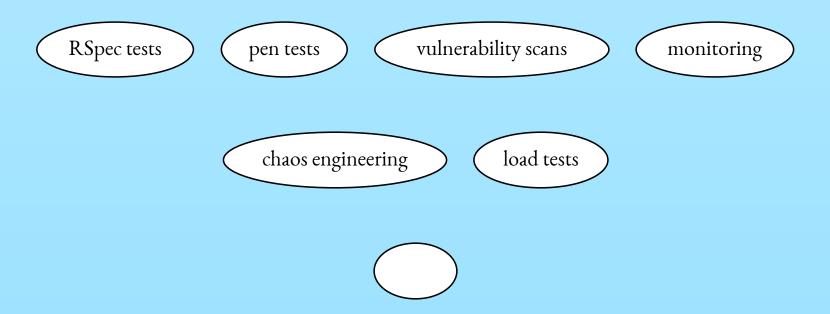
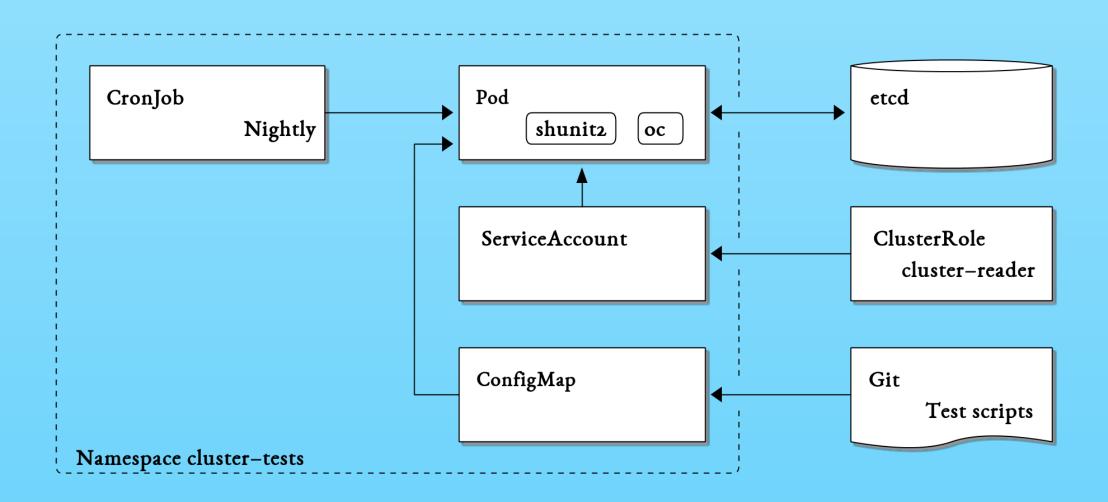
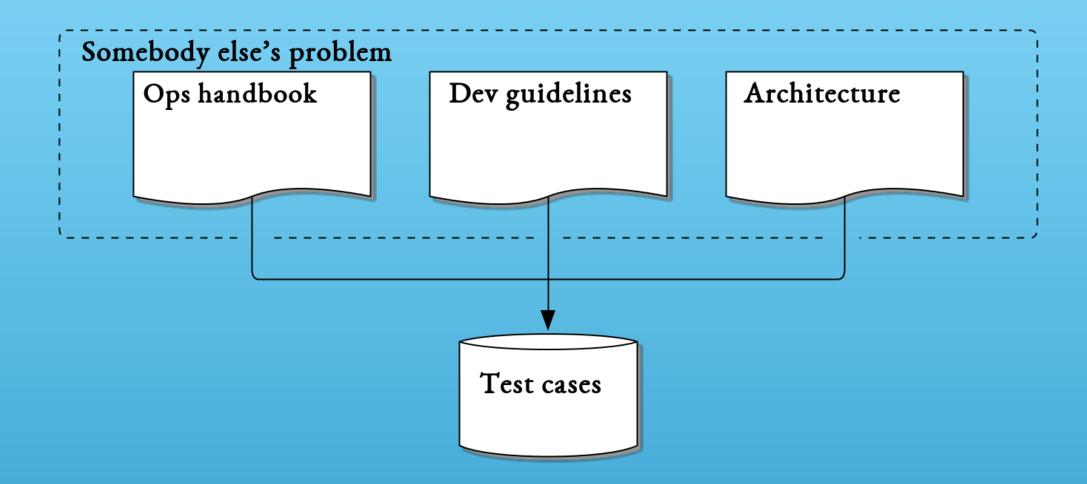
# Infrastructure tests for lazy people



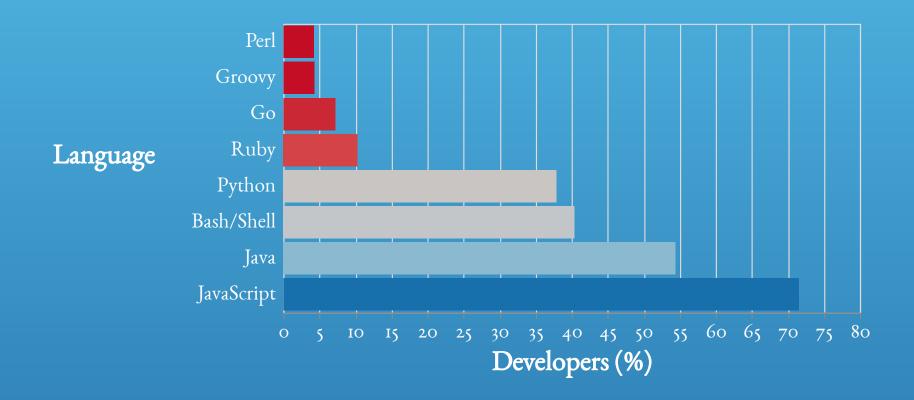
### Let someone else do the testing



#### Let someone else write the brief



### Let someone else write the tests



Source: "Programming, scripting and markup languages", Stack Overflow survey 2018

### Operational handbook

```
test_self_provisioner() {
  count_self_provisioner=`oc adm policy who-can create projectrequests \
        2>/dev/null | grep -c system:authenticated`
        assertEquals " non-admin users must not create project requests;" \
        0 ${count_self_provisioner}
}
suite_addTest test_self_provisioner
```

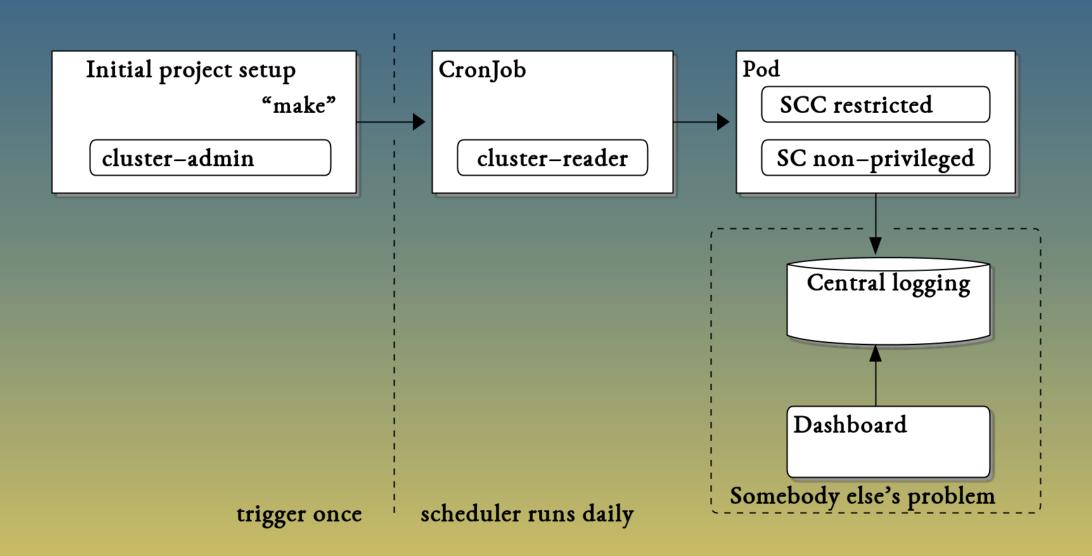
## Development guidelines

```
test_anyuid() {
   scc_anyuid=`oc describe scc anyuid 2>/dev/null`
   for project in ${USER_PROJECTS}; do
      count_anyuid_default=`echo ${scc_anyuid} | \
        grep -c "Users:.*system:serviceaccount:${project}:default"`
      assertEquals \
        " service account default in project ${project} has SCC anyuid;" \
        0 ${count_anyuid_default}
      done
}
suite_addTest test_anyuid
```

#### Architecture

```
test_high_availability() {
  for svc in ${HA_SERVICES}; do
    nodes=`oc get po --all-namespaces -o wide | grep ${svc} | \
      awk '{ print $8 }'`
   zones=""
    for node in ${nodes}; do
      zones="${zones} `oc get node/${node} -L zone | \
        awk '{print $6}' | tail -n +2`"
    done
    zone_count=`echo ${zones} | tr ' ' '\n' | sort -u | wc -1`
    ha=$((zone_count > 2))
    assertTrue " ${svc} must be distributed across 3 zones;" ${ha}
  done
suite_addTest test_high_availability
```

### Let others build the infrastructure for you



#### What's left?

For more information on using this template, see https://github.com/gerald1248/openshift-unit \* With parameters: \* Name=openshift-unit \* Project=cluster-tests \* Schedule=30 0 \* \* \* -> Creating resources ... configmap "openshift-unit" created serviceaccount "openshift-unit" created clusterrolebinding "openshift-unit" created deploymentconfig "openshift-unit" created cronjob "openshift-unit" created limitrange "openshift-unit" created resourcequota "openshift-unit" created --> Success Run 'oc status' to view your app. bash-3.2\$ oc 00:00

## Why do today what can be done tomorrow?

Do use tests to define the desired cluster state

Don't fret if it takes longer than expected to reach it

Do take pride in the work not done

#### Thank you

OpenShift cluster tests gerald1248/openshift-unit

OpenShift project backup gerald1248/openshift-backup

Slides courtesy of markdeck by @arnehilmann arnehilmann/markdeck

