Korean Access Federation 2020' Update

Jinyong JO

jiny92@kisti.re.kr

https://www.kafe.or.kr

History

Full mesh to Hybrid

· Production phase
· Federation as a Service

14 15 16 17 18 19 20

PoC

· Policy establishmenet
  (1 main and 2 profiles)
· eduGAIN membership
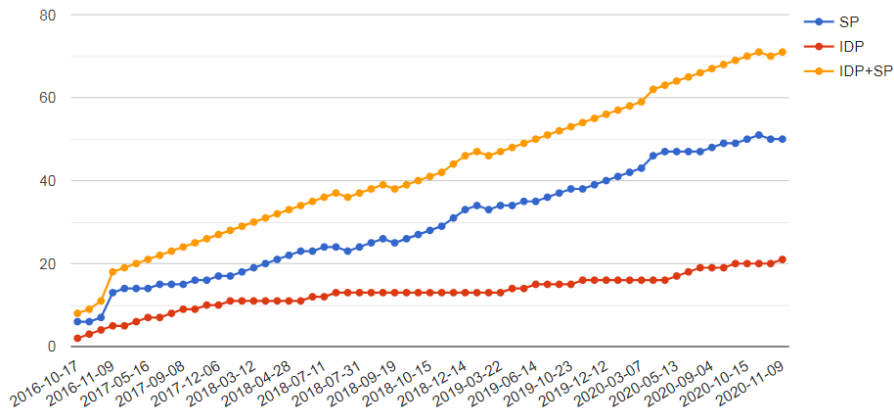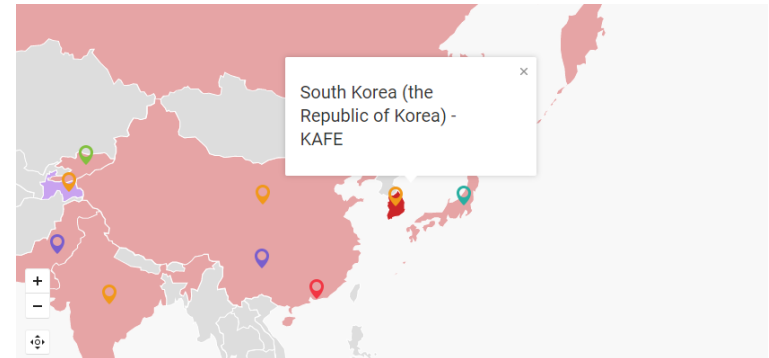
Research Collabo.
Zone/RCZ
(Start of development)

Research Collabo. Zone
(End of development.
Start of pilot phase)
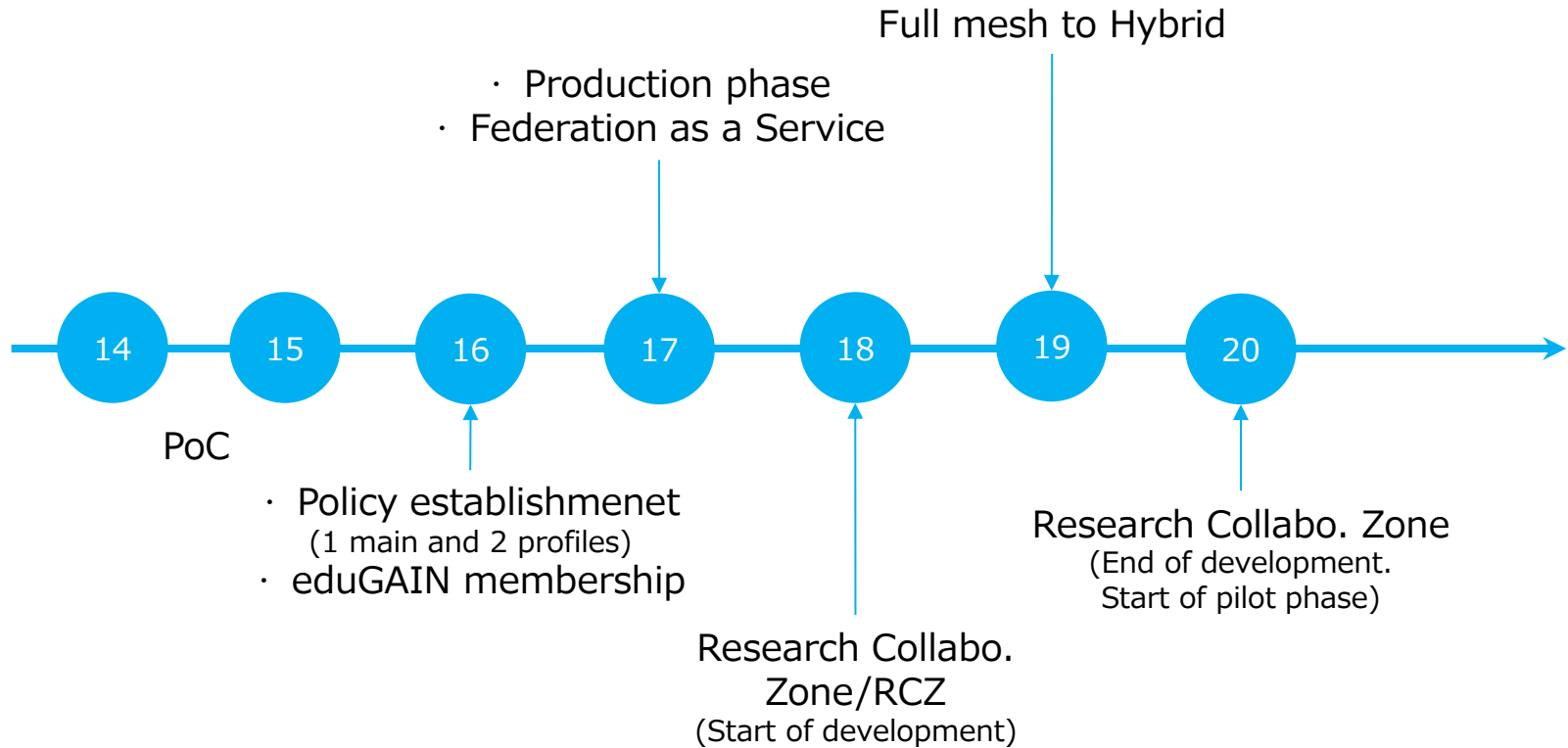
Scale Up

- 67 entities (4Q/2020)
  - Including 21 KR institutions
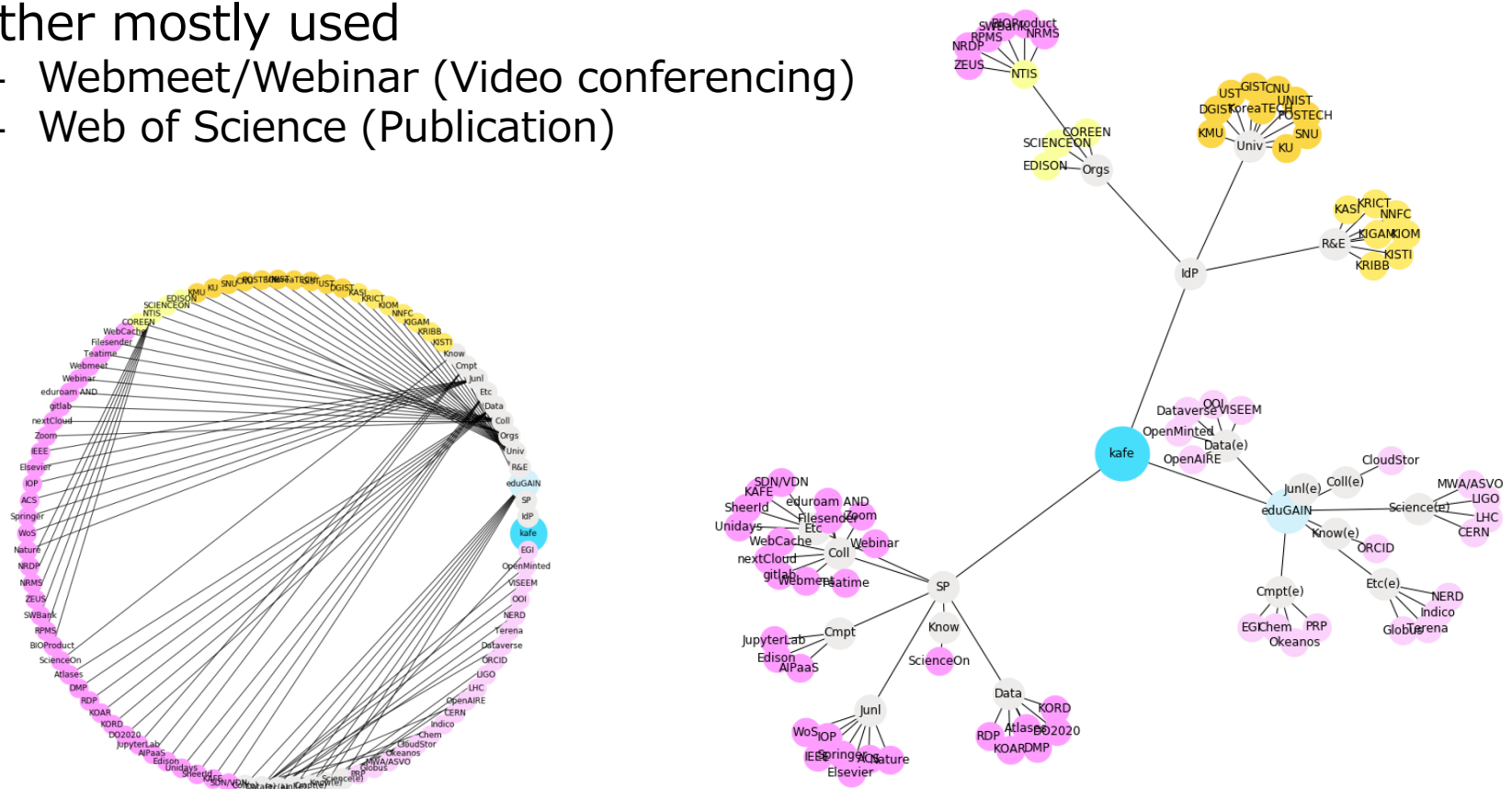 - Excluding eduGAIN entities
- 300,000 federated users

South Korea (the Republic of Korea) - KAFE

Federations summary

Total: 74

Export ▽

NAME	COUNTRY	ENTITIES	IDP	SP	AA
CAF Federation	Canada	158	85	73	0
CARSI Federation	China	157	101	56	0
SAFIRE	South Africa	157	43	115	0
SIR Federation	Spain	149	125	25	0
INFED	India	126	96	30	0
Tuakiri Federation	New Zealand	88	15	73	0
MINGA	Ecuador	80	79	1	0
WAYF Federation	Denmark	79	61	18	0
KAFE	South Korea	67	21	46	0
LAIFE Federation	Latvia	62	18	44	0
LIAF	Sri Lanka	58	47	11	0
LITNET FEDI Federation	Lithuania	53	21	32	0
COFRe Federation	Chile	47	12	35	0
SIFULAN Malaysian Access Federation	Malaysia	43	11	32	0
OMREN Federation	Oman	38	36	2	0
RCTSaai Federation	Portugal	37	29	8	0
CSTNet Cloud Federation	China	35	13	22	0

Growth of KAFE
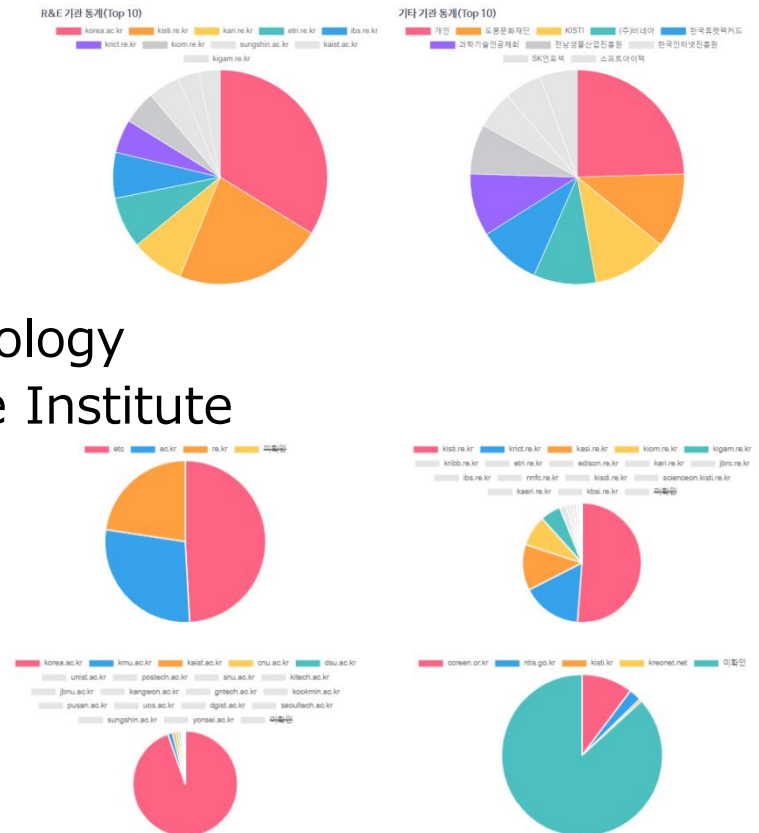
Img src: www.refeds.org

Application Services

- Mostly used science applications
  - DataOn/Korea Open Research Data
- Other mostly used
  - Webmeet/Webinar (Video conferencing)
  - Web of Science (Publication)

KAFE members and partners (86 entities including service providers enrolled in eduGAIN)

Users of our Services

- 14 Inst. & 19 Univ.
- 2 big members in Education
  - Korea University
  - Seoul National University
- 2 big members in Research
  - Korea Institute of Chemical Technology
  - Korea Astronomy & Space Science Institute

Responding to COVID-19

- Video conferencing
  - Timely deliver two web-based VC applications
    - Webinar: https://webinar.kafe.or.kr (social login powered by the RCZ)
    - Webmeet: https://webmeet.kafe.or.kr
- Off-site e-journal access
  - Increase in telecommuting however, VPN-based access is costly
    - 8 journal publishers have joined
   - 3 publishers on going
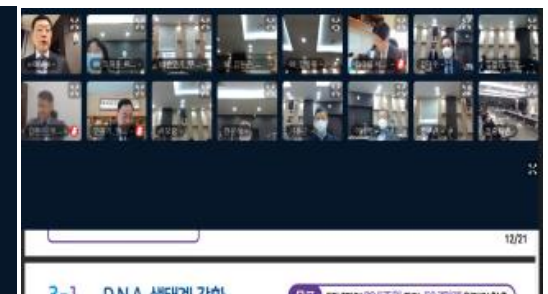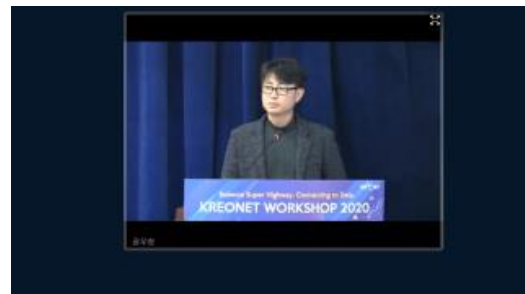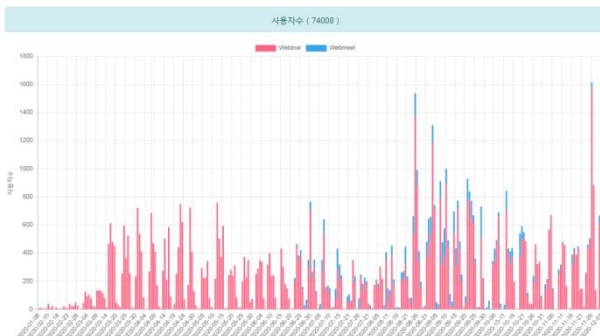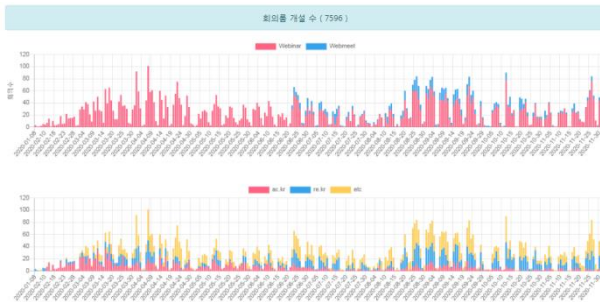
Over 74,000 users have used our VC applications

Realized by our AA Infra.
(Research Collaboration Zone)

- 3-year development
  - AARC Blueprint Arch.
- 5 subsystems
  - SAML proxy
  - 2 OIDC brokers
  - GRAM
  - Hub manager
- Main features
  - Social login
  - CO/Group management
  - IdP Proxying
  - OIDC (code flow)
  - Authorization/Access control
  - OpenSSH
  - Monitoring

GRAM(Group, Role, and Attribute Management)
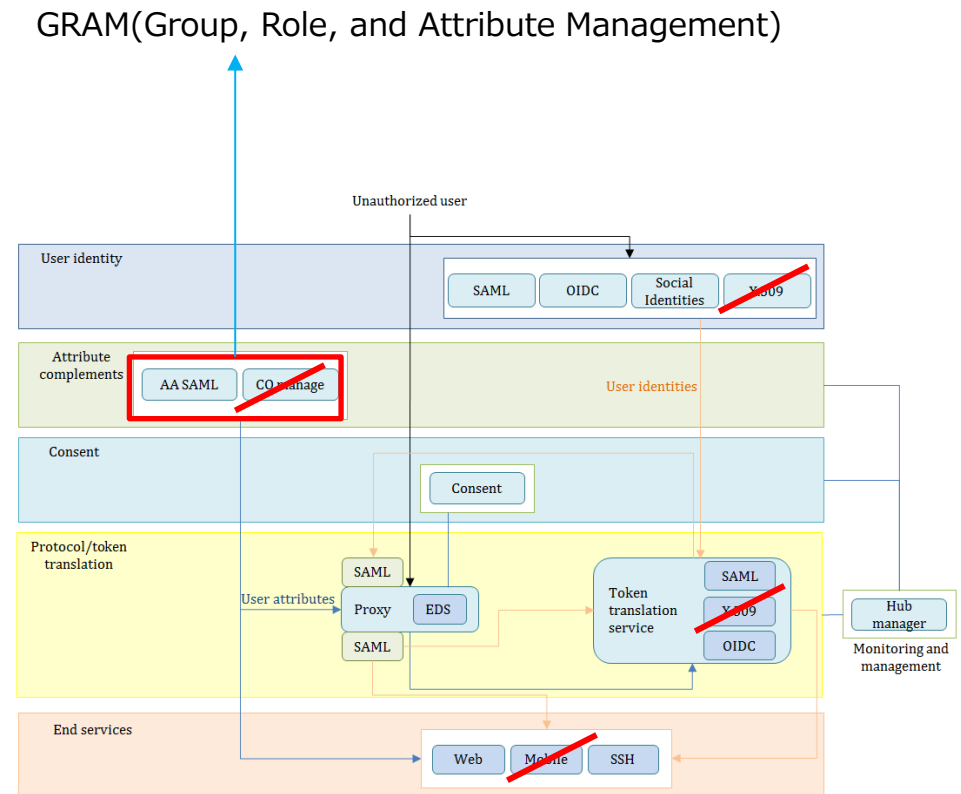
10 collaboration services are bridged by the RCZ

Korean Access Federation

https://www.kafe.or.kr