

IT @ CAMK in 2024 and 2025

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CAMK PAN



What happened in 2024?

Warsaw

- Replaced the UPS – avoiding power conversion when possible, minimizes energy losses.
- Replaced the lecture hall main projector – enjoy vivid colors and a bright picture.
- Improved storage for the Accounting databases.
- New OS on the **chuck** cluster. New frontend, GPU node, additional storage.

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Toruń

- Linux boxes upgraded to Linux kernel 6.10.
- Installation of a new PoE+ module in the main 10G/40G switches.
- Local PBX switched to a new provider. External lines now use VoIP technology. As an additional bonus, DDI (direct dial-in) is now enabled.
- New disk box with a new 160 TB disk array installed in the CTA cluster. 69 old 2 TB disks were decommissioned.

Plans and challenges for 2025

- Keep the smooth operation of the entire CAMK IT infrastructure.

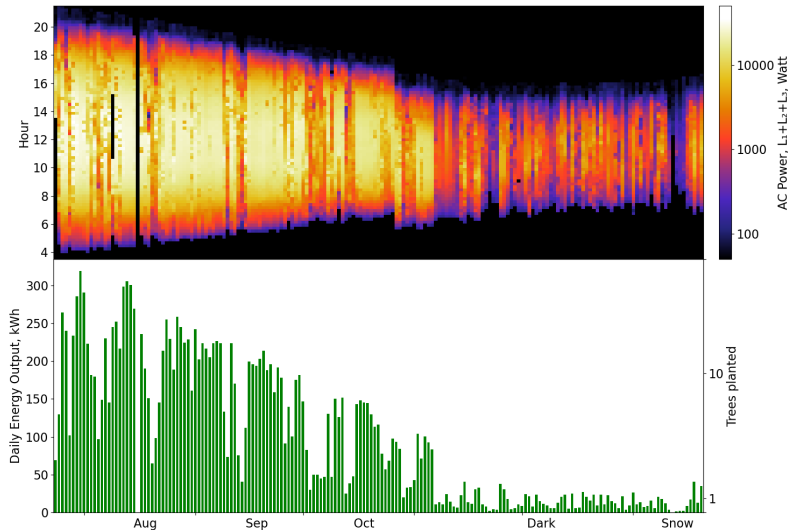
Plans and challenges for 2025

- Keep the smooth operation of the entire CAMK IT infrastructure.
- Windows 10 should be replaced by Windows 11, where possible.
- Upgrade the **chuck** disk array.
- Improve the capacity of the Windows RDP server for smoother remote access for our administration.
- Continue the implementation of the EZD (electronic document management) system.
- Improve hybrid meeting capabilities.
- New firewall server for Toruń.

"Solarigraphy"



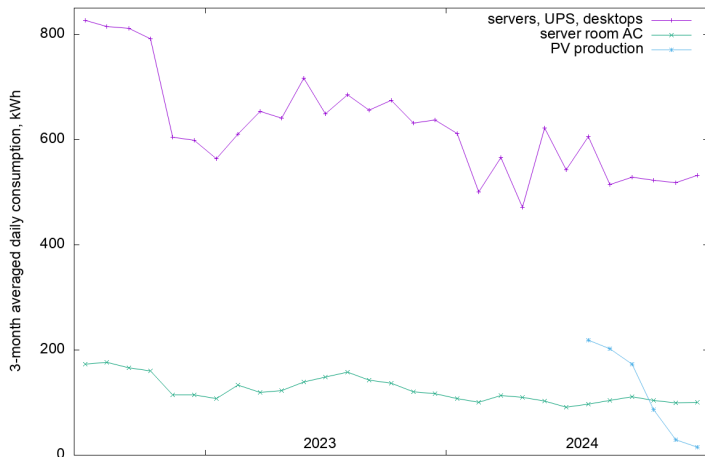
created with AI



- We can see here sunny days, cloudy/stormy days, blackouts, offline periods, snow, etc.
- The darkest day was 22 Nov 2024 with only 2.20 kWh produced. There were a few other days below 5 kWh.
- "Trees Planted" is advertised by the monitoring app :-)

Optimizing our electrical power consumption

- We replace old, inefficient devices with modern ones, when possible.
Estimated UPS savings: up to 50 MWh/year.
- We dynamically suspend idle cluster nodes.
- We power off desktops when possible (exceptions are allowed).
- We produce electricity (when we can).



Contributing to the IT infrastructure

If you expect to have some unspent grant money, please let us know as early as possible — we may get more out of it, if it goes through public tender. We can make use of:

- Monitors and peripherals for comfortable work,
- Network and server parts for upgrades (like 16+ TB HDDs for disk arrays).

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The **chuck** cluster is built almost entirely from grant funds. Please consider your contribution when applying for grants.

- Typical computing node (platform + 2 CPU + RAM + IB, **no GPU**) costs 40-50k PLN.
- GPU accelerator specifics:
 - Cost up to 170k PLN for NVIDIA H100.
 - Many models have reduced double precision capabilities.
 - Special cooling needs – some models aren't compatible with servers.

Please always consult your planned purchases with us. Paweł Ciecieląg knows best what is needed to keep **chuck** useful.

Warnings

Don't resend spam!

Just ask us for a check when you got something suspicious.

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Beware of phishing

- **AI can be better at writing convincing e-mails than average human.**
- Always check full e-mail address of the sender.
- Be careful with URLs pointing outside of `camk.edu.pl`.
- **Do not** follow any links from suspicious e-mails.
- **Do not** click any buttons there. Especially on your mobile devices.

We never, ever ask for your password to do any "update" of your e-mail account.

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- adm@camk.edu.pl** – Issues with computers or network. Domains. Software.
- webmaster@camk.edu.pl** – CAMK WWW pages.
- cluster@camk.edu.pl** – The `chuck` cluster.