Sprawozdanie 2 Ochrona Systemów Operacyjnych

Jonatan Kasperczak
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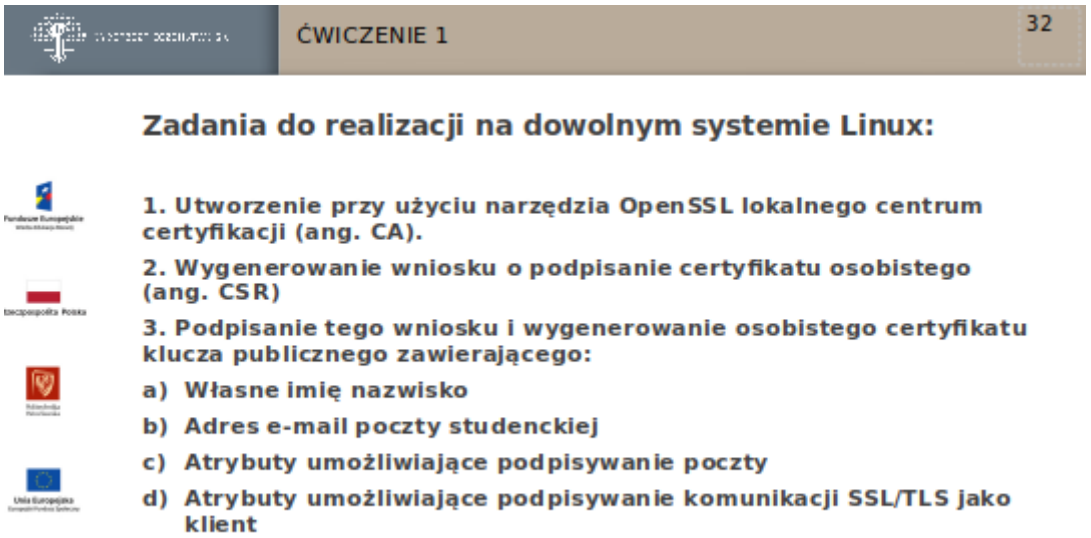
OPENSSL



W załącznikach znadują się

- Certyfikat osobisty w formatach PEM oraz tekstowym
- Certyfikat CA w formatach PEM oraz tekstowym
- Wynik weryfikacji certyfikatu osobistego certyfikatem CA

 # Zadanie 1
#Generate CA key and CA certyficate
openssl req -x509 -newkey rsa:4096 -days 3650 -keyout ca-key.pem -out ca-cert.pem -sha256 -subj "/C=PL/ST=DOL/L=Wr/O=PWr/OU=WIT/CN=Jonatan_Kasperczak/emailAddress=259418@student.pwr.edu.pl"

 # Zadanie 2
#Generate private sign request with atributes
openssl req -newkey rsa:4096 -addext "extendedKeyUsage = emailProtection,clientAuth" -keyform PEM -keyout server-key.pem -out server-req.csr -outform PEM -sha256 -subj "/C=EN/ST=ZS/L=ZS/O=Wr/OU=/CN=Kasperczak/emailAddress=259418"

 # Zadanie 3
#Sign certificate
openssl x509 -req -days 365 -in server-req.csr -CA ca-cert.pem -CAkey ca-key.pem -CAcreateserial -out server-cert.pem -sha256

#Convert ca to ca.txt

openssl x509 -in ca_cert.pem -noout -text > ca_cert.txt

#Convert sign-request to txt
openssl req -noout -text -in server-req.csr > req_csr.txt

#Convert signed certificate to txt
openssl x509 -in server-cert.pem -noout -text > cert_pem.txt

#Verify
openssl verify -CAfile ca-cert.pem server-cert.pem