



Microsoft's Commitment to Interoperability

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Microsoft Interoperability Program



Events



Support



Tools



Docs

Our goal is to ensure that developers have access to the interoperability information, tools and resources that they need to successfully develop for Microsoft's products, and platforms. We love our developers!

Interoperability Initiatives

Events	>30 Events	>5000 Participants	>1000 Companies
Docs	>900 Open Specifications		>50k Pages
Support	24/7 Support	\$0 Support Fee	10 Engineers
Tools	7+ New releases this past year	>200 Specs have an associated tool/test	

- Open engagement on a global basis
- Up to date and published regularly
- Experienced support team here to help developers
- Building Microsoft interoperability ecosystem

Open Specifications Overview

Available on [Docs.Microsoft.com](https://docs.microsoft.com)

Target Audience: Protocol and File Format Developers

Protocols

- Bits on the wire; communication between Microsoft clients and servers.
- Majority of Open Specifications are Protocols.

Standards

- Microsoft implementation of standards: extensions and implementation information

Data Portability: Office and SQL

- Detailed technical specifications for several Office file formats
- Additionally, how user-created data in SQL Server can be extracted

Office Protocol Docs Releases

- Release updates quarterly based on test results, customer inputs and product changes
- 162 documents released this year alone for Office 2021 Preview
- More updates are expected prior to GA

Office 2021 Preview



Test Driven Quality Assurance

1 Open Specification Review

- Ambiguity Review
- Simulation of the implementation Process

2 Requirement Analysis

- Normative language
- Requirement Extraction

3 Test Suite Development

- Requirements become Test Cases
- Groups of Test Cases become Scenarios

[MS-WOPI]:

Web Application Open Platform Interface Protocol

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation ("this documentation") for protocols, file formats, data portability, computer languages, and standards support. Additionally, overview documents cover inter-protocol relationships and interactions.
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Tools. The Open Specifications documentation does not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments, you are free to take advantage of them. Certain Open Specifications documents are intended for use in conjunction with publicly available standards specifications and network programming art and, as such, assume that the reader either is familiar with the aforementioned material or has immediate access to it.

Support. For questions and support, please contact dochelp@microsoft.com.



<https://github.com/microsoft/WindowsProtocolTestSuites/>
<https://github.com/OfficeDev/Interop-TestSuites>

Windows Server

- MS-SMB2
- MS-DFSC
- MS-SWN
- MS-FSRVP
- MS-FSA
- MS-FSCC
- MS-RSVD
- MS-SQOS

RDP Client

- MS-RDPBCGR
- MS-RDPEDISP
- MS-RDPEDYC
- MS-RDPEGFX
- MS-RDPEGT
- MS-RDPEI
- MS-RDPEMT
- MS-RDPEUDP
- MS-RDPEUSB
- MS-RDPEVOR
- MS-RDPRFX

RDP Server

- MS-RDPBCGR
- MS-RDPEDYC
- MS-RDPEMT
- MS-RDPELE

Kerberos Server

- MS-KILE
- MS-KKDCP
- MS-PAC

SMBD Server

- MS-SMBD
- MS-SMB2

Branch Cache

- MS-PCCRTP
- MS-PCCR
- MS-PCHC
- MS-PCCRC

AZOD

- MS-AZOD

ADFamily

- MS-ADA1
- MS-ADA2
- MS-ADA3
- MS-ADLS
- MS-ADSC
- MS-ADTS
- MS-APDS
- MS-DRSR
- MS-FRS2
- MS-LSAD
- MS-LSAT
- MS-SAMR
- MS-NRPC

ADFSPiP

- MS-ADFSPiP

ADOD

- MS-ADOD

SharePoint

- MS-LISTSWS
- MS-VERSS
- MS-SITESS
- MS-DWSS
- MS-ADMINIS
- MS-MEETS
- MS-OUTSPS
- MS-WDVMODUU
- MS-WEBSS
- MS-WWSP
- MS-AUTHWS
- MS-SHDACCWS
- MS-CPSWS
- MS-WSSREST
- MS-OFFICIALFILE
- MS-COPYS
- MS-VIEWSS

File Sync & WOPI

- MS-FSSHTTP
- MS-FSSHTTPB
- MS-FSSHTTTPD
- MS-WOPI

EAS

- MS-ASAIRS
- MS-ASCAL
- MS-ASWBXML
- MS-ASCNTC
- MS-ASCON
- MS-ASDOC
- MS-ASEMAIL
- MS-ASHTTP
- MS-ASNOTE
- MS-ASPROV
- MS-ASRM
- MS-ASTASK
- MS-ASCMD

EWS

- MS-OXWSATT
- MS-OXWSBTRF
- MS-OXWSCONT
- MS-OXWSCORE
- MS-OXWSFOLD
- MS-OXWSMSG
- MS-OXWSMTGS
- MS-OXWSSYNC
- MS-OXWSTASK

MAPIHTTP

- MS-OXCFOLD
- MS-OXCFXICS
- MS-OXCMAPIHTTP
- MS-OXCMSG
- MS-OXCNOTIF
- MS-OXCPRPT
- MS-OXCROPS
- MS-OXCRPC
- MS-OXCSTOR
- MS-OXCTABL
- MS-OXNSPI
- MS-OXORULE



Fiddler Office Inspectors

GitHub Repos

5 WOPI/FSS
MS-FSS*
MS-WOPI
...

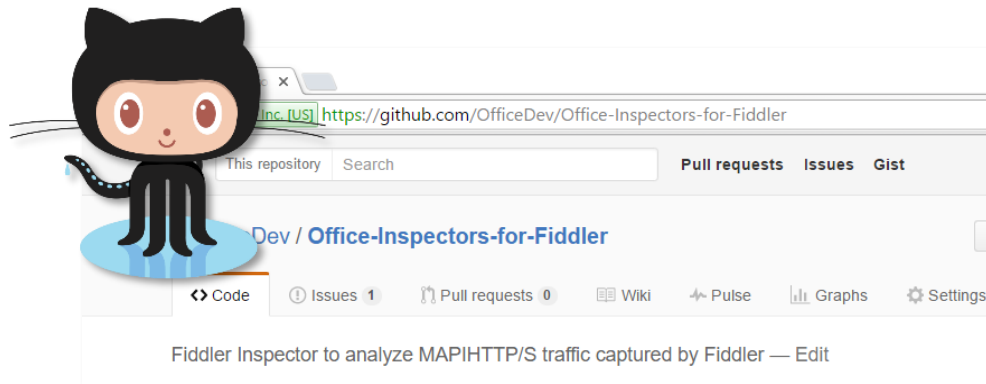
15 Exchange
MAPI
MS-OXCDATA
MS-OXCROPS
...

MAPIHTTP

<https://github.com/OfficeDev/Office-Inspectors-for-Fiddler/tree/master/MAPISpector>

WOPI/FSSHTTP

<https://github.com/OfficeDev/Office-Inspectors-for-Fiddler/tree/master/FSSHTTPWOPIInspector>



For Open specification Issues:
dochelp@microsoft.com

Open Specification Support



Dedicated Support Team based in the USA, multiple Escalation Engineers dedicated to Windows and Office protocol and file format support.



Email: **DocHelp@Microsoft.com** for private communication directly into support team



Forums: **aka.ms/InteropForums** offer anonymous posting and community driven involvement. Constantly monitored by support team.



GitHub: Issues are publicly tracked and contributed to by support team on open source projects



- Events hosted 6-8 times a year globally by product engineering teams
- Targeted at developers implementing Microsoft Protocols and certain developer technologies including Microsoft Graph and Office add-ins
- High touch and deep engagement (interop. testing, issue resolution, hackathons, technical meetings, workshops, etc.)

Plugfest

Interoperability focused workshops and testing with Microsoft engineers

IO Labs

1:1 in depth testing between Microsoft and implementer, protocol focus

DevDays

Office platform focused and includes hackathons, workshops, or training



Interop Events

Online Resources

Forums

Microsoft | Interop Dev Events

Microsoft DevDays Redmond 2021 Online

June 15, 2021

[Register](#)

Event Information

Join us virtually June 15, 2021 for Microsoft DevDays Redmond 2021 Online! Our engineers have prepared one day of **Office interoperability content** ranging from presentations to round table discussions.

We will cover **Office** on-premises protocols, file formats and standards and introduce you to exciting interoperability opportunities on the Microsoft 365 platform.

We invite you to network with our Microsoft engineers to help us understand your own interoperability journey and how Microsoft can help you be more successful. Share your interoperability feedback and direct your questions to the subject matter experts themselves!

For questions about this event please email [interop@msn.com](#)

Agenda subject to change.

We encourage you to join the meeting on time. The meeting has a capacity limit of 300 attendees. If you are unable to join the meeting on time, please register on the registration page within 48 hours post event.

Microsoft | Docs Documentation Learn Q&A Code Samples

Open Specifications Dev Center

02/14/2019 • 2 minutes to read

Through the Open Specifications program, Microsoft is helping developers open new opportunities by making technical documents related to interoperability for certain popular Microsoft products available to view and download from Microsoft Docs at no charge. This documentation includes protocols, computer languages, standards support, and data portability.

Although the technical documents are freely available, many of them include patented inventions. Some of these patents are available at no charge under the patent promises. The remaining patents are available through various programs. For more information, please see the Programs and Patents links.

You can learn about the Microsoft commitment to interoperability by watching our Open Specifications Plugfest videos, such as the [Interopability Protocols Keynote](#). Find the videos and other support for Open Specifications implementations by using the Documentation, News, Plugfests and Events, Test Tools, Support, and Case Studies links.

Programs
Programs, patent pledges, and interoperability principles

Patents
Patent map, patent promises, and the Open Web Foundation Agreement

Documentation
Technical documents for protocols, languages, standards support, and data portability

Plugfests and Events
Upcoming and past events, Open XML and ODF, Document Interoperability Initiative

Test Tools
Message Analyzer, test suites, validators, interoperability labs, and more

Support
Forums, blogs, Microsoft Support, knowledge base, partner programs, and more

Case Studies
Companies have used the Open Specifications for innovative, interoperable solutions

Microsoft | Docs Documentation Learn Q&A Code Samples

Open Specifications

09/30/2020 • 2 minutes to read

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Protocols
Microsoft publishes technical documents for protocols that are implemented in Windows client (including .NET Framework) and Windows Server (collectively Windows), Office, SharePoint Products and Technologies, Exchange Server, and Microsoft SQL Server and are used to communicate with other Microsoft software products.

Computer Languages
Microsoft publishes technical documents for the VBA programming language and Extensible Application Markup Language (XAML).

Standards Support
Microsoft publishes technical documents that describe support for specific standards implemented in Exchange Server and Outlook; Internet Explorer; OData; Microsoft SQL Server; Windows WordPad; and Word, Excel, and PowerPoint.

Data Portability
Microsoft publishes technical documents for the file formats created by Word, Excel, PowerPoint, and Outlook and by SQL Server. Additionally, it publishes technical documents that describe how user-created data in SQL Server can be extracted

Open Specs Dev Center

Library