Designing a Small Registries' ToolKit

Internet Conference 1999 at Pacifoco Yokohama

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Chiba University

Agenda

Network Administration

Network Resources

Registry Services

Administrators at Work

Tools for Administrators

Toolkit Framework

Maintenance of Database

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Maintenance of Database

Network Administration

machine installation

address assignment

domain name registration

application installation

user education

name server management

trouble shooting

power management

etcetra etcetra ......

Network Administration

machine installation

address assignment

domain name registration

application installation

user education

name server management

trouble shooting

power management

etcetra etcetra ......

Network Resources

IP address

AS # (Autonomous System Number)

domain name

routing information

etc ......

Related Information

administrator information

etc ......

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...... resource usage tracking

address (allocation, assignment, delegation)

ASN (assignment)
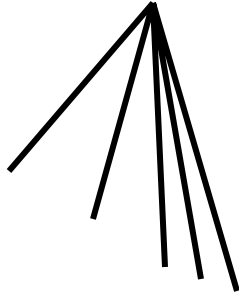
DNS (registration, delegation)

routing information

....

IPaddress administration

ICANN(IANA)

RIPE   APNIC   ARIN

KRNIC

JPNIC
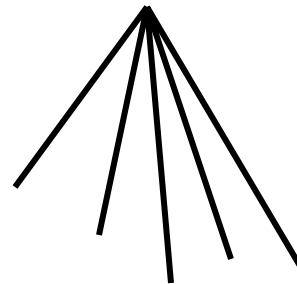
ISP

ISP

ISP   ISP

DNS administration

ICANN(IANA)

KRNIC

JPNIC

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Registries' Database

Network

Domain Names

Administrators

Hosts

Routing Information

etc......

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getting address block from ISP (or registry)

registration of domain names to registry

setup name servers

registration of NS to registry's database
updating any entries of the registry's database

assignment of addresses

registration of subdomains

delegation of subdomain administration

maintenance of backbone routers
etc ......

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assistance tools for nework administrators

updating entries on registry's database

building a database for internal information

publishing resource usage (DNS, whois, ...)

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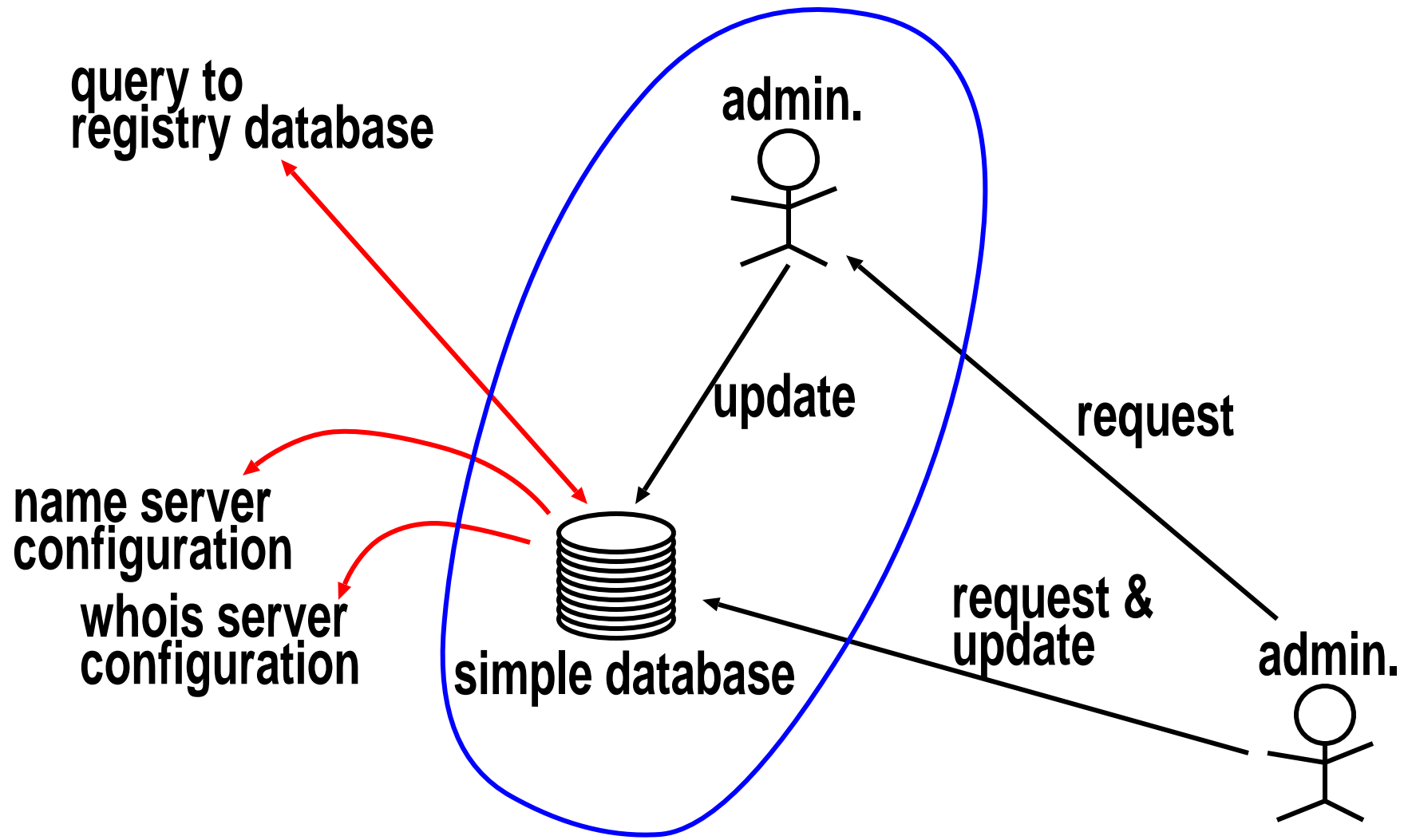Tools for Administrators

Toolkit Framework

Maintenance of Database

Toolkit Framework

query to
registry database

admin.

name server
configuration

whois server
configuration

simple database

update

request

request &
update

admin.

Maintenance of Database

database

Authentication
Authorization

WEB
E-MAIL

whois database

DOMAIN
ADMIN
HOST

ADDRESS
ADMIN
HOST

name server
configuration

update report

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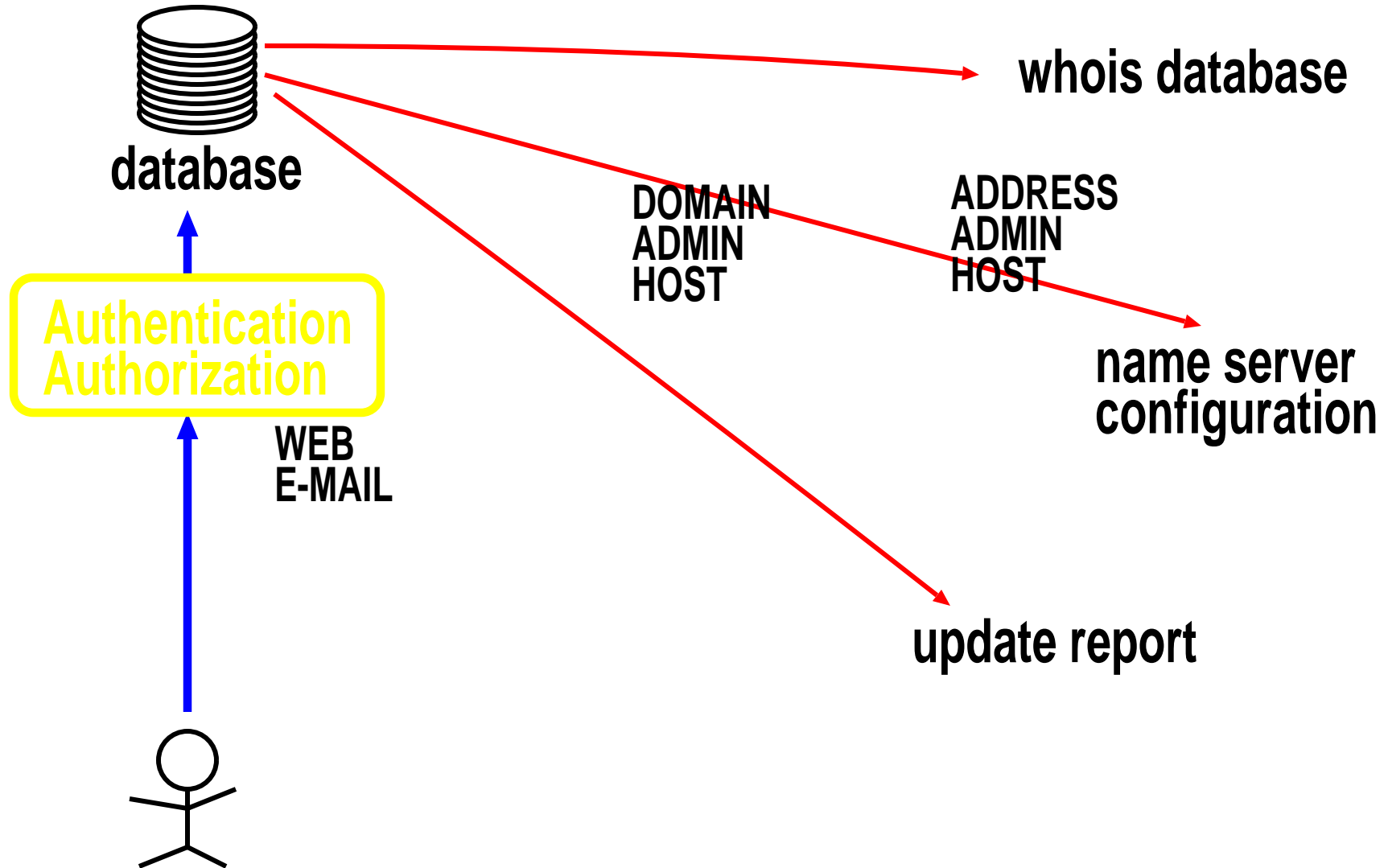
Tools for Administrators

Toolkit Framework

Maintenance of Database

Maintenance of Database

automation as much as possible
name server, whois server
config file generation, etc ......

exploring user driven updating mechanism
PGP, S/MIME, etc......

Maintenance of Database

database

plain text files as a database

  easy to read
  easy to transfer
  easy to prepare test data

shell scripts as a toolset

  easy to understand
  easy to transfer
  it's only a prototype (-:

Title Here

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