



# CHEF

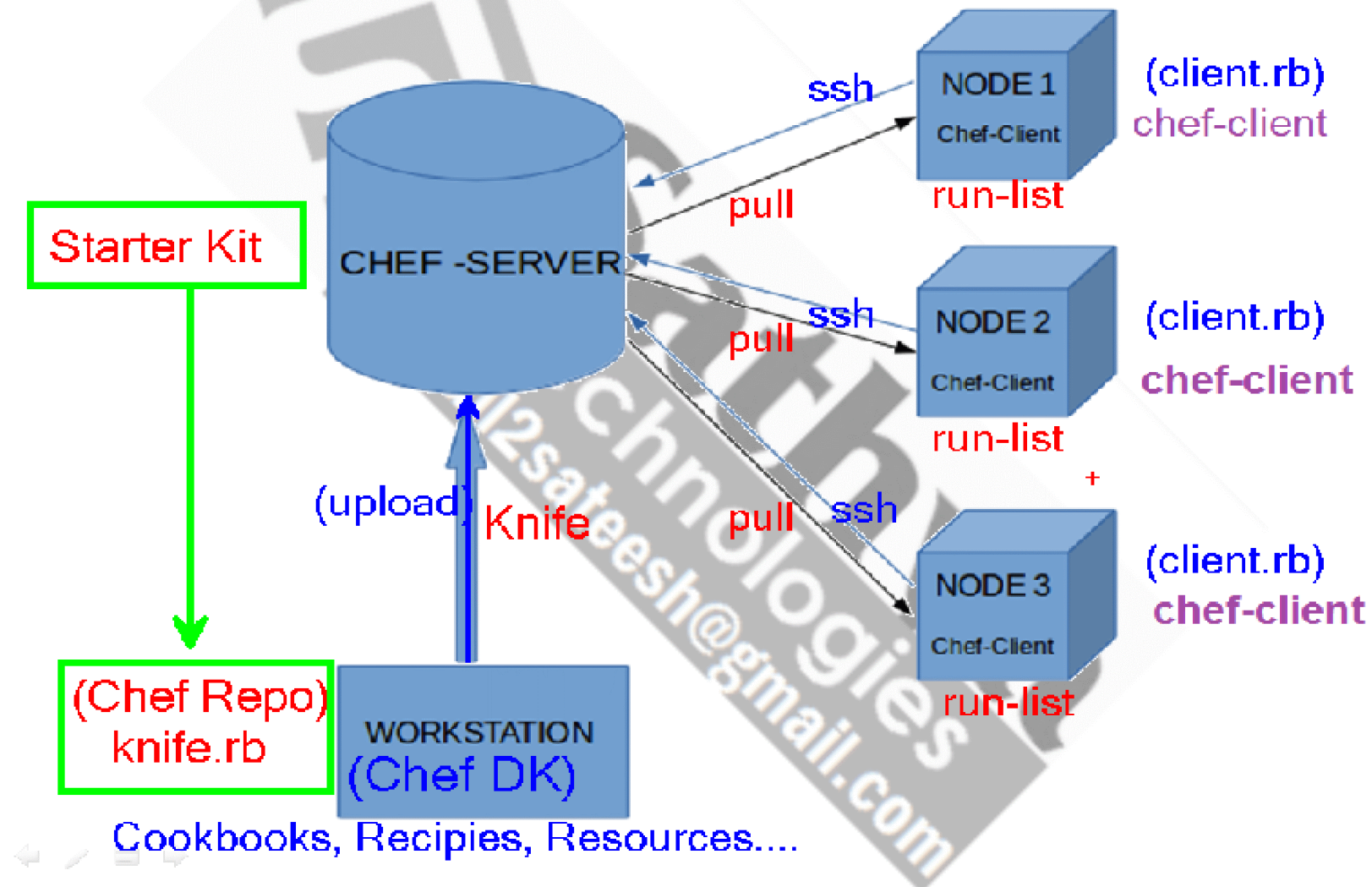
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# What is Chef?

Chef is a configuration management tool that is written in Ruby . It's capable of managing both your on premise and cloud servers with ease.

Chef turns infrastructure in to code. With chef, you can automate how you build, deploy, and manage your infrastructure.

# Chef Architecture



# Chef has three core components

**Chef Server:** This central server holds all configuration data that the nodes will use for configuration.

**Workstation:** This machine holds all the configuration data that can later be pushed to the central chef server. Several chef command line utilities will be available in this system, which can be used to interact with nodes, update configurations.

**Node:** It is a client server/system that will be registered to the central chef server, from where it can pull configuration data that needs to be applied.

# Chef Terminology

- **Recipes:** Fundamental Configuration element with in an Organization
- **Cookbook:** set of Recipes, a cookbook can hava a default recpie (default.rb)
- **Chef Client:** Agent that runs locally on the node that is registered with the chef server.



# Chef Terminology

- **Knife:** Command line tool which provides an interface between the local chef-repo and chef-server
- **Client.rb:** Configuration file for chef –client located at /etc/chef/client.rb on each node
- **Ohai:** Tools used to detect attributes on a node and then provide attributes to chef at the start of every chef-client run
- **Node Object:** Consists of run-list and node attributes that describe of the node

# Chef Terminology

- **Chef-Repo:** Located on the workstation and installed with the starter kit, should be synchronized with a version control system and stores Cookbooks, roles, data bags, environments, and configuration files.
- **Idempotence:** Means a recipe can run multiple times on the same system and the results will always be identical and does not change the state of machine / node

# Chef Architecture

