API Specification:

Execution APIs:

```
■Return existing arguments:
               • Argument: algo_name
               • Return: no_of_compulsory_args, no_of_optional_args, name_of_all_args
               "no of compulsory args":2
               "no of optional args":3
               "comp_arg_1":input_dir_path(inp-dir)
               "comp_arg_2":no_of_combiners(w)
               "opt arg 1":no of reducers(r)
               "opt_arg_2":no_of_mapper(m)
               "opt_arg_3":no_of_secondary_namenode(ns)
               • URL: <a href="http://server/analytics/execute/return_args?">http://server/analytics/execute/return_args?</a>
                        algo name=algo name value
       ■Execute existing:
               • Argument: algo_name, <comp_arg_1>,....<comp_arg_n>,
                             <comp_arg_1_val>,....<comp_arg_n_val>,
                             <opt_arg_1>,....<opt_arg_n>,
                             <opt_arg_1_val>,....<opt_arg_n_val>
               • Return: output filename, output filelocation
               "output_filename":<outputfilename_value>
               "output_filelocation":<output_filelocation_path:>
               • URL: <a href="http://server/analytics/execute/algo?">http://server/analytics/execute/algo?</a>
                        algo name=algoname value&input-
                        dir=/home/user/Down/&w=3&r=2
Addition APIs
       ■Add new framework
               • Argument: framework_name, compressed_file_path, install_script
               • Return: (+ if successfully installed, 0 if failed)
               "framework":1
               • URL: <a href="http://server/analytics/add/framework?">http://server/analytics/add/framework?</a>
                        framework name=framework name value&compessed file=compr
                        essed file path&install script=install script path
       \blacksquare Add_new_algorithm
               • Argument: framework_name, algorithm_name, algorithm_file,
                             no_of_algorithm_comp_args, no_of_algorithm_opt_args,
                             <comp_arg_1>,....<comp_arg_n>, <opt_arg_1>,....<opt_arg_n>
               • Return: (+ if successfully installed, 0 if failed)
               "framework":1
```

}

• URL: http://server/analytics/add/algo?

framework name=framework name value&algorithm name=algorithm name value&algorithm file=algorithm file path&no of algorithm comp args=2&no of algorithm opt args=1&comp arg 1 nam e=input dir path(inp-

dir)&comp arg 2 name=no of combiners(w)&opt arg 1 name=n o of reducers(r)