Verifiable Claims Working Group Primer

It is currently difficult to transmit banking account information, proof of age, education qualifications, healthcare data, and other sorts of verified personal information via the Web. These sorts of data are often referred to as **verifiable claims**. The Verifiable Claims Working Group aims to make expressing, exchanging, and verifying claims easier and more secure on the Web.

Problem Statement

In existing attribute exchange architectures (like SAML, OpenID Connect, Login with SuperProviderX, etc.) users, and their verifiable claims, do not exist independently from service providers. This results in a variety of undesirable outcomes including vendor lock-in, fragmentation of identity across different services, reduced competition in the marketplace, and reduced privacy for all stakeholders. The lack of an interoperable standard capable of expressing and transmitting verifiable claims across industries (e.g., finance, retail, education, and healthcare) leads to industry-specific solutions that are fragmented, costly, and inefficient.

The Proposal

After extensive research of the problem space, the Credentials Community Group and the Verifiable Claims Task Force of Web Payments Interest Group have proposed an architecture and specification to enable the interoperable expression, exchange, and verification of claims. The draft Verifiable Claims Working Group Charter proposes a narrow scope of work that begins with a focus on broad interoperability, initially accomplished through the development of a standardized data model with syntaxes for the expression and verification of verifiable claims.

Specifically, the Verifiable Claims Working Group will recommend:

1. a data model and syntax(es) for the expression of rich verifiable claims, including one or more core vocabularies.
2. a note specifying how these data models should be used with existing attribute exchange protocols, a suggestion that existing protocols should be modified, or a suggestion that a new protocol is required to address the problems stated earlier in this document.

The Working Group will NOT define a new protocol for attribute exchange or JavaScript browser APIs. These work items may be proposed at a future date if there is support for them, but are not necessary to successfully achieve the first step of interoperability.

Is the proposal mature enough for standardization?

Yes. The work on this proposal has been incubated in multiple W3C Community Groups for several years and has benefited from wide review during that time period. There are commercial pilot projects underway that utilize the technology.

Is the scope narrow?
Yes. The groups putting forward the proposal have gone to great lengths to reduce the scope as much as possible to a clearly achievable first step.

Is the proposal supported by Industry?
Yes. A recent survey of 56 organizations from diverse industries shows strong support for the problem statement, goals, scope of work, and use cases.

Why is a W3C standard necessary?
Cross-industry interoperability. Proprietary industry-specific solutions for verifiable claims exist, but due to their narrow nature they often fail to scale across industries. A number of survey respondents have observed that the W3C typically provides more robust, industry-agnostic solutions. Additionally, the Verifiable Claims specification is built on top of technologies standardized at W3C. For these reasons the majority of survey respondents believe that W3C is the right place to accomplish this work.

Has support for the proposal gained traction in the last year?
Yes. A survey of organizations involved with verifiable claims performed last year received 38 supportive responses. The most recent survey garnered 52 supportive responses, several from multi-billion dollar corporations and government bodies, showing significant and increasing support for the work. After some changes to the charter, a few large organizations shifted their position from not supporting or ambivalence to moderate or strong support.

Where can I read a more complete proposal?
Supporting documentation for the proposal can be found here:
http://w3c.github.io/webpayments-ig/VCTF/