

Project Silpa



Python Based Indian Language Processing Framework

Overview



- Project Introduction
- Architecture

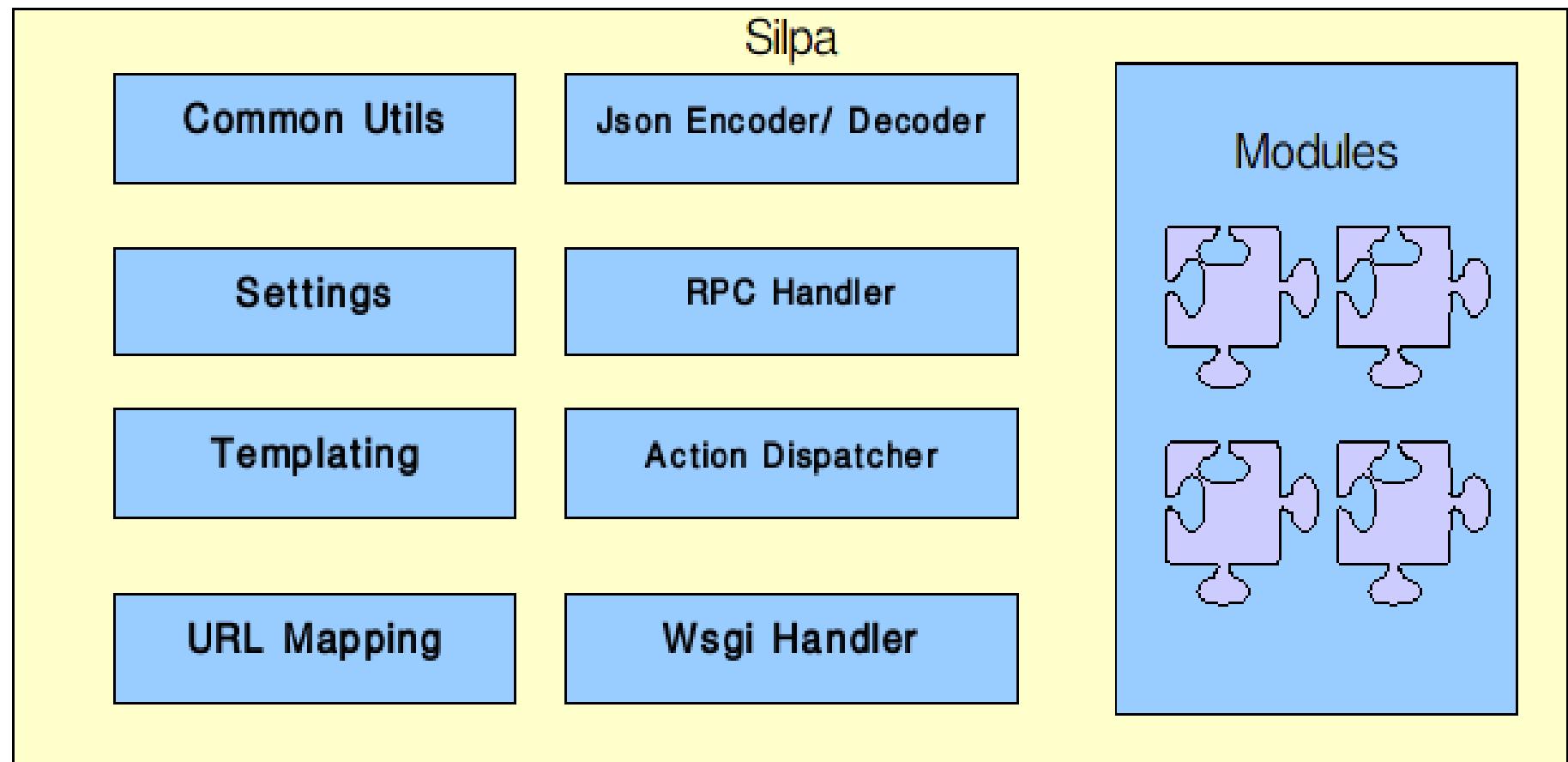
SILPA – Swathanthra Indian Language Processing Applications

What is Silpa Project?

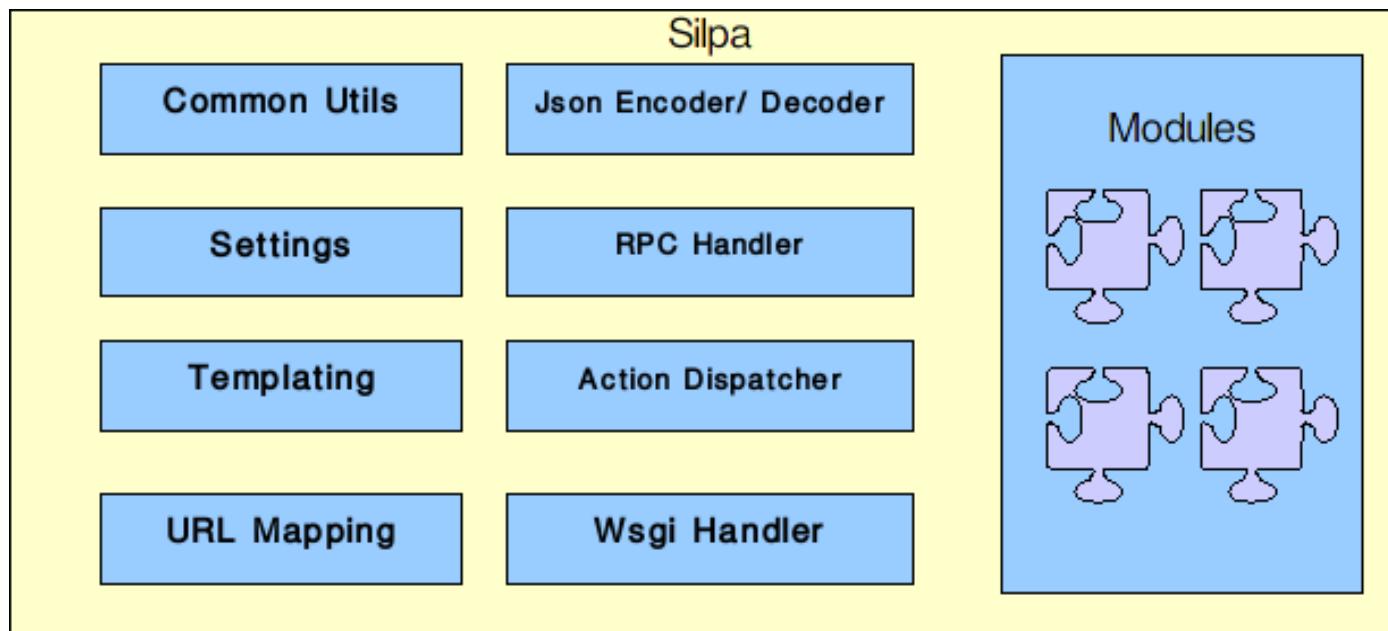
- A web framework for hosting Indian Language Processing applications.
- JSON-RPC based webservice for using the Silpa services for other applications
- A Python Library for Indian Language Processing

A Python application with all the above mentioned capabilities.

Architecture

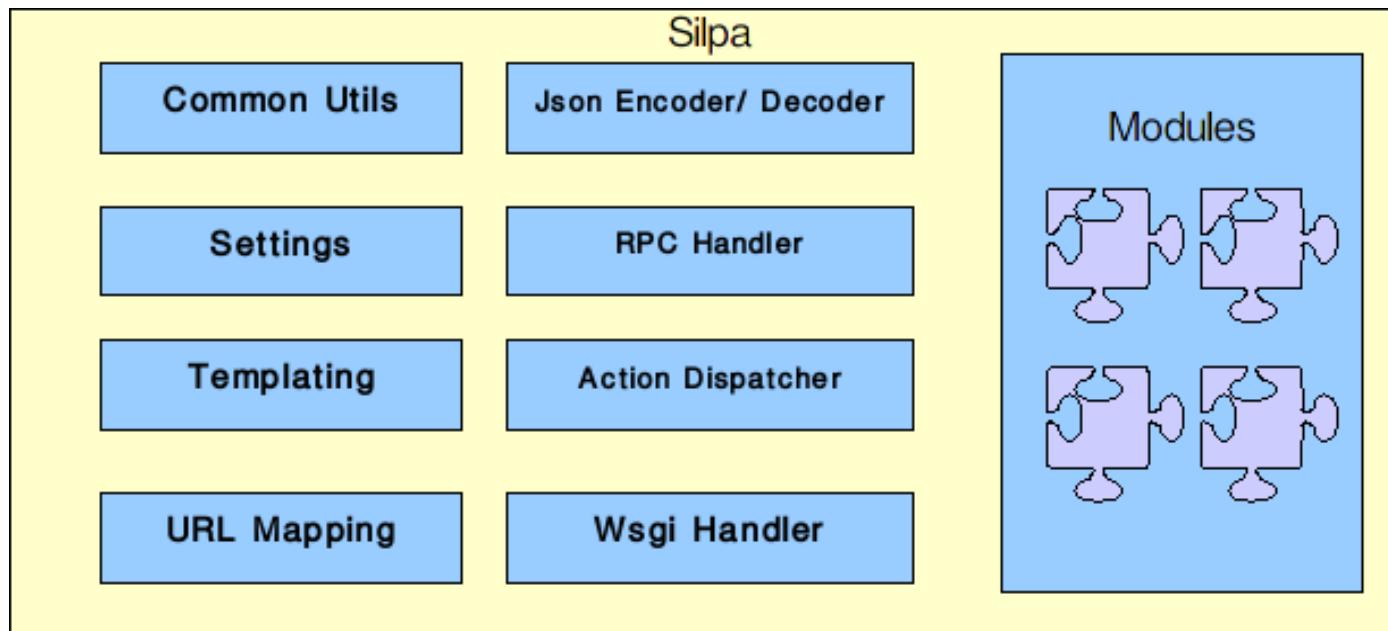


As a Python Library



```
>>>from silpa.modules import module1  
>>>module1.method1(args)
```

JSON RPC call



```
from jsonrpc import ServiceProxy
service = ServiceProxy("http://smc.org.in/silpa/JSONRPC")
print service.modules.Module1.method1(args)
```

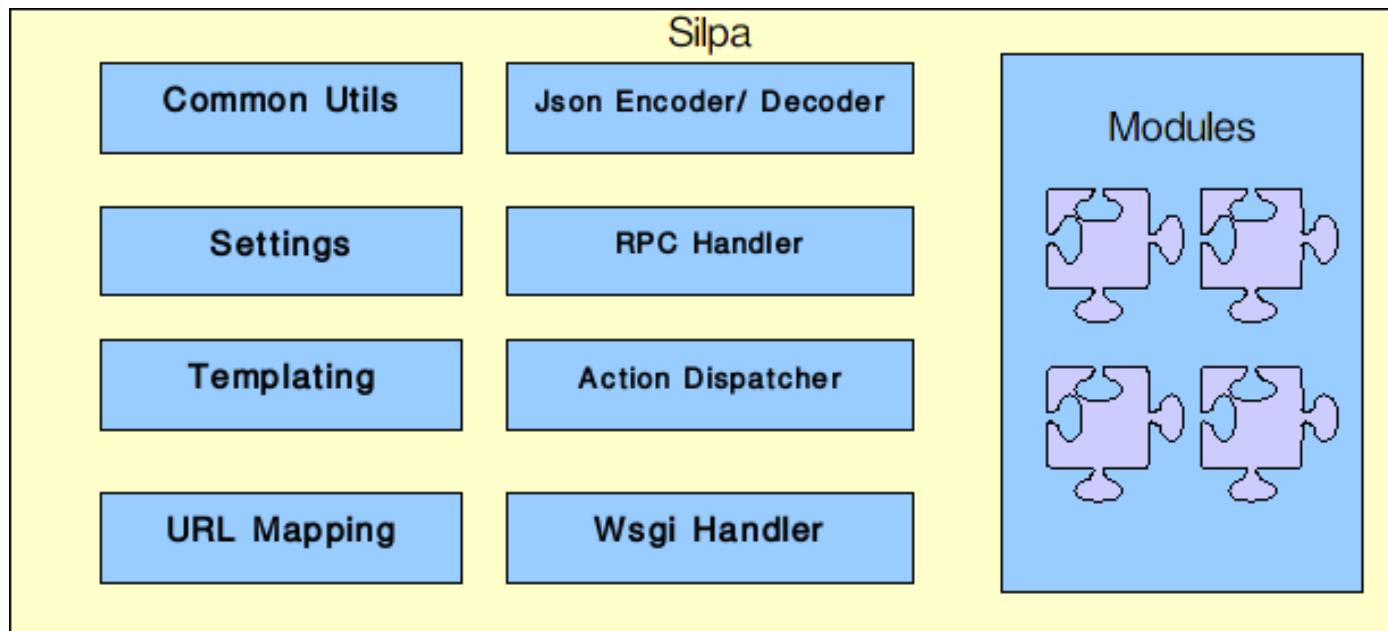
Raw JSON RPC request:

```
{"method": "modules.method1", "params": [ 'args1', 'args2' ],
'id': '1.0'}
```

Raw JSON RPC Response

```
{"error":null,"result":"methodreturnvalue","id":"1.0"}
```

A web application



- <http://smc.org.in/silpa>
- **WSGI based python web application**
- **PyMeld is used for Templating**
- **Provides web interface for each hosted modules**
- **Web interface uses javascript implementation of JSON-RPC calls**

Hosted Modules

- Transliterator
- Encoding Converter
- Calendars
- Hyphenator
- Syllabulizer
- Spellcheck
- Dictionary
- ...

Thank You!



Santhosh Thottingal(<http://thottingal.in>)