



SWISS VAULT

Data Sovereignty

Reducing the complexity of managing data

Proprietary Statement

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Data Sovereignty - I

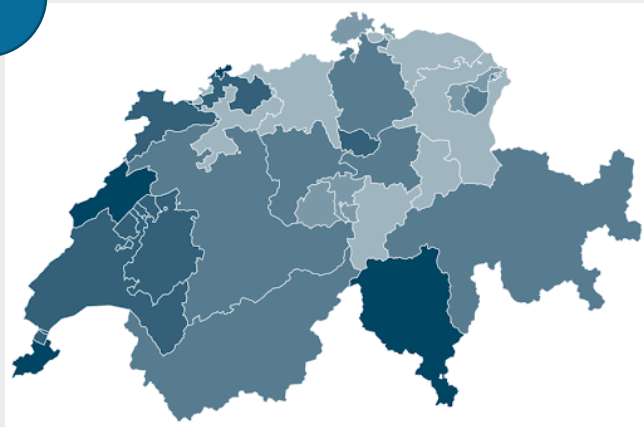
If you allow another country to gain access to really critical data about your society, over time that will erode your sovereignty, you no longer have control over that data.

Richard Morris, Chief Head of MI6, UK

Data Sovereignty - II

Data Sovereignty means that data is subject to the laws and regulations of the geographic location where that data is collected and processed.

1



Country

2



Groups

3



Individual

Challenges

- Regulations
- Technical challenges:
 - how to sustainably manage growing data volumes
 - maintain data robustness, resiliency over time
 - how to maintain access and interoperability over time (30 year, 50 years, 100 years)

Swiss Vault's innovation in software + hardware

- 14X more data storage density (PB/m³)
- 10X more energy efficient (Watt/PB)



Standard Rack *		Swiss Vault Tower
2.5 PB	Data storage (using 5 TB disks)	10.24 PB
2.57	Volume (m ³)	0.74
0.97	Density (PB/m ³)	13.84
24 / 0	CPUs / GPU	128 / 128
18,000	Power (Watts) consumption	8,000
7200	Power efficiency (Watt/PB)	780

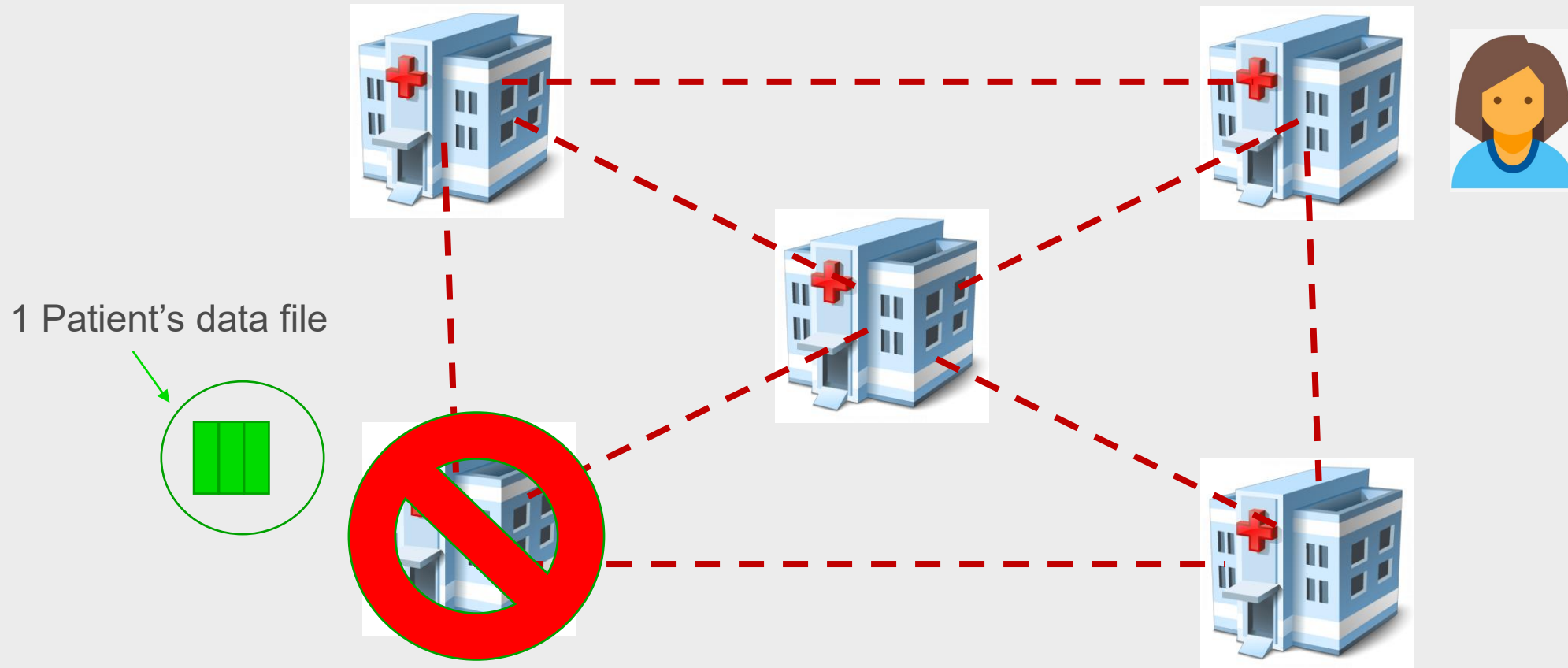
PB = Petabytes = 1,000,000,000,000 bytes



* Specs based on industry standard 4U hyper-converged rack unit

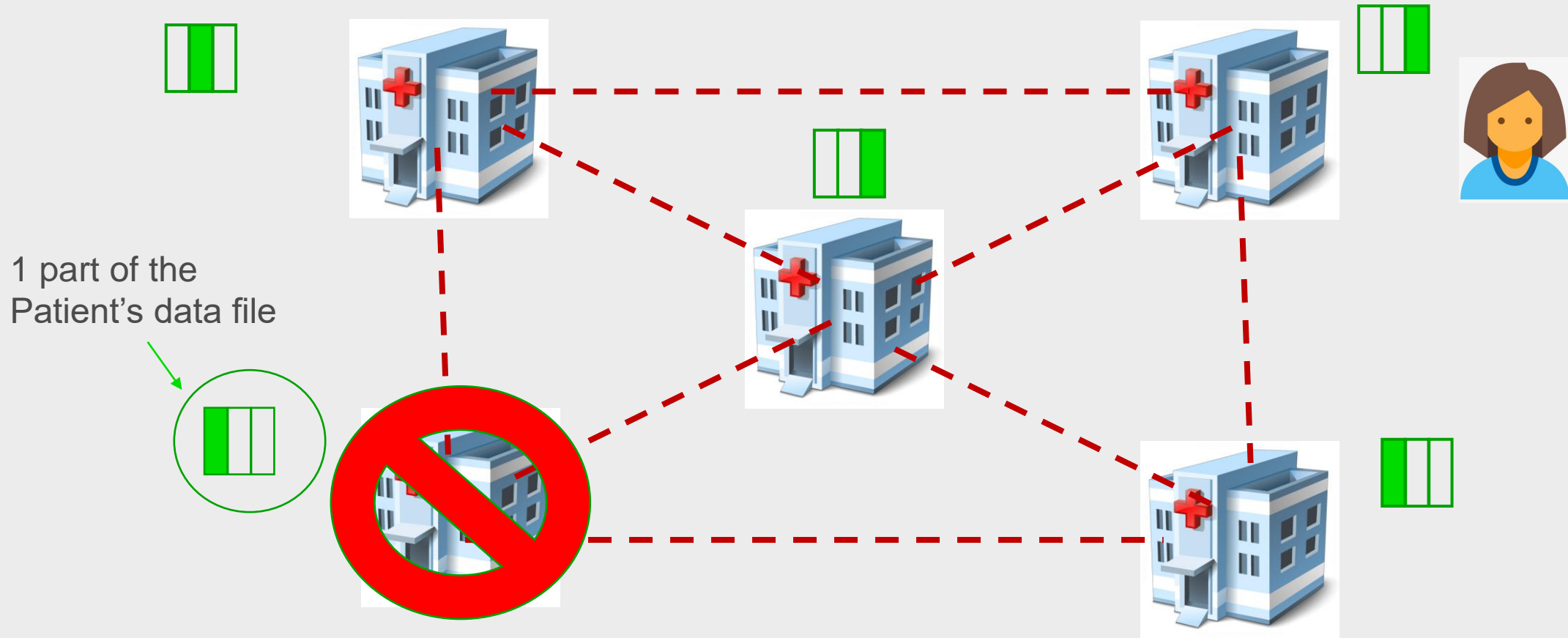
Tech Challenge II : Robust data

- The data architecture in the network = robustness



Tech Challenge II : Robust data

- The data architecture in the network = robustness



Data robustness

- No single point of failure model
- Distributed file architecture
- Distributed computing architecture



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