**Production application continuous integration procedure**

* **TravisCI script tasks**
  + **Respond to pre-defined github commit patterns**
  + **Run unit tests**
  + **Build installer file**
  + **Generate user documentation**
  + **Generate code documentation**
  + **Build dockerfile**
  + **Deploys**
    - **Docker image to docker cloud**
    - **Documentation to S3**
    - **Create installer**

**Setup AWS production environment**

* **Ansible playbooks**
  + **Subnetworks (TODO: design network architecture)**
  + **Route53**
  + **databases**
    - **Create RDS instances**
      * **Metadata database server**
      * **LIMS database server**
  + **web application services**
    - **Create IAM roles**
      * **Web server EC2 (or ECS cluster, or ELB)**
      * **API server A EC2 (or ECS cluster, or ELB)**
    - **Create docker cloud auth’d ECS Clusters for tasks**
      * **Web App Server ECS task using respective role**
      * **API Server ECS task using respective role**
  + **analytics services**
    - **Create IAM roles**
      * **Analytics utility A ECS cluster**
      * **SQS job queue**
      * **Analytics utility Lambda function**
    - **Create docker cloud auth’d ECS Clusters for tasks**
      * **Analytics utility ECS task using respective role**
    - **Create SQS job queue**
      * **Analytics utility SQS job queue**
    - **Create Lambda function**
      * **Analytics utility Lambda function**