



Building a deployment pipeline

Noam Shochat

@noamshochat

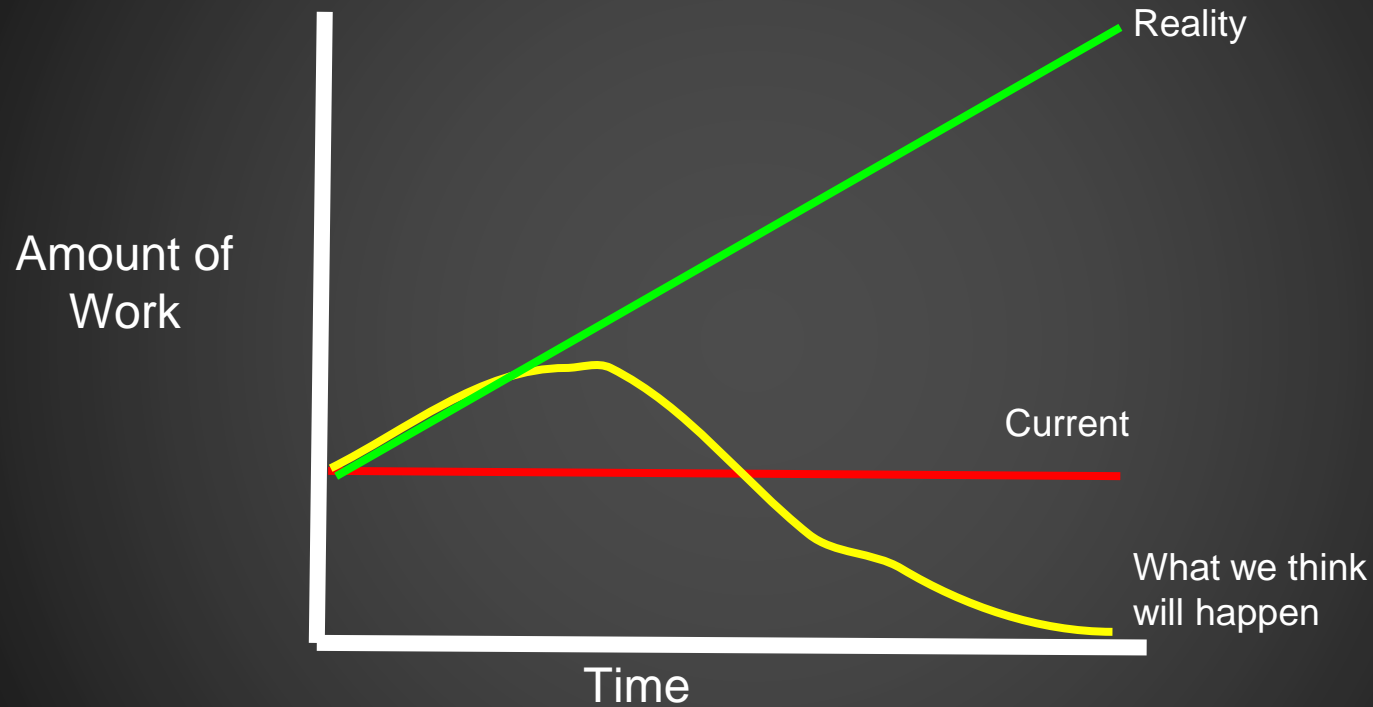
eToro

www.eto.com

July 16, 2014

#jenkinsconf

Adding automation



A little bit about eToro

- 120 Services

- 300 Servers



- 3 Data centers

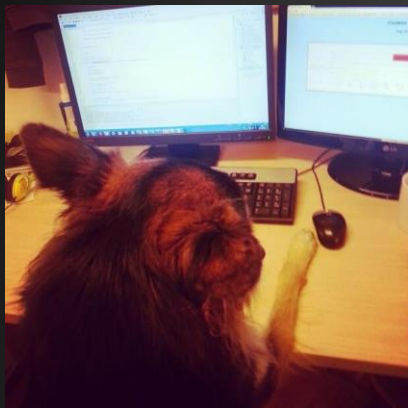
- 2 Clouds



- .Net



The problem



Developer

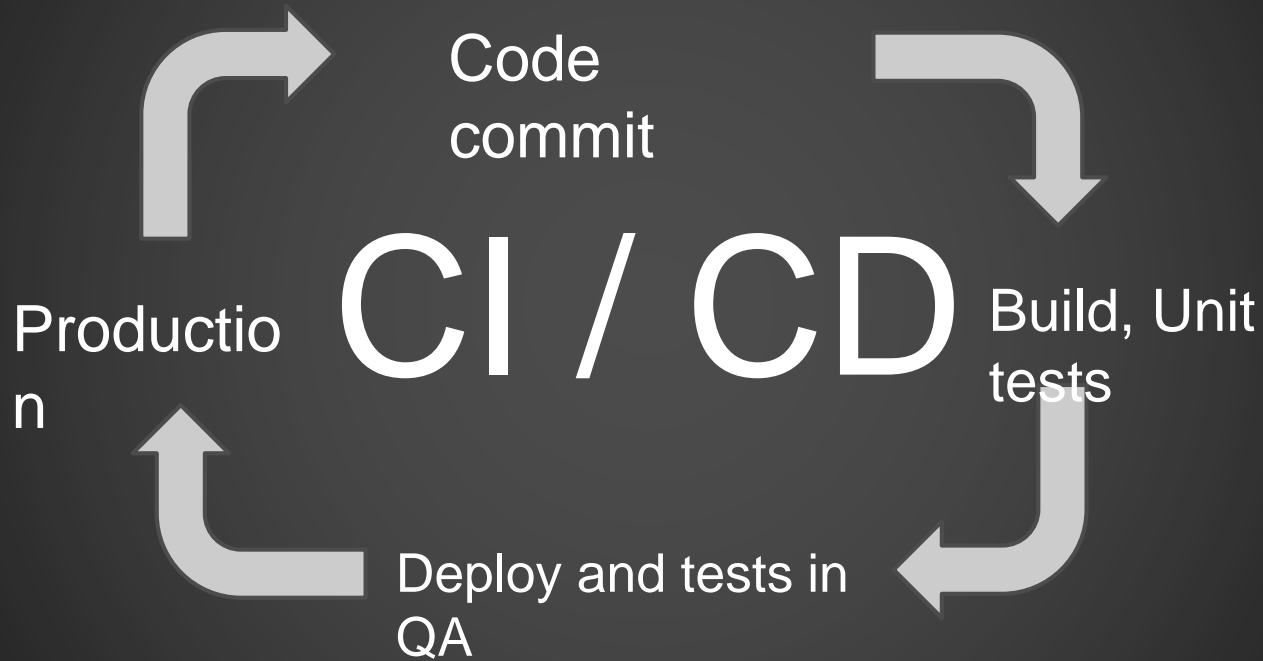


- Builds
- Manual deployments
- Lack of uniformity
- Different OS's
- Slowness
- Different Environments
- Security



Production

The Solution



We choose Jenkins

BUT...

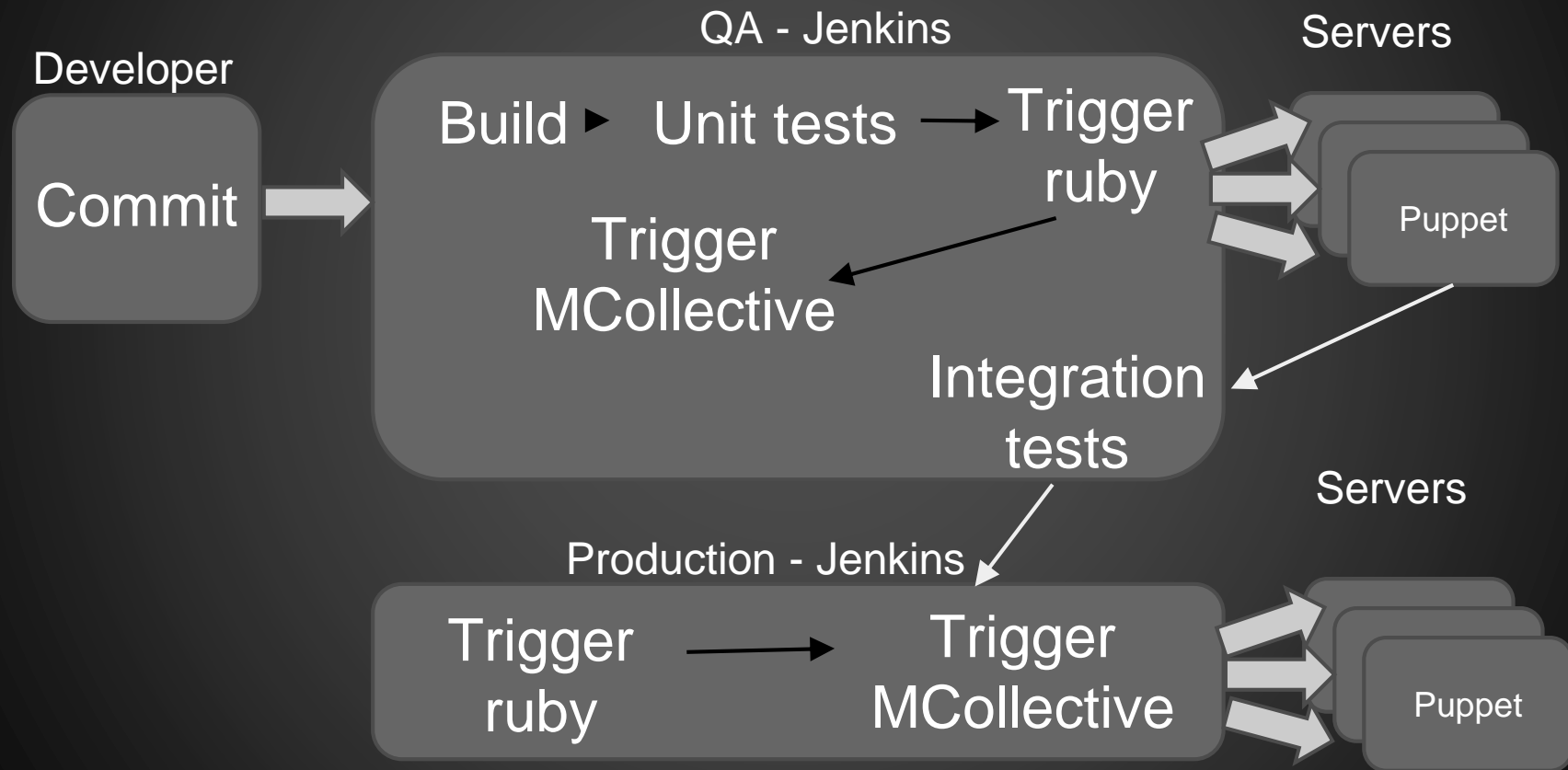
Not good for:

- Deployment
- Orchestration

So we also choose to use:



- Mcollective + Ruby for orchestration
- Puppet for deployment (and more)
- RabbitMQ for connecting between them

Pipeline





In Jenkins



OpenBookSearchAPI Flow

| S | W | Name | Last Success | Last Failure | Last Duration |
|---|---|--|------------------------------------|-------------------------------------|---------------|
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OpenBookSearchAPI Build

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OpenBookSearchAPI Back Deployment

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|  |  | OpenbookSearchAPIBack-its | 5 days 5 hr - #188 | 5 days 11 hr - #184 | 4 min 47 sec |



OpenBookSearchAPI Service Deployment

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OpenBookSearchAPI Integration tests

| S | W | Name | Last Success | Last Failure | Last Duration |
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|  |  | OpenbookSearchAPI-BackService-IntegrationTests | 5 days 6 hr - #122 | 5 days 7 hr - #121 | 2 min 38 sec |

Health Check



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|  |  | health_check_status_check | 1 mo 8 days - #18 | 3 mo 5 days - #5 | 0.32 sec |

OpenBookSearchAPI Publish



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Flow



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Flow



```
out.println 'Starting OpenBookSearchAPI Flow'
```

```
b=build("OpenBookSearchAPI-Build")
```



```
parallel(  
  {  
    build("OpenbookSearchAPIBack-iis")  
  },  
  {  
    build("OpenbookSearchAPI-Service-Stop")  
    build("OpenbookSearchAPI-Service")  
    build("OpenbookSearchAPI-Service-Start")  
  }  
)
```

Build

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Build



- Mercurial
- Build start by trigger
- MSBuild
- NUnit tests + dot cover

Deployment



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Deployment



- Use Ruby for trigger and orchestrate using MCollective
- Puppet do the deployment

Integration tests


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Integration tests



- Canary tests

Health check



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Health check



- What is it?
- Json file that checks dependencies and basic sanity test

Publish



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Publish

- Almost in production
- Build version file as the gatekeeper to production

Production deploy

- Build version file
- rsync

CloudShare

- Jenkins CLI
- Dynamic jenkins agents
- The flow continue the same changes to same flow

Plugins we're using

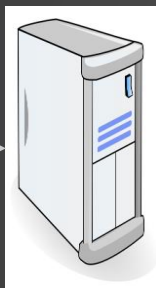
- MSBuild
- HTML Publisher
- Nested View
- Build Flow
- Active directory
- statsd

Our CI/CD servers

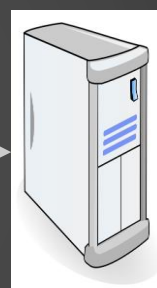
Jenkins
master



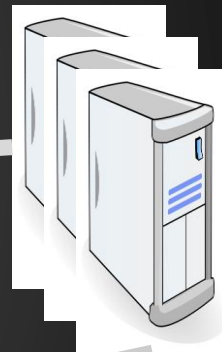
Ruby + MCollective
script



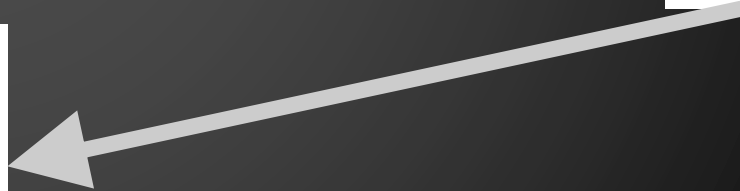
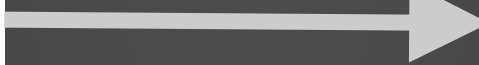
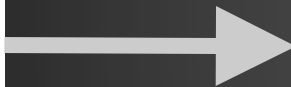
RabbitMQ



WebApp
Servers



Puppet
master



Q&A

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Platinum



Gold



Silver

