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BS ISO/IEC 17963:2013

BSI Standards Publication

Web Services for Management (WS-Management) Specification

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Foreword

The *Web Services for Management (WS-Management) Specification* (DSP0226) was prepared by the WS-Management sub-group of the WBEM Infrastructure & Protocols Working Group.

This International Standard makes use of functionality similar to the following W3C Recommendations:

- Web Services Eventing (WS-Eventing)
- Web Services Transfer (WS-Transfer)
- Web Services Enumeration (WS-Enumeration)

These W3C Recommendations were not available at the time WS-Management was defined, and similar functionality was incorporated directly into provisions of the WS-Management specification. Future revisions of WS-Management might incorporate these functions by External Reference to these W3C Recommendations

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Web Services for Management (WS-Management) Specification

1 Scope

The *Web Services for Management (WS-Management) Specification* describes a Web services protocol based on SOAP for use in management-specific domains. These domains include the management of entities such as PCs, servers, devices, Web services and other applications, and other manageable entities. Services can expose only a WS-Management interface or compose the WS-Management service interface with some of the many other Web service specifications.

A crucial application for these services is in the area of systems management. To promote interoperability between management applications and managed resources, this specification identifies a core set of Web service specifications and usage requirements that expose a common set of operations central to all systems management. This includes the ability to do the following:

- Get, put (update), create, and delete individual resource instances, such as settings and dynamic values
- Enumerate the contents of containers and collections, such as large tables and logs
- Subscribe to events emitted by managed resources
- Execute specific management methods with strongly typed input and output parameters

In each of these areas of scope, this specification defines minimal implementation requirements for conformant Web service implementations. An implementation is free to extend beyond this set of operations, and to choose not to support one or more of the preceding areas of functionality if that functionality is not appropriate to the target device or system.

This specification intends to meet the following requirements:

- Constrain Web services protocols and formats so that Web services can be implemented with a small footprint in both hardware and software management services.
- Define minimum requirements for compliance without constraining richer implementations.
- Ensure backward compatibility and interoperability with WS-Management version 1.0.
- Ensure composability with other Web services specifications.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IETF RFC 2616, R. Fielding et al, *Hypertext Transfer Protocol (HTTP 1.1)*, June 1999, http://www.ietf.org/rfc/rfc2616.txt

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