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# **valhalla Documentation**

***Release 0.1***

**valhalla**

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This project aims to provide a simple and easy way to do penetration testing with the [OWASP pentester guide](#).



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## The execution idea

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In the penetration testing world there are a lot of tools, which Valhalla assembles into different Docker containers. This keeps them separated from your local system, providing a good and simple way to version and execute them via a nice looking web GUI.

Internally the process is simple. A Docker container holds each tool that we need, and around the container is a small Rest API. This lets the user execute commands and get the results in the following way:

```
>>> from valhalla.dockerutils import OwtfContainer
>>> from valhalla.middleman.handler import send_for_execution
>>> oc = OwtfContainer('valhalla/containers/testcontainer') # Point to the container
>>> oc.build_image() # Build Docker image
>>> oc.build_container() # Build container from image
>>> oc.is_valid # Check if valid
True
>>> oc.start() # Start the container
>>> send_for_execution(oc, {'command': 'ping -c 1 scanme.nmap.org'}) # Execute command
```

Contents:

## 1.1 containerutils

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### 1.1.1 OwtfContainer

The OwtfContainer is the main object in this application and has one single constructor argument, being an Owtf Valhalla Docker image location.

When a new OwtfContainer class is instantiated, the class constructor will call `_validate_config_image_and_container()`. This will then check that everything is OK with all the needed files in place, if the image has been built, if the container is running and so on.

## 1.2 middleman





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## Indices and tables

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