Staying Happy in System Administration

Emily Gladstone Cole
I will explain how I found out some people think I don’t know how to spell ‘Is’, that I like lightbulbs, and why my job will never be flashy.
How I became a SysAdmin

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There I was, doing DNA research on pine trees...
I was given this book...
…and the rest was history

- Technical Support Engineer
- SysAdmin
- Security Admin
- Collaborator/Author
- Computer Tech
- Team Lead
- Operations Engineer
- Operations Manager
- Operations Architect
I don’t look like the stereotypical SysAdmin
So I have been in situations like this...

(Thanks, XKCD)
Knowing how to spell ‘ls’

• I worked in the SGI TAC, doing OS, kernel, backups support
• A caller tried to spell ‘ls’ for me during his technical support request
Few women choose this field
An example: the SANS GCFW Certification
(as of May 2002)

Computer Security certification covering Firewalls and Perimeter defense
• 26 women in first 320 GCFW certifications
• 33 people received honors in first 320, 3 women (one of them was me!)
Learning difficulties and gender (1 of 3)

http://www.psychologytoday.com/blog/the-science-success/201101/the-trouble-bright-girls

Girls, who develop self-control earlier and are better able to follow instructions, are often praised for their “goodness.” When we do well in school, we are told that we are “so smart,” “so clever,” or “such a good student.” This kind of praise implies that traits like smartness, cleverness, and goodness are qualities you either have or you don't.
Learning difficulties and gender (2 of 3)

http://www.psychologytoday.com/blog/the-science-success/201101/the-trouble-bright-girls

Just trying to get boys to sit still and pay attention is a real challenge for any parent or teacher. As a result, boys are given a lot more feedback that emphasizes effort (e.g., “If you would just pay attention you could learn this,” “If you would just try a little harder you could get it right.”)

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Learning difficulties and gender (3 of 3)

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The net result: when learning something new is truly difficult, girls take it as sign that they aren't “good” and “smart”, and boys take it as a sign to pay attention and try harder.
Working with lots of male colleagues

- It has happened to all of us in tech
- Not all of them have good social skills
- You will be dealing with some awkwardness at some point in your career, if you haven’t already
  - For example, there are sometimes funny silences in meetings...
- My solution: go hang out with them sometimes
Women can make great SysAdmins
(some observations and generalizations)

• We are more detail-oriented
• We’re trained to consider multiple points of view and can come up with more than one way to do something
• We collaborate well
• Multi-tasking can be good in a crisis
We are all superheroes for sticking it out in technology

I'm so SICK of this stereotype suggesting that all WOMEN wear SUPERHERO capes, when they go to the TOILET.
Why is my job not flashy?

Believe it or not, it starts with that superhero cape.
Why being a superhero is bad

You get called in the middle of the night when something breaks, and you save the day
- That’s great, right?

You’re in crisis mode, rather than in normal operating mode
- You miss sleep
- Do you want to be associated with things breaking?
- If you build it differently, would you still need to be a late-night hero?
How not to get paged: documentation & training

- If you write down what you know and share it you can avoid getting woken up or disrupted – they can look at the docs instead
- If you train the junior folks they learn, and you learn from their questions. Your documentation and presentation skills improve
- Documentation can take many forms: an email, a doc on the website, a script, or automation
  - Yes, a script counts as documentation!
When I do my job right, it’s not flashy

• Things may break, but people know how to fix them
• If I prevent downtime, nobody knows about it
• If I build it solidly to begin with, we can work around a server outage

If it just works, it’s not exciting, but it means you can move on and do new things instead.
Keeping things dull can mean a lack of recognition

• If it’s all going well, you’re invisible
• If you’re invisible, your manager doesn’t notice you at raise/bonus time
• One thing that works for me:
  – send a thank-you to others’ and their managers for their help with releases, outages, and troubleshooting (usually they thank you as well)
Loving the job you’re with

• On a bad day, find 3 work-related things you liked about your day
• This helps a lot at a “bad” job
• My personal job philosophy: find something you love about your job
• Over time, it helps you find a better job
Things I enjoy about my job
Figuring it out - the lightbulb

- The “aha” moment when you find the solution
- Finding the answer to a tricky problem
- Getting into the “flow” when working, and scripting/coding/automating
Passing it on

• Seeing someone else “get it”
• Explaining it clearly
• Having someone read and understand your documentation
Seeing things running smoothly – not like this!

<table>
<thead>
<tr>
<th>Service Status Details For All Hosts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entries sorted by state duration (descending)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host</th>
<th>Service</th>
<th>Status</th>
<th>Last Check</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>284d 21h 18m 20s</td>
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<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>184d 17h 5m 56s</td>
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<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>184d 17h 2m 14s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>128d 9h 20m 0s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>128d 9h 19m 14s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>92d 19h 25m 9s</td>
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<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>92d 19h 24m 10s</td>
</tr>
<tr>
<td></td>
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<td>CRITICAL</td>
<td></td>
<td>92d 19h 24m 0s</td>
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<tr>
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<td>CRITICAL</td>
<td></td>
<td>92d 19h 23m 8s</td>
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<tr>
<td></td>
<td></td>
<td>CRITICAL</td>
<td></td>
<td>92d 19h 22m 10s</td>
</tr>
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<tr>
<td></td>
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<td>CRITICAL</td>
<td></td>
<td>67d 20h 33m 58s</td>
</tr>
</tbody>
</table>

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Seeing things running smoothly – I can make them look like this instead

<table>
<thead>
<tr>
<th>Host</th>
<th>Service</th>
<th>Status</th>
<th>Last Check</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>OK</td>
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<td>0d 1h 12m 58s</td>
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<tr>
<td></td>
<td></td>
<td>OK</td>
<td></td>
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<td>OK</td>
<td></td>
<td>69d 19h 7m 33s</td>
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<td>OK</td>
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<td>5d 8h 26m 18s</td>
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<td></td>
<td></td>
<td>OK</td>
<td></td>
<td>82d 16h 18m 34s</td>
</tr>
</tbody>
</table>
My colleagues

• We’re a tight-knit bunch that socializes together a lot, at lunch and after work
Learning new things

- How to use a new tool
- A new OS
- A new scripting language
- A trick for simplifying my day
- Some random trivia
Avoiding burnout

- Take breaks
- Take vacations
- Get exercise
- Have something else you do after hours that gives you a mental break

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Finding the sweet spot: SysAdmin vs. Manager

• The skill set is very different
  – Job satisfaction comes through others
  – You have more politics and more meetings
  – Hands-on work can be discouraged

• You can find places where you can advance without going into management
Staying happy in system administration

• Things I enjoy and am good at fit in well with system administration:
  – Documentation
  – Automation
  – Troubleshooting

• I get to learn all the time
• My colleagues are great
• I have outside hobbies that keep me energized
Acknowledgments

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