

IBM System Upgrade Project

<u>Task</u>	<u>Owner</u>	<u>Checklist URL links</u>
PLANNING		
Assign System Upgrade project manager/change manager	Customer	
Plan for Software (SW)		
Identify which current and/or new operating system (OS) supports the proposed hardware (HW)	Customer	http://www-912.ibm.com/e_dir/eServerPrereq.nsf
Inventory SW	Customer	
Identify SW providers	Customer	
Plan for Operating Systems		
AIX		http://publib.boulder.ibm.com/eserver/ http://publib16.boulder.ibm.com/pseries/index.htm
Determine HW requirements	Customer & Seller	
Determine if need to be at maintenance or technology level prior to upgrade of OS or HW	Customer	
Determine IBM products needed	Customer	
Determine level of performance needed	Customer	
Determine load balancing requirements & HW to support	Customer & Seller	
Review Release Notes for new, discontinued, and changed functions	Customer	
Linux		
Determine HW requirements	Customer & Seller	
Determine if need to be at maintenance level prior to upgrade of OS or HW	Customer	
Determine IBM products needed	Customer	
Determine level of performance needed	Customer	
Determine load balancing requirements & HW to support	Customer & Seller	
Review Memo To Users for new, discontinued, and changed functions	Customer	
i5/OS		http://publib.boulder.ibm.com/series/
Determine HW requirements	Customer & Seller	
Determine if any i5/OS PTFs required prior to installation of OS or HW	Customer	
Determine IBM products needed	Customer	
Determine level of performance needed	Customer	
Determine load balancing requirements & HW to support	Customer & Seller	
Review Memo To Users for new, discontinued, and changed functions	Customer	
Windows hosted by i5/OS in an Integrated Operating Environment		
Determine HW requirements	Customer & Seller	
Determine new, discontinued, and changed function	Customer	
Plan for Middleware and Application Software for each operating system (LPAR)		
IBM Software		
Determine SW and HW required and their pre-reqs	Customer & Seller	
Determine supported releases of firmware (LIC, CUM, and Driver levels for IOAs) for each OS	Customer	
Determine supported releases of software products (middleware, LPPs) for each OS	Customer	
Determine level of performance needed	Customer	
Determine load balancing requirements & HW to support	Customer & Seller	
Non-IBM Software		
Determine products supported on OS release level	Customer	
Determine supported releases of HW & SW products (ISV and customer code dependencies between)	Customer	
Determine new SW and HW required and its co-reqs	Customer & Seller	
Determine level of performance needed	Customer	
Determine load balancing requirements & HW to support	Customer & Seller	
Post Task checklist		http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/software.htm
Prepare SW test plan	Customer	
Prepare SW Installation Plan	Customer	
Plan for attached clients		
Application client code requirements	Customer	
OS client code requirements	Customer	
Plan for EDI (Electronic Data Interchange)		
Data input requirements	Customer	
Data export requirements	Customer	
Plan for availability		
Determine level of availability needed	Customer	
Determine OS availability requirements per OS		
Backup plans: both system and data	Customer	

OS redundancy plans	Customer	
Application redundancy plans per OS	Customer	
System redundancy plans		
Disk protection	Customer	
Logical partition redundancy	Customer	
Power redundancy	Customer	
HMC redundancy	Customer	
FSP redundancy	Customer	
Network/Communication redundancy	Customer	
Determine clustering requirements	Customer	
Determine HW required for availability/clustering requirements	Customer & Seller	
Availability Task Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/planavail.htm
Plan for Capacity		
Consolidate performance requirements and consolidate into system order	Customer & Seller	
Capacity Task Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/plancod.htm
Plan for logical partitions		
Determine if Services contract needed for logical partition design	Customer	
Investigate benefits of customer specified placement of hardware (Feature Codes 8453/0453/0454)	Customer	
Run System Planning Tool (SPT) or LPAR Validation Tool (LVT)	Customer	http://www-03.ibm.com/servers/eserver/support/tools/systemplanningtool/
Determine if Services contract needed for logical partition validation	Customer	
Determine if Services contract needed for rearrangement of existing hardware	Customer	
Determine resources needed per logical partition	Customer & Seller	
Determine requirements for creation and management of partitions (e.g. pSystem micro partitions)	Customer	
Logical partition task checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/planlpar.htm
Determine OnDemand requirements		
Determine logical partition resource sharing	Customer	
Determine temporary, permanent, trial, etc. capacity needed and how much	Customer	
Determine impact on HW configuration	Customer & Seller	
Check for LPP license requirements	Customer	
OnDemand checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/ipha2/codprep.htm
Determine system network/communication requirements		
Understand communication requirements	Customer	
Understand network topology	Customer	
Understand network cabling requirements	Customer	
Understand network availability implications	Customer	
Determine impact on HW configuration	Customer & Seller	
Network requirement checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/networkcomm.htm
Plan for Hardware		
Pre-Task Checklist		
Get current configuration	Customer	
Gather previous planning requirements	Customer	
Determine Model/Processor required based on capacity and throughput	Customer & Seller	
Determine Firmware Requirements	Customer	
Determine firmware level required	Customer	
Understand all firmware needed (system, HMC, Power, FSP)	Customer	
Understand if disruptive or concurrent installation	Customer	
Determine how to handle HW/configurations no longer supported		
Determine HW no longer supported (ie, SPD I/O)	Customer & Seller	
Determine HW Migration considerations (ie, Max number of disks in array) - ie, RAID set size	Customer & Seller	
Determine remove/replace process (ie, prior to Process upgrade or after, prior to OS install or after)	Customer & Seller	
Determine I/O required		
Plan for consoles:		
Understand existing consoles	Customer	
Hardware Console		
Advanced System Management Interface	Customer & Seller	
Hardware Management Console (HMC)		
Plan for HMC redundancy	Customer	
Plan HMC network requirements to include HMC and FSP redundancy	Customer	
Plan for remote control via WebSM through HMC connection	Customer	

Virtual Partition Manager (system i)	Customer
IBM Virtualization Manager (system p)	Customer
i5/OS System Console	
5250 Console session via Hardware Management Console (HMC)	Customer & Seller
Telnet	Customer & Seller
Operations Console LAN Attach	Customer & Seller
Operations Console Direct Attach	Customer & Seller
Twinaxial	Customer & Seller
Thin Console	Customer & Seller
Determine redundant console requirements	Customer & Seller
AIX System Console	
Virtual Terminal Console Session via Hardware Management Console (HMC) - (Virtual Terminal er	Customer & Seller
Network based computer	
WebSM if set up	Customer & Seller
Telnet - VT Emulation or Xwindows	Customer & Seller
Graphics display per logical partition	Customer & Seller
Linux	
Linux Console session via Hardware Management Console (HMC)	Customer & Seller
Network based computer	
WebSM	Customer & Seller
Determine Remote Console Support	Customer & Seller
Plan for console redundancy	Customer & Seller
Determine final console plans	Customer
Plan for Disk	
Understand minimum drive requirement	Customer & Seller
Determine Disk required for OS and application	Customer & Seller
Determine Disk I/O needed for performance	Customer & Seller
Plan for virtual I/O	Customer & Seller
Plan for sharing Disk towers/drawers	Customer & Seller
Review OS requirements (load source size and allocation of additional space, etc.)	Customer & Seller
Understand availability implications on Disk configuration	Customer & Seller
Internal (Either Feature code or IBM Machine Type Model not SAN)	
Plan for Towers (eg, Rack)	Customer & Seller
I/O drawer requirements	Customer & Seller
Protection requirements (RAID 5, RAID 6, mirroring, etc.)	Customer & Seller
IOA/IOP requirements	Customer & Seller
Understand implications of load source disk movement	Customer & Seller
External (SAN)	
Protection requirements	Customer & Seller
IOA/IOP requirements	Customer & Seller
Plan for load source (internal/external) - Redundant paths with remote load source mirroring	Customer & Seller
Plan for bandwidth	Customer & Seller
Plan for Media (tape/optical/dvd/diskettes)	
Understand new vs existing media format compatibility	Customer & Seller
Understand implications of shared resources	Customer & Seller
Understand External device requirements	Customer & Seller
Understand Internal device requirements	Customer & Seller
Plan for Printers	
Understand Network printers requirements	Customer
Understand client printers requirements	Customer
Understand direct attach printers requirements	Customer
Understand printer sharing implications	Customer
Plan for Communications	
VPN requirements	Customer
Internet requirements	Customer
Intranet requirements	Customer
Call home requirements	Customer
Interoffice requirements	Customer
Intraoffice requirements	Customer

ftp://ftp.software.ibm.com/common/ssi/rep_who/n/ISW00530USEN/ISW00530USEN.PDF

Type of connections	Customer	
Additional Planning considerations		
Determine & understand implications of single points of failure	Customer & Seller	
Ensure all unsupported hardware situations have been handled	Customer & Seller	
Plan for additional customer requirements	Customer & Seller	
Determine if HW has co-req HW/SW requirements	Customer & Seller	
Determine physical requirements		
Plan for power		
Uninterruptible Power Supply (UPS)	Customer & Seller	
Dual Power	Customer & Seller	
Electrical requirements (Power & recepticals)	Customer & Seller	
Determine space requirements	Customer	
Determine cabling and networking requirements	Customer	
Understand cable lengths needed	Customer	
Understand cooling requirements	Customer	
Understand floor plan	Customer	
Understand weight, height and width implications	Customer	
Understand personnel required for hardware placement	Customer	
Understand intra-building route considerations	Customer	
Consider natural disaster provisions (system tie down for earthquake, etc.)	Customer	
Plan for Hardware Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/hardware.htm
Determine test methodology		
Determine Acceptance criteria	Customer	
Assign test resource	Customer	
Develop test plan	Customer	
Develop Test schedule	Customer	
Plan for IBM Services		
Determine Services needed (ie, installation, migration, education, hardware rearrangement, etc)	Customer & Seller	
Determine level of Support needed (HW/SW)	Customer & Seller	
IBM Services Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/planservice.htm
Plan for Service & Support		
Pre-Task Checklist	Customer	
Understand how to access IBM Service Support		
Hardware Support	Customer & Seller	
Software Support	Customer & Seller	
Determine how to access IBM Service electronically (i.e. IBM Service Agent)	Customer	
Understand how to retrieve fixes per OS and Firmware installed	Customer & Seller	
IBM Support Services Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphae_web/plansupport.htm
ORDER		
Configure system		
ISV SW order	Seller	
IBM SW Order via passport	Seller	
IBM SW Order via eConfig	Seller	
IBM HW Order via eConfig using SPT	Seller	
Config Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphbg/configorder.htm
Validate your order		
Solution Assurance - pre-sale	Customer & Seller	
Conduct any pre-order validation check with seller	Customer & Seller	
Validate Order Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphbg/validateorder.htm
Validate your upgrade project plan		
Ensure all tasks are defined in upgrade plan	Customer & Seller	
Determine timeline for upgrade & schedule	IBM, Seller, & Customer	
Understand parts to be returned to IBM	Customer & Seller	
Determine upgrade roles & responsibilities		
Understand IBM roles & responsibilities	Customer & Seller	
Understand Reseller roles & responsibilities	Customer & Seller	
Understand Customer Preparation & Setup roles & responsibilities	Customer & Seller	
Understand billable/potentially billable items	Customer & Seller	
Prepare contact list for upgrade & availability	Customer & Seller	

Place Order	Prepare contingency plans	Customer & Seller	
	Sign contact Purchase Order	Customer	
	Submit order via Advanced Administration Systems (AAS) and Passport	Seller	
	Perform Order check	Seller	
	Reconfirm parts to be returned to IBM	Customer & Seller	
	Advise customer which parts are to be returned	Seller	
	Place Order Checklist	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphbg/placeorder.htm
PREPARATION			
	Confirm scheduling of upgrade with customer, IBM and any third parties involved	Customer	
	Prepare environment		
	Install HW pre-requisites	IBM & Customer	
	Remove unsupported HW	IBM & Customer	
	Assign all migrating HW to a logical partition	Customer	
	Install SW pre-requisites	Customer	
	Install FW pre-requisites	Customer	
	Clean up disk storage	Customer	
	Prepare console	Customer	
	Back up data	Customer	
	Validate post-installation review scheduled	Customer	
	Preparation Checklists	Customer	http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphbg/preparationtasks.htm
PRE-INSTALL			
	Have appropriate system information available		
	Have record of current Hardware and Software configuration including console	Customer	
	Have record of proposed Hardware and Software configuration including console	Customer	
	Have LVT/SPT printed output available	Customer	
	Copy existing LPAR configuration to diskette and print out (iSeries 8xx)	Customer	
	Have copy of exported SPT	Customer	
	Prepare information to be provided to authorized service provider	Customer	
	Ensure SW keys available	Customer	
	Ensure alternate IPL media is available and correct type	Customer	
	Understand system requirements for upgrade (set system values, console etc)	Customer	
	Prepare location for upgrade		
	Rearrange existing hardware	Customer	
	Ensure cables are labeled	Customer	
	Lay new external cables	Customer	
	Ensure network or phone connection available for IBM Service	Customer	
	Validate all checklists complete	Customer	
	Review Project & Contingency plans	Customer	
INSTALL			
	Ensure WCII readiness checklist complete	Customer	
	SW Install		
	Install OS and related LPPs and Appl SW (repeat per each logical partition)	Customer	
	Install Fixes per each OS/SW product installed	Customer	
	Back up System for each logical partition installed	Customer	
	Back up data as needed	Customer	
	FW Install		
	Install required level of system, HMC, and bulk power firmware	Customer	
	HW Install		
	Inventory Miscellaneous Equipment Specification contents	IBM & Customer	
	Prepare system for upgrade (ie, System values set, system powered down system, etc)	Customer	
	Validate all checklists & hardware complete and all information available and provided to CE,	IBM & Customer	
	Transfer machine to authorized service provider	Customer	
	Set up Hardware Management Console (HMC)	IBM & Customer	
	Hardware installed by authorized service provider	IBM	
	Reconnect existing cables & Connect new cables	IBM	
	IPL system & verification that hardware reports	IBM	
	Gather Return parts & Ship back to IBM	IBM	
	Post-install checklist & authorized service provider returns machine to customer	IBM	

Customer accepts machine back from authorized service provider	Customer
Post-Task Checklist	Customer
POST CUSTOMER ACCEPTANCE OF MACHINE	
Finalize System Configuration	
Configure Hardware Management Console (HMC)	
Migrate existing configuration	Customer
Modify configuration to match system config	Customer
Re-arrange hardware as needed for logical partitions	Customer
Set up/modify logical partitions	Customer
Migrate applications/data to system	Customer
Save System per logical partition including all firmware	Customer
Test system	
Test peripherals	Customer
Test networks	Customer
Test applications	Customer
Test for functionality	Customer
Test for performance	Customer
User acceptance testing	Customer
Save System per logical partition and all firmware	Customer
Return system into production	Customer
Project closure (lessons learned etc)	Customer
Provide feedback to IBM	Customer

<http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/index.jsp?topic=/iphbg/postinstallationtasks.htm>