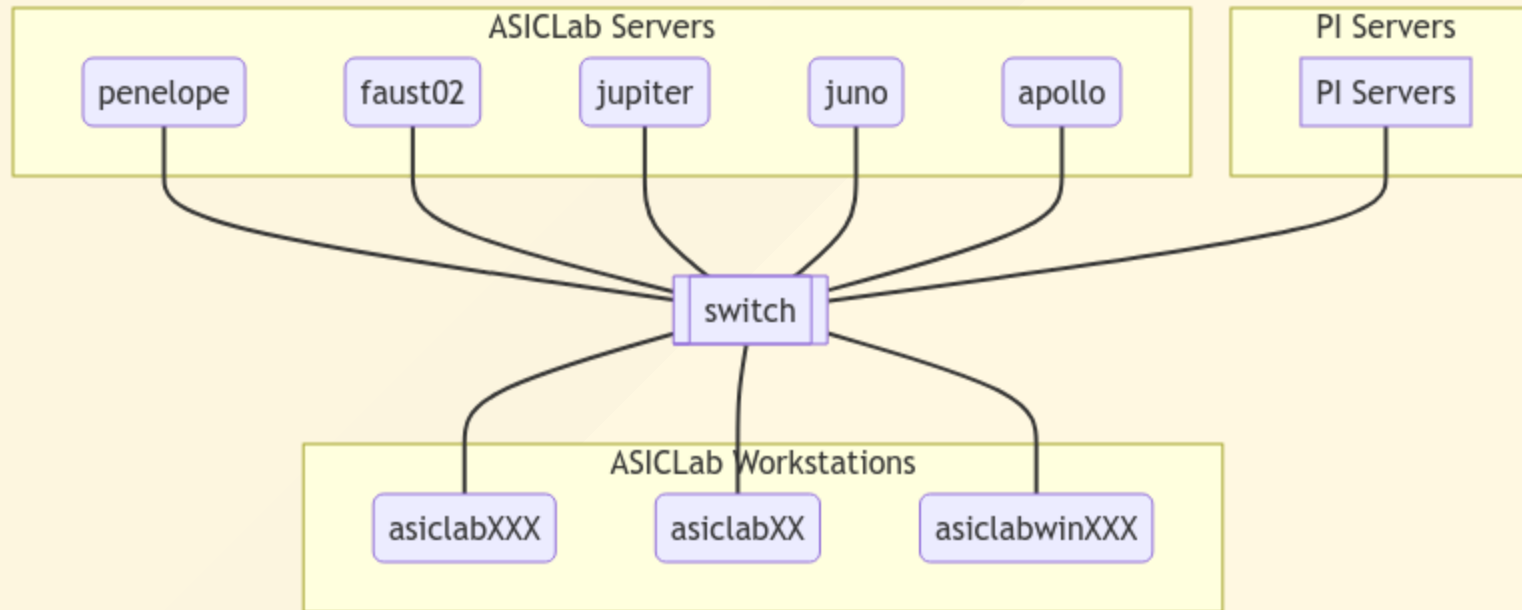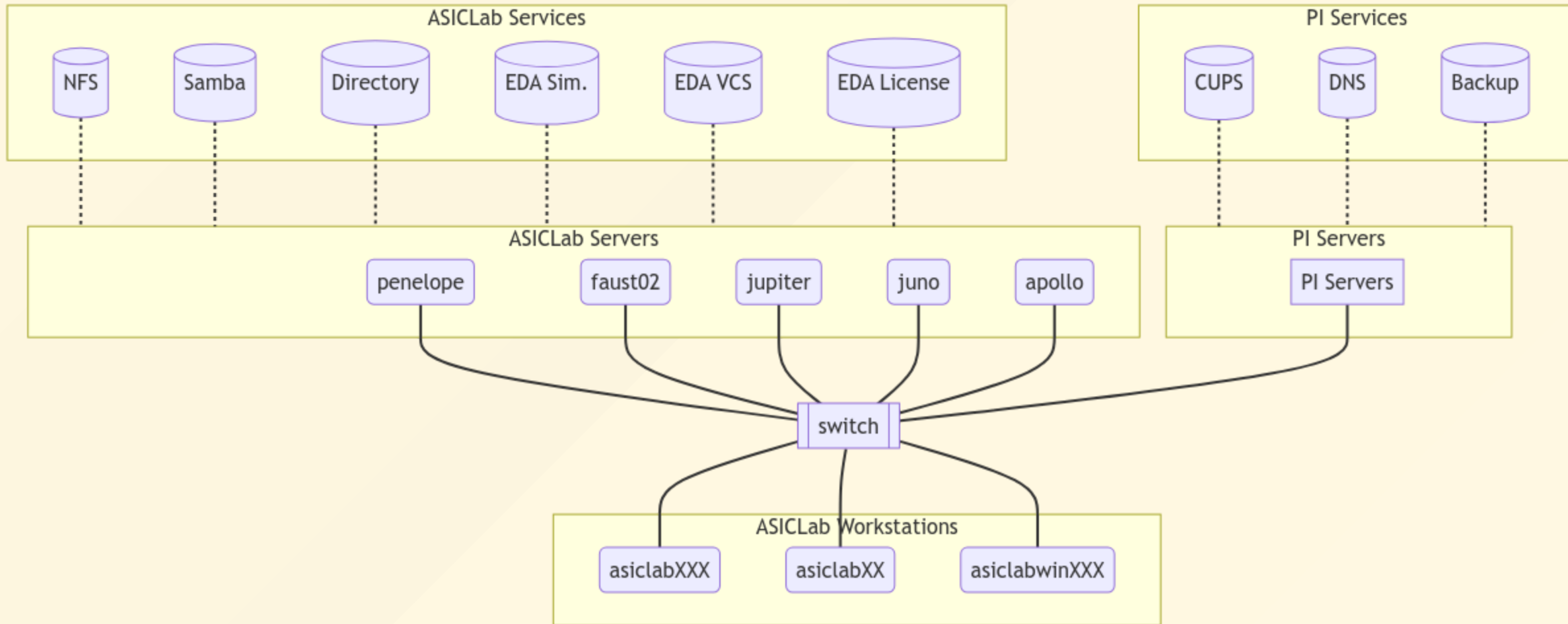# ASICLab IT Upgrades 🖥️

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The physical network...

...with services running on top

Motivations

- Hard drive failures in file server

- Workstations failing to boot

- Config and backup of

- CentOS 7 reaching end-of-life
  - Software and drivers not receiving updates
  - No CentOS 8 or 9 and similar EL projects at risk

- Documentation not easily maintainable

Project #1: An OS Upgrade

Distribution	Design	Services	Desktop	Pricing	Future
RHEL	✅	✅	🆗	💰	✅
Rocky/Alma	✅	✅	🆗	✅	😬
SUSE	🆗	✅	🆗	💰	✅
OpenSUSE	🆗	🆗	🆗	✅	✅
Ubuntu	❌	🆗	✅	✅	✅
Fedora	🆗	✅	✅	✅	✅

We chose Fedora.... How'd it go?

✅ **Fedora** installed across 14 workstations and 2 servers

✅ Some EDA tools run, work-around for the rest *(more later)*

✅ Enterprise services are well supported *(RHEL docs!)*

✅ Desktop apps are mostly available (Zoom, Slack, Code)

✅ Successful upgrades since: **36 -> 37 -> 38 -> 39** (soon)

✅ *Bonus*: Automatic firmware upgrades

Project #2: A Better Way to Configure Workstations

Need a better title

- Now that we have a bunch of fresh machines:
  - How to take a machine from a fresh install -> desired state (and keep it that way)
  - Remember the old way was to configure one, and use Clonezilla
- Used for workstations only (just make root account, enable SSH), as we want the 12+8 machines to be the same
- Now using Ansible, whenever it make sense