Kickstart Desktop Management Lifecycle with IBM

By

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Senior IT Specialist

2010-4-1

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Agenda

- **Desktop Lifecycle Management Phases**
- **Challenges and best practice of each phase**
- **Demo**
- **Q & A**

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Desktop Lifecycle Management Phases

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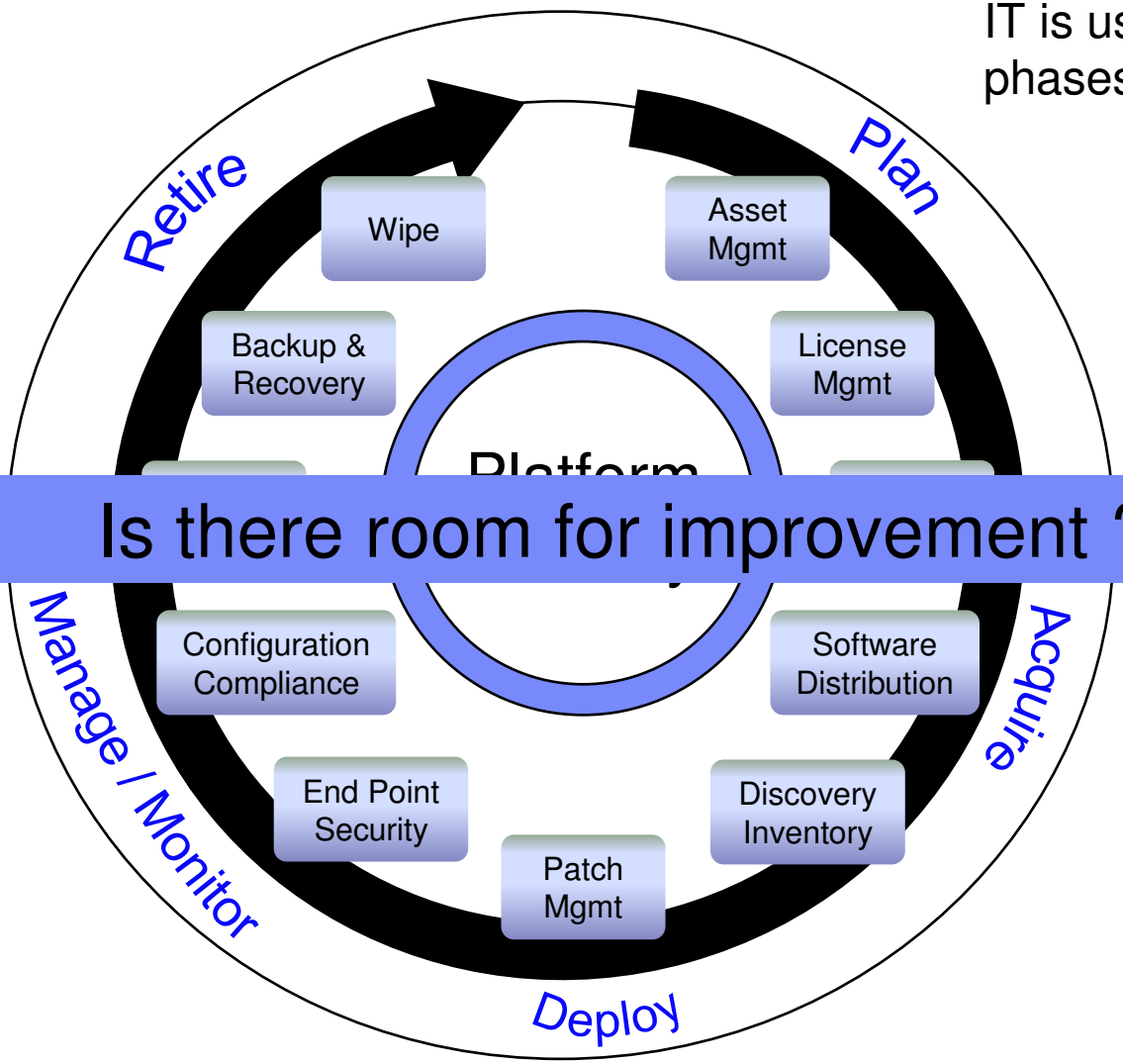
PC Lifecycle Management phases

IT is using tools to manage these phases



Is there room for improvement ?

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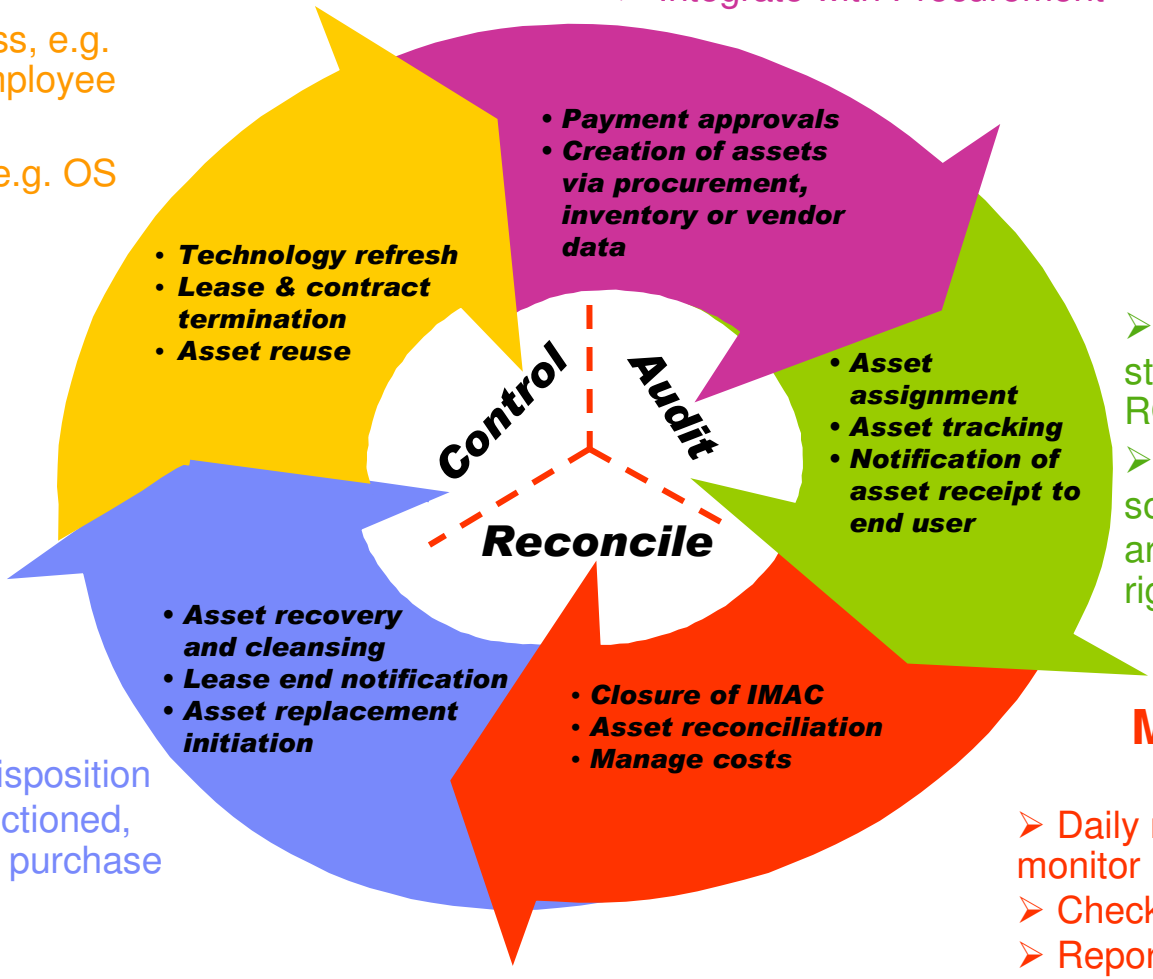
Desktop Lifecycle Phases – Major goals of each phases

Acquire

- Negotiate agreements to maximize value
- Consolidate requests for bulk purchase
- Integrate with Procurement

Planning

- Corporate business, e.g. new project, new employee
- User request
- Product upgrade e.g. OS upgrade



Deploy

- Processes to ensure standardize committed ROI
- Ensure require software and patches are delivered to the right person

Retire

- Provide for orderly disposition of assets: disposed, auctioned, donated and employee purchase

Manage

- Daily maintenance and monitor
- Checking for compliance
- Report for audit

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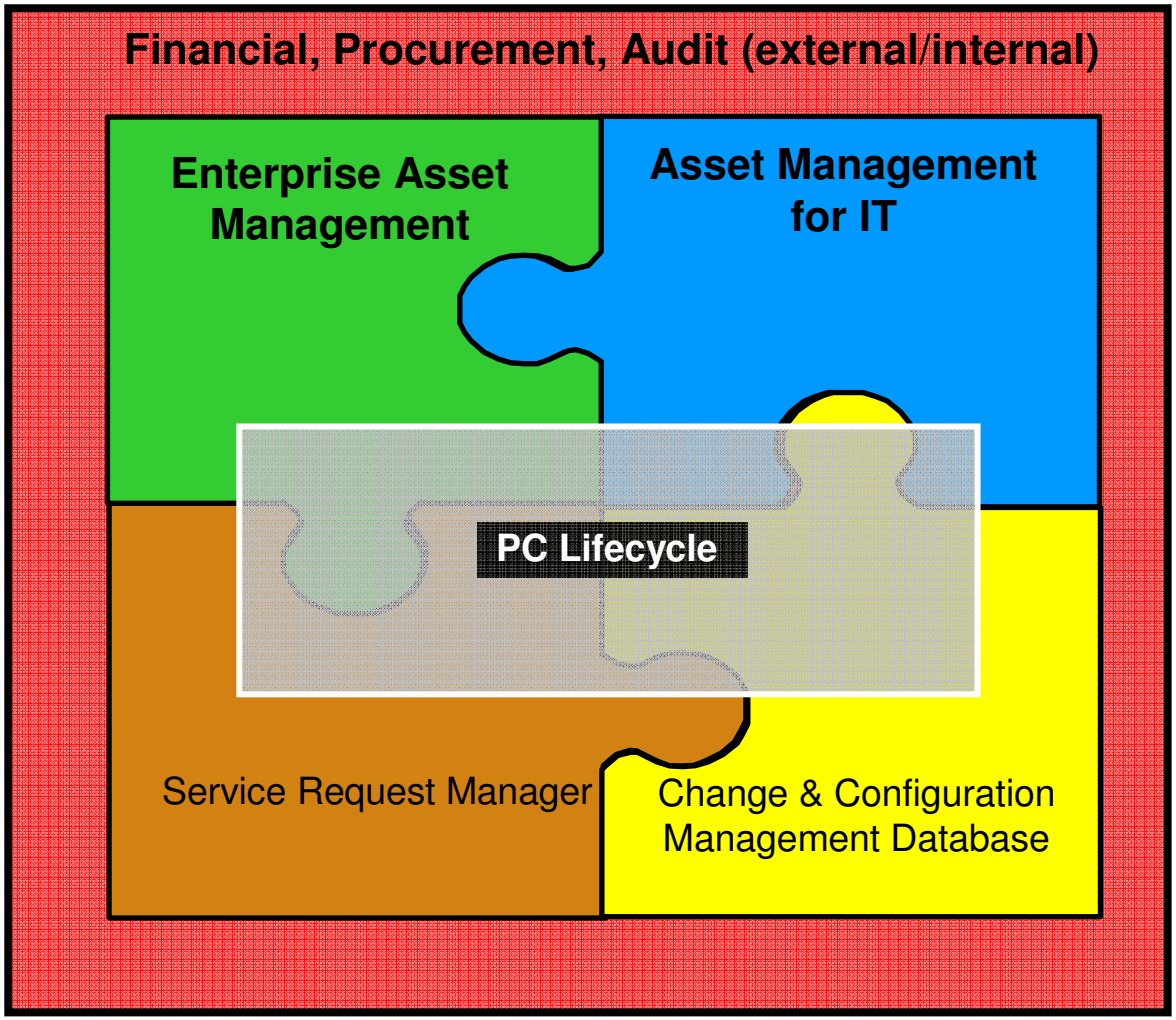
PC Lifecycle Management integrate with other departments



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Desktop Lifecycle Management

Planning

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Desktop Lifecycle Phases - Planning

Best Practice

✓ **Control** – IT must get control at this phase

✓ **Approval** – Acquire approval from management and finance

✓ **Replacement** – replacement and w

uired because

n – new employees, new project

Benefits to IT

✓ Identify those models that need to be

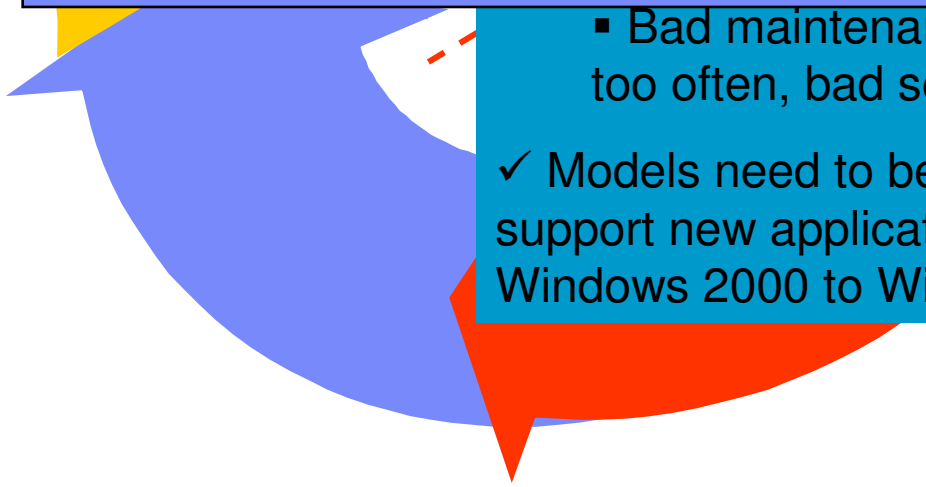
d maintenance

e out-dated

- Bad maintenance records – breakdown too often, bad service ..etc

✓ Models need to be upgraded in order to support new applications or OS, e.g. Windows 2000 to Windows 7

IBM Approach



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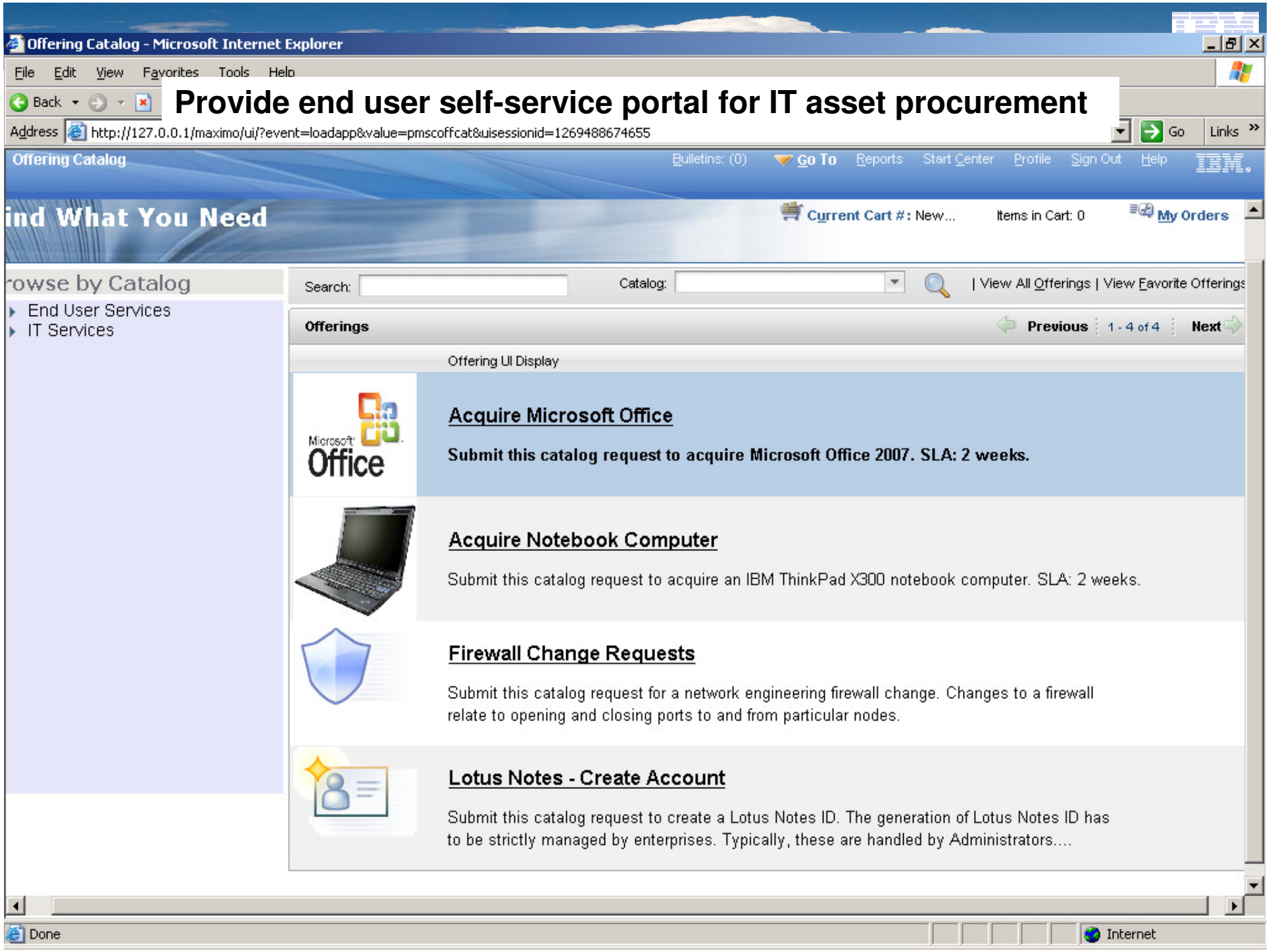
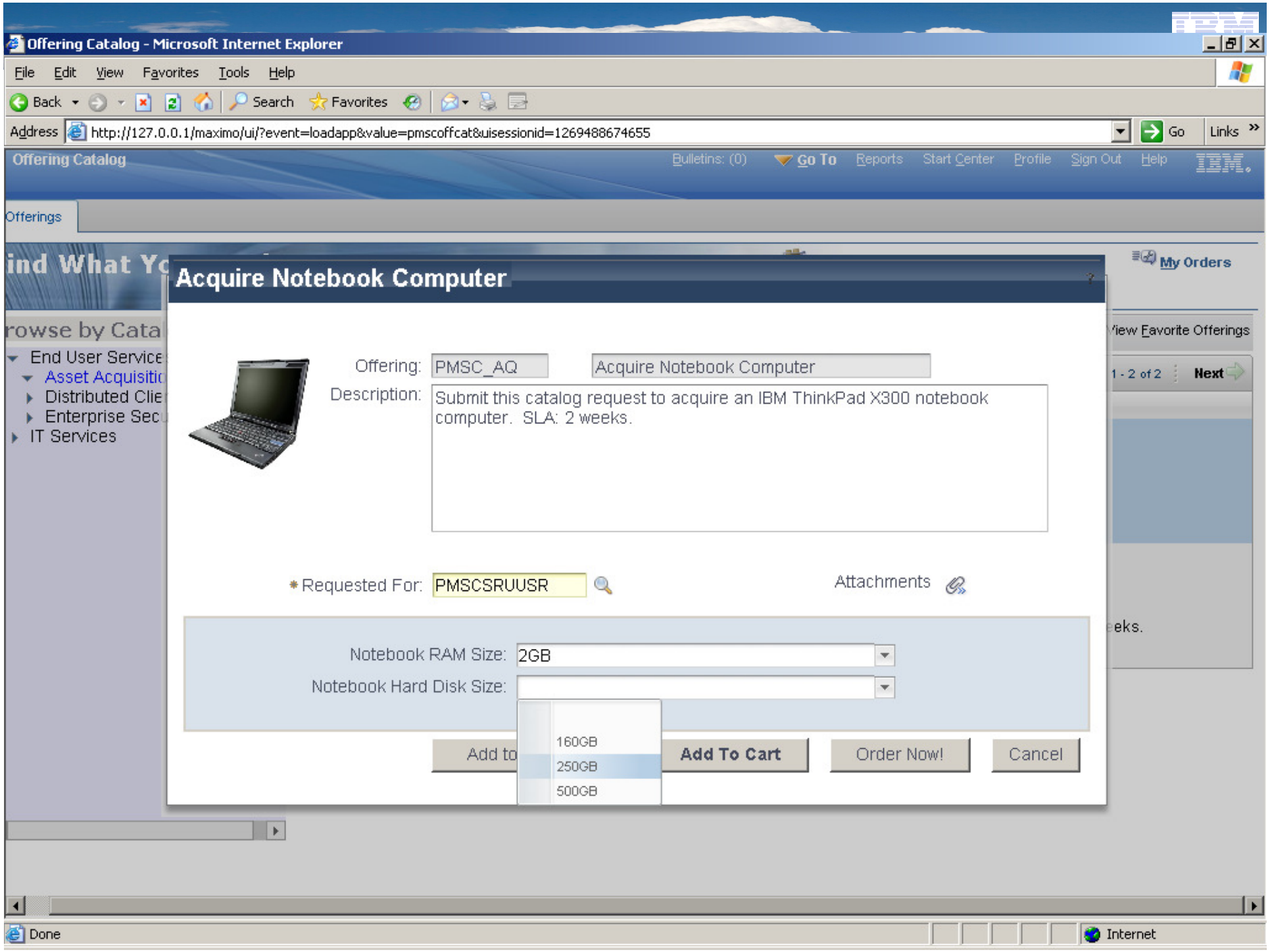
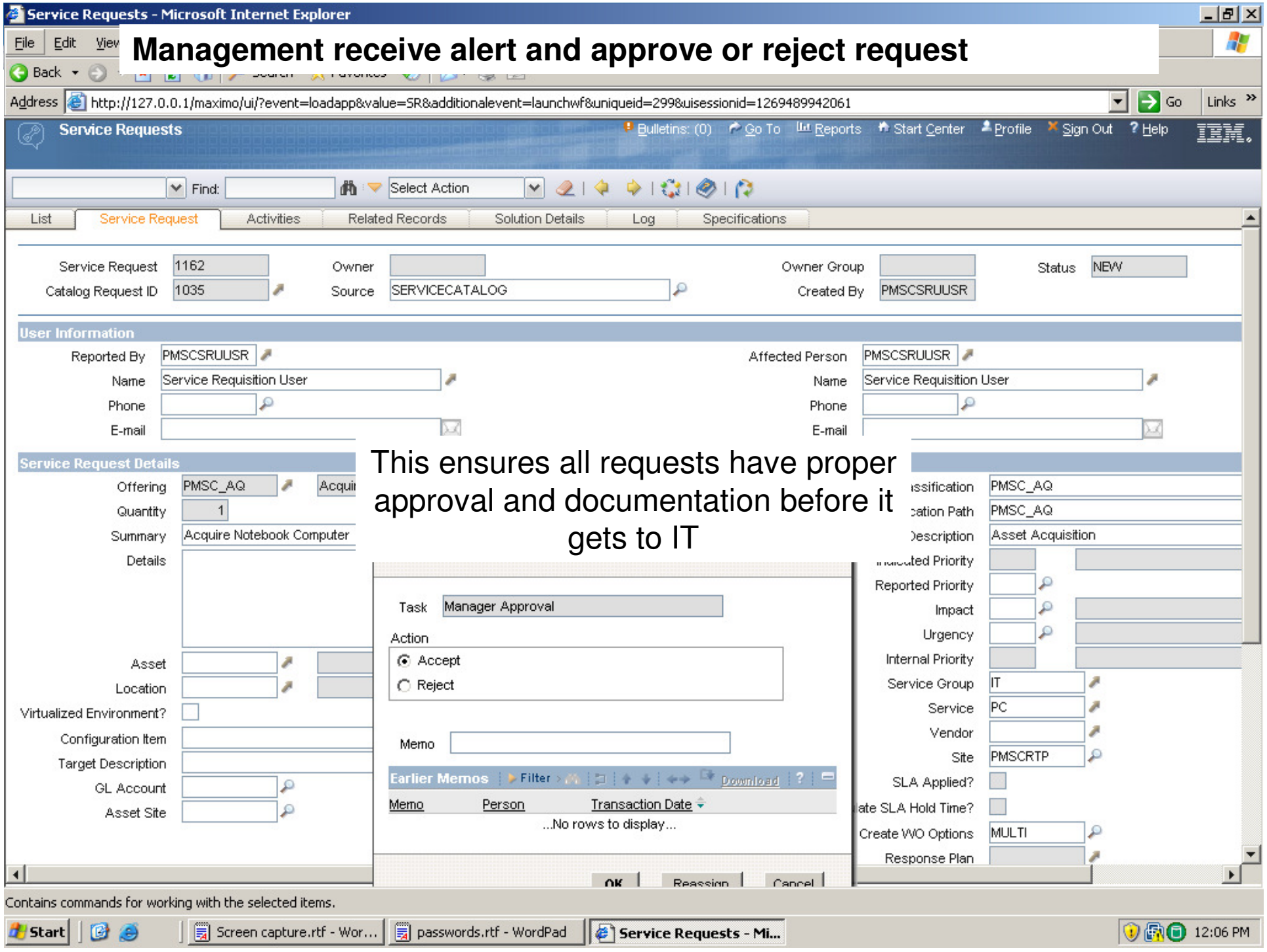

Offering Catalog - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Address http://127.0.0.1/maximo/ui/?event=loadapp&value=pmscoffcat&uisessionid=1269488674655
Go
Links
Provide end user self-service portal for IT asset procurement
Offering Catalog
Bulletins: (0)
Go To
Reports
Start Center
Profile
Sign Out
Help
ind What You Need
Current Cart #: New...
Items in Cart: 0
My Orders
rowse by Catalog
End User Services
IT Services
Search:
Catalog:
| View All Offerings | View Favorite Offerings
Offerings
Previous
1 - 4 of 4
Next
Offering UI Display
Acquire Microsoft Office
Submit this catalog request to acquire Microsoft Office 2007. SLA: 2 weeks.
Acquire Notebook Computer
Submit this catalog request to acquire an IBM ThinkPad X300 notebook computer. SLA: 2 weeks.
Firewall Change Requests
Submit this catalog request for a network engineering firewall change. Changes to a firewall relate to opening and closing ports to and from particular nodes.
Lotus Notes - Create Account
Submit this catalog request to create a Lotus Notes ID. The generation of Lotus Notes ID has to be strictly managed by enterprises. Typically, these are handled by Administrators....
Done
Internet


Offering Catalog - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://127.0.0.1/maximo/ui/?event=loadapp&value=pmscoffcat&uisessionid=1269488674655
Go Links
Offering Catalog
Bulletins: (0) Go To Reports Start Center Profile Sign Out Help
Offerings
My Orders
Acquire Notebook Computer
Offering: PMSC_AQ
Acquire Notebook Computer
Description: Submit this catalog request to acquire an IBM ThinkPad X300 notebook computer. SLA: 2 weeks.
* Requested For: PMSCSRUUSR
Attachments
Notebook RAM Size: 2GB
Notebook Hard Disk Size:
160GB
250GB
500GB
Add to
Add To Cart
Order Now!
Cancel
End User Service
Asset Acquisitio
Distributed Clie
Enterprise Sec
IT Services
1 - 2 of 2 Next
Done
Internet


Service Requests - Microsoft Internet Explorer
Management receive alert and approve or reject request
Address http://127.0.0.1/maximo/ui/?event=loadapp&value=SR&additionalevent=launchwf&uniqueid=299&uisessionid=1269489942061
Service Requests
Bulletins: (0) Go To Reports Start Center Profile Sign Out Help
Find: Select Action
List Service Request Activities Related Records Solution Details Log Specifications
Service Request 1162
Catalog Request ID 1035
Owner
Source SERVICECATALOG
Owner Group
Created By PMSCSRUUSR
Status NEW
User Information
Reported By PMSCSRUUSR
Name Service Requisition User
Phone
E-mail
Affected Person PMSCSRUUSR
Name Service Requisition User
Phone
E-mail
Service Request Details
Offering PMSC_AQ
Quantity 1
Summary Acquire Notebook Computer
Details
Asset
Location
Virtualized Environment?
Configuration Item
Target Description
GL Account
Asset Site
This ensures all requests have proper approval and documentation before it gets to IT
Task Manager Approval
Action
Accept
Reject
Memo
Earlier Memos Filter Download
Memo Person Transaction Date
...No rows to display...
OK Reassign Cancel
Classification PMSC_AQ
Location Path PMSC_AQ
Description Asset Acquisition
Reported Priority
Impact
Urgency
Internal Priority
Service Group IT
Service PC
Vendor
Site PMSCRTP
SLA Applied?
Create WO Options MULTI
Response Plan
Contains commands for working with the selected items.
Start
Screen capture.rtf - Wor...
passwords.rtf - WordPad
Service Requests - Mi...
12:06 PM

Desktop Lifecycle Management

Acquire

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Desktop Lifecycle Phases - Acquire

Acquire

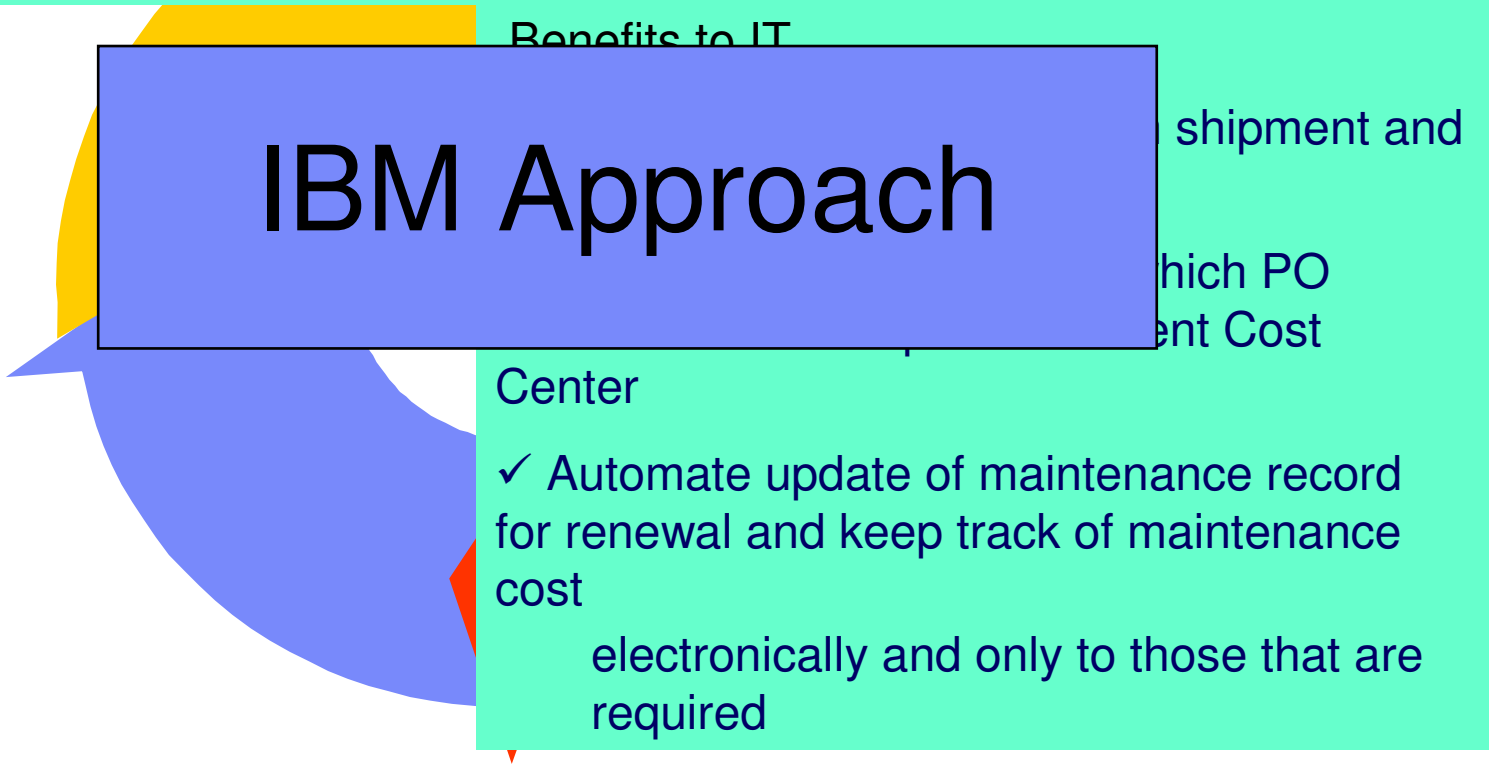
- Negotiate agreements to maximize value
- Consolidate requests for bulk purchase
- Integrate with procurement

Best Practice

✓**Consolidate requests to PO**

✓ **Link PO to Finance**

✓ **Reconcile asset with PO and Finance**



fits to IT

omate PO issue process to send data

Benefits to IT

shipment and

hich PO

ent Cost

Center

✓ Automate update of maintenance record for renewal and keep track of maintenance cost

electronically and only to those that are required

IBM Approach

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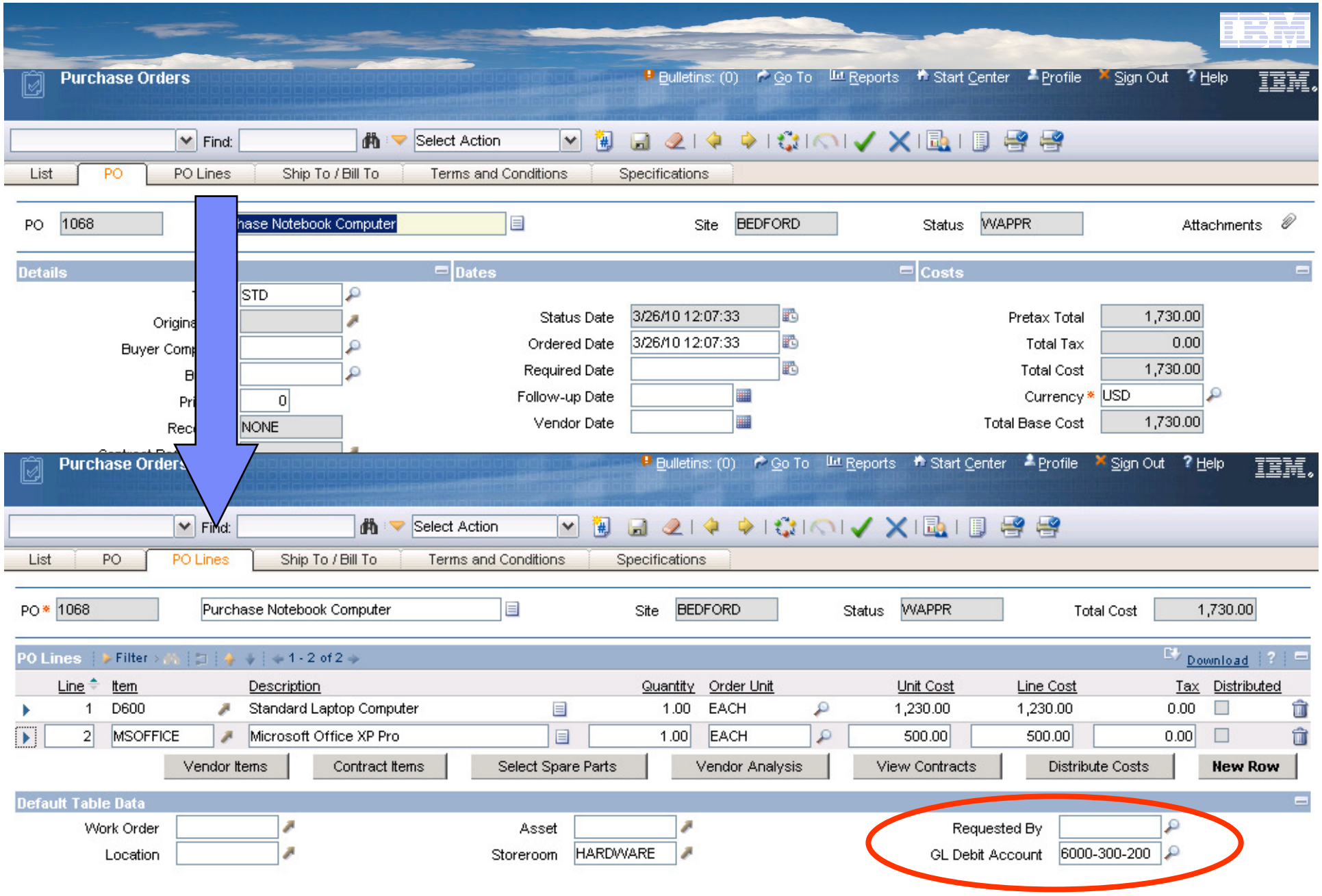

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Desktop Lifecycle Management

Deployment

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Desktop Lifecycle Phases - Deployment

Best Practice

✓ **Golden image approach** – A single image that contains all required patches and applications and use it for cloning

shipping to end user – additional software/configuration is
to end user

✓ **Update PO and inven**
update inventory record i
as deployed asset

Benefits to IT

✓ No missing patches or required applications

✓ Update accounting for PO payment

IBM Approach

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Deployment - Golden Image

- ✓ Override existing OS with company standard OS e.g. Vista/Win 7 → XP
- ✓ Standard configuration, e.g. C drive 20GB, D drive 80GB. Password length…etc
- ✓ Apply all the required patches
- ✓ Install required applications e.g. anti-virus, email, office applications…etc

Applications

Patches

Windows XP SP3

Standard model

Store this image as a "*System Profile*" in TPM for OS server for editing and cloning

Tivoli Provisioning Manager for OSD

Golden Image

Vista / Windows 7

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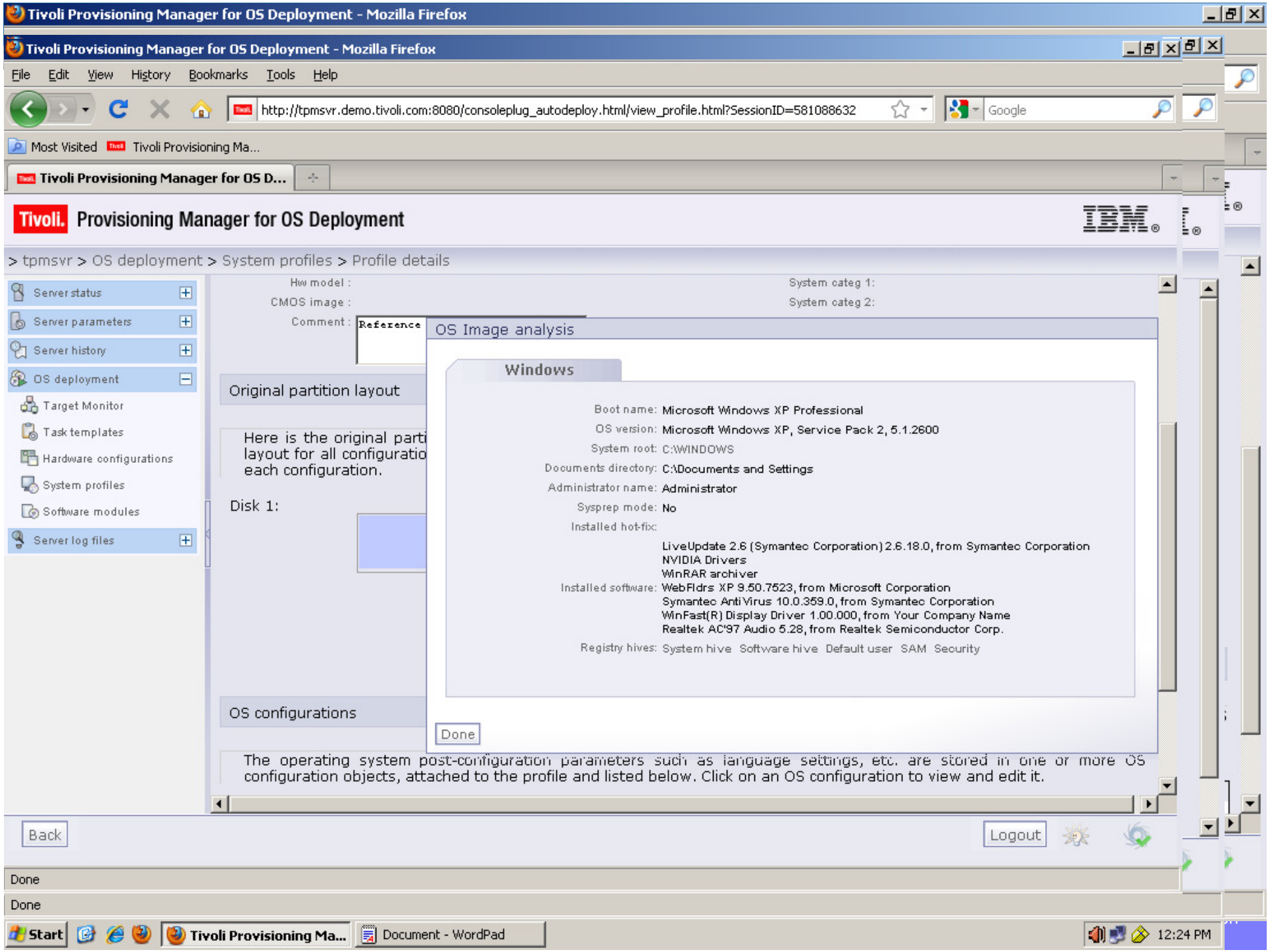
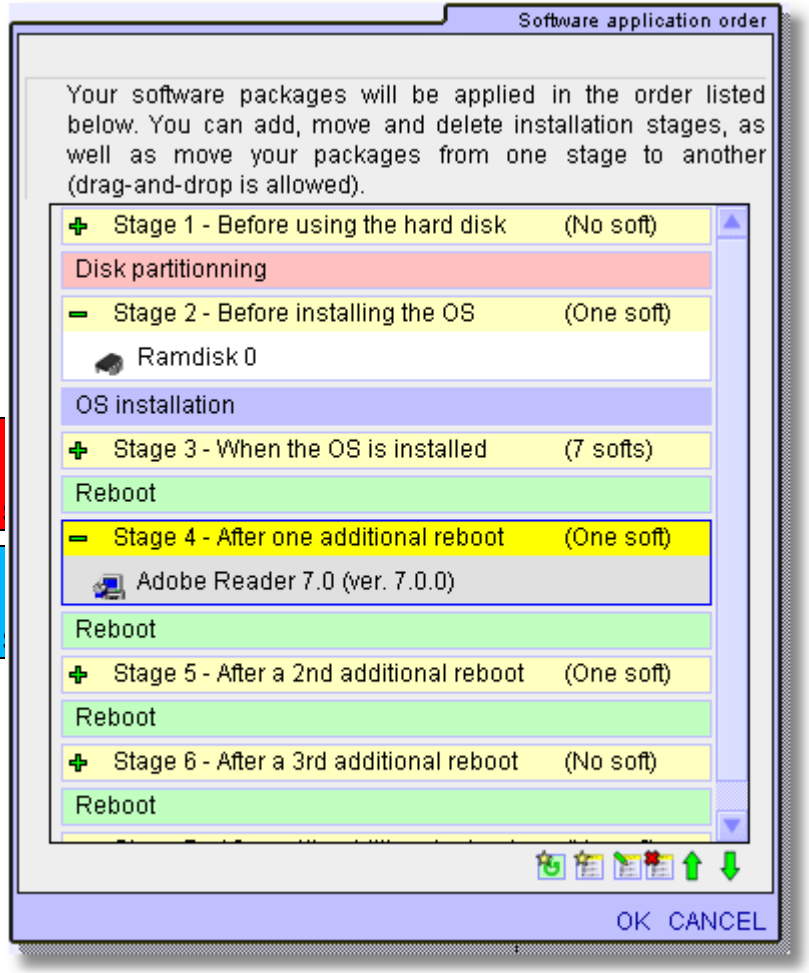

Tivoli Provisioning Manager for OS Deployment - Mozilla Firefox
Tivoli Provisioning Manager for OS Deployment - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://tpmsvr.demo.tivoli.com:8080/consoleplug_autodeploy.html/view_profile.html?SessionID=581088632
Google
Most Visited Tivoli Provisioning Ma...
Tivoli Provisioning Manager for OS D...
Tivoli. Provisioning Manager for OS Deployment
IBM.
> tpmsvr > OS deployment > System profiles > Profile details
Server status
Server parameters
Server history
OS deployment
Target Monitor
Task templates
Hardware configurations
System profiles
Software modules
Server log files
Hw model :
CMOS image :
Comment :
Reference
System categ 1:
System categ 2:
Original partition layout
Here is the original parti
layout for all configuratio
each configuration.
Disk 1:
OS configurations
The operating system post-configuration parameters such as language settings, etc. are stored in one or more OS configuration objects, attached to the profile and listed below. Click on an OS configuration to view and edit it.
OS Image analysis
Windows
Boot name: Microsoft Windows XP Professional
OS version: Microsoft Windows XP, Service Pack 2, 5.1.2600
System root: C:\WINDOWS
Documents directory: C:\Documents and Settings
Administrator name: Administrator
Sysprep mode: No
Installed hot-fix:
Installed software: LiveUpdate 2.6 (Symantec Corporation) 2.6.18.0, from Symantec Corporation
NVIDIA Drivers
WinRAR archiver
WebFldrs XP 9.50.7523, from Microsoft Corporation
Symantec AntiVirus 10.0.359.0, from Symantec Corporation
WinFast(R) Display Driver 1.00.000, from Your Company Name
Realtek AC'97 Audio 5.28, from Realtek Semiconductor Corp.
Registry hives: System hive Software hive Default user SAM Security
Done
Back
Logout
Done
Done
Start
Tivoli Provisioning Ma...
Document - WordPad
12:24 PM

Deploy with Golden Image and individual applications

Individual application

Individual application



- User can **create policy rule to bind** application/driver to different model of PCs.
- Create deployment scheme to properly insert application/driver at different stages.

For example, use Nvidia display driver XX-XXX whenever computer model begins with “AHE” and insert it after 2 reboots.

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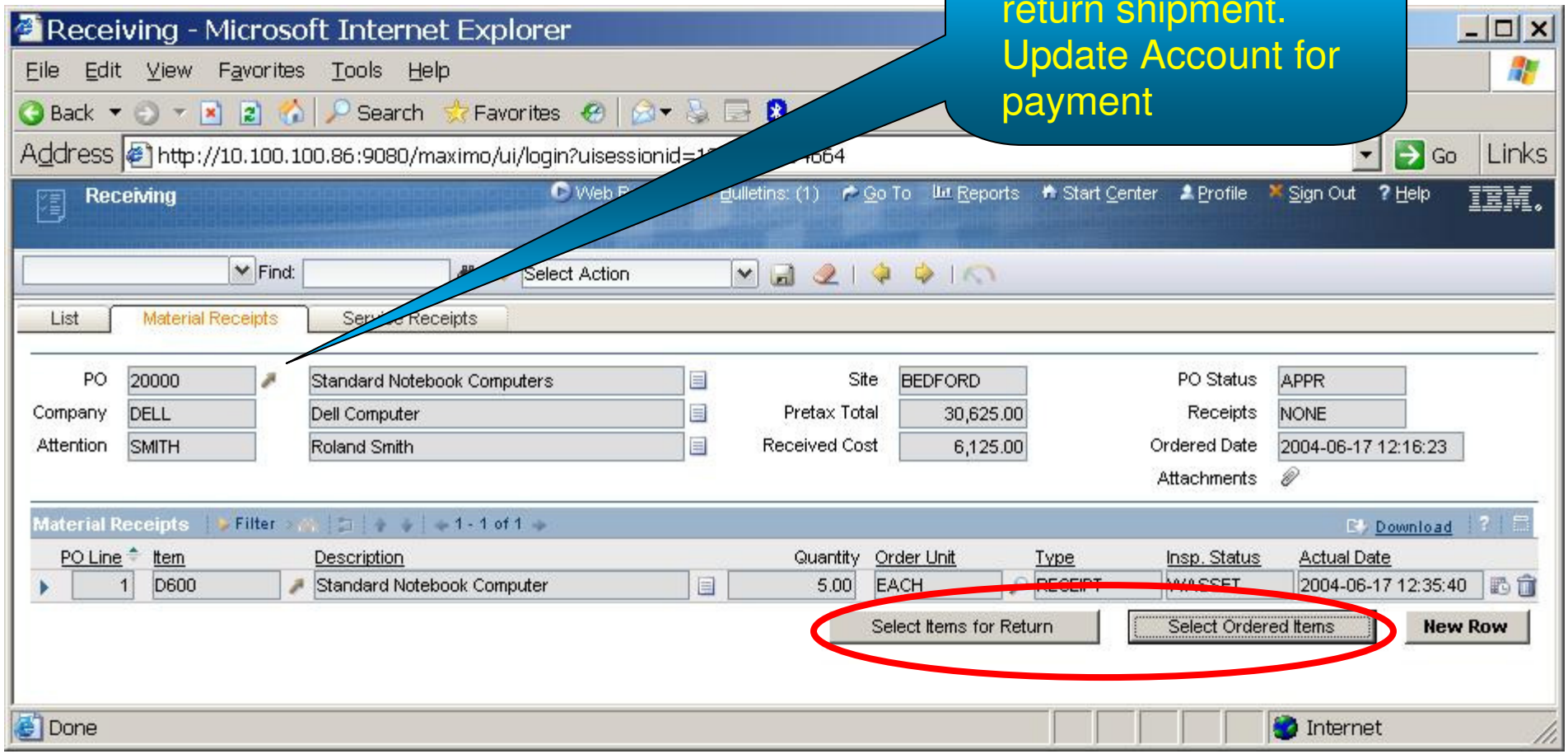
Acquire Asset – Receiving



- **Automatic asset ID generation**
- **Integration to bar code system / other identification tags**

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Desktop Lifecycle Management

Daily Management

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Desktop Lifecycle Phases

Best Practice

✓ Compliance – Ensure patch is applied and desktop environment is secured

✓ Resolve end user problem – keep track problems reported by end user with proper logging

✓ **Monitor PC** backup critical applications.

Benefits to IT

✓ Provide reports to management on asset usage and redeployment

critical data on
ade, system
e failure

upgrade and
application deployment

issues

IBM Approach

- ***Closure of IMAC***
- ***Asset reconciliation***
- ***Manage costs***

Manage

- Daily maintenance and monitor
- Checking for compliance
- Report for audit

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IT needs to collect desktop inventory; distribute software; verify security compliance and software installed

What can be done better through IBM?

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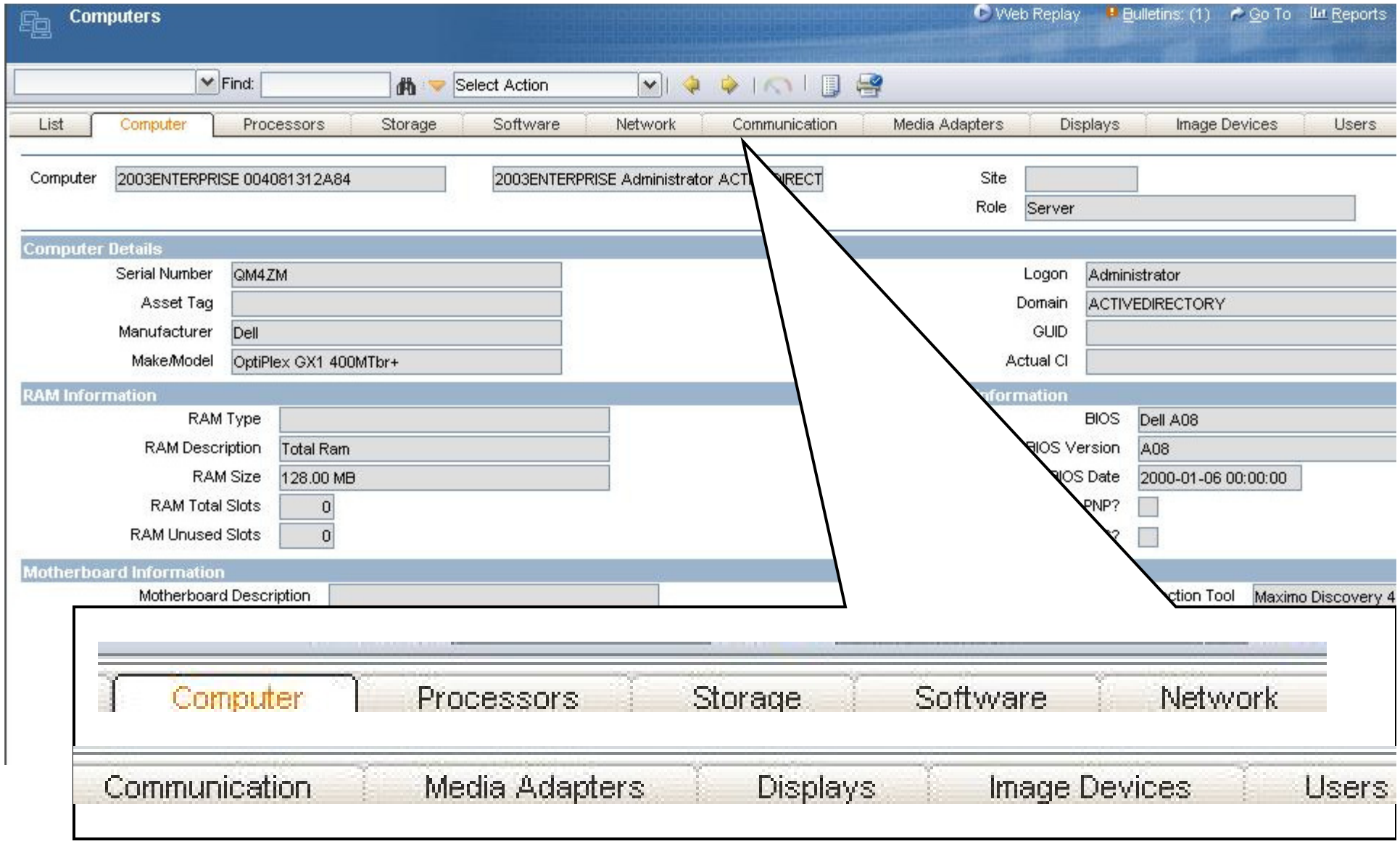

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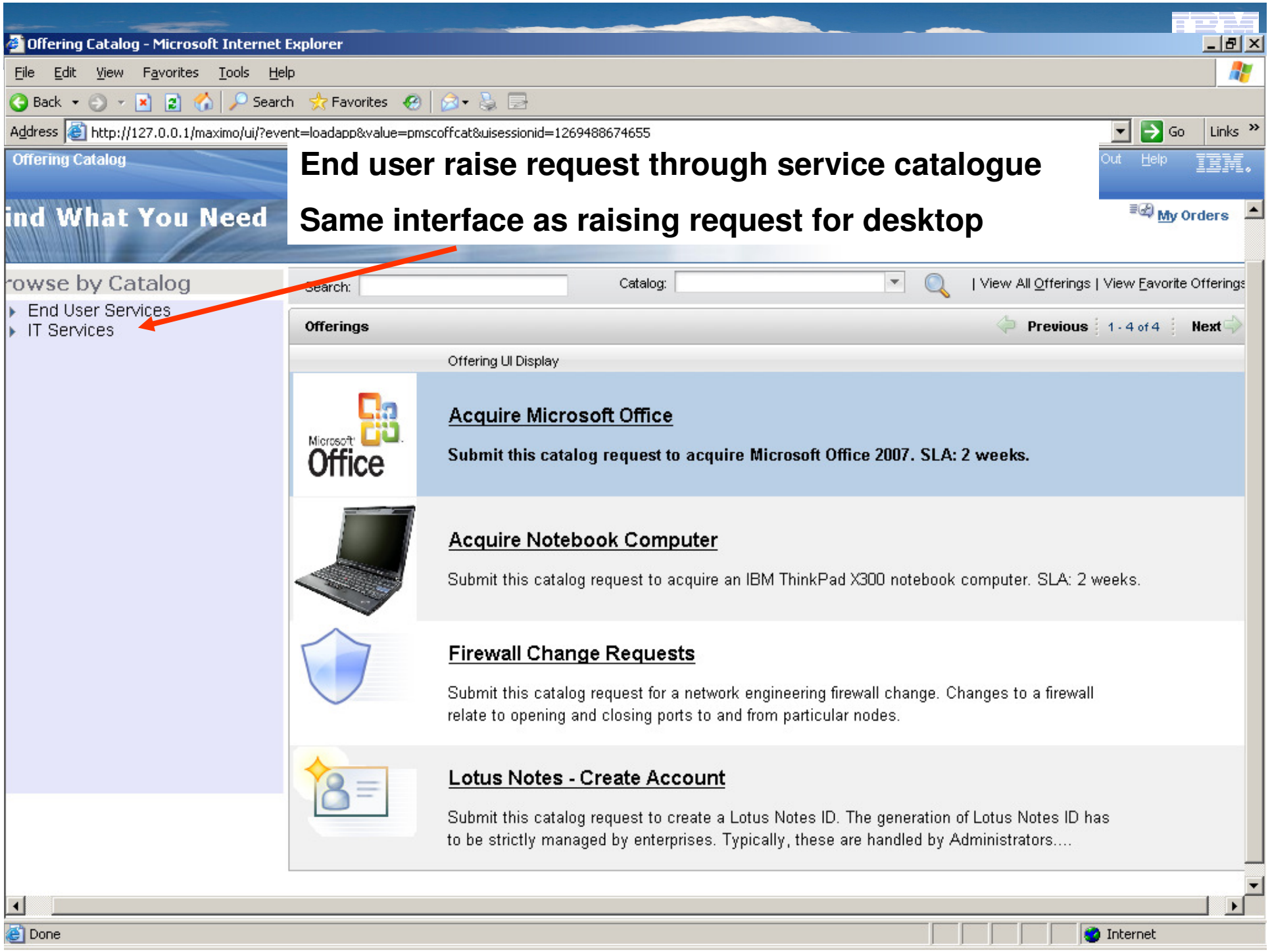
Offering Catalog - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://127.0.0.1/maximo/ui/?event=loadapp&value=pmscoffcat&uisessionid=1269488674655
Go Links
Offering Catalog
ind What You Need
End user raise request through service catalogue
Same interface as raising request for desktop
Out Help
My Orders
rowse by Catalog
End User Services
IT Services
Search:
Catalog:
| View All Offerings | View Favorite Offerings
Offerings
Previous 1 - 4 of 4 Next
Offering UI Display
Acquire Microsoft Office
Submit this catalog request to acquire Microsoft Office 2007. SLA: 2 weeks.
Acquire Notebook Computer
Submit this catalog request to acquire an IBM ThinkPad X300 notebook computer. SLA: 2 weeks.
Firewall Change Requests
Submit this catalog request for a network engineering firewall change. Changes to a firewall relate to opening and closing ports to and from particular nodes.
Lotus Notes - Create Account
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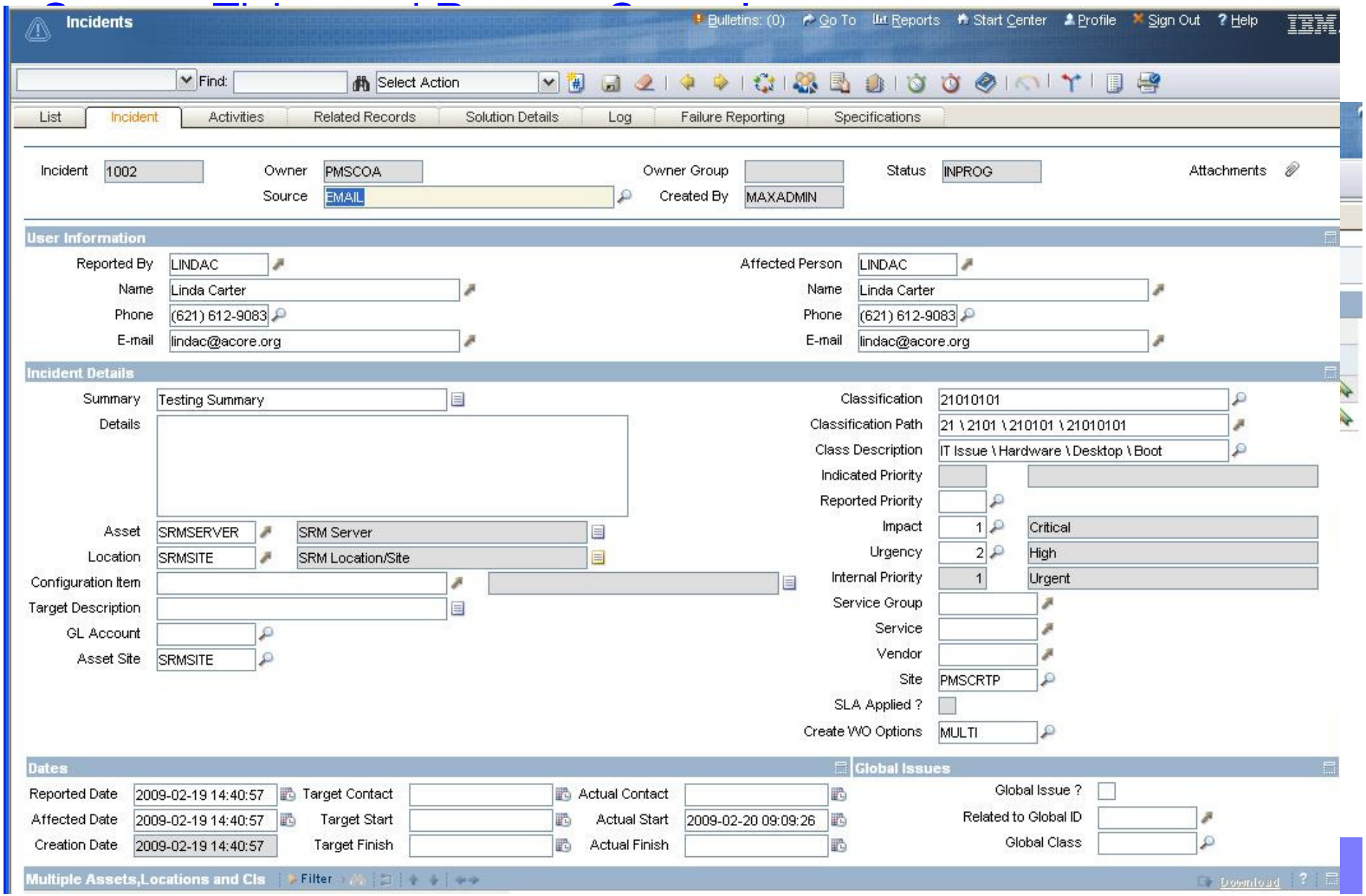
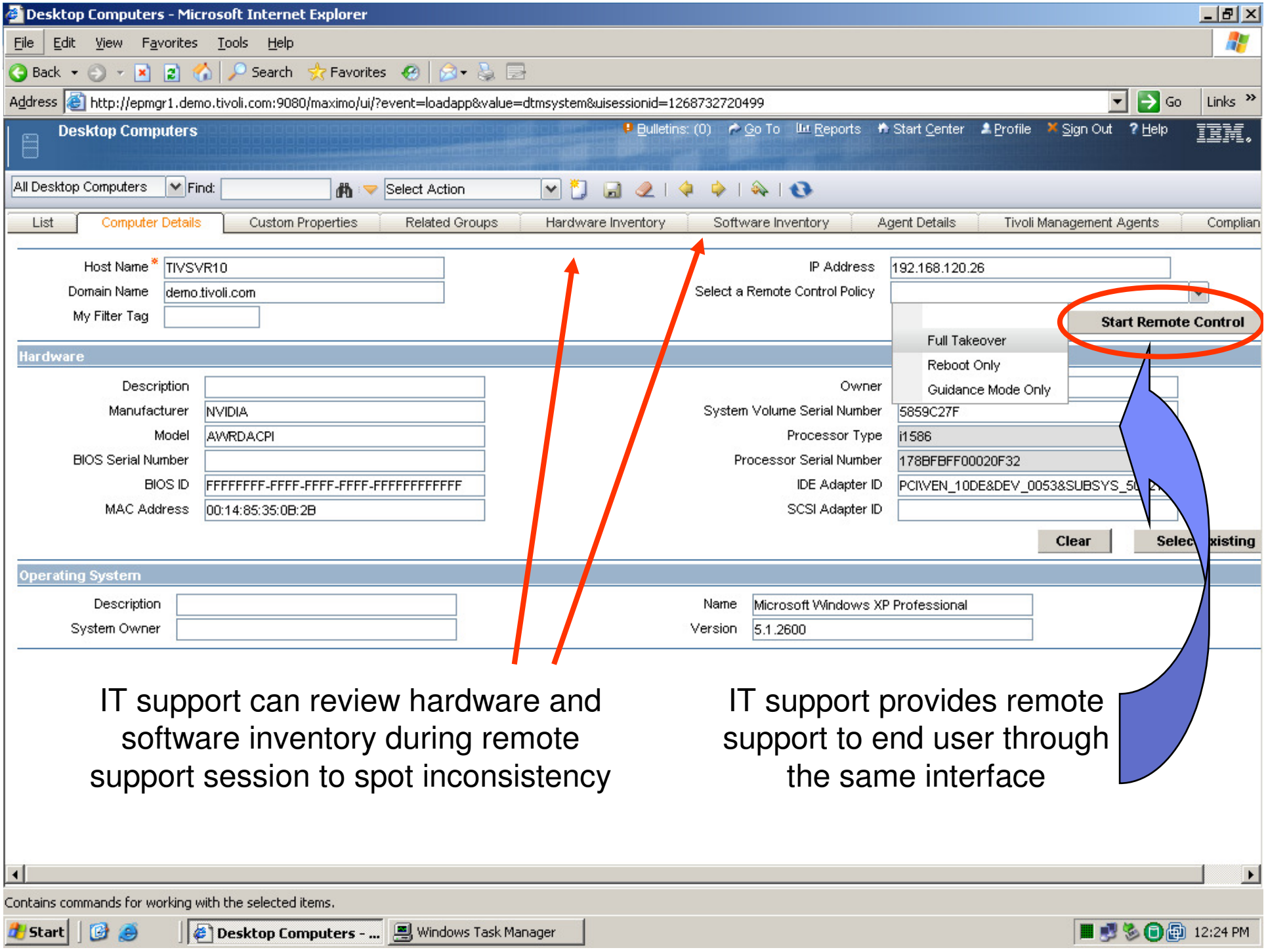
Done
Internet

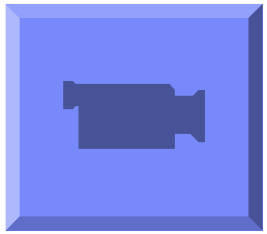

Incidents
Bulletins: (0)
Go To
Reports
Start Center
Profile
Sign Out
Help
Find:
Select Action
List
Incident
Activities
Related Records
Solution Details
Log
Failure Reporting
Specifications
Incident 1002
Owner PMSCOA
Owner Group
Status INPROG
Attachments
Source EMAIL
Created By MAXADMIN
User Information
Reported By LINDAC
Name Linda Carter
Phone (621) 612-9083
E-mail lindac@acore.org
Affected Person LINDAC
Name Linda Carter
Phone (621) 612-9083
E-mail lindac@acore.org
Incident Details
Summary Testing Summary
Details
Asset SRMSERVER SRM Server
Location SRMSITE SRM Location/Site
Configuration Item
Target Description
GL Account
Asset Site SRMSITE
Classification 21010101
Classification Path 21 \ 2101 \ 210101 \ 21010101
Class Description IT Issue \ Hardware \ Desktop \ Boot
Indicated Priority
Reported Priority
Impact 1 Critical
Urgency 2 High
Internal Priority 1 Urgent
Service Group
Service
Vendor
Site PMSCRTP
SLA Applied ?
Create WO Options MULTI
Dates
Reported Date 2009-02-19 14:40:57
Affected Date 2009-02-19 14:40:57
Creation Date 2009-02-19 14:40:57
Target Contact
Target Start
Target Finish
Actual Contact
Actual Start 2009-02-20 09:09:26
Actual Finish
Global Issues
Global Issue ?
Related to Global ID
Global Class
Multiple Assets,Locations and CIs
Filter
Download



IT support can review hardware and software inventory during remote support session to spot inconsistency

IT support provides remote support to end user through the same interface

Remote Control Video Demo



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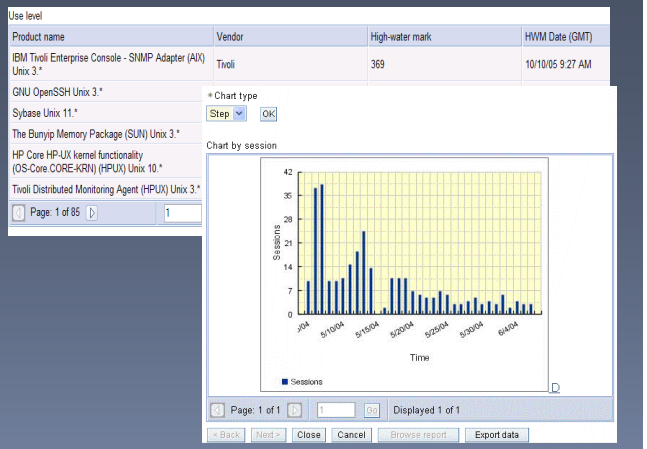
Tivoli Asset Discovery for Distributed

SW Inventory and License Management

Tivoli License Compliance Manager identifies software inventory, measures use activity, and automatically links complex license entitlements to installed inventory and use activity to help manage software costs and license compliance in the distributed environment.

Highlights

- ✓ **Automatically identify distributed software use activity to help proactively manage increasingly complex license compliance.**
- ✓ **Support for virtualized environments including VMWare.**
- ✓ **Identify software inventory with no or low use to help reduce unnecessary license fees and maintenance costs.**
- ✓ **Monitor software use and related growth to plan cost-effectively for future capacity needs.**
- ✓ **Help make funds available for software projects that keep your organization competitive and give business units the value they expect.**
- ✓ **Support for Software Bundles.**
- ✓ **Enables IT to align software spending with business priorities.**



"As one of the world's leading intellectual property rights offices, we must be at the leading edge in how we deal with the intellectual property rights of software providers. It would be stunningly embarrassing if we were found not paying for software that we were using."

–David Allin
Director, Planning, Security and Inventory, EPO

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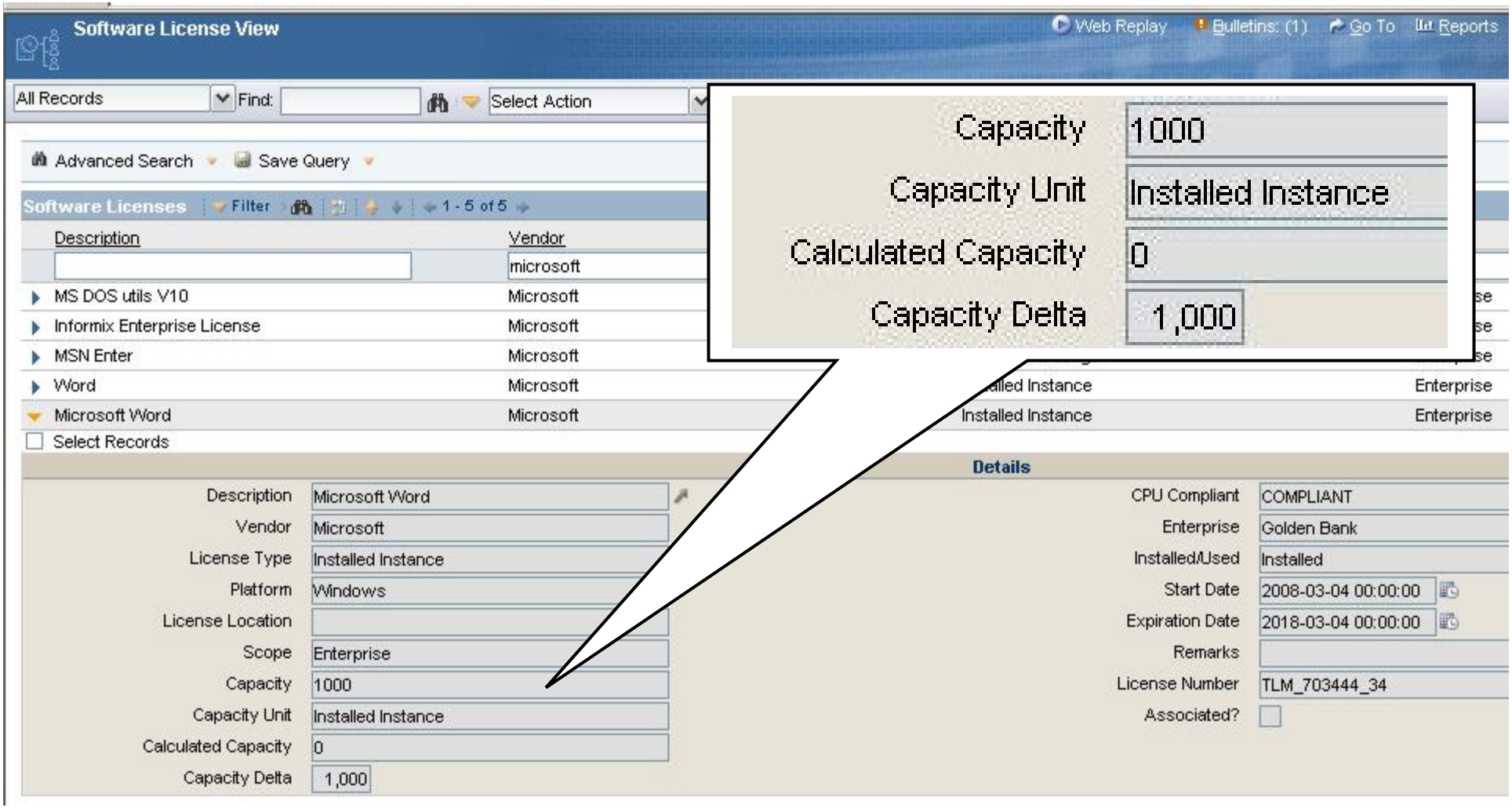
Deploy Asset – Software License View



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IBM Proventia Desktop Endpoint Security

Helping to secure your desktops with multilayered protection

Features

- Uses a patented behavioral analysis method[1] to stop known and new viruses, Trojans, worms and spyware
- Allows administrators to build customized lists of authorized and unauthorized applications
- Helps ensure that clients have updated antivirus software
- Automatically updates and applies security policies to newly discovered vulnerabilities
- Single management console

Providing protection against emerging threats—before they have a negative impact on your business

Potential benefits

- Provides for robust protection at a lower cost
- Blocks attacks through Virus Prevention System (VPS), Buffer-overflow exploit prevention, Vulnerability-centric intrusion prevention, Anti-virus and anti-spyware signatures, Personal firewall, and Application control
- Designed for easy integration with existing corporate infrastructure
- Helps ensure that desktop systems are running protective software before granting access to corporate networks

Why IBM?

- **True preemptive protection—ability to identify and block unknown, evolving attacks**
- **Multiple threat analysis techniques—not just signature-based**
- **Vulnerability-based security provided by research leaders**
- **Effective default protection policy**
- **Hands-free, out-of-the-box protection**
- **Scalable, central management capability**

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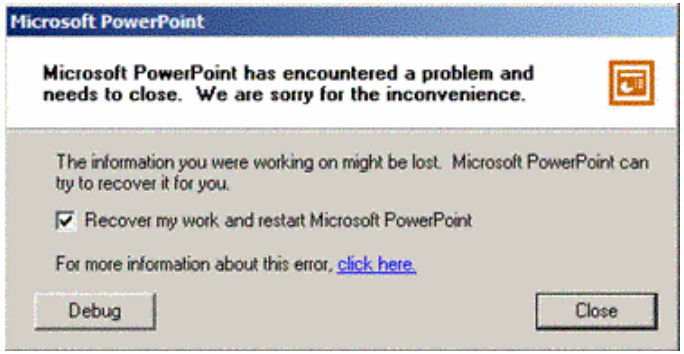
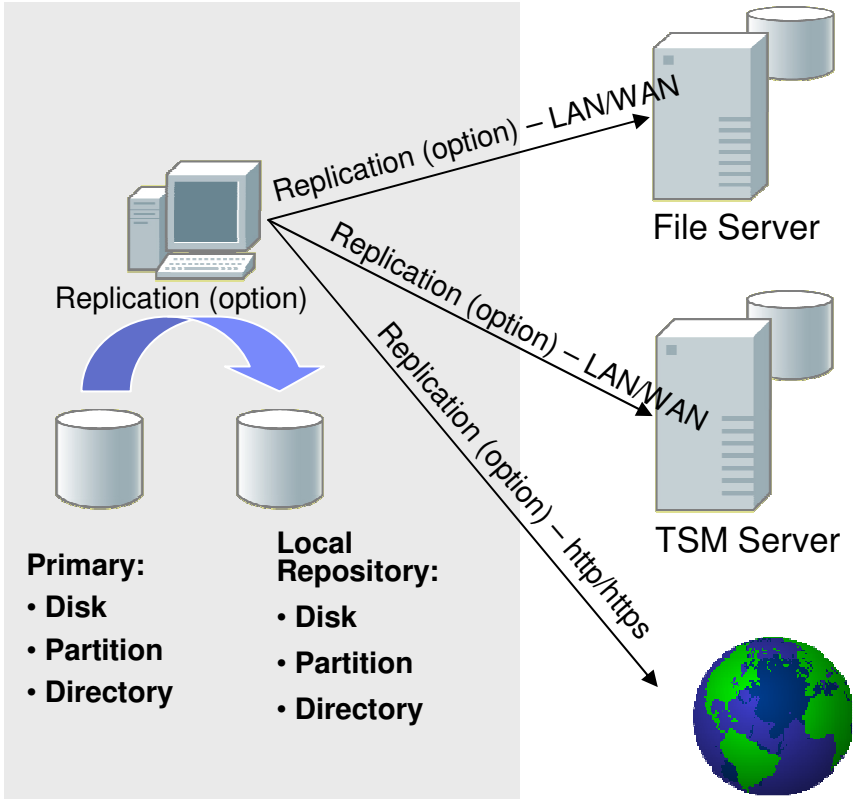
End Point Backup

Tivoli Storage Manager Fastback for Workstations*

- Invisible **real** time file replication
- Point-in-time restore
- Archive retention
- Multiple targets – any server or TSM for off host

- 70+% of corporate data resides on desktops / laptops
- More than 92% are not backed up at all
- End-users everywhere simply do not backup because no transparent solution is available





*Formerly "Tivoli Continuous Data Protection for Files"

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Desktop Lifecycle Management

Retirement

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Desktop Lifecycle Phases

Best Practice

✓ **Identify asset** – identify which asset to retire

✓ **Integrate with accounting** – update accounting records

✓ **Update maintenance record** – update asset maintenance to reflect a

✓ **Issue workflow** - en
out or erased before it i

✓ **Ensure harmful mat
properly disposed**

IBM Approach

➢ Provide for orderly disposition of assets: disposed, auctioned, donated and employee purchase

➢ Issue workflow order for employees to follow

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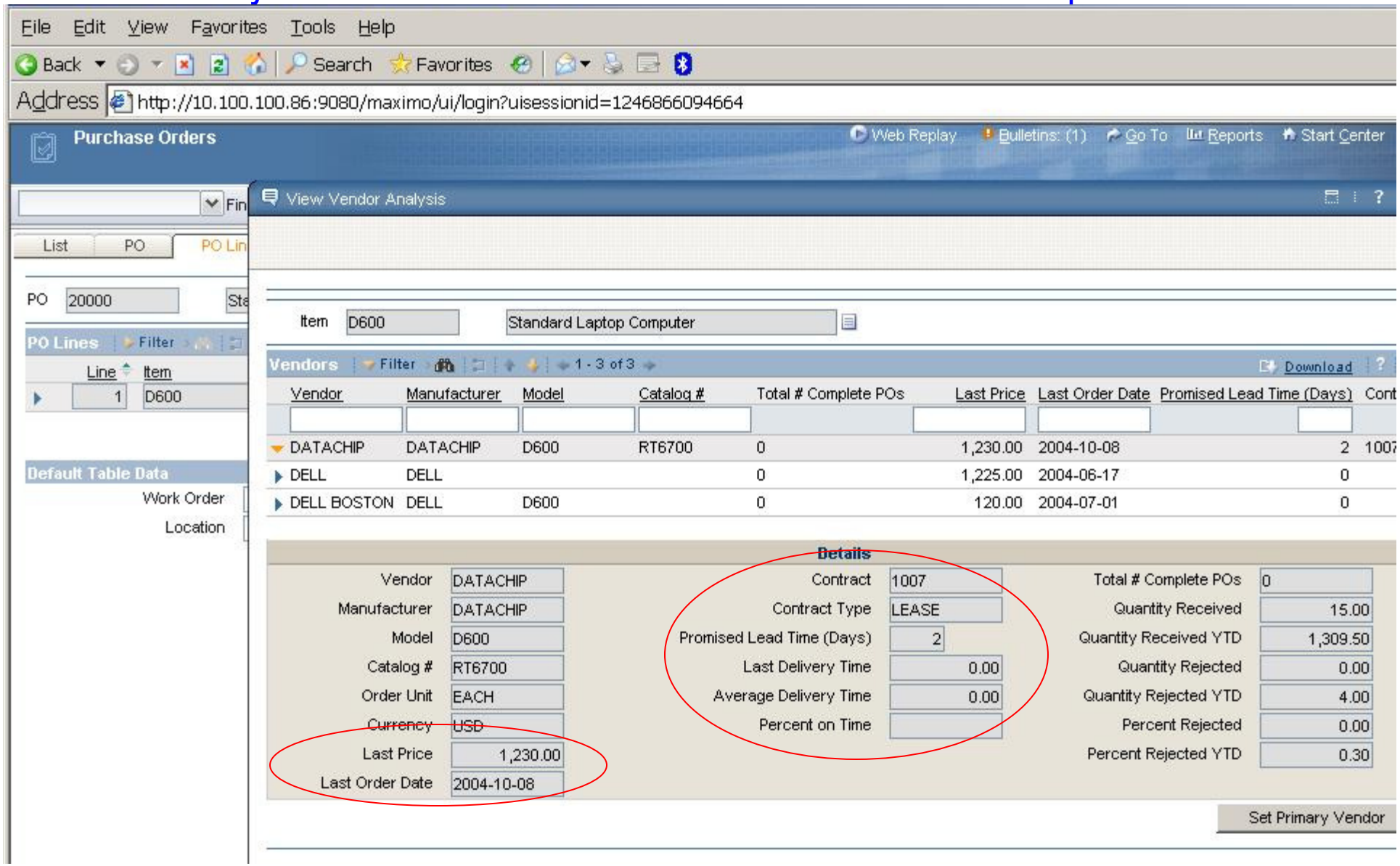
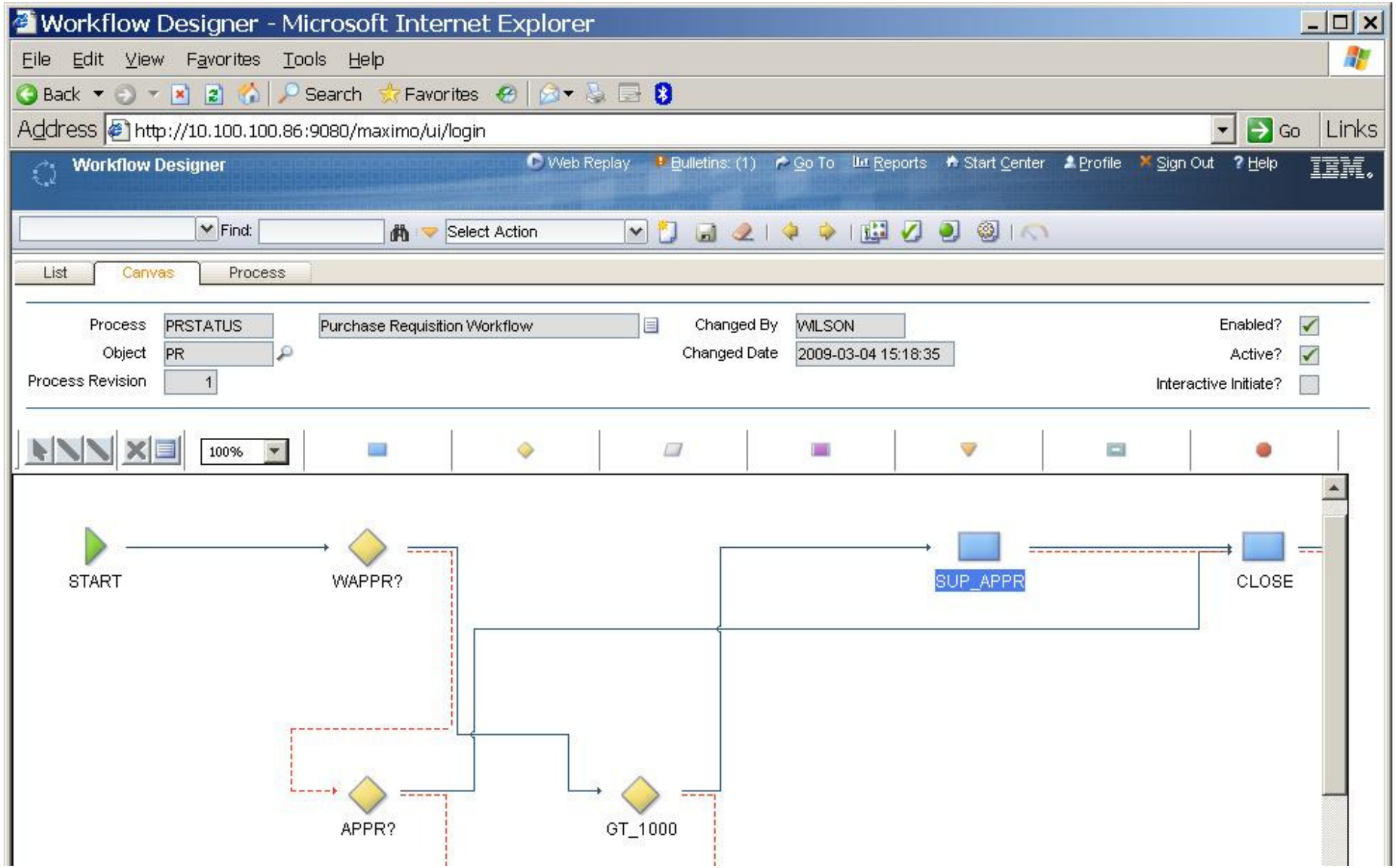
Vendor analysis – should I continue to use this vendor for replacement asset



Workflow Designer for proper approval of disposal



-Issue work order flow for people to follow for disposal

Work order provides steps and sequence to properly dispose device with confidential data and dispose harmful material in the right order for environment protection.

Sequence	Task	Summary	Estimated Duration	Status	Owner	Owner Group
	60	Inspect inpeller for wear	0:10	WAPPR		
	70	Record amperage and voltage with motor oper	0:15	WAPPR		
	90	Inspect main disconnect and all electrical.	0:15	WAPPR		
11	20	Check pump float switch.	0:30	WAPPR		
33	30	Check housing for leaks.	0:10	WAPPR		
39	10	Check pump operation.	0:20	WAPPR		

Task Information

Task *	10 Check pump operation.	Under Flow Control ?		Attachments	
Sequence	39	Flow Action		Inherit Status Changes ?	✓
Status	WAPPR	Suspend Flow Control ?		Accepts Charges ?	✓
Classification		Flow Action Assist ?		Owner	
Classification Description		Launch Entry Name		Owner Group	
				Route	
				Route Stop	

Work Reference Information

Reference WO	T1081	Service Group		Observation	
Location	BR430 Condensate Return Pump- Centrifugal/100GPM.	Service		Inspector	
Asset	11430 Centrifugal Pump 100GPM/60FT HD			Measurement Point	
				Measurement Value	
				Measurement Date	

Scheduling Information

Target Start		Actual Start	
Target Finish		Actual Finish	
Scheduled Start		Estimated Duration *	0:20
Scheduled Finish		Time Remaining	
		Predecessors	70,90

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Desktop Lifecycle Management

Kickstart PC Lifecycle Management

2010-4-1

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IBM view of PC Lifecycle Management involvement areas

Contract Management

- Contract Terms & Conditions
- Notifications
- Software Contracts

Procurement

- Procure based on standards
- Create and route purchase orders
- Use catalogs
- Integrate with ERP systems

Financial Management

- Purchase/Lease Cost Tracking
- Work/Service Cost Tracking
- Usage Accounting
- Total Cost of Ownership

PC Lifecycle Management

License Management

- Full Lifecycle support
- Multiple License types supported
- Audit Ready Reports

Asset Management

- Software Asset Management
- Hardware Asset tracking
- Installs, moves, adds, changes
- Reconciliation/Audit
- Extend beyond IT
  (data center facilities, power, etc.)

Work Management

- Work planning and scheduling
- Skills, labor, and inventory management
- Service plans and cost management

Service Management

- Support service desk with asset configuration data
- Service Impact Management

Audit

- Ensure proper approval is acquired
- Record and report of actions
- Compliance of corporate standard

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Unified interface for different tasks can start at any point !

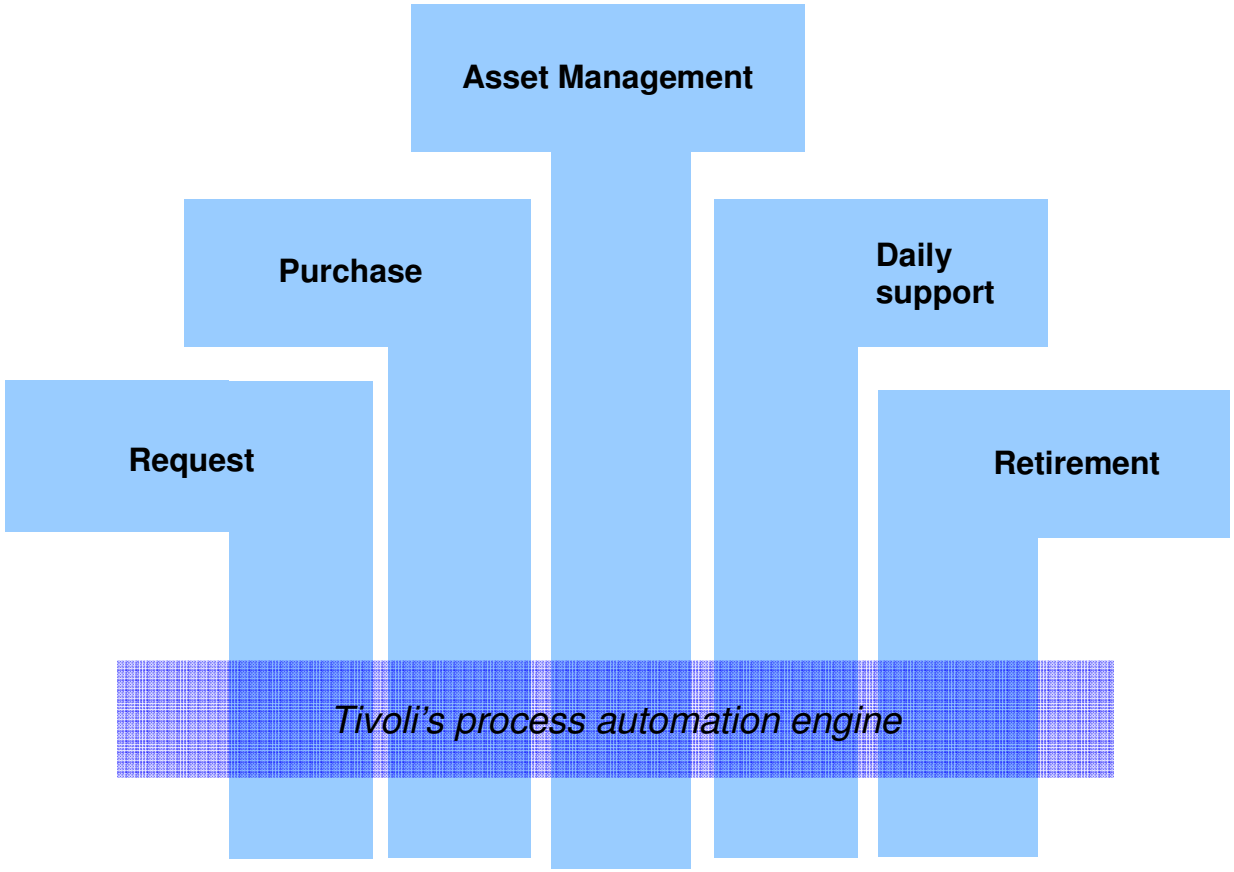
Integrated Platform
An integrated set of solutions represent the full management of data, processes, tooling, workflow automation and people

Common Data Model
The core solutions share a common data subsystem for simple data sharing

Processes that Work Together
The core solutions share a process workflow automation engine

No Rip and Replace
Leverage existing investments in IBM and 3rd party IT management tools

Lower Cost of Ownership
Lower infrastructure and training costs, simple upgrade model



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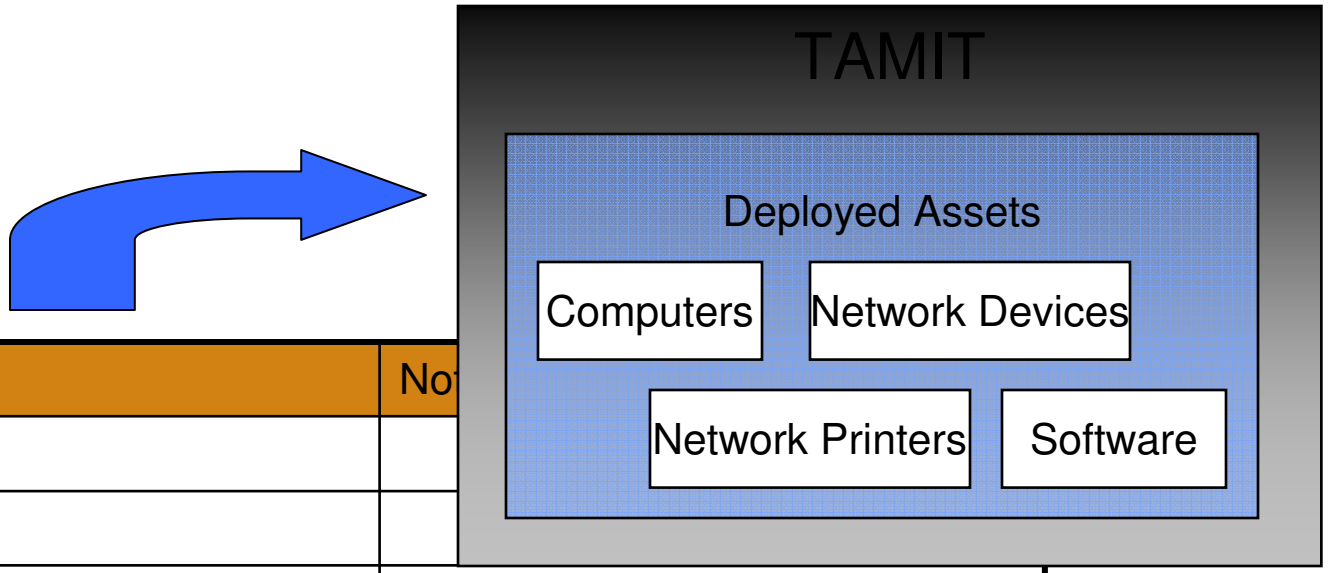
Open and integrate with existing tools



Discovery Tool	Not
Altiris Inventory Solution	
Centennial Discovery	
Maximo Discovery	
Microsoft SMS	
Tivoli Application Dependency Discovery Manager	**Agent-less discovery on server configuration and dependency**
Tivoli Configuration Manager	**Agent-based provisioning**
Tivoli License Compliance Manager	**Agent-based SW discovery**
Tivoli License Compliance Manager for z/OS	
Tivoli Provisioning Manager	**Agent-based provisioning**
Tivoli Network Manager IP Edition	**Agent-less discovery on network devices**

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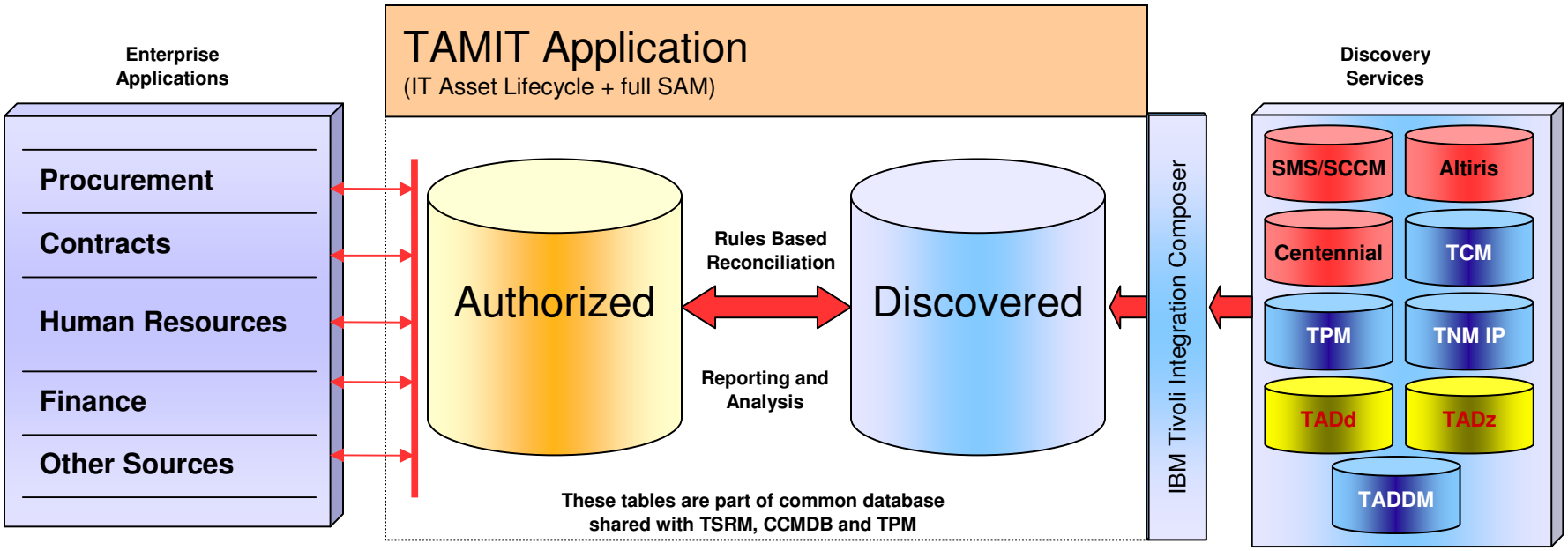
Tivoli Asset Management for IT



Authorized Asset

- Authorized assets is the inventory of record
- The Assets are populated via the procurement process and other business processes
- Hardware is entered as assets
- Software is entered as entitlements
- Attributes include: asset, software licenses, location, features, assigned to, condition monitoring, etc

Out of the Box Reconciliation

- Linkage based on unique attribute(s), like serial number
- Identification of 'authorized' Assets missing in Deployed Asset Inventory
- Identification of Deployed Assets missing in 'authorized' Asset Inventory
- Comparison of attributes/specifications

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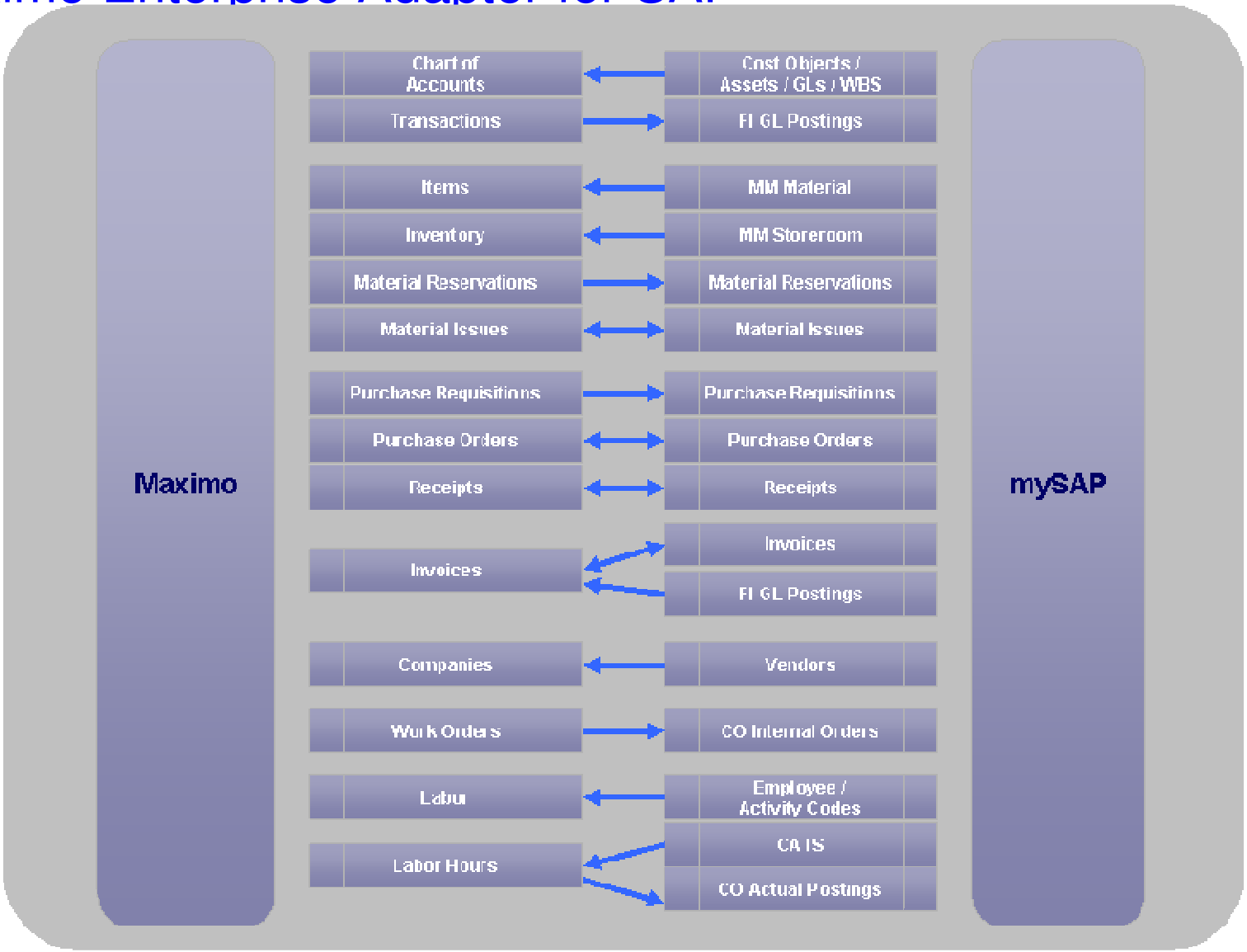
Maximo Enterprise Adapter for SAP



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Demo Scenario

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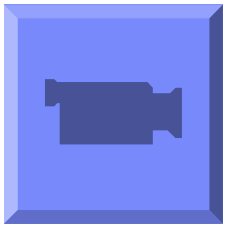
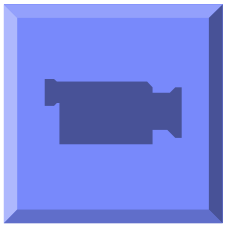
Demo Scenario

- **Computer Compliance**



- **Work Ready**



Compliance important points are:

- IT is able to enforce compliance

Work Ready means the desktop is ready to use by end user as well as comply to IT policy must be made known and with documented approval and management support

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Questions?

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