



**Extensible Markup Language (XML) Namespace Directive for  
Federal ICAM Working Groups**

**Final Version 1.0.1**

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## Document History

Status	Release	Date	Comment	Audience
Final	1.0.0	4/26/12	Initial Publication.	FICAM Working Groups
Final	1.0.1	5/16/12	Section 3, revise the URI Reference pattern definition.	FICAM Working Groups

## 1. INTRODUCTION

This document specifies rules for proper naming, identification, and usage of Extensible Markup Language (XML) Namespace Identifiers and Namespace Documents produced by Federal Identity, Credential, and Access Management (FICAM) Working Groups.

## 2. NAME CHARACTERS

For any Universal Resource Identifier (URI), Working Groups must use only the sixty-four characters from among alphanumeric characters [A-Za-z0-9] and the two punctuation characters: "." (PERIOD), and "-" (HYPHEN) — that is, any upper-case character, lower-case character, Arabic numeral/digit, FULL STOP [decimal 46], and HYPHEN-MINUS [decimal 45].

## 3. XML NAMESPACES IDENTIFIERS AND NAMESPACE DOCUMENTS

FICAM Work Products that formally declare one or more XML namespaces [viz., namespace bindings] must adhere to the terms of the applicable W3C Recommendations (e.g., Namespaces in XML 1.0, Extensible Markup Language (XML) 1.0 [1], XML Schema [2]) and several FICAM rules for construction of URI references and for use of namespace documents where applicable.

XML namespace names [Section 2] are owned and managed by individual FICAM Working Groups, based upon abbreviated Working Groups names, as specified below. Formal declarations of XML namespaces are made using a family of reserved attributes (e.g., xmlns attributes (PrefixedAttName xmlns:[prefix] and DefaultAttName xmlns) and targetNamespace) in XML instances and schemas.

An XML namespace name [3] identified by an Hypertext Transfer Protocol (HTTP) scheme URI reference must conform to the pattern:

`http://docs.idmanagement.gov/[wg-shortname]/ns/xxxx`

Where:

- "[wg-shortname]" is the official spelling of the Working Group's abbreviation as used in the work group and typically in the Working Group email list URI (e.g., ACAGWG in the namespace name `http://docs.idmanagement.gov/acagwg/ns/`, owned and managed by the FICAM Access Control & Attribute Governance Working Group). This required substring pattern is applicable as of 2012-04, but some alternate patterns based upon earlier practice may be grandfathered, if approved by FICAM.
- "xxxx" is a short string identifying an XML namespace. This may use any of the same sixty-four characters as names for files and directories/folders, plus internal "/", provided that it terminates with the character "/", "#", or an alphanumeric character [A-Za-z09]. This short string must incorporate a versioning component of the format "vX.Y...."

The pattern specified above for HTTP scheme URIs uses the /ns/ path element in a syntax reserved for identifying non-information resources only. Therefore, no (file-system) regular files, directories/folders, or symbolic links matching information resources may make use of these URI strings for resource identification.

Non-information resources using identifiers associated with XML namespaces may be based upon any HTTP scheme URI XML namespace declared by the Working Group (i.e., identifiers for profiles, attributes, named properties, functions, dialects, faults, actions, or any named message types).

Any HTTP scheme URI matching the base pattern of a declared XML namespace, when dereferenced, may resolve under Domain Name System (DNS)+HTTP to (fetch) the corresponding namespace document which documents the namespace and the specification which formally declares it. FICAM maintains the namespace documents in consultation with Working Group product editors.

Uniform Resource Name (URN)-based XML namespaces may be declared by existing Working Groups that have already used this feature where architectural considerations require continued use of URNs. URN-based XML namespaces must not be declared otherwise, since they lack a standard, ubiquitous resolution method using DNS[+HTTP]. In URNs, the colon (":") character is expected.

#### **4. ONLINE RESOLUTION OF URIs**

Working Groups should note that FICAM has no current plans to implement an online resolution system to support URIs created for Working Group products such as namespace documents.

**APPENDIX A: REFERENCES**

- [1] <http://www.w3.org/TR/2009/REC-xml-names-20091208/#concepts>
- [2] <http://www.w3.org/TR/2004/REC-xmlschema-0-20041028/#NS>
- [3] <http://www.w3.org/TR/REC-xml-names/#iri-use>
- [4] <http://www.w3.org/TR/webarch/#versioning-xmlns>
- [5] <http://www.w3.org/2005/07/13-nsuri>

**APPENDIX B: ACRONYMS**

<b>Acronym</b>	<b>Definition</b>
ACAGWG	Access Control Attribute Governance Working Group
AWG	Architecture Working Group
DNS	Domain Name System
FICAM	Federal Identity, Credential, and Access Management
HTTP	Hypertext Transfer Protocol
URI	Universal Resource Identifier
URN	Uniform Resource Name
WG	Working Group
XML	Extensible Markup Language