Handling different Versions of Antidote for Benchmark with YCSB

We will try to efficiently handle the process of building images for different Antidote versions by setting up everything beforehand. This means that the actual benchmarking runs fast without needing much time to build new images when benchmarking multiple Antidote versions. Therefore, the base (erlang) image for Antidote (not the antidote image in docker hub) needs to be available in the Docker server. Also, the repository of the Antidote database needs to be checked out on the host where the Docker server is running. These are the most significant downloads that must be performed beforehand and all following steps only require switching branches on the Antidote database or moving to a specific commit. These things will be handled by a Java Git Interface that access the repository of the Antidote database.

Now an image is built by simply using the base erlang image and extending it with the Antidote database from the repository of the host. Some additional scripts are added but the image is built locally with the current repository of the Antidote database. To build an Antidote image with another version the Java Git Interface is used to switch the branch or change the commit in the host's Antidote repository. This will cause some downloading but its kept to a minimum by using Git and not downloading the whole repository again.

The Dockerfile is kept simple since and we just add useful script to the image that is built.