Introduction of IHEP and IHEP GRID CA

Sun Gongxing

Institute of High Energy Physics, CAS, Beijing, China

Nov. 30, 2005

Outline

- Introduction of IHEP
- Introduction of IHEP CA operation

IHEP Introduction

- The major institute conducts high energy physics experiments in China

- Including HEP, cosmic ray, radiation, nuclear , theoretical physics, advanced accelerator technologies.

HEP experiments at IHEP

- BES upgrade to BESIII (5PB storage capacity, 2000+cpus computing power)
- ARGO-YBJ China-Italy collaboration at Tibet (PB + 500+CPUs)
- CMS + ATLAS/LHC (2 Tier2 RCs, 2000CPUs + 600TB Disk Buffer)
- AMS…
- Hundreds of physicists involve in these exp.
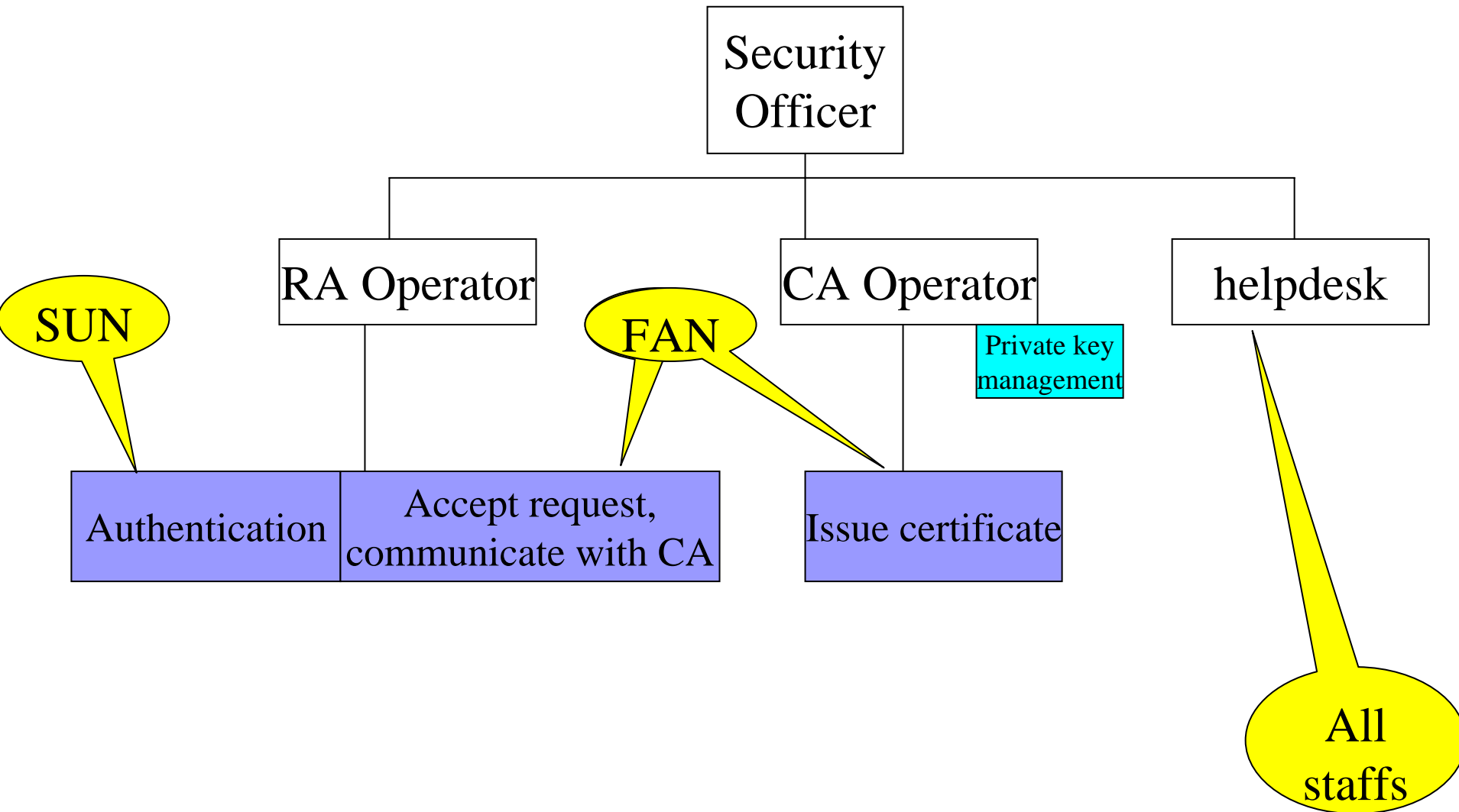- BRSF for boi-medical, materials…

Current status of IHEP GRID CA

- Number of issued certificates

Types	User	Host	Server	Total
Valid	23	12	3	38
Revoked	6	3	1	10

- Subscribers

Org.	IHEP	PKU	SDU	other
number	15	2	1	1

Details of CA operation-staff

Details of CA operation – hardware / equipments / facilities / physical access

- **CA Server**
  - Intel(R) Pentium(R) 4 CPU 1.60GHz, 1 processors, linux redhat 7.3.
  - offline
- **RA Server and repository are in the same machine**
  - Intel(R) Pentium(R) 4 CPU 2.60GHz, 2 processors, linux redhat 7.3.
  - Connected to internet
    - RA Interface is restricted to specific IP and Port
    - Reasonable port filtering
- **CA Room**
- **Physical access**
  - Physical access to the hardware is restricted to personnel authorized to enter the computer room

Details of CA operation – events recorded and archives

- CA/RA machines
  - Certificates of all status
  - Requests of all status
  - All issued CRLs
  - Login,logout,shutdown log
  - Data exchange log
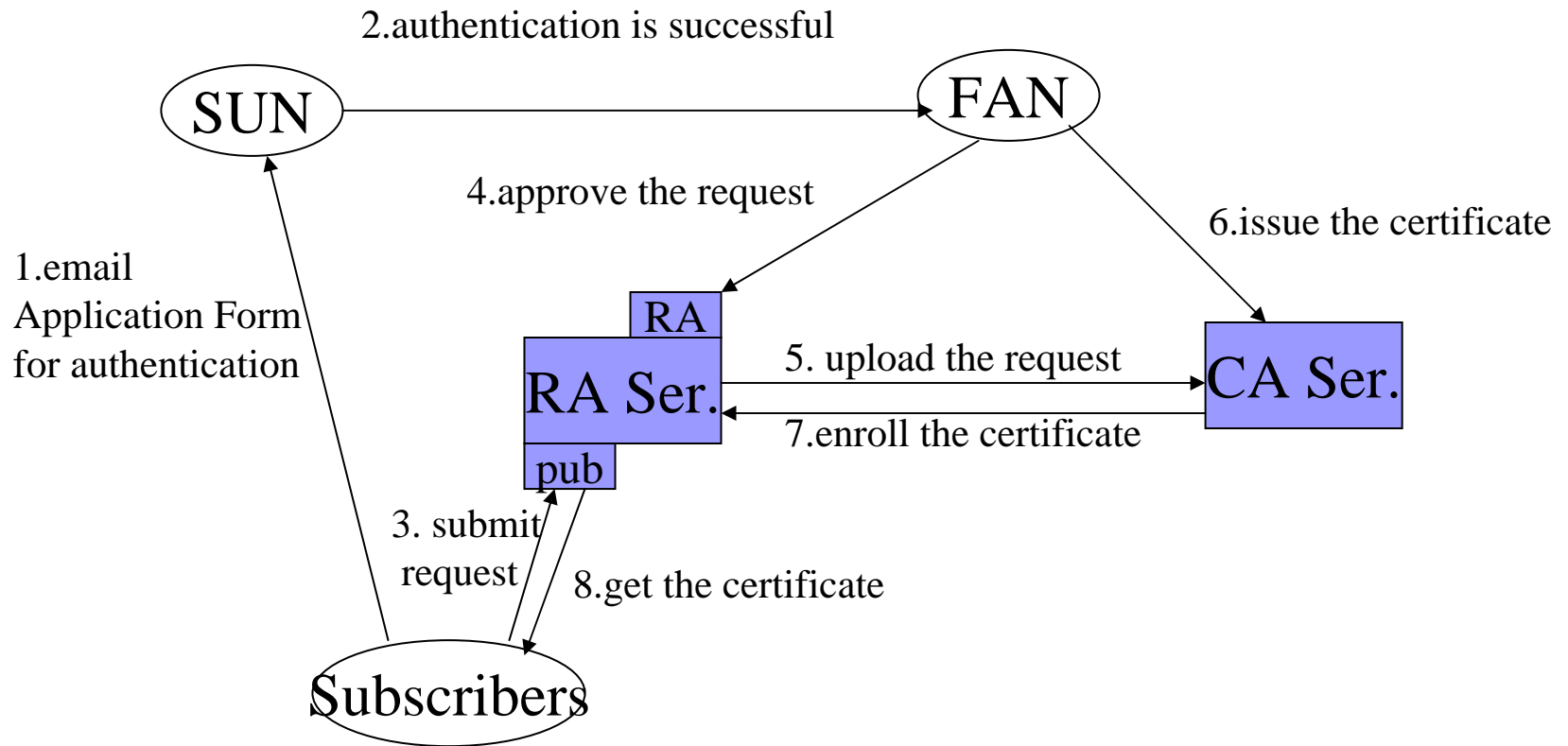- Emails
  - Mails sent by CA
  - Mails received by CA

Details of CA operation – events recorded and archives(cont.)

- **Other documents**
  - Application Form for authentication.
  - All versions of the CP/CPS

detailed workflow for issuing certificates

Thank you!