

Saving US \$ 300 with PCmover in new Windows PC Deployments

Identifying, Understanding and Reducing Some Hidden Costs in PC Migration

The forthcoming migration cycle to a new operating system ignites a new discussion about the deployment cost. Long have we abandoned the caveat that deployment costs are simply a hard- and software expense, moreover the implementation of PC deployment is a complicated paradigm requiring holistic scrutiny to costs associated. Unfortunately there is no industry consensus or model to calculate the costs, often leaving corporate or governmental organization the inability to track hidden soft costs, which are unrelated to initial budget proposals.

A satisfactory model is proposed by Perry and O'Donnell in a Dell sponsored IDC White Paper.⁴ They identify different methods of PC deployment: (1) Basic; (2) Standardized; (3) Rationalized; (4) Dynamic.⁵ The methods represent a range from roughly no-IT involvement to full IT management with category 2 being the most common, illustrating 62% of the 200 enterprises interviewed, having an average of 7,000 PC. According to this methodology, work blocks are assigned hence generating a PC deployment grid perpetuating specific assignments and different tasks.

DELL PC DEPLOYMENT MODEL				
	BASIC No documented and repeated process	STANDARDIZED Documented manual process	RATIONALIZED Documented and mostly automated	DYNAMIC Fully automated, end user could perform
Deployment management	PCs installed individually, no set process	Project managed, standard process and tools	Process managed centrally using quality metrics and knowledge management	Process fully managed using planning and tracking system
Staging and logistics	Multiple shipping legs	Central staging with multiple locations	Just-in-time delivery for on-campus worker; staging for remote users	Just-in-time ordering for all PCs from OEM to user
Imaging	Departments may delete the standard image upon arrival	Standard core image, scheduled updates	Standard cross-platform image	Standard cross-platform image with department overlays
Applications	Load from CD	Technician installs from network	Automated electronic software distribution system	User self installs
User state migration	Files copied and settings moved manually	Tool moves files, settings moved manually	Tool moves files and most settings, some manual configuration	Tool moves all files and settings automatically
Day after user support	No proactive process	Onsite technician	Less onsite support; more aids, helpdesk, on-call support	Remote issue resolution from command center online monitoring
DEPLOYMENT COST PER PC	\$678	\$522	\$426	\$260

"Dell PC Deployment Optimization Model," an IDC white paper sponsored by Dell, January 2007.

⁴ Perry, Randy and O'Donnell: Dell PC Deployment Optimization Model, January 2007.

⁵ Figure 1, page 3.

The costs associated with the deployment model are often overlooked and undervalued. Albeit that the IDC research was published in 2007, the costs have since increased, and the white paper fails to identify hidden costs that require compulsory acknowledgement.

Let's focus on the categories "applications" and "user state migrations". Each of these categories account for 15% of the total costs, ideally saving the corporation \$33 resp. \$48 dollars.⁶ In the case of applications the assumptions are completely false and misleading. The savings should reflect the change from the install method, "Load from CD" to "User Self Install". This would be correct, if the objective is to off load costs from the IT department to the individual end user. However, the corporate cost will increase respectively as the user will require more time, making more mistakes while demanding additional internal support thus increasing the overall operating costs.

Secondly, the lingering question raised, is if this model accounts for any application that resides on old desktops and need migration to new ones. While some support the new image, there will be a good amount of individual, departmental or functional applications that are needed to be re-installed. The model suggests this be done by hand and procedural this drives the costs up dramatically. Often trumping how many applications need to be installed. This can be time consuming and the model has to allow for the adjustment and number of applications to be moved.

In regards to "User State Migration" that corresponds to the individualization of a user's PC, the model suggests that using a tool reduces the costs of manually re-applying the settings, and moving the data to the new PC. However, cost reductions can only be accomplished if an off-the-shelf tool is present, and does not require any customization. Non-automated tools, like Microsoft's User State Migration Tool, require expensive customization for every type of OS and application settings; often executed by a major consultant firm. Aforementioned, moving data and settings manually can be expensive and a derivative of the amount of data and settings present.

Using an off-the-shelf tool like Laplink PCmover can reduce operating costs in both the application and user state migration buckets. It allows users to use any kind of transport (network, cable, and disc) to transfer applications from the old PC to the new PC, including settings and copies data to the new intended location. The user or the IT tech specialist can select which application, data directories or settings will migrate, while determining which users or drives will be correspondent to the users new PC. Since PCmover can independently move operating systems, it avoids migration with any Windows components or hardware related settings and drivers.

Looking at the two buckets and implying the use of an off-the-shelf tool like PCmover we've created a simple model that directly corresponds with larger facsimiles created by IDC/Dell or Gartner⁷. It should recognize the high number of settings, applications and data files on the source (old) PC, which are necessary for the user's every day consumption. Naturally the higher standardization and possibility of the PC being locked by IT technicians reduce the cost of migrating applications, data and settings.

⁶ Table 3 - 4

⁷ Ronni Colville, Michael Silver, and Kris Brittain; Windows Migration: Desktop Management and CSD Effects; Gartner Group, Inc.; Research Note: DF-14-7121; November 5, 2001

However, albeit the cases, where corporate IT departments have locked the individual's PC, that data is stored on the server, eliminating individual installations or settings. The corporation in most cases still have a mixed work environment where certain departments, remote and foreign locations including affiliated users were excluded from this supervised IT-managed scenario. Though extensive research is unavailable on the percentage of mixed environments existing, it is significant variable to consider for any project.

We propose a simple model to verify savings for the aforementioned buckets which can be adjusted by the IT staff in correspondence to their respective organizations and environments. The data is derived from interviews with various customers in both corporate and government landscapes.

It is important to note that both IT staff and PC down time enter the calculations. In examples where service repairs are conducted outside office hours, the hourly compensation need be adjusted accordingly.

It is certainly a simplistic model, where the number of applications, settings and data volume, added to staff costs, and down time result in a cost model. Still, when isolated the cost model used by IDC/Dell dramatically undermines and under illustrates the real costs, neglecting hidden costs and offering no plausible solution that significantly reduces the costs of the PC deployment.

The PC deployment costs models go beyond the interest of the IT department. The real costs are associated with employee down time, wasted company resources configuring PCs, installing applications, and the demands of rising subsequent support costs. Often these soft costs are not identified nor realized by the management when making decision on how to effectively migrate.

It is fair to say that no matter what the costs are, PC deployment and re-deployment will continue as burgeoning technology continues and advancements are made. Management however, can save large amounts of money and resources, in the user state migration sector or individualization of a new PC, which represent more than 30% of total deployment costs, by using a proven off-the-shelf tool like PCmover.

Calculate time for a normal migration			
	Amount	Time Per Unit	Total (minutes)
Migration Set Up (minutes)	20	1	20
Data in GB	20	3	60
Applications	10	15	150
Unique Settings	30	1	30
After Migration Support (minutes)	20	1	20
Total Migration Time			280
Calculate cost of the migration			
Setup (hours)	4.67		
Down time (hours)	3		
Hourly rate (dollars)	50		
Total Migration Cost (dollars)	383.33		
Subtract cost of PCmover			
PCmover install (hours)	0.2		
Migration Config (hours)	0.4		
Software Cost (dollars)	25		
Total Cost (dollars)	55	net savings:	\$328.33