

MPE/iX and the
Web

Ashwin K Karkala

Vikram Kumar B T

Hewlett Packard India Software
Operations Ltd

#29 Cunningham Road

Bangalore 560052

India

Ph: (91) 80- 225-1554

Ashwin@india.hp.com

Vikram@india.hp.com

Introduction

- **Purpose of the discussion**
 - The e-features of the HP e-3000
 - Explain the concept of their working
 - How to configure some of these on the e-3000

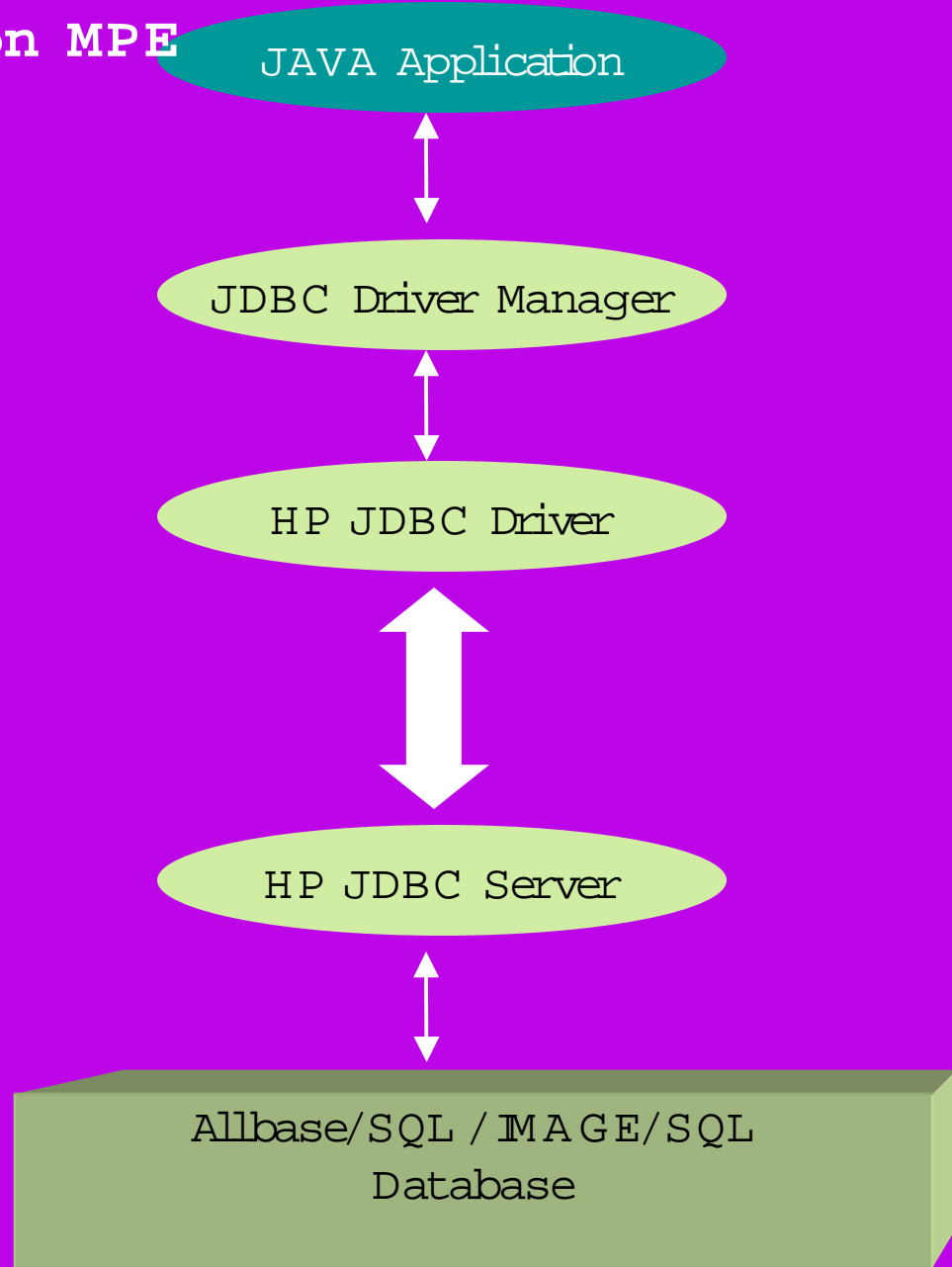
Topics

- JDBC
- LDAP
- Apache on the e-3000
- Java on the e-3000
- Enhydra on the e-3000
- Middleware and other tools

JDBC

- **What is JDBC**
 - Specification for database access.
- **How does it work on the e-3000**
 - Client-server configuration
 - Vendor specific JDBC driver at the client
 - JDBC server is the entry point into the DB

Architecture of JDBC on MPE



JDBC Contd..

- Components of JDBC

- JDBC Driver

- Standard set of Java classes for java.sql*

- JDBC Server

- Process spawned by JDBC monitor

- At least one server per client connection

- Format conversions

- JDBC Monitor

- Daemon on the server

- Manage connections, authentication

Configuration of JDBC on e-3000

- **Installation requirements**
 - **Java requirements**
 - JDK version 1.1 or higher compliance
 - **MPE/iX server requirements**
 - MPE/iX 6.0 or higher
 - **Allbase and/or Image requirements**
 - Allbase/SQL G3.01 or higher**
 - IMAGE/SQL G3.00 or higher**

Configuration of JDBC on e-3000 contd..

- **Installation**

- **Server package : HFSFILES.JDBC.SYS**

- **Install script: I00IJDBC.JDBC.SYS**

- **SERVCFG.JDBC.SYS**

- **Java driver classes on client machine**

- @.JDBC.SYS (for MPE client)**

- ftp DRIVERT/ DRIVERJ/ DRIVERZ**

- **Starting and Stopping the Monitor**

- JSTRTMON.JDBC.SYS**

Lightweight Directory Access Protocol

- Open standard protocol
- Directory connectivity
- Heterogeneous platforms
- Generic APIs
- Application transportability
- Sharable, replicable directory repository
- Runs over TCP/IP

LDAP contd..

- **LDAP server**
 - Manages network directories
 - Processes access requests

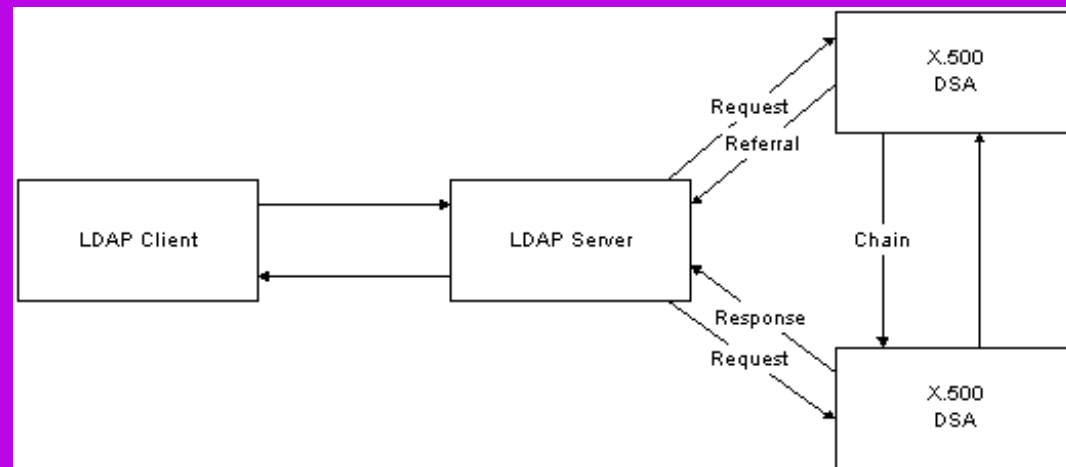
LDAP Client

Send access requests

Standard protocol & APIs

LDAP Contd..

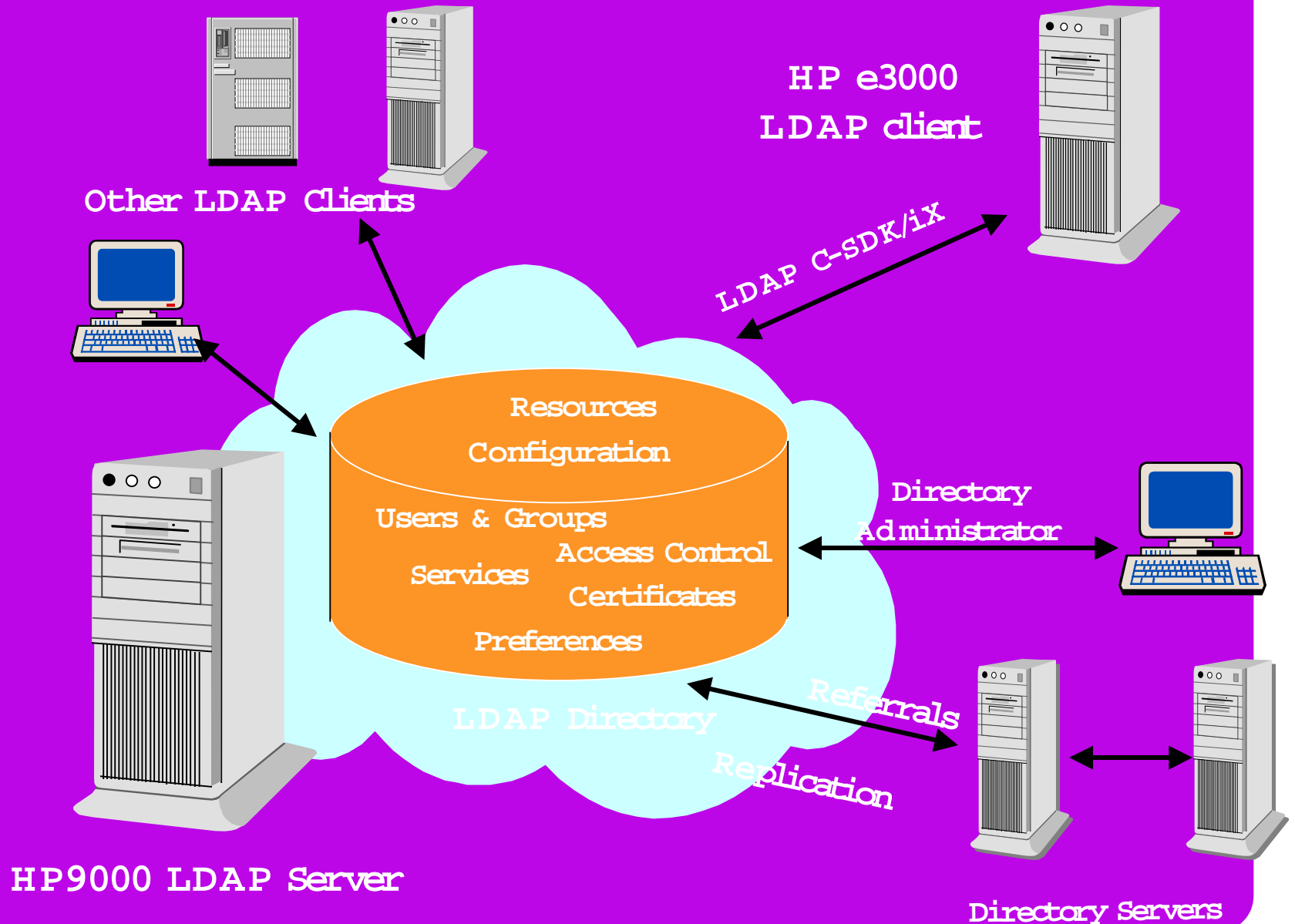
- LDAP and X.500



LDAP C-SDK/iX

- LDAP client API to access directories in LDAP servers
 - Applications can query & update directory info
 - Command tools for simple queries & testing
 - Enables directory access from HPe3000
-
- MPE 6.0 or above

Directory Access Via LDAP C-SDK on MPE/iX



LDAP C-SDK/iX Contd..

- **LDAP Installation**
 - Download from <http://jazz.external.hp.com/src/ldap/>
 - Untar to /usr/local/ under shell in MPE
 - Create symbolic links
- **LDAP package contains**
 - **Library for linking applications**
 - **Header files for compiling applications**
 - **Command tools for search/ update/ delete**
 - **HTML docs for C programmer's guide**
 - **Example client programs**

Apache on the e-3000

- What is Apache?
 - Web server from Apache Foundation
 - Popularity : > 50 %
- How does it Work?
 - Runs as Background process
 - HTTP
 - Serves static and dynamic resources
 - CGI scripts in PERL, C, or other scripting languages

Apache on the e-3000 contd..

- System Requirements
 - MPE/iX 6.0 or greater
- Apache Installation
 - <http://jazz.external.hp.com/src/apache/>
 - Download & extract the tar ball
 - Stream JAPINST

Apache Contd.

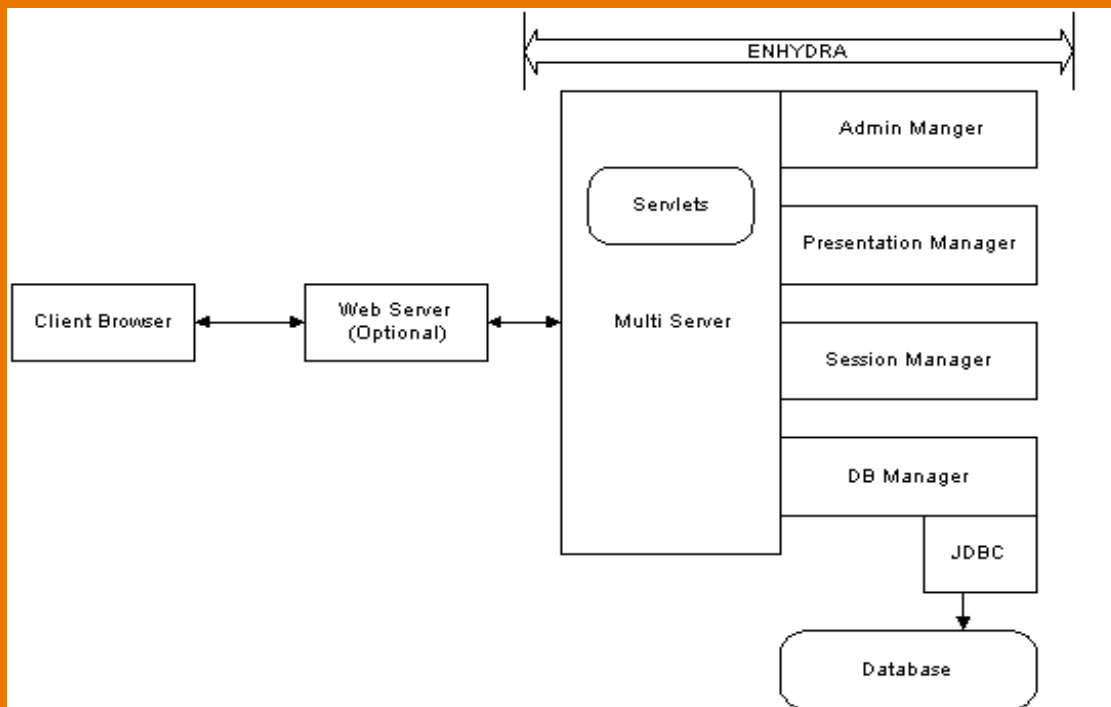
- Apache Configuration
 - `httpd.conf`, `srm.conf`, `access.conf`
 - `Mime.types` and `magic files`
 - `JHTTPD` file
 - Info to start/ stream apache server
 - Stream `JHTTPD` to run apache

Apache Contd.

- **HP WebWise**
 - Secured web server based on Apache
 - Full strength RSA Encryption
 - SSL v2.0, SSL v3.0, TLS v1.0
 - X.509 digital certificates authentication
 - Session caching
 - Dynamic Shared Object (DSO)

Enhydra on e-3000

- Open source Java/XML application server
- Wired and wireless web applications



Enhydra Contd..

- Enhydra Components
 - MultiServer
 - Administration Manager
 - Session Manager
 - Presentation Manager
 - Database Manager
- Applications on Enhydra
 - Presentation Object
 - Business Logic Object
 - Data Objects

Enhydra Contd..

- Download the latest Version
 - <http://www.enhydra.org>
- Installation instructions
 - <http://www.lutris.com/documentation/index.html>

Other tools

- Interoperability
 - Middleware for client/server applications
 - ODBC driver/ server
 - Migration tools
- Many more tools, utilities, products,

Conclusion

- All the 'e' capabilities are present
- Any solution is possible with the e-3000!!

We are there to help you succeed in your business

References

<http://docs.hp.com>

<http://www.enhydra.org>

<http://www.apache.org>

<http://jazz.external.hp.com/>

Q & A