

GÉANT eduPKI in 6 Slides Servicing GÉANT Services

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Slides & Related Materials @ https://www.edupki.org

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#### **Outline**



# The 3 building-blocks of eduPKI are

- eduPKI Policy Management Authority eduPKI PMA which sets the coordinating frame and quality standards with its governing documents for eduPKI participants
- eduPKI Certification Authority eduPKI CA which supplies GÉANT Services with SSL certificates
- eduPKI's Trust Anchor Repository TERENA Academic CA Repository (TACAR)
   which provides a trustworthy download service for CA certificates for eduPKI participants

#### eduPKI PMA



# **Policy Management Authority (PMA)**

- manages Policies of Public-Key-Infrastructures (PKIs) and their Certification Authorities (CAs) – focus on SSL certificates
- interacts with **GN services** (the *Relying Parties*) to assess their PKI security requirements; if SSL certificates fit, offers solutions to address the requirements by defining requirements as *Trust Profiles*
- interacts with NREN CAs to engage them
  - CAs adopt Trust Profiles and get accredited by PMA
- publishes the Trust Profiles and a list of accredited CAs in TACAR

https://www.edupki.org/edupki-pma/

#### eduPKI CA



### **Certification Authority (CA)**

- eduPKI's own CA issuing SSL certificates to GN services
  - for try-out, demo, test and proof-of-concept purposes
  - to support those providers and users of GN services that cannot use any NREN CA service for suitable SSL certificates for their GN service
- running in established DFN-PKI trust-centre which is providing the environment for its secure operation
- governed by its policy documents, i.e. Certificate Policy (CP) and Certification Practice Statement (CPS)
- accredited under the eduPKI Trust Profiles for "eduroam Certificates", "Certificates for GÉANT's Multi-Domain Network Services" and "Generic Server- and Client-Machine-Certificates"
- 3 specific Registration Authorities (RAs) for GN services: *eduroam*, *GN's Multi-Domain Network* Services and GÉANT-IT





#### **CA Certificate Repository**

- utilizing TERENA's TACAR
- secure & trustworthy trust anchor repository provides a central repository for providers of GN services (the Relying Parties) to find / download
  - (Root-) CA certificates of mainly NREN / project PKIs
  - CA's policy documents & contact info
- TACAR provides one TACAR Trust Category per eduPKI Trust Profile
- TACAR lists all accredited compliant CAs under the pertinent TACAR Trust Category
- Relying Parties can find / download all accredited CA certificates under a specific TACAR Trust Category with a view clicks

https://www.edupki.org/tacar/





KPI	Target	Baseline	Measured
Availability (%) of www.edupki.org	99.9	99.4	99.95
Certificate Status Check Availability (%) (CRL Download & OCSP)	99.99	99.9	100
RA Service (certificate application & approval) availability (%)	99.9	99.7	99.99
CA Service (certificate & CRL issuance) availability (%)	99.9	99.7	99.9

#### **Future Plans**

Keep the availability KPIs high

Get involved with the Certificate Transparency work that JRA3T2 is doing

GN4: Move from SA5/T1 (Application Services / eduPKI) to SA4/T2 (Production Application Services and Infrastructure / Production And Support)





# **Expiring eduroam Service and Identity Provider and Proxy certificates**

- Watch out for the expiring dates of your eduroam certificates!
- The first eduroam certificates will expire from 01/2016 on

A loooooooooooooo time till 2016

BUT that is during the transition phase of eduroam ops to SA4





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Slides available from https://www.edupki.org/documents/

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