



Surviving Power Outages

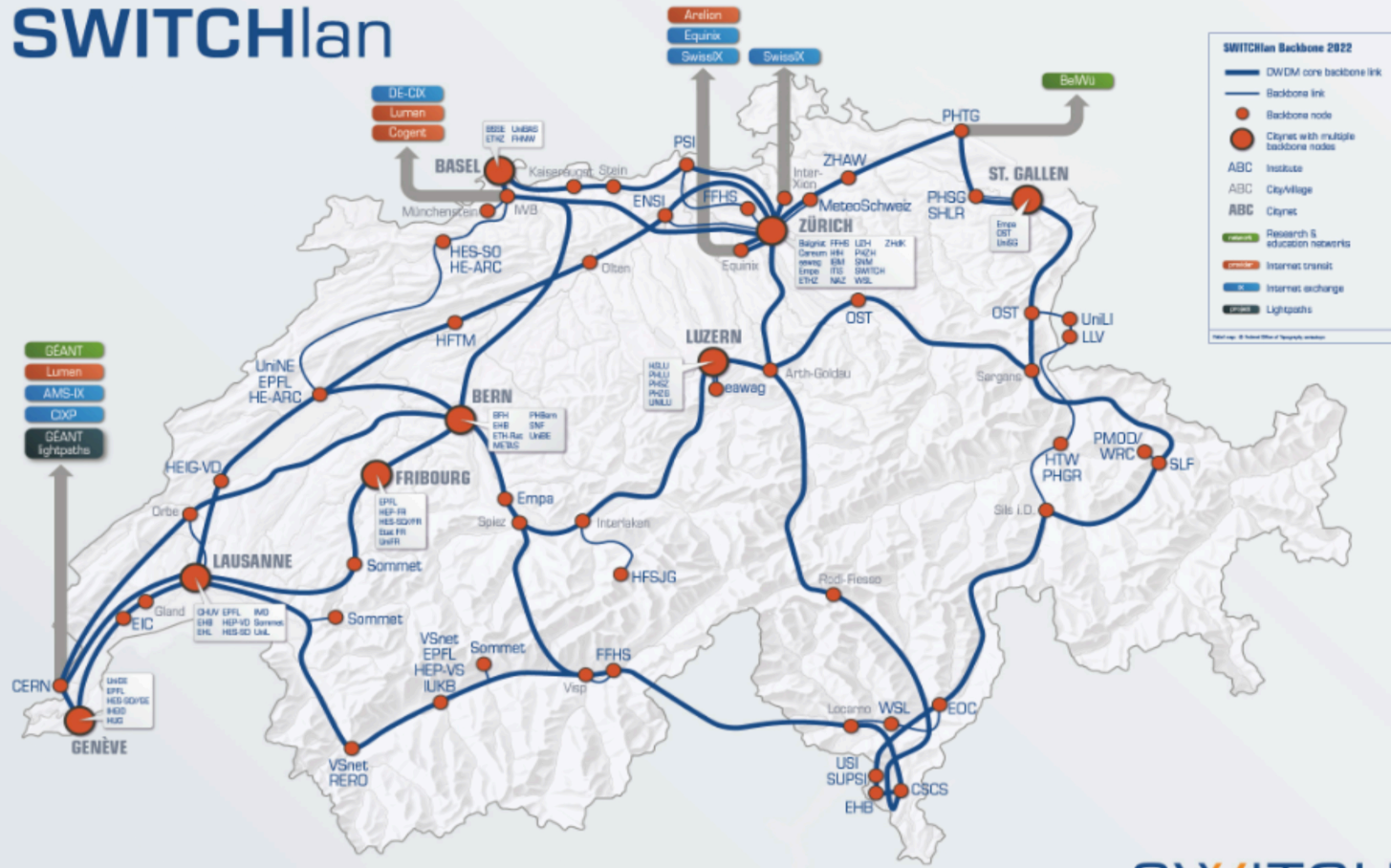
Dealing with the “Strommangellage”



SWITCHlan (AS559)

- Most PoPs hosted at universities, with a few exceptions (CERN, commercial datacenters mostly for peering)
- For >30 years, we always depended on universities providing us with power (along with rack space)
- We don't impose rules beyond asking for basic diversity for redundant device feeds

SWITCHlan



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“Strommangelage”

- Swiss administration preparing population for power shortages this winter
- Three levels:
 - Significant (appeals for restraint, restrictions for bulk consumers)
 - High (up to 2 weeks of rolling outages, uncontrolled outages cannot be excluded)
 - Extreme (up to 16 weeks of rolling outages, several uncontrolled outages)

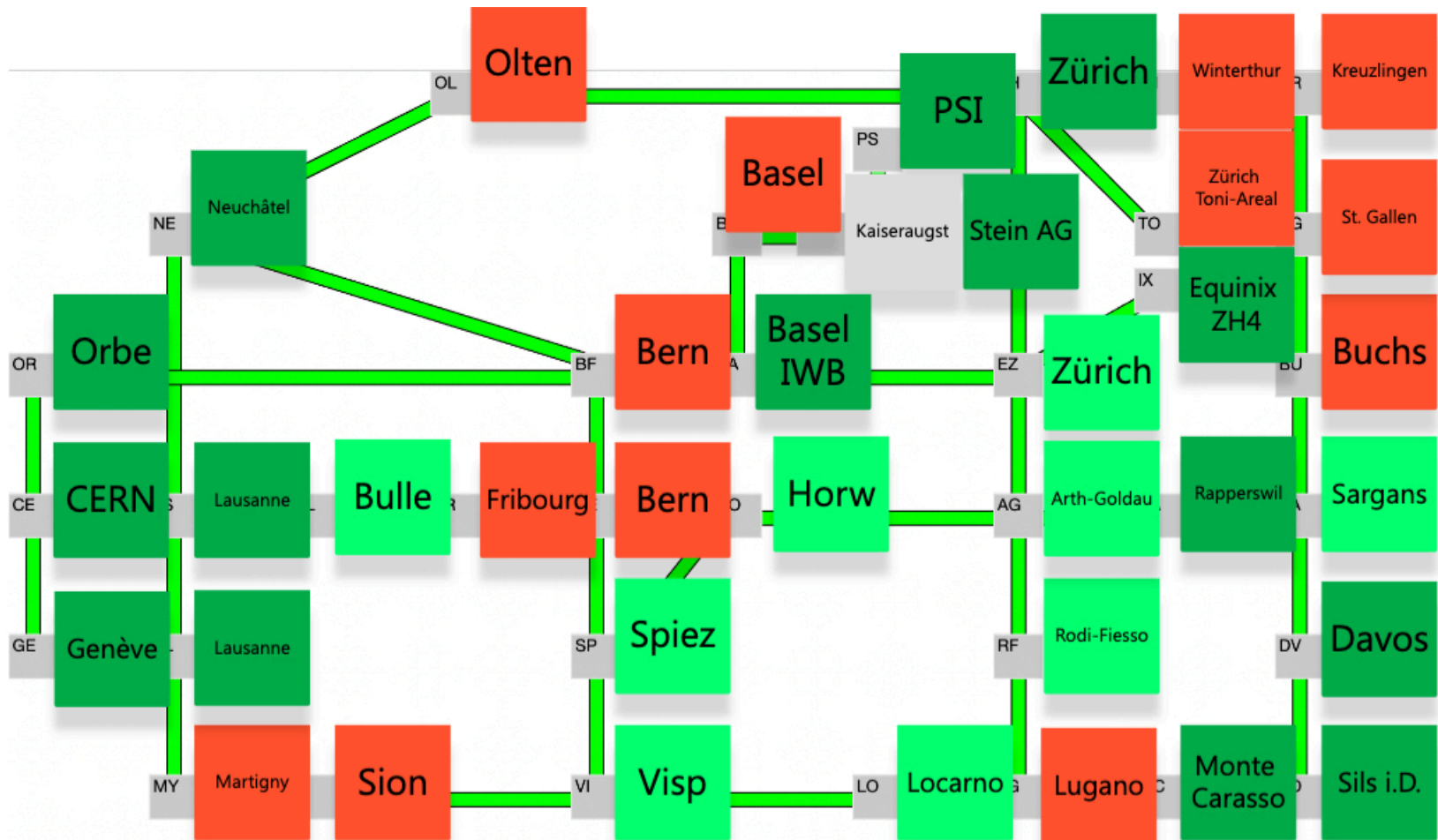
Survey of all sites

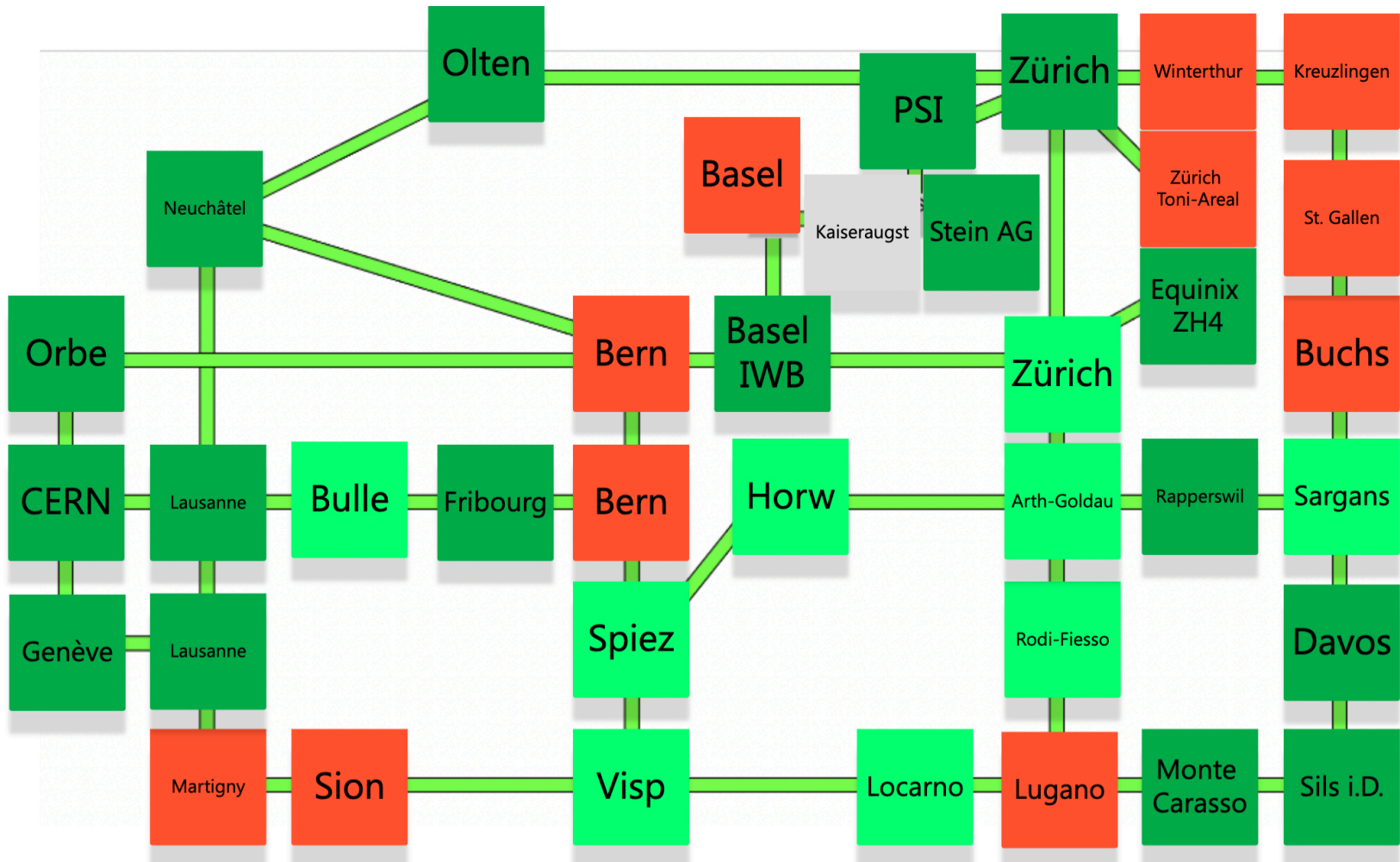
Please answer the following questions regarding the infrastructure you operate for SWITCH.

1. Should the mains power fail:
 - a) How long is the autonomy of the UPS in minutes (estimated)?
 - b) How long is the autonomy of the air conditioning and cooling system in minutes (estimated)?
 - c) Is an off-grid emergency power supply (e.g. diesel generator, flywheel) available?
 - d) What is the autonomy of this emergency power supply in hours (estimated)?
 - e) Is physical access to the SWITCH equipment guaranteed?
2. Is the data centre connected redundantly on the network side (from different substations)?
3. Our equipment at your site is part of the national critical infrastructure and should therefore be prioritised. Are you willing to prioritize our equipment when it comes to power saving measures?
4. Would you provide us with emergency contacts (e.g. mobile phone number) or have you already stored these in the SWITCH customer portal?

Survey results

- Lots of engagement/willingness to help
- Wide variety of infrastructure protection





Next steps

- Test batteries in lab
- Plan coordinated battery deployments in critical locations
- Address needs of some university hospitals
- Move customer access to commercial DC (1 case so far)



Thank you!

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