profile 1.0 follows the SAML 2.0 requirements for the General Service
- 163 Administration (GSA) of the US Government. It was tested in the Liberty Alliance 2008
- 164 SAML 2.0 IOP event.

165 **Key Words**

- 166 The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD",
167 "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be
168 interpreted as described in RFC 2119.

169 Conformance Requirements

170 Web SSO

- 171 • SSO profile in [SAMLProf] MUST be supported by both SP and IdP with both capable of
172 initiation. Unsolicited IdP <Response> messages MUST be supported.

173 IdP Discovery

- 174 • IdP Discovery MUST be supported.
- 175 • If a CDC exists the SP MUST SUPPORT functionality of presenting the user with a tailored
176 list of compatible Identity Providers featuring, at a minimum, the compatible Identity
177 Providers in the CDC.

178 SP Authentication Request

- 179 • MUST be communicated using HTTP Redirect binding.
- 180 • *isPassive* MUST be supported. It MAY be used when the IdP is not to take direct control. If
181 *isPassive* is true, the Identity Provider and client MUST NOT take over the user interface.
- 182 • *ForceAuthn* MUST be supported. It MAY be used to require the IdP to force the end user to
183 authenticate.
- 184 • <AuthnRequest> MUST be signed.
- 185 • <NameIDPolicy> MUST be supported and MUST SUPPORT formats of 'persistent',
186 'transient' and 'unspecified'.
- 187 • <RequestedAuthnContext> MUST be supported. IdP MUST recognize *Comparison* field and
188 evaluate the requested context classes.

189 IdP Authentication Response

- 190 • MUST be communicated using HTTP POST binding or SOAP Artifact binding.
- 191 • Assertion MUST be encrypted when using POST binding.
- 192 • The *Consent* attribute MUST be supported. The *Consent* values which MUST be supported,
193 but not limited to, are:
 - 194 • urn:oasis:names:tc:SAML:2.0:consent:obtained
 - 195 • urn:oasis:names:tc:SAML:2.0:consent:prior
 - 196 • urn:oasis:names:tc:SAML:2.0:consent:current-implicit
 - 197 • urn:oasis:names:tc:SAML:2.0:consent:current-explicit
 - 198 • urn:oasis:names:tc:SAML:2.0:consent:unspecified

199 Assertion

- 200 • Assertion MUST be signed.

- 201 • MUST have one <AuthnStatement> present. SessionIndex parameter MUST be present and
- 202 SessionNotOnOrAfter MUST NOT be present.
- 203 • MUST support <AttributeStatement> and MAY contain up to one <AttributeStatement>.
- 204 • MUST support NameFormat of <Attribute> values of “basic”, “uri” and “unspecified”.
- 205 • <AttributeStatement> MUST use <Attribute> and MUST NOT use <EncryptedAttribute>.
- 206 • The <Conditions> attributes *NotBefore* and *NotOnOrAfter* MUST be supported.
- 207 • The <Conditions> element <AudienceRestriction> MUST be supported.

208 **Single Logout**

- 209 • SP-initiated Single Logout and IdP-initiated Single Logout MUST be supported.
- 210 • Single Logout binding MAY be HTTP Redirect or SOAP Artifact.
- 211 • <LogoutRequest> MUST be signed.
- 212 • <LogoutResponse> MUST be signed.
- 213 • SP MUST offer user choice between local logout from SP only or SLO.
- 214 • User SHOULD confirm logout. If Single Logout is unsuccessful, user MUST be informed.

215 **Security**

- 216 • The minimum requirements for algorithm, key length and other security requirements are
- 217 defined in Section 4 of [SAMLConf]. eGov applications and deployments MUST follow
- 218 those minimum requirements.
- 219 • Utilization of a certificate authority and other security practices not defined in this profile are
- 220 deployment decisions outside the scope of this profile.
- 221 • <AuthnRequest>, <SingleLogoutRequest> and <SingleLogoutResponse>
- 222 messages SHOULD use HTTPS over SSL (v3.0 or higher) or TLS (v1.0 or higher) to
- 223 establish a security context with the user agent (web browser) but earlier versions of SSL are
- 224 permissible.

225 Metadata

226 The choice of Metadata information is largely a deployment level decision. However, all conformant
227 SP and IdP implementations MUST support the consumption and proper use of all Metadata
228 elements, attributes and specifications listed in this section.

229 General Metadata

- 230 • SP and IdP SHOULD authenticate metadata before using it.
- 231 • The exchange of metadata is outside the scope of this profile.
- 232 • Signing of Metadata MUST be supported.
- 233 • MUST support root elements of <EntityDescriptor> or <EntitiesDescriptor>.
- 234 • <Organization> MUST be supported.
- 235 • Attributes *validUntil* AND *cacheDuration* MUST be supported.
- 236 • Certificates consumption and use in metadata MUST be supported.
- 237 • Certificate revocation methods of CDP Extension, OSCP and CRL MUST be supported.

238 <SPSSODescriptor>

- 239 • <KeyDescriptor> MUST be supported.
- 240 • <SingleLogoutService> MUST be supported.
- 241 • *WantAssertionSigned* MUST be supported.
- 242 • *AuthnRequestsSigned* MUST be supported.

243 <IDPSSODescriptor>

- 244 • <KeyDescriptor> MUST be supported.
- 245 • *WantAuthnRequestsSigned* MUST be supported.
- 246 • <SingleLogoutService> MUST be supported.
- 247 • <SingleSignOnService> MUST be supported.

248 <AttributeAuthorityDescriptor>

- 249 • <AttributeAuthorityDescriptor> MUST be supported.

250 Considerations for Version 2.0

251 This section is a “catch all” for pertinent issues that need to be addressed in the next version of the
252 eGov profile. They are not required for adoption of eGov 1.5 profile. These bullet points exist as
253 reminders and placeholders for future discussion.

- 254 ○ Some don't consider CDC approach to IdP discovery to be an effective model. Suggest
255 putting on roadmap consideration for moving to other discovery service approach.
- 256 ○ On a deployment level, we had stated that optional metadata elements <RoleDescriptor>,
257 <AuthnAuthorityDescriptor>, <PDFDescriptor>, <AffiliationDescriptor> and
258 <AdditionalMetadataLocation> SHOULD NOT be used. However, it is not necessary or
259 particularly wise to state for vendors that they are NOT to support certain elements.
- 260 ○ Metadata and PKI methods need to be better specified to insure interoperability.