

# Parameterizing Tools with Variables

Variables can be used to parameterize text field values in tool editors (e.g., input tabs, request/response message fields, and tool configuration fields). A text field might reference environment variables, a data source column, a data bank column, or a variable defined for the current suite.

To reference a variable in this manner, you use the `${var_name}` notation: a dollar sign with the variable's name wrapped in curly braces. The referenced values can be:

- **Static variables:** Values that remain constant during the execution of a tool. This includes:
  - **Environment variables:** Values that come from the environment that is currently enabled for the active test suite.

## ▼ Environment Variables

	Name	Value
1	CALCULATOR_HOST	ws1.parasoft.com
2	CALCULATOR_PORT	80
3	CALCULATOR_PATH	/glue/calculator
4	WSDL	http://soatest.parasoft.com/store-01.wsdl
5	ENDPOINT_2	http://ws1.parasoft.com/glue/store-01
6	LOCALHOST:8080_BASE_URL	http://localhost:8080

- **IDE variables:** Eclipse variables like `project_loc`, `env_var` as well as SOAtest variables such as `test_suite_loc` (test suite location) and `soa_env` (SOAtest environment variables). For example:

```
${project_loc:MyProject}/DataSource/${soa_env:CVS_DIR}/my_csv_file.csv
```

```
${test_suite_loc}/../${soa_env:XLS_DIR}/my_excel_file.xls
```

- **Dynamic variables:** These are values whose values may change during tool execution—for example, data source columns, data bank columns, and suite-level variables. Data source columns depend on the current data source row.

## Notes

- Some tool editors that take a file input have an option to conditionally resolve variables in the external file before the file is read from disk.
- Some fields support only static variables—typically in cases where an editor needs to directly resolve a variable outside the context of tool execution. For example, this is the case with file path fields in Excel and CSV data source editors, WSDL/WADL/XSD fields in messaging tools, and suite fields.
- Any data source columns referenced by a tool will cause the tool to iterate over the data source's rows.