



VOIP, Voice Recognition and the Future of Customer Interactions

Comnet Conference and Expo
January 29, 2003

Charlie Rabie
Vice-President, IP and Customer Self-Service

Agenda

- **Convergence – A New Starting Point**
 - A Tale of Two Networks
 - The Unified Contact Center
- **IVR and Speech Applications**
 - Speech Is Revolutionizing IVR Applications
 - What is VXML?
 - Winning Speech Applications
 - Speech Advances
- **Best Practices – VOIP and Speech**

Convergence: A tale of two networks



PSTN “Cloud”

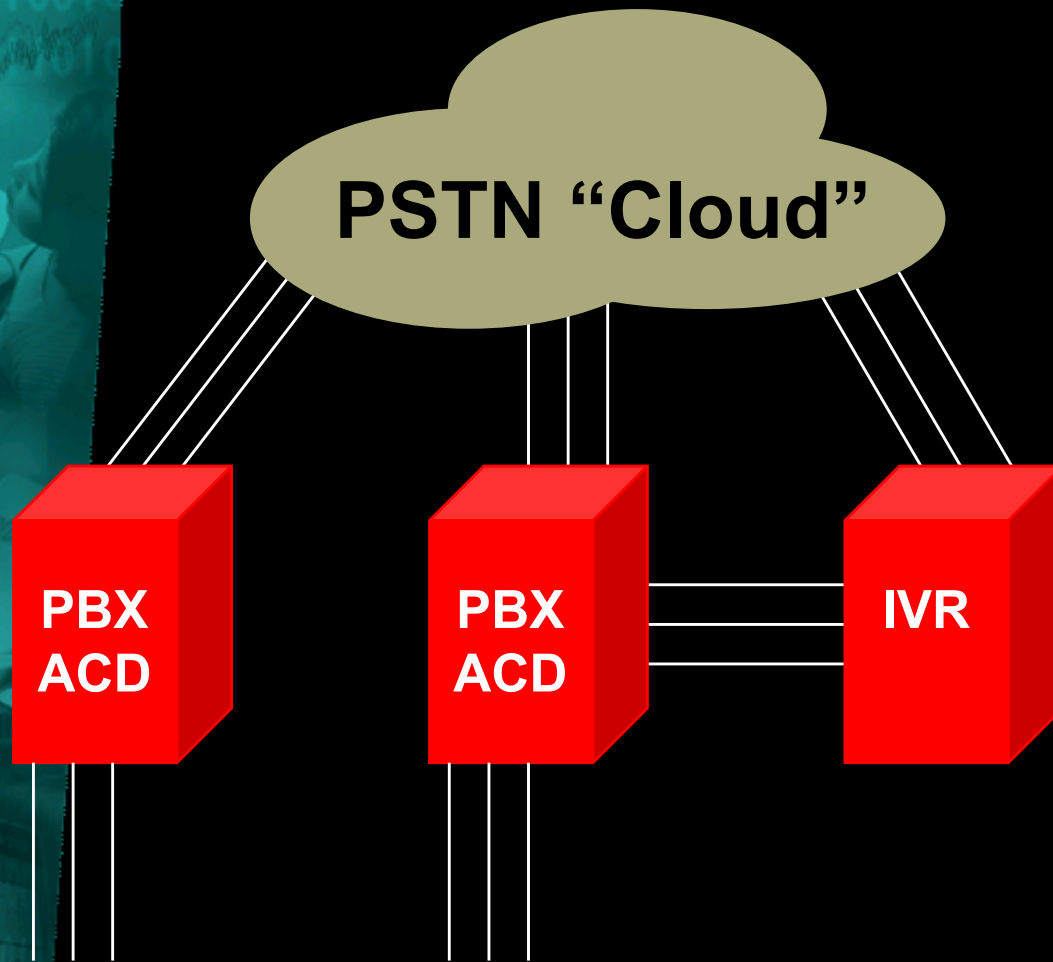
Voice



IP Network

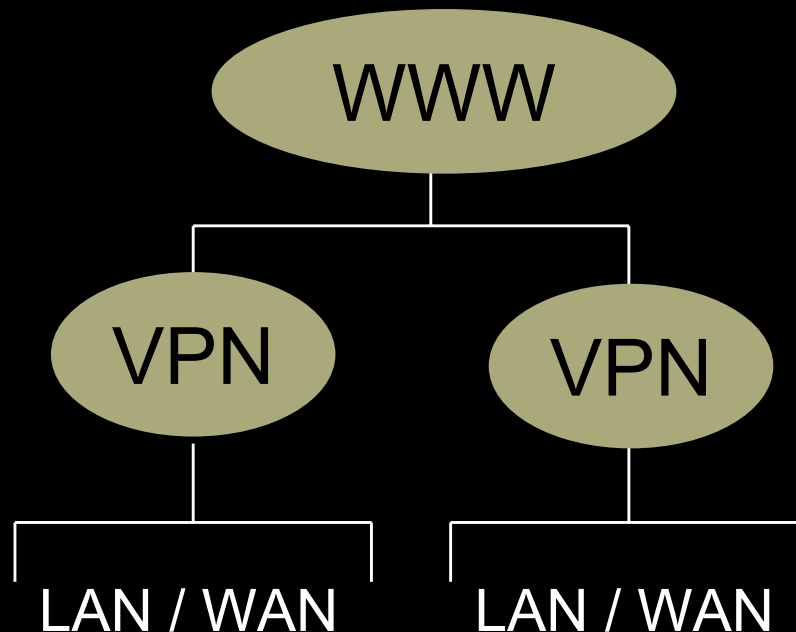
Data

Why are these networks inherently different?



- “Copper”-based
- Point-2-point voice
- Not many devices supported – switches, telephones, IVRs, fax
- Concurrency is determined by # of trunks
- No common identification scheme

Why are these networks inherently different?



- Many devices supported – PCs, servers, PDAs, telephones, printers, PBX/ACD through CTI
- Provisioning is IP address-based
- Common identification scheme – IP address
- Concurrency is determined by pipe size

Advantage VOIP

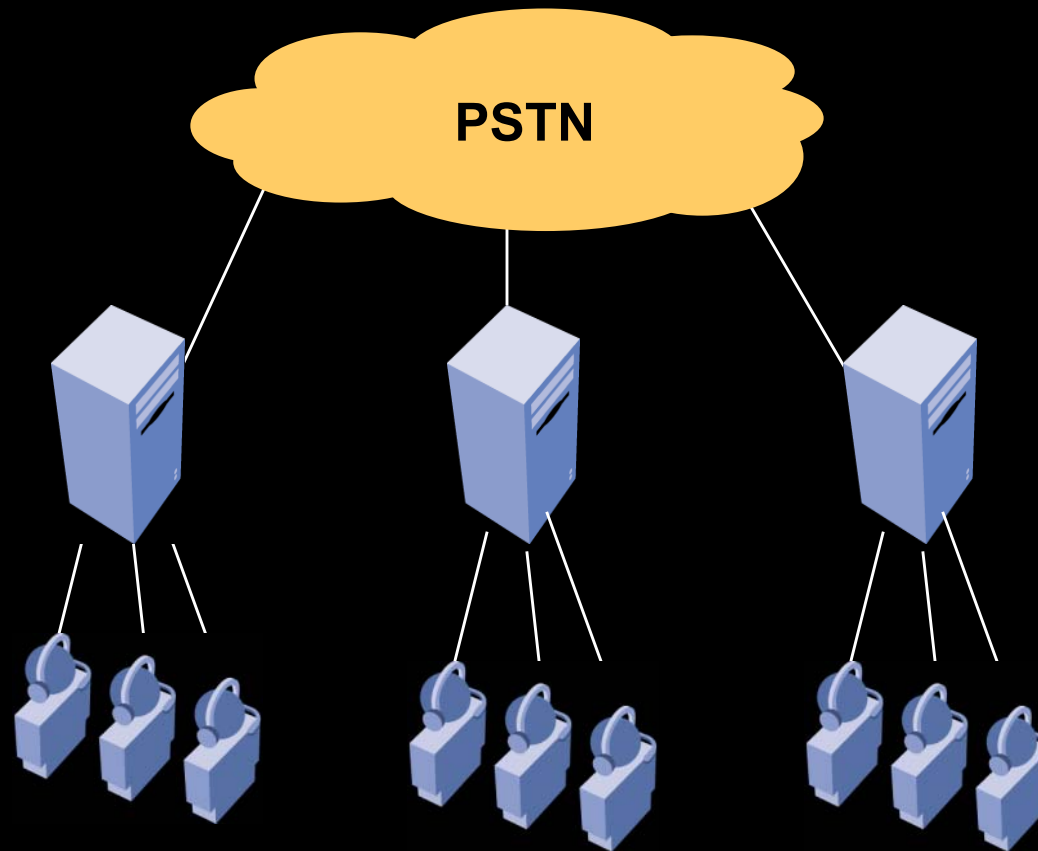
- Voice and data are supported simultaneously; in fact, *everything* is data
- Packets can be “prioritized” for Quality of Service (QOS)
- Ubiquitous network – everything is IP address-based, and is unique network-wide and potentially worldwide
- Mobility is easy: the device can move and keep the same IP address anywhere on the network
- Many devices are supported off of a single wire through hubs and switches



Why the move to an all-IP network?

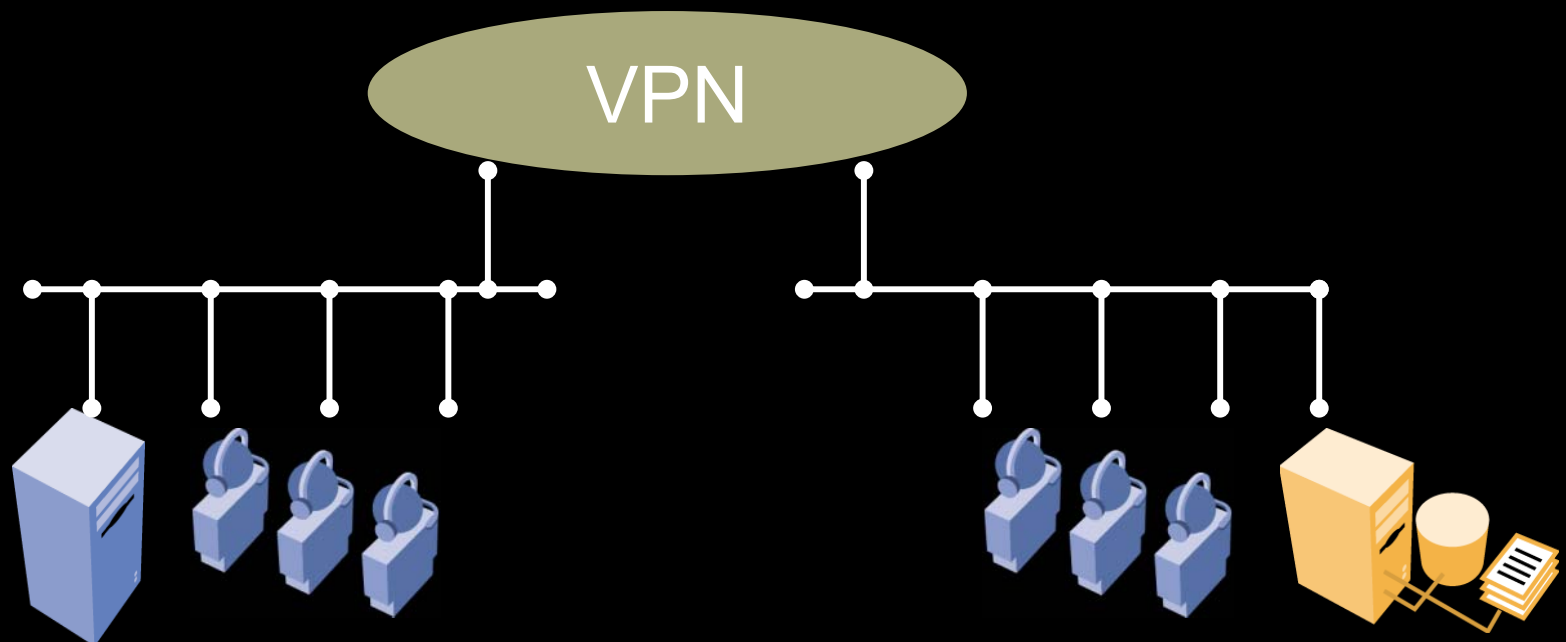
- **Bottom line: the IP network is more flexible, cost effective and easier to manage**

The before...



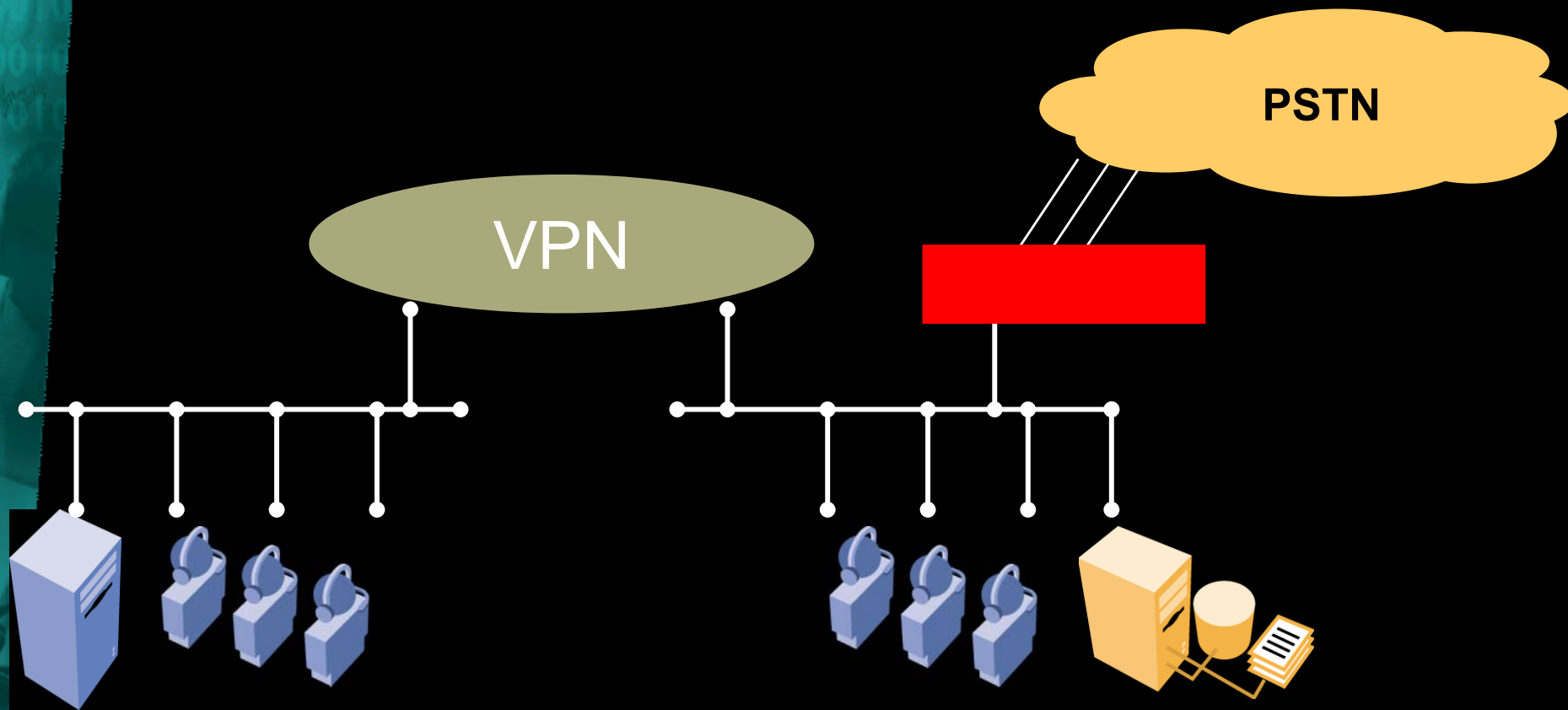
- **A network designed exclusively for voice**
- **Silos of locations that are difficult to tie together**
- **Every device –type is addressed differently**

And, the after



- One network carrying both voice and data
- “Single wire” to each knowledge worker
- Every device is IP address-based

But, it won't happen all at once



- Hybrid networks to the rescue
- Allows the “caller” to remain in a traditional PSTN network
- The IP network becomes a premise-based solution