WinINSTALL LMS Suite
A Look at ROI for Bottom Line Savings with Total PC Lifecycle Management

OVERVIEW

Managing the total lifecycle of the PC environment in an automated approach can provide many savings of time and cost over an approach that may not only use several products to accomplish total lifecycle management but may also use technologies that require constant management. Some of these that we will address in this document include the cost of imaging for operating system deployment, the lack of real automation of PC hardware refresh, and finally the costs associated with using several tools that are not integrated and require a heavy hardware platform to accomplish the daily task of managing the PC environment.

Our data is based on some general information that has been compiled by both Gartner Group and IDC but may not always meet the specific data that exists in your corporate environment. While this is true, the industry has often agreed on these numbers as good averages to consider.

THE COST OF IMAGING TODAY

"Most companies spend too much time and money deploying new PCs. Tools are available to help organizations reduce deployment costs, but lots of process is required to get to the point where deployment can be fully automated."
Mike Silver, December 5, 2005 – Research Note Saving Money on PC Deployment

There are three problems that add to the cost of managing imaging as a way to install operating systems on PCs. First of all,m the plethora of patches released by Microsoft and other vendors today make imaging fluid for IT. Each time new patches are released the image becomes obsolete. At some point the image must be rebuilt to include new patches. That new image not only must be rebuilt but also must be tested. Here are some metrics that are used by analysts on the rebuilding and testing of an image.

A single new image takes approximately one day to build correctly.

A single new image takes approximately two days to test appropriately

Let's assume that an organization may rebuild their image quarterly

Build=1 day plus test of 2 days = 3 days

3 days X 4 times per year = 12 business days to rebuild and test a single image

Most organizations also are faced with multiple images to support all of the disparate hardware platforms in the environment. This is due to the many different drivers that are required for all the platforms. So if your organization had 3 images as an example then the number of days grows exponentially.

Image 1 = 3 days X 3 images = 9 days of building and testing the multiple images

9 days X 4 times per year = 36 business days to rebuild and test multiple images

WinINSTALL LMS does not require any imaging. In fact we believe that our Client Reset Template process is a complete alternative to imaging. WinINSTALL LMS is the only solution today that first of all does not use or require imaging and is also the only solution with a complete automated Client Reset Template process that uses a DOS-FREE PXE boot environment, also unique to this industry. Our time to build and test our Client Reset Template is a matter of minutes and hours rather than days and weeks.

The WinINSTALL LMS Client Reset Template also can include an unlimited number of hardware drivers allowing intelligent driver installation and eliminating the need to use multiple templates to support all the different hardware platforms in your organization.

As an added part of the solution Client Reset integrates the slipstreaming of patches directly into the operating system installation which means the template does not need to be rebuilt to include the latest patches. Again, a bottom-line savings of time and cost.

It is important to note that our operating system installation uses a true bare-metal install of the operating system to assure the cleanest install of the operating system without sacrificing a great deal of speed. This also adds the integration of dynamic software distribution to automatically load the appropriate software per user.

Finally imaging cannot personalize the install of the operating system for the user. The PC personality is different for each user. This includes all the settings, preferences, and options of both the operating system and the applications. Imaging does not take into account the users configuration of their internet browser, Outlook settings, mapped drives, dialup network settings as examples. WinINSTALL LMS can automatically restore the personality after the operating system and applications have been installed providing a user with the same look and feel as they had before which can often lead to lowering the number of visits that technicians have to make to PCs to resolve software problems.

All in all, this can justify the use of WinINSTALL LMS and show a return on your investment in a very short period of time.

It is important to note that nearly all products today use imaging as their means of installing operating systems. Microsoft SCCM uses WinPE to boot to an image based WDS server and process. This means an image must be managed.

Altiris uses its own imaging technology. They have the capability of using a single image but the time to rebuild that image and test it with all drivers grows to a larger number of days for building and testing the image which adds to the time and cost.

Symantec Ghost uses its image process but requires multiple images to support multiple hardware platforms.

Landesk uses an image coupled with DOS drivers to boot a machine which also adds time and cost.

THE AUTOMATION OF PC HARDWARE REFRESH

Introducing new PCs for users has long been a process problem for IT organizations. Few products have addressed the total automation of replacing a PC for a user. In most situations this is a brute force effort that uses a back office approach with scripts to perform some of the work and potentially several tools used together for other parts of the work. In nearly every occasion there are multiple trips to the desktop in order to provide the user with a usable new machine.

Industry analysts such as Gartner Group and IDC indicate that it takes up to a day to configure a new PC for a user. At the very least with a large project where many new PCs are replacing retired PCs it takes several hours per machine. For this example we will use an average of four (4) hours or half a day for the rebuild of a new machine for a user.

100 PCs X 4 hours = 400 hours

We will assume that in the back office situation that some multi-threading is taking place where several parts of the process are working simultaneously on several PCs. We will assume the operation is setup to do ten (10) machines simultaneously.

400 hours \ 10 machines = 40 hours or 5 days

This type of process still requires a great deal of manual intervention which often means mistakes are made on certain machines since the back office approach is usually not completely duplicatable. This means that often technicians need to be dispatched to the desktop to do certain things such as get printers setup again, fix mapped drives or dialup network settings, etc. All analysts today agree that a visit to the desktop costs approximately $75 per visit.

For this example let's assume that per 100 PCs that are built for users that there are 10 visits to the desktop to fix potential mistakes in the process.

10 visits X $75 = $750

If you multiply that project by a number of machines that potentially could be replaced in any year by 10 the math looks like this:

40 hours or 5 days X 10 = 400 hours or 50 days

10 visits X $75 = $750 X 10 = $7,500

WinINSTALL LMS eliminates nearly all of this time and cost to a PC hardware refresh project. The LMS Suite uses our unique Client Reset Template approach that with a single template you can;

Boot the machine
Load the operating system
Slipstream the patches to the operating system
Join the machine to a domain and add to an Active Directory OU
Dynamically load the appropriate software for the user
Restore the personality and locally saved data

AND, do this without a technician touching the machine. This Client Reset Template process is also multi-threaded which means that many machines can be scheduled to run simultaneously therefore lowering the time for the project significantly.

Also the template approach means it can be duplicated with the same result each time. No longer will technicians need to be dispatched to fix potential mistakes when manually working on the machine for the user. This also speaks to lowering the time and cost of PC hardware refresh.

The level of automation provided with WinINSTALL LMS is second to none. No other product tackles the entire automation. For example;

Microsoft SCCM cannot slipstream patches which means the operating system must be patched after it is installed in most situations. SCCM also cannot dynamically load the software for each user nor can they handle restoring the personality and locally saved data for each user. This means other methods must be used through scripting or other standalone products.

Altiris does not provide a template driven approach for the automated process of refreshing hardware for users. They do have personality restore and local data restore but it requires all modules of their solution with multiple dedicated hardware servers at each location on your wide area network. There is a great deal of manual work to be done using their approach.

Landesk does not have the template driven approach and cannot restore personality or locally saved data. They also have no dynamic software distribution to load the appropriate software for each user without manually starting that process as a secondary function.

This alone many times returns an investment for WinINSTALL LMS even if other products are used for software distribution, asset management, etc. PC hardware refresh is a project that is ongoing. It is usually something that happens on a regular basis and takes a great deal of time, effort and cost to efficiently manage. WinINSTALL LMS can automate this process and justify cost in a short period of time.

This process also pertains to disaster recovery situations that potentially happen on a daily basis. All of us that have worked with Windows for any time know that there is a lifespan for Windows on a machine. When it reaches that end there is little use in troubleshooting the machine. The process to resolve the problems are usually to completely rebuild the machine.

With WinINSTALL LMS this Client Reset Template can simply be dragged and dropped onto the troubled machine remotely and the machine will boot, load the O/S, join to the domain and Active Directory OU, reset the software, personality and data without a technician ever touching the machine. This also adds total return of investment in the normal day to day PC Lifecycle Management of your PC environment.

HEAVY HARDWARE PLATFORM – DON'T MANAGE THE TOOL BUT MANAGE THE PC ENVIRONMENT

Nearly every PC Lifecycle Management product has had the reputation of being difficult to manage. In fact, analysts have estimated that most enterprise organizations rebuy their desktop management or PC Lifecycle Management toolset every three to five years either due to internal management changes or to the fact that the product has been to costly to manage and ruled ineffective.

Many products today require dedicated server hardware at each site or region on the wide area network. In fact Altiris requires a dedicated server for software distribution, another for patch management and a third for notification. An organization that has 10 regions or sites would require 30 servers just for the tool.

We suggest this is overkill. WinINSTALL LMS does not require any dedicated server hardware for its implementation. We simply use a file share at those regions or sites that local PCs can see. The file share can sit on any machine at the site and is merely a repository for application packages, client reset templates and the local repository or store for the backups of user personality and data in compressed format.

The savings in hardware platform go beyond the server requirements and reach to the operating systems required on those servers, the software licenses to manage those servers and the backups that must be performed on those servers. Analysts agree that managing a server can reach over $1,000 per year. WinINSTALL LMS eliminates all of that cost and keeps you away from managing the tool and back to managing the PC environment.

THE COST OF MULTIPLE TOOLS TO PROVIDE A SOLUTION

For many years the term, "best of class" has applied when choosing tools to manage the desktop environment. Over the past decade we have seen the approach by vendors come full circle. We have seen point products for software distribution get added to suites that include asset management and we have seen point products emerge to handle patch management and now seen them included in suite products.

What we do know is the point product solution is costly. License costs alone add up with maintenance and support costs for each product proving to be costly on an annual basis. We see patch management point products that range from $8 to $15 per seat that do nothing more than patch management.

If you do not think about a complete PC Lifecycle Management Suite to cover the whole management then you potentially see the following;

Basic software distribution suite	**$10 to $15 per seat**
MSI packaging tool	**$2,000 to $4,000 per console**
Inventory and asset management	**$10 per seat**
Patch management	**$8 to $15 per seat**
Operating system installation	**$5 to $10 per seat**
Personality and data backup/restore	**$5 to $15 per seat**

On the low end of that range that comes to $48 per seat plus $2,000 for a MSI Packaging console tool.

This also does not take into account the different hardware that is required for each of these solutions. It would not be unusual to see the following dedicated servers required;

Software distribution	**1 dedicated server per site**
Patch management	**1 dedicated server per site**
Notification	**1 dedicated server per site**

It is important to note that when you think about dedicated servers to run a product you should also add the costs of the operating system on those servers and any management products used for those servers such as backup/restore and systems management.

WinINSTALL LMS has taken the approach that an integrated suite offers the value of complete PC Lifecycle Management without a dedicated hardware platform requirement but also that a modular approach not only adds cost to the solution, but also usually means that integration is a second thought.

We believe that all of these features have relationship. Software distribution relates to asset management and both relate to patch management. Client Reset with WinINSTALL LMS shows the relationship of nearly every function of PC Lifecycle Management. It includes operating system installation, patch management, software distribution and personality and data backup/restore. No other product today can provide this complete automation.

For example, Microsoft SCCM has no native MSI packaging tool. They also have no way to backup and restore either locally saved data on the PC or the user personality on the PC. For operating system installation SMS requires a boot to an image that backs into a RIS server. So in this example you would need to license a MSI packaging product, a personality backup/restore product and all the components to RIS to go with the license and hardware for SMS. This gets costly very quickly and overshadows the often heard, “SCCM is free with my Microsoft Enterprise Agreement.”

Another example could be used with Landesk. The Landesk basic client management suite is merely software distribution. To add asset management you would need to buy the $10,000 Asset Management Console. To include patch management you again are charged on a per node basis for that module. For operating system installation you would need their imaging technology and finally they have no MSI packaging product or capability to backup/restore the PC personality or local data. So after paying approximately $45 - $50 for the suite and components you still have a $10,000 asset management console and $2,000 to $4,000 MSI packaging tool to license, learn and use.

SUMMARY

When thinking about return on your investment in a real PC Lifecycle Management product suite there are several things to consider. The things to always focus on are how much time and how many people does it take to manage the product and the process. This specific area is where WinINSTALL has spent years working to lower costs. We know that the most costly part of managing the desktop environment is focused around having to dispatch technicians to user’s desktops to resolve software problems. Eliminating any of that cost shows significant returns on the investment in the product.

Secondly, the management of the tool itself should not outweigh the cost of the investment in the product. If you are spending time managing images, dedicating people to PC hardware refresh, writing scripts and building process that isn't in your toolset then you are losing any investment made in your tool selection.

If you spend more time trying to make multiple products work together you also lose your investment in the toolset, and finally if the hardware requirements to run and manage the tool are greater than your investment then the selection and process is costing your organization more than it should.

Scalable Software believes that we have come a long way in helping you eliminate cost, eliminate management time and automate tasks that all other tools have failed to recognize as important. Couple that with our ability to help you implement this tool in a short period of time will assist in helping you reach the optimum return on your investment today and then long into the future.