## **Configuration management:**

Configuration management is the process of maintaining hardware and software in a desired state. It manages workflow control, version control, dependency management, task orchestration etc. Ansible is a tool for configuration management.

Importance of configuration management:

- 1. Classify jobs and tasks by groups and subgroups.
- 2. Configure new or old systems to a desired state.
- 3. Automate system identification, patches and updates.
- 4. Prioritise necessary actions.

## **Steps in Configuration Management Plans:**

- Planning and Identification: Identify system configuration items in the process
- Version Control and Baseline: Ensure continuous integrity of the product by identifying the accepted version of the software.
- Change Control: It is a method to ensure any changes made are consistent with the rest of the project.
- Configuration Status Accounting: Ensure the project proceeds according to plan by testing and verifying according to predetermined baselines.
- Audits and Reviews: Audits and reviews look at the process, configurations, workflow, change requests, and everything that has gone into developing each baseline throughout the project's development.

## **Ad Hoc Commands:**

Ad Hoc means when necessary. Ad hoc commands are commands that are executed meeting certain conditions.

Ansible uses ad hoc commands that reduce redundant execution of tasks and make the configuration management process efficient. The ansible obtains the state of the system initially before running the commands on the managed node. This allows to modify/change only necessary components/substate of the node.