

Teaching Zabbix



Raymond Kuiper





Teaching Zabbix

Our topics for this talk:

- About me
- What are we going to discuss?
- The problems
- My proposal
- Take a sample

About me

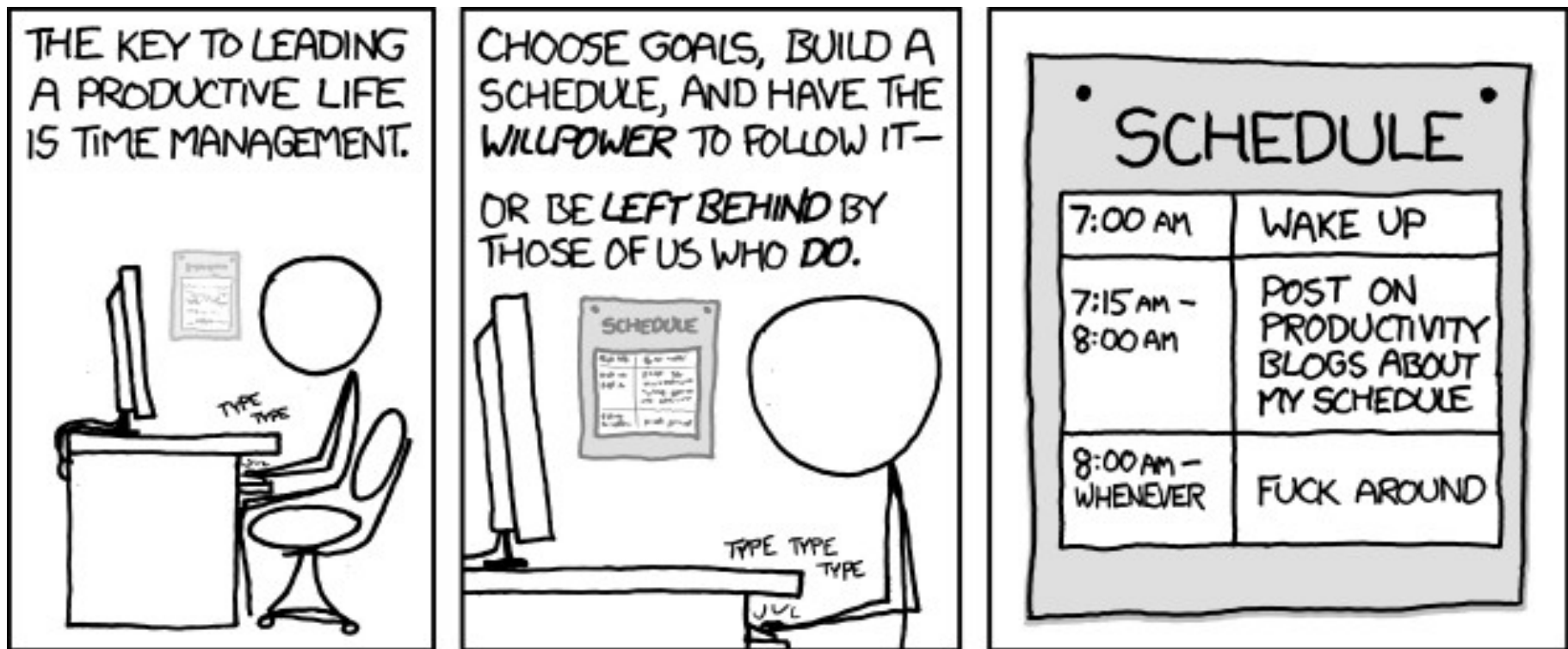
Raymond Kuiper

- Infrastructure Specialist at Competa IT
- Owner / consultant at Qixia
- Cisco / Linux guy
- Working with Zabbix since 2006 (v1.1.3)
-  <http://nl.linkedin.com/in/raymondkuiper>
-  RaymondKuiper



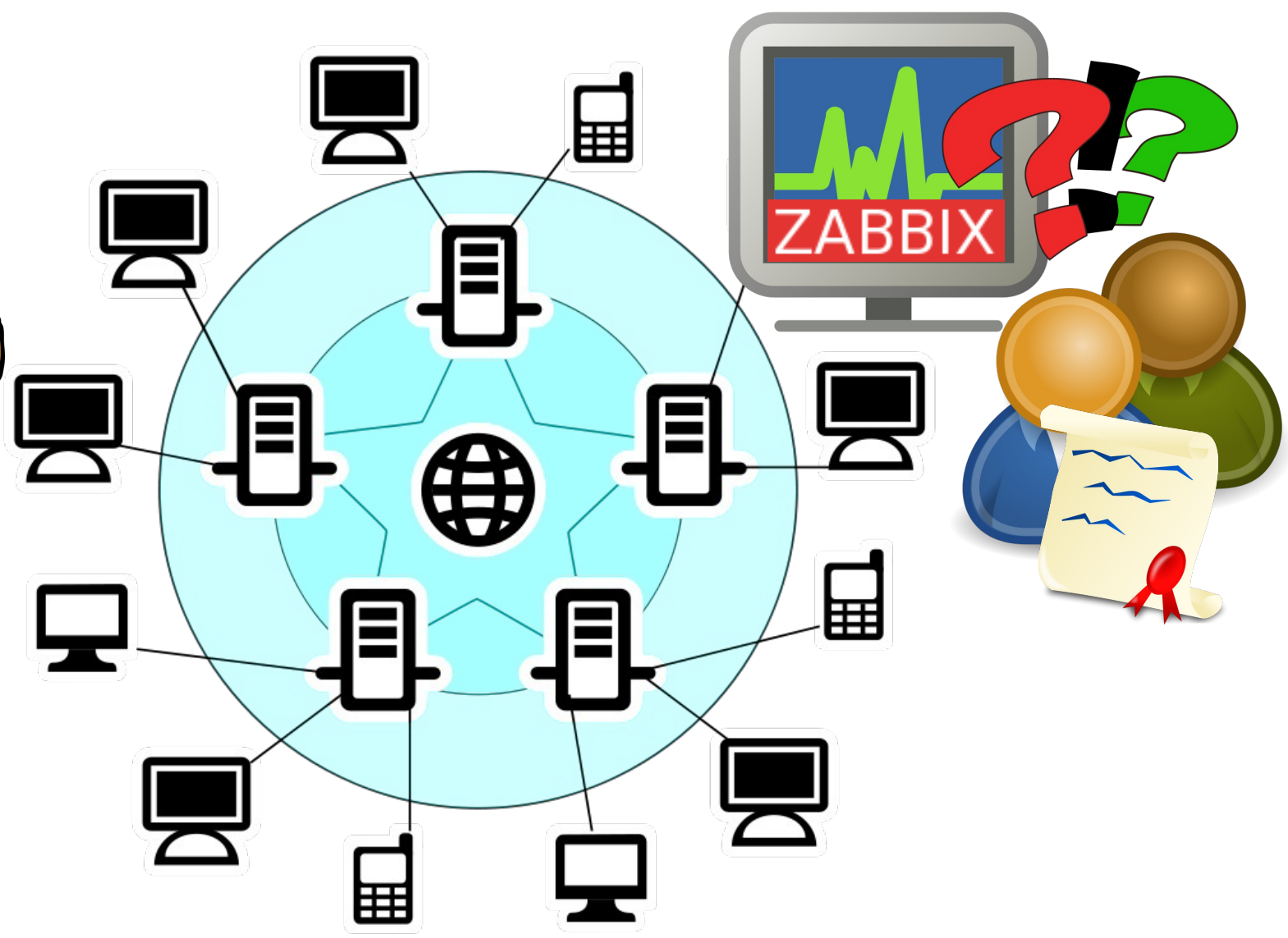
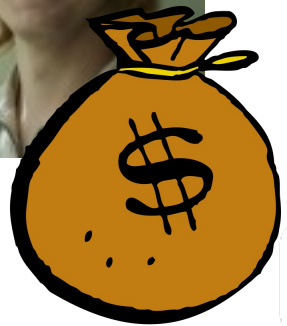
What are we going to discuss?

Does my story sound familiar?



<http://xkcd.com/874>

A solution: Scenario



A solution: The problems

What are the problems with this approach?

- It is expensive (but may be worth it)
- Your people might become overcertified for what they need to do

(You don't need to know how to setup and tune Zabbix to operate it)

- They learn the general approach, normally not specific for your environment.

My proposal

I propose to do the following:

- Start up a community effort to fill in this gap (minimize overlap with certification course)
- Use Zabbix.org as a base for course development
- Provide courseware for topics not handled by the Zabbix certification courses
- Start from the materials we already have
- Release everything under a free CC license so people can customize and share

My proposal

Added Bonus:

The community gains a nice interactive introduction for new users to get acquainted with Zabbix

My proposal

What do we have right now:

- A simple tutorial on some basic concepts

http://repos.competa.com/Download/zabbix_talk.pdf

- Accompanying lab exercises

http://repos.competa.com/Download/zabbix_lab.pdf

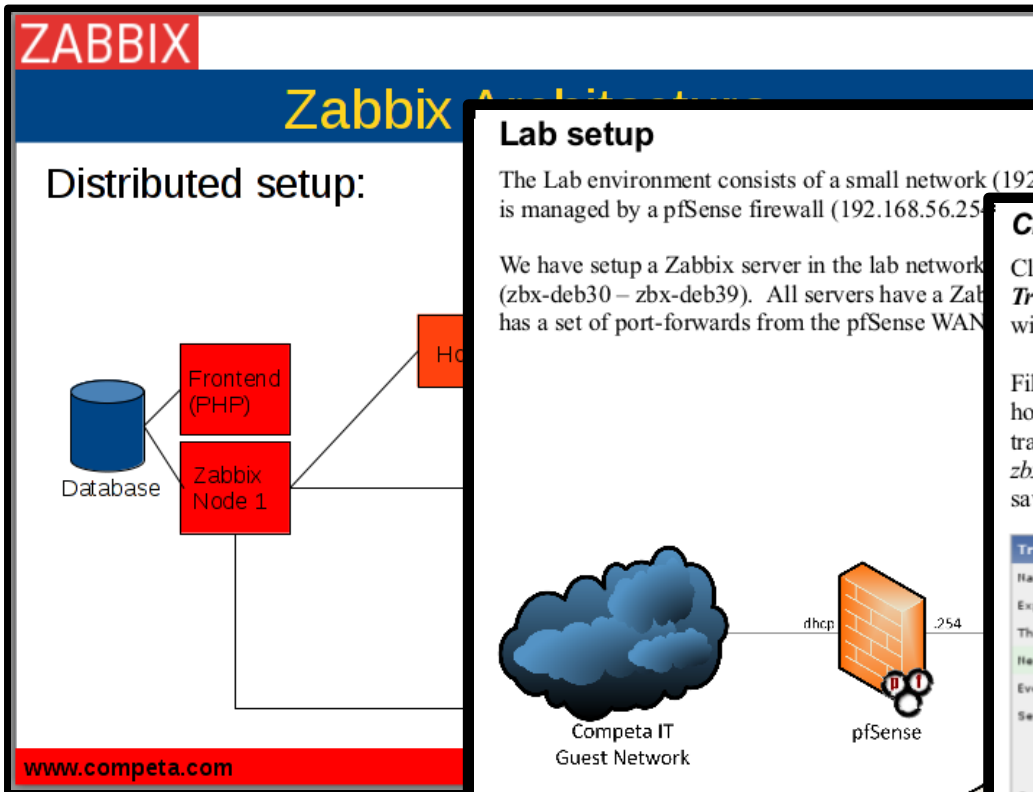
- Virtualmachines to build the lab

<http://repos.competa.com/Download/zbx-lab1.tar.bz2>

<http://repos.competa.com/Download/zbx-lab2.tar.bz2>

My proposal

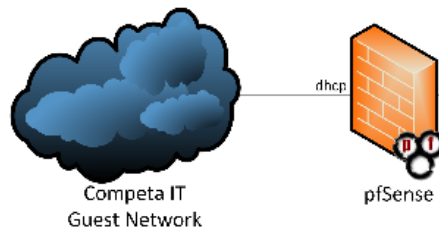
Screenshots:



Lab setup

The Lab environment consists of a small network (192.168.56/24). Access to and from the network is managed by a pfSense firewall (192.168.56.254).

We have setup a Zabbix server in the lab network (zbx-deb30 – zbx-deb39). All servers have a Zabbix agent installed. The Zabbix server has a set of port-forwards from the pfSense WAN interface.



Every team in the classroom will be assigned a network. This number corresponds with the Debian server address. The last part of the name of your zabbix administrator account will be the same as the network number.

Creating a trigger

Click on **Configuration** in the top bar of the navigation bar. Then proceed to **Hosts** and click on the **Triggers** link to the right of your host. The trigger configuration screen will open, but of course this will still be empty. Now click on the **Create trigger** button on the right of the screen.

Fill out the fields with the values below to create your trigger. Please remember to change the hostname in the *Expression* field to the name of your assigned host. The expression we see here translates to “Trigger the alert if the *last* value retrieved for the item *system.cpu.util[]* on the host *zbx-deb30* is more than *80*.” When you have verified all the values for the fields are correct, click save.

The screenshot shows the Zabbix Trigger configuration interface. The fields are filled with the following values:

- Name:** CPU utilization on {HOSTNAME} is above threshold
- Expression (Toggle input method):** {zbx-deb30:system.cpu.util[],last(0)}>80
- The trigger depends on:** No dependencies defined
- Item dependency:** Add
- Event generation:** Normal
- Severity:** Average
- Comments:** (Empty text area)
- URL:** (Empty text field)
- Disabled:**

Buttons for **Save** and **Cancel** are visible at the bottom right.



The trigger expression language in Zabbix is very powerful! For a description on the way expressions are build and the functions you can use, check out the manual: <http://www.zabbix.com/documentation/1.8/manual/config/triggers>

My proposal

Where do we go from here:

- Decide on topics to address and prioritize them
- Edit the material so it is suitable in the new community concept
- Create new courses and materials according to priority and/or community demand



Take a sample

Grab your laptop and start trying!



Lab Exercises



Thanks for attending!