TPF Users Group
Grapevine Texas

October 2004

Open Standards and Linux

Carol Stafford
Vice President, IBM
World Wide Linux

Linux – only operating system that can run on anything

A platform for innovation

2

Linux is an IT industry-wide initiative – www.osdl.org
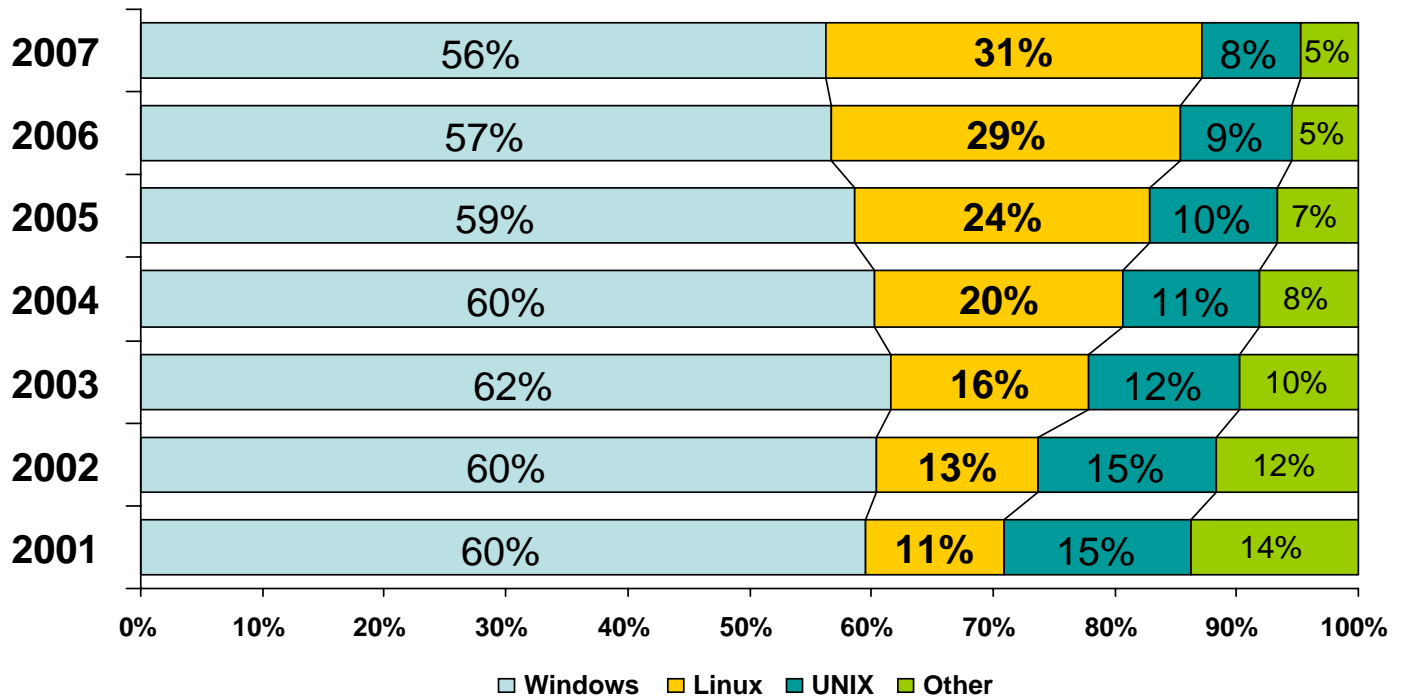
3

Linux is pervasive – Major Gov't Initiatives

Australia
Brazil
China
Columbia
European Union
Finland
Germany
India
Italy
Malaysia
Mexico
Norway
Philippines (Desktop)
South Korea
Thailand (Desktop)
United Kingdom
USA

Linux is the fasting growing operating system

Year	Windows	Linux	UNIX	Other
2007	56%	31%	8%	5%
2006	57%	29%	9%	5%
2005	59%	24%	10%	7%
2004	60%	20%	11%	8%
2003	62%	16%	12%	10%
2002	60%	13%	15%	12%
2001	60%	11%	15%	14%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

☐ **Windows** ☐ **Linux** ☐ **UNIX** ☐ **Other**

Source: IDC Server Market Quarterly Forecast, September 2003
Note: Does not include servers running downloaded versions of Linux
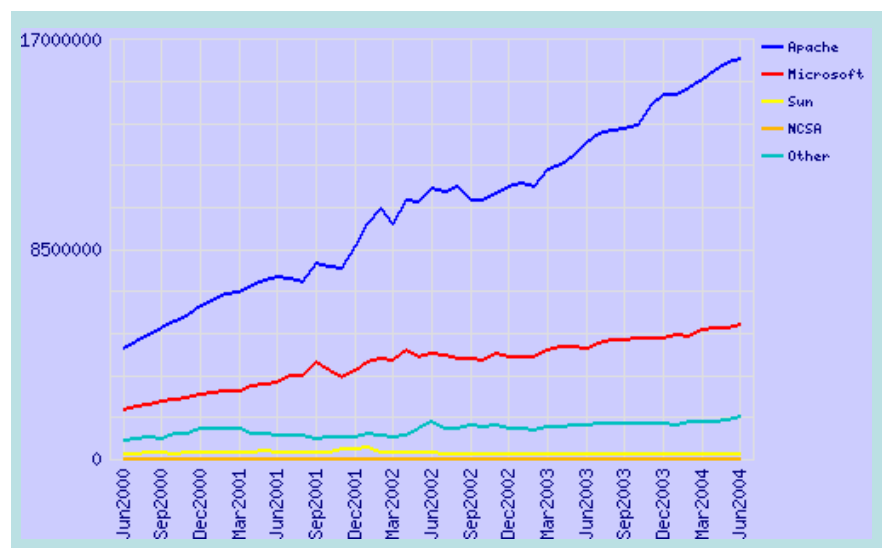
Linux has become the standard Web server

- Totals for active servers across all domains

- Linux - Apache
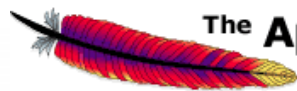 - Sites: 16,226,452
  - Share: 69%

- Microsoft IIS
  - Sites: 5,451,814
  - Share: 23%

The **Apache Software Foundation**
h t t p : / / w w w . a p a c h e . o r g /

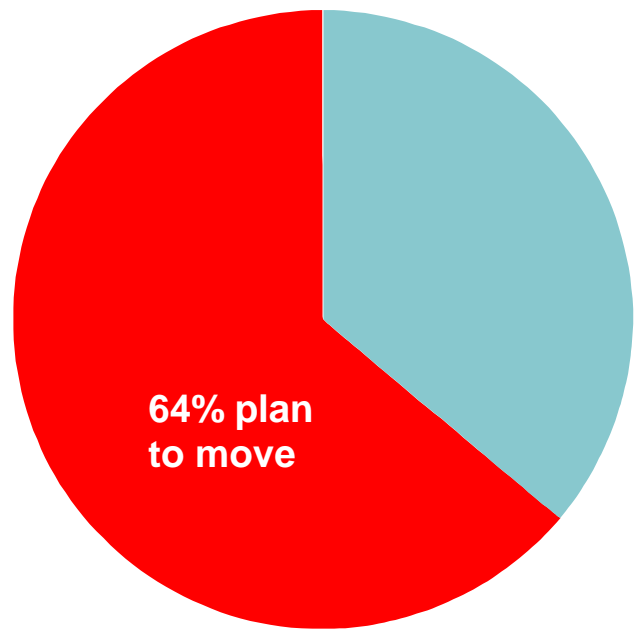Source: Netcraft

6

Linux is a Platform of Choice for Enterprises

64% of Customers Plan to Move a Portion of Their OS to Linux

- **42% plan to migrate from Unix to Linux**

- **25% plan to migrate from Windows to Linux**

- **21% plan to add Linux Servers**

- **11% plan to replace Windows Servers totally**

64% plan to move

Source: The Yankee Group and Sunbelt Software, Inc. 2004

Linux

42% plan to migrate from Unix to Linux

Pie chart:
- Consolidating 41%
- Replacing 33%
- No longer need 10%
- Other 13%
- DK 3%

n=153
QB7-Unix
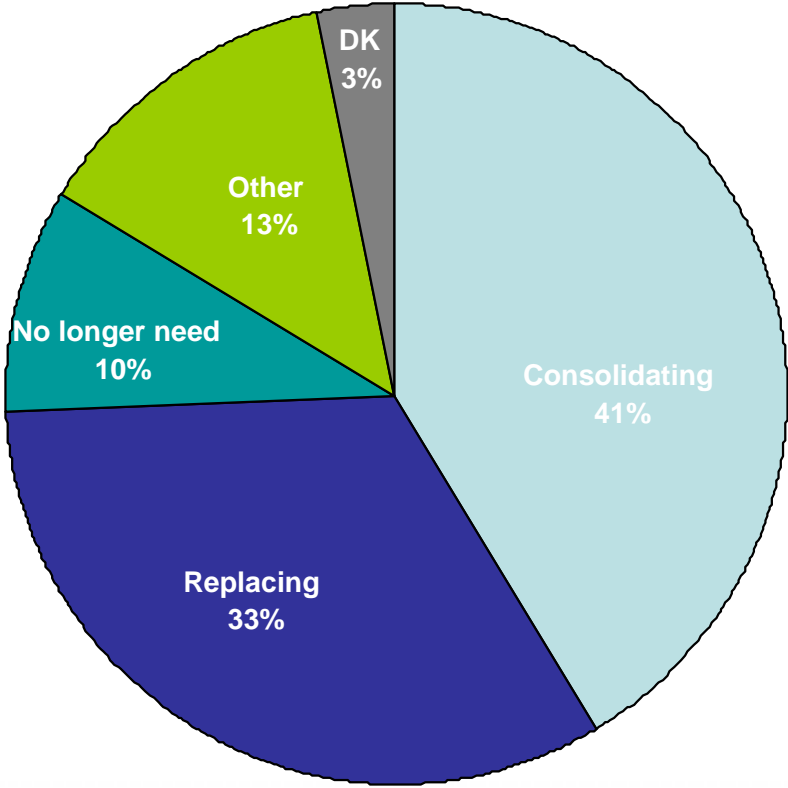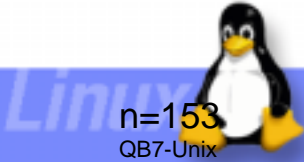
Today's Environment

Business Data

Web Servers

Database Servers

Security & Directory Servers

SSL Appliances

Routers Switches

Application Servers

Firewall Servers

Caching Appliances

DNS Servers

File/Print Servers

LAN Servers

UI Data
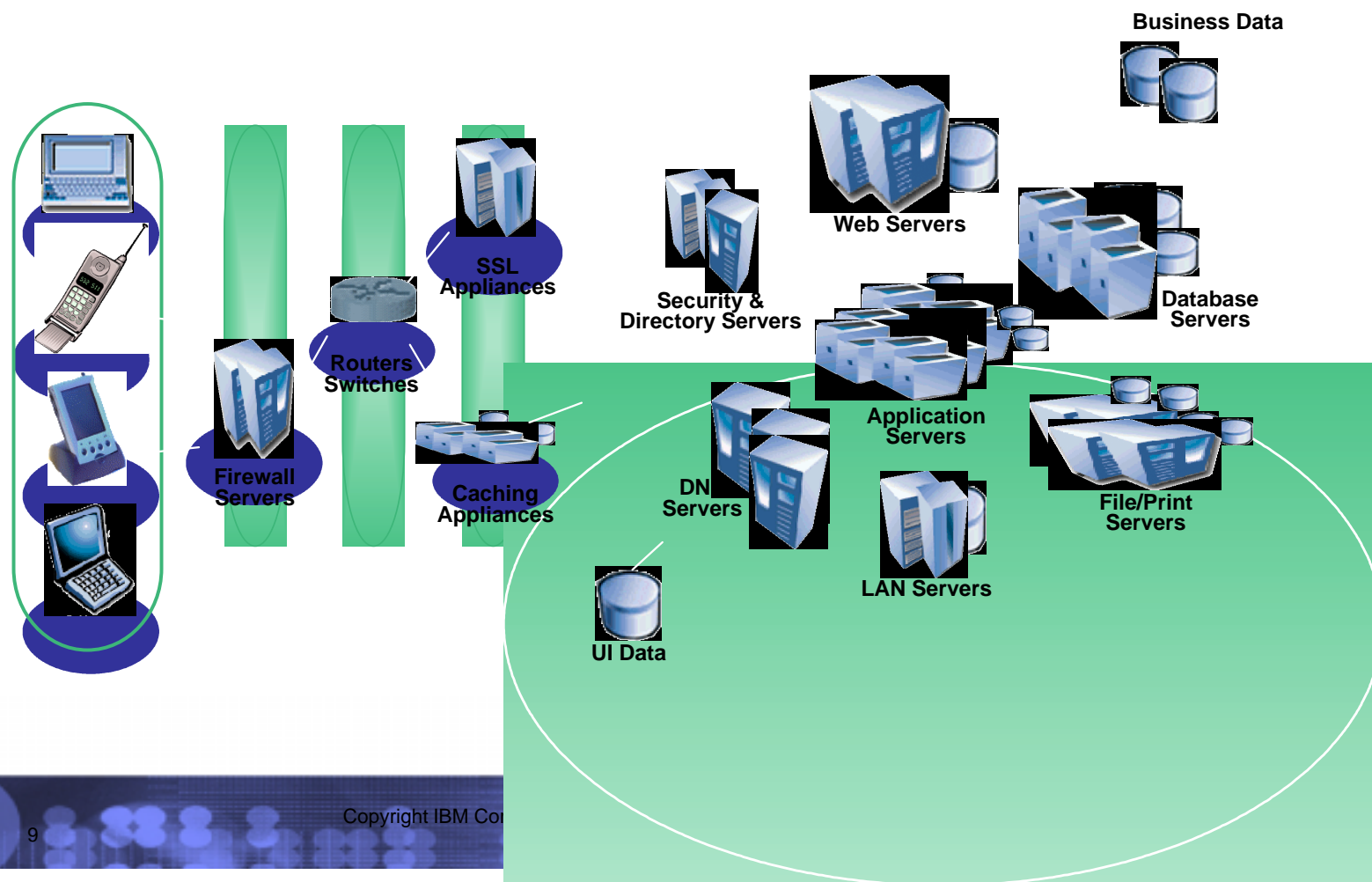
Infrastructure Simplification

Scale Up
Mainframe

Security &
Directory Services

File/Print Servers

Application
Servers

Scale Out
BladeCenter

Application Servers

DNS Servers

Web Servers

Terminal
Serving

E-Commerce
Applications

Database
Servers

Transaction
Servers

Corporate
Infrastructure

Deep Computing
Clusters

Collaboration Servers

File/Print
Servers

SSL Appliances

Web Services

Mission Critical Applications # 1 in customer plans

- Gartner – Linux server shipments saw 57% growth in 1Q2004
- Forester – "Linux is for Mission-Critical Apps.", 4/2004

Running mission-critical applications on Linux	53%
Chose Linux for new applications	52%
Using Linux to port older applications to new hardware	44%
Run applications requiring Linux	33%
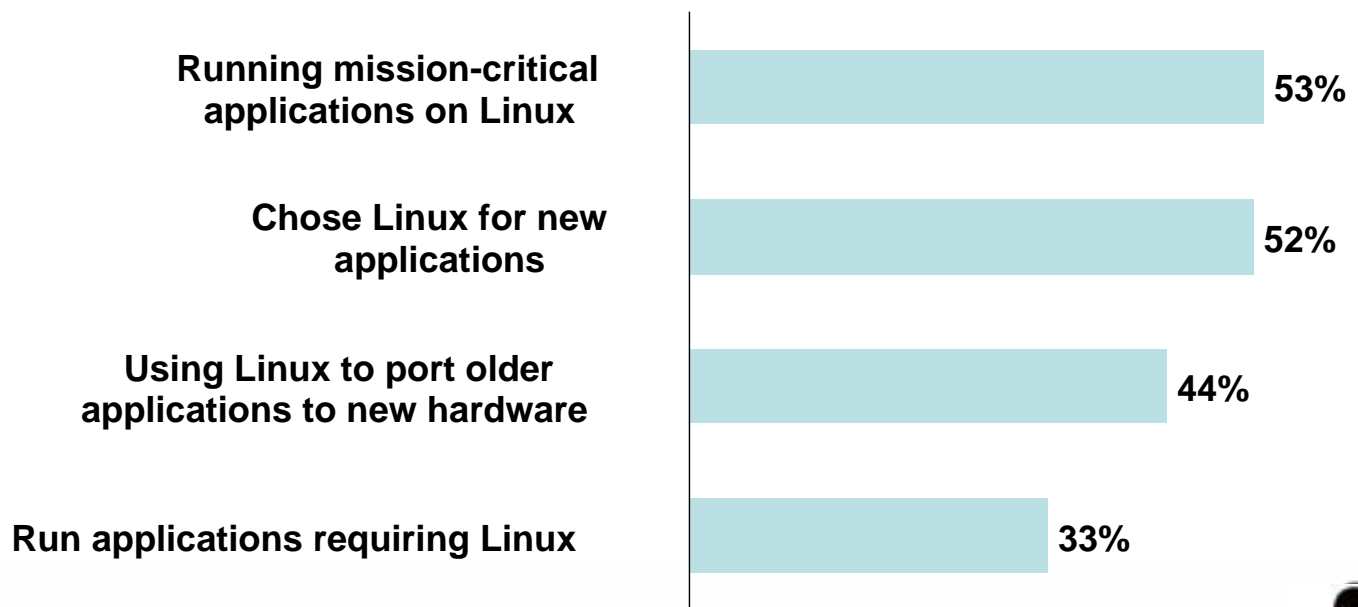
ISV's flock to Linux

Industrial	Distribution	Financial	Telecom	Public
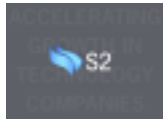
Industrial: Landmark, QAD, cadence, synopsys

Distribution: RELAVIS, S2 (ACCELERATING GROWTH IN TECHNOLOGY COMPANIES), SAS, Retek (Home - Search - Login - Contact Us)

Financial: SUNGARD, Algorithmics Incorporated, MANTAS, SANCHEZ INNOVATE

Telecom: AVAYA, SOFTIMAGE, CISCO SYSTEMS, Huawei Technologies

Public: LANSA Advanced Software Made Simple, accelrys, CERNER, WebCT

Cross Industry: SAP, PeopleSoft, Check Point Software Technologies Ltd. We Secure the Internet., SIEBEL, XIMIAN Enabling Enterprise Linux

How Customers Start to Implement Linux

Infrastructure
- NT/2000 to Linux
- UNIX to Linux
- New Workloads

- **Firewall - Check Point, etc.**

- **Print / File - Novell OES, SAMBA**

- **Web Server - WebSphere**

- **e-mail - Domino**

Customers Continue to Implement Linux

Infrastructure

Applications

- Database servers
- eCommerce
- Super Computing Clusters
- SW Development
- Store & Branch Automation

Banca Popolare di Milano

BPM

CASAS **BAHIA**

COSMORLD POWER BY

ING

INFORMATICA

KIRIN

Bristol-Myers Squibb Company

HEALTH MANAGEMENT ASSOCIATES, INC.

K·B toys

CANADA'S MICHAEL SMITH
G E N O M E
Sciences Centre

JPMorganChase

Morgan Stanley

TORONTO MAPLE LEAFS

AIR CANADA CENTRE

RAPTORS

Linux

Step 3 - Customers Exploit Linux

Infrastructure

Applications

Enterprise

- Mission Critical
- Commercial Clusters
- ERP, CRM, SCM

PEOPLE Soft

SAP

OMV

BANK OF THE PHILIPPINE ISLANDS
www.bpiexpressonline.com

citigroup

GHM   POLSKA MIEDŹ S.A.

Prudential Financial
Growing and Protecting Your Wealth®

Veryes

HERZBERG INSTITUTE
OF ASTROPHYSICS

National Research   Conseil national
Council Canada   de recherches Canada

Deutsche Bank

Raiffeisen BANK

New Options going forward – Client Desktop

Infrastructure

Applications

Enterprise

Client

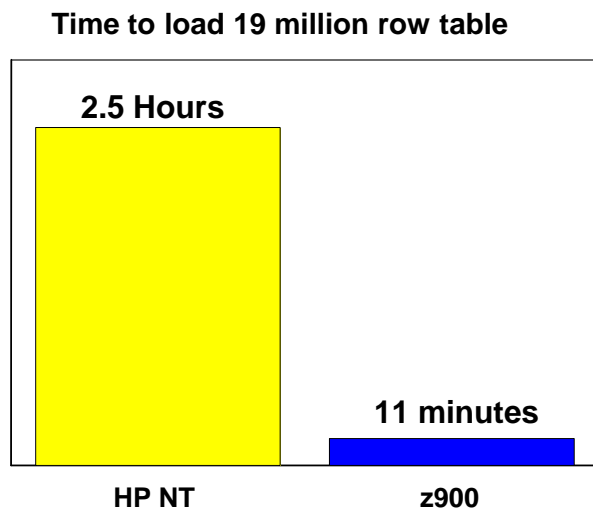- Industry specific
- Browser-based clients
- Desktop
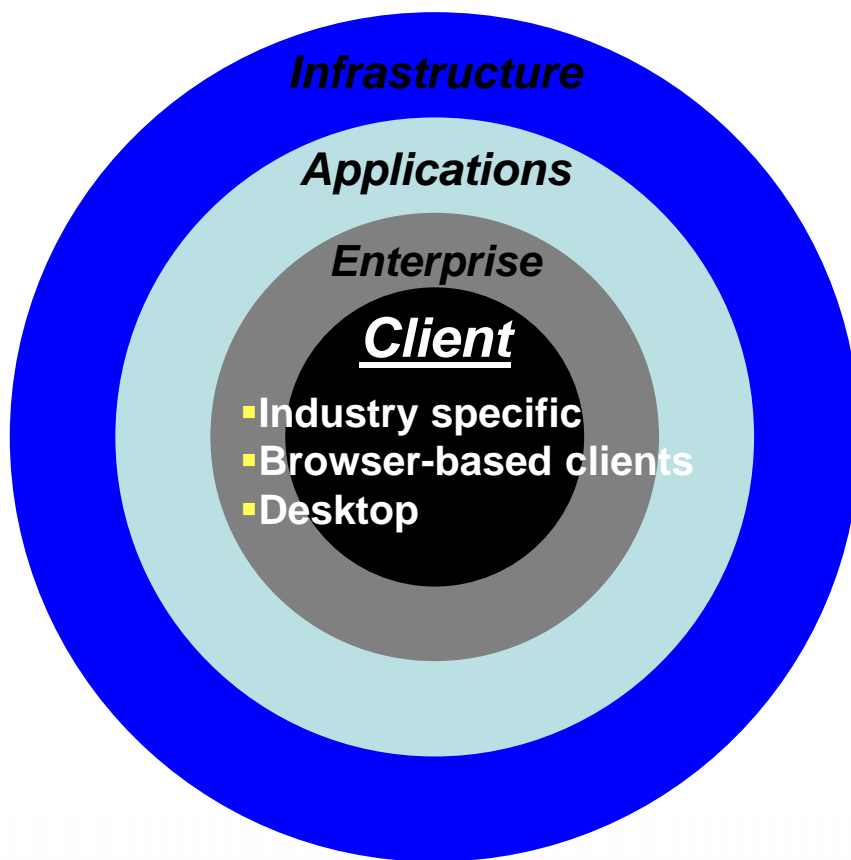
IBM Corporate Linux Status

3500 Internal Production Projects Worldwide

Linux

zLinux Consolidation! "2 ½ hours to 11 Minutes"

Banco Mercantil's experience with Linux on zSeries

Time to load 19 million row table

```
2.5 Hours
 ┌────────┐
 │        │
 │        │                11 minutes
 │ YELLOW │              ┌──────────┐
 │        │              │   BLUE   │
 └────────┘──────────────└──────────┘
   HP NT                    z900
```

Data Warehouse moved from HP 2-way Intel server
➤ NT4, Oracle 8.0.5

to IFL on z900
➤ SuSE 7.0, DB2 UDB 7.2

DB2 and I/O tuning actions
➤ use LOAD instead of IMPORT
➤ tune DB2 LOAD parameters
➤ use DMS instead of SMS tablespaces
➤ apply performance patch to RAMAC

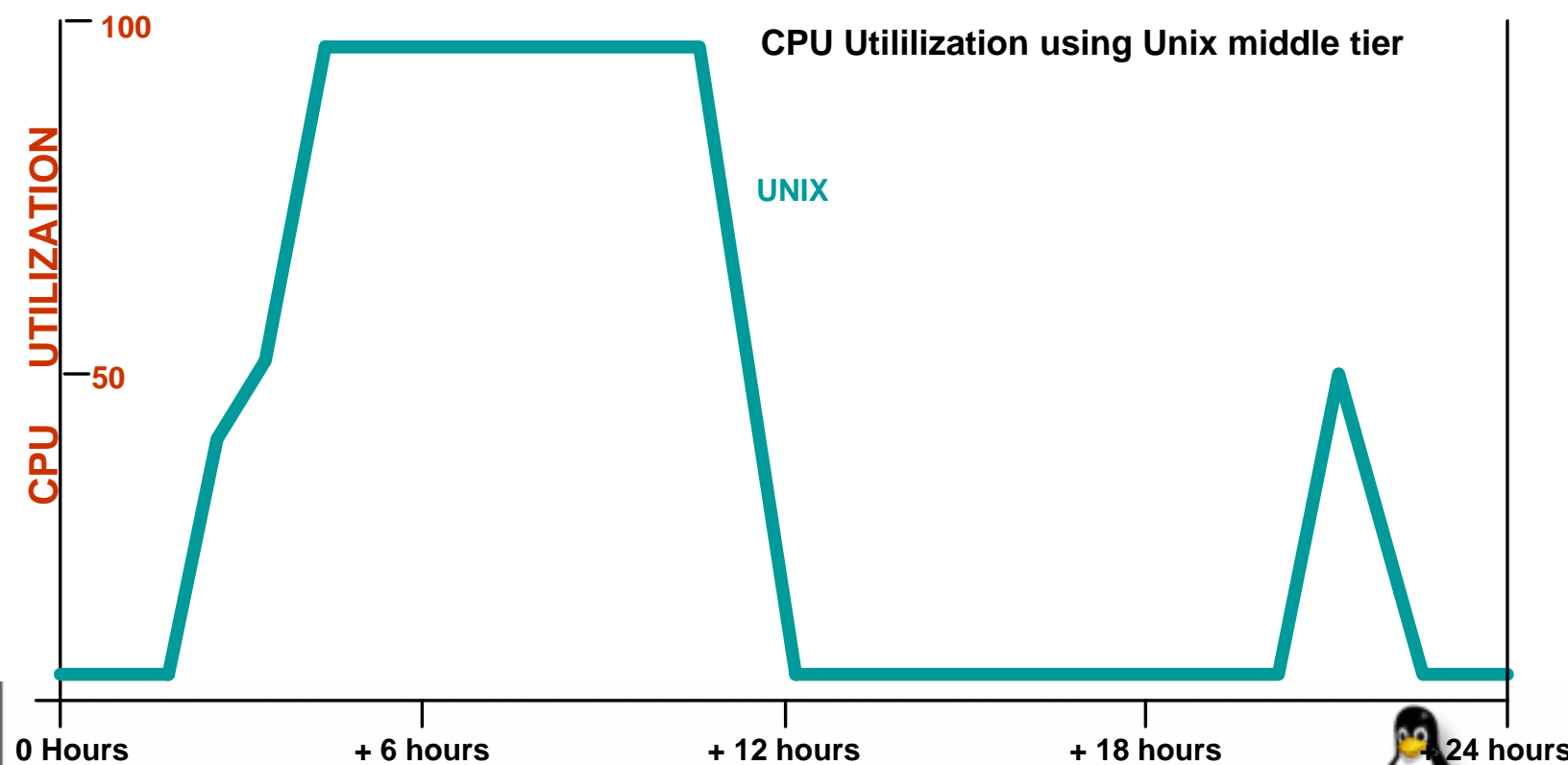"zSeries shows us how a real computer performs.
Fast response and high data transfer to meet our business needs".
quote: Enrique Rodriguez, Banco Mercantil's Data Management Manager

Source: Bruce Clavey, IBM Linux Integration Centre, white paper describing the Banco Mercantil engagement

SAP R/3 RETAIL / zSeries

CPU Utililization using Unix middle tier

UNIX

CPU UTILIZATION

100

50

0 Hours — + 6 hours — + 12 hours — + 18 hours — + 24 hours

OMV

SAP R/3 RETAIL / zSeries

CPU Utilization - Unix vs zLinux Middle tier

CPU   UTILIZATION

100

50

UNIX

0 Hours   + 6 hours   + 12 hours   + 18 hours   + 24 hours

OMV

OMV

20
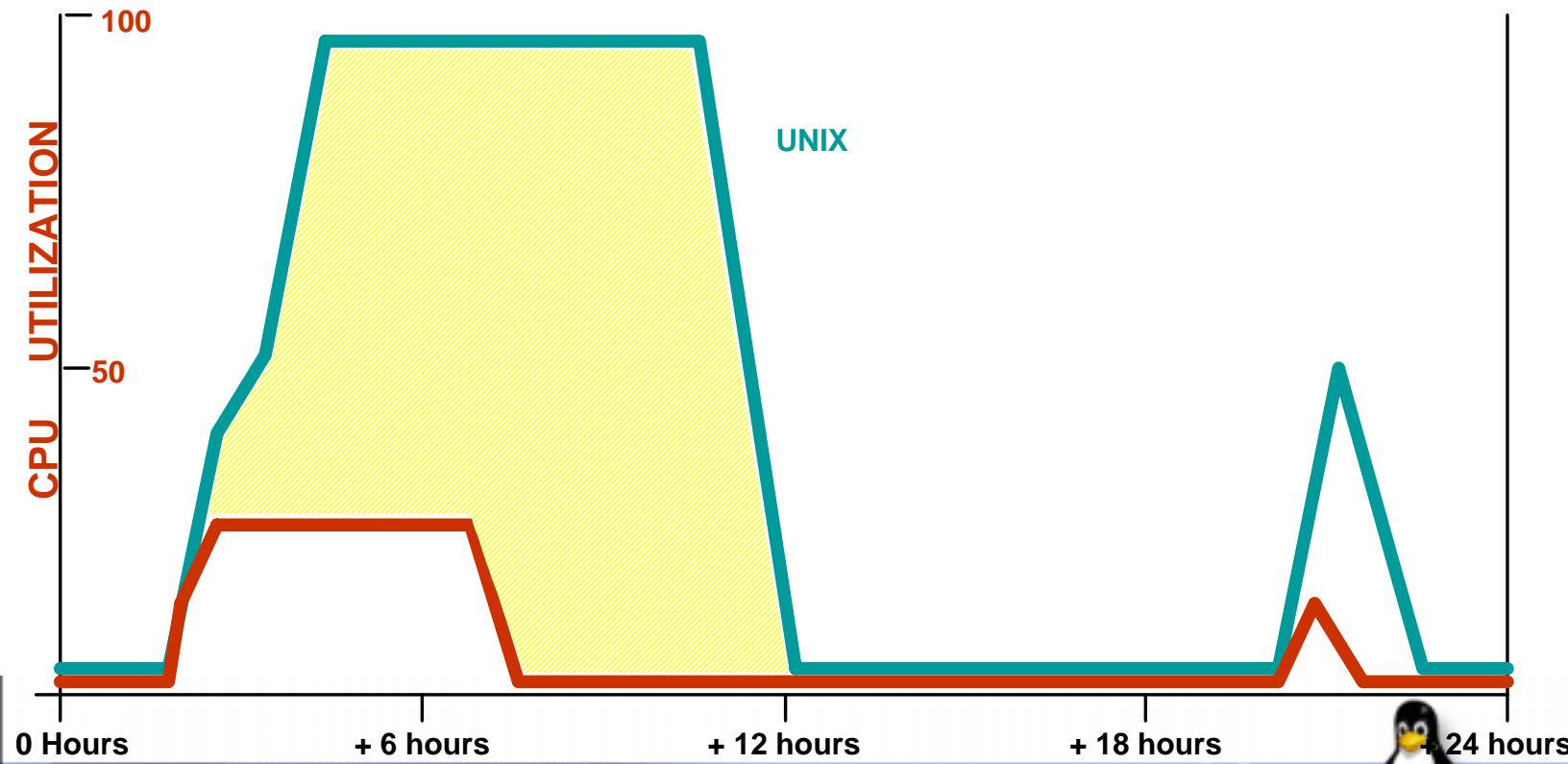
Linux

IBM Linux Support Investments

**Linux
Technology Center**

**Worldwide
Porting Centers**

**Technical Support
WW Competence Centers**

**Linux Sales
Specialists**

**Linux Whitepapers
and Redbooks**

**Linux
Integration
Center**

OSDL

Products

**Linux
Services**

www.ibm.com/linux

**Linux Enabled
Business Partners**

LINUX is Pervasive

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http://www.ibm.com/linux/

अनुवाद
Hindi

СПАСИБО
Russian

Grazie
Italian

شکریہ
Arabic

謝謝
Traditional Chinese

谢谢
Simplified Chinese

ขอบคุณ
Thai

בתודה רבה
Hebrew

Merci
French

Gracias
Spanish

Obrigado
Portuguese

Danke
German

감사합니다 감사합니다
Korean

நன்றி
Tamil

ありがとうございました
Japanese

Carol Stafford
IBM Vice President, Linux

Thank You
English

Linux