Microsoft

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sambaXP Conference

Microsoft Interoperability Track

Microsoft

Integrate the Power of Office365 through Co-Auth and File Synchronization Protocols

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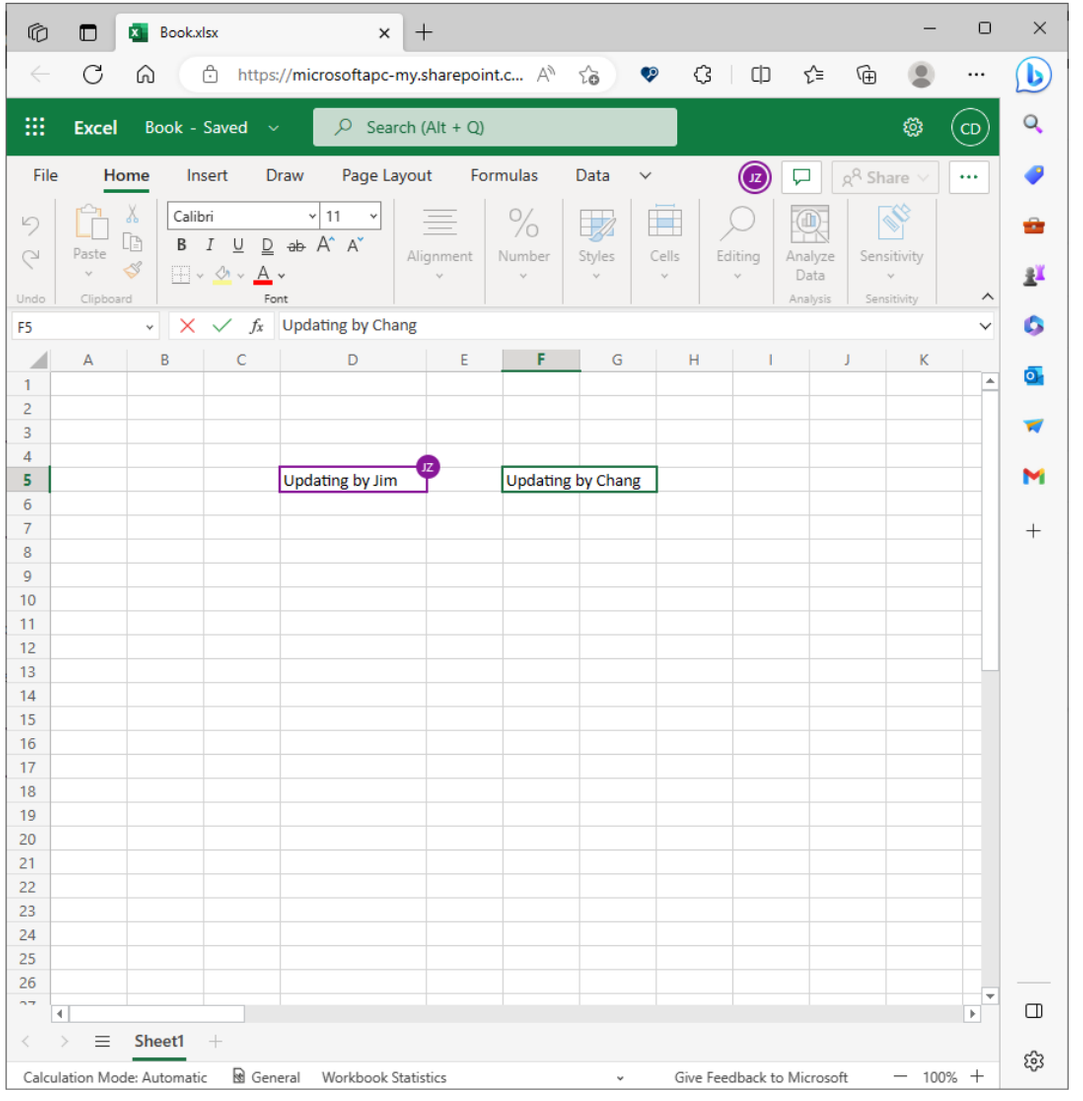
Agenda

Office Online Introduction
WOPI Protocol Overview
FSSHTTP Protocol Family Overview
Resources

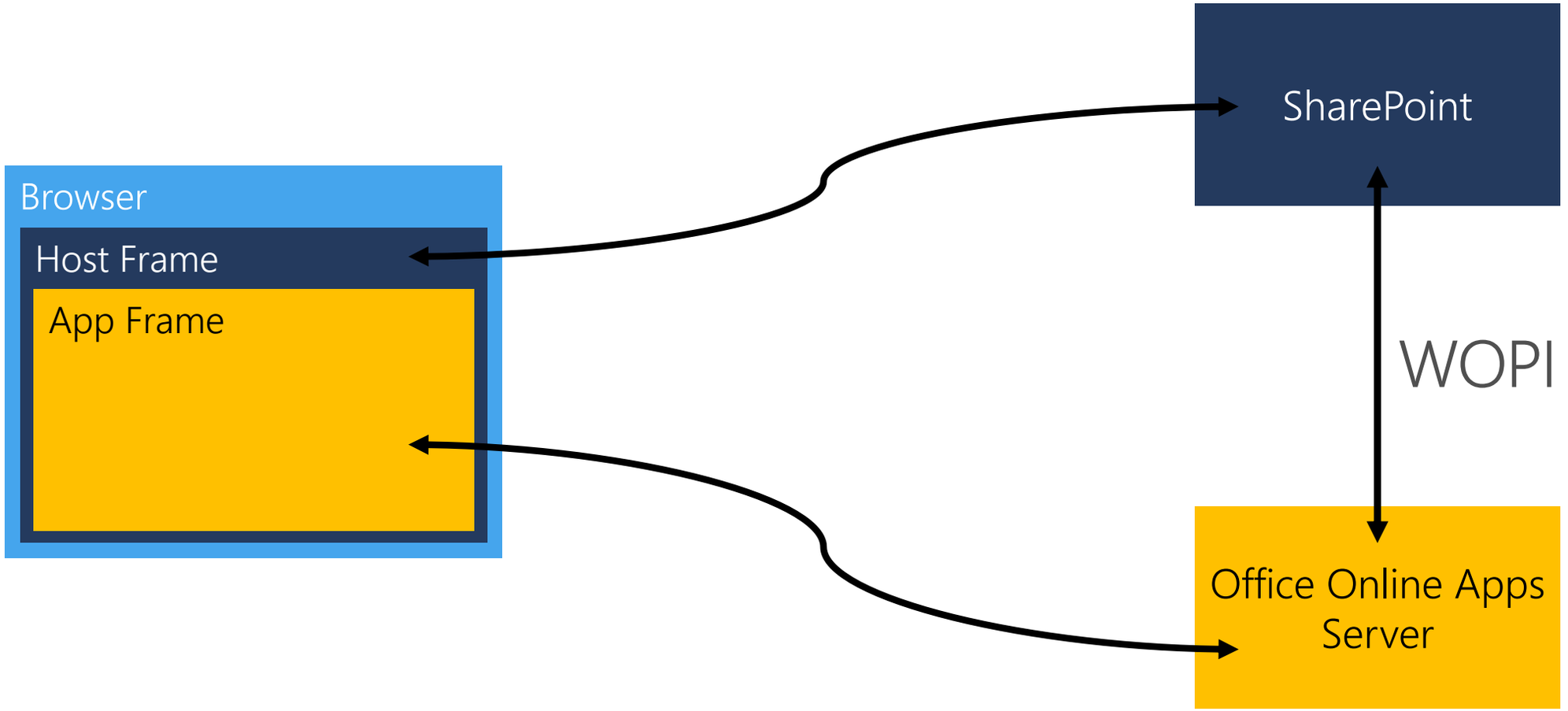
Office Online

Work and share Office files from anywhere with an internet connection from any device

Combines commonly used Office features and real-time co-authoring capabilities

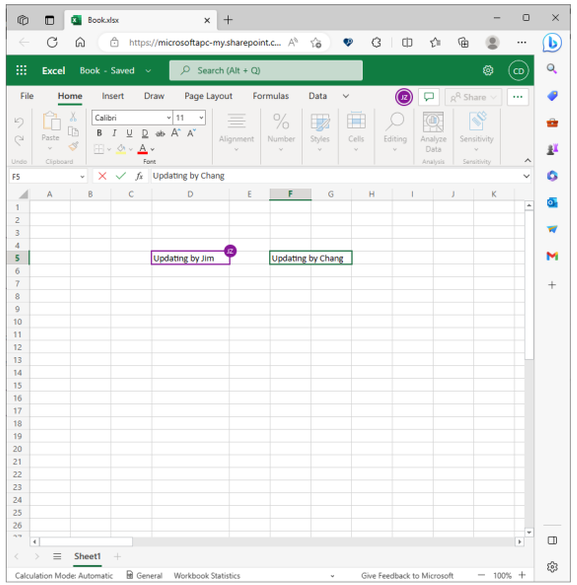


How Office Online Works

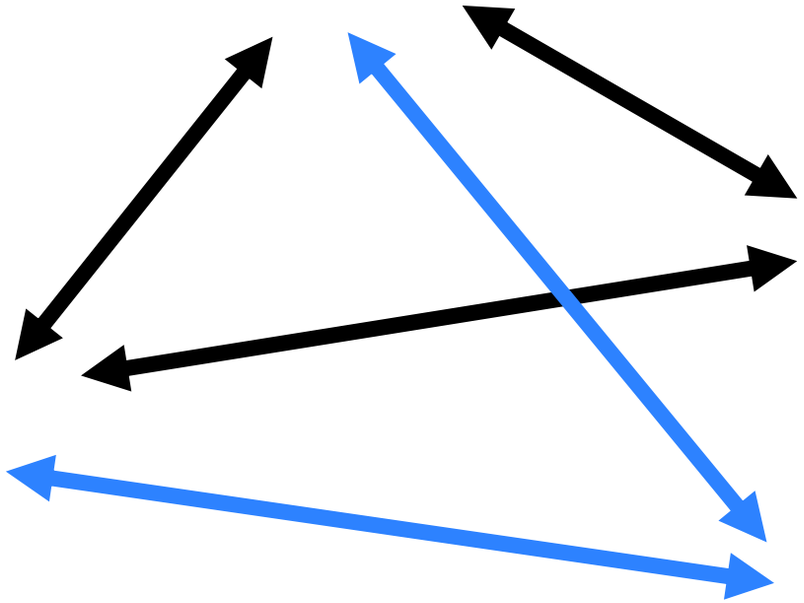


WOPI – Why You Care

Web Browser (or App)



Office Online Server



Microsoft Document Hosts

Office 365

OneDrive

SharePoint

3rd Party Document Hosts

Your Storage

MS-WOPI Protocol

Defines a set of operations that enables a client to access and update files stored on a file storage

Describes the communication between the Office Online Server and a WOPI Server

MS-WOPI Most Important Operations

WOPI Discovery – Negotiate the capacities
File Metadata Operations – Delete, Rename, FileInfo
File Content Operations – GetFile, PutFile
Lock – Lock, Unlock, RefreshLock

FSSHTTP

Empower Cloud based documents

- Multi-user/Co-authoring
- Incremental file sync
- Save the network cost and server I/O cost

Multi-user/Co-authoring - Locks

Traditional Exclusive Lock

- Single writer, multiple readers
- Used for single user editing

Shared Lock

- Many writers
- Ensure co-authoring capable and non-capable clients interact

FSSHTTP – Object Graph

File Contains one or more “Cells”

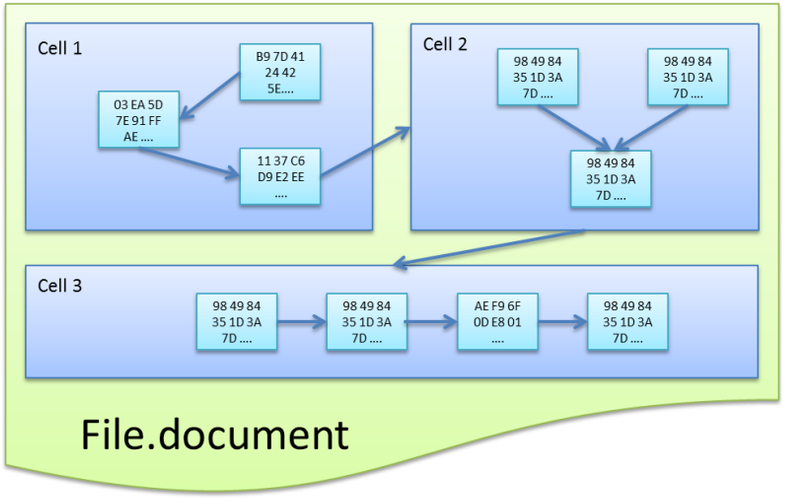
- Unit of lock

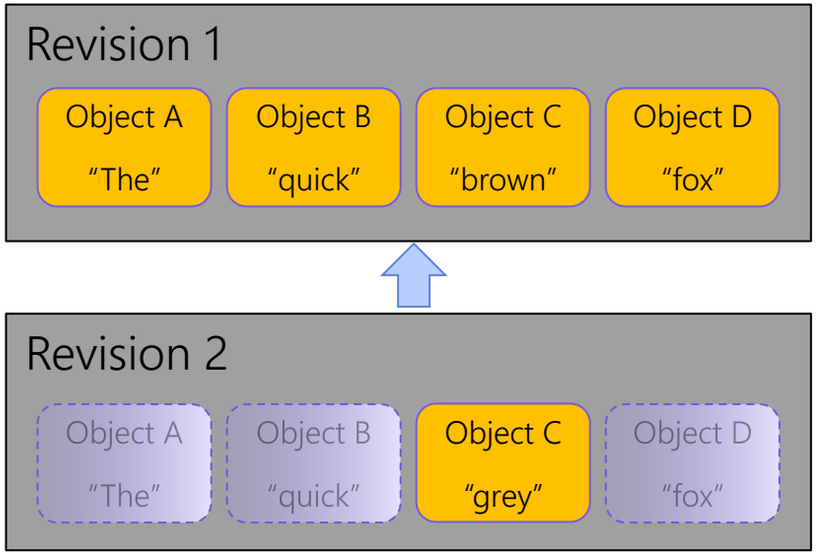
Cells contain one or more “Objects”

- Cell contains “Revision” State

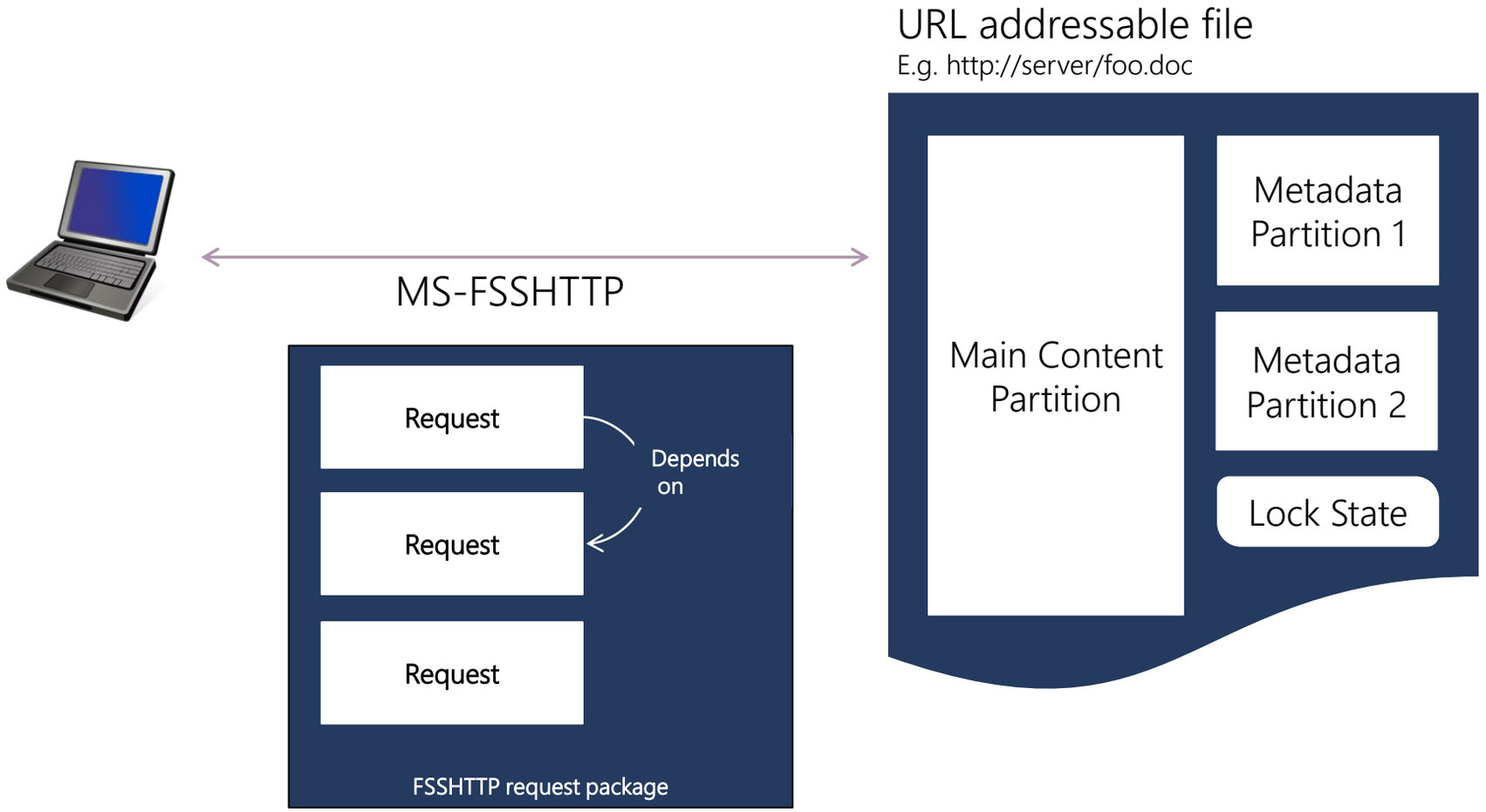
Objects contain data and references to other objects and/or cells

- Unit of change

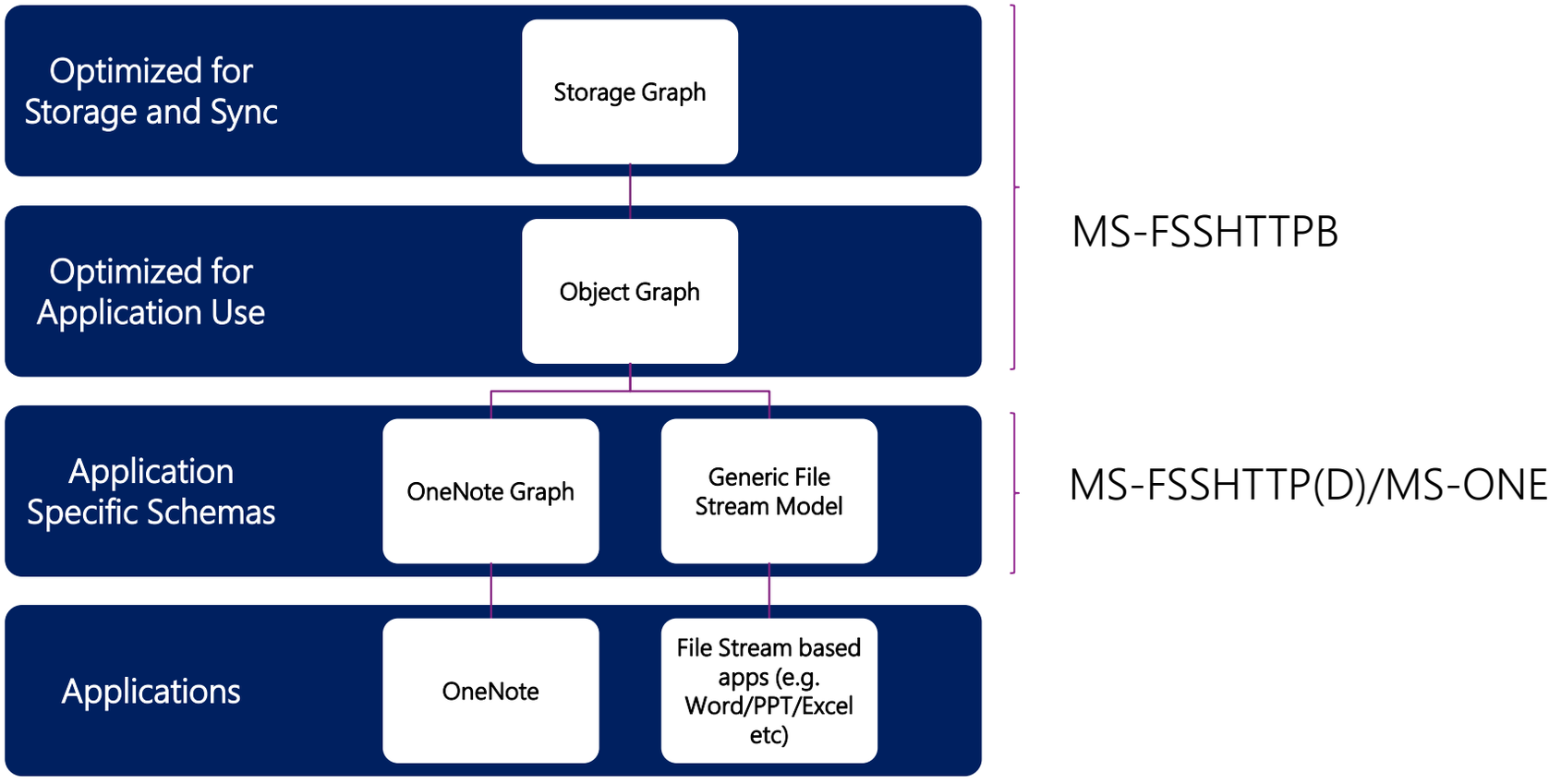




MS-FSSHTTP Protocol



FSSHTTP Other Protocols



Resources

dochelp@microsoft.com

Open Specifications Developer Center

GitHub - OfficeDev/Interop-TestSuites: FileSyncandWOPI

Microsoft

Thank you!

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