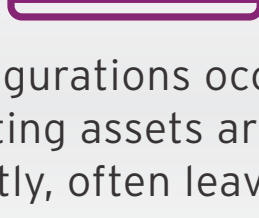


# MISCONFIGURATIONS: AVOID THE RISK

## WHAT ARE MISCONFIGURATIONS?



Misconfigurations occur when computing assets are set up incorrectly, often leaving them vulnerable to malicious activity.<sup>1</sup>

## 65-70%

of all security issues start with misconfigurations.<sup>2</sup>

## HOW DO THEY HAPPEN?

### 5 mistakes that cause misconfigurations:

### 1

#### Storage access

Cloud users wrongly assume that "authenticated users" covers just their organization, in actuality, this refers to anyone with an Amazon Web Services® (AWS) account.

### 2

#### "Secrets" management

Some enterprises fail to properly secure their "secrets" (passwords, credentials, etc.), exposing their data to malicious actors.

### 3

#### Disabled logging and monitoring

Without proper review, an organization can miss important maintenance alerts or security-related events, putting them at risk for serious security implications.

### 4

#### Overly permissive access to hosts, containers, and virtual machines

Businesses often forget to shut down legacy ports and protocols, essentially leaving the door open to potential attacks.

### 5

#### Lack of validations

Without systems to check and identify misconfigurations as they occur, businesses have no way to know of and properly address security flaws.

# 424%

increase in data breaches resulting from cloud misconfigurations by **human error**<sup>3</sup>

## WHAT ARE THE IMPACTS?



#### Cost

Since 2018, cloud breaches resulted in \$5 trillion in costs to enterprises<sup>4</sup>



#### Exposure

33.4 billion private records exposed since 2018 –This leads to obvious security risks, but also is detrimental to customer trust and business reputation<sup>5</sup>



#### One and done

Just one misconfiguration can expose billions of private records

## WHY IT IS IMPORTANT TO YOU:

**Anyone** is at risk



## 100,000,000 records exposed

Capital One is considered a mature cloud company, but it experienced **two** misconfigurations that led to 100,000,000 sensitive records exposed



Microsoft Azure

Google Cloud

Alibaba Cloud

**Shared responsible model is tricky** - You may not be pulling your weight the way you thought you were

#### Customer

Responsibility for security 'in' the cloud

Customer Data

Platform, applications, identity & access management

Operating system, network & firewall configuration

Client-side data  
Encryption & data integrity  
Authentication

Server-side encryption  
(File system and/or data)

Networking traffic protection  
(encryption, integrity, identity)

#### Cloud Vendor

Responsibility for security 'of' the cloud

Software

Compute

Storage

Database

Networking

Hardware/global infrastructure

Regions

Availability zones

Edge Locations

## HOW TO MANAGE:



Check permissions controls



Audit for misconfigurations and compliance



Check for policy compliance before provisioning



Choose the right CSPM tool

How **Trend Micro Cloud One™ - Conformity** can help:



750+ real-time configuration checks:

AWS & Azure Well-Architected Framework, PCI, HIPAA, NIST, GDPR, CIS, SOC2, ISO 27001



The Conformity **Knowledge Base** helps developers run checks and remediate any failures



Central visibility across a single, multi-cloud dashboard.

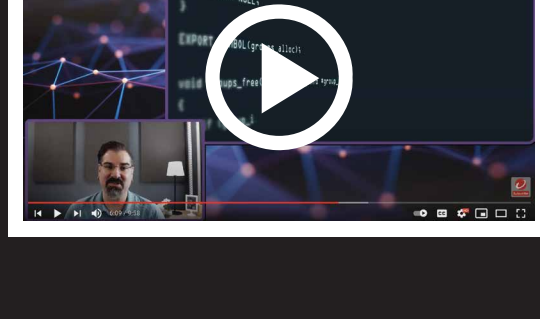


Easy to use UI and full API coverage

See how you can manage misconfigurations with a free 30-day trial of Conformity.

Try it for free

Learn more about cloud security and the risks misconfigurations pose in this video by Mark Nunnikhoven, Vice President of Cloud Research at Trend Micro.



<sup>1</sup> <https://www.infosecurity-magazine.com/opinions/misconfiguration-cloud/>

<sup>2</sup> [https://www.trendmicro.com/en\\_ca/research/21/a/the-top-worry-in-cloud-security-for-2021.html](https://www.trendmicro.com/en_ca/research/21/a/the-top-worry-in-cloud-security-for-2021.html)

<sup>3</sup> <https://newsroom.ibm.com/2018-04-04-IBM-X-Force-Report-Fewer-Records-Breached-In-2017-As-Cybercriminals-Focused-On-Ransomware-And-Destructive-Attacks>

<sup>4</sup> <https://www.techrepublic.com/article/cloud-misconfigurations-cost-companies-nearly-5-trillion/>

<sup>5</sup> <https://www.techrepublic.com/article/cloud-misconfigurations-cost-companies-nearly-5-trillion/>