

Kanban for IT Operations

Obligatory Narcissism Slide

- Lead Architect, Peak Hosting
- ~17 years in IT
- Mostly “Ops”
- Maybe a little “Dev”
- Agile Fanboy

What is Operations

- System Administration
- Network Engineering
- Security
- Datacenter Mgmt.
- Troubleshooting
- Logistics
- Procurement
- HR Stuff
- Finance
- Management

Operations, we keep the lights on!

The Problem

- Obstructionists
- Over Budget
- Behind Schedule
- Unfinished Projects

The Problem

- Capacity != Free Time
- Squeaky Wheel Conundrum
- Humans Suck at Task Switching
 - Let's test this!

Agile to the rescue!

What is Agile

...we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

A Tale of Two Methods

Kanban

- Event Driven
- State Constrained
- Constant Reprioritization
- No formal roles
- Constant state
- Single/cross-function teams
- No item size requirement
- No hard commitments

Scrum

- Time Driven
- Time Boxed (Sprints)
- Don't Change Sprints
- Prescribed roles
- Reset between sprints
- Cross-functional teams
- Items must fit in a sprint
- Estimation is necessary

What is Kanban



Push vs. Pull



Why Kanban for Ops?

- We're Hard to Time Box
- Can't Typically Visualize Our Work
- Too Much Context Shifting
- Priorities Shift, a lot
- We (Typically) Suck at Estimating
- Metrics

How

- Get a “Board”
- Define States
- Put Our Work in Inventory
- Limit Work In Progress
- Review, Revisit, Revise
- Stop starting, start finishing!

Other Tools

JIRA

29 Backlog

53 In Progress

22 Waiting

11 Done

Release...

Intel NICs for 4 SQL hardware servers

Castfire SAN Wipe

TP-1712 Decommission Servers: Active Forever - MLP1 - 07/28/...

TP-1716
- CSSA - Remove device from Load Balancers/Firewalls

5 issues

CE-467
- Evolve: Performance issues

CE-608
- Evolve Hardware Error Monitoring

CE-381
+ Luminoso - Custom backup solution, IAD2

CE-452
- Luminoso: rsync setup and monitoring

CE-580
- Setup GPG signing process for Luminoso

9 issues

CE-268
- Upgrade Xirrus to Vsphere 5.5

TP-1312
- Scorebig Hyper V Migration

CE-284
- EdgeMac Hitachi to EMC Migration

CE-462
- Research how to create daily/week report from EMC on storage situation.

CE-416
- Create Server Build Checklist for ScoreBig.

CE-422
- HealthCheck and StatusCheck for Udutu.

CE-485
- Ensure all of EdgeMac's servers are in Nagios.

CE-532
- Install MS patches on Scorebig's VMH04, 05, and 07.

Trello

The image shows a Trello board interface with a blue header and a blue background. The board is titled "LOPSA Etenn Presentation" and is marked as "Private". It is organized into four columns: "Backlog", "Scheduled", "In Progress", and "Done".

- Backlog:** Contains three cards: "Distribute Slides to People Who Want Them", "Get Feedback on Presentation", and "Go get some beer after an awesome presentation." Below the cards is an "Add a card..." button.
- Scheduled:** Contains one card: "Give Talk at LOPSA". Below the card is an "Add a card..." button.
- In Progress:** Contains two cards: "Do some Trello Demos" and "Take Some JIRA Snapshots". Below the cards is an "Add a card..." button.
- Done:** Contains one card: "Make Slide Deck". Below the card is an "Add a card..." button.

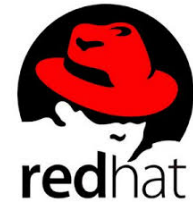
Kanbanize

The screenshot displays the Kanbanize web application interface. At the top, a blue navigation bar contains the user profile 'anonymousbadger', the current project path 'Projects / My First Kanban Project / My First Kanban Board (click to open)', a search bar, and links for 'Administration', 'Notifications', and the user name 'jwvynkoop'. Below the navigation bar, a secondary bar shows the board name '1rst Kanban Board (click to open)', utility icons for 'Invite Users', 'Open Analytics', and 'Edit Board', and a notification: 'You have 1000 free events left: Upgrade'. The main workspace is a Kanban board with three columns: 'Requested [2/0]', 'In Progress [1/0]', and 'Done [2/0]'. The 'Requested' column contains two task cards: 'k #2' and 'k 4', both with 'None' priority. The 'In Progress' column contains one task card: 'ID 7 jwvynkoop' with the description 'Create some Demo Stuff for LOPSA'. The 'Done' column contains two task cards: 'ID 9 Task #1' and 'ID 11 Super Awesome Task', both with 'None' priority. On the right side, there is a vertical 'ARCHIVE' sidebar and a 'My Queue [0]' section. At the bottom right, there is a 'BOARD MESSAGES' button and a 'My Worklog' section showing '0 hours' for 'today'.

Who does it?



SIEMENS



Questions?

- Presentation
 - <https://goo.gl/lbfUub>
- Notes
 - <https://goo.gl/dqV9oL>



References

- <https://www.crisp.se/file-uploads/Kanban-vs-Scrum.pdf>
- <http://www.infoq.com/articles/kanban-operations-spotify>
- <http://www.infoq.com/articles/kanban-siemens-health-services>
- <https://blog.sei.cmu.edu/post.cfm/addressing-detrimental-effects-context-switching-devops-064>
- <http://www.joelonsoftware.com/articles/fog0000000022.html>
- <http://www.petrikainulainen.net/software-development/processes/the-cost-of-context-switching/>

Want to Learn More?

- http://www.amazon.com/Kanban-Successful-Evolutionary-Technology-Business/dp/0984521402/ref=sr_1_1?s=books&ie=UTF8&qid=1438559517&sr=1-1&keywords=kanban
- <http://www.amazon.com/Personal-Kanban-Mapping-Work-Navigating/dp/1453802266/soundbag-20>
- http://www.amazon.com/The-Phoenix-Project-Helping-Business/dp/0988262509/ref=pd_sim_14_3?ie=UTF8&refRID=0N09AV5D20QMNHWC9HJX