

# Let's VSCode play with Wildfly/EAP

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# Server Connector

- Open source
- Support any runtime in VSCode (or others)
- Pluggable architecture
- Based on an LSP inspired protocol : RSP
- <https://github.com/redhat-developers/rsp-server>
- <https://github.com/redhat-developers/vscode-adapters>
- Protocol description: <https://bit.ly/2JEgqg2>

# Architecture

- vscode-adapters extension implements a generic UI
- rsp-server is a Java based server implementing RSP
- SPI for adding new runtime support



# RSP protocol

- List supported runtimes
  - Each SPI can provider one or several types
  - Return the whole list of server types (id, description)
  - Used when downloading a runtime

# RSP protocol

- List downloadable runtimes
  - Each SPI can provide one or several types
  - Return the whole list of server types (id, description, url)
  - Used when downloading a runtime
  - An SPI may support download or not

# RSP protocol

- Create server
  - Must provide server type (id) and server id
  - Must provide required parameters (based on id)
  - May provide optional parameters (based on id)
  - Return status code and diagnostic code

# RSP protocol

- Download runtime
  - Must provide server type (id) and request id
  - Must provide required parameters (based on id)
  - May provide optional parameters (based on id)
  - Return status code and diagnostic code



# RSP protocol

- Start server
  - Must provide mode and server id
  - Return status code, command line and diagnostic code

# RSP protocol

- Stop server
  - Must provide server id
  - Return status code and diagnostic code



Demo

# Demo

- Install extension (search 'connector' in marketplace)
- Download Wildfly

# RSP protocol

- Add deployable
  - Must provide server id + path
  - Path maybe a file or a folder
  - Return status code and diagnostic code

# RSP protocol

- Remove deployable
  - Must provide server id + path
  - Path maybe a file or a folder
  - Return status code and diagnostic code

# RSP protocol

- Publish server
  - Must provide server id
  - Synchronize local workspace with runtime/server
  - Return status code and diagnostic code



Demo



# Demo

- Start server
- Add deployment ([github.com/wildfly/quickstart](https://github.com/wildfly/quickstart))
- Publish server
- Modify local file
- Publish
- Debug server
- Add breakpoint
- Debug application code

# RSP protocol

- Notifications
  - serverAdded / serverRemoved
  - serverStateChanged
  - serverProcessOutputAppended

# What's next

- Extensibility
  - Extension as SPI
- Custom actions
  - Open in browser, ....
- Configuration support
- More runtimes

# Thanks

- Q / A
- Feedback wanted !