

[MS-WDVRV]: World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol Specification

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Table of Contents

1	Introduction	4
1.1	Glossary	4
1.2	References	4
1.2.1	Normative References	4
1.2.2	Informative References	4
1.3	Protocol Overview (Synopsis)	4
1.4	Relationship to Other Protocols	5
1.5	Prerequisites/Preconditions	5
1.6	Applicability Statement	5
1.7	Versioning and Capability Negotiation	5
1.8	Vendor-Extensible Fields	5
1.9	Standards Assignments.....	5
2	Messages	6
2.1	Transport	6
2.2	Message Syntax.....	6
2.2.1	MS-Author-Via	6
3	Protocol Details	7
3.1	Client Details	7
3.1.1	Abstract Data Model.....	7
3.1.2	Timers	7
3.1.3	Initialization.....	7
3.1.4	Higher-Layer Triggered Events	7
3.1.5	Message Processing Events and Sequencing Rules	7
3.1.6	Timer Events.....	7
3.1.7	Other Local Events.....	8
3.2	Server Details.....	8
3.2.1	Abstract Data Model.....	8
3.2.2	Timers	8
3.2.3	Initialization.....	8
3.2.4	Higher-Layer Triggered Events	8
3.2.5	Message Processing Events and Sequencing Rules	8
3.2.6	Timer Events.....	8
3.2.7	Other Local Events.....	8
4	Protocol Example.....	9
4.1	MS-Author-Via	9
5	Security	10
5.1	Security Considerations for Implementers	10
5.2	Index of Security Parameters	10
6	Appendix A: Windows Behavior	11
7	Index.....	12

1 Introduction

This document specifies the MS-Author-Via extension to the Web-based Distributed Authoring and Versioning (WebDAV) Protocol, as specified in [\[RFC2518\]](#). This extension is a response-header field on an OPTIONS command specifying how documents under a particular **namespace** should be authored. [<1>](#)

1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

FrontPage

The following terms are specific to this document:

Namespace: The entire collection (as specified in [\[RFC2518\]](#) section 5.2) of items under a request Uniform Resource Identifier (URI).

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)", March 2007.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.ietf.org/rfc/rfc2119.txt>

[RFC2518] Goland, Y., Whitehead, E., Faizi, A., Carter, S., and Jensen, D., "HTTP Extensions for Distributed Authoring—WebDAV", RFC 2518, February 1999, <http://www.ietf.org/rfc/rfc2518.txt>

[RFC2616] Fielding, R., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, <http://www.ietf.org/rfc/rfc2616.txt>

1.2.2 Informative References

[MSDN-FP] Microsoft Corporation, "FrontPage", [http://msdn2.microsoft.com/en-us/library/aa167865\(office.11\).aspx](http://msdn2.microsoft.com/en-us/library/aa167865(office.11).aspx)

[MSDN-WEBFOLD] Microsoft Corporation, "About Web Folder Behaviors", <http://msdn2.microsoft.com/en-us/library/ms531432.aspx>

1.3 Protocol Overview (Synopsis)

The [MS-Author-Via](#) extension to WebDAV is a header field returned by the server in a response to an HTTP OPTIONS command. It specifies to the client application what the preferred protocol

mechanism is for authoring documents in a particular namespace. For example, a client might have multiple authoring tools available to it, each possibly supported by a different network authoring protocol. Such a client could issue an OPTIONS command to a server that supports this extension and, based on the MS-Author-Via header, determine what tool to use.<2>

1.4 Relationship to Other Protocols

The [MS-Author-Via](#) extension is based on HTTP mechanisms, but is relevant only for WebDAV scenarios. This addition to the existing WebDAV specification does not modify the behavior of the base WebDAV specification. This extension is purely additive.<3>

1.5 Prerequisites/Preconditions

For this protocol extension to be available, a WebDAV server that supports the HTTP **OPTIONS** method must be running. The client needs to know the name of the server, have a connection to that server, and know in advance (either by explicit configuration on the client or by previous sessions against the server) what namespace to issue the **OPTIONS** method against.

1.6 Applicability Statement

This protocol extension applies when a client authors content on a WebDAV (as specified in [\[RFC2518\]](#)) server, and when the client has a choice of multiple authoring tools available to it.

1.7 Versioning and Capability Negotiation

This document introduces no new versioning issues.

Negotiation of WebDAV and HTTP options is specified in [\[RFC2518\]](#) section 15 and [\[RFC2616\]](#) section 3.1, respectively.

1.8 Vendor-Extensible Fields

This protocol may be extended by adding new tokens to the [MS-Author-Via](#) field value (see section [2.2.1](#)). Clients MUST ignore tokens in that field value that they do not recognize.

1.9 Standards Assignments

There are no standards assignments for this protocol other than those assigned for the base HTTP protocol (as specified in [\[RFC2616\]](#) section 1.4).

2 Messages

This extension adds a single new response-header field to the HTTP OPTIONS command response.

2.1 Transport

This extension MUST be transported in an HTTP OPTIONS response.

2.2 Message Syntax

The header field [MS-Author-Via](#) is returned as a response-header field to a client that has issued an OPTIONS command to the server. The syntax of the OPTIONS command is specified in [\[RFC2616\]](#) section 9.2. The syntax of the MS-Author-Via header is specified using the Augmented Backus-Naur Form (ABNF), as defined in [\[RFC2616\]](#) section 2.1.

2.2.1 MS-Author-Via

This extension MUST have the following format: [<4>](#)

```
MS-Author-Via = "MS-Author-Via" ":" " ("MS-FP/4.0,DAV" | "DAV" | token)
```

This header field indicates to the issuer of an HTTP OPTIONS command what protocol mechanism is preferred for authoring documents in this particular namespace. The preference MUST be ordered, so the first mechanism listed is the one most preferred by the server.

Note The "token" definition in the preceding grammar is specified in [\[RFC2616\]](#) section 2.2. Its purpose in the grammar is to allow for future extensibility.

The following table lists the two values that are currently defined for this header.

Value	Meaning
MS-FP/4.0,DAV	The server's protocol preference for authoring is first FrontPage Server Extensions (for more information, see [MSDN-FP]), and then WebDAV.
DAV	The server's preferred method for authoring is WebDAV.

3 Protocol Details

The following sections specify details of the World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol, including abstract data models and message processing rules.

3.1 Client Details

3.1.1 Abstract Data Model

No additional data is required beyond what is in the base protocol.

3.1.2 Timers

No new timers are required beyond those in the base protocol.

3.1.3 Initialization

No initialization is required beyond what is in the base protocol.

3.1.4 Higher-Layer Triggered Events

No additional higher-layer triggered events exist beyond those in the base protocol, and the behavior of any existing higher-layer triggered events is unchanged by the extensions specified herein.

3.1.5 Message Processing Events and Sequencing Rules

The client MUST send an HTTP OPTIONS request to the server. The server response MAY have an [MS-Author-Via](#) header field.

The client MUST parse the server HTTP OPTIONS response, searching for the "MS-Author-Via" header field. The client may encounter the following four possible states when parsing:

- The header field is missing from the OPTIONS response.

In this case, the client SHOULD rely on other header fields to determine how to author, or the client MAY refuse to author content. [<5>](#)

- The header field is present in the OPTIONS response, but the values returned are not as expected.

In this case, the client SHOULD rely on other header fields to determine how to author, or the client MAY refuse to author content. [<6>](#)

- The header field is present and the value is "MS-FP/4.0,DAV".

The client SHOULD use FrontPage; if that is not available, it SHOULD use WebDAV. [<7>](#)

- The header field is present and the value is "DAV".

The client SHOULD use WebDAV to author. [<8>](#)

3.1.6 Timer Events

No new timers are required beyond those in the base protocol.

3.1.7 Other Local Events

There are no new local events other than those described in the base protocol.

3.2 Server Details

3.2.1 Abstract Data Model

No additional data is required beyond what is in the base protocol.

3.2.2 Timers

No new timers are required beyond those in the base protocol.

3.2.3 Initialization

No initialization is required beyond what is in the base protocol.

3.2.4 Higher-Layer Triggered Events

No new events are triggered beyond what is in the base protocol.

3.2.5 Message Processing Events and Sequencing Rules

The server MUST respond to an HTTP OPTIONS request with a response that includes an [MS-Author-Via](#) header field. The value of this field SHOULD include the ordered list of tokens that represent the possible mechanisms available to clients for authoring in the namespace passed in the request URI to the OPTIONS request. [<9>](#)

3.2.6 Timer Events

No new timers are required beyond those in the base protocol.

3.2.7 Other Local Events

The value of this header field depends on configuration and policy on the server. If the server changes its configuration, the value of this header field MAY change.

4 Protocol Example

This section provides an example of the World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol.

4.1 MS-Author-Via

The following is an example of a server response to a standard HTTP OPTIONS request utilizing the World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol:

```
HTTP/1.1 200 OK
Content-Length: 0
Date: Thu, 08 Jun 2006 21:32:40 GMT
Server: XXXX
MS-Author-Via: DAV
DAV: 1, 2
Public: OPTIONS, TRACE, GET, HEAD, DELETE, PUT, POST, COPY, MOVE,
        MKCOL, PROPFIND, PROPPATCH, LOCK, UNLOCK
Allow: OPTIONS, TRACE, GET, HEAD, COPY, PROPFIND, SEARCH, LOCK,
        UNLOCK
```

What this response suggests is that authoring clients use WebDAV (as specified in [\[RFC2518\]](#)) mechanisms to author documents. See section [3.1.5](#).

5 Security

The following sections specify security considerations for implementers of the World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol.

5.1 Security Considerations for Implementers

This extension has no security considerations beyond what is specified in WebDAV (as specified in [RFC2518](#) section 17) and HTTP (as specified in [RFC2616](#) section 15).

5.2 Index of Security Parameters

No security parameters are used by this protocol extension.

6 Appendix A: Windows Behavior

The information in this specification is applicable to the following versions of Windows:

- Windows 2000
- Windows Server 2003
- Windows XP
- Windows Server 2008

Exceptions, if any, are noted below. Unless otherwise specified, any statement of optional behavior in this specification prescribed using the terms SHOULD or SHOULD NOT, implies Windows behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies Windows does not follow the prescription.

[<1> Section 1:](#) The World Wide Distributed Authoring and Versioning (WebDAV) MS-Author-Via Protocol is deprecated in Windows Server 2008.

[<2> Section 1.3:](#) Windows supports only two possible values for the header field, as specified in section [2.2.1](#).

[<3> Section 1.4:](#) This extension is used by WebFolders (for more information, see [\[MSDN-WEBFOLD\]](#)) to determine what mechanisms are available for authoring documents.

[<4> Section 2.2.1:](#) Windows clients recognize only "MS-FP/4.0,DAV" and "DAV". Windows servers send only "MS-FP/4.0,DAV" and "DAV".

[<5> Section 3.1.5:](#) Windows clients will refuse to author.

[<6> Section 3.1.5:](#) Windows clients will refuse to author.

[<7> Section 3.1.5:](#) Windows clients will use FrontPage to author to this namespace.

[<8> Section 3.1.5:](#) Windows clients will use WebDAV to author.

[<9> Section 3.2.5:](#) Windows servers will only return one of the two values listed in section [2.2.1](#). If FrontPage is installed on the server and configured to manage the namespace identified by the request URI, Windows will return a value of MS-FP4/4.0, DAV. Otherwise, it will return DAV.

7 Index

A

Abstract data model

[client](#)

[server](#)

[Applicability](#)

C

[Capability negotiation](#)

Client

[abstract data model](#)

[higher-layer triggered events](#)

[initialization](#)

[local events](#)

[message processing](#)

[overview](#)

[sequencing rules](#)

[timer events](#)

[timers](#)

D

Data model - abstract

[client](#)

[server](#)

E

[Example](#)

F

[Fields - vendor-extensible](#)

G

[Glossary](#)

H

Higher-layer triggered events

[client](#)

[server](#)

I

[Implementers - security considerations](#)

[Informative references](#)

Initialization

[client](#)

[server](#)

[Introduction](#)

L

Local events

[client](#)

[server](#)

M

Message processing

[client](#)

[server](#)

Messages

[overview](#)

[syntax](#)

[transport](#)

MS-Author-Via ([section 2.2.1](#), [section 4.1](#))

N

[Normative references](#)

O

[Overview](#)

P

[Parameters - security](#)

[Preconditions](#)

[Prerequisites](#)

R

References

[informative](#)

[normative](#)

[overview](#)

[Relationship to other protocols](#)

S

[Security](#)

Sequencing rules

[client](#)

[server](#)

Server

[abstract data model](#)

[higher-layer triggered events](#)

[initialization](#)

[local events](#)

[message processing](#)

[overview](#)

[sequencing rules](#)

[timer events](#)

[timers](#)

[Standards assignments](#)

[Syntax - message](#)

T

Timer events

[client](#)

[server](#)
Timers
[client](#)
[server](#)
[Transport - message](#)
Triggered events - higher-layer
[client](#)
[server](#)

V

[Vendor-extensible fields](#)
[Versioning](#)
[Version-specific behavior](#)