



# KEK Grid CA Report

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# Staffs for operating CA

- Organization of operating CA (minimum 7 staffs)

- User administrator (one):

- Tomoaki Nakamura\*, Takashi Sasaki\*, Sari Kaneko\*\*\* (LOA),  
+ Two office staff of KEK-CRC:

- Supporting all groups/VOs related to KEK

- Takanori Hara\*\*, Ikuo Ueda\*\*:

- Dedicated support for users belonging to the Belle VO

- Security officer (two):

- Go Iwai\*, S. Takahashi

\* Teaching Staff in KEK-CRC

- CA operator (two):

\*\* Teaching Staff in KEK-IPNS

- M. Nakaya, Y. Nemoto, S. Ogawa

\*\*\* Technical Staff in KEK-CRC

- RA operator (two):

- Two staff in Help Desk

- Help Desk

- Four other staffs in the Help Desk for the services of KEK-CRC

# Overview

- Classic X.509 CA
- Approved by APGridPMA in January 2006
- Serves Japanese high-energy physics and related communities
  - Major players: Belle II, ATLAS, ALICE, ILC, Muon g-2/EDM
    - Belle II has started Physics run since March 2019.
    - In June 2020, SuperKEKB collider achieved the world's highest luminosity.
    - Belle II experiment is continuously going to take the data before the long shut down (expected roughly 10 months) in 2022.
    - Recently, Muon g-2/EDM experiment in J-PARC (VO name: mug2ej.kek.jp) started the preparation to utilize Grid infrastructure including KEK-CA.
  - System is built with NAREGI-CA middleware.
  - OCSP responder: Open CA
- CP/CPS
  - Current version: 2.3.2 (February 2021, no update since then)
- The current CA system was renewed in [September 2020](#).
- Status of the Self-Audit was reported at the previous APGridPMA meeting in February 2022. [The next self-audit has been scheduled for April 2023](#).

# Statistics (as of March 1st, 2023)

- CA users
    - Active users: 192 (No change from the last meeting in March 2022)
  - User certificates
    - Total: 3451 (+170)
    - Valid: 150 (+10)
  - Host certificates
    - Total: 4142 (+197)
    - Valid: 180 (+12)
  - Robot certificates
    - Total: 153 (+18)
    - Valid: 35 (-5)
- Most users have kept up CA accounts through the annual renewal campaign of KEK-CRC services.
  - 19 accounts were invalidated by that in Mar. 2nd 2023.
  - Several accounts have been reactivated after the annual renewal by the user's request.

# Other things related CA

- Started to provide client certificates for Australian users belonging to the Belle II experiment since 2022.
  - Since they can not obtain the X.509 certificate from DigiCert anymore.
- The current CA Key must be renewed by the end of 2025.
  - Considering to keep the current system and operate in parallel with the new system with SHA-2 root certificate from 2024 if necessary.
  - The procurement process of the new KEK central computing system has been started for the 2024 and/or 2025 deployment. The new CA system will be replaced at the same time as the KEKCC renewal.
- Have been started to operation INDIGO-IAM mainly for the Belle II Grid and users.
  - The other small VOs hosted at KEK also will be able to utilize it.
  - Currently in the test phase of 3rd party data transfer with FTS3.
  - We keep VOMS service after the start operation of IAM at least for several years.