

# Sysadministrivia

## Linux, Lagers, and Late Nights

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# S4E1: "Measuring Success"

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### Log

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Quicklisten:

On gathering and applying metrics data. Contain's Jthan's "compile noise".

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## Just the Tip

- Continuing a mention from the previous episode's Just the Tip, Paden talks about chatr ("CHange ATTRIBUTES").
  - You can read more about it here.
- Bonus! He mentions (rants about) pump, a DHCP and BOOTP client.
  - I mention a different pump (as part of distcc) as well.

## Notes

Starts at **13m05s**.

I was drinking water. Paden was drinking Glenmorangie Original again. Jthan was drinking Buffalo Trace.

- Metrics!
  - Metrics is the measuring of data about services, etc. (with the purpose of application for optimization). e.g.:
    - CPU usage
    - uptime/availability
    - Memory usage
    - Bandwidth throughput average
    - Bandwidth usage ("bandwidth accounting")
  - Metrics are vitally important to **projected models** for e.g. budgeting.
  - Gathering metrics:
    - Generally speaking, logs don't have much value to gathering metrics with one exception: AWStats (for Apache or Nginx).
    - Jthan mentions Prometheus which has a lot of flexibility and is pretty.
    - I also mentioned Sysdig which seems to have taken a shift more towards container technology.
    - For bandwidth alone, there's a lot of tools!
      - RRDTOol has been an industry standard for a **long** time. One can even generate graphs from the data it collects with Cacti, or you can interact with it directly via e.g. python-rrdtool or use the RRDTOol-provided python bindings, or even modify RRD data (for instance, if you wanted to redact some information or minimize your data for a report summary).
      - nmon gathers more than just bandwidth, but it does gather it as well.
      - bandwidthd has been around for ages.
      - (There are "live metrics" monitoring programs as well such as iftop and iptraf, the latter of which DOES have logging but you would need to write your own parser.)
      - Jthan also wrought his campus' IT department's wrath upon him with ntop-ng.

- Metrics, in addition to budgeting approval, are good for providing feedback/insight to clients **and** C-level officers proving service value.
- Metrics can also allow you to identify issues, but this is perhaps better reserved for **monitoring** as it's better designed for that purpose.
- Metrics also can allow you to identify *trends* — finding patterns of usage and then making projections based on said patterns (and allowing you to make “educated guesses” to maximize your resource availability/load/etc.).
- Metrics are useful for “proving and quantifying success”; as part of our role, the better we are the more invisible we are (read through that parent thread, by the way! It has a lot of useful tips!).
  - Always remember to **translate** the success of your department to **financial gain** — servers up equals **+\$\$\$**, servers down equals **-\$\$\$**.

## 15 Clams

In this segment, Jthan shares with you a little slice of life. The title is a reference to this video. (2m16s in)

Starts at **35m15s**.

Storytime! Jthan hires a student and he (Jthan) as a result is a happy little clam.

He also relates how someone seems to “just know” the answers, but knowing how to find an answer is even more important.

## Errata

- We didn't mention it on-air, but another product to check out is netdata. It's geared more towards the “monitoring” than “metrics” side though.
- Nosbig (who has been on several of our Shitshow episodes and is a regular in our IRC) reminded us that we missed one of the biggest metrics platform out there today — Elasticsearch. Duh! Thanks, Nosbig!

## Music

### Music Credits

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**Categories** Season Four

## Comments

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