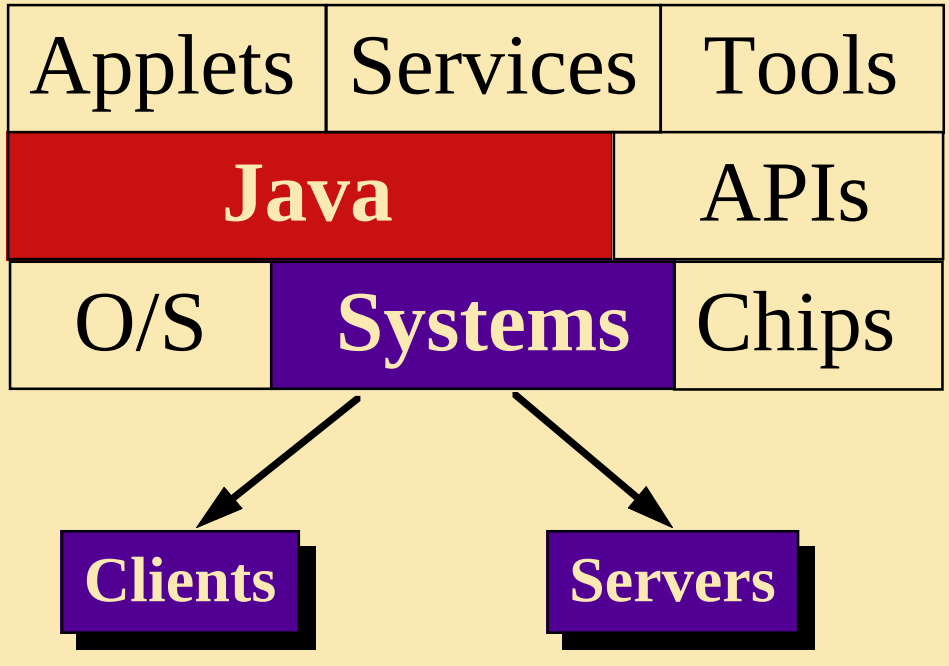
JavaOne℠
Sun's Worldwide Java Developer Conference

Server Evolution in the Java™ Paradigm

Dennis Tsu
Director, Internet Product Marketing, SMCC

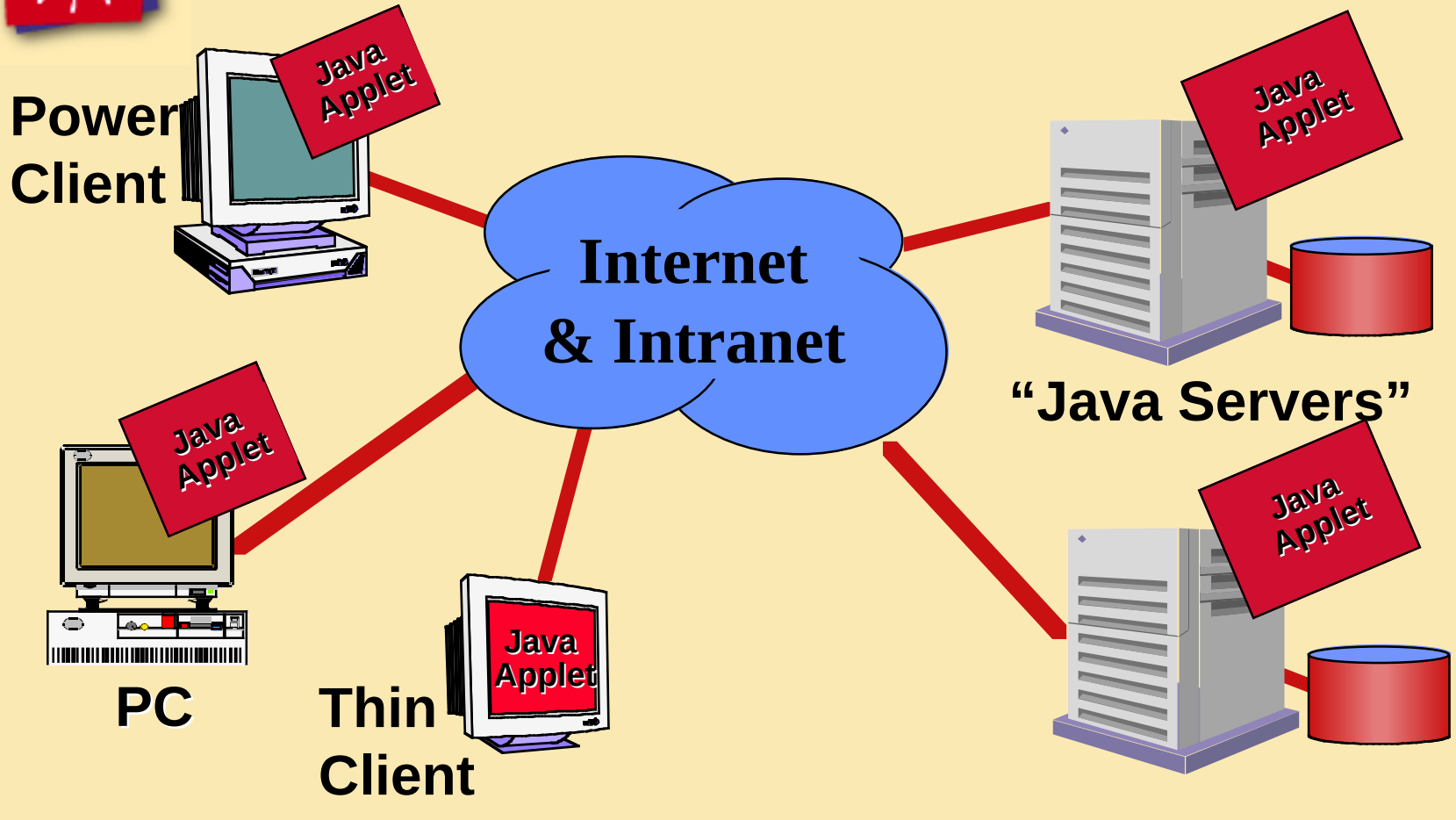
Java Infrastructure



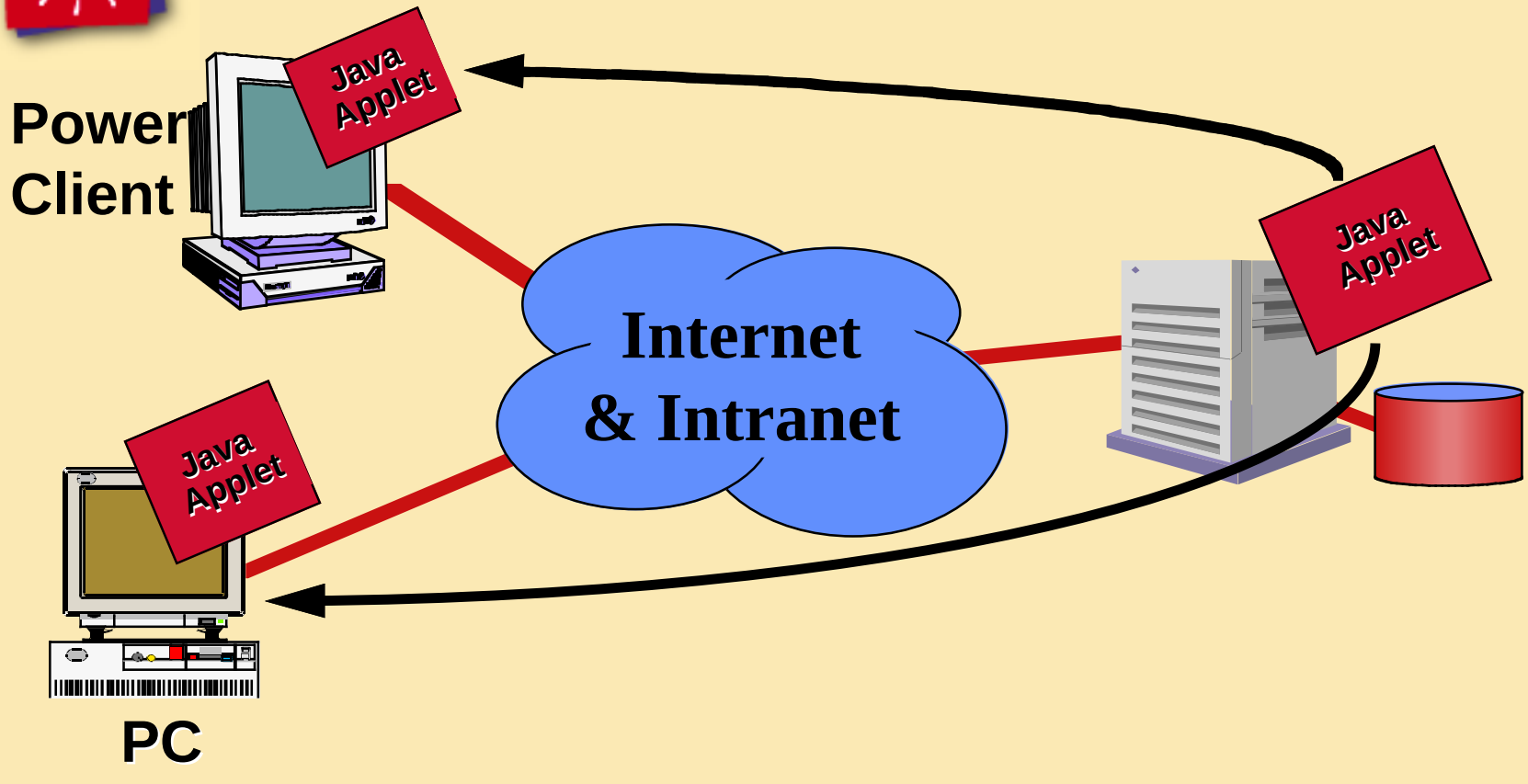
Agenda

- Introduction/Objectives
- Java Network Computing
- Applet “Servers”
- Thin Client “Servers”
- Applet “Catchers”
- Competitive Landscape
- Summary

Java Network Computing



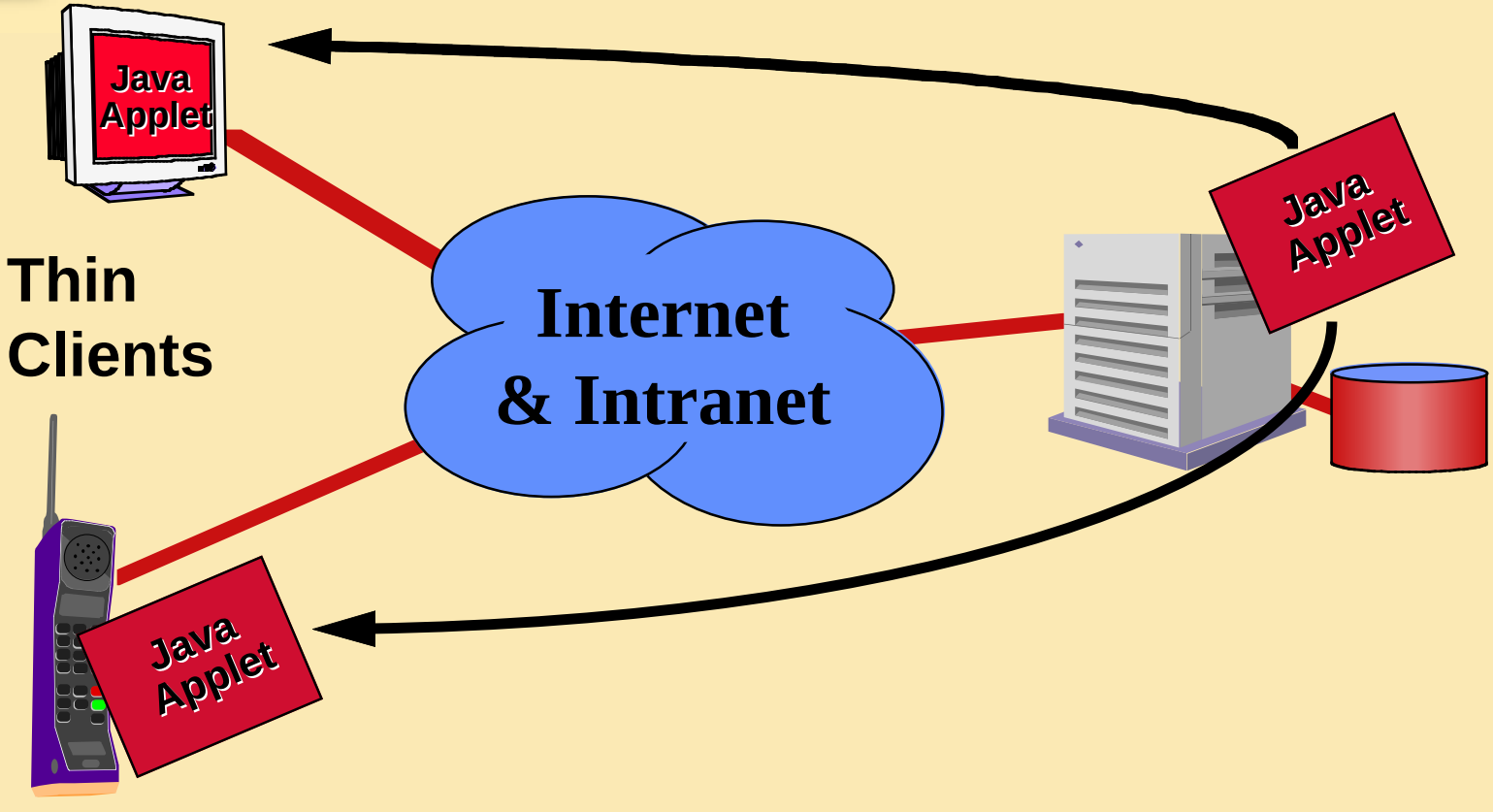
Applet Servers



Applet Servers

- Key Requirements
  - performance, scaleability
  - reliability (RAS)
  - ease-of-use, manageability
  - integration with applet authoring, creation tools
- Products are shipping today
- Next Steps
  - more, better, cheaper, faster…

Thin Client Java Servers



Thin Client Expectations

- Multiple “thin clients” will ship in CY96:
  - “network computer”
  - cellular phone
  - 3270 replacement
  - set top box
  - PDAs
  - tablets
  - etc....

Java Server for Thin Clients

- **Support for the client at “power up”**
  - providing the necessary information/software
  - will vary — based on clients’ capabilities
- **Operational support**
  - Performance
  - Tracking status (State machine)
- **NMS**
  - reporting
  - billing
  - etc.

Java Server for Thin Clients

- **Configuration/Performance**
  - will vary based on number/type of clients
  - anticipate a range of needs
- **Minimal system target**
  - 10 clients (@$800) = $8k
  - 1 server = $4k to $5k ?
- **Large system target**
  - 1000 clients (@$600) = $60k
  - 1 server = $40k to $60k ?

Thin Client Java Server

Phase One Features

- **Client Installation**
  - Assign Network ID
  - Assign default application
  - Assign client State Files
- **Client Administration Facilities**
  - Client Statistics
  - User Statistics
  - Network Statistics
- **User Administration**
  - Add/Modify/Delete Users
  - Assign default home page
  - Assign User State Files
- **Boot Facilities**
  - Installation and Administration of Boot Images
  - Boot Protocol Support

Thin Client Java Server
Stage 2 & beyond

- Intermittently connected clients
  - keep state information for clients who may only log on for minutes per day
  - clients may also process applets while they are disconnected
- Roaming, nomadic clients
  - track clients across the network, maintain linkages to the appropriate server/applets/data

Thin Client Java Server

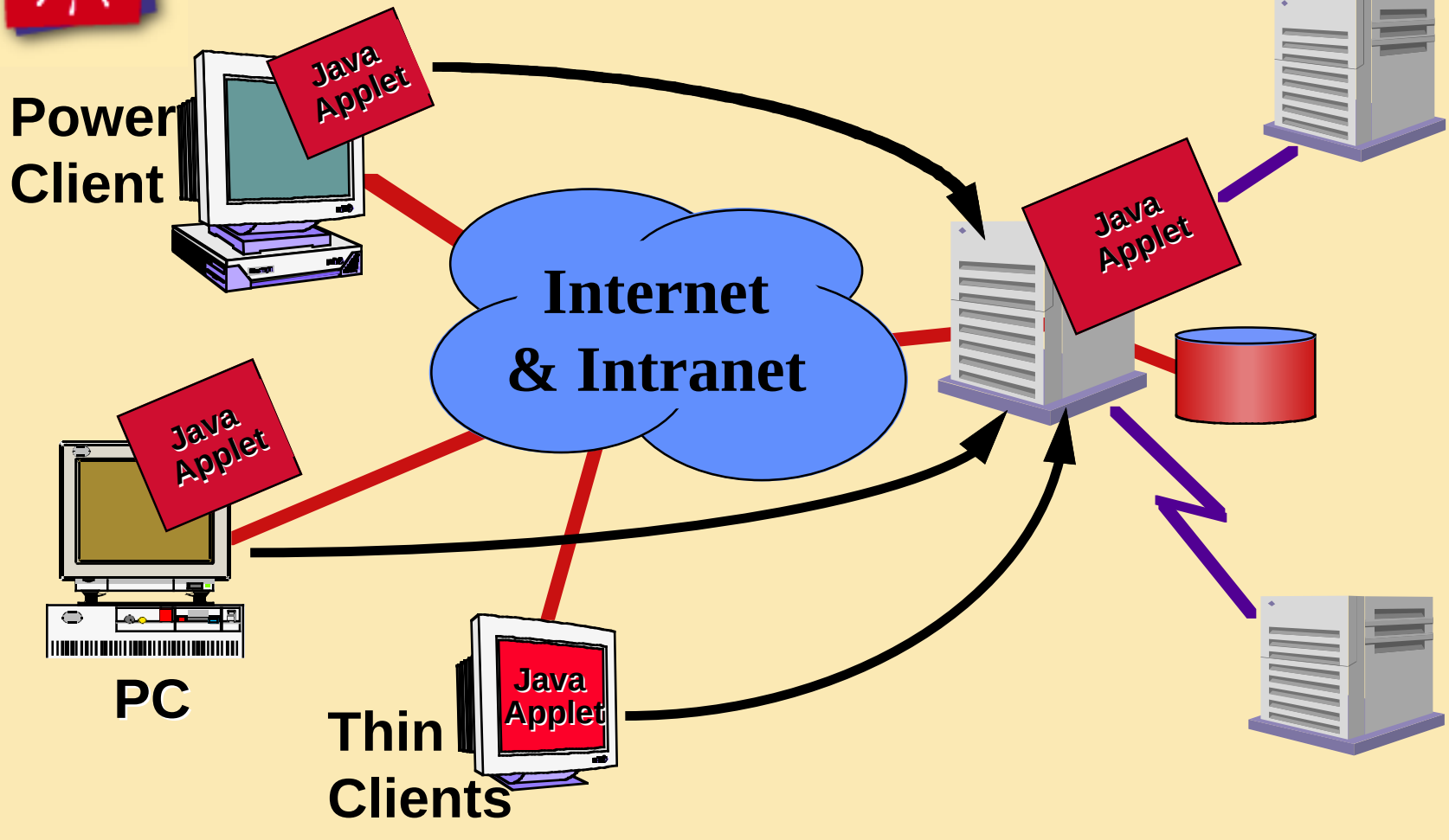
Potential Customers/Applications

- Financial Services Institutions
- Health Care Industry
- Telco’s
- Publishers
- Cellular Data Services Providers
- CATV Companies
- Maintenance Workers/Mechanics
- Package Delivery/Distribution/Postal Services
- Governmental Agencies
- Java applet distribution

Thin Client Servers

- Key Requirements
  - performance/scaleability
  - network connectivity
  - security, ease of use
  - integration with clients
  - reliability (RAS)
  - manageability
- Product Availability
  - in conjunction with thin clients

Applet “Catchers”



Applet Catchers

- Key Requirements
  - performance, scaleability
  - connectivity
  - reliability
  - manageability
  - security, ease of use
  - ease of applet creation
  - legacy application connectivity
- Product Availability — CY97

Competitive Landscape

- Java endorsed by everyone
- Hot market, highly competitive
- Internet years = dog years
- > 6 thin clients by year end
- Java Server Selection:
  - Hardware vs. Software vs. Bundles
  - Single vendor vs. multi-vendor
  - Open vs. Proprietary

Summary

- CY96 = applet servers (today) & thin-client servers (by year-end)
- CY97 = applet catchers
- Competitive differentiators:
  - performance, scaleability
  - network awareness, connectivity
  - degree of integration, ease of use
  - security, management
  - reliability, availability, serviceability

JavaOne℠
Sun's Worldwide Java Developer Conference
sun
microsystems