

FREQUENTLY ASKED QUESTIONS: BASIC PROFILE 1.0

What is the Basic Profile 1.0?

The Basic Profile 1.0 (BP1.0) consists of implementation guidelines recommending how a set of core Web services specifications should be used together to develop interoperable Web services. The guidelines address technologies that cover the following areas:

- Messaging: the exchange of protocol elements, usually over a network, to affect a Web service.
- Description: the enumeration of the messages associated with a Web service, along with implementation details.
- Discovery: metadata that enables the advertisement of a Web service's capabilities.
- Security: mechanisms that provide integrity and privacy.

What is the purpose of the BP 1.0?

BP 1.0 will significantly simplify the task of implementing interoperable Web services solutions within and across enterprise boundaries, by allowing companies to focus resources on delivering new products and services to their customers, instead of dealing with basic plumbing. The greater confidence in Web services interoperability that BP1.0 brings will reduce the risk of adopting Web services technologies or beginning Web services projects. BP 1.0 will also simplify purchasing decisions for customers concerned about interoperability with partners, customers, and suppliers. BP 1.0 delivers on the key promise of WS-I, to promote consistent and reliable interoperability among Web services across platforms, applications, and programming languages.

What standards and specifications does the Basic Profile 1.0 cover?

BP 1.0 covers the following core Web services standards and provides constraints and clarifications to these base specifications, along with conventions about how to use them together, with the goal of promoting interoperability:

- SOAP 1.1
- WSDL 1.1
- UDDI 2.0
- XML 1.0 (Second Edition)
- XML Schema Part 1: Structures
- XML Schema Part 2: Data types
- RFC2246: The Transport Layer Security Protocol Version 1.0
- RFC2459: Internet X.509 Public Key Infrastructure Certificate and CRL Profile

- RFC2616: HyperText Transfer Protocol 1.1
- RFC2818: HTTP over TLS Transport Layer Security
- RFC2965: HTTP State Management Mechanism
- The Secure Sockets Layer Protocol Version 3.0

Can you give a few examples of the kinds of conventions and guidelines that WS-I developed to support the underlying set of specifications covered in BP 1.0?

WS-I resolved more than 200 interoperability issues associated with using the core Web services specifications together, including:

- RPC-encoded was deprecated (indicating a shift to the use of schema as the interoperable type system)
- Support and guidance for using rpc/lit, and how to construct rpc/lit messages
- Agreement on common interpretations for various aspects of WSDL (e.g., discrepancies between the specification, schema, examples, and appendix mean that WSDL could be – and has been – interpreted in different ways, which can lead to interoperability problems)
- Unique signatures for input messages
- Clarification of SOAP faults, and development of complete error-handling conventions
- Resolution of issues related to HTTP binding, HTTP status code, and SOAPAction headers
- Clarification about one-way messages

Can anyone make a conformance claim?

Yes, just ensure you read and comply with the terms in the WS-I Trademark and Compliance Claim Guidelines document posted at http://www.ws-i.org/docs/20031021_trademark.pdf.

Is the usage of the testing tools mandatory for Profile conformance claims?

WS-I recommends the use of the testing tools before you claim conformance, but there is no formal requirement to do so. We suggest you treat the testing tools as “necessary, but not sufficient” to establish conformance. Frankly, you may make a claim based on anything you like. However there are a couple of things you need to understand:

- (a) You are responsible for any claim you make.

(b) If someone uses the WS-I test tools properly to test your software, and the tools produce a fail result, then your software does not conform to the Profile(s) specified in the testing (or there is a bug in the testing tools¹).

What does "necessary but not sufficient for conformance" mean?

As noted above, if someone uses the WS-I test tools properly to test your software, and the tools produce a fail result, then your software is not conformant. However, obtaining a pass result from the tool does not guarantee that your software is conformant. As documented in the tool specification, it was not possible to provide a tool which tests all kinds of software for all conformance issues with all of the contents of all of the profiles in all of the situations in which the software could participate as a Web service.

Why should I care that WS-I considers my software non-conformant?

Many will see value in a claim of conformance and may seek redress if they feel a claim is false. In the evaluation of a claim, there's little question that WS-I will be considered an authority on the interpretation of its Profiles and in the making of conformance claims. The WS-I Trademark and Conformance Guidelines document will undoubtedly be consulted to assess the validity of a claim or of an assertion that a claim is false. Any software found to be in violation of these guidelines is non-conformant, so you would be well advised to adhere to these terms.

Can I use testing tools from other people to prepare a claim?

As stated earlier, you can test your software any way you like, with any help you like. Just keep in mind that you are responsible for any claims you make. If the testing tools are not sufficient, then how do I make sure that my software is truly conformant?

The truth is that the more testing you do, the more confident you can be that your software is conformant, but there's no way we're aware of to be 100% certain. You probably have partners today who help you develop, test, deploy, and maintain your software. You should approach them ask what they can do to help you produce Web services which conform to WS-I profiles.

Who is responsible for conformant claims I make?

You are. Make sure you read our Trademark and Conformance Guidelines.

¹ If you believe you have identified a bug in the WS-I testing tools, please notify us via email at ws-i-tools@ws-i.org so that we may research the issue. Known testing tool or Profile specification bugs are posted on the WS-I public web site next to the link to the specification or tool download.

What if I developed my software using tools that claim to generate WS-I conformant Web services?

If your software is demonstrably non-conformant, then you should contact them and explain your concerns.

What if I use the WS-I testing tools, and my software is found to be non-conformant?

If you wish to claim conformance, then you are responsible for remediating your software until it is conformant. If, during your analysis, you believe that the testing tools themselves are in error, then WS-I is very anxious to hear from you. Please send an email to wsi-tools@ws-i.org. We will work with you to analyze the situation you've found; it may be that you have identified a gap in the testing provided by our tools. Keep in mind the "necessary but not sufficient" term, though. In some cases, we may verify that your software is non-conformant, acknowledge that our tools didn't catch it, and yet not do anything about it beyond adding the information to our bug list. We may decide not to act because of technical constraints which prevent the tools from catching some things, or we may be facing shortages of skilled development staff to enhance the tool to meet your needs. We are always looking for people to help improve our tools and their coverage, and you're welcome to join WS-I to contribute to this effort!

What if we have questions about how to interpret a Profile?

If you're not a WS-I member and have questions concerning how to interpret a WS-I Profile, or any other WS-I related questions for that matter, you can send them to us at info@ws-i.org.

Do I have to be a member of WS-I to use BP 1.0?

No. Any organization or developer is welcome to use BP 1.0. The public is free and encouraged to download, use, and display BP 1.0, and download and use test tools and material to test their applications.

Adopters may, in addition to the above, reproduce and redistribute specifications with their products. And members can, in addition to all of the above, ship test tools and material (as is or modified) within their products.

What can I expect in future Profiles?

Additional profiles are decided upon in part by market demand for a particular specification. WS-I is currently working on SOAP with Attachments and the Basic Security Profile. As the industry comes to some consensus around specifications for Web services reliability, orchestration, etc., and various implementations begin to appear, WS-I will investigate potential interoperability issues and determine whether or not a new profile (or modification of existing profile) is warranted.

What deliverables are issued with each Profile?

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When complete, the package of deliverables produced in conjunction with a WS-I Profile will be as follows:

- **Profiles:** Profiles are comprised of a set of named and versioned Web services specifications together with a set of implementation and interoperability guidelines recommending how the specifications may be used to develop interoperable Web services
- **Usage scenarios and use cases:** Usage scenarios demonstrate how specific message exchange patterns are constrained by the Basic Profile 1.0. Use cases capture the business requirements for an application. Together these two guidelines provide a framework for the use of WS-I compliant Web services.
- **Sample applications:** Sample applications demonstrate the implementation of applications that are built from WS-I compliant Web services and utilize the usage scenarios and use cases that conform to a given set of profiles. Implementations of the same Sample Application on multiple platforms, languages, and development tools demonstrate interoperability in action, and provide readily usable resources for the Web services practitioner.

Testing tools: Testing tools are used to monitor and analyze interactions with a Web service to determine whether or not the messages exchanged conform to WS-I Profile guidelines.

When will the sample applications and testing tools be available?

WS-I is targeting Fall, 2003 to deliver final versions of the sample application packages and testing tools.