Debugging Microsoft Projects Using Fiddler

Office 365 DevDays

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Agenda

- Introduction
- How to configure Fiddler
- Demonstration – Fiddler in action
- Key Takeaways
- Q&A
Introduction

• What is Fiddler?
• Why use Fiddler for Microsoft projects?
• How to configure Fiddler – HTTPs Decryption?
What is Fiddler?

• Tool to capture network traffic.
• Web Debugging Proxy - logs all HTTP(S) traffic between application and Web service.

• Key Features:
  - Web Debugging
    Debug traffic from PC, Mac or Linux systems and mobile devices. Ensure the proper cookies, headers and cache directives are transferred between the client and server. Supports any framework, including .NET, Java, Ruby, etc.
  - HTTP/HTTPS Traffic Recording
    Fiddler is a free web debugging proxy which logs all HTTP(s) traffic between your computer and the Internet. Use it to debug traffic from virtually any application that supports a proxy like IE, Chrome, Safari, Firefox, Opera and more.
  - Web Session Manipulation
    Use Fiddler for security testing your web applications -- decrypt HTTPS traffic, and display and modify requests using a man-in-the-middle decryption technique. Configure Fiddler to decrypt all traffic, or only specific sessions.
  - Customizing Fiddler
    Benefit from a rich extensibility model, ranging from simple FiddlerScript to powerful Extensions which can be developed using any .NET language.
  - Performance Testing
    Fiddler lets you see the “total page weight,” HTTP caching and compression at a glance. Isolate performance bottlenecks with rules like “Flag any uncompressed responses larger than 25kb.”
  - Security Testing
    Easily manipulate and edit web sessions. All you need to do is set a breakpoint to pause the processing of the session and permit alteration of the request/response. You can also compose your own HTTP requests to run through Fiddler.
Why use Fiddler for Microsoft projects?

• Microsoft Projects - Graph APIs, Azure Functions, AAD Auth., etc. – REST APIs

• Fiddler is the preferred non-invasive tool to capture and troubleshoot these REST calls.

• Some of the talks where Fiddler is applicable:
  
  **Day 1**
  
  11:00 – 12:15 | Extend the Functionality of Word, Excel, PowerPoint, or Outlook with an Office Add-in
  
  1:15 – 2:30 | Integrate with Documents, People, Insights
  
  4:45 – 5:45 | How to Build AAD OAuth with Office 365
  
  **Day 2**
  
  9:00 – 11:00 | Develop Tabs, Bots, and Connectors with Microsoft Teams
  
  11:15 – 12:15 | Microsoft PowerApps and Flow
  
  1:15 – 2:15 | Build Mail App with Office 365 and Microsoft Graph
How to configure Fiddler – HTTPs Decryption?

• Install Fiddler – https://www.Telerik.com/fiddler
• Configure Fiddler to decrypt HTTPs traffic
Fiddler in Action

Demonstration
Key Takeaways

• Fiddler enables you to inspect incoming and outgoing data.
• Fiddler can be used for any application that’s using HTTP/HTTPs as communication protocol.
• HTTPS decryption should be enabled to view decrypted payloads.
• Data collected by Fiddler is valuable for troubleshooting, performance tuning, and system monitoring.
Q&A
Thank you

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