

WAL: Waveform Analysis Language

Version 8.1

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The **Waveform Analysis Language** (WAL) is a *Domain Specific Language* (DSL) for analyzing waveforms produced by hardware simulators. It gives developers the tools they need to naturally express hardware analysis problems.

1 Introduction

The core unit of WAL are expressions. An expression can be either literals, symbols, or lists. Literals are data like `1` or `"hello"`. Symbols are names that can refer to variables, signals or functions. Some examples for signals are `x`, `Top.module1.input`, or `print`.

2 WAL API

This section contains the documentation for all WAL functions.

2.1 Organization

Organization function can be used to load and step through waveforms as well as introducing aliases for signals.

```
(load path id) → ()  
  path : string  
  id : symbol
```

Loads the waveform in file *path* and makes it available to WAL code using the id *id*.

```
(step [id amount]) → ()  
  id : symbol = all  
  amount : integer = 1
```

Step trace *id* by *amount*. Both arguments are optional. If no *id* is provided *all* traces will be stepped by *amount*.

```
(alias name signal) → ()  
  name : symbol  
  signal : symbol
```

Introduces an alias for *signal* such that it can be also referenced using *name*.

```
(alias name) → ()  
  name : symbol
```

Removes the alias *name*.