Creating Virtual Assets - Overview

A Parasoft Virtual Asset is deployed at a specified endpoint, where it listens for incoming traffic and responds in the defined manner (e.g., with expected /desired responses).

The first step in creating a Virtual Asset is to create a .pva (Parasoft Virtual Asset) file that represents the behavior you want to virtualize. Each .pva file references one or more "Responder suites." Each responder suite should contain one or more of the following tools:

- **SQL Responders:** These tools virtualize database behavior (including SQL queries received and result sets delivered). SQL Responders can be created by recording live database traffic. They can also be added/defined manually.
- **Message Responders:** These tools virtualize messages and responses sent over HTTP, MQ, JMS, or other/custom protocols. Message Responders can be created from traffic files that capture actual behavior or they can be generated from definitions such as OpenAPI/Swagger and RAML definitions, WSDLs and XML schemas. They can also be added/defined manually.

There are several ways to create Message Responders:

Record and Simulate Live HTTP, JMS, or MQ traffic

See the following chapters describe how to create message responders from recorded traffic over HTTP, JS, and MQ:

- Recording Behavior with Virtualize - Overview
- Creating Message Responders from Traffic Files - Overview
- Creating Parameterized Message Responders from Traffic

Simulate Traffic Captured in Logs

See the following chapters if you want to simulate traffic captured in logs (e.g., Wireshark):

- Creating Message Responders from Traffic Files - Overview
- Creating Parameterized Message Responders from Traffic

Creating Message Responders Manually or from a Definition File

If you want to virtualize application behavior that is not yet available for capture, you can model that behavior by creating a Message Responder from scratch or based on a definition (e.g., OpenAPI/Swagger, RAML, WSDL or schema).

See the following chapters to manually create a responder for each request response and set up the responder correlations:

- Creating Message Responders Manually
- Message Responder Overview

See the following chapters to manually create a responder in multiple responses mode:

- Creating Message Responders Manually
- Message Responder Overview

See the following chapters to aggregate the requests/responses into a single traffic file and then use the parameterized wizard to create a virtual asset from that file:

- Creating Message Responders from Traffic Files - Overview
- Creating Parameterized Message Responders from Traffic

Once you have a .pva with an appropriate Responder suite and tools, it can be deployed as described in Deploying Virtual Assets and serve as a working Virtual Asset.