**Configuration Management and Automation Tools**

| **Tool** | **Website** | **Description** |
| --- | --- | --- |
| Chef | [chef.io](https://www.chef.io/) | Depends on agent to be installed. Very mature. |
| Puppet | [ouppet.com](https://puppet.com/) | Requires master "puppet master" server. Performance issues. |
| Salt | [saltstack.com](https://www.saltstack.com/) | Keeps inventory on a central server. |
| Ansible | [ansible.com](https://www.ansible.com/) | Most popular. Very fast. Agentless. |

Tools like these are great for everything that happens *AFTER* the server instances are running.

**Ansible**

We're going to focus on **Ansible** since it is currently the most popular!

**Installation**

Installation is easy as long as you already have Python installed.

pip install --user ansible

For more information about installation, check [the docs](https://docs.ansible.com/ansible/latest/installation_guide/intro_installation.html).

**Ansible uses SSH**

Ansible connects to a remote machine using ssh and executes commands and scripts remotely. If you already have scripts written to set up an instance, you can reuse those scripts easily with Ansible. After all, it's all about ssh and bash!

Ansible uses yaml files called Playbooks to manage all the configurations to be made. As always, we should check this file into source control so that it is versioned and available to the entire team.

A Playbook is a set of instructions that Ansible uses to configure a machine. An inventory file is the list of machines on which to perform those instructions.