



European Migration Survey

Key challenges in IT migration

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com

Survey conducted by
IDG Connect on behalf of Dell

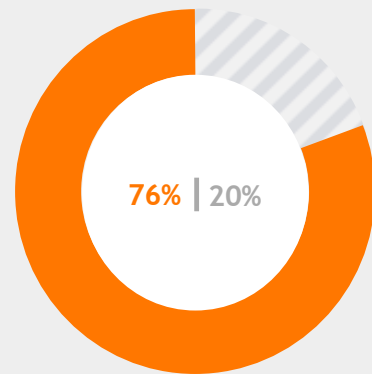


Summary of Research

Yes to Windows 7, no to the cloud as businesses strive to migrate from Windows XP

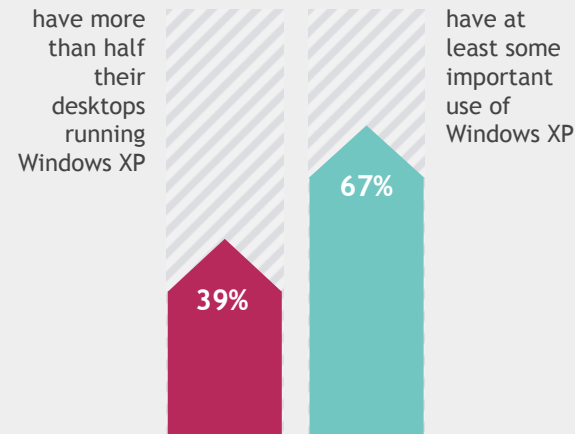
Windows 7 is the business standard

have moved or plan to move to Windows 7 | have moved or plan to move to Windows 8



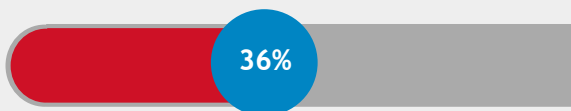
Windows XP is hanging on

have more than half their desktops running Windows XP | have at least some important use of Windows XP



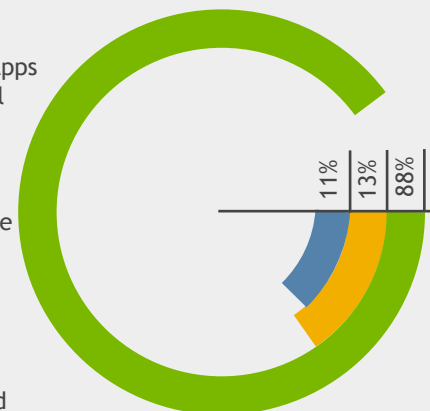
Application compatibility is the biggest challenge

36% rate ensuring application compatibility highly challenging



The cloud: not yet thanks

- Google Apps for email
- use or plan to use Office 365 for email
- have no plans to use cloud servers

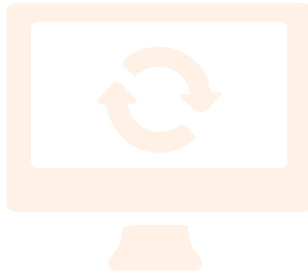


in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit:

www.idgconnectmarketers.com



Key Challenges in IT Migration

The IT migration challenge across Europe

Migration is a constant challenge for IT departments. The advantages of upgrading to new technology are countered by the benefits of staying with known and tested platforms, yet migration must happen eventually in order to avoid business disadvantage.

IDG Connect surveyed IT decision makers in six European regions - France, Germany, the Netherlands, Scandinavia, Spain and the United Kingdom - to discover the key issues facing organisations undertaking IT migrations, including Windows upgrades, application compatibility across a move to a new platform, and migrations to different server applications or platforms. There were 35 respondents in each region. The persistence of Windows XP, Microsoft's 2001 operating system, is remarkable. Support is ending for Windows XP. Mainstream support ended in 2009, and from April 8 2014 extended support ends and Microsoft will no longer issue security updates.¹

Despite its obsolescence, 39% of organisations surveyed across Europe have more than half their desktops running

Windows XP. In Spain, the worst case, that figure rises to 63%. Overall, two thirds confess to at least some important use of Windows XP.

No surprise that the need to move from obsolete or unsupported platforms is the biggest migration incentive for those surveyed, with 58% rating it an important or very important factor.

Why then do organisations hold back? The problem is that migration is difficult. The chief concern among the respondents was keeping applications working, with 49% rating this a key issue. Other issues include user training (24%) and guarding against the risk of migration failure (21%).

The survey highlights another key fact: that 50% of those surveyed will regard application virtualisation as important or very important in managing applications. Virtualisation techniques vary, but a common goal is to encapsulate the application and the resources it needs, so that deployment is simplified and it is longer likely to break if some component of the operating system changes. In some

cases the application actually runs on a remote server, but users interact with it as if were local. This is a powerful tool to overcome issues that would otherwise block migration, though setting up virtualised applications can itself be challenging.

What about migration to the cloud? Overall, most organisations of the size surveyed (1000 or more employees in the UK and Germany, 500 or more in other countries) are not yet considering this. The results do show 13% using or planning to use Office 365 for email, and 8% Google Apps for email, but while significant, this falls short of a rush to cloud services. Similarly, only 12% overall plan to use cloud servers to extend their IT infrastructure.

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com

¹ http://windows.microsoft.com/en-US/windows/products/lifecycle#section_2



The Windows XP Problem

How Windows XP is hanging on

The stark fact: two-thirds of the organisations surveyed have at least some important use of Windows XP, now over a decade old and for which all support is ending in April 2014. Some 39% of respondents report Windows XP in use on more than half their desktops.

Analysing the figures more closely shows significant variation between countries in their efforts to move away from Windows XP. 63% of Spanish respondents report more than 50% usage of Windows XP, whereas in France and Scandinavia only 17% have this extent of usage. That said, even in those countries with least usage, more than 50% of the respondents report at least some important use of Windows XP.

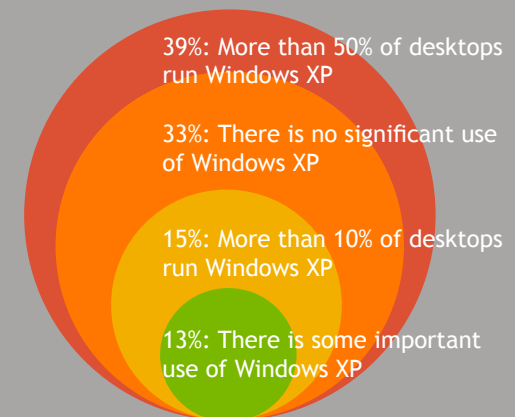
Significant changes were made to the architecture of Windows between XP and Vista, including User Account Control which limits application access to system files and locations considered to belong to the system, and the Desktop Window Manager which changes the way the screen is drawn by the operating system. Hardware generally requires new drivers to work in Windows Vista. These factors cause

compatibility issues, forcing businesses either to retain Windows XP for certain key functions, or face substantial expense.

The transition from Vista to Windows 7 is generally easier, and even Windows 8, despite dramatic changes like the disappearance of the Start menu, is likely to run the same applications successfully.

Although the data shows clear intention to migrate away from Windows XP for most businesses, the survey also threw up a surprising statistic. For those organisations where more than half the desktops run Windows XP, 33% reported no plans to move. In other words, more than one third of the XP diehards either cannot afford to move, or see no advantage in doing so. This is a concern on two levels, first because of the security risks of running an obsolete and unsupported platform, and second because it may prove a barrier to innovation.

What best describes the use of Windows XP in your organisation



in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit:

www.idgconnectmarketers.com



Windows 7 Takes Over

Windows 7 is the new standard

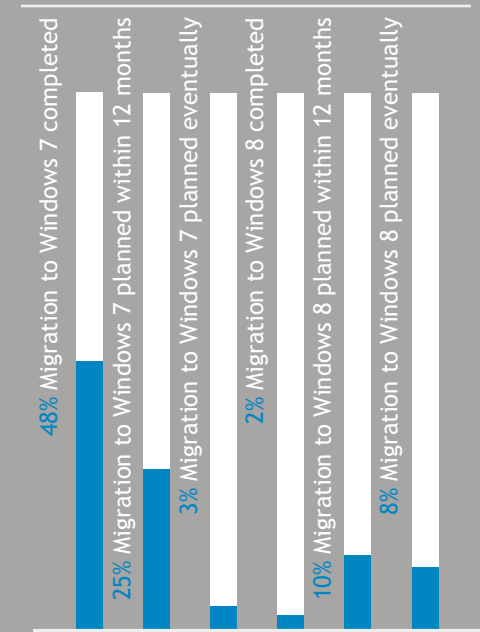
Windows 7 is the preferred desktop operating system of most organisations according to the survey. Some 48% of organisations have already migrated, and a further 28% plan to migrate either in the next 12 months or eventually. This is in contrast to Windows 8, where 80% have no migration plans. This could change as Windows 8 matures and Windows 7 gets older, but the signs currently are that Windows 7 is the new XP, for better or worse.

It is speculation, but the radical changes in the Windows 8 user interface may impose too much of a training burden for too little gain in productivity. Another factor is how much value Windows 8 adds over Windows 7. While Windows 8 is well suited to touch control and tablet deployment when using new-style Windows Store apps, there is little use of these in business today, and most work will be done on the desktop which is no better for touch control than Windows 7. That said, application compatibility between Windows 7 and 8 is generally good, so once users have come to terms with the user interface changes it is a less difficult transition than XP to 7.

Looking at the figures more closely shows that the largest organisations are also the furthest ahead with Windows 7 migration. 80% of those with 20,000 or more employees have either completed their migration, or it is in progress, while for those with 5,000 or fewer that figure drops to around 42%. In the smallest organisations, under 1,000 employees, a significant 34% have no plans to migrate.

Another notable correlation is that the government and charity sector has a relatively high proportion of respondents, around 30%, with no plans to migrate to Windows 7.

Windows migrations planned or in progress



in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com



Migration Benefits

The goals of migration

Why migrate? The evidence from the survey is that escaping obsolescence is more important than more positive goals, with 33% rating this very important. Even so, other reasons are significant. New platforms are designed with the internet and mobile working in mind, including better support for smartphones and tablets, which may explain why taking advantage of new capabilities is a goal of 42% of respondents, and more flexible patterns of work 30%.

Reducing cost is another significant goal, at 31% medium importance or greater, but not of overwhelming importance. Most organisations attach more importance to getting the right IT resource for their work rather than simply cutting costs.

How is it that when organisations place such a high value on moving away from obsolete platforms, Windows XP still has so great a presence? Although this seems contradictory, it is more likely further evidence that moving completely away from XP is challenging and expensive.

A further question is whether the move, generally, from Windows XP to 7 is creating a future “obsolete platform” problem that will be equally severe. No doubt there will be issues; but high interest in application virtualisation shows that IT administrators are thinking about how to encapsulate their most difficult applications so that future transitions are less difficult.

Application virtualisation and desktop virtualisation are also key enablers of the more flexible patterns of work sought by 30% of respondents.

Importance of migration goals

33%

Moving from an obsolete platform is very important

Organisations rated the following of medium importance or more:



- Need to move from obsolete platform
- Taking advantage of new capabilities
- Cost saving
- More flexible patterns of work

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit:

www.idgconnectmarketers.com



Migration Challenges

What is difficult about migration?

The big issue in migration is keeping applications working correctly, rated as of medium importance or greater by 49% of respondents. It is worth noting that the number agreeing with this is more than double that of the next most recognised, user training.

Organisations rolling out a new version of Windows cannot afford to discover at the last minute that certain applications do not work reliably. The further implication is that substantial effort is required in order to ensure that this is not the case. The survey explored these issues in more detail, which can be seen below.

Other issues are less pressing but still significant, such as user training (24%) and having backup systems in place so that if the migration goes wrong, something can be done to keep employees working (21%).

Organisations were also asked about Exchange and Active Directory migration, and these responses must be considered in the context discovered elsewhere, that around 20% are planning Exchange

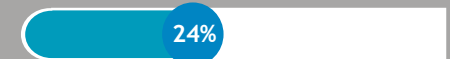
or Windows Server upgrades. For those organisations, Exchange and Active Directory pose complex issues, especially considering that no interruption of service can be tolerated from these key business services. Microsoft has bound Exchange and Active Directory tightly together, which means that the way Active Directory is designed and implemented for a particular organisation has an immediate impact on the success of an Exchange deployment, particularly in larger businesses with geographically dispersed sites.

It is also common, and often a requirement, that Active Directory is upgraded at the same time (or just before) Exchange, which is why it is not surprising to see such close figures (15% and 17%) representing the proportion of respondents who find Active Directory and Exchange migration challenging.

How challenging are migration issues?



Ensuring application compatibility



User training for new platforms and/or applications



Backup and continuity plans to mitigate risk of migration failure



Migrating Exchange to a new version



Migrating Active Directory to a new version

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com



Application Migration

A detailed look at application migration

The process of migrating applications to a new platform is complex because of the diversity of applications in use in typical organisations. Even knowing what is used can be a challenge.

Maybe a particular department has a custom Visual Basic 6 application that was coded years ago, and still works perfectly for its appointed task, but which needs significant coaxing and compatibility effort to work properly in Windows 7, or which in the worst case, cannot be made to work at all. Although Microsoft still provides a version of the old Visual Basic runtime (prior to newer versions that use the .NET Framework) in Windows 7 and 8, this does not mean that a typical custom application using this runtime will work correctly.

Reasons for failure include changes in Windows security, coding assumptions based on obsolete system locations, and dependence on custom libraries that themselves do not run correctly. Among organisations for which application migration is relevant, there is strong agreement in the survey that auditing use,

testing compatibility, and testing browser compatibility are key issues. Overall, 48% of those surveyed regard fixing or replacing incompatible applications as important or very important. There is also a consensus that application virtualisation is a valuable tool enabling migration. Encapsulating applications into self-contained packages means they continue to run without problems on new platforms. Finally, browser compatibility remains a headache, for example with applications designed for the quirks of Internet Explorer 6 causing issues on later versions. In some cases even web applications built with Internet Explorer 7 and 8 in mind are now problematic. There is also increasing use of non-Microsoft browsers in business, especially on smartphones and tablets.

What is important or very important in Application Management?

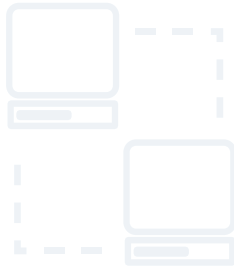


- 50% Ascertaining compatibility of applications with new platforms such as Windows 7
- 50% Using application virtualisation to simplify deployment and eliminate dependencies
- 48% Fixing or replacing applications that have compatibility problems
- 37% Discovering which users run which applications
- 32% Testing browser compatibility following a Windows upgrade

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com



Exchange and Windows Server

Slow migration to Exchange 2013 and Windows Server 2012

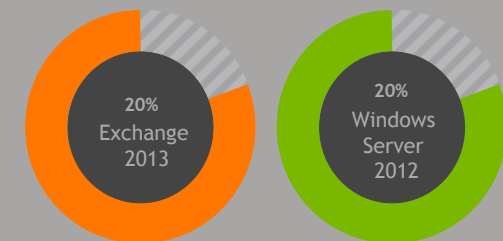
Organisations do not feel the same migration pressure on the server as they do on the client, with 80% reporting no plans to migrate either to Exchange 2013 or Windows Server 2012, despite a mainly positive reception to these new products. That said, even 20% is significant considering that they have not been out for long. There are significant regional variations, with 40% of Scandinavian respondents planning at least an eventual migration to Exchange 2013, and 34% in Germany intending a move to Server 2012.

user expectations mean more rich media content in emails, increasing the size of attachments. Best practice or not, it is no longer unusual to see mailboxes measured in gigabytes. Storage has to be easily expanded, resilient and fast, which requires careful design and implementation. Another issue is mailbox clean-up, to avoid orphaned mailboxes and other unnecessary storage.

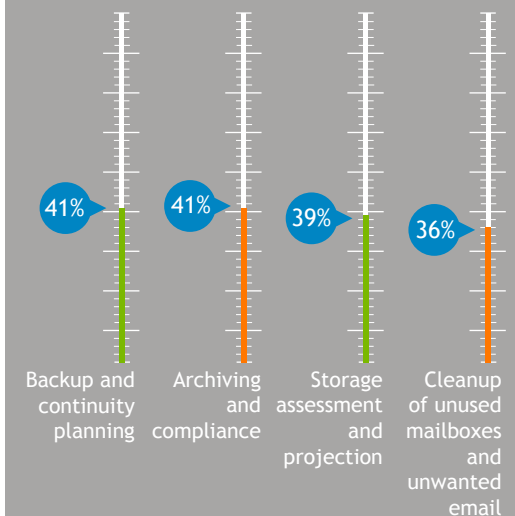
Some key issues in Exchange migration emerged from the survey. Email remains business-critical to most organisations, and planning for zero or minimal downtime during a migration, and quick recovery if the migration fails, is of primary importance. Regulatory compliance is another issue, with multiple national and European legislation applicable to email archives, as well as whatever internal policies may be in place.

At a technical level, storage planning is critical. Faster networks and raised

Migrations planned or in progress for Exchange 2013 and Windows Server 2012



Important issues in Exchange Migration



in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit:

www.idgconnectmarketers.com



Cloud Plans

Office 365 and Google apps plans

Organisations were asked about planned migration to three of the most prominent cloud services: Microsoft's Office 365 for email and/or SharePoint, and Google Apps for email.

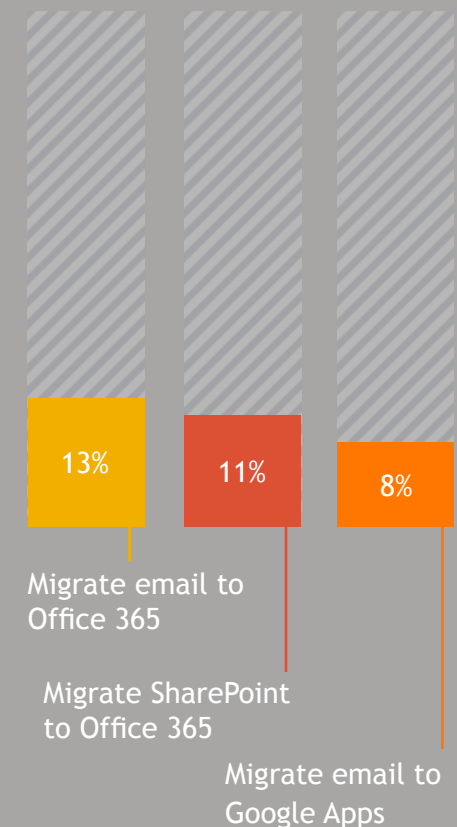
Despite the high profile of these services, respondents reported limited interest, though Microsoft's cloud services at 13% for email are more prominent than those for Google Apps at 8%. Since the survey covers larger organisations, this supports the idea that small businesses are more enthusiastic adopters of cloud services. Interest in the cloud is significant, but the hype in the technical media is ahead of actual take-up.

The UK has above average interest in Office 365, at 23% email and 20% SharePoint of those surveyed, and also above average for Google Apps for email, at 15%. Taken together, and considering that there are other cloud providers as well, it may be that the UK is significantly ahead of the rest of Europe in cloud adoption.

There is often a presumption that smaller organisations, which have less invested in

on-premises IT infrastructure, are more likely to adopt cloud computing. Does the survey confirm this presumption? The sample sizes are relatively small, so it is difficult to draw firm conclusions. Further, none of these organisations were very small businesses, since the minimum size was 500 or more employees. With those caveats though, it is interesting to note that there was no significant correlation between organisation size and cloud intentions. Even in businesses with fewer than 5,000 employees, those planning to migrate some or all of their email amount to around 14%.

Planned usage of Office 365 and Google Apps



in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com



Cloud Servers

No rush to use servers in the cloud

IT vendors such as Amazon and Google offer virtual servers hosted in the cloud. The advantages include pay as you go pricing and easy scalability, though for organisations with their own datacenter, self-hosting may be cheaper as well as being fully under their own control. The survey shows that 88% of organisations have no plans to use cloud servers. Another point to note: despite the prominence of Amazon in this market, of those using cloud servers the majority use another provider. Microsoft's share of this emerging market is even smaller, among those surveyed.

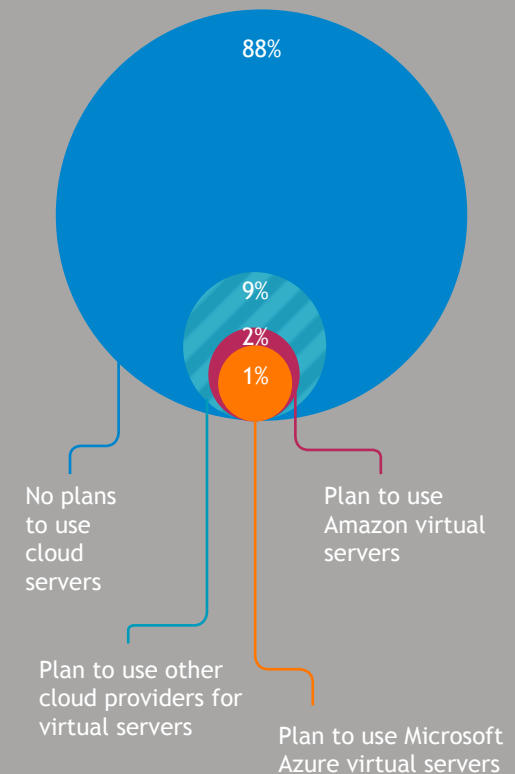
This survey only covers organisations with 500 or more employees (1,000 in the UK and Germany). Therefore it is possible that take-up is greater among smaller businesses. That said, the smallest businesses might not use cloud servers (as opposed to services like Office 365) at all. Among those who are adopting, the biggest reason given was rapid deployment and scaling of applications, followed by the hope of saving money. There is scepticism about whether cloud is more secure and

resilient than on-premises servers; only 3% overall agreed.

These topics are a matter of healthy debate, and the survey results should be taken as evidence of how such servers are perceived, rather than as evidence that they are or are not inherently more or less secure. In any case, in this as in most IT matters, the manner of implementation counts for more than the underlying technology.

Even so, the survey does show that the use of cloud-hosted servers for corporate applications is not as extensive as you might assume from media coverage of this kind of approach. Does that mean merely that the cloud vendors have plenty of room to grow? Alternatively, does it suggest that the cloud server hype exceeds the reality and this is just another IT fashion that will decline as others have before? Once again, that is a matter for debate.

Planned usage of cloud servers



in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit: www.idgconnectmarketers.com



Conclusion

Businesses are migrating, but not yet to the cloud

A big city is always under construction, and the same is true of IT migration in any business of a substantial size. Today the biggest pressure comes from the obsolescence of Windows XP, the desktop operating system which remains embedded in many organisations.

Most businesses are migrating, and for more than 75% of the survey respondents that means Windows 7, the new de facto standard for the business desktop. This is a process that raises a number of challenges, with the biggest single issue being the need to keep applications running correctly, rated important by nearly 50% of respondents. Other significant challenges include user training, and backup and continuity plans in case migration does not proceed smoothly.

It is notable that despite this overall enthusiasm for Windows 7, there is a significant proportion of businesses with no plans to upgrade Windows. If that means running Windows XP for the foreseeable future, it raises questions about how secure and agile those organisations will be.

Another key statistic emerging from the survey is the importance of application virtualisation. A full half of those surveyed are using this technique to overcome application compatibility and deployment issues. Application virtualisation takes many forms, but this is strong evidence that the ability to package applications into isolated packages with few dependencies is highly attractive.

While there is no overall rush to upgrade to the latest Windows Server platforms, Server 2012 and Exchange 2013, almost 10% of those surveyed have this in progress and 20% plan this eventually. Those organisations are taking on a complex task, different in nature from client issues, but no less challenging.

Cloud computing is the future according to many pundits, yet this is not yet evident in corporate planning. The most popular cloud migration is email, but even this is planned by under 15% of those surveyed. That may change, but for now the evidence is that on-premises infrastructure still dominates.

In this context note that while organisations may be slow to adopt cloud services, preferring to own their infrastructure, cloud computing has nevertheless changed user expectations of IT provision. The demand for anywhere access to business resources, and the desire to pick up a tablet at home or in a hotel and get on with some work, are forces that will not go away, irrespective of how those resources are implemented.

in association with



IDG Connect is the demand generation division of International Data Group (IDG), the world's largest technology media company. Established in 2005, it utilizes access to 35 million business decision makers' details to unite technology marketers with relevant targets from any country in the world. Committed to engaging a disparate global IT audience with truly localized messaging, IDG Connect also publishes market specific thought leadership papers on behalf of its clients, and produces research for B2B marketers worldwide. For more information visit:

www.idgconnectmarketers.com