Managing Your Database
In a Wireless World

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Agenda

- Introduction
- A DBA's life
- Handheld Overview
- Today's Business Needs
- PocketDBA / PocketSA Demo
- Wireless Technology Architecture
- Wireless and Database Resources
- Q&A

Introduction to Ari Kaplan

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A DBA's Life

Traits of a DBA

- Tenacity

- Self starter

- Detail oriented

- Curiosity

- Self confidence

A DBA's Life

- 100,000 Oracle DBAs in United States

- 4th fastest growing occupation

- Oracle global installed base 200,000 companies

- Oracle 2000 revenue: $10 billion

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A DBA's Life

DBA workload demands are increasing:

- Businesses expect more of current staff

- 30% of DBAs report an excessive workload

–Oracle Professional Survey

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A DBA's Life

Almost 30% of DBAs report an excessive workload

Workload	Percent	Average salary
Not enough work	4.0%	$47,954.54
Steady flow of work	63.7%	$59,409.72
Excessive workload	29.7%	$66,250.00
Not Answered	2.6%	

A DBA's Life

DBA salaries

Salary Range	Percent
Less than $30,000	11.5%
$30,000-$39,999	7.9%
$40,000-$49,999	14.2%
$50,000-$59,999	12.9%
$60,000-$69,999	17.8%
$70,000-$79,999	11.3%
$80,000-$99,999	11.5%
$100,000 or more	6.9%
Not answered	5.9%

A DBA's Life

Difficult environment for workers…

- "Dawn of the IT sweatshop" says the Meta Group

- Long hours

High burnout rate / job hopping

A DBA's Life

According to the Meta Group, the average DBA works more than 50 hours, including six hours on the weekends

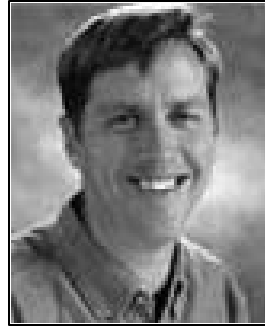| Number of employers over the past five years	Percent
1	22.1%
2	34.3%
3	21.5%
4	7.9%
5 or more	5.6%
N/A—freelance	2.3%
Not Answered	6.3%

Handheld Overview

Who are these CEOs?

Carl Yandowski

CEO Palm Computing

Jeff Hawkins

Founder and Chairman
of Handspring

Donna Dubinsky

Founder and CEO
of Handspring

Mr. Kouji Ohboshi

President of NTT DoCoMo

Handheld Overview

How many of you have handhelds?

How many of you have wireless handhelds?

How many of your companies bought the handhelds for you?

Handheld Overview

Handheld Sales

- Last year, nearly 10 million PDAs were sold

- Almost double of 1999's sales

- By 2004, everyone from executives to hairdressers will buy some 33 million PDAs

Handheld Overview

Evolution

- Once clunky, overpriced

- Only stored phone numbers and addresses

- Rebirth as sleek wireless accessories

- PDA is now cell phone, electronic wallet and personal entertainment system all rolled up in one
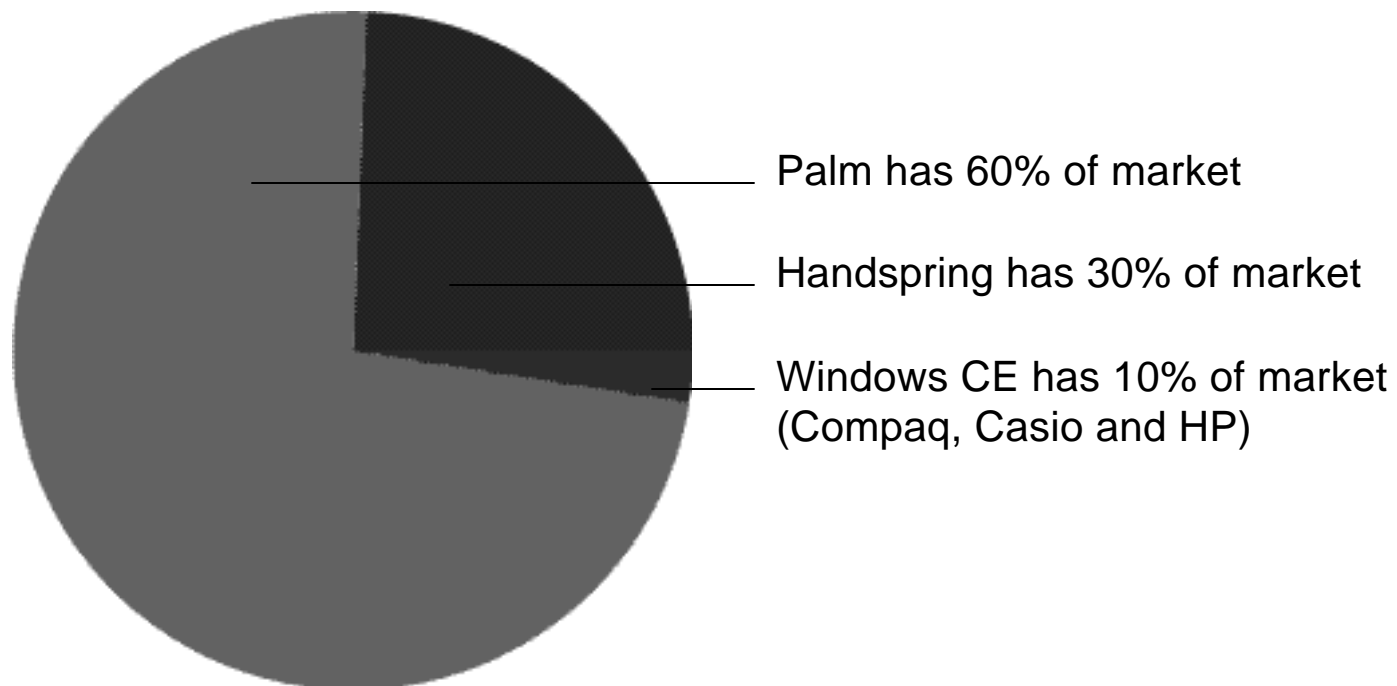
Handheld Overview

Evolution

- Movement to enterprise sales, where corporations order thousands of devices

- Palms given to workers like a tool, much like a training manual

Handheld Overview

Palm has 60% of market

Handspring has 30% of market

Windows CE has 10% of market
(Compaq, Casio and HP)

Handheld Overview

New Palm OS models launching now

- Each with 8 megabytes of memory

- 33-megahertz processors

Handheld Overview

Handspring Edge ($400)
- Thin metallic casing like the Palm Vx

Sony Clie N710C ($500)
- Packs four-times as many illuminated dots 320 x 320 pixels into Palm.

- Although screen can only show 256 colors at once

- Thumb wheel for navigating

- Memory sticks

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Handheld Overview

HandEra Era 330 ($350)
- Higher resolution screen

- Screen stretches into the Graffiti writing area

- Built-in mike and speaker

- 2 expansion slots

Handheld Overview

Palm m500 ($400)
- Excellent grayscale screen

Palm m505 ($450)
- Color Palm V

Today's Business Environment

- Need for monitoring, managing, and development of databases wirelessly

- Huge business inefficiencies

- Staff currently must conduct work on fixed-line computers

- Lost business when staff is not onsite

- Business are "always open" all day, all night, across time zone

Today's Business Environment

Six Costly Database Challenges: Summary

- DBA 24 x 7 Access

- DBA Response Time

- DBA Productivity

- DBA Retention

- DBA Replacement

- Database Availability

Today's Business Environment

1. The Challenge of DBA Remote Access

- Businesses are "always open"

- Need for continual monitoring, managing & development of databases and server environment

- But. . .DBAs are restricted by the wired technology of the last century

Today's Business Environment

1. The Challenge of DBA Remote Access

   DBA's are often unavailable to dial in:
   - Commuting
   - Trade Shows
   - Training
   - Lunch
   - Little League Games
   - Traffic

   - Illness
   - Vacations
   - Personal Life
   - Meetings

Today's Business Environment

2. The Challenge of DBA Response Time

DBA quick response needs are increasing:
- User expectations
- Customer demands
- Competitive pressures
- Management requirements
- Service level agreements
- Mission-critical systems
- High availability needs

Today's Business Environment

3. DBA productivity

4. DBA retention

5. The Challenge of DBA Replacement

DBAs are costly to replace:
- Average cost to hire one person in I.T.: $25,000 to $35,000

- Does not include:
  - Salary
  - Cost to bring candidates in
  - Lost unbilled hours of time spent in process.

–CEO of I.T. Recruitment Firm

6. Database Availability

Unscheduled Downtime is Costly:

Average Cost per Minute of Application Downtime at Peak Load

Data Warehouse	$6300
SCM	$6600
eCommerce	$7800
ERP	$7900

–Standish Group International Inc., 1999

PocketDBA Demo

PocketDBA Systems is the only provider of software enabling comprehensive management of Oracle databases, servers, and networks from a wireless device.

PocketDBA Demo

Endorsed by Rich Niemiec

" PocketDBA Systems has broken new ground with a robust wireless product that can make organizations and DBAs more effective through increased system availability."

— Richard J. Niemiec, CEO of TUSC,
   President of International Oracle Users Group

PocketDBA Demo

Wireless Database Management Now!™

Control your Oracle®
Databases from wireless
devices ®

PocketSA Demo

Wireless Database Management Now!™

Control your servers from wireless Palm OS devices

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Wireless Architecture

Compatibility:
Oracle 8.0.x, 8.1.x, 8i, [9i], 7.3.x*

OS:
Palm OS, [WinCE] ; Solaris, LINUX, Win NT/2000

Supported Devices:
Palm V, Vx, VII, VIIx
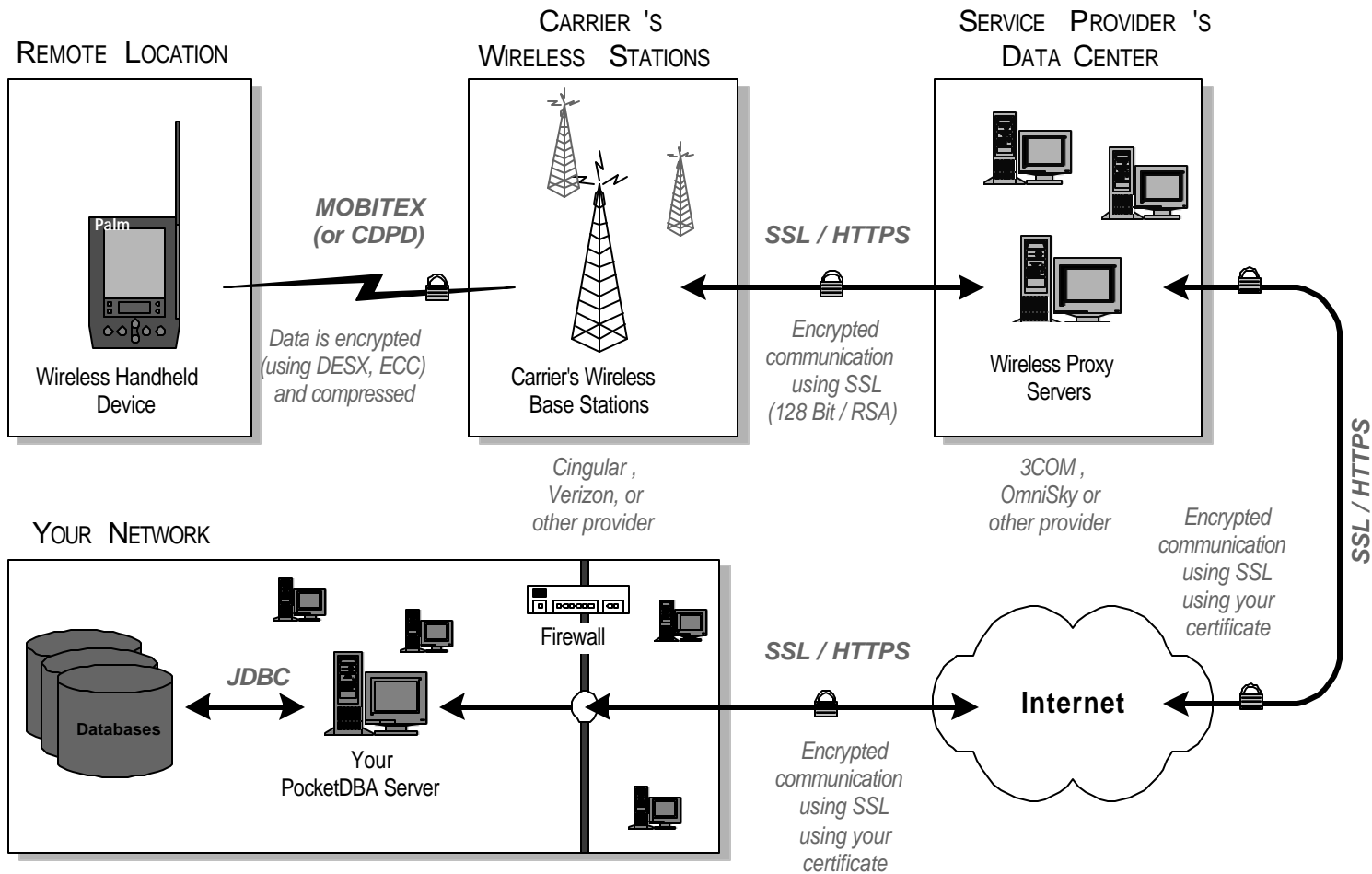Handspring Visor Platinum & Prism
Kyocera QCP 6035 Smartphone

[Compaq iPaq, HP Jiordana]

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Oracle Wireless Technology Options:

IAS Components

- Apache JServ
- Oracle HTTP Server
- SQLJ (use SQL directly in Java applications)
- mod_plsql / mod_perl / mod_ssl / mod_jserv
- OracleJSP (JavaServer pages)
- Oracle PL/SQL Server Pages
- Oracle *8/9i* JVM (Java Virtual Machine)
- Oracle *8/9i* PL/SQL
- Oracle XML Developer's Kit
- Oracle LDAP Developer's Kit
- Oracle Forms Services (Enterprise Edition Only)
- Oracle Reports Services (Enterprise Edition Only)
- Oracle *8/9i* Cache (Enterprise Edition Only)

Wireless Architecture

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REMOTE LOCATION

CARRIER 'S
WIRELESS STATIONS

SERVICE PROVIDER 'S
DATA CENTER

Palm

**MOBITEX
(or CDPD)**

SSL / HTTPS

Wireless Handheld
Device

*Data is encrypted
(using DESX, ECC)
and compressed*

Carrier's Wireless
Base Stations

*Encrypted
communication
using SSL
(128 Bit / RSA)*

Wireless Proxy
Servers

*Cingular ,
Verizon, or
other provider*

*3COM ,
OmniSky or
other provider*

*Encrypted
communication
using SSL
using your
certificate*

SSL / HTTPS

YOUR NETWORK

Firewall

JDBC

SSL / HTTPS

Internet

Databases

Your
PocketDBA Server

*Encrypted
communication
using SSL
using your
certificate*

Wireless Architecture—Security

Incorporates or Supports:

• Automatic session timeout

• No proprietary data or passwords reside on PDA

• Elliptical curve encryption SSL
  (HTTPS 128-bit Secure Socket Layer)

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Wireless Architecture—Security

Incorporates or Supports:

- Mandatory password authentication

- Oracle roles to limit access to specific users or areas of database

- Read-only permission option

- Encryption maintained on proxy server; no data caching

Wireless Benefits

- Speed up remote access and emergency troubleshooting

- Increase productivity by enabling more proactive monitoring

- Decrease costs by decreasing unplanned downtime

Wireless Benefits

- Provide inexpensive 24x7 insurance against DBA unavailability

- Reduce staff turnover by improving job satisfaction

- Gain fuller control over mission-critical systems

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Wireless and database resources

Oracle Discussion Newsgroups:

• comp.databases.oracle.server

• comp.databases.oracle.tools

• comp.databases.oracle.misc

These can be accessed through a newsgroup program or "www.deja.com"

• Ari's free Oracle Tips web page at: www.arikaplan.com

Over 400 tips and answers to questions.

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Wireless and database resources

- Other good sites with links:

  www.ioug.org

  www.lazydba.com

  www.orafaq.org

  www.orafans.com

  www.orasearch.com

  www.revealnet.com

  www.dbdomain.com

Wireless and database resources

Wireless News:

- www.planetit.com

- www.mobileinsights.com

- www.mobileinfo.com

- www.pdabuzz.com

- http://www.thestandard.com/subject/technology/

Handheld Discussion Newsgroups:

- comp.sys.handhelds.palmpilot

- comp.sys.palmtops

- comp.handheld

Questions and Answers