



DNSSEC in TANet

Pei, Shan-Cheng

Department of Information and Technology Education,
Ministry of Education



What is TANet?

Taiwan Academic
Network
Since 1970

4K schools,
research
institutions,
libraries

4M users (students,
teachers,
researchers)

200Gbps backbone
110Gbps internet
connection



TANet Architecture

5 core nodes

13 regional network centers

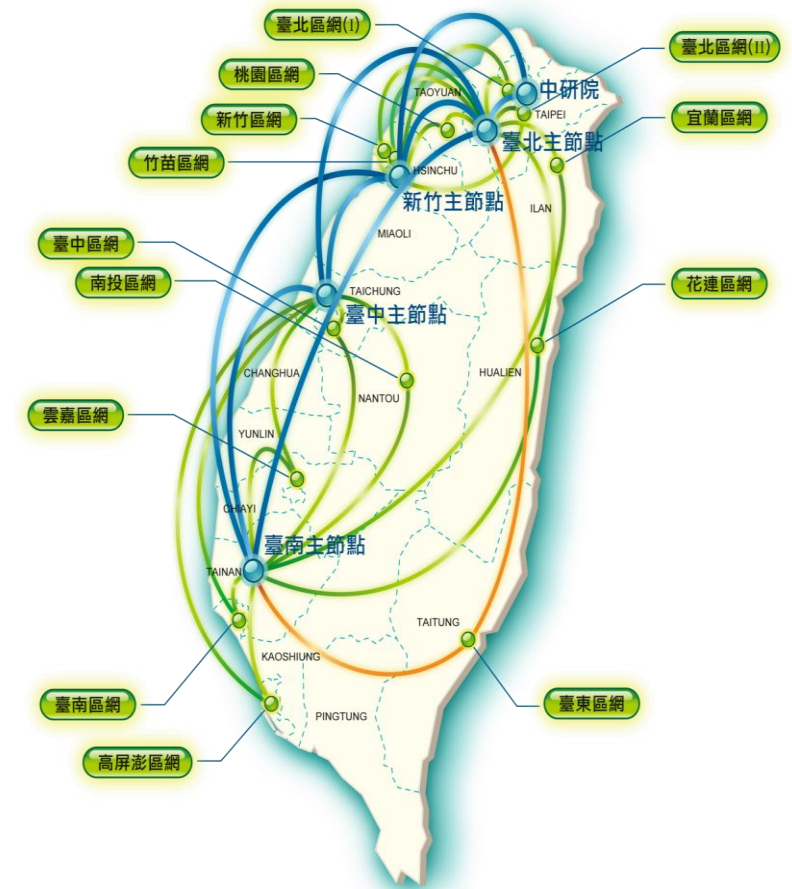
- Universities, colleges, and research institutions

22 county network centers

- High schools, elementary schools

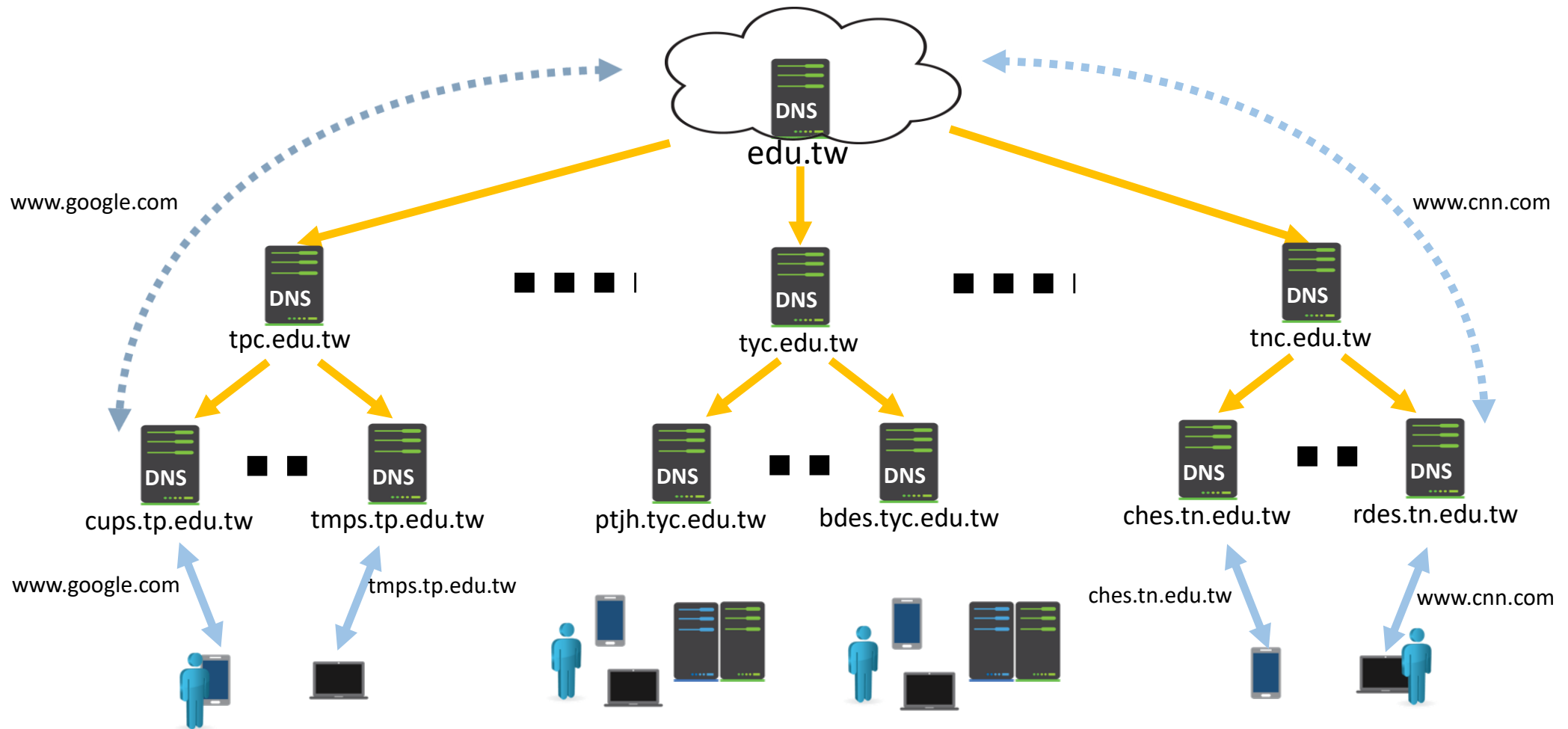
Dark fiber backbone in 2016

Operated by government and school





DNS Hierarchy





DNSSEC in TANet

Incorrect DNSSEC signing

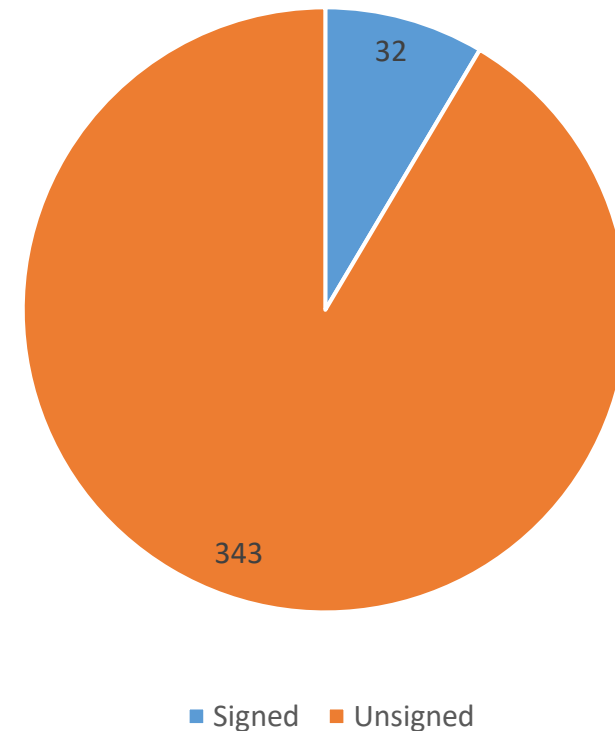
- Key update expiration

Recursive DNS response

- 168.95.1.1, 8.8.8.8

Lack of management ability

edu.tw subdomain





Future perspective

DNS service
centralization

Technical
training

Technical
support
enhancement

