# Sinapsis CLI

The sinapsis CLI offers a mechanism to easily execute Sinapsis Agent definitions from a unix shell. Additionally, it includes functionalities to display useful information such as a Template attribute names, example Agent definitions for specified Templates or the list of all the installed templates in the current workspace.

## Initial steps

Please follow the installation process described in the Sinapsis Installation section.

### Available commands

A summary of the available CLI commands and usage can be consulted in the Sinapsis Quickstart section.

## Usage

To verify the installation process was successful, please execute the following command:

```
sinapsis
```

If everything was correctly installed, the below welcome message should be displayed in the unix console:

```
Welcome to Sinapsis CLI. Please run 'sinapsis -h' to obtain information about available commands.
```

Add the flag -h or --help after the sinapsis command to get detailed information about sinapsis usage and available options

```
sinapsis -h
```

```
usage: sinapsis [-h] {run,info} ...
Sinapsis CLI

options:
   -h, --help show this help message and exit

subcommands:
   CLI commands: run, help
```

```
{run, info}
  run Run a Sinapsis agent with a yaml config file
  info Get information about one or all Sinapsis template
```

## Sinapsis run

Sinapsis CLI provide the command sinapsis run to execute Agent definitions declared in a config file. Detailed usage information can be obtained using the --help or -h flags as follows

```
sinapsis run -h
```

This will produce the following usage example

For instance, to run the hello world agent config file use

```
sinapsis run src/sinapsis/configs/hello_world_agent.yml
```

```
2025-02-24 @ 14:44:31:663 | DEBUG |
hello_world_agent:__instantiate_templates:113 - Initialized template:
InputTemplate
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:__instantiate_templates:113 - Initialized template:
HelloWorld
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:__instantiate_templates:113 - Initialized template:
DisplayHelloWorld
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:_log_agent_execution_order:128 - Execution Order
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:_log_agent_execution_order:131 - Order: <<0>>, template
name: <<InputTemplate>>
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:_log_agent_execution_order:131 - Order: <<1>>, template
name: <<HelloWorld>>
```

```
2025-02-24 @ 14:44:31:665 | DEBUG |
hello_world_agent:_log_agent_execution_order:131 - Order: <<2>>, template
name: <<DisplayHelloWorld>>
2025-02-24 @ 14:44:31:665 | INFO | hello_world_agent:_lazy_init:66 - Agent
and templates initialized
2025-02-24 @ 14:44:31:665 | INFO |
hello_world_agent:signal_block_if_needed:167 - Signaling block mode for
HelloWorld no: 2/3
2025-02-24 @ 14:44:31:666 | INFO |
hello_world_agent:signal_block_if_needed:167 - Signaling block mode for
DisplayHelloWorld no: 3/3
Hello, this is my first template!
2025-02-24 @ 14:44:31:666 | INFO |
hello_world_agent:all_templates_finished:208 - All templates returned
finished, stopping execution...
2025-02-24 @ 14:44:31:666 | DEBUG |
.../sinapsis_core/cli/run_agent_from_config.py:run_agent_from_config:47 -
result: DataContainer(container_id=a360a..., images=[], audios=[], texts=
[TextPacket(content='Hello, this is my first template!', id='e86...',
source='HelloWorld', modified_by_templates=['HelloWorld'], embedding=[],
generic_data={}, annotations=None)], time_series=[], binary_data=[],
generic_data={})
```

## Enable profiler

Additionally, to get the profiling times of the executed Agent and Templates the optional flag -- enable-profiler can be used. For example, the following command

```
sinapsis run src/sinapsis/configs/hello_world_agent.yml --enable-profiler
```

will display the following execution times and statistics in the output console

```
2025-02-24 @ 14:49:07:502 | INFO | hello_world_agent:print_stats:77 - template: HelloWorld, average_time: 0.030, median: 0.030, num_executions: 1 2025-02-24 @ 14:49:07:502 | INFO | hello_world_agent:print_stats:84 - Agent times: 0.174 median: 0.174
```

## Sinapsis info

Sinapis CLI offers through the sinapsis info command, a funtionality to display detailed information regarding Template Attributes, example Agent configs for specified Templates and the list of all the installed Templates in the working environment.

To display the sinapsis info command example of usage and all the available options use the --help or -h flags

```
sinapsis info -h
```

#### Output:

### Display Template information

#### Use

```
sinapsis info --template TEMPLATE_NAME
```

to display the following information:

- Path to the installed Template.
- Brief description of Template.
- Description of Template attributes.

For example, to display the Helloworld Template information run

```
sinapsis info --template HelloWorld
```

### Display ALL Templates info

Use the following command to display Template information for ALL the templates installed in the working environment:

```
sinapsis info --all
```

#### Output:

```
/path/to/sinapsis/templates/display_hello_world.py

DisplayHelloWorld: This template simply logs all the text packets received in a data container.

It is meant to be used for illustration purposes and in combination with HelloWorld template.

DisplayHelloWorld attributes:

/path/to/sinapsis/templates/hello_world.py

HelloWorld: This template simply adds a text packet to our data container. The data container is `sent` to any subsequent templates in our Agent.

HelloWorld attributes:

display_text <class 'str'>: default: Hello World
```

### Display ALL Template names

#### Use

```
sinapsis info --all-template-names
```

to display a list with all the available Template names installed in the working environment. By default, when installing Sinapsis the following templates should be displayed:

CopyDataContainer
DisplayHelloWorld
HelloWorld
InputTemplate
MergeDataFlow
OutputTemplate

SplitDataFlow TransferDataContainer

### Display example template config

The sinapis info command offers the option to build and display an example Agent config for an specified Template name using the --example\_template\_config flag as follows:

```
sinapsis info --example-template-config TEMPLATE_NAME
```

For example, to display an Agent config for the HelloWorld template use:

```
sinapsis info --example-template-config HelloWorld
```

```
agent:
   name: my_test_agent
templates:
- template_name: InputTemplate
   class_name: InputTemplate
   attributes: {}
- template_name: HelloWorld
   class_name: HelloWorld
   template_input: InputTemplate
   attributes:
    display_text: Hello World
```