

**RED HAT
SUMMIT**

10 YEARS *and counting*
SAN FRANCISCO | APRIL 14-17, 2014

Running & Monitoring OpenShift Enterprise

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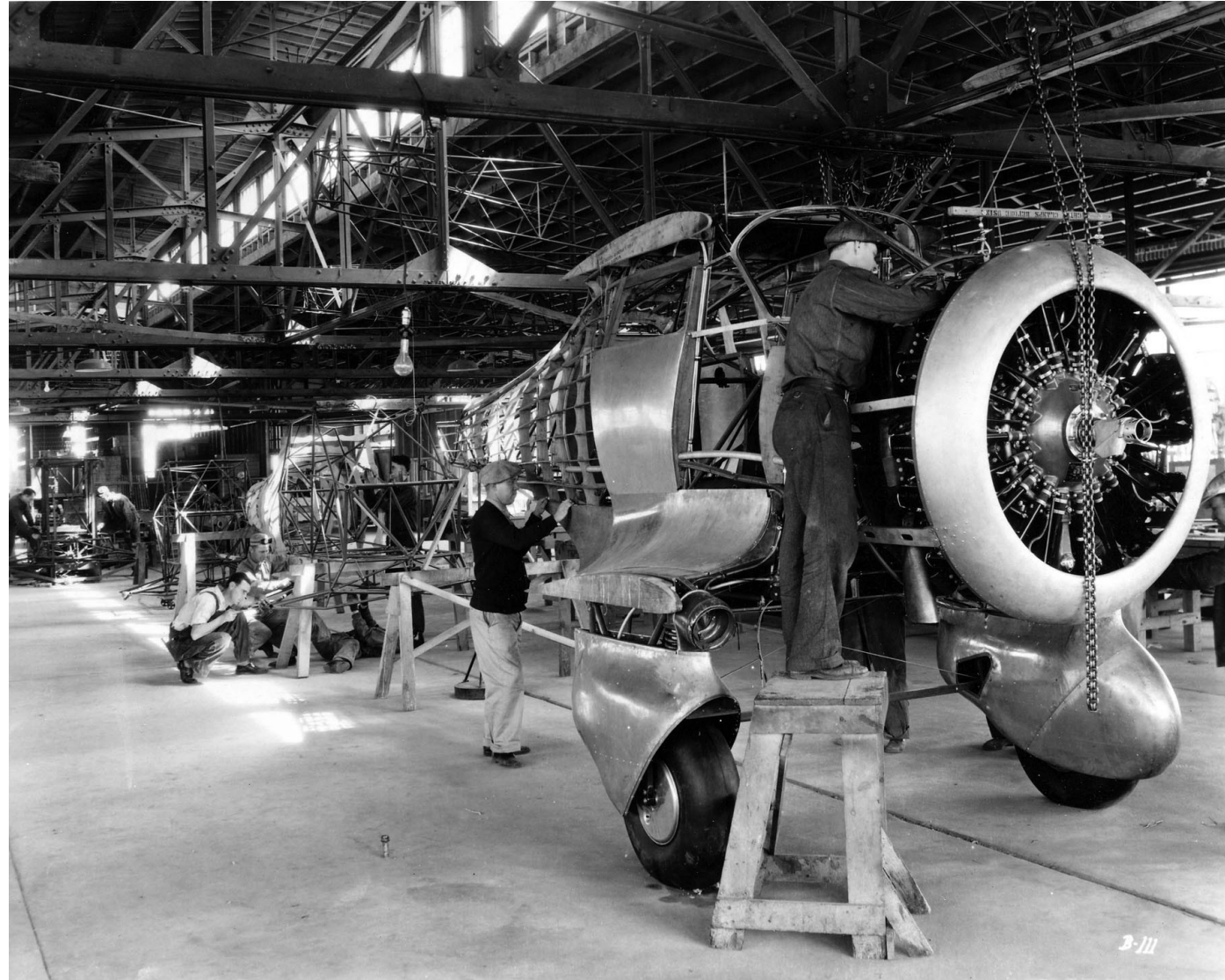
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Keeping the Lights On

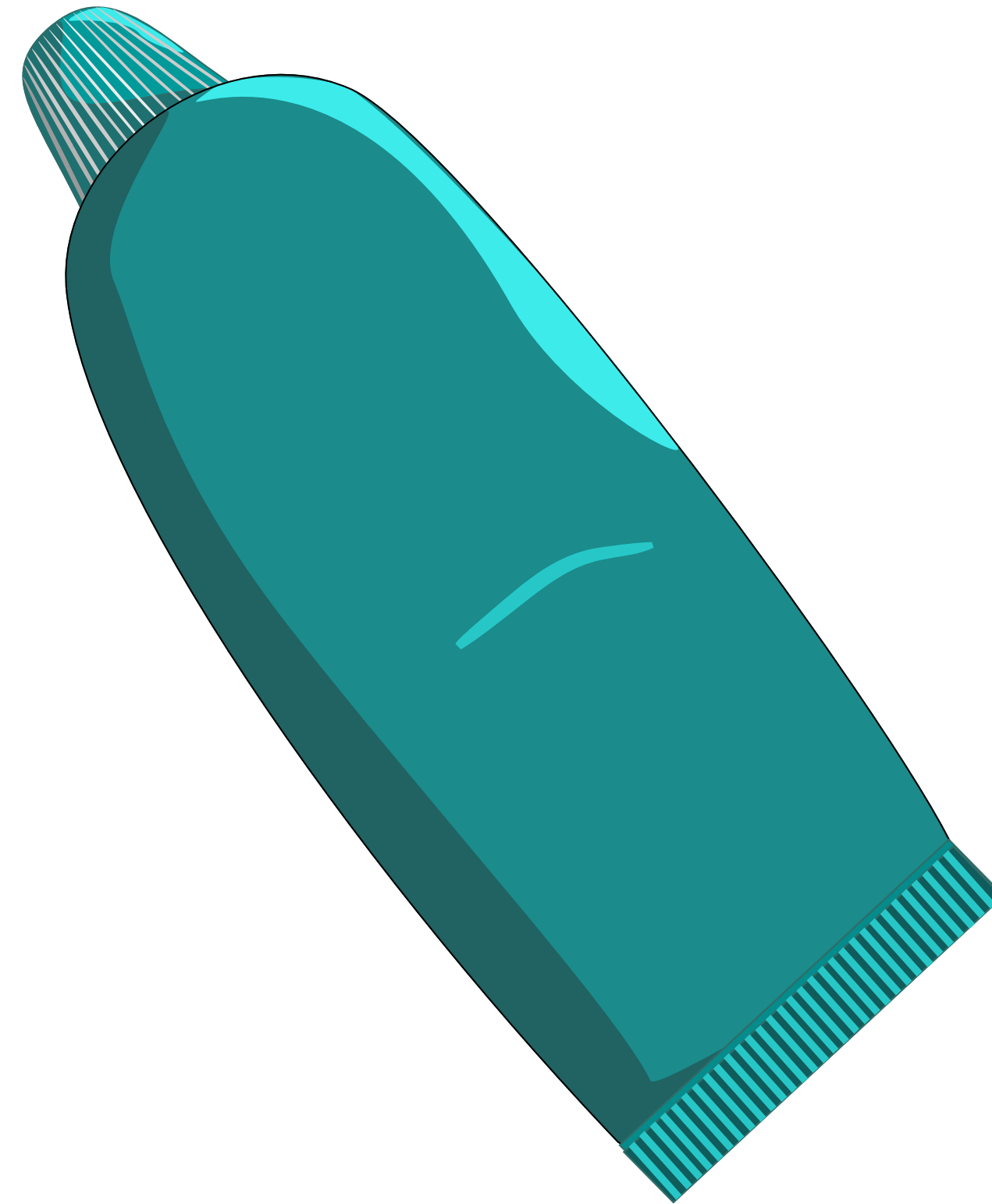
Lessons learned from OpenShift Online

What best describes your job?

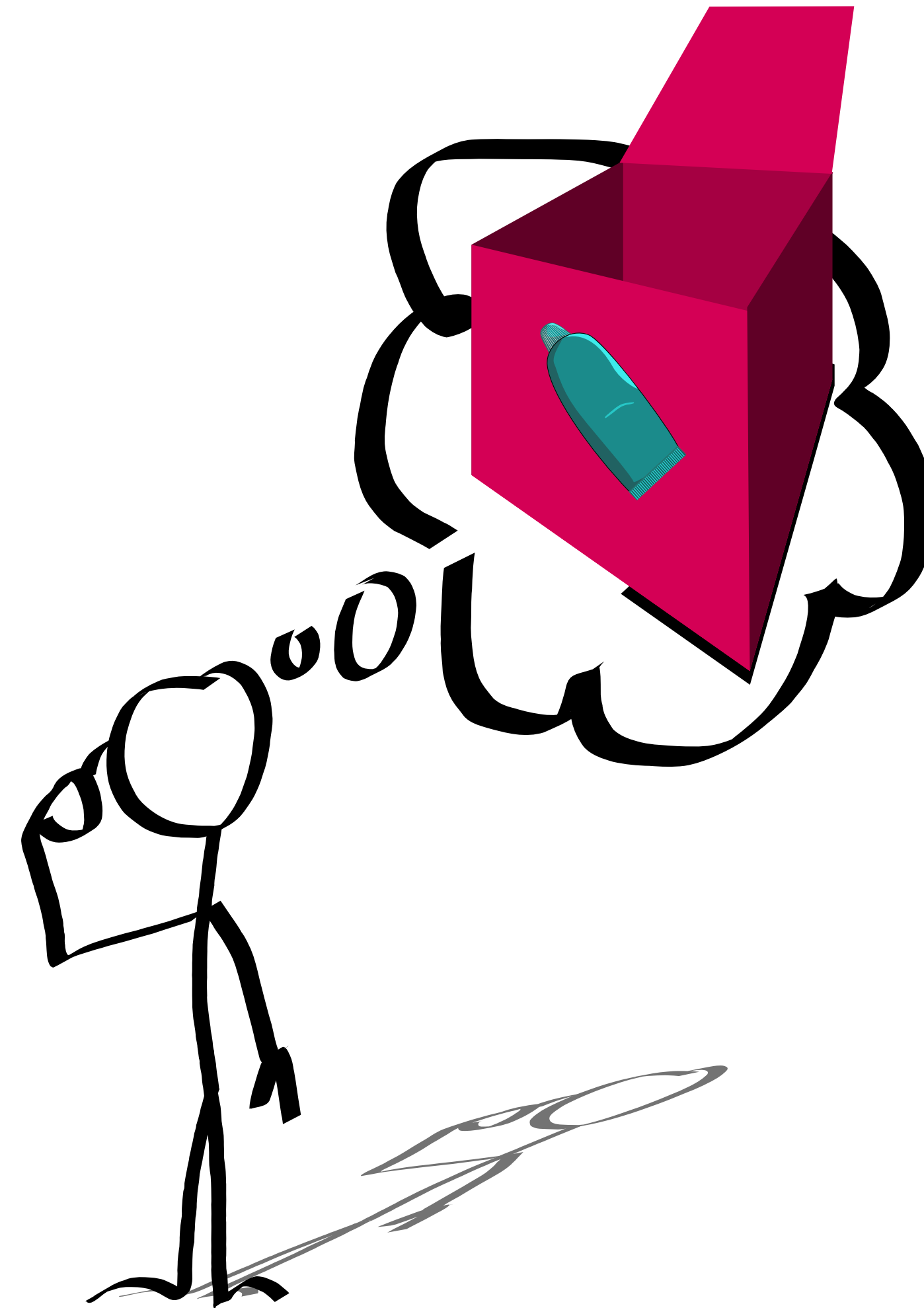


The Toothpaste Factory

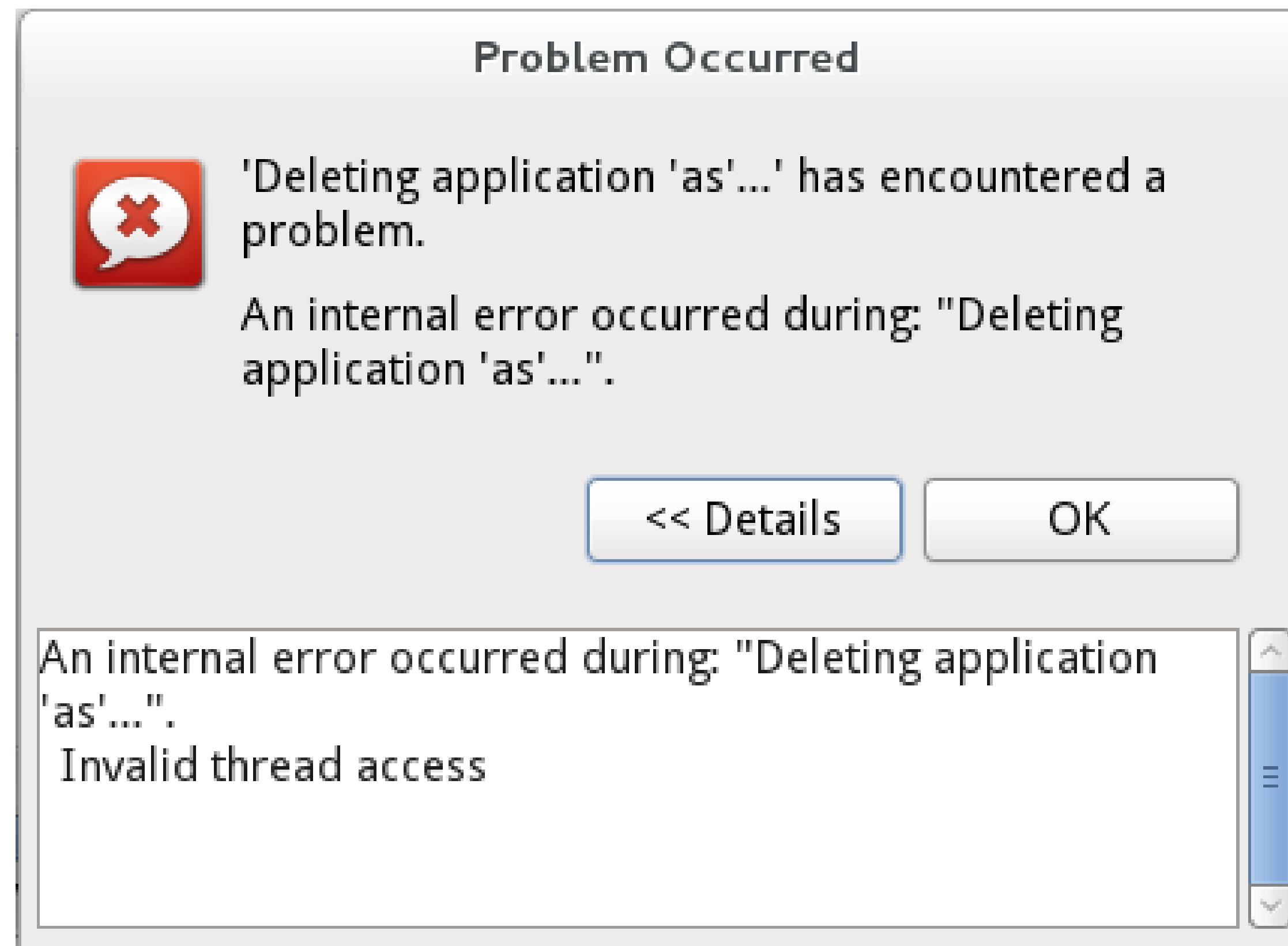
Toothpaste (Pictured below, for teeth brushing)



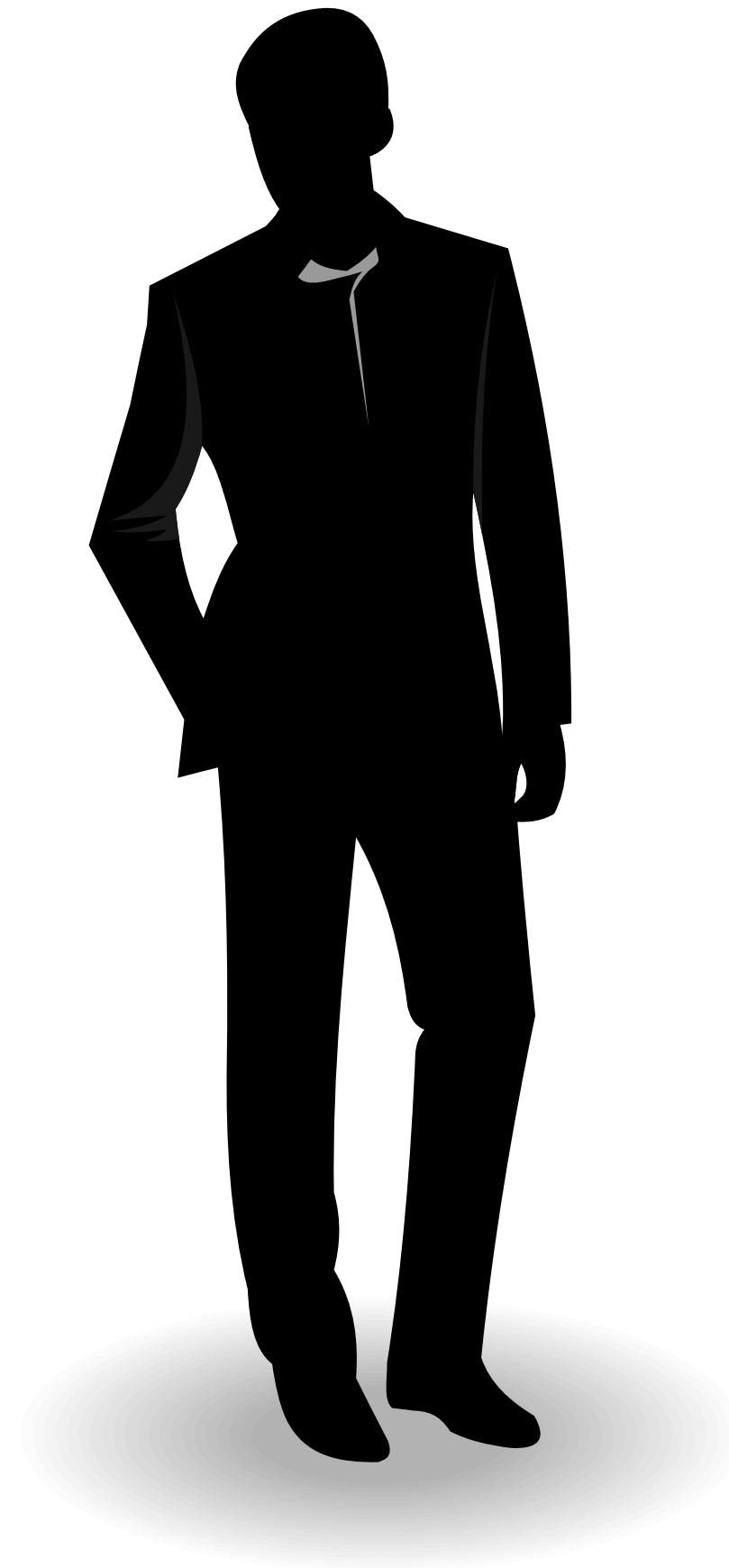
Despite their best efforts, sometimes empty boxes of toothpaste would get shipped to customers.



Sound Familiar?



CEO wants it fixed.

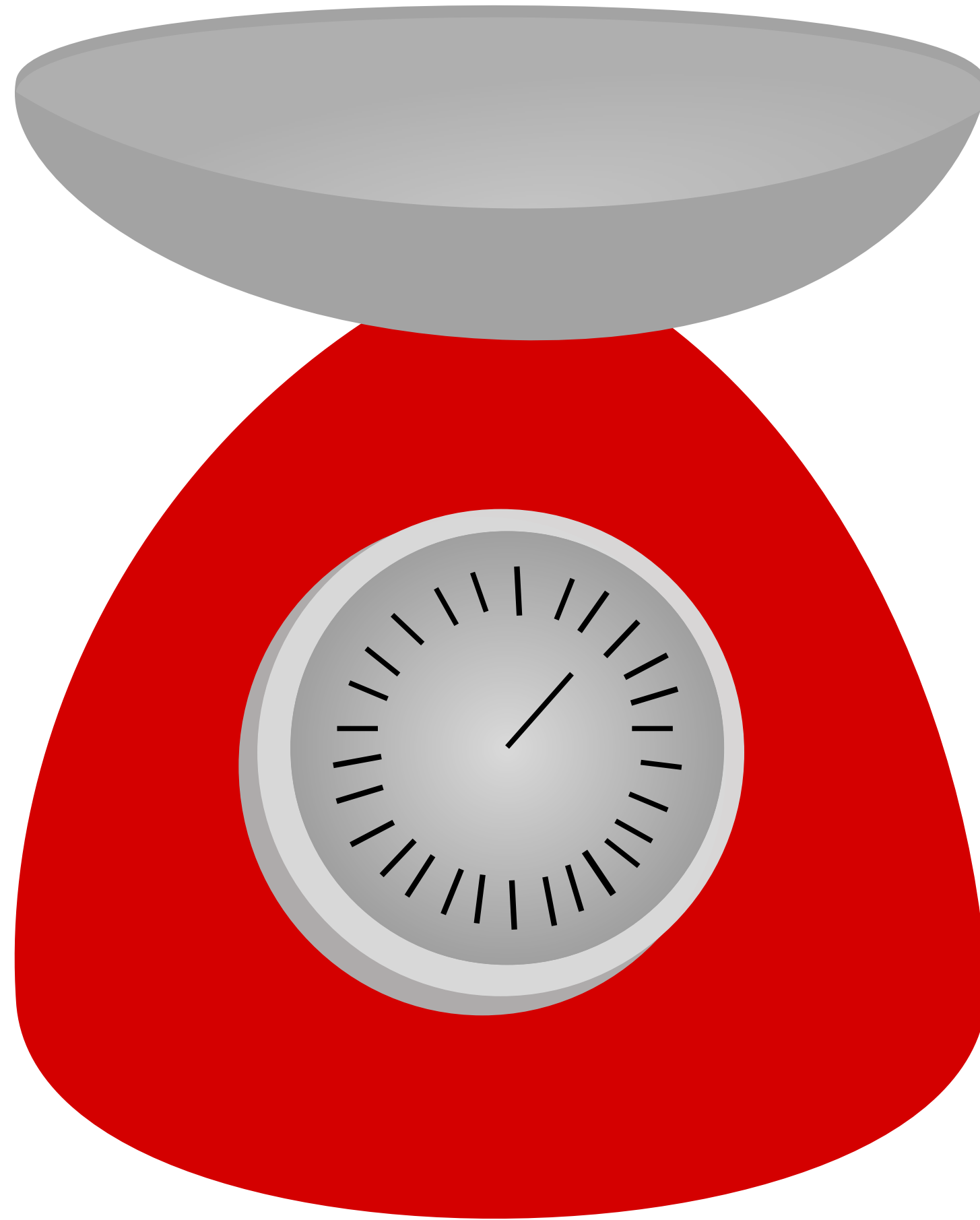


“We've got our top men working on it right now.”

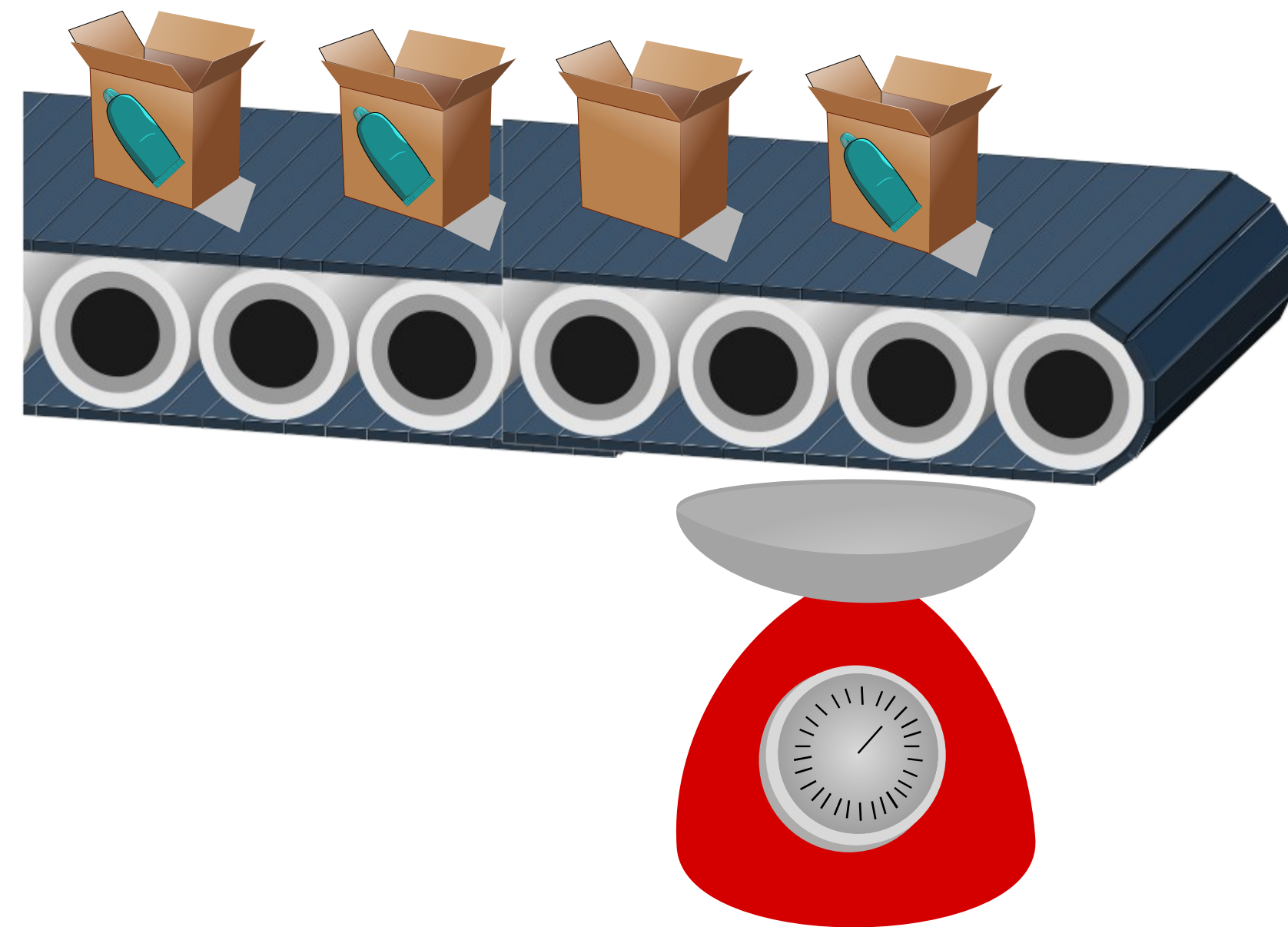


... Top Men

Add a scale to the end of the line to detect empty boxes so they can be removed and not shipped!



Will it work?



What Happened?

- Customer complaints about empty boxes: 0

So success! Much profit!



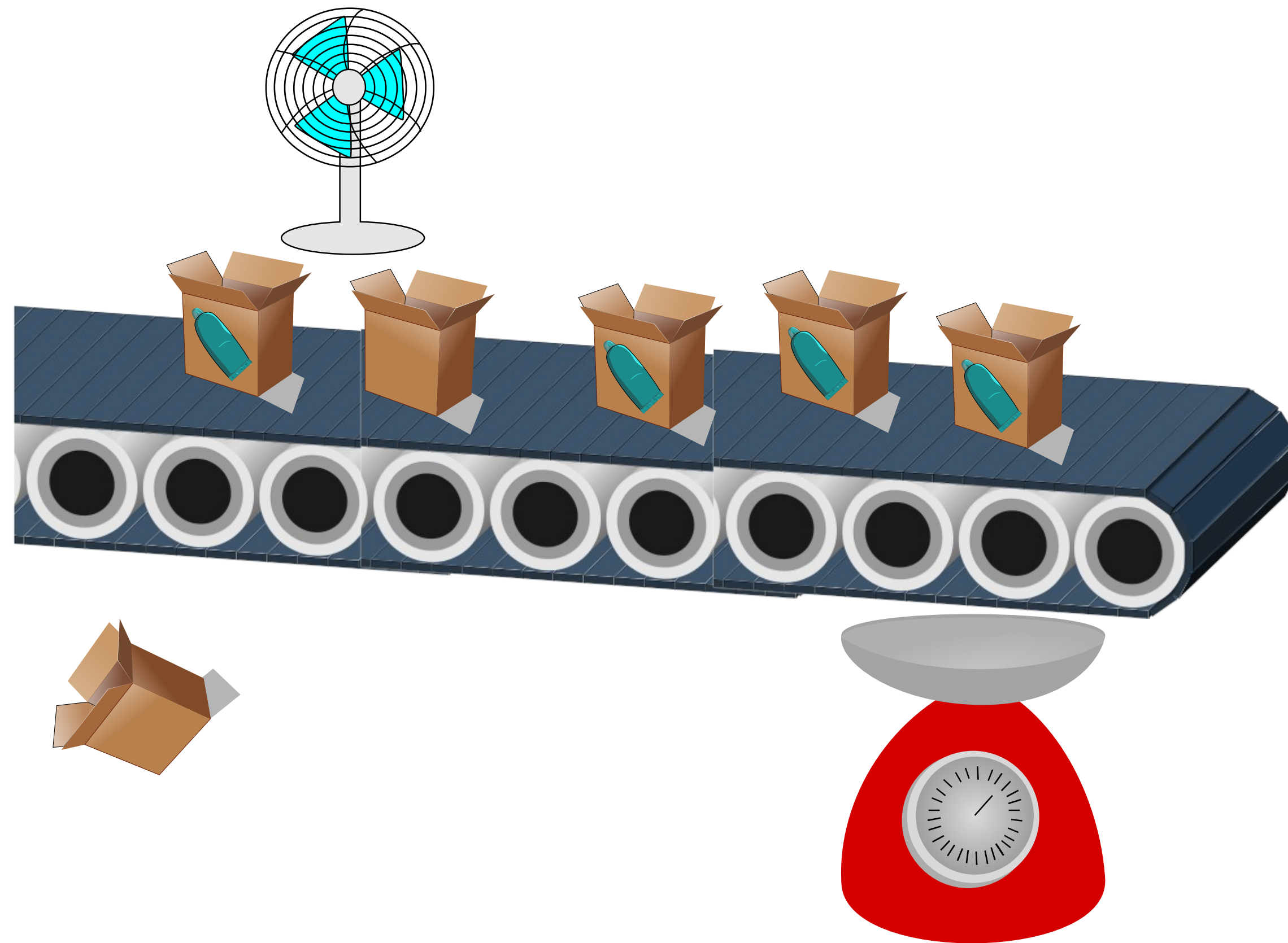
What Happened?

- Customer complaints about empty boxes: 0
- Empty boxes detected by scales: 0

What happened?



What happened?



Adding the scale was simply not enough!



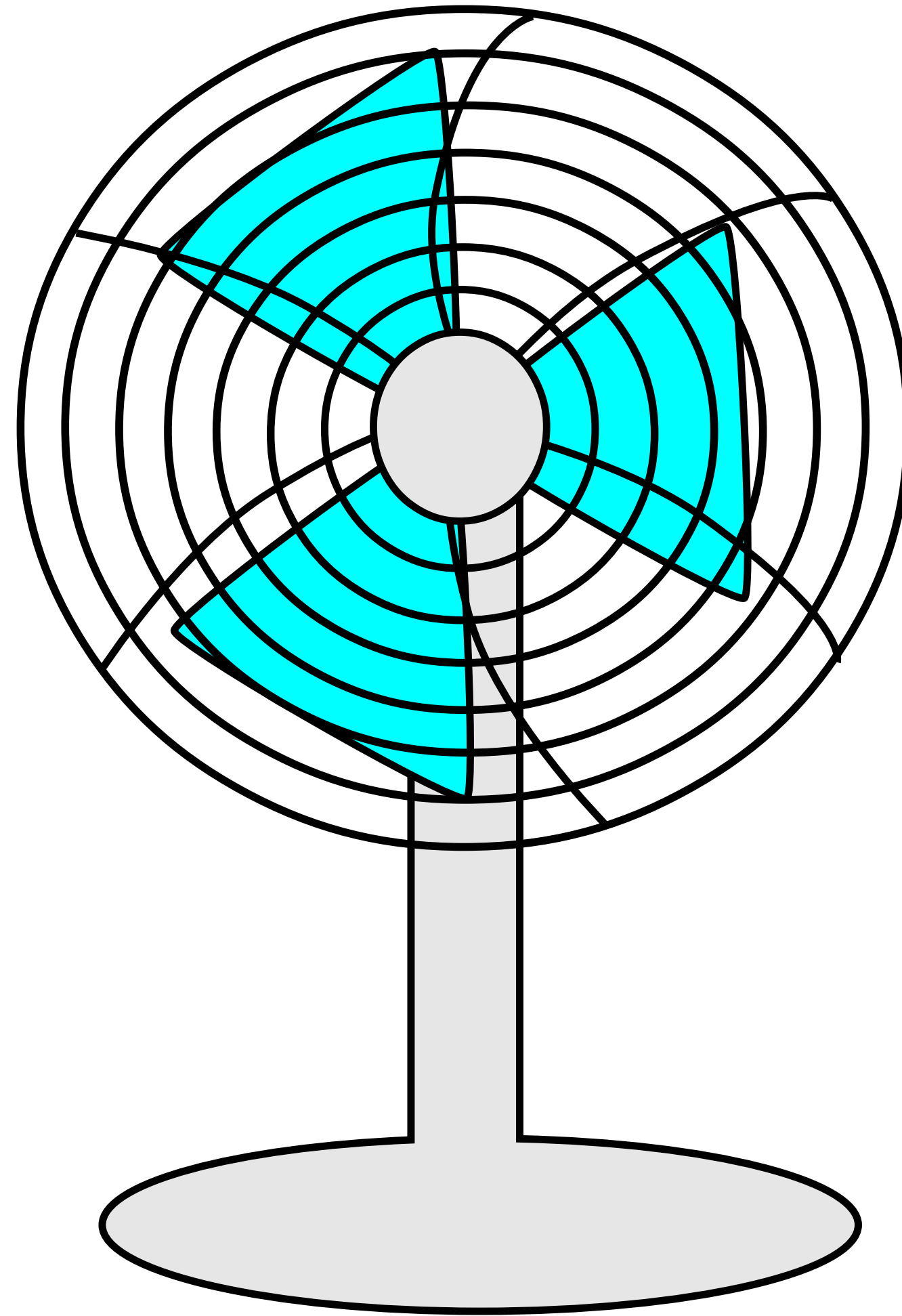
Your job is to build and maintain tools to do the work for you.



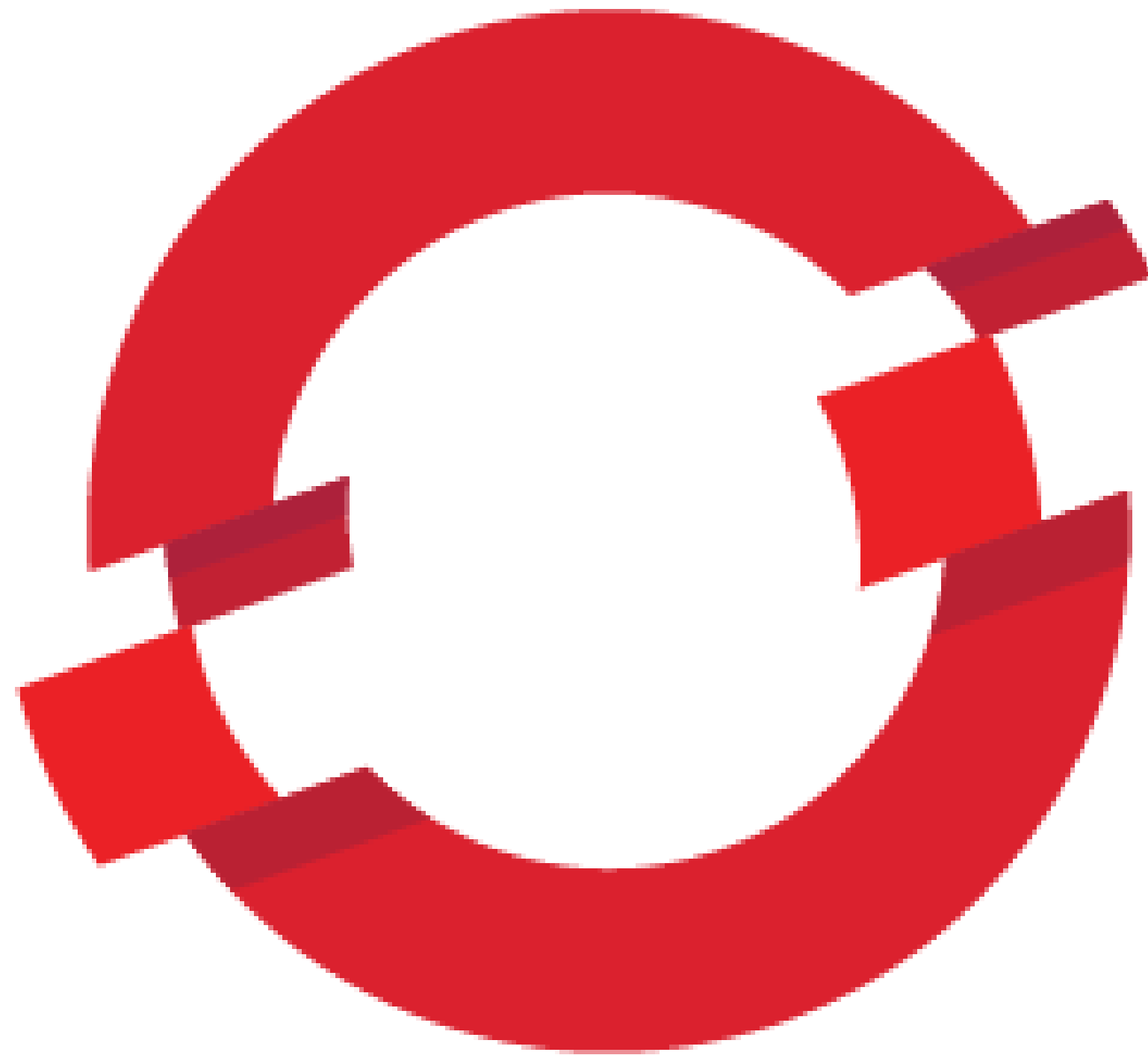
You, after today.



Tools don't always need to be super complicated.

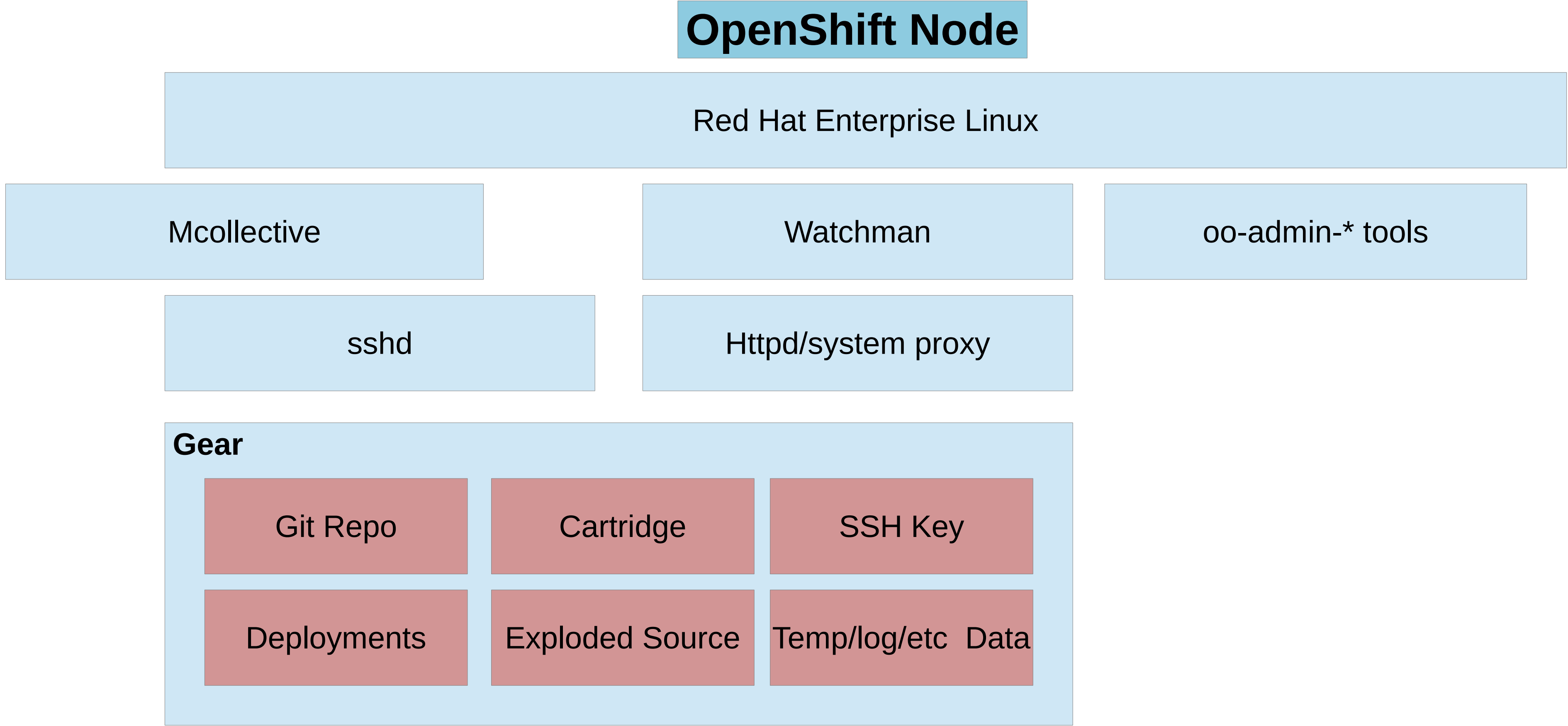


How does OpenShift Help?



OPENSHIFT

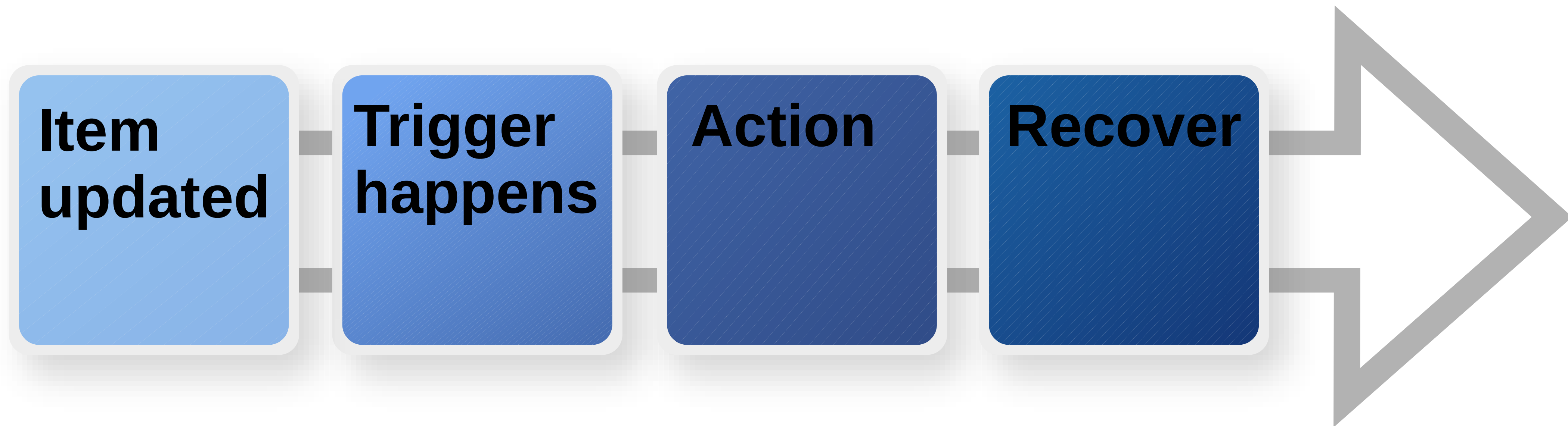
Looking at different components of the node.



How OpenShift tech ops is using Zabbix to monitor node health.

Number of items (monitored/disabled/not supported)	118395	109573 / 6240 / 2582
Number of triggers (enabled/disabled)[problem/unknown/ok]	58154	57100 / 1054 [127 / 0 / 56973]
Number of users (online)	23	14
Required server performance, new values per second	556.27	-

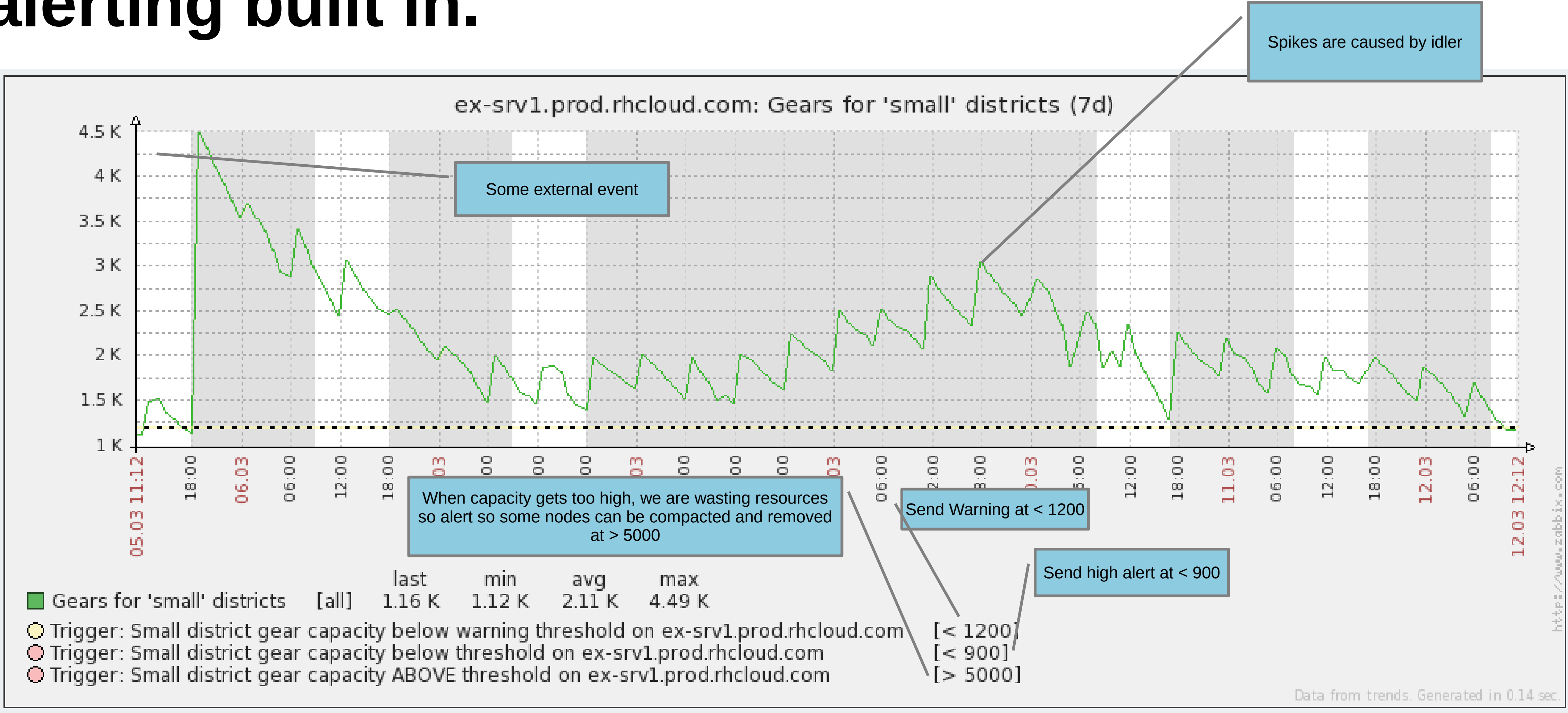
Basic automation workflow in Zabbix once a problem has occurred



OpenSourced Zabbix monitoring scripts are available on github.

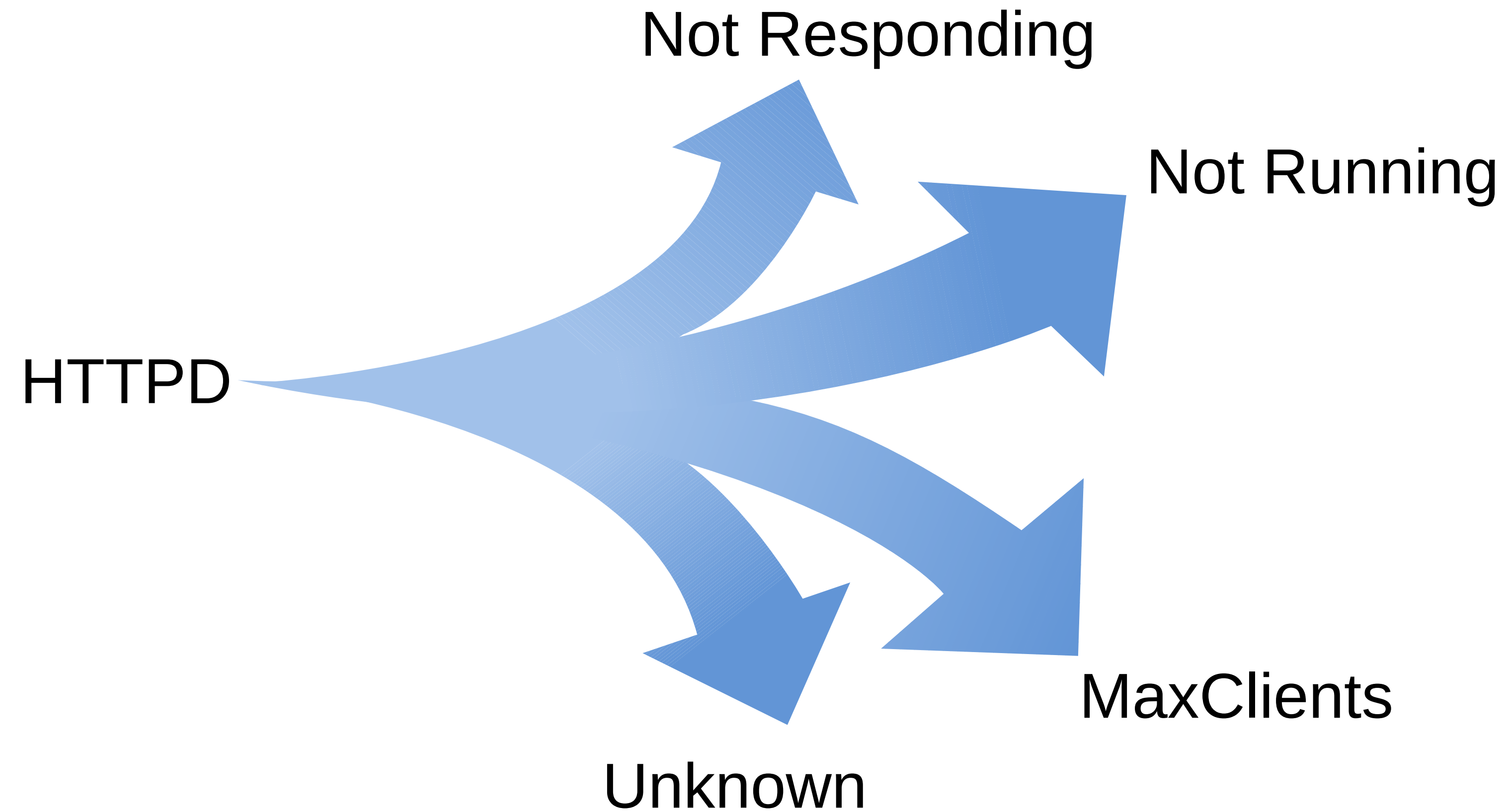
https://github.com/openshift/openshift_zabbix

Looking at available gear capacity for with alerting built in.



Lets talk about common problems.

System process is not “functioning”?



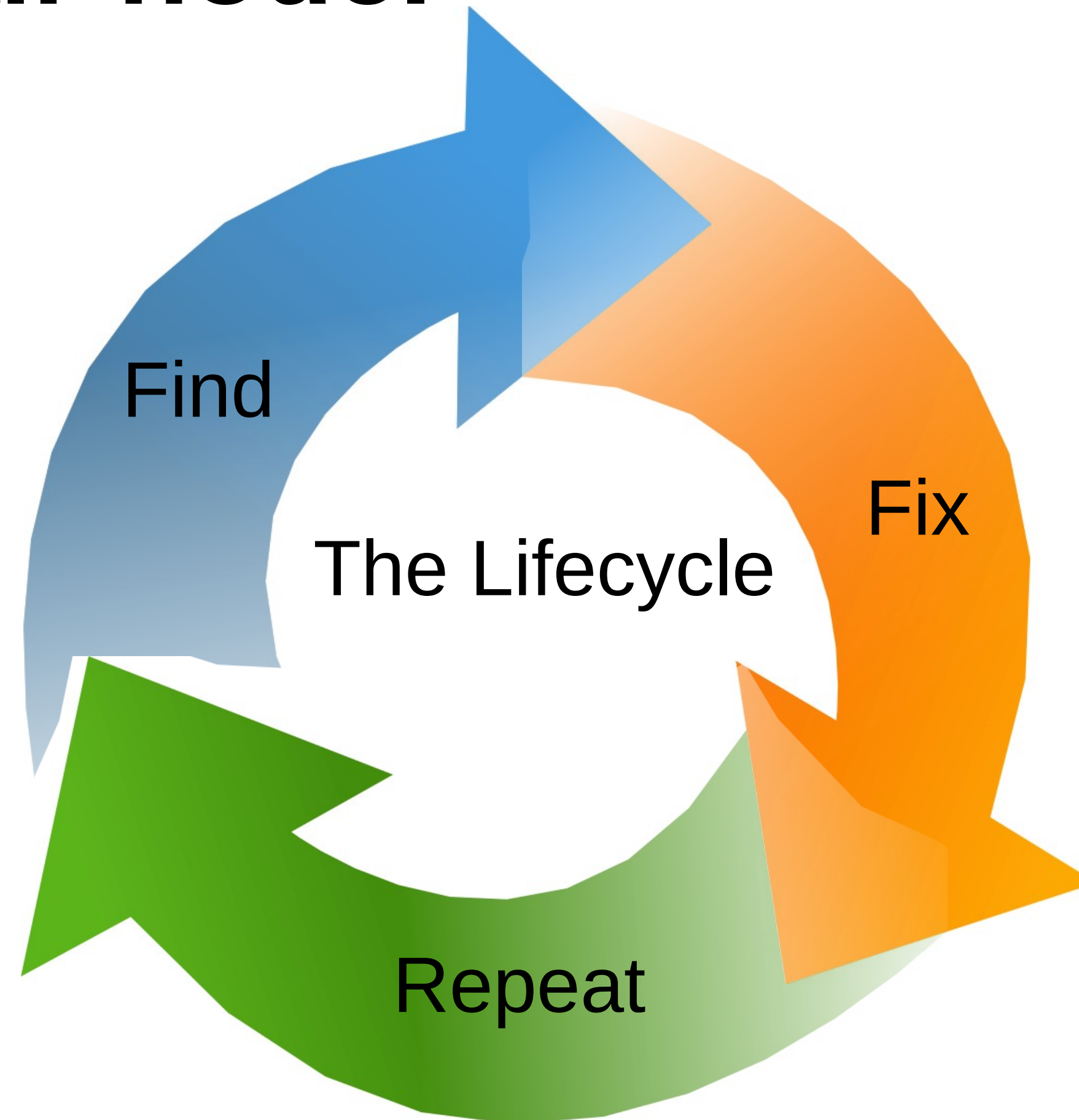
CPU or resources on a node exhausted?



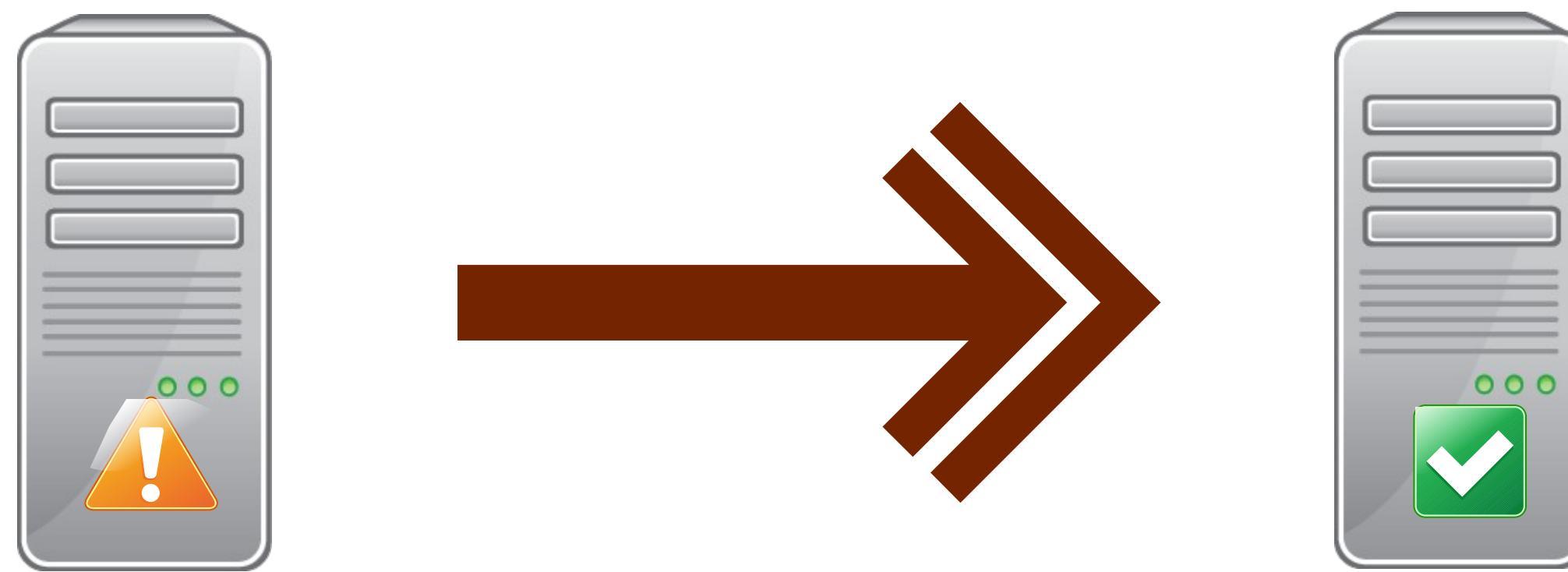
Pseudo-unresponsive node, ssh may fail but other services succeed.



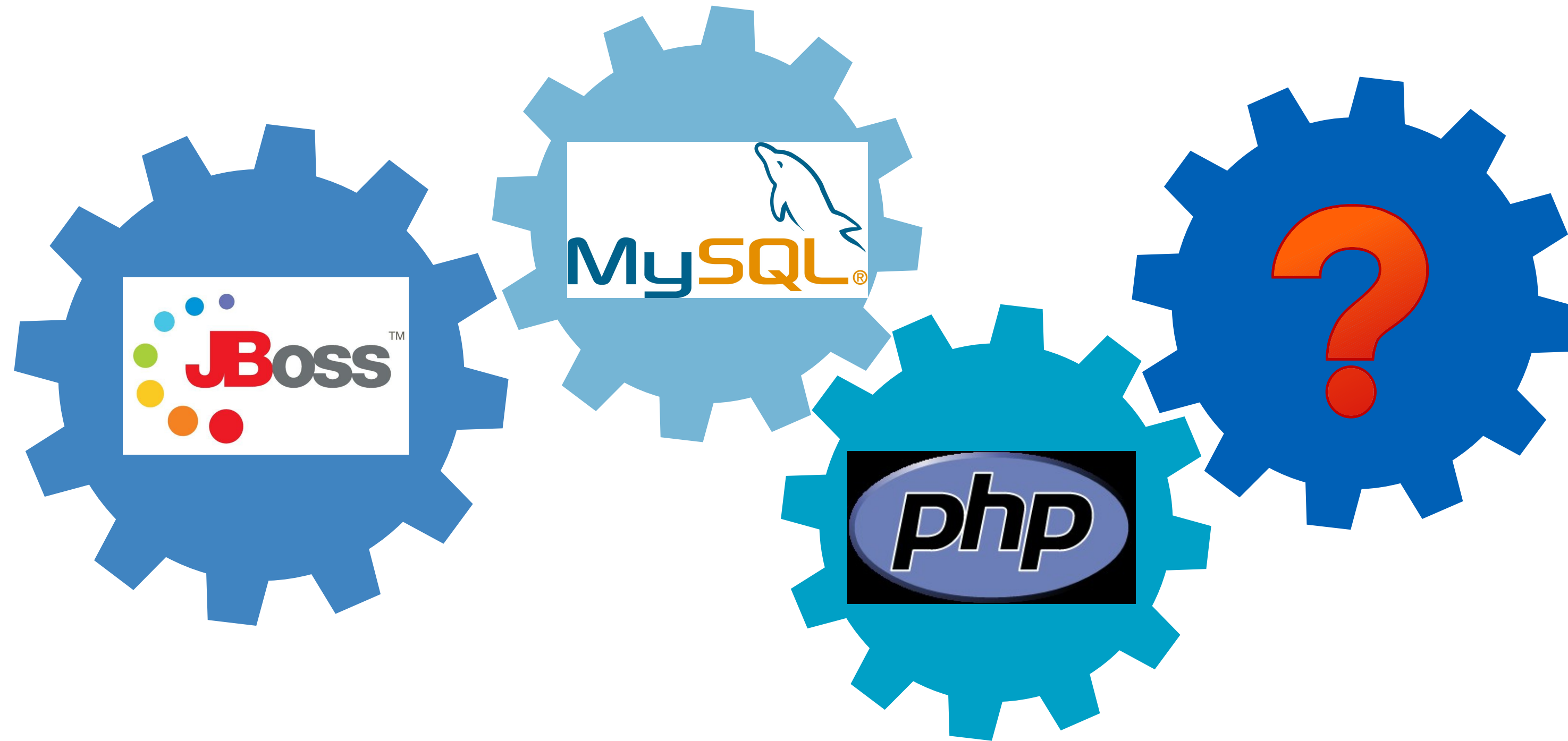
Maintain sanity and consistency with oo-admin-chk and oo-repair-node.



How do we deal with security updates?



What should you do about problems inside the gear?



Attributions

- Robot Arm - http://commons.wikimedia.org/wiki/File:Automation_of_foundry_with_robot.jpg
- Andros lends a hand - http://commons.wikimedia.org/wiki/File:Andros_lends_a_hand.jpg
- Beechcraft Swaggerwing production line - http://commons.wikimedia.org/wiki/File:Beechcraft_Staggerwing_production_line.jpg
- Toothpaste - <http://openclipart.org/detail/170235/pasta-de-dientes-by-ppgomez>
- Empty Box - <http://openclipart.org/detail/5173/empty-box-thinking-by-bsantos>
- Oppenheimer - <http://commons.wikimedia.org/wiki/File:Oppenheimer.jpg>
- Scale - <http://openclipart.org/detail/181397/red-analog-scale-by-rdevries-181397>
- Conveyor Belt - <http://openclipart.org/detail/25734/conveyor-belt-by-markroth8>
- Open Cardboard Box - <http://openclipart.org/detail/1458/open-cardboard-box-by-jack123>
- Doge Meme - <http://i2.kym-cdn.com/photos/images/original/000/581/296/c09.jpg>
- Sleepy Thailand - [http://commons.wikimedia.org/wiki/File:Thailand_\(1960336961\).jpg](http://commons.wikimedia.org/wiki/File:Thailand_(1960336961).jpg)
- Fan - http://openclipart.org/detail/191035/fan_2d-by-loveandread-191035
- OpenShift Error - <https://issues.jboss.org/browse/JBIDE-10941>
- Business man vector - <http://openclipart.org/detail/184756/business-man-vector-by-waider-184756>
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