

# Managing Change at the Speed of Business

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10926: Customer Experience - Creating One Change  
Management Solution for all Platforms - Mainframe to Windows



Before we get too serious

# Talking Dog



# Agenda

- Introductions
- Why ISPW?
- Background Information
- Converting to ISPW
- Code Development and Deployment
- Future of Distributed
- Developer Feedback (What they Think)



**SHARE**  
Technology • Connections • Results

# Commerce Bank



# Why ISPW?



One Vendor  
One System to Learn  
One System to Support  
One System to Train



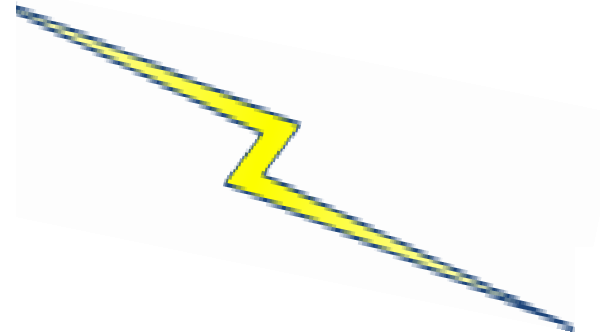
# Why ISPW?

Windows  
AIX  
Linux  
HP/UX  
Sun  
Solaris



**Production**

All Mainframe  
No MIPS

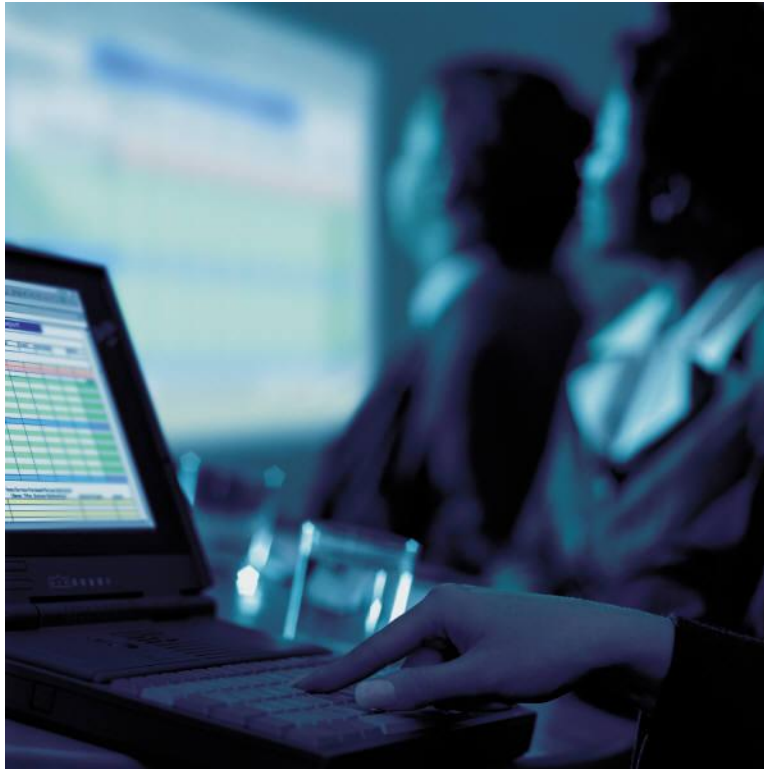


**Disaster  
Recovery**



Automatically Mirrored  
Stable Proven Environment

# Why ISPW?



Great Presentations  
All Questions Answered  
Excellent References

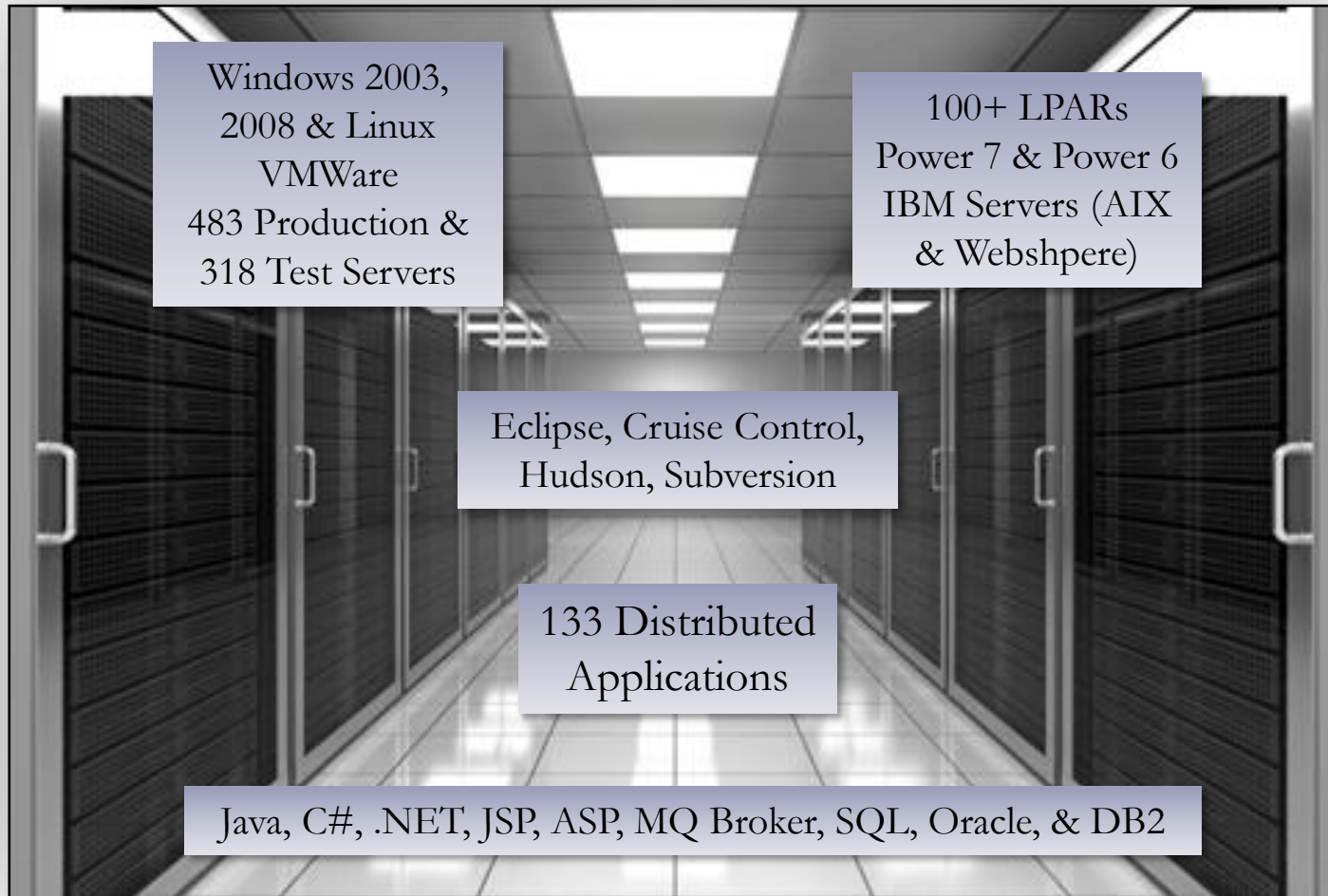


# Mainframe Environment





# Distributed Environment



# Two Choices?

- Gather Requirements
- Don't Assume Current System is Meeting all Requirements
- Question Status Quo (Revisit Processes)

Project  
Management



Shotgun  
Approach

- Don't try to do all Customization Up Front
- Convert Small Subset of Applications
- Use Phased Approach
- Break into Logical Groups Based on Requirements

# Two More Choices?

**ISPW**

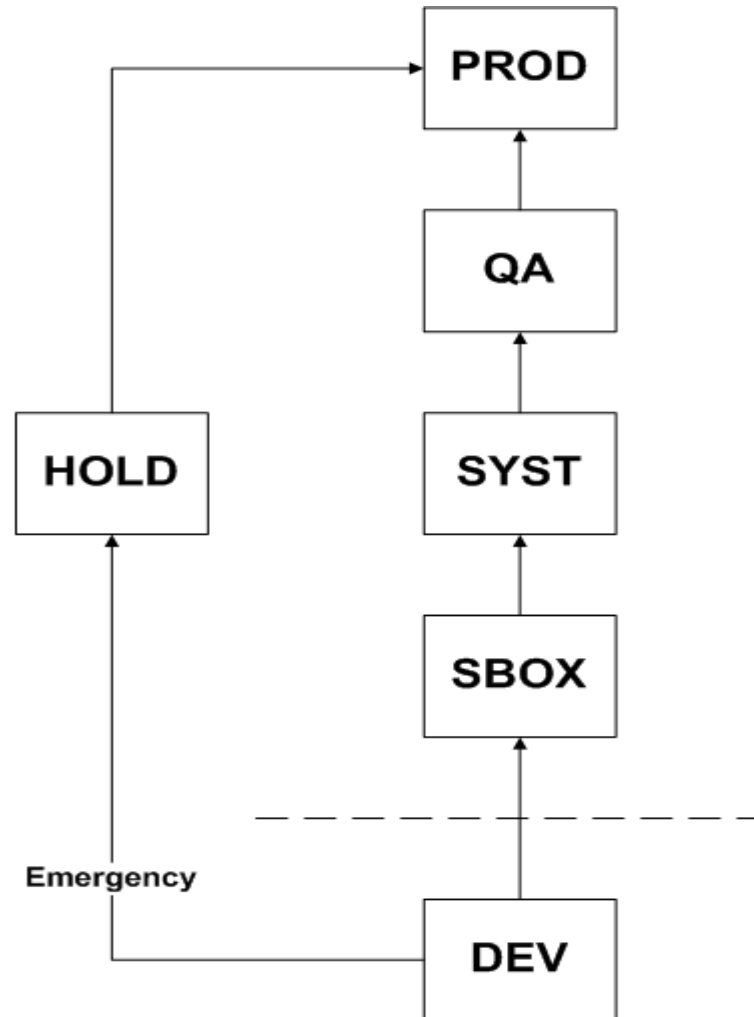


**Source Code  
Control**

## **Subversion**

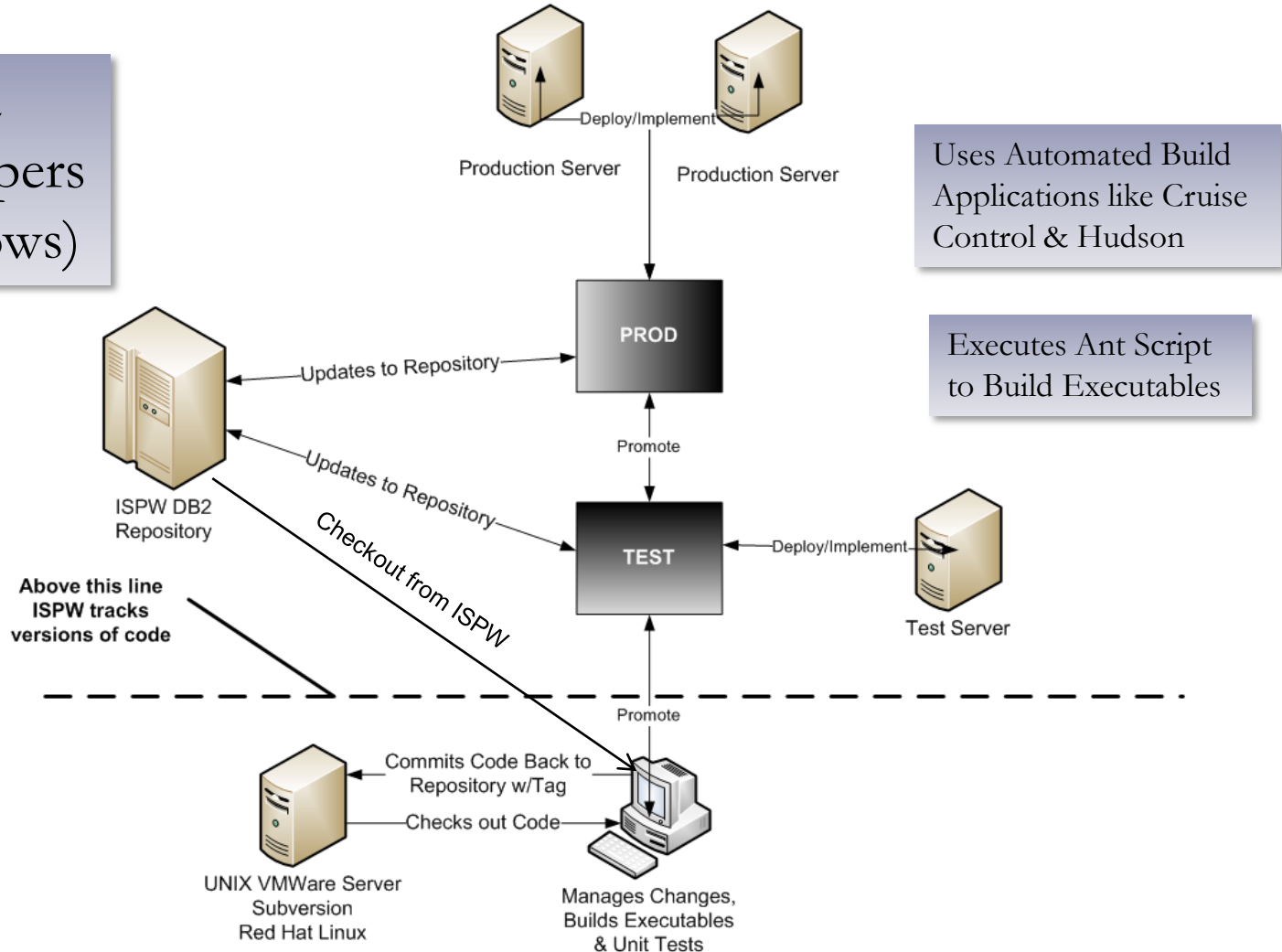
- CollabNet Subversion
- Redhat Enterprise 5 (Linux)
- Access Controlled by AD Groups
- Partitioned by Application
- Each application has a Non-secured and Secured Repository

# Standard Mainframe Development Cycle



# Standard Distributed Development Cycle

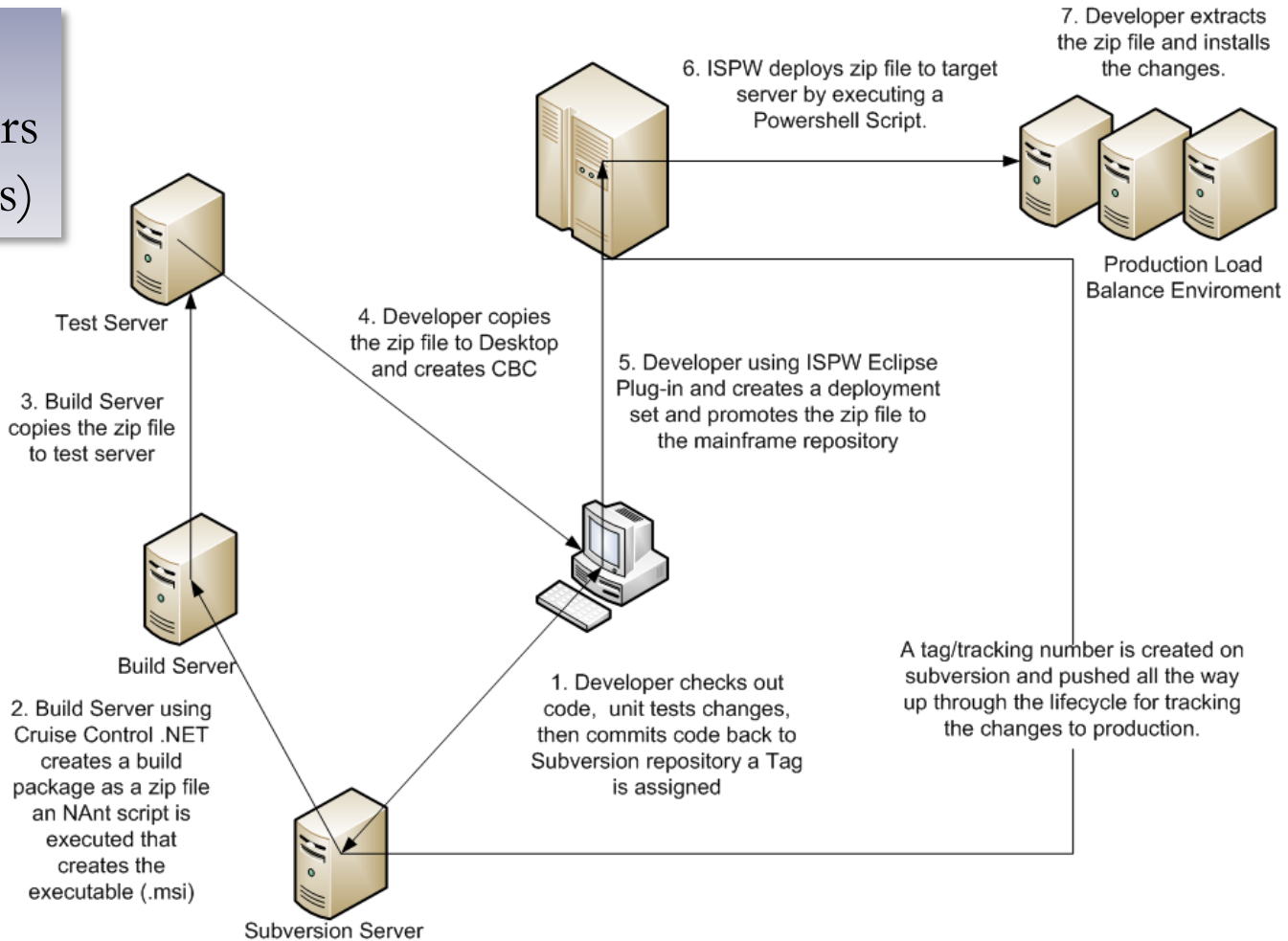
Java  
Developers  
(Windows)





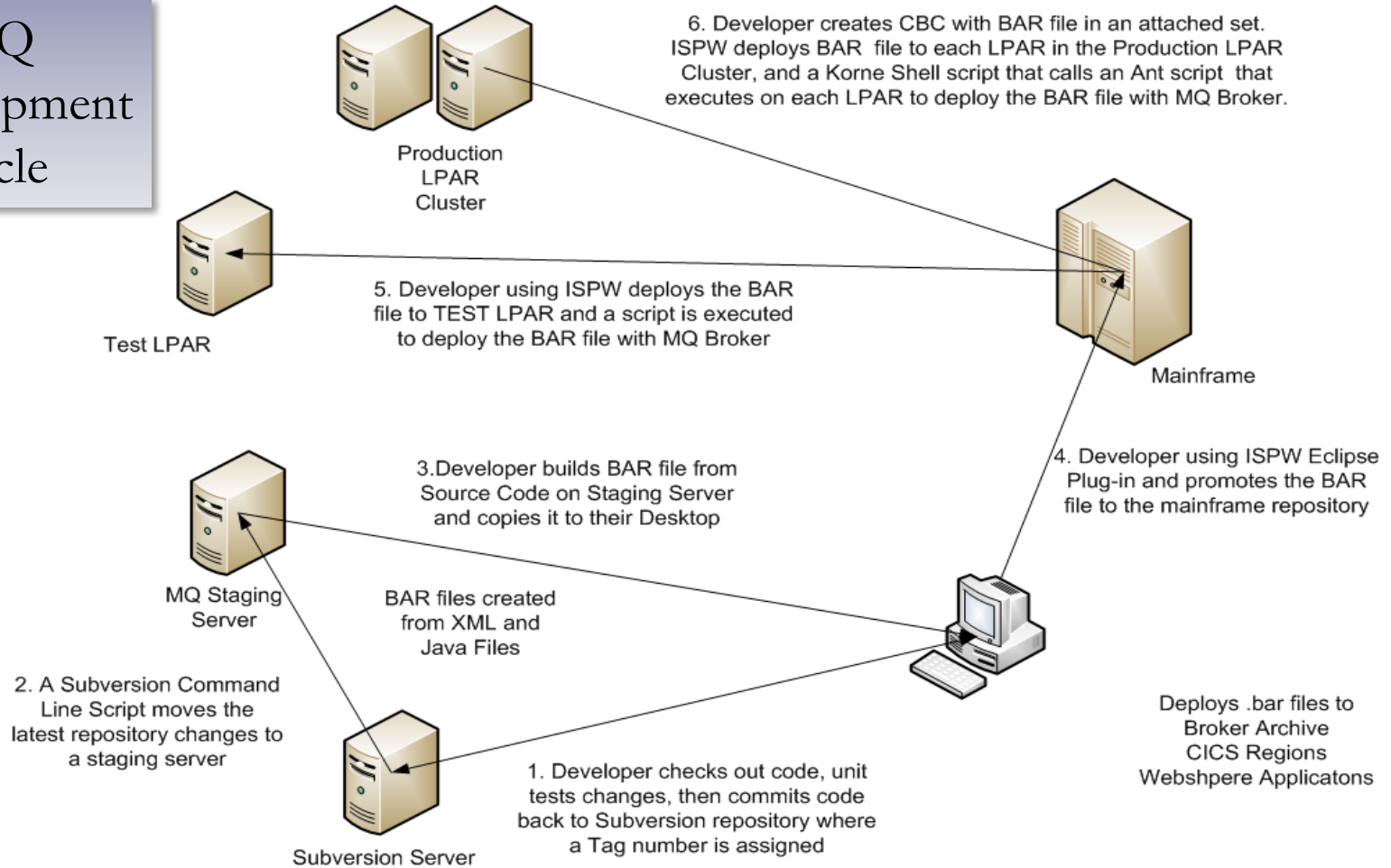
# Distributed Development Cycle

.NET  
Developers  
(Windows)



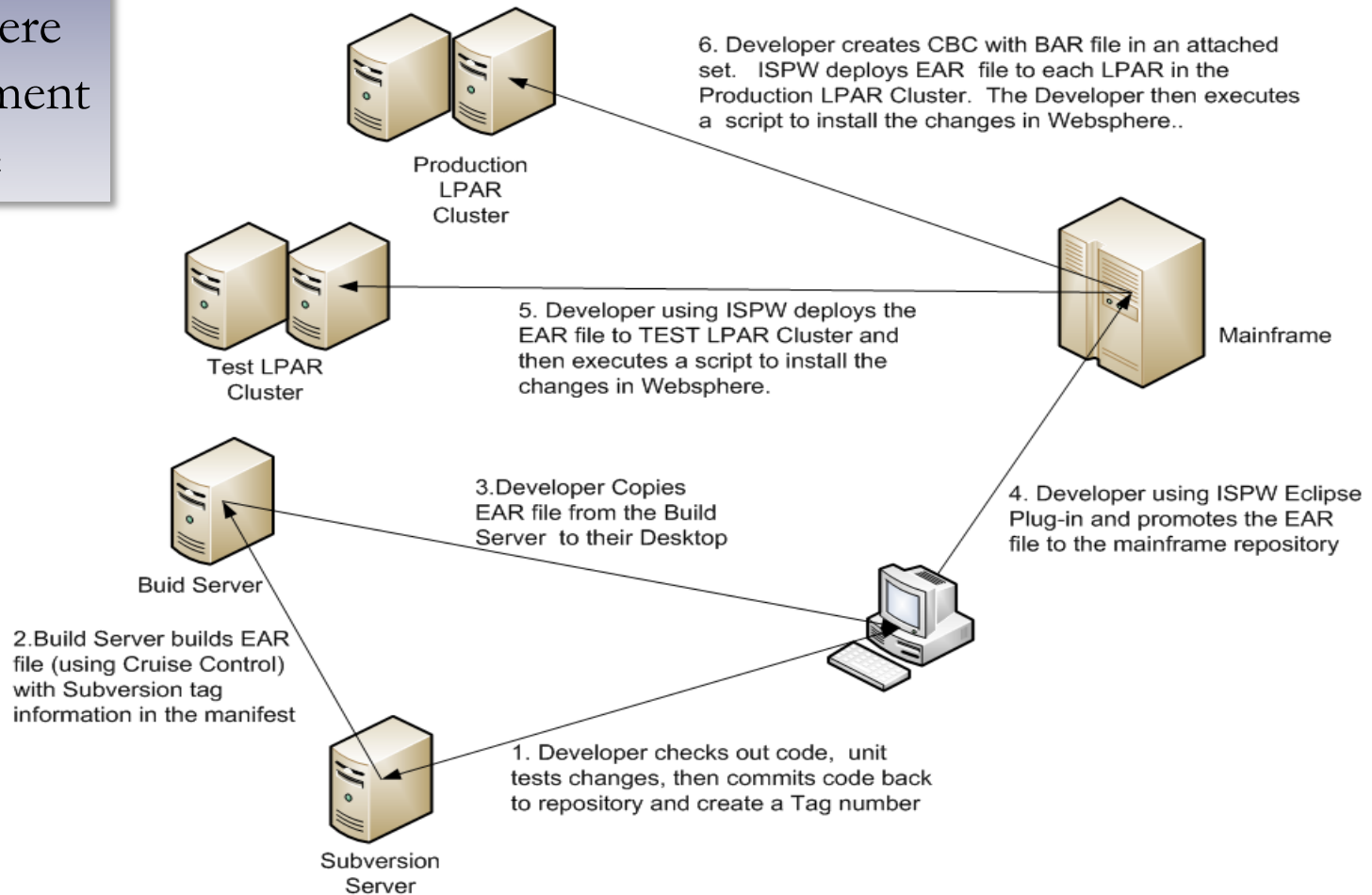
# Distributed Development Cycle

## MQ Development Cycle



# Distributed Development Cycle

## Websphere Development Cycle



# Agile Change Control

Change Happens Rapidly at Commerce

Over 45,000+ Changes since 2005

Changes are Read, Approved, and Implemented Daily



# Read and Approve Changes

## Change Control Console

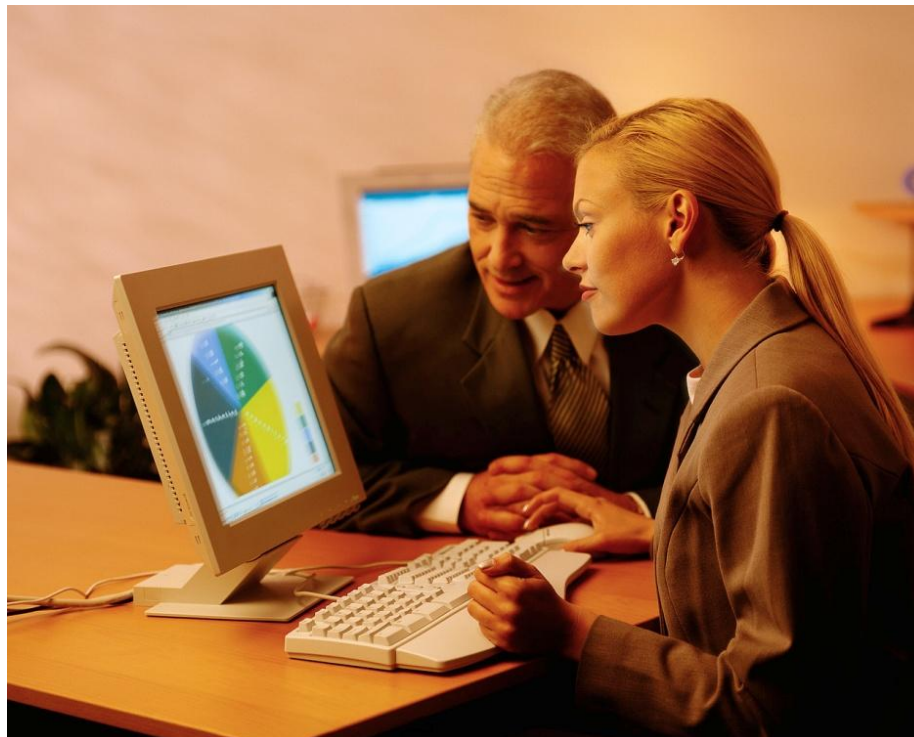
- ISPW supplied a DLL to Return Set Information to ISPW
- Created a COM+ Application to Manage DLL Supplied by ISPW

### Creates

- Accountability
- Visibility

### Business

- Reliability
- Stability





# What Metrics?

## Measurements Drive Behavior

- Number of Changes
- Number of Incidents
- Number of Emergency Changes
- Number of Unsuccessful Changes
- MTTR
- Problem Analysis



# What's Next?

## ISPW creating a Command Line Interface

- Replace the manual copy of the executable from the build server to desktop with a menu driven script in Cruise Control
- Script will ask for inputs to:
  - Create a Container
  - Import the executable
  - Promote the executable
  - Create a deployment set
  - Create the CBC record with the deployment set attached.

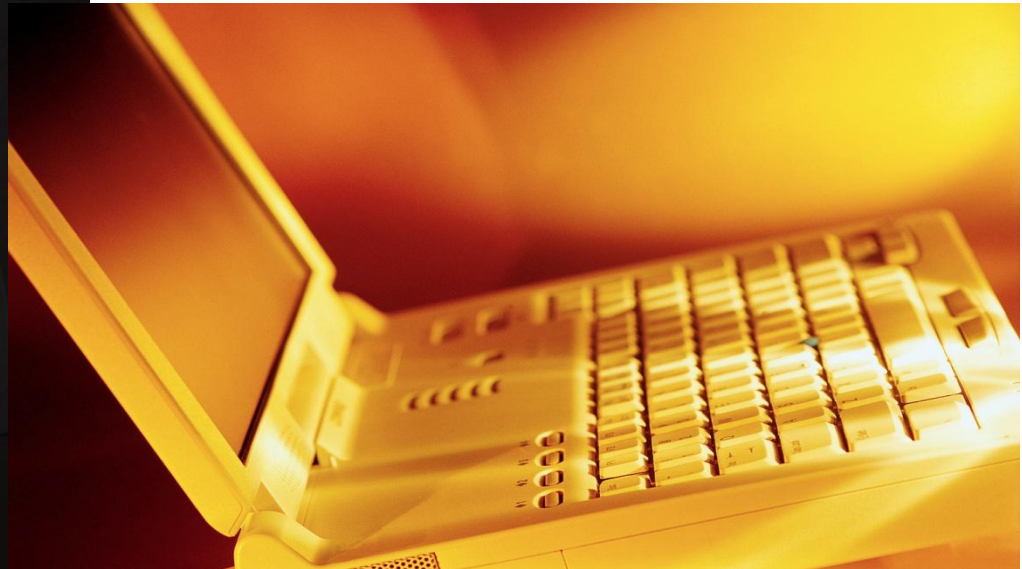
## Unix Base Environments

- New Remote Server Able to Modify Permissions on Files and Directories
- Execute Scripts as a Specified User

# Developer Feedback



General Feeling of Improvement  
Tool Easy to Use  
Single Point of Control  
Great Synchronization





**SHARE**  
Technology • Connections • Results

# Questions?



# APPENDIX





**Do you want**  
more success, more often, with less effort at **lower cost?**



### **Old problems require new thinking:**

Henry Ford shattered conventional wisdom by bringing existing parts and tools to the workers.

He didn't invent the car, just a new process that made them affordable.



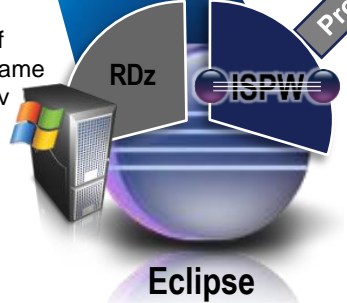
# Mainframe Dev



Agile Dev



Off Mainframe Dev



Eclipse



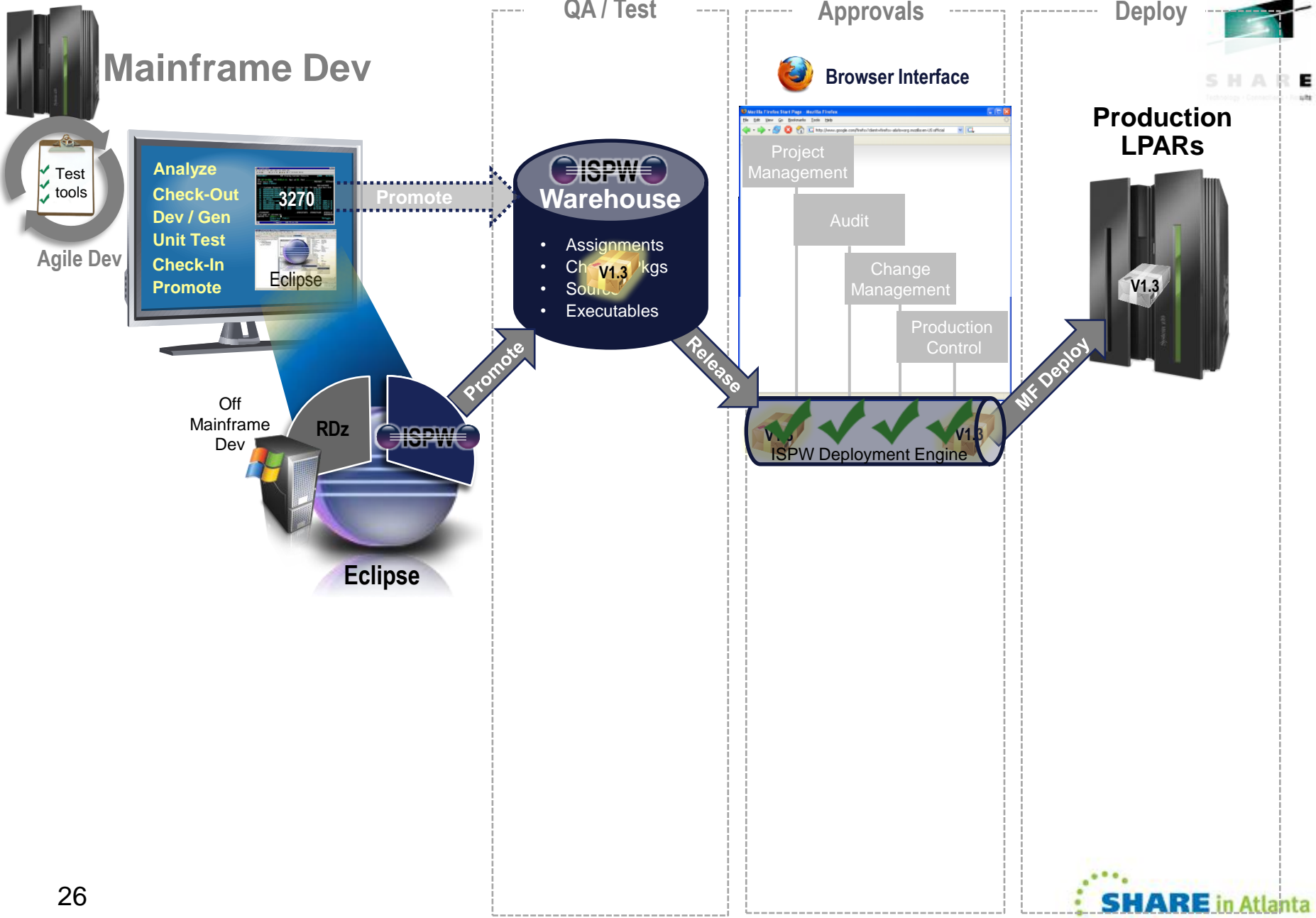
Promote

QA / Test

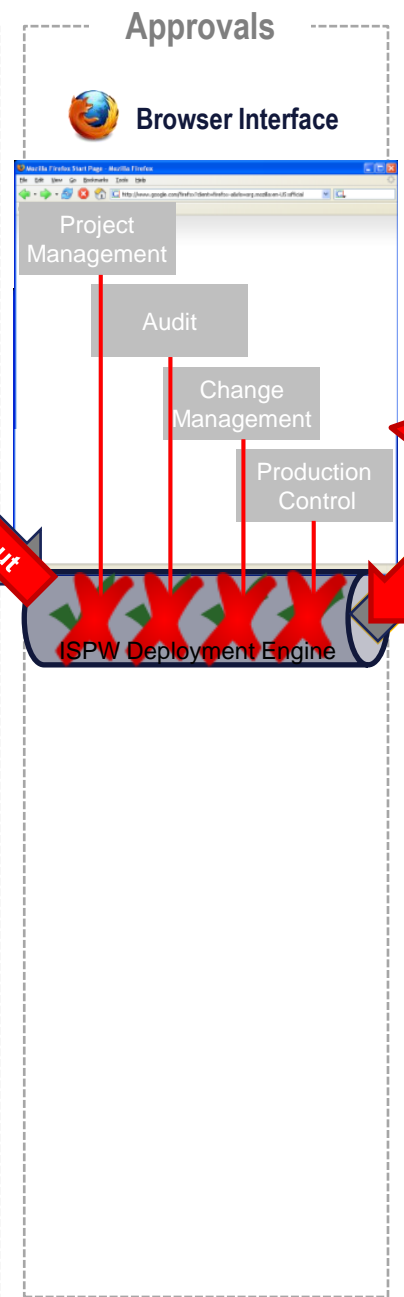
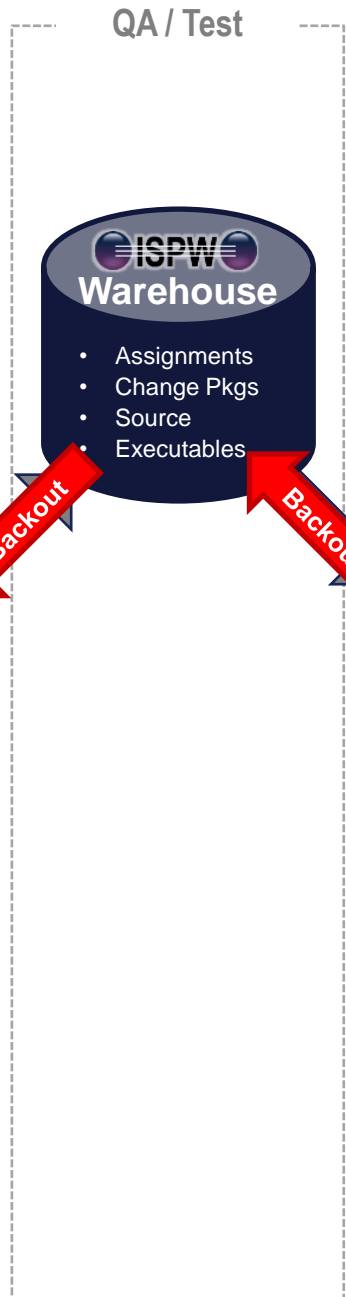
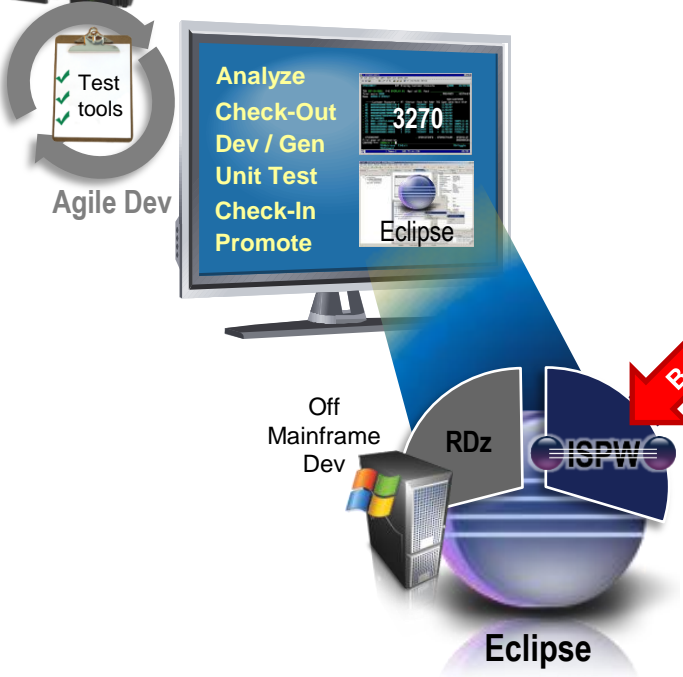
Approvals

Deploy





# Mainframe Dev



# Mainframe Dev



Off Mainframe Dev



Emergency Fix V1.3

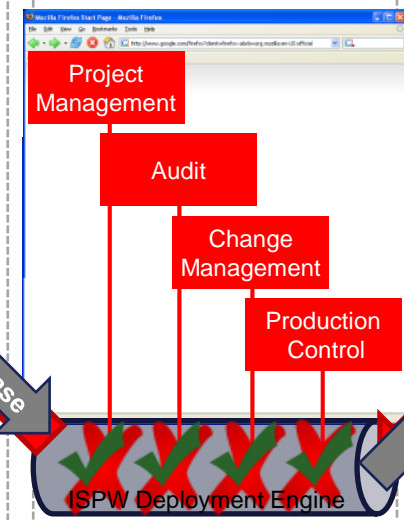


Promote

## QA / Test

Release

## Approvals



## Deploy

Production LPARs



Restore Previous





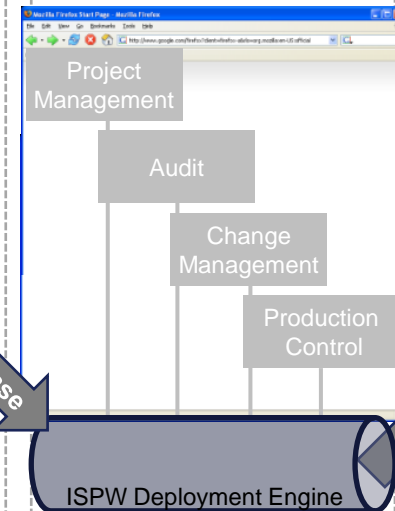
# Mainframe Dev



## QA / Test



## Approvals

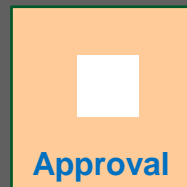
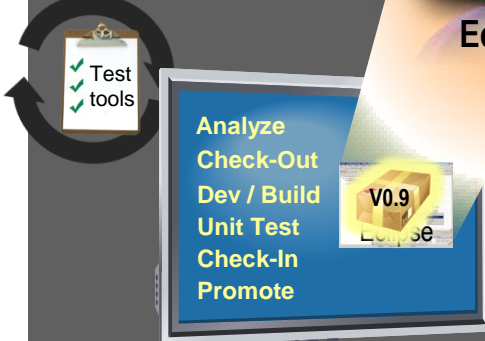


## Deploy

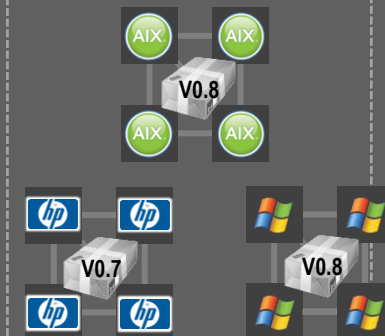
### Production LPARs



## Agile Dev



## Runtime Servers



## Distributed Dev



# Mainframe Dev

Agile Dev

Test tools

Analyze  
Check-Out  
Dev / Gen  
Unit Test  
Check-In  
Promote

3270  
Eclipse

Off Mainframe Dev

RDz

ISPW

Promote

ISPW Warehouse

- Assignments
- Change Pkgs
- Source
- Executables

Release

Approvals

Browser Interface

Project Management

Audit

Change Management

Production Control

ISPW Deployment Engine

Deploy

Production LPARs

V1.3

SHARE

Agile Dev

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Eclipse

AIX  
Windows  
IBM  
hp  
Linux

Distributed Version Control

Eclipse

Distributed Version Control

ClearCase  
PVCs  
CVS  
SUBVERSION

Release

Approval

"SneakerNet"

## Runtime Servers

V0.9

V0.7

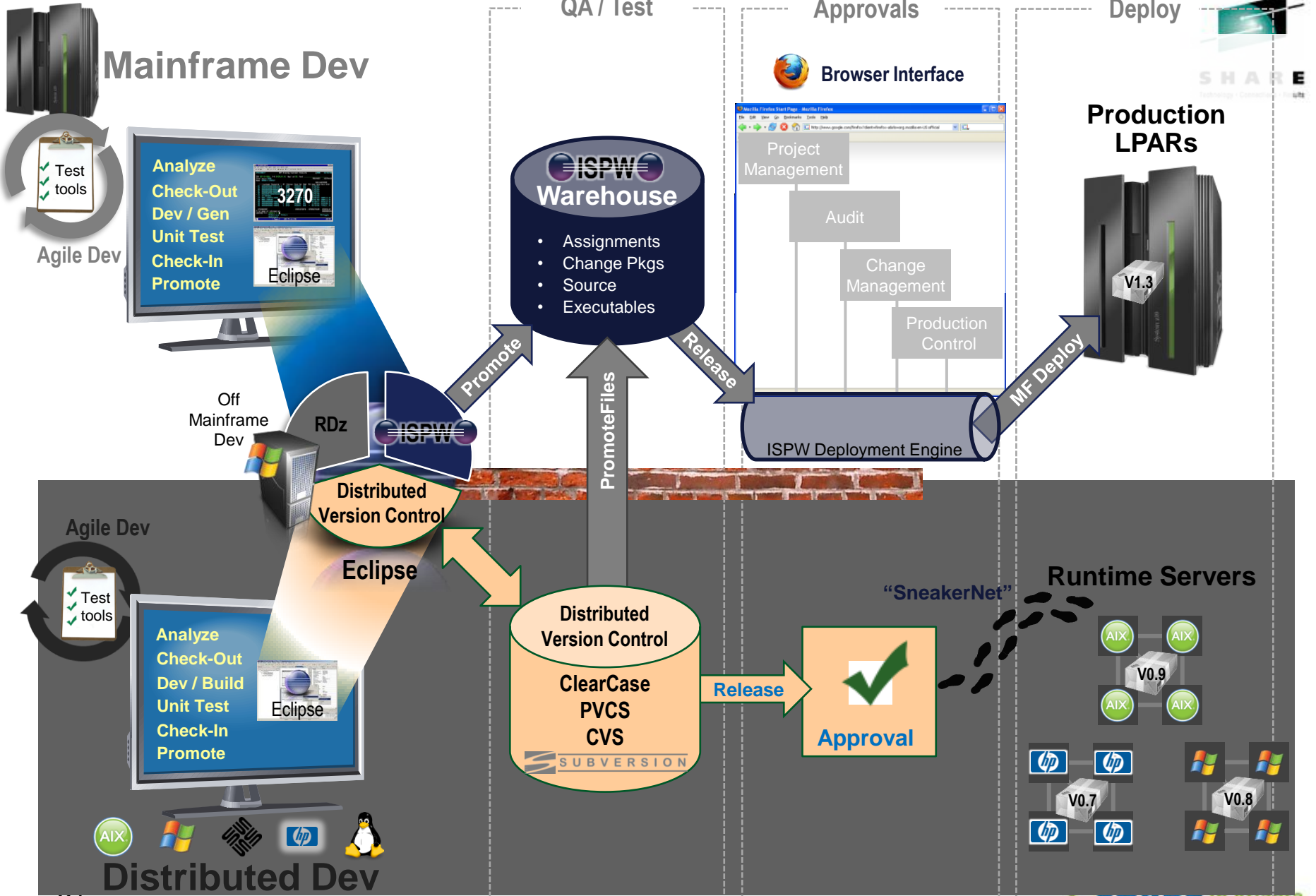
V0.8

AIX

hp

Windows

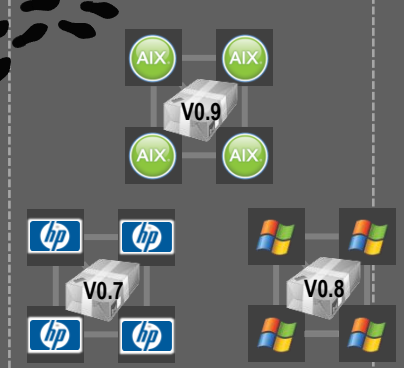
# Distributed Dev



**Production LPARs**



**Runtime Servers**



**Mainframe Dev**



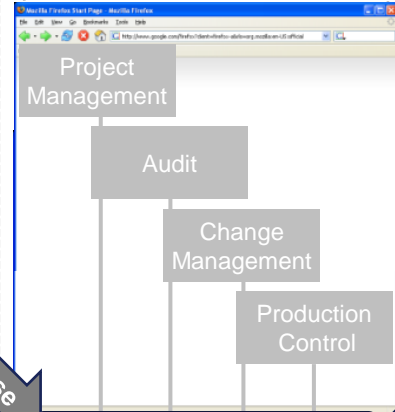
**Distributed Dev**

**QA / Test**

**Approvals**

**Deploy**

**Browser Interface**



**ISPW Deployment Engine**



# Mainframe Dev

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V1.4  
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ISPW

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Eclipse

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Promote

V1.4  
V1.4  
V1.4



# Distributed Dev

## QA / Test

V1.4

Executables

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PromoteFiles

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## Deploy

### Production LPARs

V1.3

## Runtime Servers

AIX V0.9

AIX V0.7

AIX V0.8

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V1.4

## Deploy

### Production LPARs

V1.3

Deploy

### Runtime Servers

AIX V0.9

AIX V0.8

hp V0.7





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Agile Dev

- Test tools
- Analyze
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- Dev / Gen
- Unit Test
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- Promote

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3270

Off Mainframe Dev

RDz

ISPW

Distributed Version Control

Eclipse

Agile Dev

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- Promote

Eclipse

Distributed Dev

- AIX
- Windows
- IBM
- hp
- Linux

ISPW Warehouse

- Assignments
- Change Pkgs
- Source
- Executables

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PromoteFiles

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CVS

SUBVERSION

## QA / Test

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ISPW Deploy

V1.4

## Deploy

### Production LPARs

V1.3

### Runtime Servers

AIX

Windows

hp

V0.9

V0.7

V0.8



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SUBVERSION

## QA / Test

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Browser Interface

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ISPW Deploy

V1.4

# Production LPARs



Fail! Runtime Servers

V1.4

AIX

hp

V1.4

V1.4

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# Distributed Dev

## QA / Test

ISPW Warehouse

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- Change Pkgs
- Source
- Executables

Backout

Backout

PromoteFiles

## Approvals

Browser Interface

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Change Management

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ISPW Deploy

## Deploy

### Production LPARs

V1.4

Backout

### Runtime Servers

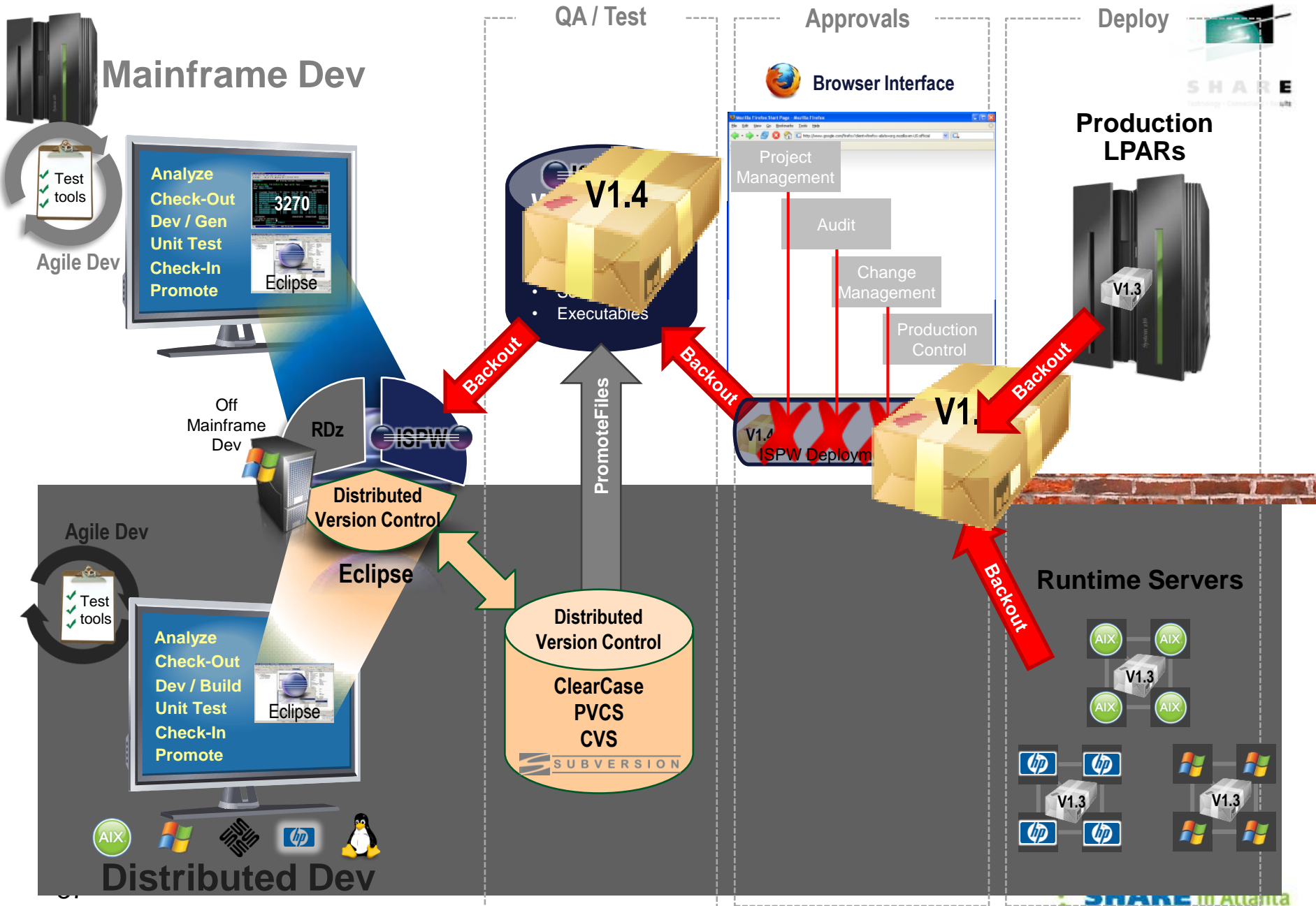
AIX

V1.4

hp

V1.4

V1.4



# Mainframe Dev

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Eclipse

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ISPW

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V1.4

PromoteFiles

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ISPW Deployment

# Deploy

Production LPARs

V1.3

Runtime Servers

AIX

V1.3

hp

V1.3



Distributed Dev



more success, more often, with less effort at **lower cost**

## Enterprise software change management. Delivered.

- Cost savings over older products
- Elimination of redundant effort
- Single point of control for IT.