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TECHNICAL REPORT

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Universal Mobile Telecommunications System (UMTS);
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Liberty Alliance and 3GPP security interworking;
Interworking of Liberty Alliance Identity Federation Framework (ID-FF), Identity Web Services Framework (ID-WSF) and Generic Authentication Architecture (GAA)
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Contents

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Introduction

3GPP defined the Generic Authentication Architecture (GAA) independent of the Liberty Alliance Identity Federation and Web Service Framework. Both systems were designed to be deployed independently of each other. The Liberty Alliance Identity Federation and Web Service Framework offers simplified sign-on and session management for complex web service business interaction protocols. The GAA offers a mechanism to provide a shared secret and certificates to two communicating entities for mobile applications, based on GSM and UMTS authentication and key agreement protocols.

1 Scope

The present document provides guidelines on the interworking of the Generic Authentication Architecture (GAA) and the Liberty Alliance architecture. The document studies the details of possible interworking methods between the Security Assertion Markup Language v2.0, SAML v2.0 (or alternatively the Liberty Alliance Identity Federation Framework, ID-FF), the Identity Web Services Framework (ID-WSF) , the Security Assertion Markup Language (SAML) and a component of GAA called the Generic Bootstrapping Architecture (GBA). This document only applies if Liberty Alliance and GBA or SAML v2.0 and GBA are used in combination.

2 References

The following documents contain provisions, which, through reference in this text, constitute provisions of the present document.

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- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 33.220: "Generic Authentication Architecture (GAA); Generic bootstrapping architecture".

[2] 3GPP TS 33.222: "Generic Authentication Architecture (GAA); Access to network application functions using Hypertext Transfer Protocol over Transport Layer Security (HTTPS)".

[3] 3GPP TS 33.221: "Generic Authentication Architecture (GAA); Support for subscriber certificates".

[4] 3GPP TS 24.109: "Bootstrapping interface (Ub) and network application function interface (Ua); Protocol details".

[5] 3GPP TS 29.109: "Generic Authentication Architecture (GAA); Zh and Zn Interfaces based on the Diameter protocol; Stage 3".

[6] Liberty Alliance Project, ID-WSF v2.0: "Liberty ID-WSF Security Mechanisms".

[7] Liberty Alliance Project, ID-FF v1.2: "Liberty ID-FF Architecture Overview".

[8] Liberty Alliance Project, ID-WSF v2.0 "Liberty ID-WSF Authentication Service Specification and Single Sign-On Service".

[9] Liberty Alliance Project, ID-WSF v2.0: "Liberty ID-WSF SOAP Binding Specification".

[10] Liberty Alliance Project, ID-WSF v2.0: "Liberty ID-WSF Discovery Service Specification".

[11] Organization for the Advancement of Structured Information Standards (OASIS), SAML v2 Core "Assertions and Protocols for the OASIS Security Assertion Markup Language (SAML) V2.0".

[12] Liberty Alliance Project, ID-FF v1.2: "Liberty ID-FF Bindings and Profiles Specification".

[13] Organization for the Advancement of Structured Information Standards (OASIS), "Profiles for the OASIS Security Assertion Markup Language (SAML) v2.0".

[14] Liberty Alliance Project, ID-WSF v1.2: "Security Mechanisms".

[15] Liberty Alliance Project Support Documents: "Authentication Context Specification" v2.0.

[16] Liberty Alliance Project, ID-WSF "Profiles for Liberty enabled User Agents and Devices" v2.0.