



ILMS Redevelopment to HP-UX

(A Real Time Production Conversion)

Kenneth W. Porter

Must replace the legacy application? Why?

City of Houston, Planning Development Department, iTEAM

This journey starts with a transmission that was retrieved from old media between an incoming HP3000 mainframe class server and the outgoing Cobol application program, circa 01.01.2001

must replace the legacy
application ? ? ? ?



huh?

Why?



let me show you how in four clicks

begin new transmission so begins
the redesign of a classic MPE/iX
application into a multi-tier environment

The Cobol program starts to explain to the host that adding a graphical client and middle ware will not mean the lost of any functionality but simply an extension of the **application** to another **environment** . . .

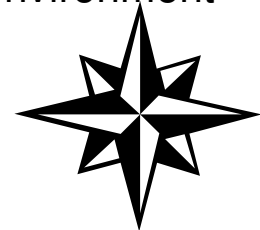
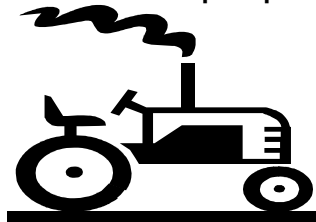
click 1 - add a graphical client interface



click 2 – provide browser based reporting



click 3 – sunset the 9xx servers, use N or A class servers and prepare for Itanium/Unix environment



click 4 – load data from Image to Oracle



What is the Integrated Land Management System?

WHAT IS THE INTEGRATED LAND MANAGEMENT SYSTEMS (ILMS)? IN A WORD IT IS USERS !! The Integrated Land Management System (ILMS) was purchase by the City of Houston Building Inspections Division in 1987 to automate building inspection's permitting process. Since that time, several divisions dealing with various codes related to construction, signs, building standard or neighborhood standard codes are using the system. ILMS was designed to primarily handle **plan tracking, permitting, and inspection tracking**. Over the years the users have found many ways to use this application to solve their business problems and challenges. The ILMS environment up time is at 99%. There are over 1000 internal and external clients of the application and its support environment.

Senior Stake Holders and Supporters

- Gary Bridges, Building Inspections
- Shelia Blake, Building Inspections
- Allen Largent, Building Inspections
- Ken Lorton, Building Inspections
- Chief Daniel Pruitt, HFD
- Charles Key, HFD
- Gracia Rosslow, HFD
- Nick Toparcean, Planning and Development
- Brian Sedberry, Planning and Development

iTEAM Concept – Resource Management

•internet, innovative, ingenuity, initiative, in site, instructions, input, intellectual capital, individuals . . .

- Together
- Everyone
- Achieve
- More

iTEAM Members: Ken Porter, Jack Griffin, Niki Patel, Phuong Nguyen, Steve Craig, Willie Gause, Keith Martin, Robert Hooper, Neal Gittleman, John Galinski, Richard Klimitchek, Les Anderson, Bernard Doarks, Cathy Aulds, support assistants and the customers and clients we serve .

Project OverLord

A Real Time Production Conversion

- Project OverLord is a joint public + private venture to redesign a 'Classic' propriety MPE/iX, HP View & Image database one/two tier application with its sub-applications and their operating systems into a Open Platform multi-tier, graphical client based application ;
- The primary challenge, the conversion is being done concurrently within the daily ILMS production environment...

Overview of Project Overlord

Transition from a Propriety Platform to an Open Platform

Challenges

- Transition from a propriety platform Operating System (OS) to a more open platform OS by 2006
- Provide a realistic approach to move from MPE/iX OS with a Image/SQL database to a Unix OS with Oracle database environment
- To have 85% of the Application and Support systems redesigned before Hewlett Packard is retires the MPE/iX OS in 2006
- All vendors that develop and support the MPE/iX will in theory scale back or stop support in 2006
- Design, develop, install, and test the open environments and platforms while utilizing better business concepts as we deliver information to the public, internal and external clients in an efficient and timely manner
- Integrate Fire Marshal Permitting and Field Inspections into ILMS



Why do OverLord?

What is the Cost of Inefficient Information Management Systems?

According to IDC, for every 1,000 knowledge workers, your enterprise wastes **\$7.5 million** a year looking for and reworking information that already exists . . .

Moreover, total replacement cost is estimated at over **\$10 million**.

Goals for Project Overlord

- The iTEAM will provide improved services and access to the Code Enforcement Information Applications and Systems, while minimizing interruptions to the public, and internal and external clients during the transition phases.
- Not to exceed the old MPE/iX classic goal of having any application off line for more than 4 hours during normal business hours . . . with 99% uptime

Implementation Concept



- Phased approach will help maintain project scope
- Phased approach identifies mile stones
- Phased approach reduces total system unavailability
- Limited personnel resources requires a phased approach
- Phased approach augments the ability to design, develop, and deploy applications and systems in a safe and timely manner

Phases of Project OverLord

- Phase I - Replace of aging mainframes with current hardware, software, initial redevelopment effort to integrate the Fire Marshal Office Permitting and Field Inspections operations into ILMS
- Phase II – Install a HP9000 Unix server, develop a data warehouse for reporting, and use browser based business intelligence tools for the reporting
- Phase III – Replace the HP3000/959 with an e3000 server move all production and applications, redesign ILMS database from Image to Oracle, modify ILMS application to take advantage of the new database design
- Phase IV – Implement redesigned ILMS application and database into production

Classic HP3000 MPE/iX Configuration Terminal to Host

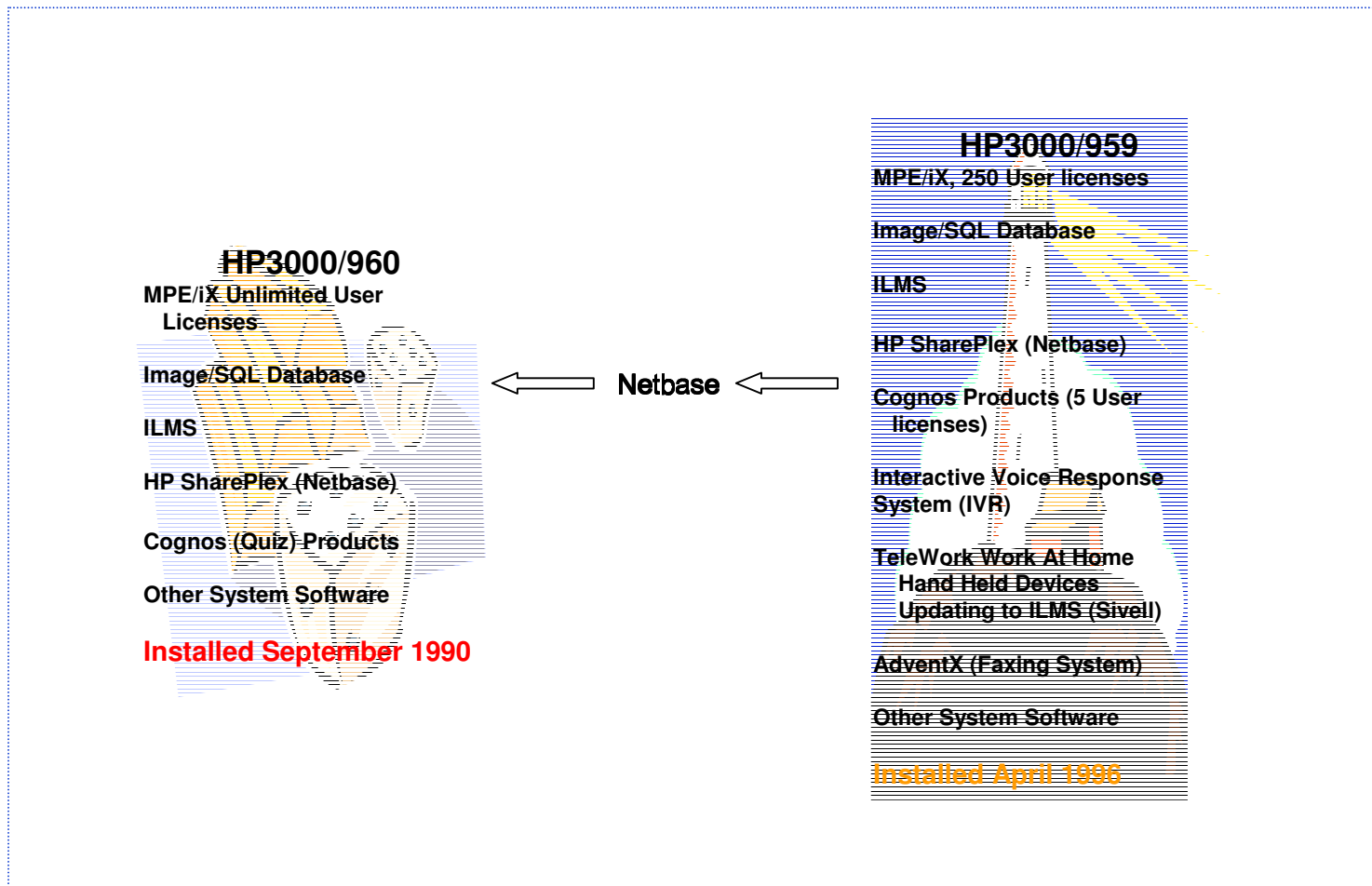
Terminal Client



Host Client



Classic ILMS Hardware Configuration



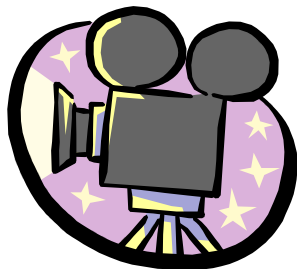
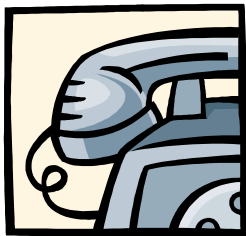
Phase I – Client Application Interfaces + Fire Marshal Project

Scope

- Modify existing ILMS application to handle Fire Marshal permitting and field inspections
- Replace the oldest of the aging and out of production mainframe computers
- Increase hardware reliability for daily operations
- Provide improved/corrected business functionality
- Normalize Image database for new report application
- Minimize disruptions to users and clients by phasing in the changes and replacement of the HP3000/960 Online Production Server(s)
- Have the Class A to become the test/development system while the HP3000/960 continues to function.

New ILMS Multi-Tier structure

Clients



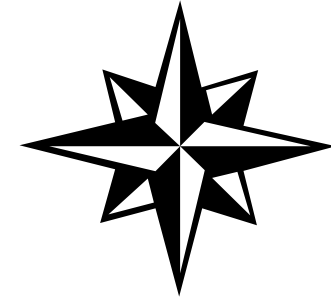
New
Middle Tier



Host
Client

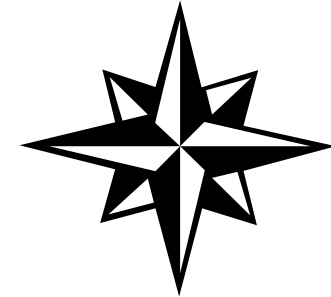


OverLord Design & Development Philosophy



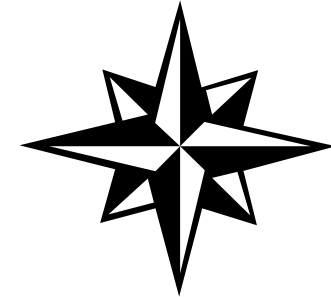
The design and development begins with the custom middleware program developed by one of our development partners. This is the centre point that enabled the iTEAM to reengineer the application based on a three tier model with in record time of 4 ½ months. The end-result is a high-performance environment that can publish as well as perform transaction processing services based on Microsoft IIS hosted web-pages/Web-services. Application state is handled at the middle-tier level and all user requests are based on HTTP-port-80. This is regardless of request's source. Specifically, the newly developed ILMS Graphical Client, Intranet/Internet Web Pages, or Cell phone (WML). This should equate to huge savings over the life of the application. The City's business continues to evolve and we have to be in a position to share and respond to a wide array of business issues in a timely, cost effective manner. The importance of standardizing on stateless Port 80 request cannot be over emphasized. We feel that Applications must be Firewall/Wireless-Internet friendly to stand the test of time. Our customers, the Mayor, City Administration, the building-contractors and the public-at-large expect if not demand value for money and constantly improving services. We are now able to respond more quickly and avoid reinventing the wheel as new technologies/requirements emerge.

Design and Development



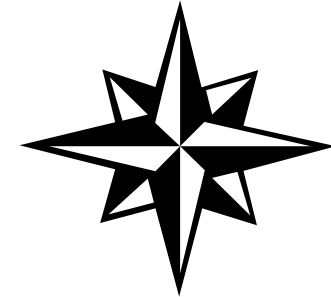
New Multi-Tier design is a key feature for handling external processes and clients. The potential outsourcing of services, projects and field inspection exist as all organizations both private and public seek to improve services and reduce costs. New ILMS will handle future external processes without major rewrites or enhancement to programs.

Design and Development



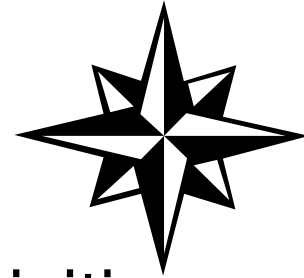
Redevelop the thirty (30) Core Business screens in a three tier model to provide the same basic functionality as the legacy COBOL/IMAGE/VIEW Application. Refine and extend the application's functionality as to take advantage of the Graphical environment.

Design and Development



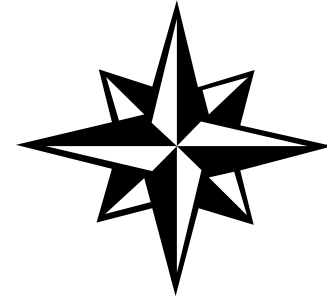
Great care was exercised in the new ILMS graphical environment to make the screens easier to learn and navigate than the classic ILMS character based screens. A client can navigate in the new ILMS environment with little to no assistants.

Design and Development



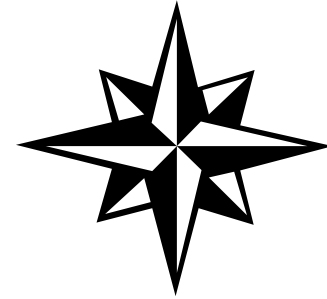
The COBOL and Image development activities and processes to date have required Thirty-Two DBGENERAL jobs to be developed and implemented to transform and extend the database content in the last 18 months. For examples, in many cases, the legacy screen displayed only the user specified code value. To make the system move intuitive we have tried to translate all codes and as a normal display with both the code and its description. Additional data elements (rows) were added to the image database to carry the descriptive info.

Design and Development



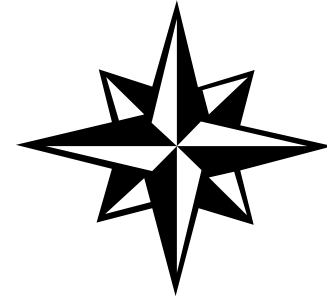
This also effects the QUIZ conversion effort. The QUIZ reports contained a number of hard-coded application code value-description conversion tables. These tables are not being perpetuated in the WebFocus report development effort. Rather the WebFocus reports are being developed to retrieve the code's descriptions based on the improved database model. Basically addressing poor business and economic decisions of years gone by.

Design and Development



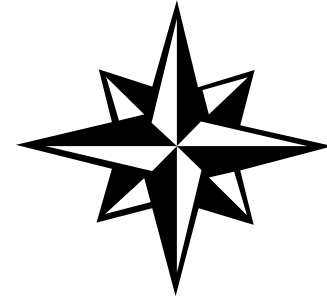
TRAINING and IN CORPORATING USER FEEDBACK!!! The process is the most underestimated activity of any project. We recognized this need up front and have provide for improving training efforts and communicating with all clients that use the systems.

Design and Development



Challenges of running two applications (Legacy and reengineered Version) against the same production database. Luckily the Legacy system exclusively used IMAGE Item-Level-Locking so we only had to deal with the issue of the legacy system holding locks across terminal-reads. These were limited in number but took time to resolve. The larger challenge has been that when a transaction error was reported we did not necessarily know where to start our investigation. Green-Screen or GUI.

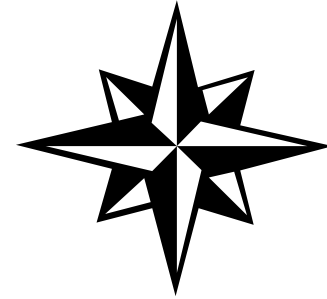
Design and Development



We envision the actual systems migration will require an additional Thirty-Six man-months. Most of which we be incurred in the data normalization and Extract, Transform, Load (ETL) process.

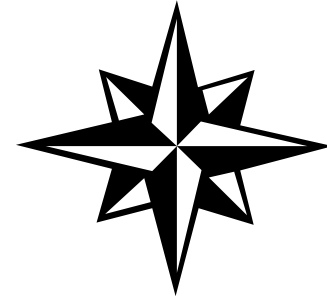
Develop Reporting database and OLAP support Data-Warehouse. The need to address historical information for reports. This does not include the Quiz to WebFocus redevelopment effort. In all probability this will be the critical path in the overall migration.

Design and Development



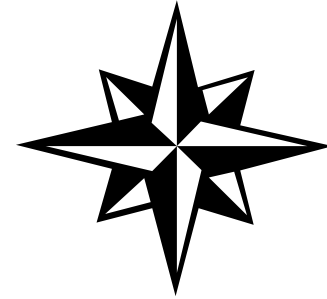
Integrate with other business systems. We added links to Harris County Appraisal District (HCAD) site for tax information and link to the Planning and Development MetaMap system for GIS map information. Soon we will integrate to the City's GIS system.

Design and Development



AIRLINE a external Interactive Voice Response system. This NT based IVR system uses a custom API to communicate with e3000. The back-end COBOL was developed by the iTEAM. Presently, the IVR system provider does not need to be involved with this phase of the migration. Moving forward this external application will be redeveloped to meet the standard profile for the new ILMS environment.

Design and Development



TeleWork a external Palm Based Field Data Collection System. Information is FTP'd from/to the Palm service provider and processed in batches on the e3000. We are currently reworking the e3000 COBOL program so that it is accessible via Middle-Tier server, which means the ftp process will be retired and Palm Service provider will issue near real-time XML request from his server to ours.

ILMS Enhance, Redeveloped Features

- Enhanced ability to deploy new features and modifications
- Links to Harris County Appraisal District (HCAD)
- Links to Planning + Development Mapping Service (MetaMap)
- New Developed Billing Systems
- Improved controls for Data Entry processing
- Improve integration of reporting applications
- Enhanced auditing features
- Enhanced security features

New ILMS Demonstration via Wireless Connection



Street Search Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*Enter Line Number, then press 'ENTER'; f1=MORE records; f6=EXIT mode

Ocpt , Proj # 00000000 Status

Addr 1001 ST JOSEPH Sp - - -

City Zip 00001-0000 Cnt HARRIS Ix - Key Mp CT

Sbdvs Block Lot Pu/Pr Deed Rst N

Dt Rcrd Trct # - Bldgs Unts Strs Rst Area

Lot Size F/A Depth Front Setbacks F Lf Rt R

Occ-Ld Gp Crd Zn Int MGR

1	1001	ST JOSEPH	PKY	77002	*FIRE, AND
2	1001	ST JOSEPH	PKY	11503	77002 THIS, VERSION
3	1001	ST JOSEPH	PKY	16203	77002 THIS, VERSION
4	1001	ST JOSEPH	PKY	162G	77002 THIS, 16
5	1001	ST JOSEPH	PKY	2004	77002 ILMS, NUMBER
6	1001	ST JOSEPH	PKY	5	77002 AIR, PROJECT
7	1001	ST JOSEPH	PKY	7.5	77002 *MPE/IX, M
8	1001	ST JOSEPH	PKY	BI5	77002 *BUILDING, N
9	1001	ST JOSEPH	PKY	DISC1	77002 *THIS, DISC
10	1001	ST JOSEPH	PKY	FL 2	77002 THIS, DATASET
11	1001	ST JOSEPH	PKY	FMP3	77002 *FIRE,
12	1001	ST JOSEPH	PKY	FMTWO	77002 PERMIT, OFFICE

Select #

f1 MORE f6 EXIT f7 MENU f8 QUIT

24, 42 HP70092 -- 10.70.163.214 via VT-MGR 00:16:00 Num Caps

100 Screen Classic ILMS

Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*f1=CONTINUE; f2=SUBMENU; f4=Generate Project No; f5=PRINT; f6=EXIT mode

Ocpt	ILMS SCREEN	,TRAINING		Proj	B #	04046541	Status	MPP
Addr	1001	ST JOSEPH		PKY	Sp	PRACT	-	-
City	HOUSTON		Zip	77002-0000	Cnt	HARRIS	Ix	-
Sbdvs	TRAINING SITUS ON VOYAGEUR PRODUCTI	Block		Lot		Pu/Pr	Deed	Rst
Dt Rcrd		Trct #		Bldgs	Unts	Strs	Rst Area	
Lot Size		F/A	F	Depth	Front	Setbacks	F	Lf
Occ-Ld	000030	Gp		Crd		Zn	1	Z Int
								I02

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

f1 CONTINUE	f2 SUBMENU		f4 PROJ #	f5 PRINT	f6 EXIT	f7 MENU	f8 QUIT
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2, 6 HP70092 -- 10.70.163.214 via VT-MGR 00:14:17 Num

ILMS Street Search

Find Situs Additional Functions Select Search Method Import MetaMap Data

Address Search

No. Fraction Direct Street Name Street Type Space Zip Code

1001 PKY ST JOSEPH

☐ Wild Card this Search to the include all entries in the current block

Search Database

Number	Frac	Dir	Street Name	Type	Unit	Zip	Occupant
1001			ST JOSEPH	PKY		77002	FIRE MARSHAL TEST AND DEMOPLAN
1001			ST JOSEPH	PKY	11503	77002	THIS IS A TEST FOR , VERSION 16 06 115 03
1001			ST JOSEPH	PKY	16203	77002	THIS IS A TEST FOR , VERSION 162 293 FIX
1001			ST JOSEPH	PKY	162G	77002	THIS IS A TEST FOR , 16 06 162 03 G PRODUCTI
1001			ST JOSEPH	PKY	2004	77002	ILMS NEW PROJECT, NUMBER 2004
1001			ST JOSEPH	PKY	5	77002	AIR LINE TEST, PROJECT
1001			ST JOSEPH	PKY	7.5	77002	HPE/IX UPGRADE FROM 7.0 TO 7.5
1001			ST JOSEPH	PKY	BI5	77002	BUILDING INSPECTION PERMIT SELLS
1001			ST JOSEPH	PKY	DISC1	77002	THIS IS A TEST FORDISC DRIVEREPLACEMENT
1001			ST JOSEPH	PKY	FL 2	77002	THIS IS A TEST FOR , DATASET INCR EASE
1001			ST JOSEPH	PKY	FMP3	77002	FIRE PERMIT OFFICE
1001			ST JOSEPH	PKY	FMTW0	77002	PERMIT, OFFICE FIRE
1001			ST JOSEPH	PKY	ITEC	77002	ITEC PRESENTATION RELIANT CTR ITEAM
1001			ST JOSEPH	PKY	PRACT	77002	ILMS SCREEN, TRAINING
1001			ST JOSEPH	PKY	Y4	77002	AIR LINE TEST, PROJECT

ILMS Situs

ILMS Additional Functions

Project is: ACTIVE **Situs is Flagged**

Situs Address:

Project Number: Permit Type:

208/599/Other

100 Situs Info 102 Application 115/297 Permits 205 Fee Collection 126 Situs Holds

Occupant:

Owner Name:

Address:

City/State: Zip Code:

Subdivision:

Legal Desc:

Parcel No:

100 Review/Modify This Situs' Basic Information

Ownership Bldgs Map Reference

Date Record Units Census Tract

Deed Restrict Stories Inspect Zone

County Council Dist.

Occ. Type

Occ. Load

Filters

Lot Dimensions

Lot Size Sq. Feet

Depth Frontage

102 New Project Application

101 Situs Comments

126 Situs Holds

411 Other Names

110 Screen Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*NO more Situs History records; f3=SELECT; f5=PRINT; f6=EXIT mode

Ocpt ILMS SCREEN , TRAINING Proj B # 04046541 Status MPP

Addr 1001 ST JOSEPH PKY Sp PRACT - - - -

City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT

Sbdvs TRAINING SITUS ON VOYAGEUR PRODUCTI Block Lot Pu/Pr Deed Rst N

Dt Rcrd Trct # Bldgs Unts Strs Rst Area

Lot Size F/A F Depth Front Setbacks F Lf Rt R

Occ-Ld 000030 Gp Crd Zn 1 Z Int MGR

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

PROJECT HISTORY BY SITUS

Number	Date	Type	Use	St	180 Day/ Date	Film Number
04046541	06/20/04	MULT	THIS IS A TEST FOR ILMS 16.06.1	A	12/17/04	
04011057	02/19/04	MULT	THIS IS A TEST FOR HOW TO SET U	A	08/17/04	
04008495	02/09/04	MULT	THIS IS A TEST FOR HOW TO USE T	A	08/07/04	
04007802	02/04/04	MULT	THIS IS A TEST FOR PROJECT FINA	A	08/02/04	
03124884	12/04/03	MULT	THIS IS TRAINING PROJECT	A	07/30/04	

f3 SELECT f5 PRINT f6 EXIT f7 MENU f8 QUIT

12, 31 HP70092 -- 10.70.163.214 via VT-MGR 00:19:38 Num

[illegible]

102 Screen Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*f1=Cntr 00/02;f2=Ownr 00/01;f3=Lndr 00/00;f4=A-E 00/00; f5=PRNT; f6=EXI

Ocpt ILMS SCREEN, TRAINING Proj B # 04046541 Status MPP

Addr 1001 ST JOSEPH PKY Sp PRACT - - - -

City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT

Sbdvs TRAINING SITUS ON VOYAGEUR PRODUCTI Block Lot Pu/Pr Deed Rst N

Dt Rcrd Trct # Bldgs Unts Strs Rst Area

Lot Size F/A F Depth Front Setbacks F Lf Rt R

Occ-Ld 000030 Gp Crd Zn 1 Z Int MGR

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

P R O J E C T A P P L I C A T I O N

APPLICANT ILMS, HOST 2004.19.04 Appl Date 06/20/04

Address 1860 FM 359 RD Space 240

City RICHMOND State TX Zip 77469-0000 Phone 281-342-2313

PERMIT Value Basis R FCC 022 SIC Inspection Class S Category B

Use THIS IS A TEST FOR ILMS 16.06.128.04A

Privatization Estimated Valuation 124,589

180 Day Extension To Date C of 0 or CC

Address Prmts

City Space

Firm Phone

Lic Exp Dt B/I Exp Dt Oth Exp Dt Type Int 102

f1 CNTR f2 OWNR f3 LICENSEE f4 ARC/ENGR f5 PRINT f6 EXIT f7 MENU f8 QUIT

13, 14 HP70092 -- 10.70.163.214 via VT-MGR 00:17:52 Num

ILMS Project Application

ILMS
Additional Functions

ACTIVE **Situs is Flagged**

Situs Address: 1001 ST JOSEPH PKY # PRACT 77002 100 Search

Project Number: 4046541 Look Up 110 Project History Recent Selections Permit Type:

208/599/Other
100 Situs Info 102 Application 115/297 Permits 205 Fee Collection 126 Situs Holds

Applicant Name: ILMS, HOST 2004.19.04
1860 FM 359 RD # 240
RICHMOND, TX 77469-0000
Phone No. (281) 342 - 2313

Primary
Contractor Name: SHOCK YOU CO
Contact Name: ELECTRICAL 01234567, MASTER TEST AIR LINE
Comment:
Hold(s) Status: SITUS HOLD

102 Update General Project info

102 Contractors

103 Project Comments

109 Project Holds

Description of Work: THIS IS A TEST FOR ILMS 16.06.128.04A

Occupancy Type:

Occupancy Load:

ILMS Project Application (Details)

102 - Revise the Current Project's Primary Control Information

Additional Functions

Application Date: 06/20/2004 Project Number: 04046541

Project is: ACTIVE

Project Address

Occupant: TRAINING ILMS SCREEN

Project Address: 1001 ST JOSEPH PKY # PRACT

Tax Assessor Parcel: Tract ID:

102 Update

Description: THIS IS A TEST FOR ILMS 16.06.128.04A

Applicant Name & Address Information

Last/First/Middle: Individual Corporation or Firm

Name: ILMS HOST 2004.19.04 Show Owner/Builder

Address: No. 1860 Fraction Direct Street Name FM 359 Street Type ROAD Space 240

City: RICHMOND State: TX Zip Code: 77469 0000

Phone: 281 342 2313 Copy Name & Address from Master Entry

Org. Group / Value-Basis / Building Category

B Building

R Remodel Existing Structure

B Other Building(s)

Inspection Class/ Certificate Required/ Plans Submitted

S Specialty

FCC Code / FPU Code

022

Occupancy Code -- Material Type/Group/Fire Rating

Estimated Valuation: 124,589

Occupancy Load: 0

Plan Review Approval Required

Required Date Initials

Project Extension

Extension in Effect Expiration Date

Situs is Flagged

Permit Type:

126 Situs Holds

Update General Project Info

Contractors

Project Comments

Project Holds

115A Screen Classis ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*f1=MORE records; f5=PRINT; f6=EXIT mode

Ocpt ILMS SCREEN , TRAINING Proj B # 04046541 Status MPP

Addr 1001 ST JOSEPH PKY Sp PRACT - - - -

City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT

Sbdvs TRAINING SITUS ON VOYAGEUR PRODUCTI Block Lot Pu/Pr Deed Rst N

Dt Rcrd Trct # Bldgs Unts Strs Rst Area

Lot Size F/A F Depth Front Setbacks F Lf Rt R

Occ-Ld 000030 Gp Crd Zn 1 Z Int MGR

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

P R O J E C T A C T I V I T Y

SEL- ECT --	PERMIT TYPE --	PLN REV	BND REQ	STATUS	SEL- ECT --	PERMIT TYPE --	PLN REV	BND REQ	STATUS
X	11 ELECTRICAL PMT	N	N	P Paid		12 PLUMBING PMT	N	N	
X	13 BUILDING PMT	Y	N	P Paid		14 HVAC PERMIT	N	N	
	15 SIDEWALK, DW, PT	N	N			16 HEALTH DEPT	N	N	
	17 FIRE MARSHALL	N	N			18 SIGN ADMIN OK	N	N	
	19 NOT IN USE	N	N			1Q 11-QUAL.ASSURE	N	N	
	1R NOT USED	N	N			1T ELEC TICKET	N	N	
	2Q 12-QUAL.ASSURE	N	N			2R NOT USED	N	N	
	2T PLBG TICKET	N	N			3Q 13-QUAL.ASSURE	N	N	

f1 MORE f5 PRINT f6 EXIT f7 MENU f8 QUIT

17, 2 HP70092 -- 10.70.163.214 via VT-MGR 00:22:20 Num

[illegible]

ILMS Main View

ILMS
Additional Functions

Project is: ACTIVE **Situs is Flagged**

Situs Address: 1001 ST JOSEPH PKY # PRACT 77002 **100 Search**

Project Number: 4046541 **Look Up** **110 Project History** Recent Selections Permit Type:

126 Situs Holds 208/599/Other

100 Situs Info 102 Application 115/297 Permits 399 Inspections 205 Fee Collection

Applicant Name: ILMS, HOST 2004.19.04
1860 FM 359 RD # 240
RICHMOND, TX 77469-0000
Phone No. (281) 342 - 2313

Primary Contractor Name: SHOCK YOU CO

Contact Name: ELECTRICAL 01234567, MASTER TEST AIR LINE

Comment:

Hold(s) Status: SITUS HOLD

102 Update General Project info

102 Contractors

103 Project Comments

109 Project Holds

Description of Work THIS IS A TEST FOR ILMS 16.06.128.04A

Occupancy Type

Occupancy Load

ILMS Inspection

ILMS
Additional Functions

Project is: ACTIVE **Situs is Flagged**

Situs Address: (399) Inspection Maintenance - Project: 04046541 THIS IS A TEST FOR ILMS 16.06.128.04A
Additional Functions (395) Inspection History

Project Number: 1001 ST JOSEPH PKY # PRACT 77002

Type: 11

Permit-Type	Description	Current-Status	Plan-Review-Req	Permit-Required	Planning-Appr-Req	Plans-
<input checked="" type="checkbox"/> 11	ELECTRICAL PMT	Permit Paid	N			
<input type="checkbox"/> 13	BUILDING PMT	Permit Paid	Y			
<input type="checkbox"/> PF	PROJECT FINAL					

Inspection History

Insp-Type	Description	Status
<input checked="" type="checkbox"/> 11U	UTIL RELEASE	X
<input type="checkbox"/> 11V	GO BY	
<input type="checkbox"/> 11W	OVERTIME SKED	
<input type="checkbox"/> 112	ADMIN FINAL	
<input type="checkbox"/> 111	DITCH COVER	
<input type="checkbox"/> 112	SLAB COVER	
<input type="checkbox"/> 113	WALL COVER	
<input type="checkbox"/> 114	CEILING	
<input type="checkbox"/> 115	ROUGH	
<input type="checkbox"/> 116	MLS	
<input type="checkbox"/> 117	TCI	
<input type="checkbox"/> 118	RECONNECT	
<input type="checkbox"/> 119	SHOP INSP	
<input type="checkbox"/> 11A	SIGN INSP	
<input type="checkbox"/> 11F	ELECT FINAL	

Inspection Type
11U UTIL RELEASE

Inspector Assigned (Note: * indicates entry predates name history)
124 JONES, STEVE (ELECTRICAL)

Status
X Inspection Requested As of 07/12/2004

Status Comments (published to the web)
THIS IS A DEMONSTRATION FOR HP WORLD

Recorded By I02 **Date** 07/11/2004 **Time** 08:29:47

Update

Yet Available

399 Screen Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*NO more records; f5=PRINT; f6=EXIT mode

Ocpt ILMS SCREEN , TRAINING Proj B # 04046541 Status MPP
 Addr 1001 ST JOSEPH PKY Sp PRACT - - - -
 City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT
 Sbdvs TRAINING SITUS ON VOYAGEUR PRODUCTI Block Lot Pu/Pr Deed Rst M
 Dt Rcrd Trct # Bldgs Unts Strs Rst Area
 Lot Size F/A F Depth Front Setbacks F Lf Rt R
 Occ-Ld 000030 Gp Crd Zn 1 Z Int MGR

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

Int 11 ELECTRICAL INSPECTIONS COMMENTS

Type	Description	Stat	Date	Int	Type	Description	Stat	Date	Int
111	DITCH COVER				112	SLAB COVER			
113	WALL COVER				114	CEILING			
115	ROUGH				116	MLS			
117	TCI				118	RECONNECT			
119	SHOP INSP				11A	SIGN INSP			
11U	UTIL RELEASE	X	07/12/04	124	11V	GO BY			
11W	OVERTIME SKED				11Z	ADMIN FINAL			

11F ELECT FINAL

f5 PRINT f6 EXIT f7 MENU f8 QUIT

12, 19 HP70092 -- 10.70.163.214 via VT-MGR 00:30:22 Num

103 Screen Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

DISPLAY*NO more records; f5=PRINT; f6=EXIT mode

Ocpt ILMS SCREEN, TRAINING Proj B # 04046541 Status MPP
 Addr 1001 ST JOSEPH PKY Sp PRACT - - - -
 City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT
 Sbdvs TRAINING SITUS ON VOYAGEUR PRODUCTI Block Lot Pu/Pr Deed Rst N
 Dt Rcrd Trct # Bldgs Unts Strs Rst Area
 Lot Size F/A F Depth Front Setbacks F Lf Rt R
 Occ-Ld 000030 Gp Crd Zn 1 Z Int MGR

Sit Info; THIS IS A TEST FOR ILMS 16.06.128.04A

PROJECT COMMENTS

GE GENERAL COMMENTS

Insp	Prmt		MGR
Type	Type	Date	Int
11U	11	07/11/04	I02

f5 PRINT f6 EXIT f7 MENU f8 QUIT

12, 15 HP70092 -- 10.70.163.214 via VT-MGR 00:31:48 Num

ILMS Comment

(103) Project Comments - Project: 04046541 THIS IS A TEST FOR ILMS 16.06.128.04A

Additional Functions

Permit-...	IS-...	Comment	Comment-Init	Comment-Date	Permit-Desc	Ins...
11	11U	THIS IS A DEMONSTRATION FOR HP WORLD	I02	07/11/2004	ELECTRICAL PMT	UTI

Project Comment Details

Permit Type: 11 ELECTRICAL PMT

Inspection Type: 11U UTIL RELEASE

Comment Information

Comment: THIS IS A DEMONSTRATION FOR HP WORLD

Date: 07/11/2004 Authorized By: I02

Update This Entry **Add Additional Comments**

100/102 Screen Classic ILMS

HP Untitled - WRQ Reflection for HP

File Edit Connection Setup Macro Window Help

MODIFY* f1=Cntr 00/10;f2=Ownr 00/01;f3=Lndr 00/00;f4=A-E 00/00;f5 to MODIFY

Ocpt AIR LINE TEST, PROJECT Proj B # 00021421 Status INA
 Addr 1001 ST JOSEPH PKY Sp Y4 - - -
 City HOUSTON Zip 77002-0000 Cnt HARRIS Ix - Key Mp 4930 CT
 Sbdvs KINGWOOD PLACE VILLAGE 4 Block Lot Pu/Pr Deed Rst N
 Dt Rcrd Trct # - Bldgs Unts Strs Rst Area
 Lot Size F/A Depth Front Setbacks F Lf Rt R
 Occ-Ld 000030 Gp 1 B B Crd Zn 1 Y Int MGR
 Hold Info; Pr Si Cmmts;
 Sit Hold;Fld Mgmt; Cklist; TEST PROJECT DEMO OF NEW / ILMS BROWSER \
 PROJECT APPLICATION

APPLICANT TEST PROJECT FOR, AIR LINE PRODUCTION Appl Date 03/01/00
 Address 3302 MAIN ST Space 301
 City HOUSTON State TX Zip 77003-0000 Phone 713-535-7868
 PERMIT Value Basis R FCC 022 SIC W Inspection Class S Category B
 Use TEST PROJECT DEMO OF NEW / ILMS BROWSER \ SCREENS ? DEMO
 Privatization Estimated Valuation 500,000
 180 Day Extension Y To Date 09/08/04 C of 0 or CC N
 Address Prmts
 City Space
 State Zip Phone
 Firm License Number Type
 Lic Exp Dt B/I Exp Dt Oth Exp Dt Int 107

f1 CNTR f2 OWNR f3 LICENSEE f4 ARC/ENGR f5 MODIFY f6 EXIT f7 MENU f8 QUIT

13, 14 HP70092 -- 10.70.163.214 via VT-MGR 00:41:43 Num

ILMS Situs

ILMS Additional Functions

Project is: ACTIVE **Situs is Flagged**

Situs Address: 1001 ST JOSEPH PKY # Y4 77002 100 Search

Project Number: 21421 Look Up 110 Project History Recent Selections Permit Type:

101/103 Comments

205 Fee Collection 126 Situs Holds Renew Permits 208/599/Other 109 Project Holds

100 Situs Info 102 Application 114 Plan Review 115/297 Permits 399 Inspections

Occupant: PROJECT AIR LINE TEST

Owner Name: GATEWAY, BILL 100 Review/Modify This Situs' Basic Information

Address: 3300 MAIN ST # 102

City/State: HOUSTON TX Zip Code: 77002 0000

Subdivision: KINGWOOD PLACE VILLAGE 4

Legal Desc: Parcel No:

Ownership: N/A Bldgs: Map Reference: 493Q

Date Record: Units: Census Tract:

Deed Restrict: N Stories: Inspect Zone: 1

County: HARRIS Council Dist.:

Occ. Type: 1 B B

Occ. Load: 30

Filters:Y

Lot Dimensions

Lot Size:

Depth: Frontage:

102 New Project Application

101 Situs Comments

126 Situs Holds

411 Other Names

ILMS Use Line Revised History (New Feature)

102 - Revise the Current Project's Primary Control Information

Additional Functions

Application Date: 03/01/2000 Project Number: 00021421

Project is: ACTIVE

Project Address

Occu

Project Ad

Tax Assessor P

Description TE

Applicant Nar

Last/First/Middle

Name TES

No.

Address 3

City HOU

Phone 71

Org. Group / Valu

B Building

R Remodel t

B Other Buil

FCC Code / FPU

022

Estimated V

Plan Review Approval Required

Required ☐ Date Initials

Project Extension

Extension in Effect ☒ Expiration Date 09/08/2004

Project Change History: 00021421 TEST PROJECT DEMO OF NEW / ILMS BROWSER \ SCREENS ? DEMO

Additional Functions

The following table highlights all 'Major Changes' made to Screen 102.
The last entry reported is based on the current 102 screen entry.

Project-Use	Change-Date	Change-Time	Change.
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	05/18/2004	09:45:55.70	7P2
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/17/2004	14:17:33.50	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/28/2004	08:57:16.70	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/28/2004	10:15:10.00	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/28/2004	17:40:50.70	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/28/2004	17:41:11.00	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	06/28/2004	17:41:23.00	I07
TEST PROJECT DEMO OF NEW ILMS BROWSER SCREENS DEMO	07/01/2004	17:03:07.80	I07
TEST PROJECT DEMO OF NEW / ILMS BROWSER SCREENS DEMO	07/01/2004	17:03:19.80	I07
TEST PROJECT DEMO OF NEW / ILMS BROWSER \ SCREENS ? DEMO	07/08/2004	12:53:55.30	I07
TEST PROJECT DEMO OF NEW / ILMS BROWSER \ SCREENS ? DEMO	07/11/2004	08:41:08.30	MGR

ILMS Project History (New Feature Sort Items)

(110) Project Associated With Address: 1001 ST JOSEPH PKY # Y4
Special Functions

Project	Group	Status	Description-Use	App-Date	Exp-Date
01104094	B	ACTIVE	THIS IS A TEST FOR PRINTER SEAL S	09/05/2001	05/16/2002
01127113	B	FINAL FD	THIS IS A DEMO FOR FIRE MARSHAL	10/29/2001	05/29/2002
01146107	B	FINAL FD	THIS IS A TEST FOR UPGRADE TO ILM S 21 DECEMBER...	12/21/2001	07/08/2002
02000001	B	FINAL FD	THIS IS THE PROJECT TO CHANGE PROJECT NUMBE...	12/31/2001	07/13/2002
02008157	B	ACTIVE	THIS IS A TEST FOR VERSION 263A	01/28/2002	12/09/2002
02018728	B	ACTIVE	THIS IS A TEST FOR DB GENERAL INCREASE	02/23/2002	08/22/2002
02040250	B	ACTIVE	THIS IS A TEST OF DATABASE MAINTENANCE	04/20/2002	10/17/2002
02056436	B	ACTIVE	THIS IS A TEST FOR SCREENS	05/31/2002	11/27/2002
02056939	B	ACTIVE	THIS IS A TEST FOR 599 SCREEN	05/31/2002	11/30/2002
02092877	B	ACTIVE	THIS IS A TEST PRINT FOR PRINTER 935	08/30/2002	02/26/2003
02129457	B	ACTIVE	THIS IS A TEST FOR ILM S AFTER RESTART OF SYSTEM	12/17/2002	06/15/2003
03000001	B	ACTIVE	THIS PROJECT SETUP THE NEW YEAR 2003 PROJECT ...	01/01/2003	06/30/2003
03005505	B	ACTIVE	THIS IS A TEST PROJECT FOR MPFTX UPGRADE	01/18/2003	11/12/2003
03079053	B	ACTIVE	THIS IS A TEST	07/28/2003	04/19/2004
03093040	B	ACTIVE	THIS IS A TEST FOR UPGRADE 16 06 162 03 F FTX FO...	08/31/2003	02/27/2004
03097713	B	FINAL FD	THIS IS A TEST FOR DBGEN121 ERROR IN PROGRAM	09/13/2003	03/11/2004
03106622	B	ACTIVE	THIS IS A TEST FOR WEB SCREEN ACCESS	10/06/2003	04/04/2004
03110865	B	ACTIVE	QCC REPORT	10/17/2003	04/14/2004
03124495	B	ACTIVE	THIS IS A TEST FOR REINSPECT MULTI-FFF 297 SCRE...	12/03/2003	08/20/2004
04033620	B	ACTIVE	THIS IS A TEST FOR DATABASE INCREASE	05/09/2004	11/05/2004
04037118	B	ACTIVE	TRASH RUBBISH IN YARD NEEDED ATTEN	05/19/2004	11/15/2004
04043997	B	ACTIVE	TEST 2	06/10/2004	12/07/2004
04047972	C	ACTIVE	TEST PROJECT DEMO OF NEW ILM S BROWSER SCREE...	06/24/2004	12/21/2004
03109205	F	ACTIVE	THIS IS TEST FOR FM	10/14/2003	04/11/2004
03113437	F	ACTIVE	TEST	10/24/2003	04/21/2004
03120620	F	ACTIVE	TEST	11/14/2003	05/12/2004
04043880	F	ACTIVE	TEST	06/10/2004	12/20/2004
04037122	S	ACTIVE	SIGN SURVEY	05/19/2004	11/15/2004

Return without Selection

Phase II Develop+Implement new Business Intelligence Reports Application

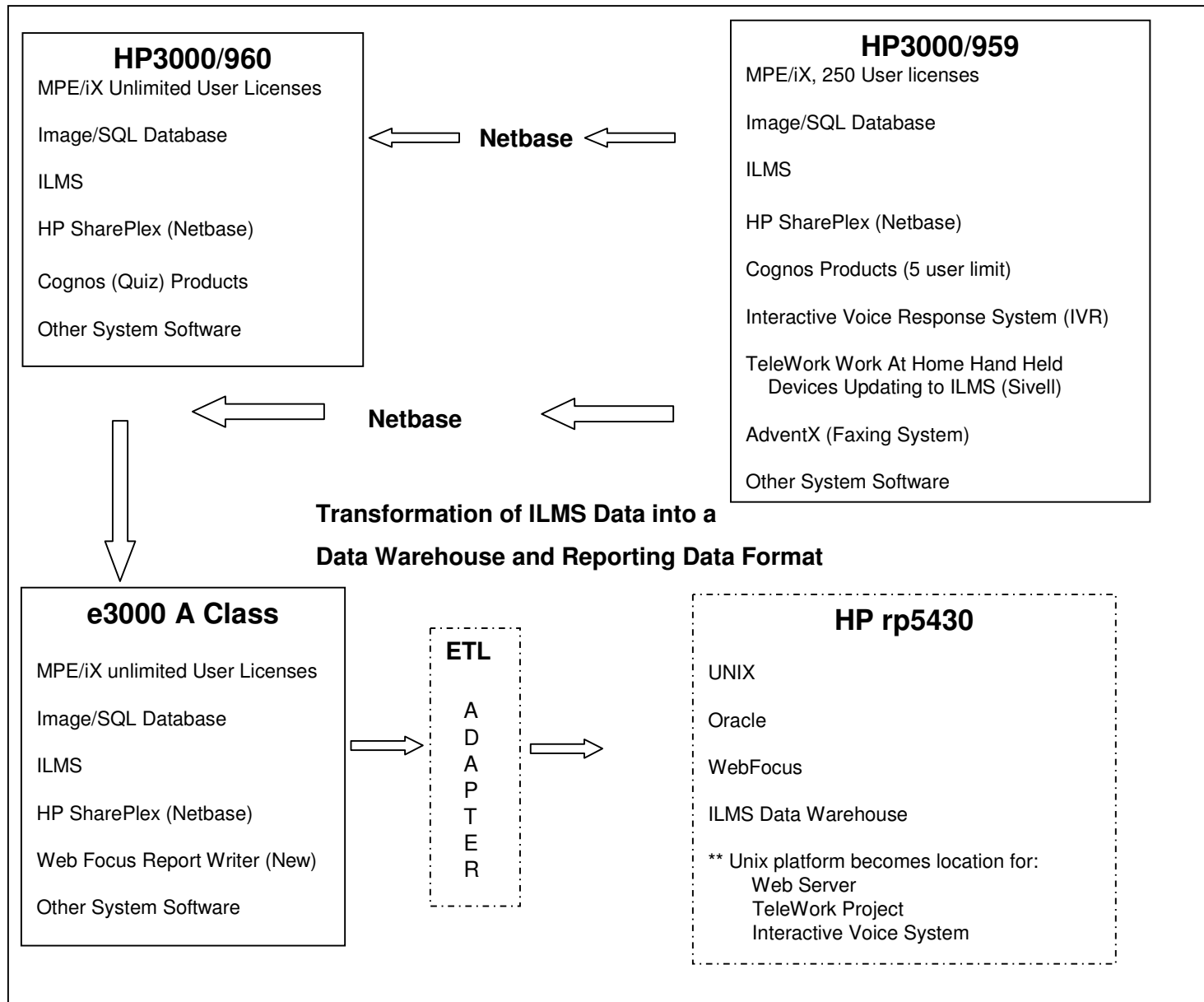
- Retire Powerhouse
- Implement WebFocus Reports
- Initiate Oracle Datamart
- Continue redevelopment of ILMS from classic MPE/iX to Multi-tier model

Phase II Develop+Implement new Business Intelligence Reports Application

Scope

- Install a HP rp5430Unix server
- Install Itanium server
- Replace terminal based Powerhouse Quiz Reports with Web Focus browser based Business Intelligence Reporting
- Develop a Data Warehouse in Oracle
- Incrementally update the Data Warehouse from current ILMS Image Database (Hierarchical structure)
- Continue ILMS transition to open environment

Phase II Browser Reports Generation

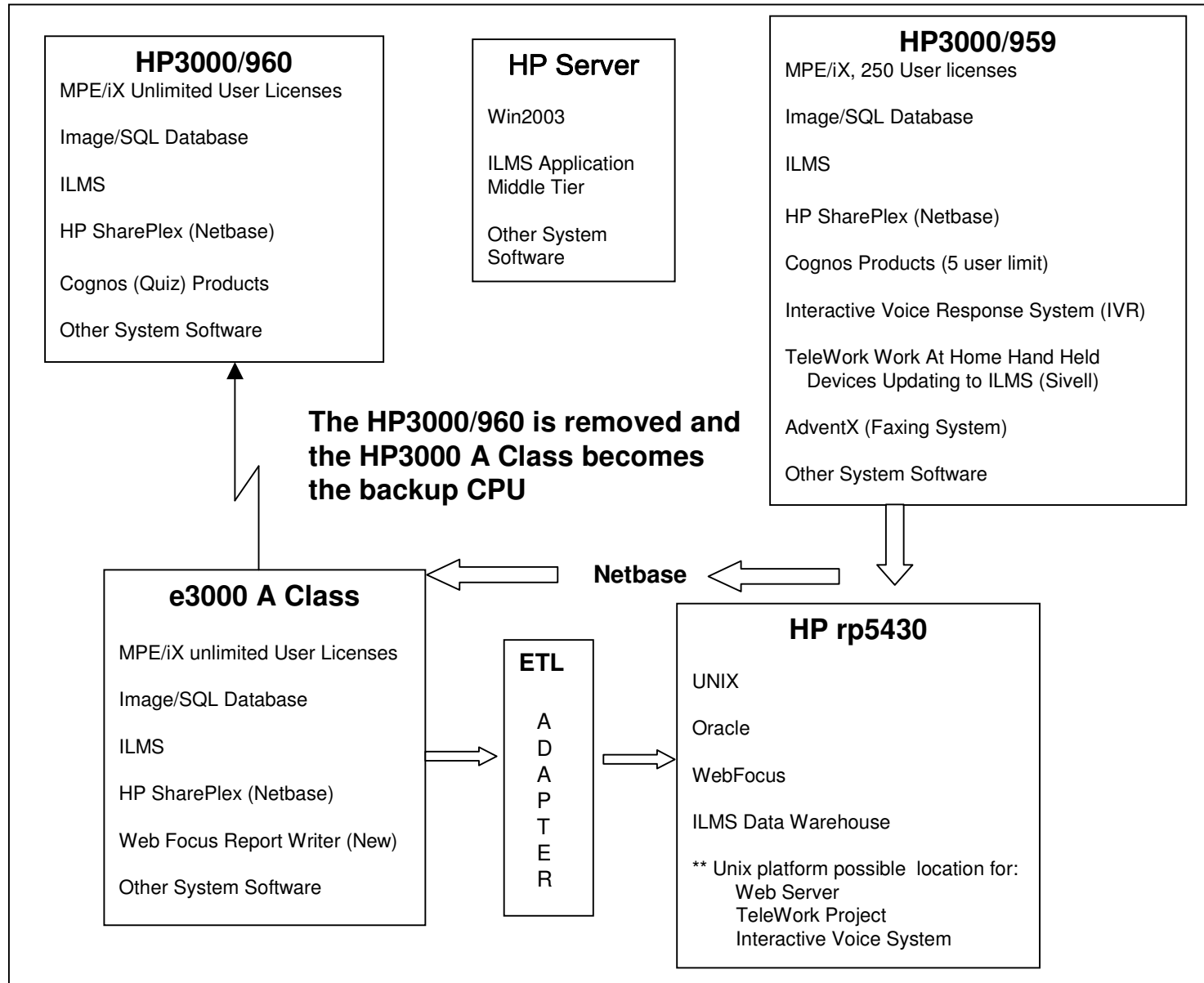


Phase III Sunset 9XX Servers

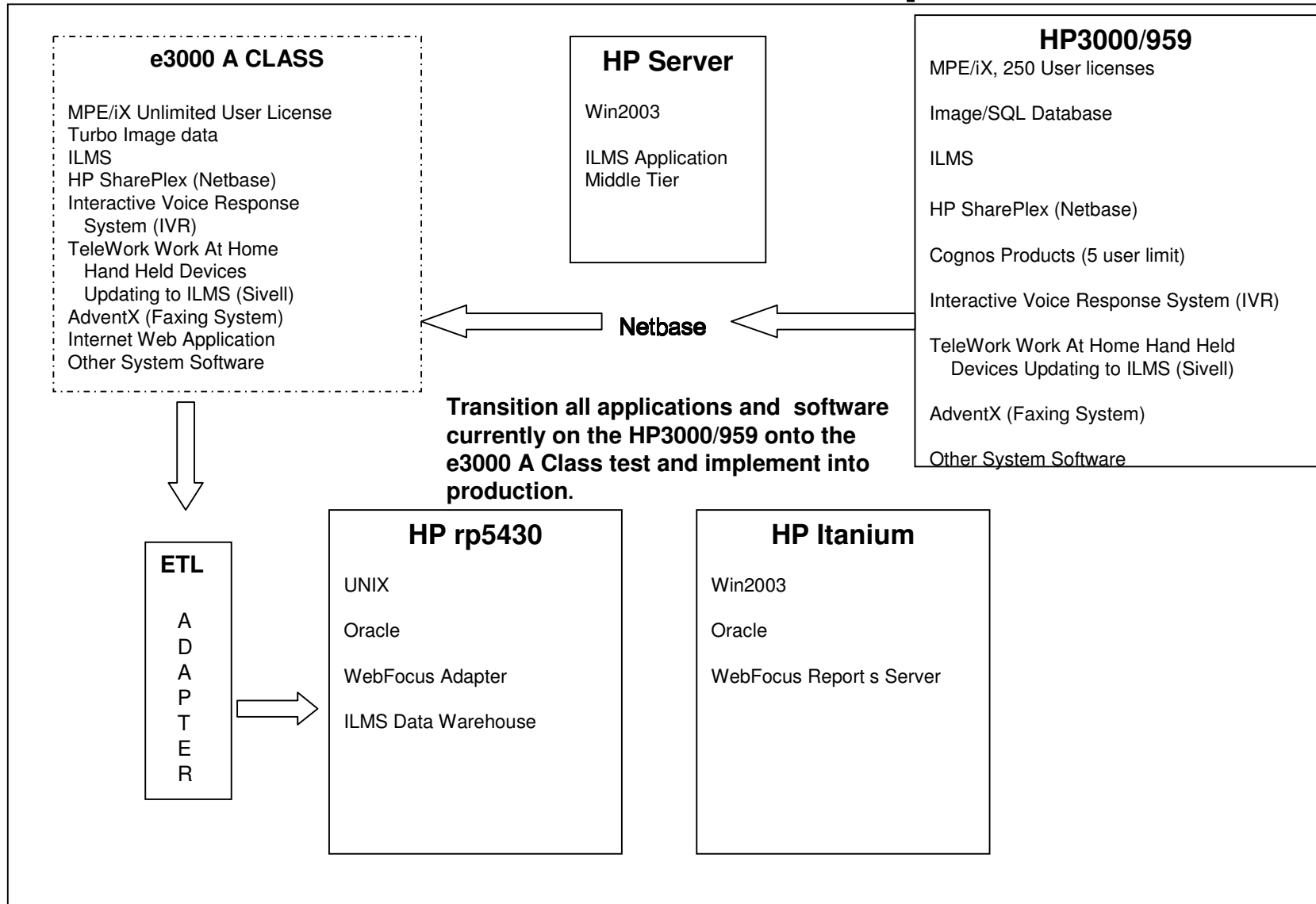
Scope

- Replace the HP3000/959 mainframe the primary ILMS application and database production server with a e3000 server
- Move TeleWork-(field inspection PDA application) and AIR line-(IVR) to e3000 server
- Begin the conversion from an image-hierarchical database management system to oracle-relational database management system

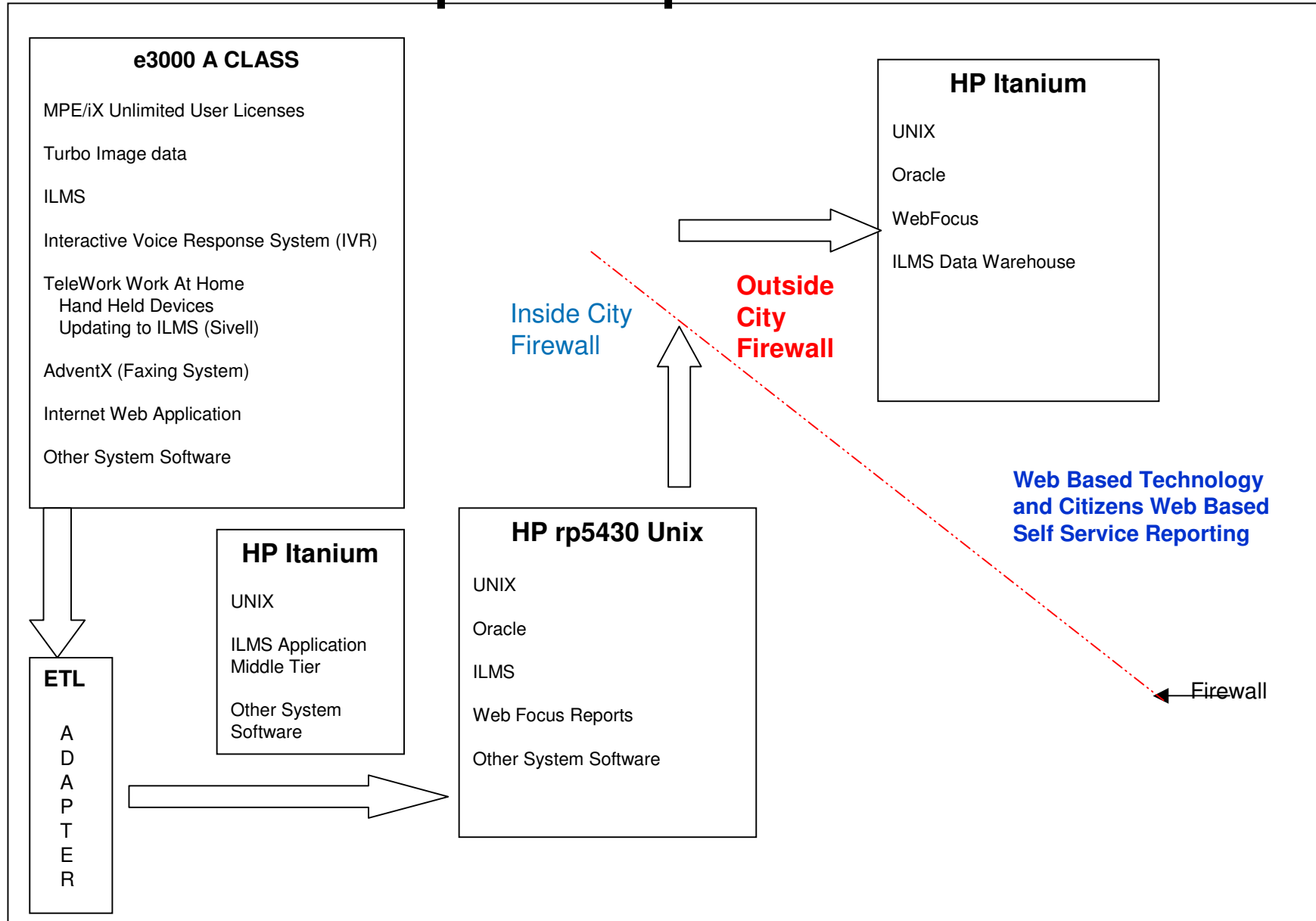
Phase III – Step 1



Phase III – Step 2



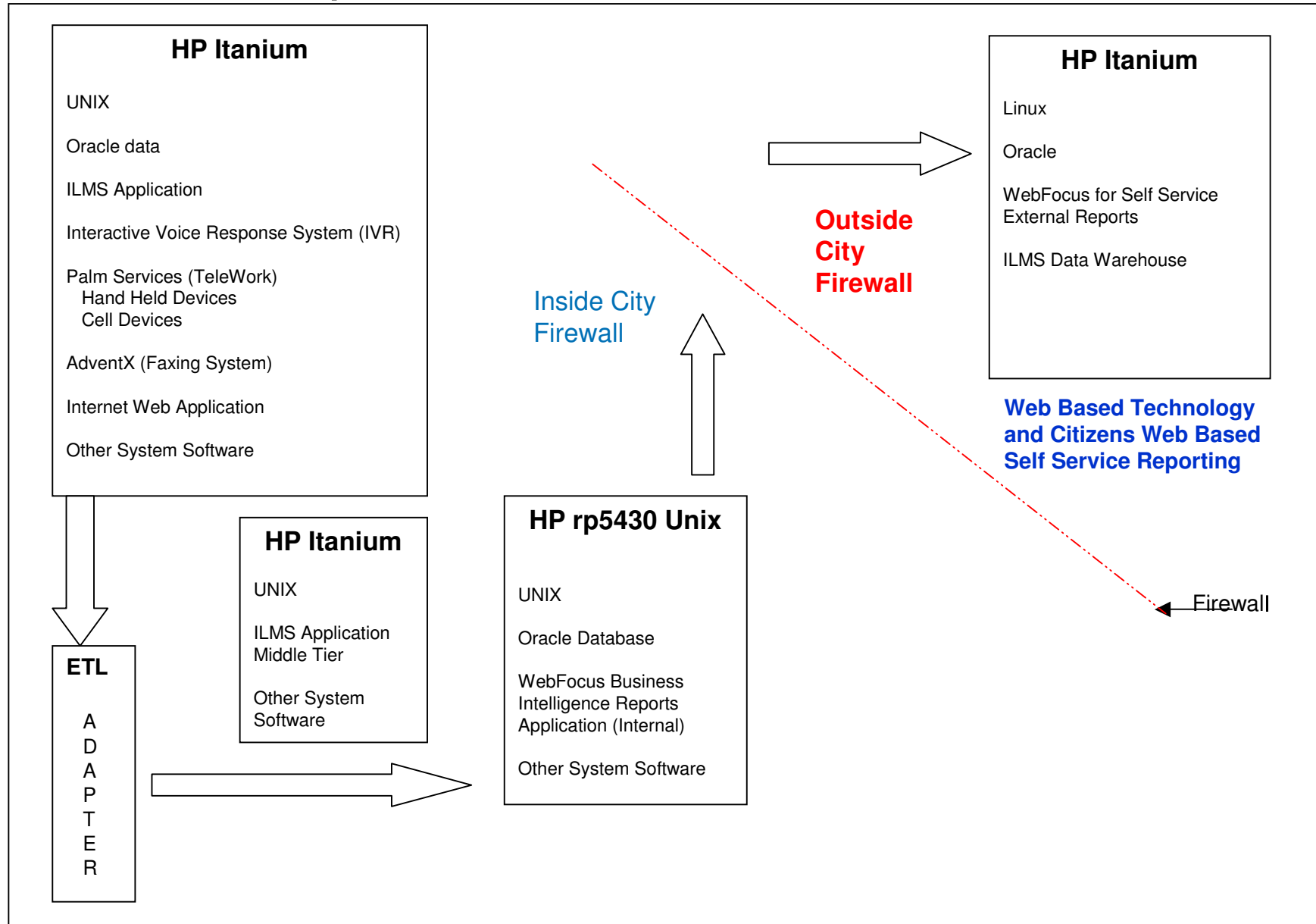
Phase III - Step 3 – Prep for Oracle Structure



Phase IV Implement redesign ILMS Application and database into Production

- Move complete ILMS screens into production
- Move ILMS Management 800 screens into production
- Implement ILMS Oracle production database into production
- Implement second generation Oracle Datamart into DMZ
- Implement new Self Service Reports applications and systems

Phase IV Open ILMS Environment



The End



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