

iSystems

Cloud Computing

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Cybersecurity with SAP Business One



You will be hacked one day! The question is not if. The question is: when and how good are you prepared?



# Example of 2023/2024

Total # of Attacks

1,203

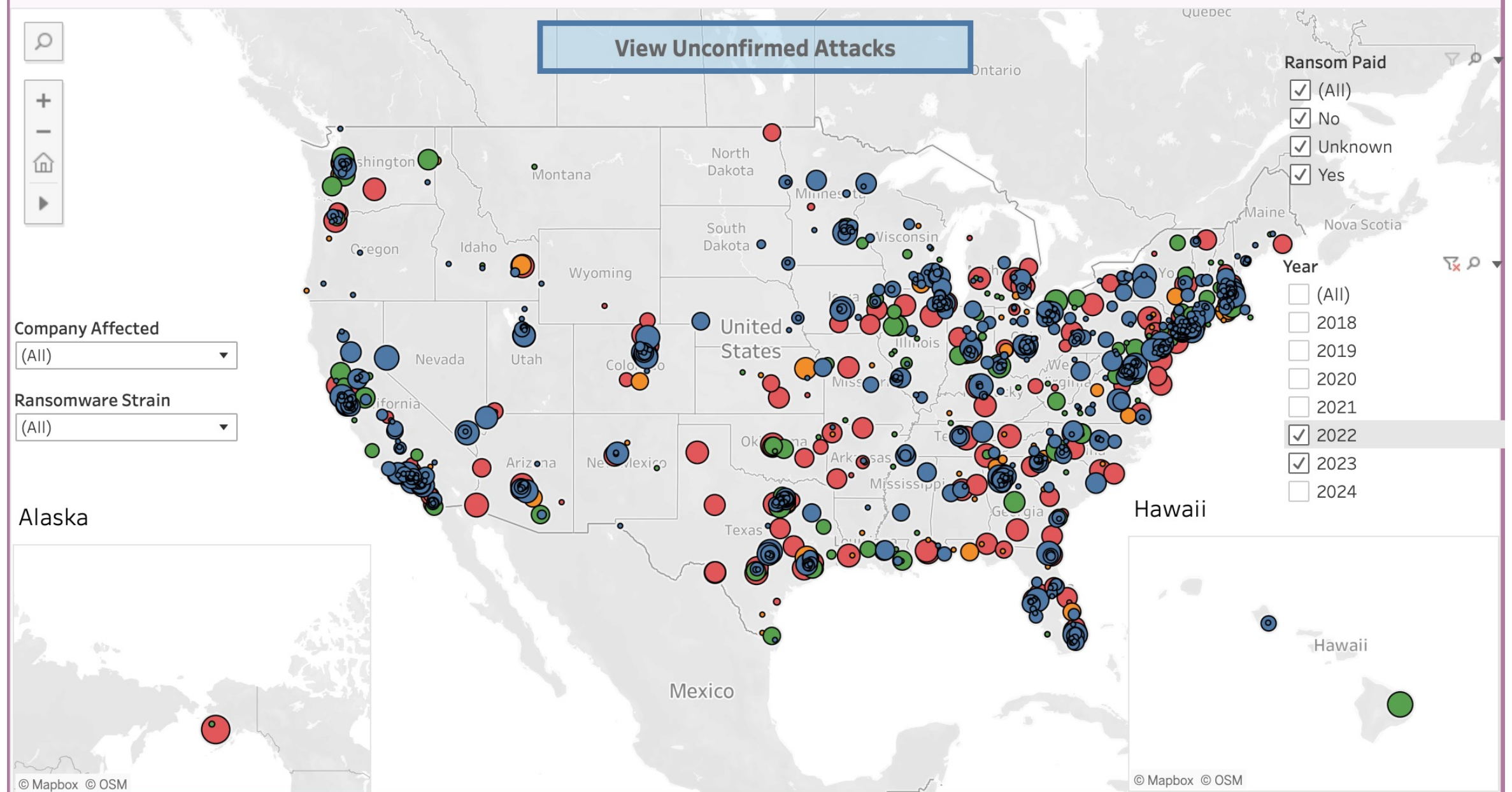
Average Ransom (\$)

5,453,502

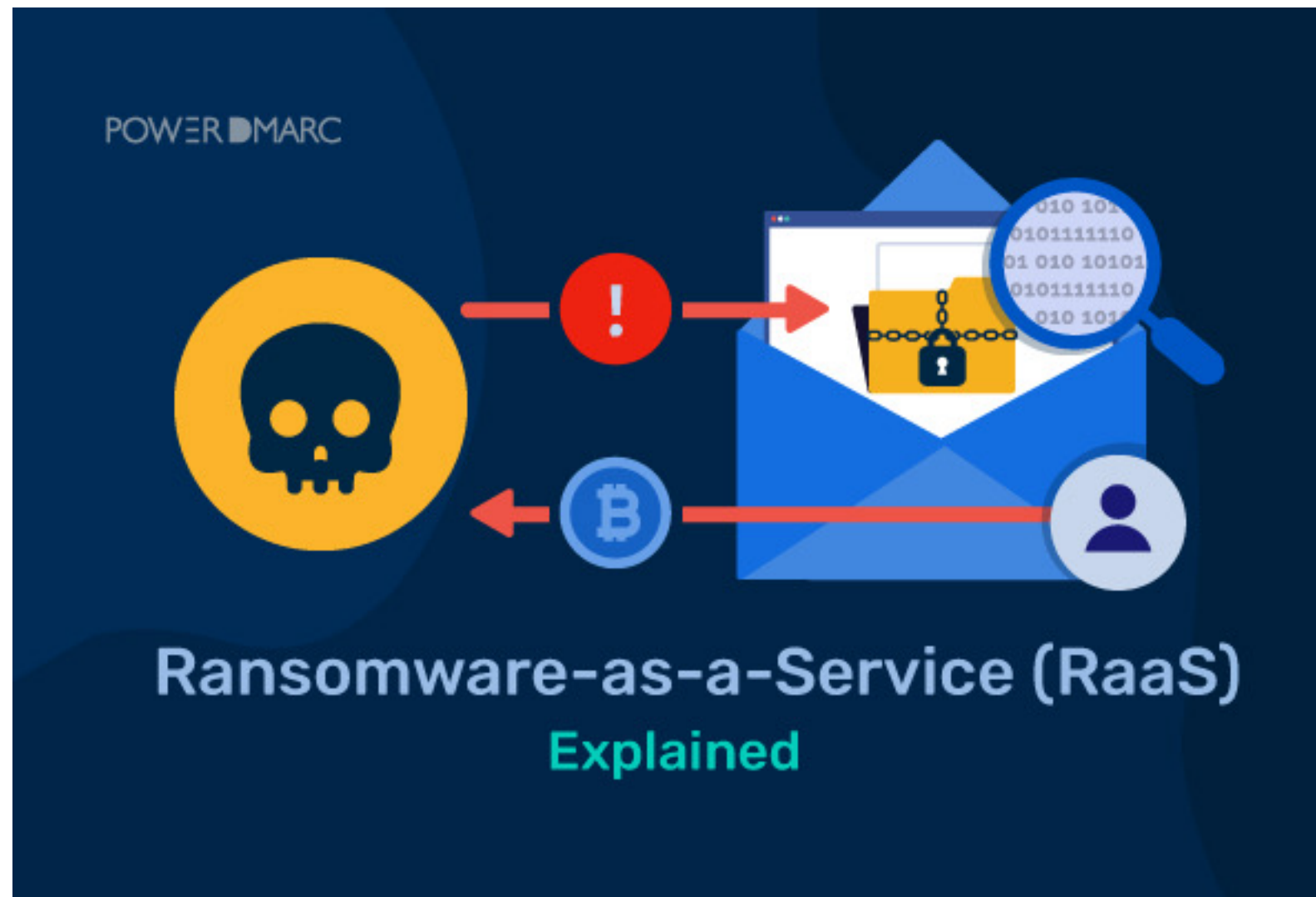
Total Records Affected

248,051,523

Map of confirmed US ransomware attacks from 2018 to present



# Some Facts



## iSystems

- Average downtime 24 days
- Rise of 13% per year with an average cost of 1.85 mio USD
- Average ransom in 2024 2.73 mio USD
- Largest ransom in history 2021, 70 mio USD
- 93% of ransom is windows based executables
- The most common tactics hackers use to carry out ransomware attacks are email phishing campaigns, RDP vulnerabilities, and software vulnerabilities

# Potential risks

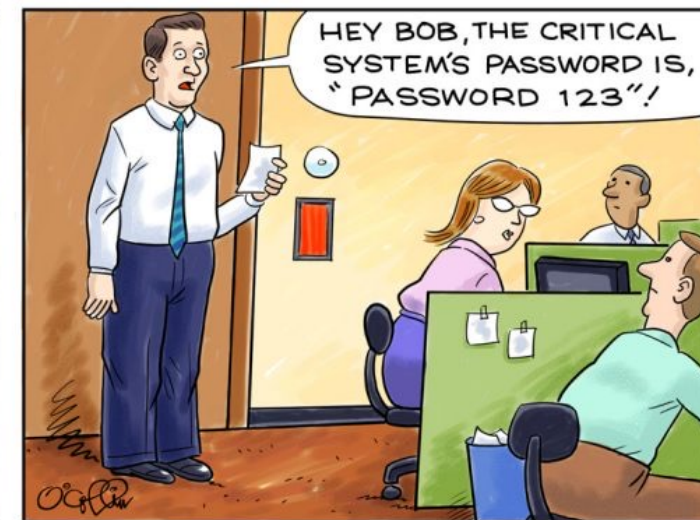
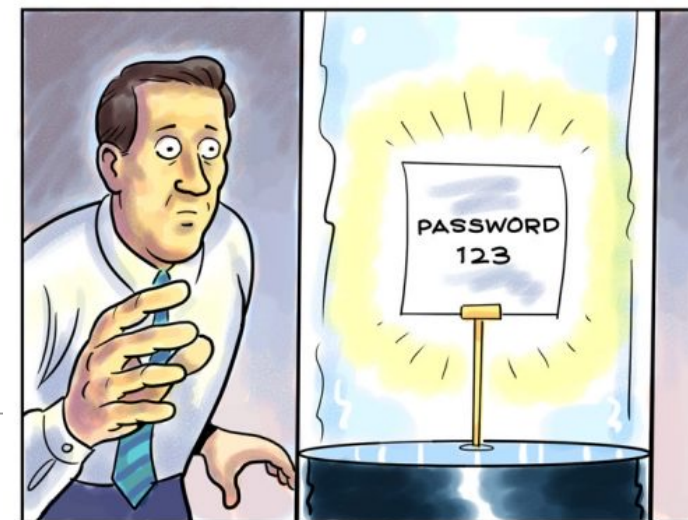
Human Factor

PEBCAK – (p)roblem (e)xists (b)etween (c)hair and (k)eyboard



Maleware

Intrusion thru the human factor



No reliable backup

blackmail, encrypted data, compromised infrastructure and no valid backup  
incl. test to restore



Amazon Order #154-1238066-0002647 - Mozilla Thunderbird

File Edit View Go Message Tools Help

Your recent purchase with your Apple ID.

Message

Delete Reply Reply All Forward Attachment Move

Meeting Attachment Move

Your recent purchase with your Apple ID.

Apple ID <webbpass-sqzcx909@busun...>  
Monday, August 28, 2017 at 9:53 PM  
To: You

1 Attachment Download All

Apple\_InvoiceJ2iTu...  
201.4 KB

URGENT NOTICE!

Your Apple ID, [you@memphis.edu](mailto:you@memphis.edu), was just used to purchase an item that has previously been associated with that Apple ID.

Your service has been accepted due to payment after the fact. We are very sorry for any inconvenience this may cause. Please find the attached file for your reference (PDF).

Regards,  
Apple

Invalid Signature

amazon.com

ation  
0002647

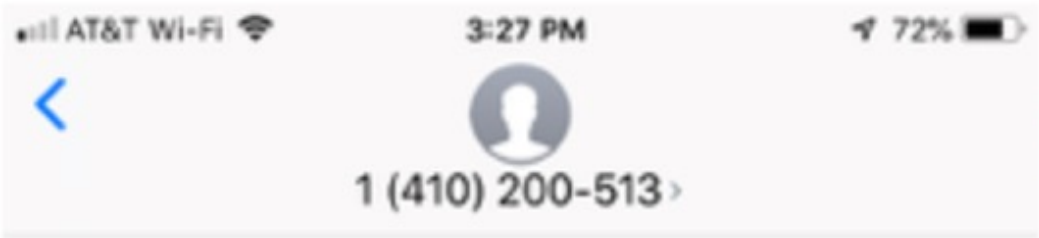
available

\$11.13  
\$2.87  
Total Before Tax: \$14.00  
Estimated Tax: \$1.26  
Order Total: \$15.26

# More examples



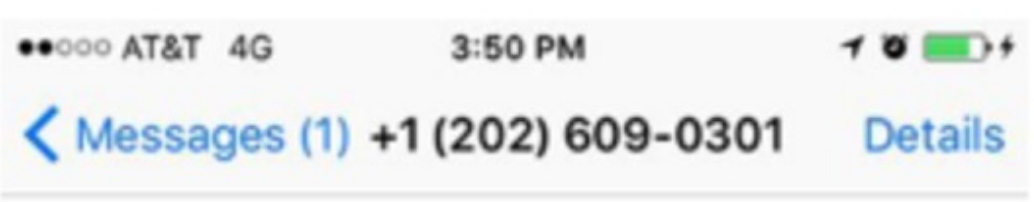
Dear Sir,  
 I am prince [redacted] from Nigeria. Your help would be very appreciated.  
 I need to open a bank account, but I don't have a bank account, I need to open a bank account, outside of my country, please help me open a bank account, outside of my country.



Text Message  
 Today 3:12 PM

FRM:AMEX@Message  
 SUBJ:Card Alert  
 MSG:Card Alert;Card Alert

<http://www.americanexpress-message.com>



Text Message  
 Today 3:40 PM

WARNING:(Criminal Investigation Division) I.R.S is filing lawsuit against you, for more information call on [+1 7038798780](tel:+17038798780) on urgent basis, Otherwise your arrest warrant will be forwarded to your local police department and your property and bank accounts and social benifits will be frozen by government.

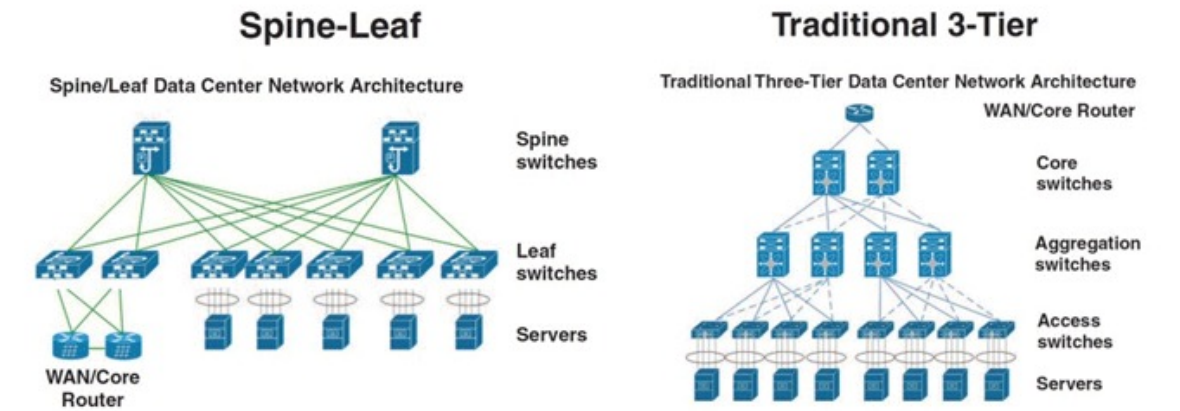


# Examples for security measurements

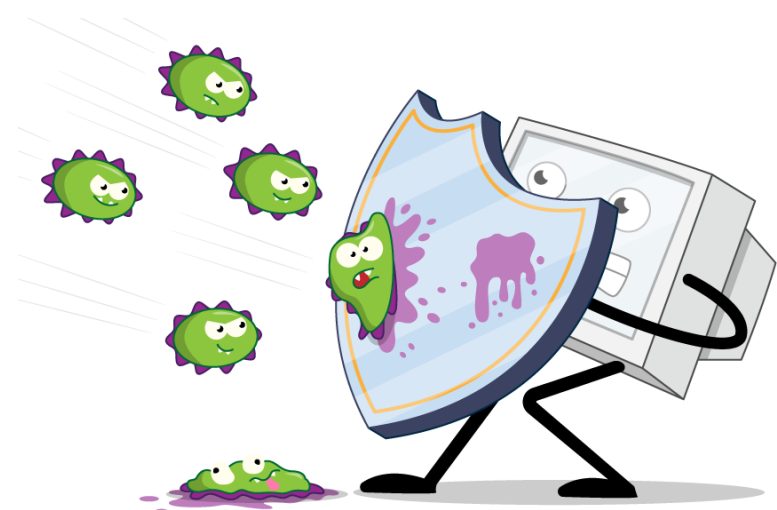
## Physical / Network



## Network / Perimeter



## Endpoint Security



## User Training

Employee Security Awareness Training



## Data Security



# IT Solutions Portfolio

## Products & Services

iSystems

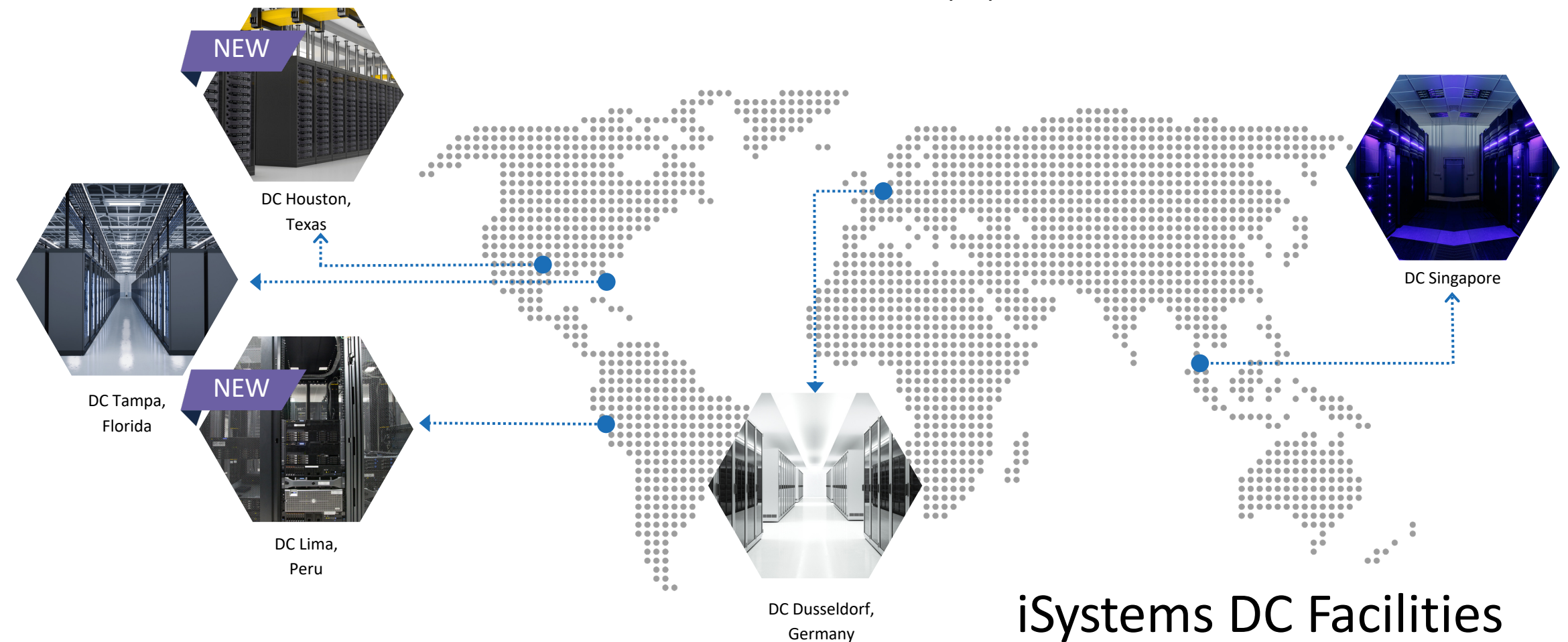
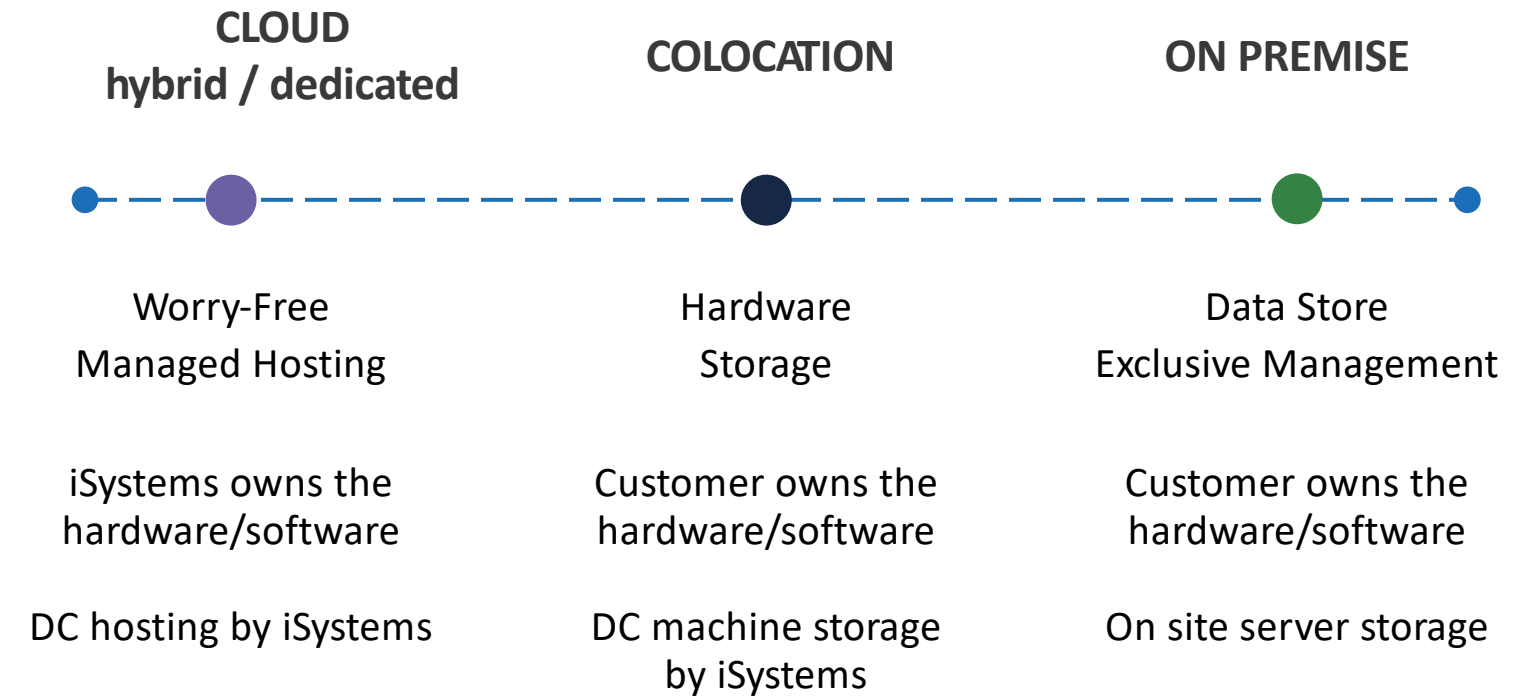
- IT Infrastructure for ERP system**
- > Cloud 100% designed by iSystems - Hybrid & Dedicated
  - > Colocation Solution
  - > On Premise Solution
  - > Network management: Fully Managed Services



- Disaster Recovery Procedures**
- > Solid Data Security DC setup (data storage, data access, Firewall etc.)
  - > Backup in 2 additional locations: dedicated backup storage in a different network
  - > Extensive security: off-site backup and threat detection, correction & prevention



- Dedicated Support Services**
- > 24/7 technical support on request for SAP Partners and SAP End-Users

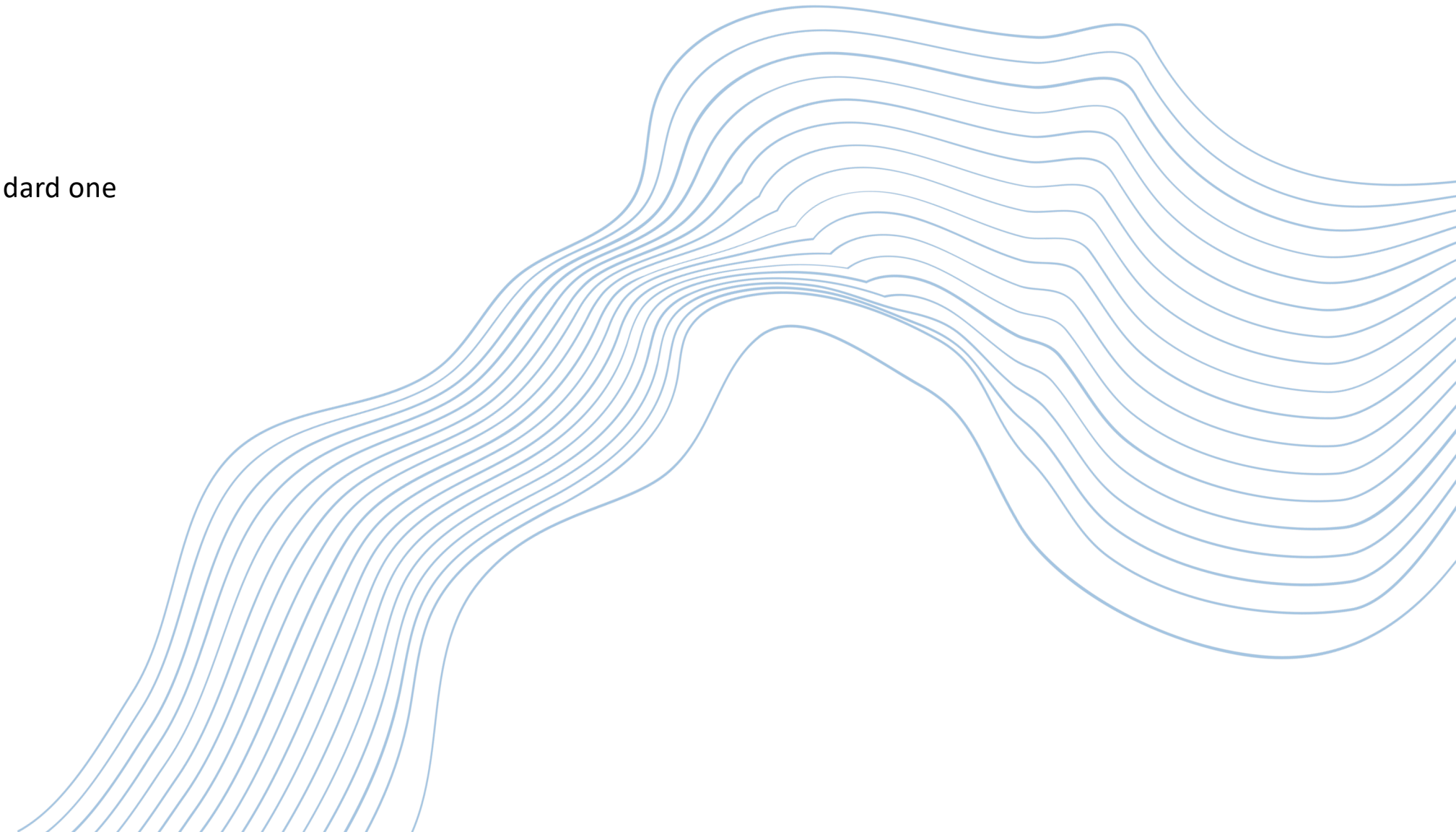


iSystems DC Facilities



## What Differentiates Us

- **Demo & Test environment**
  - Up to 2 users, for 60 days at no cost
- **Ready-to-use System**
  - Automatic installation 24h > Sizing questionnaire
- **HANA system - in-depth understanding**
  - HANA certified + over 10 yrs of experience and expertise with HANA implementation
  - Over 20 yrs experience and expertise in Data Management
- **SQL > HANA Free of charge Migration**
- **Capability to manage complex requirements from customers**
  - (Re)design the entire IT infrastructure: spin-off a new environment in the standard one
  - Customized infrastructure (if needed)
  - Setup for larger enterprises and corporates
  - Build HANA memory functions
  - Provide multi-language technical Support: EN, DE, ES, VIE, TR
  - Penetration test performed 2 times/year
- **Provide VDI virtual desktop infrastructure**
- **Compliant with Government regulations for Cloud services**
- **Effective Security Procedures**
- **Complete portfolio of IT solutions**



## Hyperscale Downsides

### Hosting Data in the Public Cloud - Risks & Incidents

- **2023 - 2024:** Microsoft committed a “cascade” of “avoidable errors” that allowed Chinese hackers to breach the tech giant’s network. The hack “was preventable and should never have occurred”, US Cyber Safety Review Board (CSRB)
- **March 2023:** Ativy was hacked / encrypted by Ransomware. Many companies were paralyzed
- **Jan 2019:** Microsoft deleted the customers in the SQL databases in Azure
- **2018 & 2019:** AWS have had several outages (EC2 / S3)
- **Oct. 2017:** SAP Partner and the Cloud provider were attacked by a Trojan. Not only a single tenant were infected, but also the backup got encrypted

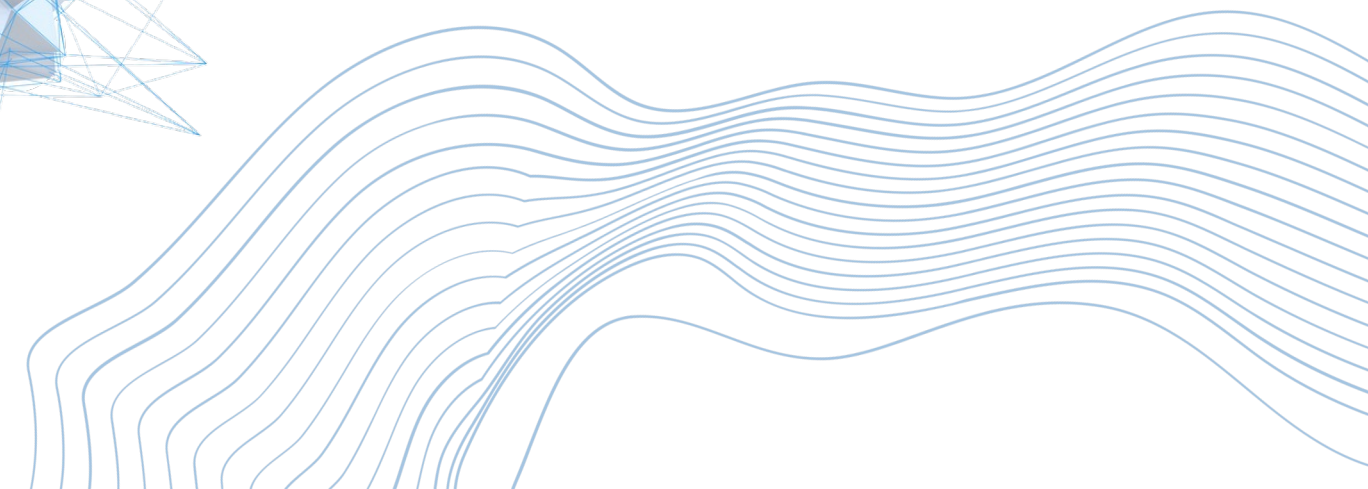
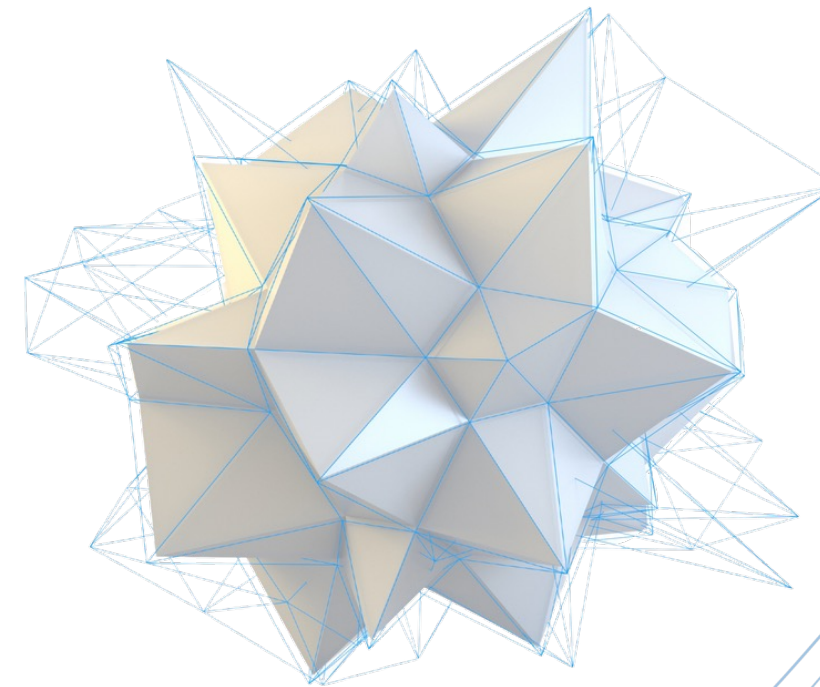
## Public or Private Cloud?

### Public Cloud

- No control on administration processes, backup & recovery may affect your data
- Some cloud-hosting providers do not keep the backup separated
- Tenants may infect each other
- Mostly more expensive than owned hardware combined with managed services

### iSystems Cloud

- We do not use automated processes, customer can control backups
- iSystems keeps **backups off-site and transfer data encrypted only**
- Options to **rent or buy the hardware**
- **iSystems Cloud is fully managed**
- **Extensive Security:** Additional off-site backup; Sophos Cybersecurity Managed & Response (MDR)
- **DC Firewalls:** state-of-the-art firewall and antivirus systems with integrated intrusion detection and standard port blocking



# Additional IT Solutions



## IP Recognition

- User authentication: IP recognition enables websites to verify the identity of users and ensure secure login processes.
- Network management: IP recognition helps network administrators manage and troubleshoot network issues by identifying devices and their connections.



## b1direct

> A **scalable SAP-based online portal** that delivers a distinctive blend of process optimisation and the highest quality data security.

- b1direct collaborate
- b1direct showroom
- b1direct self-service



## DMS

## cks.DIGITAL 4.0

> **cks.DIGITAL 4.0** is a Document Management Software Solution that is fully integrated into SAP Business One, offering a wide range of effective features.

- Secure Information Access
- 24/7 Availability
- Secure Data Exchange
- Automatic Order Capture

# iSystems



## Data Security

> **24/7 Managed Threat Protection, Detection and Response (MDR) service:**

- Analyst-led threat hunting
- Investigation
- Threat containment

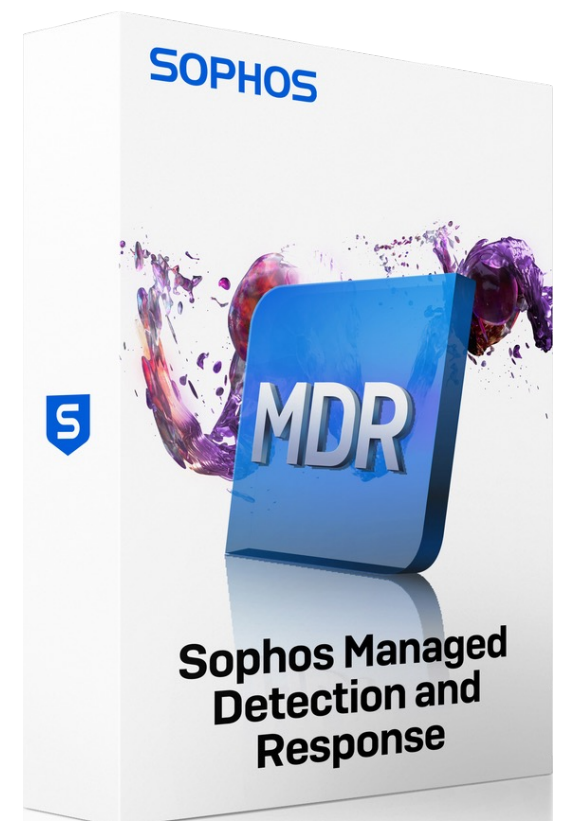
> Solid Data Security DC setup (data storage, data access, Firewall etc.)



## Unmatched Backup Technology

> **Off-site backup device:** a local replication device that can ensure a higher data protection in the event of catastrophic failure and outage

> **DC Backup in 2 additional facilities:** dedicated backup storage in a different network



# Questions?

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