

## Zero Trust Network Access (ZTNA), Carta and SDP

Duration: 0 Days    Course Code: GKZTNACS    Delivery Method: e-Learning

### Overview:

#### Nederlands:

In deze eLearning Zero Trust Network Access (ZTNA), CARTA en SDP worden de concepten van Zero Trust en Carta uitgelegd en de implementatie met een Software Defined Perimeter (SDP) en Micro-segmentatie toegelicht.

Het Zero Trust model in IT security is al in 2009 bedacht door Forrester. Zoals de naam zegt, overal en altijd moet de sterkste vorm van security (b.v authenticatie, autorisatie en encryptie) toegepast worden.

Het huidige netwerk model (*perimeter model* met een DMZ) kan niet op tegen geavanceerde bedreigingen zoals APT's (Advanced Persistent Threats) en DDOS aanvallen. Is het niet vreemd dat het meest gebruikte transport protocol uitgaat van: eerst verbinden, dan authenticeren? Het IP adres was nooit bedoeld als authenticatie middel maar is wel makkelijk om een verbinding mee op te zetten... Met Zero Trust Network Access is het netwerk "donker": een niet geauthenticeerde entiteit kan NIETS zien.

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#### English:

In this e-Learning course Zero Trust Network Access (ZTNA), CARTA and SDP you'll learn the concepts of Zero Trust and Carta are explained and the implementation with a Software Defined Perimeter (SDP) and Micro-segmentation clarified.

The term Zero Trust model was coined by Forrester in 2009. As the name says, everywhere and anytime the highest form of security (authentication, authorization, encryption etc.) must be enforced.

The current network model (*perimeter model* with a DMZ) does not offer sufficient protection against threats like APT's (Advanced Persistent Threats) or DDOS attacks. Don't you think it is strange that the most popular transport protocol is based on: connect first, then authenticate? The IP-address was never meant for authentication, it is very convenient for making a connection. With Zero trust the network is completely dark: unauthenticated you cannot see anything...

### Target Audience:

Anyone who wants to know about the latest trends in IT security

### Objectives:

- After completing this course you should be able to:
- Understand the need for Zero Trust Network Access
- Identify the challenges with the traditional network design
- Describe the implications of the changed environment and the cloud
- Explain the problems with TCP/IP
- Understand the concept of Named Data Networking
- Describe the internet threat model
- Identify the features of Zero Trust Network Access
- Understand how to implement Zero Trust Network Access
- Explain the advantages of Zero Trust Network Access
- Identify Zero Trust solutions as Software Defined Perimeter and Micro-segmentation
- Understand the concept of CARTA
- Explain why you need CARTA
- Describe UEBA and the relationship with CARTA
- Identify the importance of Artificial Intelligence and Machine Learning in IT security
- Explain the features of a SDP solution
- Understand the architecture of SDP
- Understand the problems with VPN
- Describe the features of Single Packet Authorization (SPA)
- Describe static versus dynamic firewall
- Explain the importance of Points of Presence (PoP)
- Understand the advantages of SDP
- Explain how SDP enables micro-segmentation
- List the most important vendors of SDP solutions

- Identify the 7 imperatives of CARTA

- Identify the critical factors when choosing a SDP product

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## Prerequisites:

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- Basic internet usage skills

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## Follow-on-Courses:

The following courses are recommended for further study.

- The latest trends in Cloud security: CASB, SD-WAN and SASE Training (GKCSS)

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## Content:

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| <ul style="list-style-type: none"><li>■ What are the features of Zero Trust Network Access</li><li>■ Problems with the current network and security model</li><li>■ The changed environment: BYOD, working from home (or anywhere)</li><li>■ North-south opposed to east-west traffic</li><li>■ How to implement ZTNA</li><li>■ The future of the internet: Named Data Networking (NDN)</li></ul> | <ul style="list-style-type: none"><li>■ What is CARTA and why do I need it?</li><li>■ The features of CARTA: the 7 imperatives of CARTA</li><li>■ Relationship CARTA and UEBA (User and Entity Behavior Analytics)</li><li>■ AI/ML and IT security</li><li>■ What is SDP and how does it work?</li><li>■ SDP architecture</li></ul> | <ul style="list-style-type: none"><li>■ VPN versus SDP</li><li>■ Single Packet Authorization</li><li>■ Static and dynamic firewalls</li><li>■ The advantages of SDP</li><li>■ What is micro-segmentation and how does it work</li><li>■ Vendors SDP and micro-segmentation</li></ul> |
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## Further Information:

For More information, or to book your course, please call us on 0800/84.009

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