**Supervisor**

Supervisor is a client/server process control system which is used to monitor and manage processes on Unix-like operating systems.

**Supervisor Components**

**Supervisord** is the server piece of supervisor which is a Python-based daemon program that helps manage processes and applications, ensuring that they run continuously and can be automatically restarted if they crash or stop for any reason.

To use supervisord, we need to install it on our server or system, create a configuration file with the necessary settings for the processes you want to manage, and then start the supervisord daemon. Once running, supervisord will take care of managing the specified processes based on the defined configuration.

Key features of supervisord include:

1. **Process Management:** Supervisord can start, stop, and restart processes based on configuration settings. It can also monitor the processes and automatically restart them if they terminate unexpectedly.
2. **Program Configuration:** We can define the configuration for various programs or services in a configuration file (usually named supervisord**.conf**). This file specifies the command to run the process, the user under which it should run, log files e.t.c.
3. **Logging and Monitoring:** Supervisord keeps logs of its activities, including process start/stop events and any issues that may occur. These logs can be helpful for troubleshooting and monitoring the health of processes.

**supervisorctl** is the command-line client piece of the supervisor. It provides a shell-like interface of the features provided by **supervisord**. From supervisorctl, a user can connect to different supervisord processes (one at a time), get status on the subprocesses, stop and start subprocesses and get lists of running processes of a **supervisord**.

It also has a built-in web-based interface that allows us to view the status of processes, start or stop them, and perform other administrative tasks. To view and control process status through the web interface activate the configuration file’s [inet\_http\_server] section.

**XML-RPC API** is an alternative to supervisorctl tool to send commands and signals to the managed processes. The same HTTP server which serves the web UI serves up an XML-RPC interface.