## docker-swarm YML

```
YML format version ->
                                           version: "3"
                                           services:
                a service definition ->
                                             web:
                                               image: username/repo:tag
                                                deploy:
        custom service configuration ->
                                                  replicas: 5
                                                  restart policy:
                                                    condition: on-failure
                resource limitations ->
                                                  resources:
                                                    limits:
this is speculative, based on cycles ->
                                                      cpus: "0.1"
                                                      memory: 50M
                                                ports:
                                                  - "80:80"
    custom defined network reference ->
                                                networks:
                                                  webnet
                                             visualizer:
                                                image: dockersamples/visualizer:stable
                                                ports:
                                                  - "8080:8080"
                                                volumes:
                                                  - "/var/run/docker.sock:/var/run/docker.sock"
                                                deploy:
                                                  placement:
                                                    constraints: [node.role == manager]
            constraint on scheduling ->
                                                networks:
                                                  webnet
           custom network definition ->
                                           networks:
                                             webnet:
```

## docker-swarm processes

## What is it?

- Scheduling is based on location, availability, affinity and other constraints (which can be based on user-tagging of resources)
- Swarm API EXTENDS the docker remote API, so the local CLI user is unaware that they are talking to a cluster

