internetMCI Services Technical Overview

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MCI internetMCI Engineering

Growth of the Internet

- 20 - 30 million users
  160,000 new users per month.
  300 million users by year 2000
- Comprised of 42,000 connected networks -- world's largest computer network.
- In 1993, WWW was ranked 11th of all network services -- just 12 months earlier, its rank was 127th.
- Potential for $2 billion in business by year 2000.
- Global marketers can reach 25 to 30 million people via the Internet.
- Accessed from 84 different countries with E-mail connection from 154 countries.

MCI and the Internet

- Started as an extension of the ARPANet, created 25 years ago to meet defense industry needs. Many of the early players are MCI employees.
- The early years -- ARPANet to NSFNet
- MCI (with IBM and Merit) has signed cooperative agreements with the National Science Foundation since 1987.
- Today, MCI carries 40 % of Internet traffic because of contract with seven regional providers.

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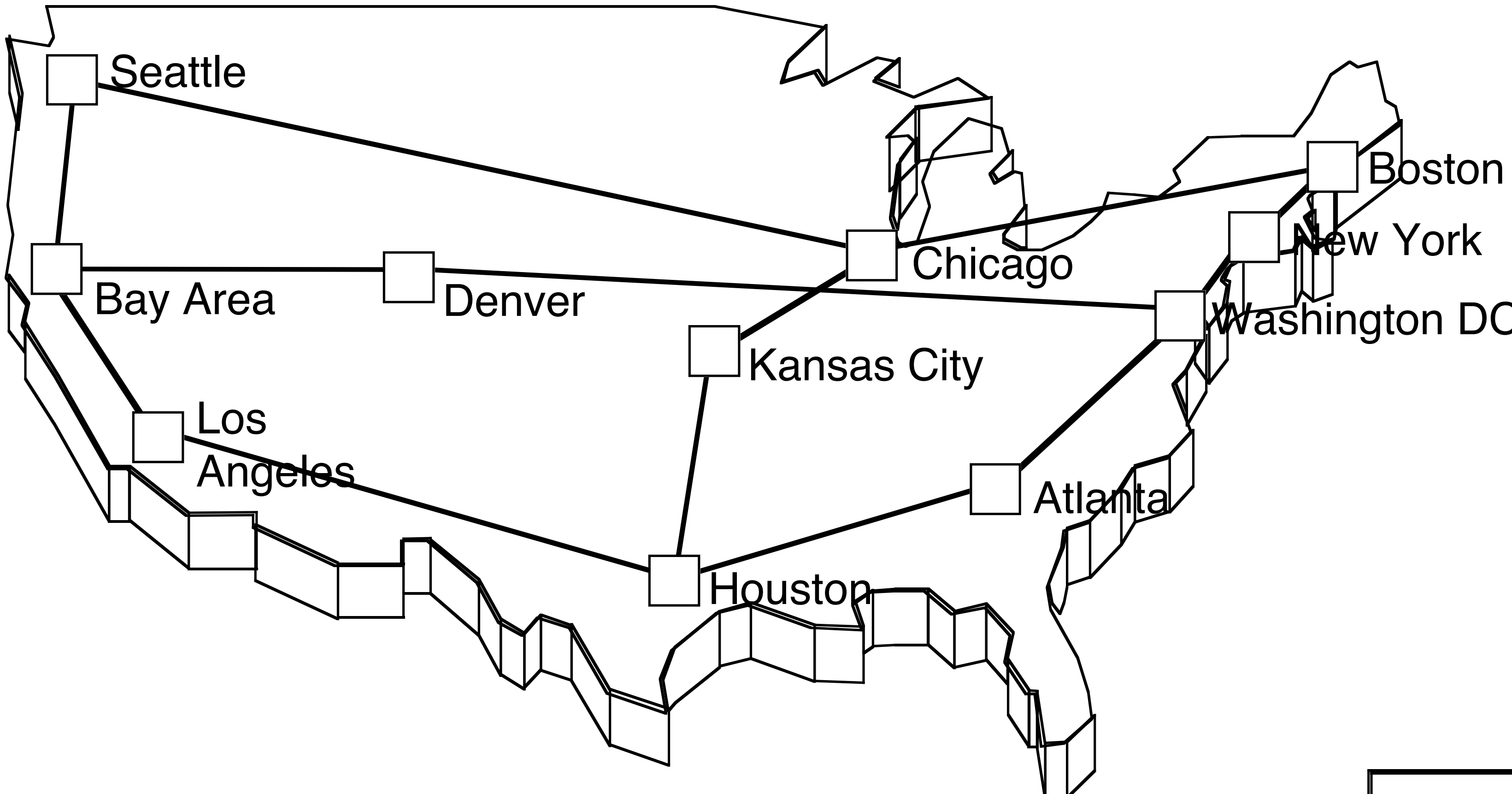
- An easy-to-install and easy to use software package for browsing and shopping in the Internet electronic shopping mall
- Offers an extensive selection of access methods to the Internet, from dial-up to ISDN and more advanced data services
- Industry's most fully connected commercial Internet network
- Internet consulting services

internetMCI Key Features

- Nationwide, physically diverse DS3 fiber backbone
- Variety of access methods and speeds
- Accessible from many other MCI services
- Full Internet routing; >40,000 reachable networks
- Multi-protocol routing and forwarding - IP & OSI
- External Connections to NSF NAPs, CIX, and GIX
- Commercially available router platform

internetMCI Backbone

Current Node Deployment



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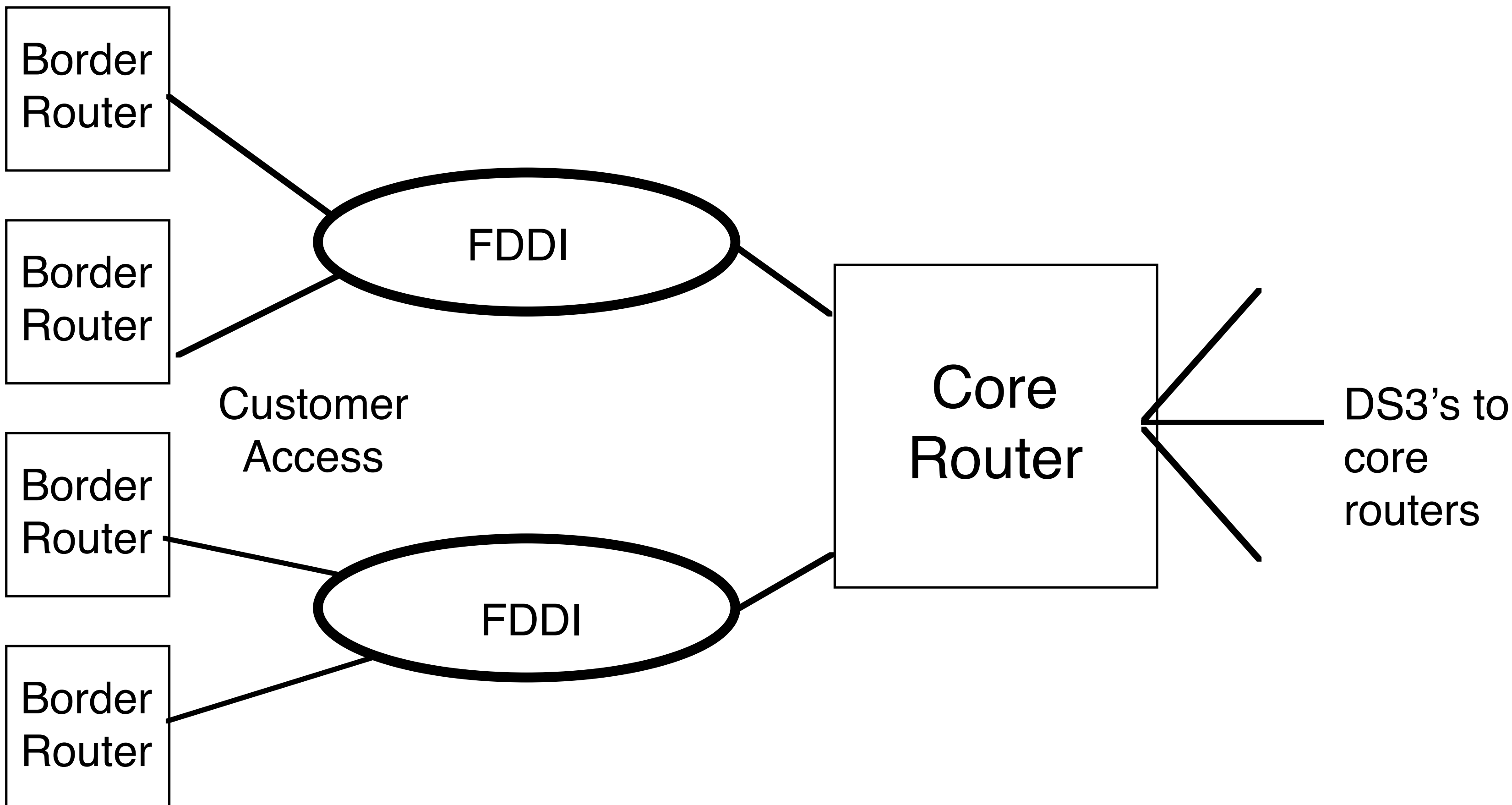
internetMCI POP Design

Generic Architecture



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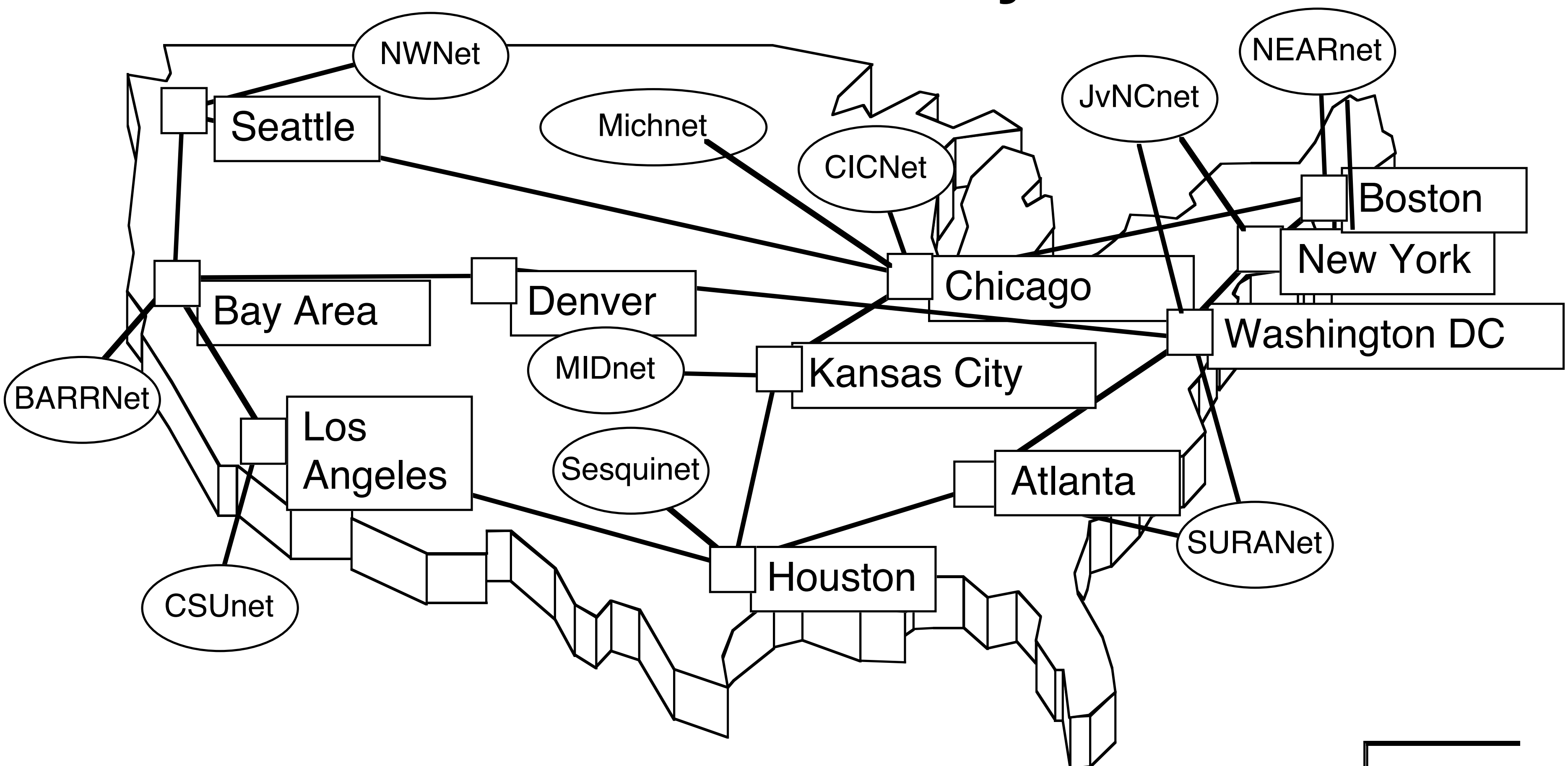
Regional Network Connectivity



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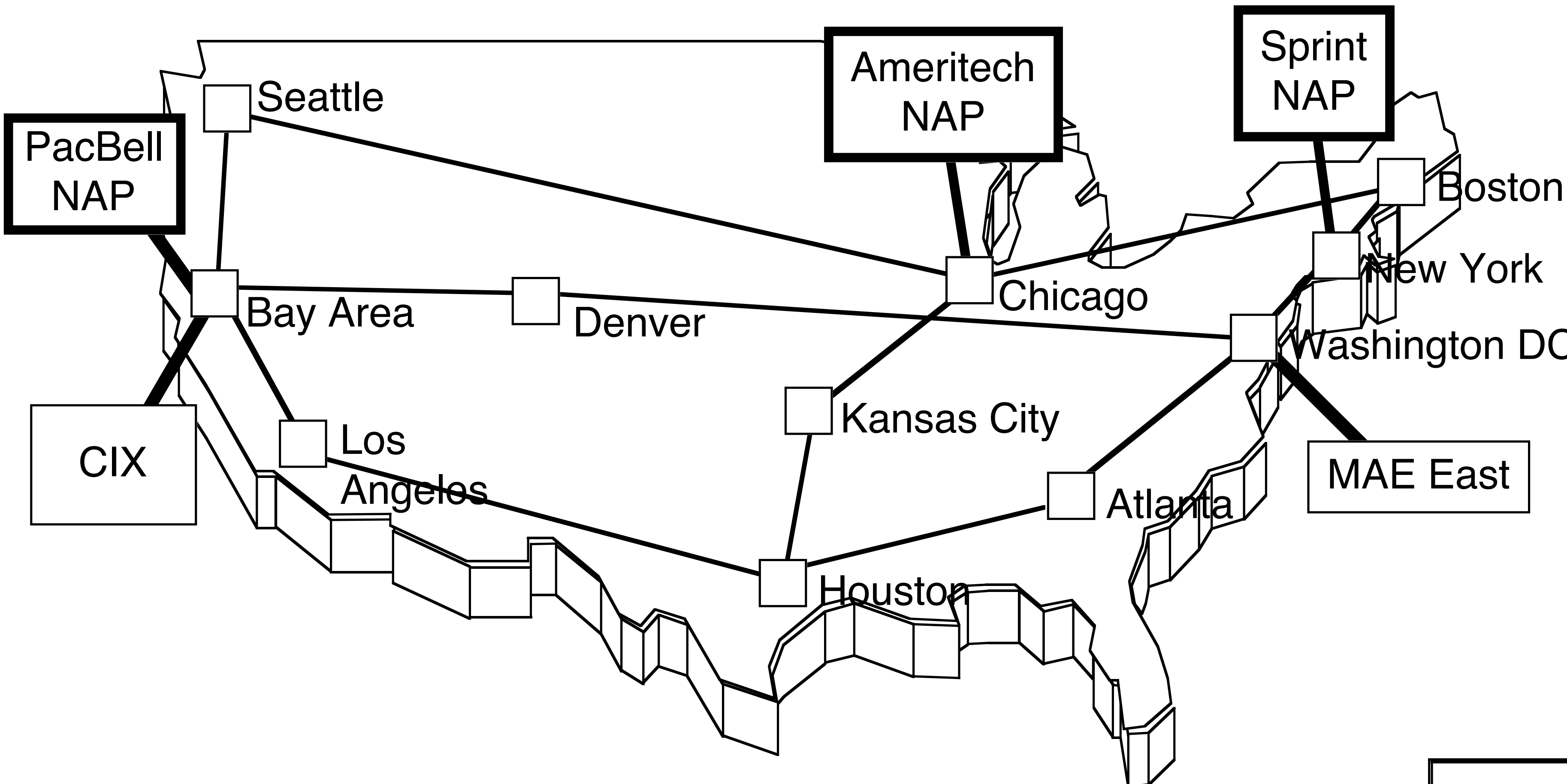
External Internet Exchange Points



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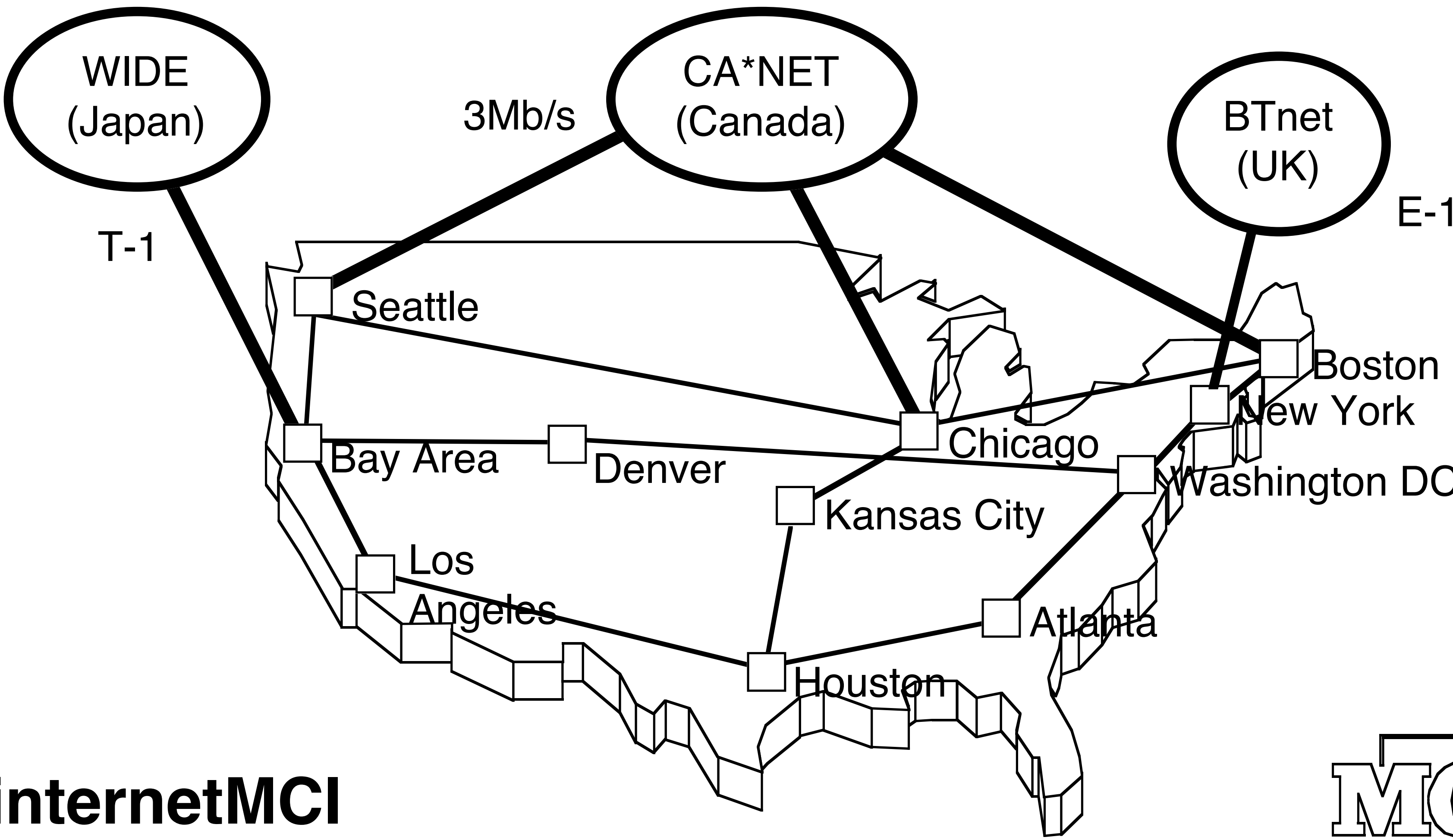
International Links



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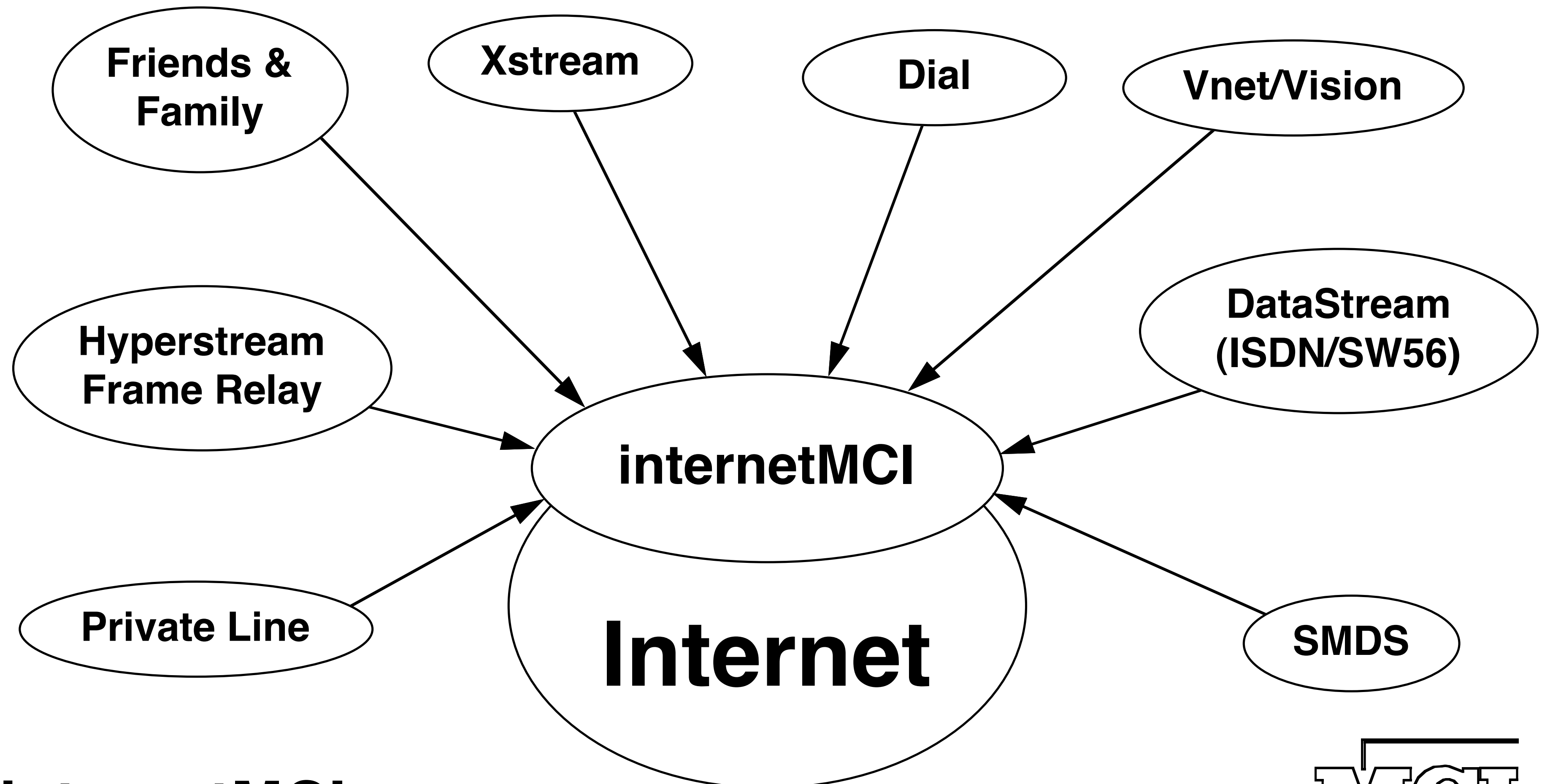
internetMCI Accessibility



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Key Dial-in Features

- Local and 800 access
  - Top 30 metro areas in First Quarter 1995
- High Speed Access
  - 28.8kb V.34 Analog with V.42 bis compression
  - 64kb ISDN B-Channel
- PPP Protocol; SLIP in future
- CHAP security; RADIUS authentication