

Reduce the Blast Radius with Micro segmentation

Jonathan Borgesen

Introduction



Jonthan Borgesen Technical Director of Security

15 years of experience in the cybersecurity industry. Throughout his career, he has built and led security practices for multiple organizations.

He emphasizes business impact, cross-architecture solutions, and strategic alignment over simply focusing on technology. This mindset has earned him a reputation as a trusted advisor and thought leader among his clients and peers.



Challenges Around Traditional Network Segmentation

- Complexity
 - Increased Management Overhead
 - Application Compatibility
 - Increased Latency
 - Complexity of Acess Control
 - Lack of Visibilty

IT Silos Continue to Impact Progress



- Lack of understanding
- Manifests Complexity
- Delays in strategy and deployment
- Lack of Documentation
- Standards and Procedures are unclear or not created



Ooooops All Your Files Are Encrypted ,NoCry

Can I Recover My Files ?

Yes, You Can Recover All Your Files Easily And Quickly

But How?

Send The Required Amount And I Will Send The Key To You For Decryption

See You Soon (0_0)

Your files will be lost on :

: 58

About bitcoin

How to buy bitcoins?

Contact Us

Send \$100 worth of bitcoin to this address: **Obitcoin**

1LHaSk425DzEoR6dT8t6gc4wkoKnQ4iVwK

Сору

Show Encrypted Files

Decrypt



The Need, Why Now?



High (100)	Medium- risk level (10)	High-risk level (50)	Critical- risk level (100)	
Medium (50)	Low-risk level (5)	Medium- risk level (25)	High-ris level (50)	
Low (10)	Low-risk level (1)	Low-risk level (5)	Medium risk level (10)	
	Low (0.1)	Medium (0.5)	High (1)	
Likelihood of Threat				

Microsegementation vs Zero Trust

Think of microsegmentation as a helpful tool that is part of the bigger Zero Trust security approach. Here's how they compare:

Aspect	Microsegmentation	Zero Trust
Focus	Isolating network segments	Verifying every user and device
Implementation	Granular policies for traffic control	Continuous verification of all entities
Scope	Network - centric	Holistic, including users, devices, etc
Goal	Minimize lateral movement	Never trust, always verify

Microsegmentation works well with Zero Trust by focusing on network security, while Zero Trust covers a bigger overall security plan



Network Segmentation vs Micro Segmentation

Network Segmentation Micro Segmentation

Coarse policy controls

Physical network

North – South traffic communication

Address based/network level

Hardware Based (policies enforced on VLANs subnets) Granular policy controls
(Enforce policy up to Layer 7)

Virtual or overlay network via SDNs

East - West traffic communication

Identity based/workload level

Software Based (Policies enforced on virtual machines)

Tackle segmentation as a program and not a project

Identify Risk

- Gain Visibility
- Create Policy
- Prioritize Change

Operate & Optimize

- Monitor the Network
- Iterate on Process

Design Segmentation

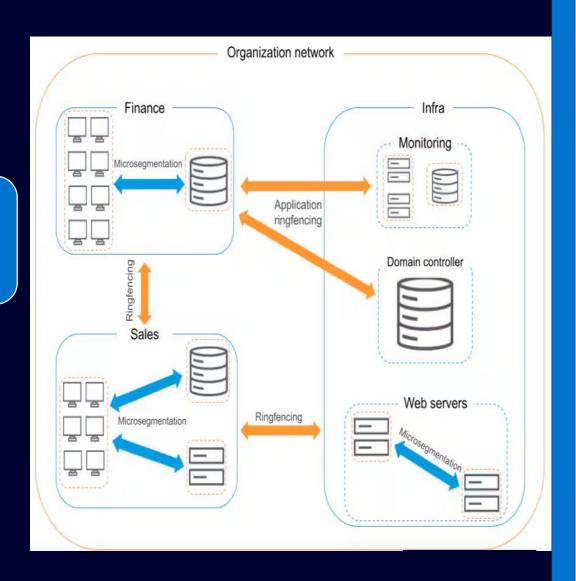
- Choose a Methodology
- Define Acess Control

Unmanaged Devices (IOT)

- Gain Visibility
- Control point
- Only necessary access

Discovering Critical Applications

- Dependencies
- Mapping



Benefits Gained Through Micro Segmentation

Simplify Compliance

Map and isolate compliance related applications and systems. Granular visualization will help you understand how best to reduce the risk of breaches quickly

Protect Essential Systems

Separate critical applications such as money transfers, payments, and customer applications from the general IT infrastructure.

Stop Lateral Movement

Isolate IoT and third-party access. Manage access routes and terminate access at the target applications.

Preventing further movement within the data center.

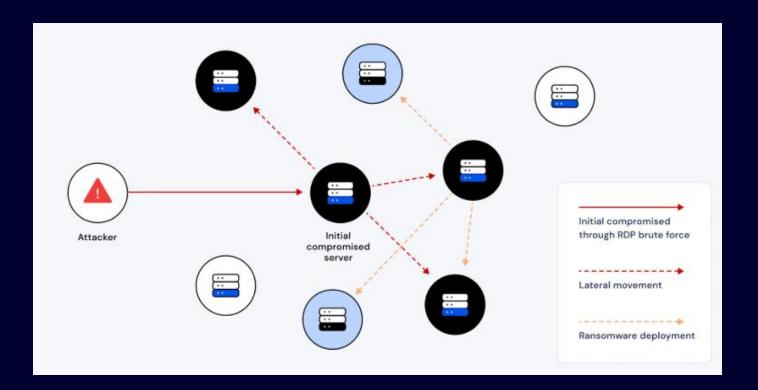
Adopt Tech Securely

Use a single pane of glass for visibility and setting security policy across all infrastructure (Cloud, PaaS, etc.). Be sure you enforce security via a unified set of tools.

Reduction Of the "Blast Radius"



According to <u>Forrester's latest analysis</u>, in 2024, the top 35 global breaches alone **exposed more than 5.4 billion records**, and privacy violations related to this sensitive data **cost organizations US\$3.1 billion** in fines.



TRENDS REPORT

Lessons Learned From The World's Biggest Data Breaches And Privacy Abuses, 2024

March 25, 2025

By Janet Worthington, Enza lannopollo, Heidi Shey, Andras Cser, Alla Valente, Sandy Carielli, Allie Mellen, Madelein van der Hout with Amy DeMartine, Danielle Chittem, Peter Harrison

FORRESTER

Summary

Forrester analyzed the top global breaches and worst privacy abuses of 2024 and identified key trends and lessons learned. With more than 5.4 billion records exposed in the top 35 breaches alone and almost \$3.1 billion in fines levied on the top 35 violators — both up from 2023 — lessons abound for security teams. Security and privacy leaders should use this report to understand the key breaches and lessons from the past year and augment their security and privacy strategies accordingly.

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Key concepts of reducing the blast radius

Restrict access rights



Classify your sensitive data







Use a strong

segmentation

strategy

Monitor all systems and data



Controlling Risk

- Avoid Risk
- Reduce Risk
- Risk Transfer
- Risk Confirmation
- Risk Containment
- Risk environment reevaluation





Ket Benefits of Micro-Segmentation Reducing The Blast Radius



Breach containment

Implementing micro-segmentation prevents the lateral movement of attackers when they inevitably gain initial access. Each workload operates in its own secure enclave with granular control, dramatically limiting the blast radius of any compromise.



Third-party risk mitigation

By segmenting third-party access and implementing least-privilege principles, organizations can continue to work with vendors like Snowflake or Fortinet while minimizing exposure if those relationships are compromised.



API protection

Application-aware policies ensure that API communications follow predefined security rules, preventing the kind of unrestricted access that led to the Twilio and Dell breaches.

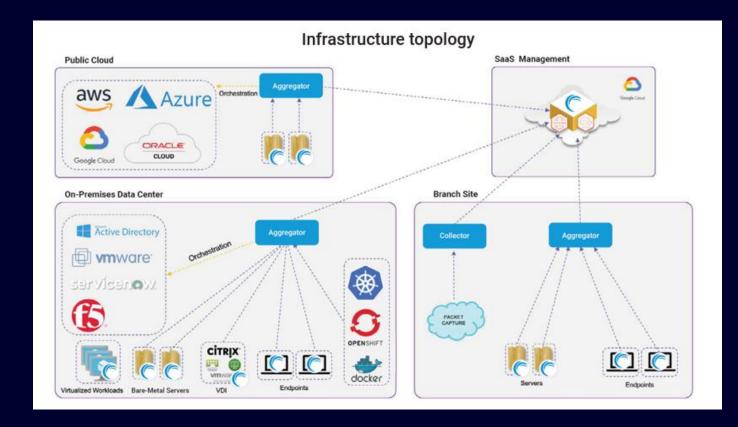


Compliance support

The ability to demonstrate granular data protection controls becomes essential to help meet compliance and regulatory requirements.

Strengthen with Defense in Depth

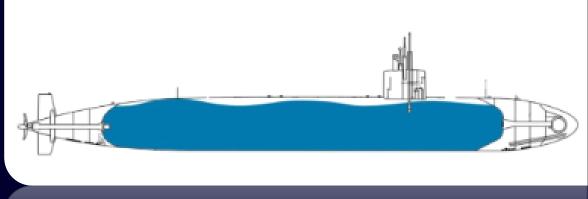
"CISA releases 'Journey to Zero Trust' series, guides federal agencies on micro-segmentation to boost adoption"

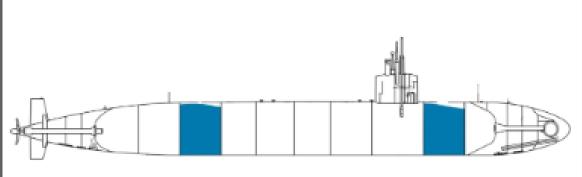




Without Micro-Segmentation

With Micro-Segmentation







Thank you!