ewl

CO_2 NEUTRAL OPERATION

Stollen Lucerne Data Center

highly secure. sustainable. energy efficient.

ewl energie wasser luzern operates the Stollen Lucerne Data Center, a high-security data center in the middle of the city of Lucerne. The data center in the heart of Switzerland is located in an underground bunker complex sealed off from the outside world. It offers 1,640 square meters of IT floor space and room for up to 600 racks.

The bunker comprises five main tunnels each with 200 square meters of usable IT space and eight side tunnels (private rooms each with 50 – 100 square meters of usable IT space). The Stollen Lucerne Data Center is powered by a fully redundant architecture. This self-financed data center boasts environmentally sustainable electricity and a lake water cooling system, uses waste heat in the green lake energy network, and has its own carrier-neutral fiber-optic network and TüViT `level 3 extended`certification, not to mention ideal transport links and flexibility in terms of fitting out customer space. The hallmarks of this unique data center are its underground bunker architecture, its unbeatable physical protection, its security, its quality and its energy efficiency.

ewl – an experienced and reliable partner

As a state-of-the-art energy services company, providing another piece of pioneering infrastructure in the shape of the Stollen Lucerne Data Center.

As a public limited company under private law, ewl is wholly owned by the city of Lucerne. ewl plans, builds, operates and maintains the basic supply of electricity, heat, drinking water and Internet in the city of Lucerne. Around the clock, with specific know-how and many years of experience. In this way, ewl lays a solid foundation for the operation of the Stollen Lucerne Data Center.

- ✔ Infrastructure specialist
- ✔ Planning, building, operating and maintaining the city of Lucerne's vital arteries
- ✔ Ownership situation is regulated clearly, transparently and for the long term
- ✔ Guaranteed security and continuity

Your benefits

The Stollen Lucerne Data Center combines cutting-edge technology with sustainability and excellent links to Switzerland's communication and energy networks. With its unique underground location and ewl as its operator, the data center is positioning itself as a long-term investment in the Swiss data center industry.

Security

Physical

- Maximum physical protection and security thanks to an underground bunker.
- Its comprehensive CCTV, biometric access control, and turnstile system meet the highest security standards.
- Optimum fire protection thanks to:
  - O_2 reduction
  - Smoke extraction system
  - Extinguishing system with prevention and intervention mode

Financial

- ewl is an experienced investor and is funding the Stollen Lucerne Data Center itself.
- ewl's clear, transparent ownership situation guarantees long-term stability and consistency.

Operational

- The ewl network control center ensures round-the-clock infrastructure operation, seven days a week.
- The presence of an on-call team guarantees the fastest possible response times.
- Continuous access is ensured thanks to a separate external and disaster-resistant network connection with its own UPS.

Quality

Certified

- TüViT `level 3 extended`certification involves an audit by independent third parties and serves as a guarantee of reliability.
- Certification according to ISO 27001 from the second quarter of 2023.
- The redundant architecture guarantees very high availability.

Flexible

- Thanks to the unique architecture in the tunnels, a wide range of space requirements can be covered.
- Flexible scalability in terms of space, performance and privacy means that the right solution can be found for any need.

Powered

- Power supply:
  - 2N medium voltage
  - 2N high voltage
  - 2N UPS
- ewl operates its own carrier-neutral dark-fiber infrastructure, thus guaranteeing autonomy.

Energy efficiency

Operation

- The use of cutting-edge DCIM technologies makes for highly efficient data operation.
- Redundant and highly efficient UPS systems guarantee a very high availability of energy.

Cooling

- Lake water is used to provide a stable supply of cooling energy without any additional energy input required.
- Waste heat is fed into ewl's own heating/cooling network, further enhancing the environmental benefit of the energy consumed.

Sustainability

- Repurposing the civil defence bunker allows gray energy to be reduced and vacant space to be put to good use.
- No waste of valuable space in the metropolitan area.

What we offer

We offer various fit-out and performance levels at the Stollen Lucerne Data Center and give you a say in how the rooms are laid out. Customized, modular space management provides an ideal basis for integrating your existing hardware into the data center design.

The following specifications apply to all levels

- 2N electrical and N+1 cooling supply
- Separation between hot and cold aisles
- Cold 25°C air at a height of 1.5 m
- 2 separate busbar systems
- Metered PDUs (optional)
- 1,500 kg/m²
- Several separate duct systems (fiber, copper and general cabling)

Colocation racks

For SMEs and companies that want rack units with maximum protection and high privacy requirements.

- 1/3 (13 U), 2/3 (28 U) and 1/1 (42 U) rack
- Supply power output 1–6 kW
- Options for additional supply power output
- Tunnels up to 76 racks
- High level of cooling availability
- Secure rack access
- Redundant in-house cabling

Private cage

A private cage (enclosure with security grill) offers the best security for your sensitive data from eight racks upwards.

- 1/3 (13 U), 2/3 (28 U) and 1/1 (42 U) rack
- Supply power output 1–6 kW
- Options for additional supply power output
- Tunnels up to 76 racks
- High level of cooling availability
- Secure access to the cage
- Redundant in-house cabling

Private suite

For the highest security needs with your own private room and state-of-the-art access solution.

- A separate room can be useful for 12 racks or more
- Consultation about room and space layout
- High level of cooling availability
- Manned 24/7 control centre
- Special solutions by request
- High SLAs

"Personalized solutions for our customers' specific needs – this is what we can provide in a unique underground bunker in the heart of Switzerland."

We are illuminating the data center of the future. Boasting maximum protection, autonomy, energy efficiency, and flexibility in terms of fitting, this data center can deliver unparalleled solutions.

Make the most of the key advantages offered by both ewl's and Switzerland's location. Alongside this central base, these also include an outstanding infrastructure, highly skilled professionals and Swiss data protection legislation. You too can become part of the Stollen Lucerne Data Center. **rz-stollen.ch**

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