

# Acronis

## Easy, Efficient and Secure Cyber Protection

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Dual headquarters  
in Switzerland and Singapore

# The World is Digital



**Data is  
doubling every  
two years**

[IDC, The Digital Universe of Opportunities](#)

# Data is critical for AI decision making

AI can examine all of the data an organization has collected, on multiple systems over many years, to find new insights and add value

# Data is driving the Internet of Things (IoT)

Intel estimates there will be 200 billion  
IoT devices by 2020, up from 2 billion in 2006

**Data is now  
“the world’s most  
valuable resource”**

The  
Economist

[economist.com/leaders/2017/05/06/  
the-worlds-most-valuable-resource-is-no-longer-oil-but-data](https://economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data)

**Which means  
protecting data is now  
a basic human need**



Air



Water



Food



Shelter



Cyber  
Protection

**But today's  
data owners face  
three emerging  
challenges**

# COMPLEXITY

Workloads Are Leaving the Data Center

The edge and endpoints are rapidly being used to create, access and store data



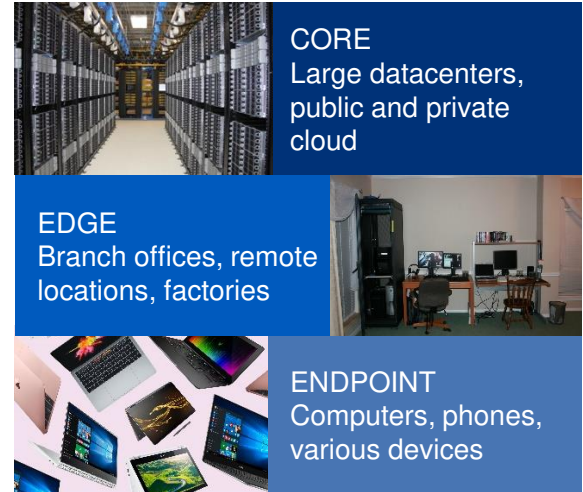
# Complexity: Computing is Shifting Towards the Edge

## 100B Devices, Only 1B in Data Centers

IoT and mobile shifts computing to data origins - managed centrally, like the cloud

Lower latency, better response time, Better availability with intermittent connectivity

Avoids uploading large data sets to the cloud, Security and Compliance



# SECURITY

Hackers Have Gone Industrial

Greater computing power  
and AI create more sophisticated  
and damaging attacks



# Security: Threat Trends

## Industrialization of Cyber Crime, Growth of Zero-Day Exploits

Criminals with huge computing power, AI and physical security

Privacy, state and organization sovereignty, vendor and supply chain management

GDPR and Importance of authenticity and privacy management



NSA Multiprogram Research Facility in Oak Ridge, TN  
NSA is building first ever Exaflop computer there:  
200MW power, 24,000 m<sup>2</sup> building space,  
54,000 tons of cooling equipment

# COST

Predictable Budgets Are Needed

Storage costs and staffing IT  
to manage bigger data volumes  
is a budgetary challenge

# Cost: Digitizing the World with Precision Results in Huge Amount of Data

Almost all Business and Personal processes are already digitized:  
3 Exabytes of data per day

Now digitizing Physical world with cameras, satellites, sensors, wearables for predictive analytics: million times more data

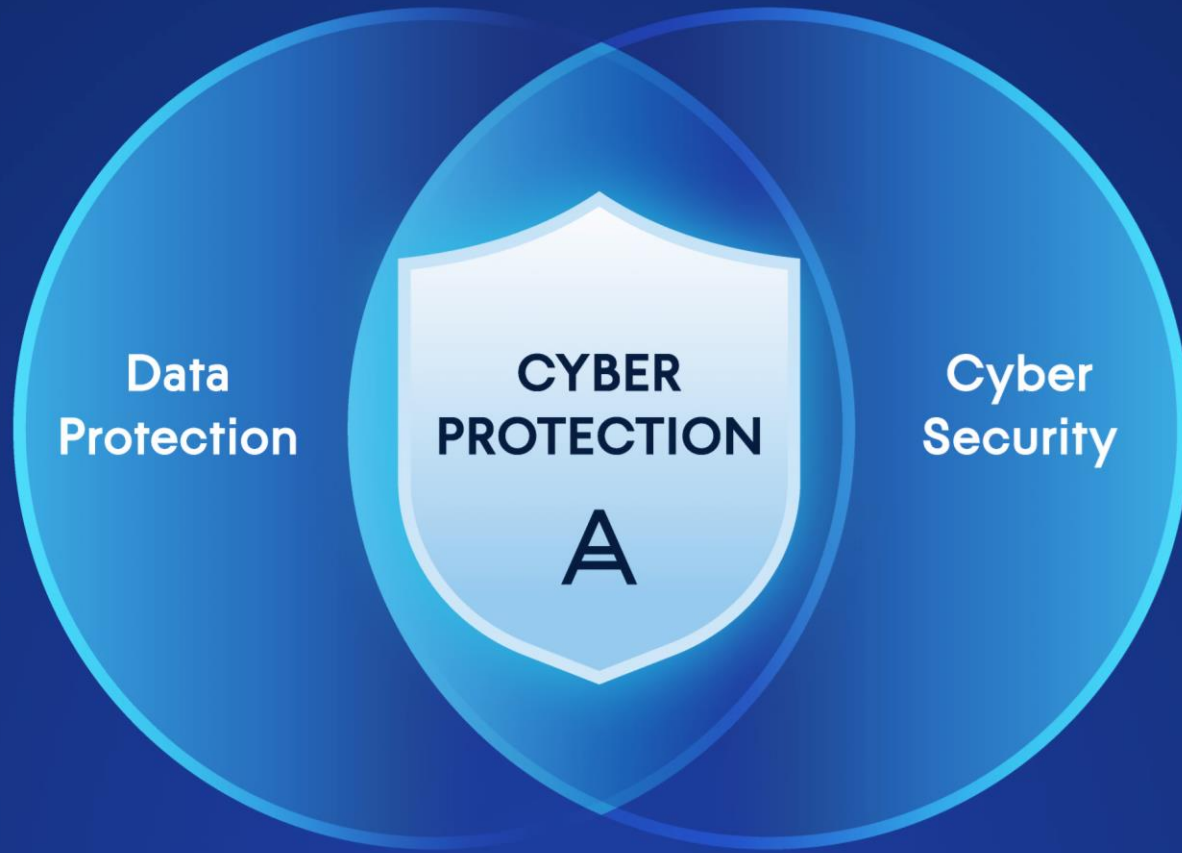
Soon digitizing world of Nature and Health: another million times more data (applications and systems)



## Cost: Ultra Rapid Growth of Data and Accelerating

Over 40 ZB in 2019, growing to 175 ZB (or much more) by 2025

(Source: IDC)



Modern approach for modern protection

# What is effective cyber protection?

# There are 5 Vectors of Cyber Protection (SAPAS)



Safety



Accessibility



Privacy



Authenticity



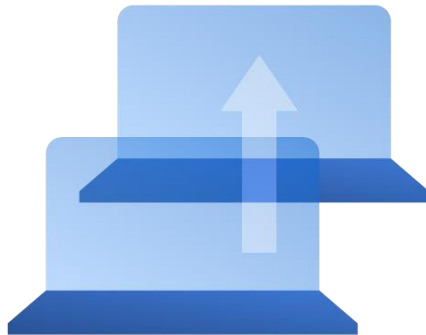
Security



## Safety

*“The condition of being safe from undergoing or causing hurt, injury, or loss.”*

– Merriam-Webster



### In the digital world:

An always available copy or multiple copies that can be used to restore the original.

### Any Storage: Cloud, On-Premise or Hybrid

#### ANY CLOUD



FTP/SFTP



#### ANY ON-PREMISE



DISKS, TAPE, NAS, SAN



# Accessibility

*“Capable of being used or seen”*

– Merriam-Webster



## In the digital world:

An easy way to access your digital world from anywhere at anytime.

## Easy to Manage

- **Data Recovery**
  - File Recovery
  - Mailbox & E-mail Recovery
  - Database Recovery
- **System Recovery**
  - Bare-Metal Recovery
  - Instant Restore™
  - vmFlashBack
- **Dissimilar Hardware Recovery & Migration**
  - P2V, V2V, V2P, P2P
  - P2C, V2C, C2C, C2V, C2P
- **Physical Data Shipment**
- **Cloud Disaster Recovery**
- **Replication**
- **High Availability**



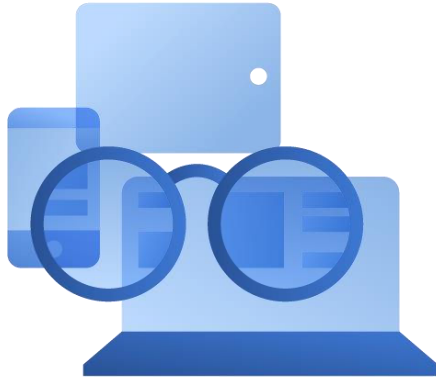
# The 5 Vectors of Cyber Protection



## Privacy

*“Freedom from unauthorized intrusion.”*

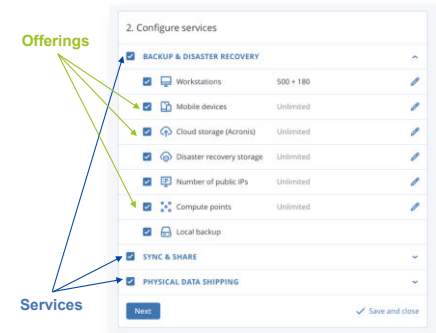
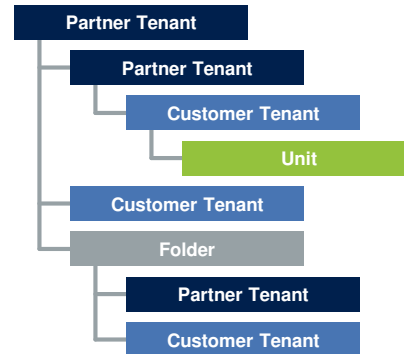
– Merriam-Webster



### In the digital world:

The ability to control the who, how, where and when can access your digital life.

### Any Recovery



# The 5 Vectors of Cyber Protection



## Authenticity

*“Worthy of acceptance or belief as conforming to or based on fact.”*

– Merriam-Webster



**In the digital world:**

An easy way to validate that a copy is an exact replica of the original.

The screenshot displays the Acronis Data Cloud interface. On the left, a sidebar shows navigation options: HOME, NOTARIZED FILES, APP KEY, and VERIFICATION. The main area is titled 'Notarized files' and contains a table with the following data:

Name	Status	Notarized	Uploaded
Notarized_01.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_02.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_03.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_04.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_05.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_06.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_07.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_08.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_09.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_10.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_11.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_12.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_13.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_14.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_15.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_16.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_17.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_18.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_19.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM
Notarized_20.pdf	Notarized	22 May 2018 12:04 PM	22 May 2018 12:04 PM

To the right of the table is a sample 'NOTARIZATION CERTIFICATION' document. It features a decorative border and a central seal. The text on the document reads: 'This is to certify that the dataset or file referred to hereunder was notarized at the date and time printed below, through the creation of a self-authenticating digital record using blockchain technology.' Below this text are three fields: 'NAME' (Contract\_01.pdf), 'DATE & TIME' (22 May 2018 12:04 PM), and 'SIGNEE' (Acronis History).





# Security

*"Freedom from danger."*

– Merriam-Webster



**In the digital world:**  
Protection against malicious agents

## Industrialization and Automation of Cyber Crime, Zero-Day Exploits, Forensic



**Government of Bulgaria records stolen**

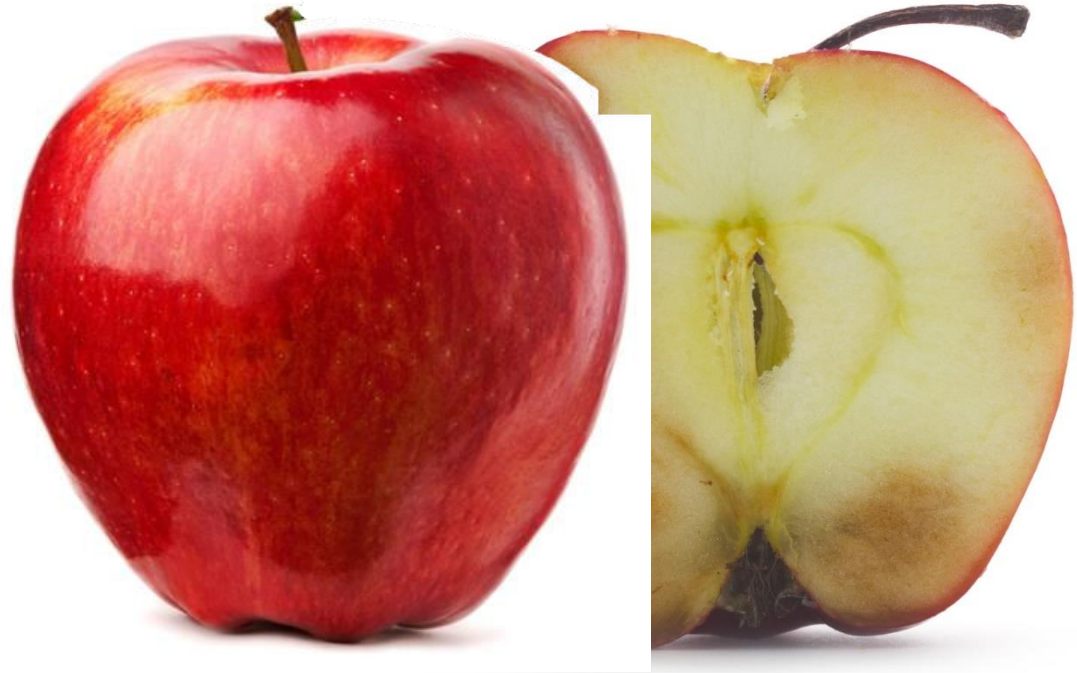
**Government of Texas hit by ransomware**

**One million Swiss residents are victims of cyber attacks**





# Ransomware evolves...



# Modern Data Threats: Cybersecurity and Privacy Share Center Stage

## Ransomware

**\$300M+**

Reported cost of a ransomware attack for three Forbes-ranked companies (Merck, TNT Express, Maersk)

## Ransomware

**Every  
14 seconds**

Ransomware will attack a business by the end of 2019

## Non-Compliance Penalties

**\$57M**

The largest GDPR penalty issued to date

## Cyber Attacks

**43%**

of costs associated with a cyber attack are information loss – the most expensive component

## Privacy

**40%**

of companies have sensitive files that are unprotected and open to every employee

## Privacy

**27.9%**

The likelihood that an organization will have a data breach in the next two years

# Digital World Requires 5 Vectors of Protection



## Safety

Ensure a reliable copy of your data is always available



## Accessibility

Make data easily available from anywhere at any time



## Privacy

Control who has visibility and access to your data



## Authenticity

Have undeniable proof a copy is an exact replica of the original



## Security

Protect your data, apps, and systems against malicious threats

## Data Protection

## Cyber Security

## Cyber Protection

Acronis

# These 5 Vectors of Cyber Protection

are all critical, but they often  
work against each other



**Acronis delivers  
cyber protection  
that is easy, efficient  
and secure**

# EASY

Intuitive solutions mean  
less time learning and more time  
protecting

# EFFICIENT

Purchasing one solution  
addresses all cyber protection vectors

# SECURE

Integrated security includes  
anti-malware, privacy and file  
authenticity solutions

**Get #CyberFit:  
Make sure you're  
covering all  
Five Vectors of  
Cyber Protection**

# Acronis Cyber Foundation

Building a more knowledgeable future

[www.acronis.org](http://www.acronis.org)

**CREATE, SPREAD  
AND PROTECT  
KNOWLEDGE WITH US!**

Building new schools • Providing educational programs • Publishing books

