

# Setup AD with etoken Smartcard Authentication

Thomas Glanzmann  
<thomas@glanzmann.de>

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# Thomas Glanzmann

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- Strong Unix background including kernel and virtual machine programming
- Linux, VMware, Storage, HP Trainer and Consultant
- Diplom-Informatiker Univ. (bachelor and master degree in computer science)
- Self-employed

# Agenda

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- Prerequisites
- DNS delegation
- Setup Active Directory
- Install Active Directory Certificate Services
- Install SafeNet Authentication Client
- Configure Certificate Services
- Sources

# Prerequisites

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- Fully patched Windows 2008 R2
- Configure hostname and static ip address
- SafeNet Authentication Client

# DNS delegation

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```
directory      IN      NS ad.gmv1.de.  
ad.gmv1.de.   IN      A 10.10.20.2
```

# Setup Active Directory

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- Call `dcpromo`
- Create a domain in a new forest
- Specify forest and domain functional level as Windows 2003
- Configure the DNS Server as part of the setup
- Specify a recovery password

# Install Active Directory Certificate Services

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- Add Role Active Directory Certificate Services
- Select Certificate Authority, Certificate Authority Web Enrollment, Online Responder
- Configure Enterprise Root CA
- Choose RSA#Microsoft Software Key Storage Provider and SHA 256 Hash

# Install SafeNet Authentication Client

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- Install SafeNet Authentication Client on every system in the domain
- Install SafeNet Authentication Client on every system accessing the domain



# Configure Certificate Services: Configure Template

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- Start → Administrative Tools → Certification Authority
- Right click Certificate Templates → Manage
- Right click Smart Card Login → Duplicate Template
  - ▲ [x] Windows Server 2003
  - ▲ Template Display Name: GMVL Smartcard Logon
  - ▲ [x] Publish Certificate in Active Directory
  - ▲ Request Handling
    - Purpose: Signature & Encryption
    - CSPs → Requests must use one of the following CSPs:
      - [x] eToken Base Cryptographic Provider
  - ▲ Issuance Provider
    - This number of authorized signatures: 1
    - Application Policy: Certificate Request Agent

# Configure Certificate Services: Issue Certificate Templates

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- Right click on Certificate Templates
  - New Certificate Template to Issue
  - Select Enrollment Agent
  - OK
  
- Right click on Certificate Templates
  - New Certificate Template to Issue
  - Select GMVL Smartcard Logon
  - OK

# Configure Certificate Services: Enroll the Enrollment Agent Certificate

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- Run mmc
  - Certificate
  - My user
  
- Right click on Personal
  - Certificates
  - Request New Certificate
  - Enrollment Agent

# Configure Certificate Services: Enroll smartcard

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- Run Adsi Edit

- Set UserPrincipalName to administrator@DOMAIN

- Right click on Personal

- Certificates

- Advanced

- Request New Certificate on behalf of new user

# References

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- [Installing Windows 2008 R2 Certificate Services for SmartCard Authentication](#)