



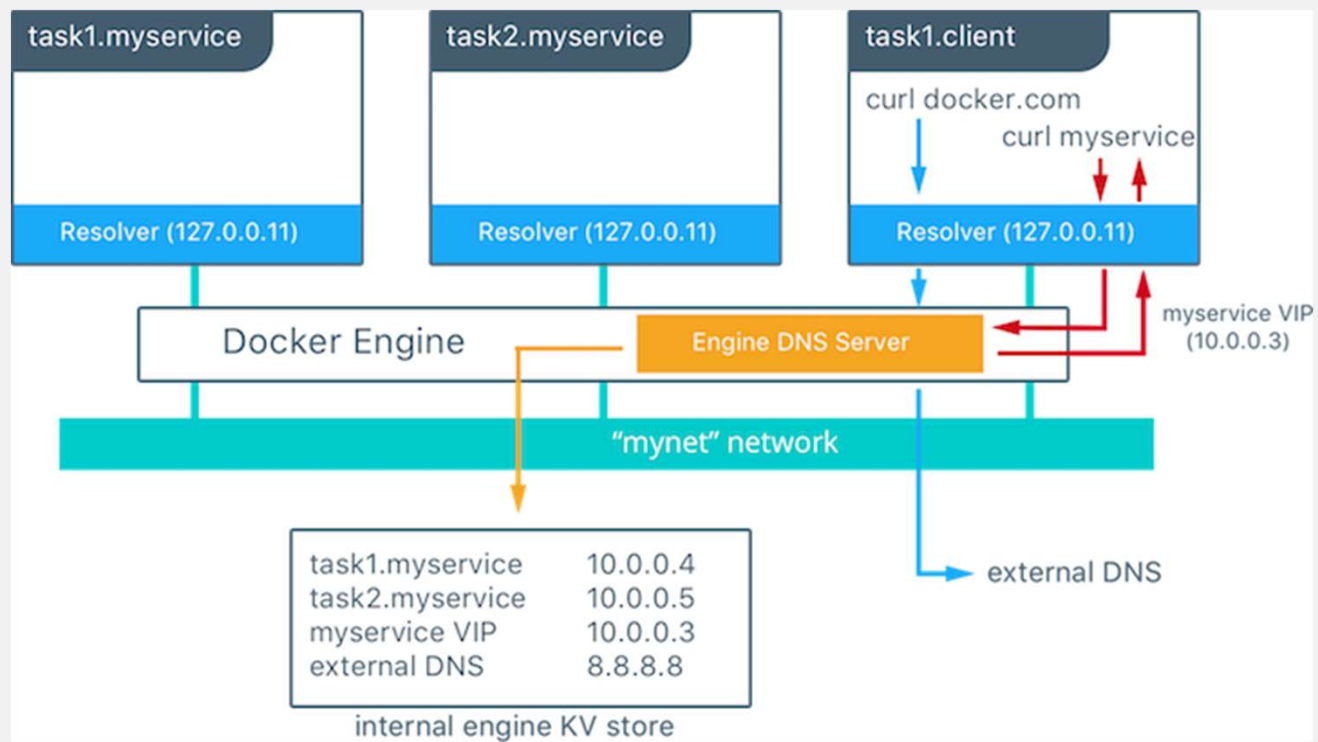
CLOUD COMPUTING APPLICATIONS

Service Discovery and Internal Load Balancing
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Service Discovery

- User-defined networks provide DNS service
 - User-defined Bridge networks
 - User-defined overlay networks
- For most situations, you should connect to the service name, which is load-balanced and handled by all containers (“tasks”) backing the service.
- To get a list of all tasks backing the service, do a DNS lookup for `tasks.<service-name>`

DNS



Internal Load Balancing in Swarm Services

- From one service to another
- This feature is automatically enabled once a Service is created.
- When a Service is created, it get a virtual IP address right away, on the Service's network.
- When a Service is requested the resulting DNS query is forwarded to the Docker Engine, which in turn returns the IP of the service, **a virtual IP**.
- Traffic sent to that virtual IP is load balanced to all of the healthy containers of that service on the network.
- All the load balancing is done by Docker, since only one entry-point is given to the client (one IP).