

COTS COE Installer

marimba[®]

**Kia Behnia
Chief Technology Officer
Marimba Inc.**

Who is Marimba?

- ▶ Leader in Software Change and Configuration Management
 - ▶ Manage software delivery, installation and management of applications and content
 - ▶ Inventory collection, deployment status, and reporting
- ▶ Pioneered Change & Configuration Management using web technologies to manage applications across:
 - ▶ Computing Platforms: Servers, Desktops, Laptops, and devices
 - ▶ Networks: LAN, WAN, Dialup, VPN, Extranet, and Internet
 - ▶ All users: Employees, Customers, and Business Partners
- ▶ Flexible, open standards based solution (JAVA, XML, SOAP, etc)
 - ▶ “Future-proof” to manage evolving computing needs
- ▶ Robust Security Model: SSL, X.509, PKI, AUDIT, User and Role Based Admin
 - ▶ Expect EAL-3 Common Criteria Certification Q1-2004

Agenda

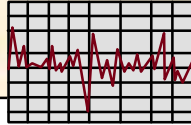
- ▶ COE Installer History
- ▶ Evolution of COTS solutions
- ▶ COE Installer Functionality
- ▶ COTS Functionality
- ▶ Marimba as (possible) COTS solution
 - ▶ Technical Overview

COE Philosophy

- ▶ The COE provides an environment for the re-use of common software, a set of system and security management tools, cross-platform account and profile management, and a documented security lockdown.

What is COE?

Personnel, Transportation, Medical,
Logistics, Procurement, Command &
Control, etc



Common Operating Environment

Mapping, Tracking
Windowing Environment,
Data Management Services,
Communication Services,
Access Control, etc

OS Services

V3 Solaris 2.5.1 & HP 10.20, NT4.0
IBM UNIX 4.1.4
DIGITAL UNIX 4.0
SILICON GRAPHICS IRIX 6.5.3
COMPAQ UNIX 4.0e
V4 Solaris 7, HP 10.20, NT 4.0

SUN, HP, INTEL, IBM, DEC, SG, COMPAQ

Services

Operating
System

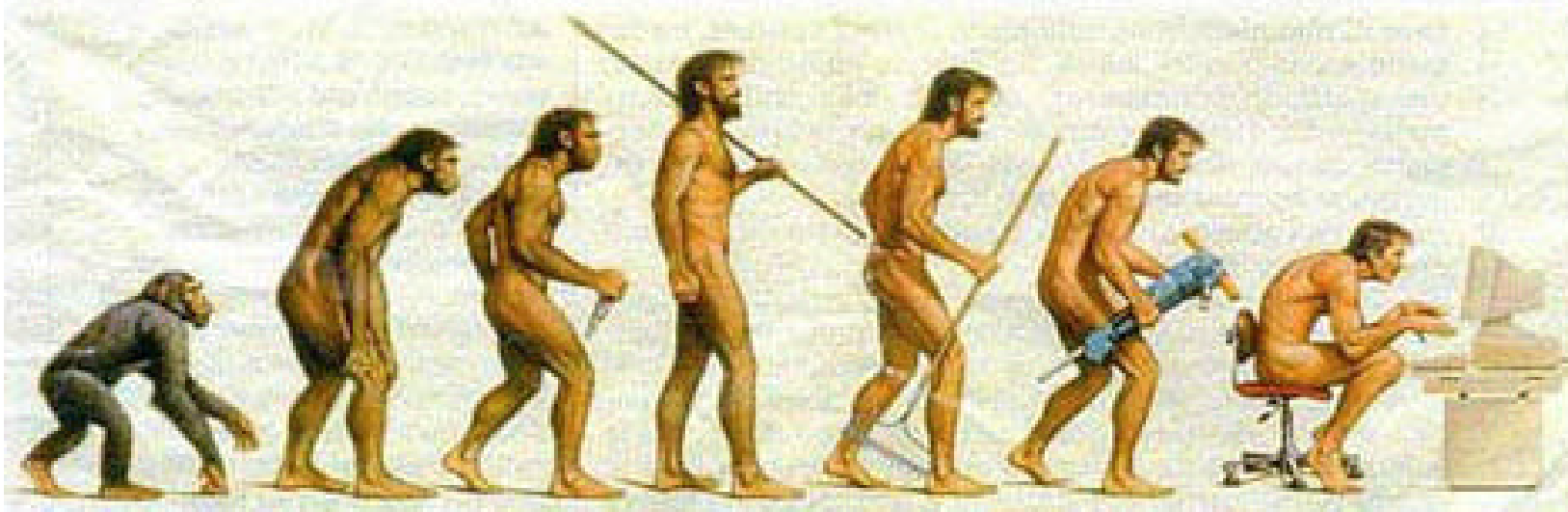
Hardware

SOURCE: The DII Common
Operating Environment (COE)
in Common Terms Presentation

COE Installer Functionality

- ▶ Provides a window for viewing installed segments and the segments available for installation on a variety of media sources.
- ▶ Supports installation, re-installation, and de-installation of segments
- ▶ Supports installation of segments from a network server
- ▶ Determines the adequacy of resources such as disk space and system revision level
- ▶ Identifies any system conflicts that may arise between applications to be installed and the existing system
- ▶ Installs appropriate executables on the system and performs pre- and post-install tasks needed for proper application operation.
- ▶ Cleanly removes segments from a machine when the segment is de-installed or when a segment installation fails
- ▶ Supports a common install/home directory structure
- ▶ Ensures all installed applications 'play well' together and documents known conflicts/deviations (COE I&RTS, waiver process)

COTS Solutions Evolution

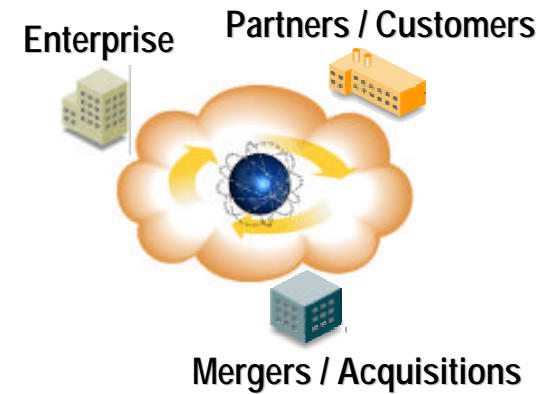


Increased Management Complexity

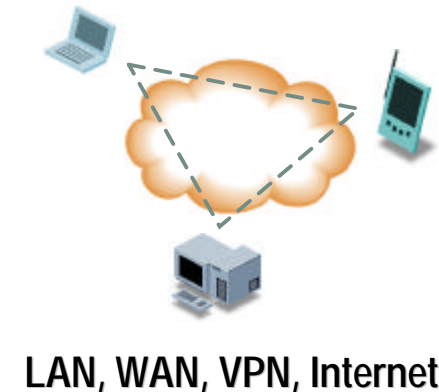
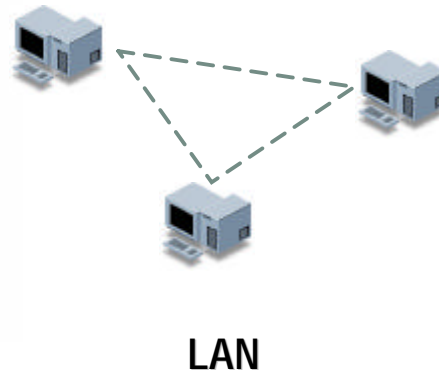
5-10 Years Ago

Today

Scope of Management



Endpoint Diversity and Connectivity

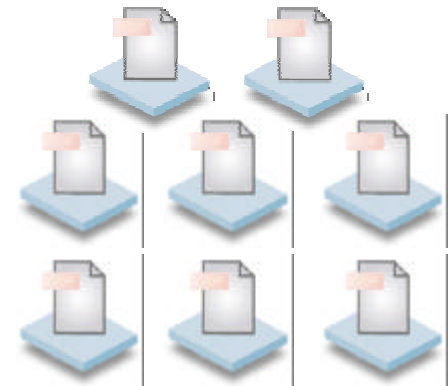
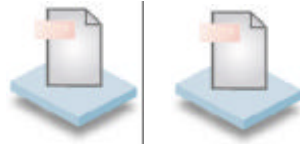


Increased Management Complexity (cont.)

5-10 Years Ago

Today

Number and Size
of Applications

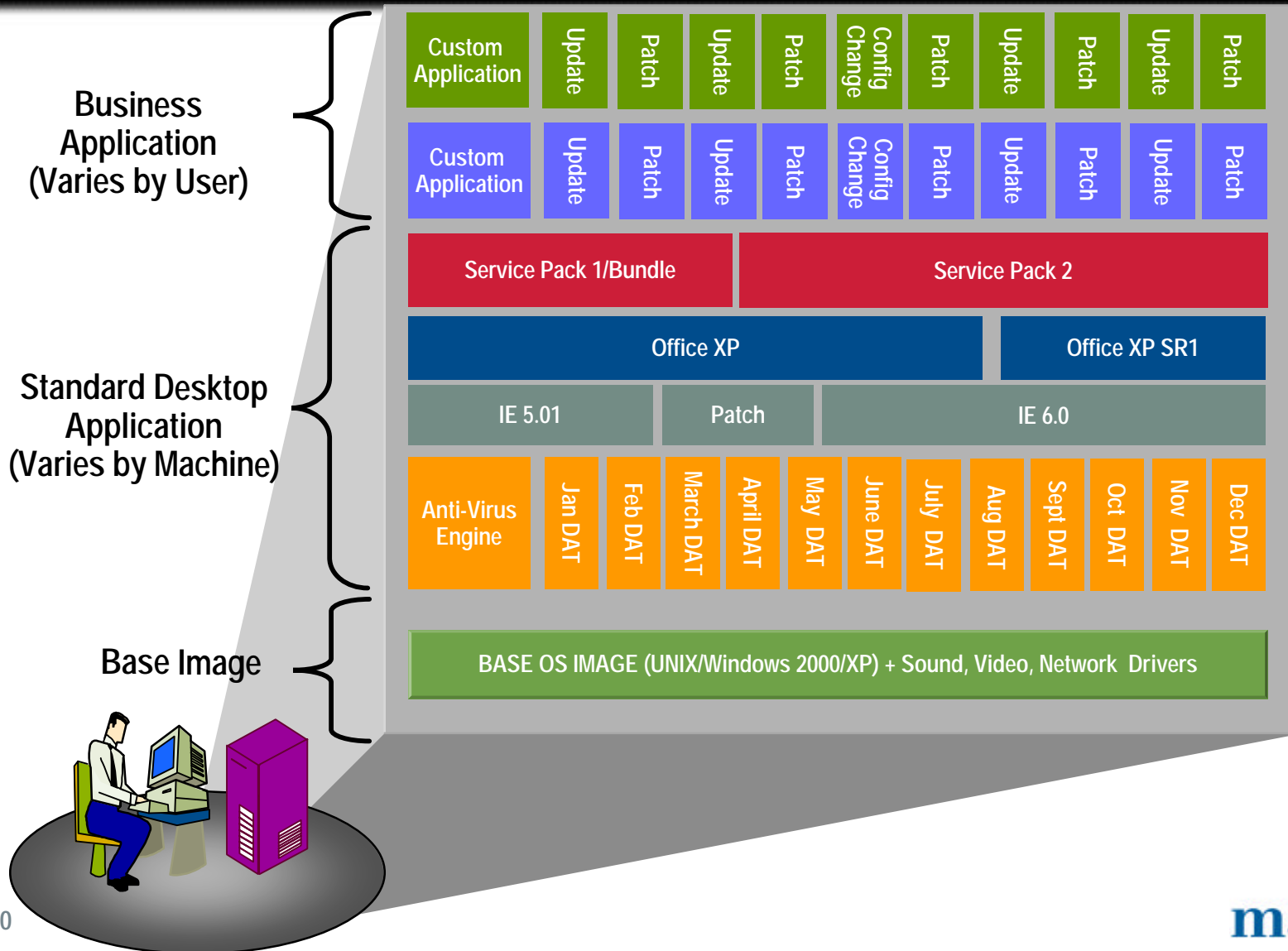


Frequency of Change

S	M	T	W	T
	1	2	3	4
7	8	9	10	11
14	15	16	17	18

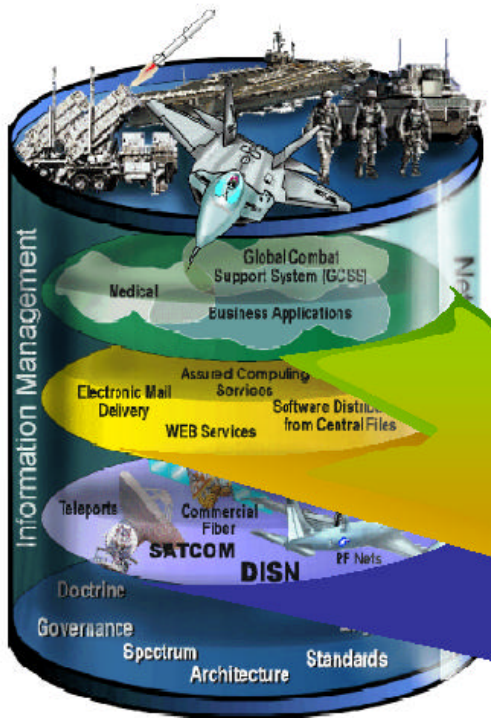


Increased Component Management...

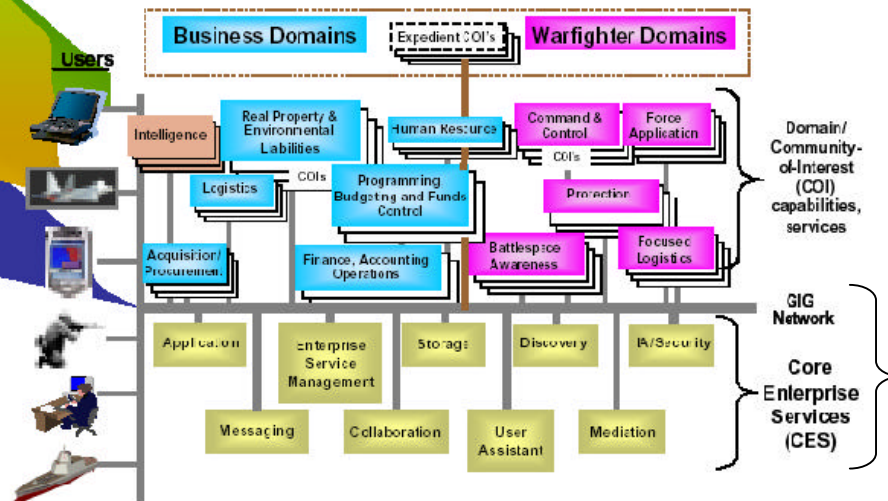


GIG Enterprise Services

- GIG requires a common set of information services to provide the awareness, access and delivery of information.
- GIG Enterprise Services (GES) is a collection of networked capabilities organized as Core Enterprise Services (CES) and Community-of-Interest (COI) services.
- CES, generic information services that apply to any COI, provide the basic ability to search the enterprise for desired information and then establish a connection to the desired service.
- COI's are organized around DoD, IC, and dynamically created communities that have similar information requirements



GIG Enterprise Services (GES)



COTS Opportunity

SOURCE:

Global Information Grid Core Enterprise Services Strategy DRAFT 1.1a

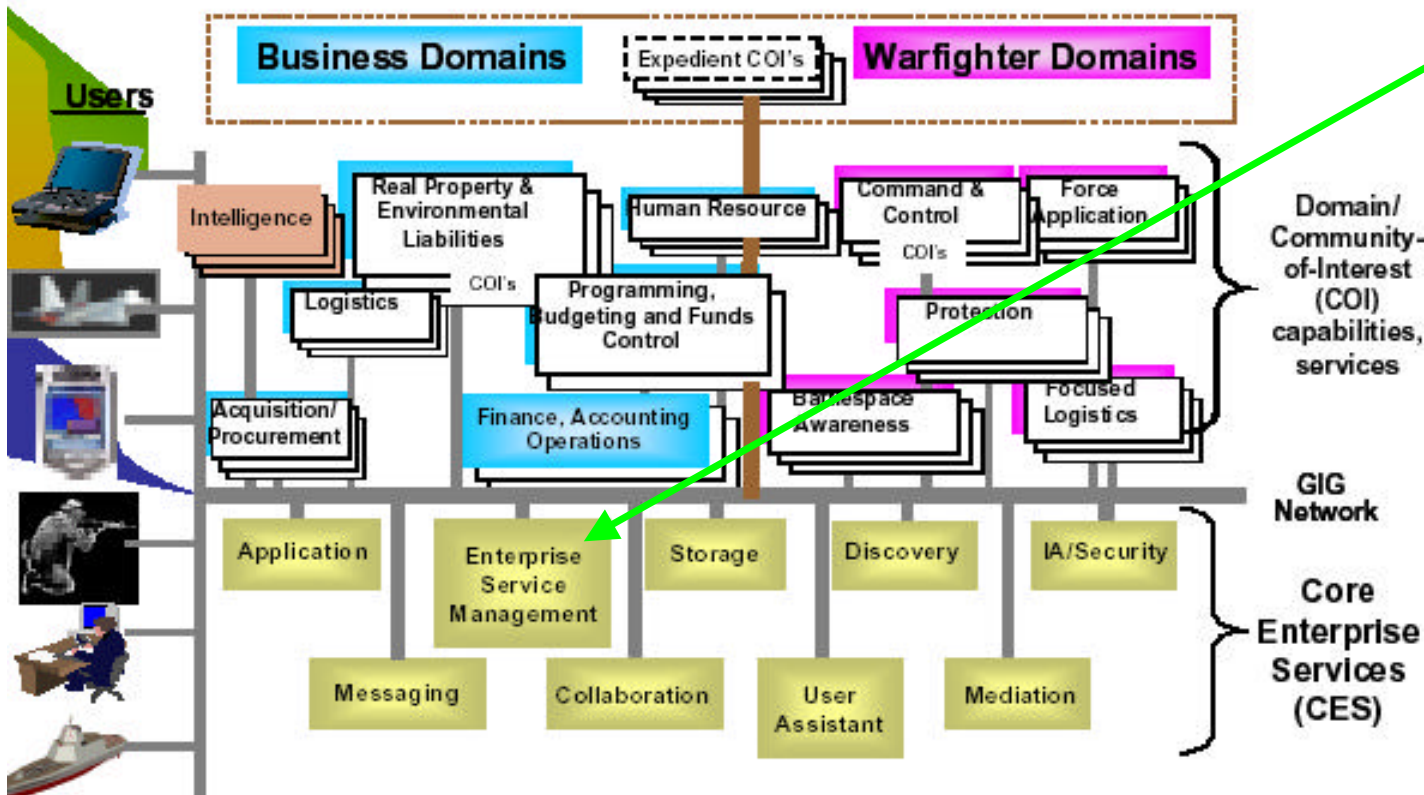
http://www.defenselink.mil/nii/org/cio/doc/GIG_ES_Core_Enterprise_Services_Strategy_V1-1a.pdf

COTS Vendors Respond...

- ▶ Commercial and Government converge
 - ▶ Technology crossover
 - ▶ Government Adopts Commercial Best Practices
 - ▶ Commercial recognizes Security is Relevant (NIAP/CCEV)
 - ▶ Commercial vendors emerge with COE functionality built for Net-Centric environments..

GIG Enterprise Services Cont'

GIG Enterprise Services (GES)



marimba®

Subset of ESM Including:

- Packaging
- Patching
- Distribution
- Inventory
- Usage
- Remote Admin

Ideal Management Solution – COTS Evolution

COTS Evolved into a Net-Centric Cross Platform Solution

- Integrate, rather than change the environment or processes
- Capture your business requirements and policies
- Enforce the policies and report against compliance
- Allow you to take proactive action on exceptions
- Provide adaptable infrastructure which can be easily installed, maintained and upgraded
- Provide a certified secure operating environment
- Support cross-platform distribution, packaging, and analysis on virtually any hardware type

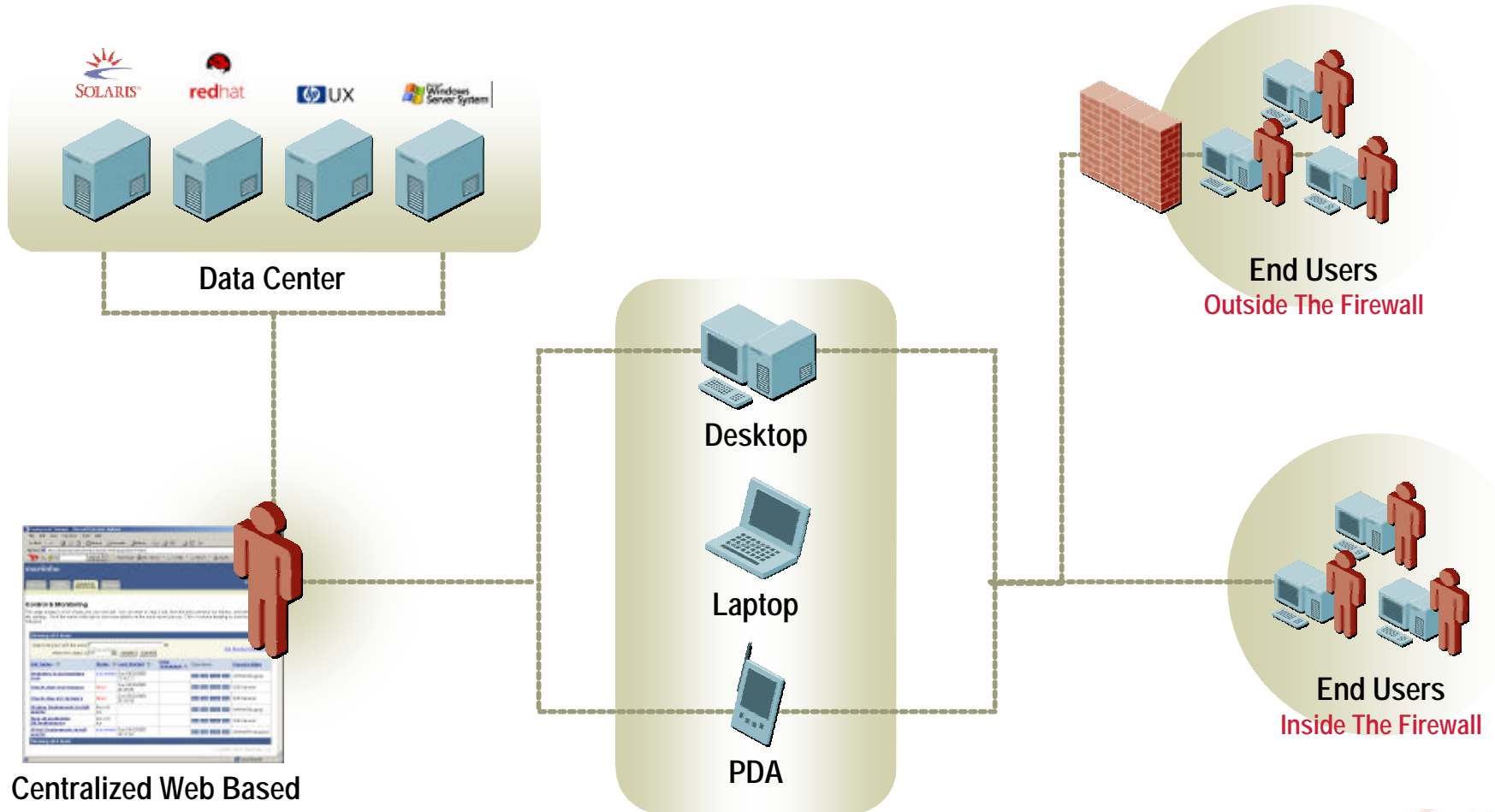
Marimba as a (possible) COTS solution

Fundamental concepts that have made Marimba the technology leader

- ▶ Continuous, policy-based management
- ▶ Rapid, adaptive deployment and maintenance without compromising security or scalability
- ▶ Comprehensive heterogeneity – platforms, environments and systems

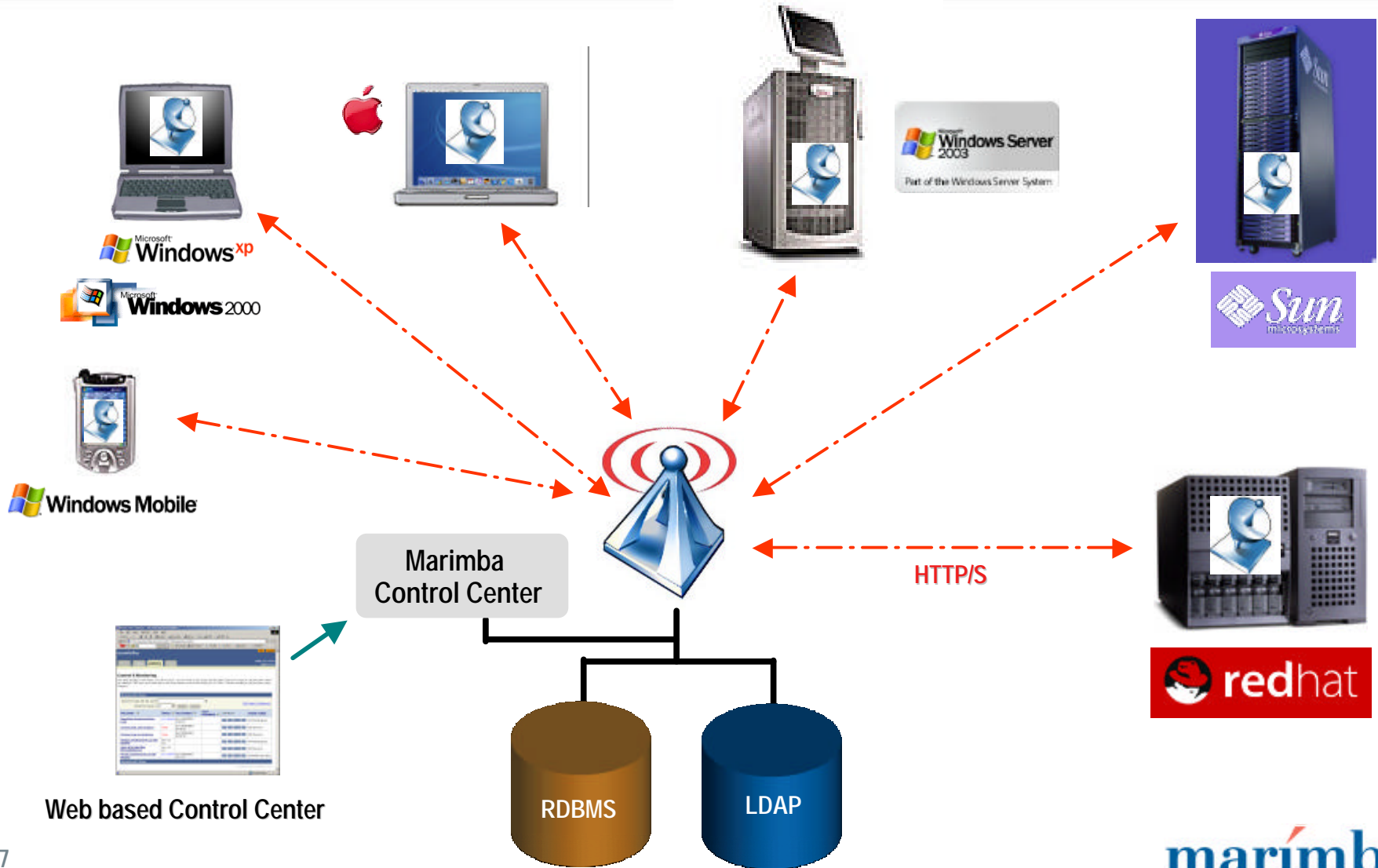
Enterprise-wide Net-Centric Management

Marimba manages all of your desktops, laptops, handhelds, servers...



Centralized Web Based Management

Marimba Architecture



Packaging: Cross-Platform and OPEN

Shrink wrapped/Third party applications



MSI applications



Custom, VB, C/C++
Java applications



Unix packages



XML Manifest:

- Files
- DLL's
- Policy
- Dependencies
- Before and after scripts

▶ XML based packaging format

- ▶ Contains file, registry, policy
- ▶ Human and Machine Readable DtDs

▶ Single Package

- ▶ One package is used for installs, upgrades, repair, and un-install

▶ Wizard Driven or Command Line Packaging

- ▶ Automates packaging
- ▶ Templates enforce packaging standards/defaults
- ▶ No Scripting requirements

▶ Portable packages

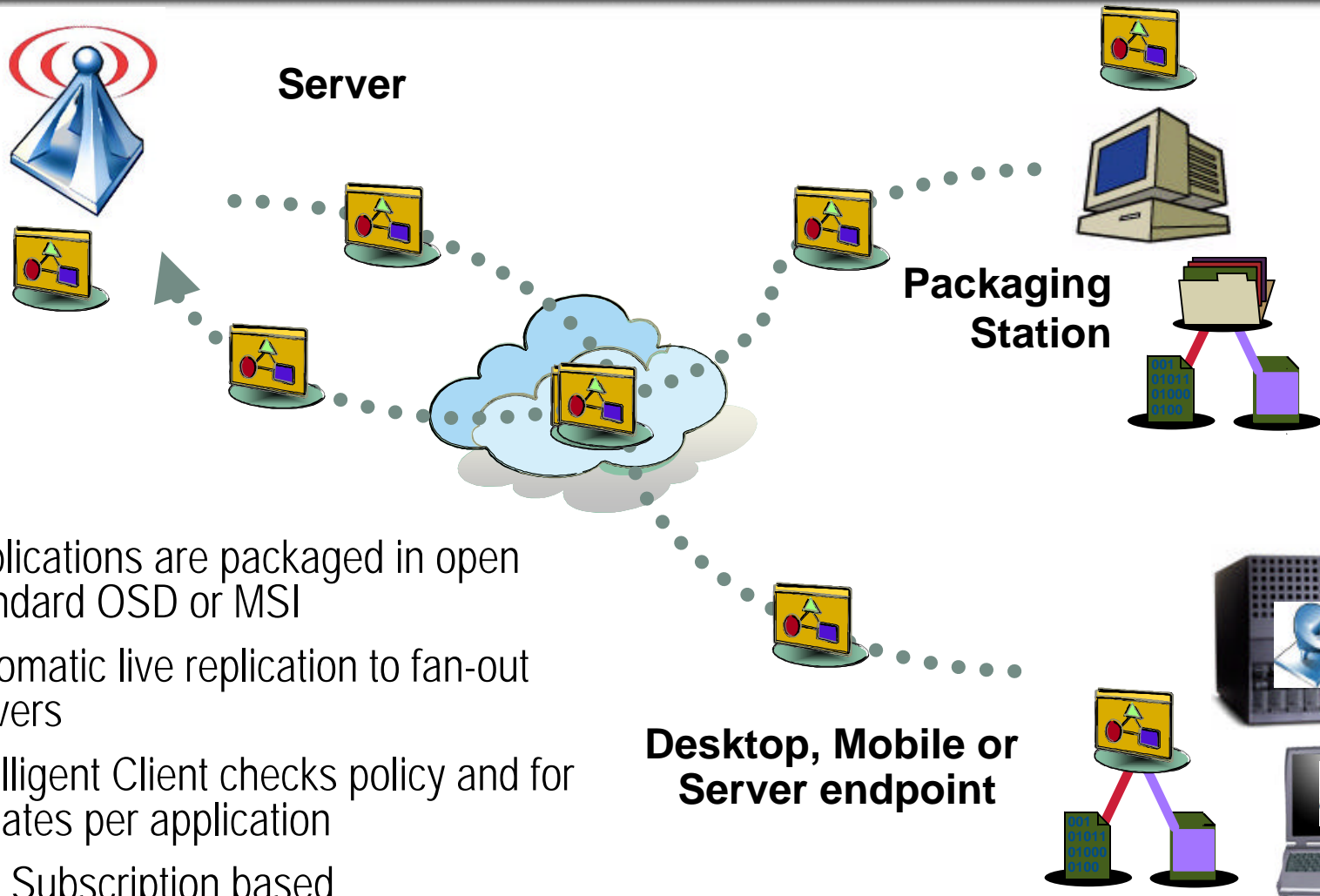
- ▶ Support multiple operating systems

Version-less Updating



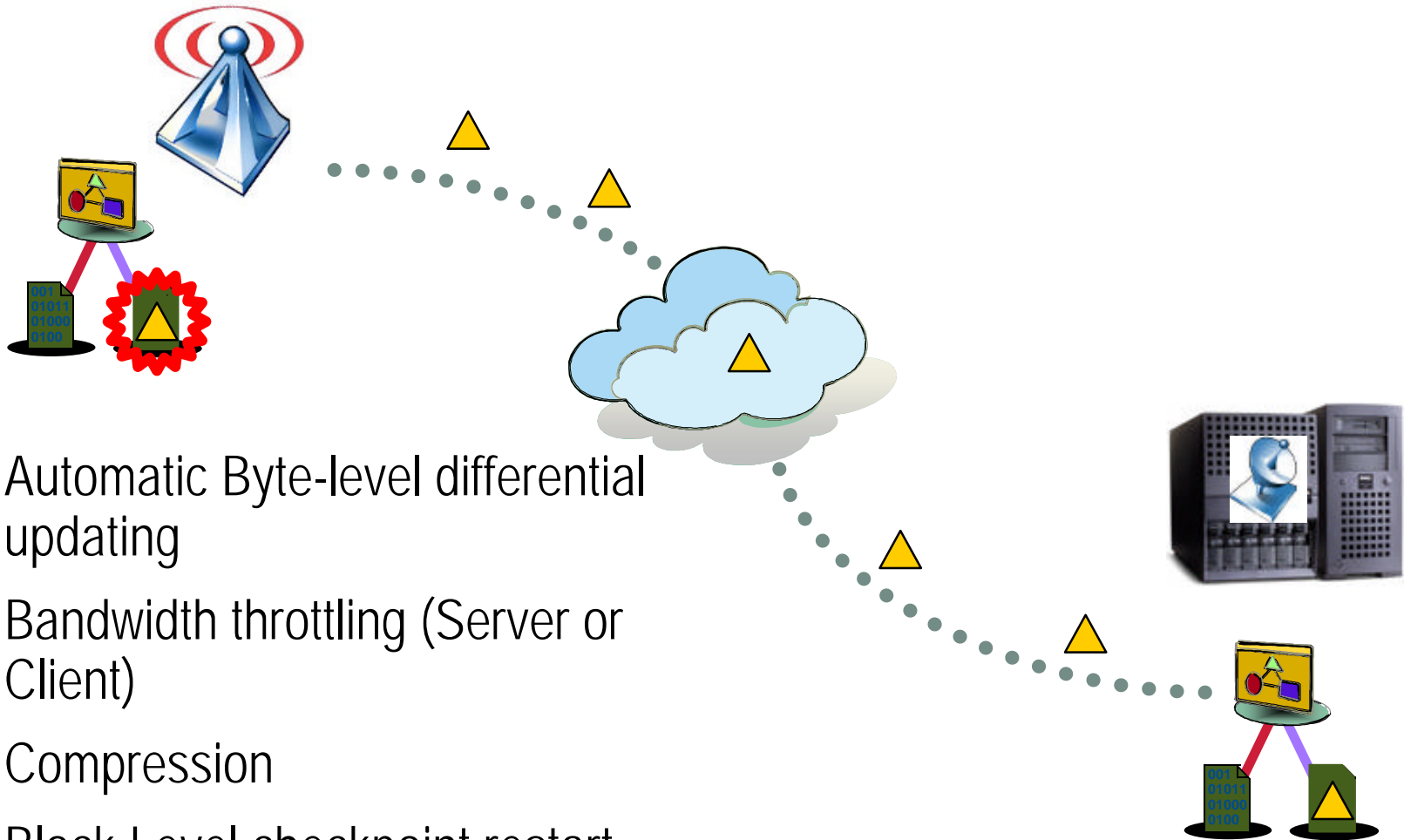
- ▶ Marimba allows you to create a single package for pristine installs, updates/patches, un-installs
- ▶ Marimba can automatically detect whether an upgrade or an install is needed and perform the most efficient activity
- ▶ Marimba can also automatically detect the platform and the locale settings for each endpoint at run time and deliver the correct version if appropriate

Marimba Cross Platform Distribution Process



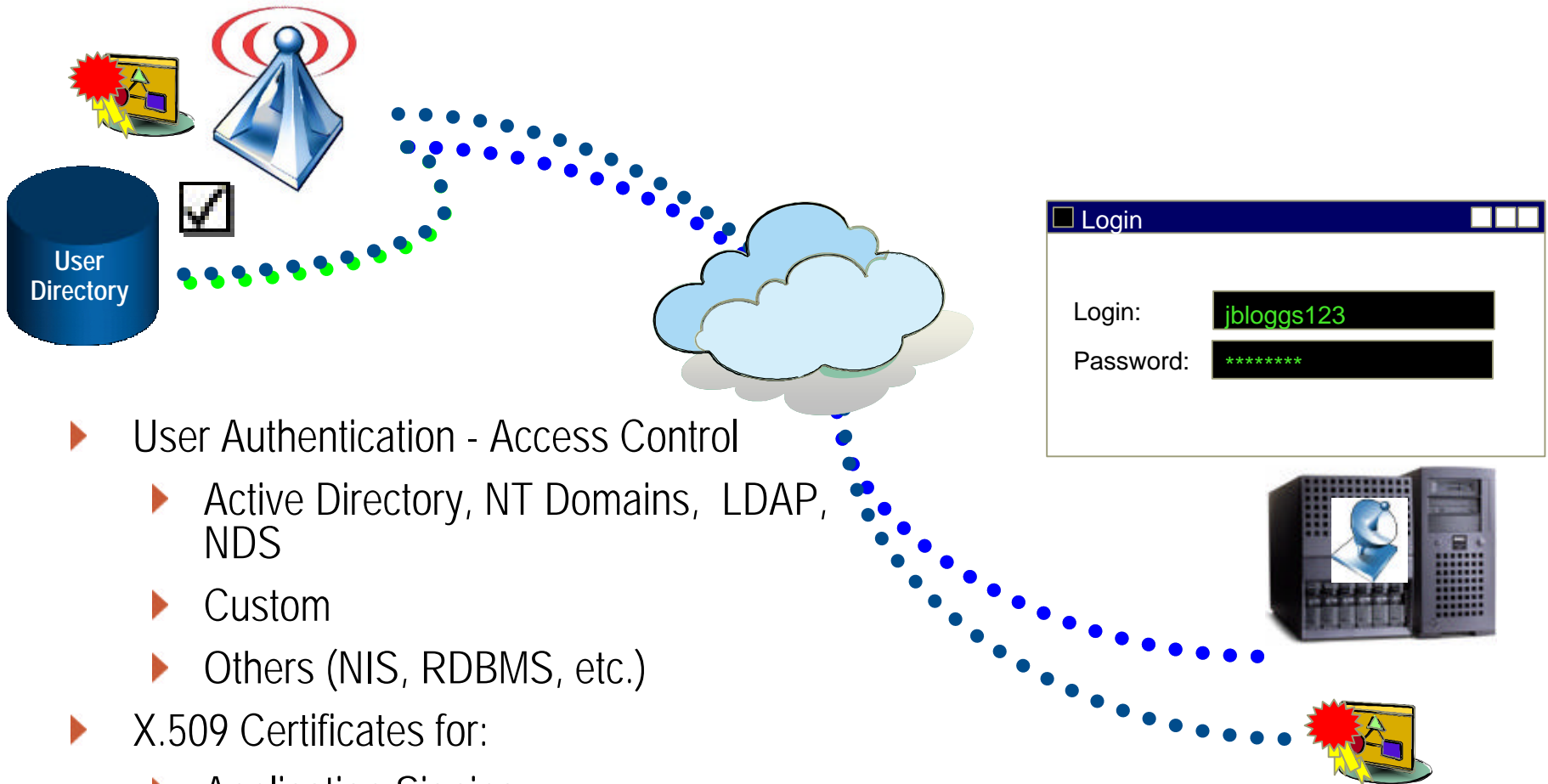
- ▶ Applications are packaged in open standard OSD or MSI
- ▶ Automatic live replication to fan-out servers
- ▶ Intelligent Client checks policy and for updates per application
 - ▶ Subscription based
 - ▶ Fast deployments

Marimba Distribution - Efficient, Reliable Network Delivery



- ▶ Automatic Byte-level differential updating
- ▶ Bandwidth throttling (Server or Client)
- ▶ Compression
- ▶ Block Level checkpoint restart

Security – User Authentication/Digital Certs



- ▶ User Authentication - Access Control
 - ▶ Active Directory, NT Domains, LDAP, NDS
 - ▶ Custom
 - ▶ Others (NIS, RDBMS, etc.)
- ▶ X.509 Certificates for:
 - ▶ Application Signing
 - ▶ Client Authentication
 - ▶ SSL Transport Encryption

eSupport - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://qaesupport.pg.com:8081/sdcuser/asp/default.asp

eSupport Application Center
 my.PG.com
 @Your Fingertips

Belgium > Brussels > ETC [Change Location/Language](#) [FeedBack/Questions](#) [Help](#)

STEP 1 Select a button below to display either Available or Installed Applications

INSTALLED APPLICATIONS **AVAILABLE APPLICATIONS**

STEP 2 Pick an application and select an action to perform

Installed Application Name	Last Update	Actions	
ACD See -- v3.1 SCV1 ~requires license~	Aug 27, 2002	Repair	Remove
Adobe Photoshop -- v6.0 SCV1 ~requires license~	Aug 27, 2002	Repair	Remove
Application Recovery Tool -- v1 SCV10 (GM)	1, 2003	Repair	Remove
Carbon Copy -- v5.7 SCV5 ~requires license~	2002	Repair	Remove
CBT Web Player -- v2.62 SCV1 (GM)	Aug 27, 2002	Repair	Remove
DAO 3.5 Registration -- v3.5 SCV1	Aug 27, 2002	Repair	Remove
DataLock -- v2.0 SCV1 (GM)	Aug 27, 2002	Repair	Remove
Desktop DMA -- v4.0 SCV11 (GM)	May 28, 2003	Repair	Remove

STEP 3 Click on Start Actions

Actions to perform	Status
<input checked="" type="checkbox"/> Repair CBT Web Player -- v2.62 SCV1	Success

STEP 4 If the action failed, click on Get Live Support

Powered by **marimba**

Search Applications:

Install from CD/DVD

Processing selected actions . . . Please wait . . .

Local intranet

Application Center - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://qaesupport.pg.com:8081/sdcuser/appcenter/appcenter.htm

eSupport Application Center my.PG.com @Your Fingertips

Belgium > Brussels > ETC Change Location/Language Feedback/Questions Help

STEP 1 Select a button below to display either Available or Installed Applications

INSTALLED APPLICATIONS AVAILABLE APPLICATIONS

STEP 2 Pick an application and select an action to perform

Available Application Name	Actions
Acrobat Reader Japanese Font Pack -- v5 SCV2	Install
Acrobat Reader Korean Font Pack -- v5 SCV2	Install
Acrobat Reader Simplified Chinese Font Pack -- v5 SCV2	Install
Acrobat Reader Traditional Chinese Font Pack -- v5 SCV2	Install
ACT 6 -- v6.02 SCV1 ~requires license~	Request
Adobe Acrobat 5 -- v5.05 SCV1 ~requires license~	Request
Adobe Illustrator -- v9.0.2 SCV1 ~requires license~	Request
Adobe Pagemaker 6 -- v6.5 SCV1 ~requires license~	Request

STEP 3 Click on Start Actions

Actions to perform	Status

STEP 4

Search Applications:

Install from CD/DVD

Done Local intranet

eSupport - Microsoft Internet Explorer

Address: http://qaesupport.pg.com:8081/sdcuser/asp/default.asp

Request a Software License - Microsoft Internet Explorer

Request A Software License

Business Justification

Justification / Comments*

Approver*: buys.w

Manager accepting the cost of this request. This person will receive a validation eMail.

No action will be taken until approval.

Start Previous Next End Submit Draft Close

Start Actions

Remove

Recorder Panel

Record Audio

00:10:28 / 4,463 KB

Local intranet

Done

Start

F:\APPS UltraEd... Meetin... Microso... Int... SEWP5... Chann...

5:22 PM

Marimba Product Architecture

Marimba
Solutions

Software Usage

Patch and Anti-Virus
Management

Application Mgmt

Remote
Administration

Discovery &
Inventory Management

OS Management
(Migration)

Content Distribution

Marimba
Control Center

Marimba Console
(Reporting, Policy Assignments, Orchestration, Administration)

Marimba
Infrastructure

Marimba Infrastructure (Secure, Scalable, Efficient, Reliable)

Endpoints



Integrations

Contact Information:

- ▶ Kia Behnia kia@marimba.com
- ▶ Product Overview -- <http://www.marimba.com>
- ▶ More Information and Demo:
governmentsales@marimba.com

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