NetConf : Automation of Network Configuration
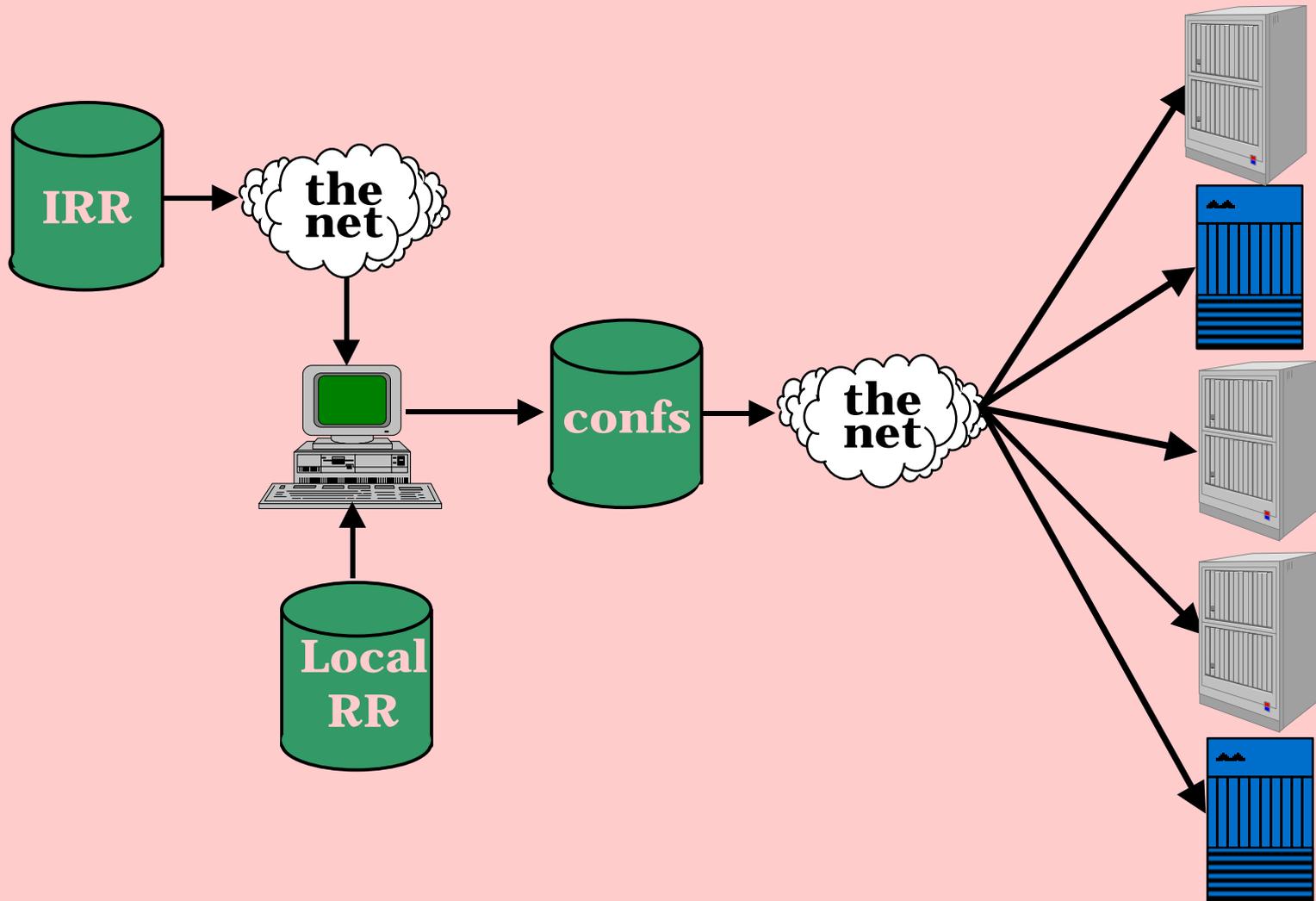
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NANOG / Salt Lake City 2003.06.02
<http://psg.com/~randy/030602.nanog-netconf.pdf>

The Start - March 2001

- "How many Operators have SNMP SET enabled?"

- No one raised their hand

- Network Management folk were Shocked!

- Yes, a few devices are configured using SNMP, e.g., DOCSIS Cable Modems

Router Configuration System

2001-2002

- Woody's draft-ops-operator-req-mgmt
  - Good points about CLI/Text, secure transport, etc.
  - But no vision beyond, net conf with a palm pilot at 2AM
- "It's the CLI," but why?
- Text is universal, malleable by many tools, emailable, …
- Vendor CLI leads MIB by months or years
- IAB Workshop

2003

- XMLconf design team in IETF
- draft-enns-xmlconf-spec-00.txt
- NetConf IETF Working Group

High-Level Vision

- Configuring Networks, not just Devices
- Transaction model across the network
- Security (identity and authorization)
- Boundaries, administrative, security, ...
- Transitive Trust (peers, registries, ...)