SYBASE iAnywhere

The iPhone is Here to Stay.

What's an Enterprise to do About it?

Google "iPhone in the Enterprise" and in the blink of an eye, millions of results will appear. Many of these results are articles, white papers and analyst reports commenting on iPhone shortcomings that make it an unsuitable device to be set loose in any responsible organization. This vast congregation of reporters, analysts, IT managers and other industry commentators correctly point out that the iPhone was designed as a consumer/prosumer device and only after the fact was promoted as "The best phone for business. Ever."

You really can't argue with the assertions made by this rather vast community of pundits that the iPhone, straight out of the box, is not quite ready yet for prime time in the enterprise.

Most of the comments focus on security and manageability issues, which are de rigueur for any technology to be deployed across the enterprise – particularly mobile devices that operate beyond the hardened, well-defended walls of the data center.

The 451 Group, for example, in its November 2008 report, iPhone in the Enterprise, states, "Security comprises confidentiality, integrity and availability – that is, that messages are reasonably difficult to decrypt without a key; that one can rely on the source of a message and be sure it reached its intended recipient; and that the asset or network will remain available. Anything that misses any of those criteria is insecure by definition."

Gartner, which initially found the iPhone unfit for enterprise use, has recently revised its opinion, now deeming it "acceptable," with a clear caveat regarding security.

Of course, back here in the real world, it doesn't really matter what any of these folks say when it comes to the iPhone making its way into the enterprise. End-users, including many executives, love the iPhone, and ultimately – like it or not – that's what matters. IT managers are just going to have to love, or at least accept it, because the iPhone as an enterprise device is already a done deal. Fighting this juggernaut is pointless.

Just as resistance to PCs in the enterprise proved futile, IT must realize that end-user demand for convenience, functionality and unaided access to enterprise applications and data will nearly always prevail over IT's preference for hard and fast control.

IT INNOVATION DRIVEN FROM THE OUTSIDE IN

This is particularly true because of the emergence of the mobile enterprise as the most dynamic portion of many businesses. There are estimates that mobile employees now comprise upwards of 35 percent of corporate employees and projections that that number will soar to more than 70 percent over the next couple of years. Increasingly, the business-critical activities of many organizations take place at the edges of enterprises. Likewise, much of today's enterprise innovation is being driven by the actions and expectations of end-users operating in the field at the points of action and opportunity.

As noted earlier, we've seen this bottom up or outside in model of IT enterprise change and innovation in the past with the unauthorized and unwelcome introduction of PCs, laptops, cell phones and PDAs into the IT ecosystem. These earlier events were driven by end-users seeking greater convenience and access to previously closely guarded centralized systems. With the rapid adoption of smartphones in enterprises – authorized or not – we saw it again. It is difficult to find an executive or mobile worker who does not have some type of smartphone close at hand – indeed in hand – at all times.

Now that a number of smartphones offer power, functionality, storage capacity, wireless voice and data capability, larger screens and other features that often make them reasonable alternatives to notebook computers for many business purposes, their future is one of ubiquity.

Redefining the Smartphone

The introduction of the iPhone by Apple in 2007, which was seen by almost everyone as a redefinition of the smartphone, essentially guaranteed it would soon find its way into enterprises in spite of weaknesses that posed legitimate concerns for senior management and IT departments. It delivered a completely new and empowering mobile experience for users. The opening of Apple's App Store and the release of its SDK, allowing enterprise vendors to develop and sell enterprise-focused applications, pushed the probability factor that the iPhone would storm the enterprise to the level of inevitability.

One other factor at work here is the once big-buzz issue of convergence. End-users have long desired a single, small form factor computing device that would free them from lugging multiple devices around like soldiers weighed down by backpacks, tools and weaponry, communications devices, and other essential equipment and supplies jammed into every pocket and hooked onto every clothing loop.

Shifting the Focus of the Discussion

Given these realities, the discussion needs to shift to one of how to incorporate the iPhone into the enterprise in a way that ensures the continued security of sensitive information. IT needs to be able to provision and manage the devices despite a very different method of application deployment and the use of the iPhone for both personal and business functions.

Let's begin with the obvious. Employees on the move have a number of IT requirements that are essential to their optimal productivity and effectiveness. These include wireless access to:

- Email
- The Internet
- Corporate intranets
- Enterprise applications (ERP, CRM, SFA, etc.)
- Customer contact information and history
- Personal and corporate calendars

They also require the ability to store business-critical data on their smartphones and to receive behind-the-scenes data and software updates as they become available.

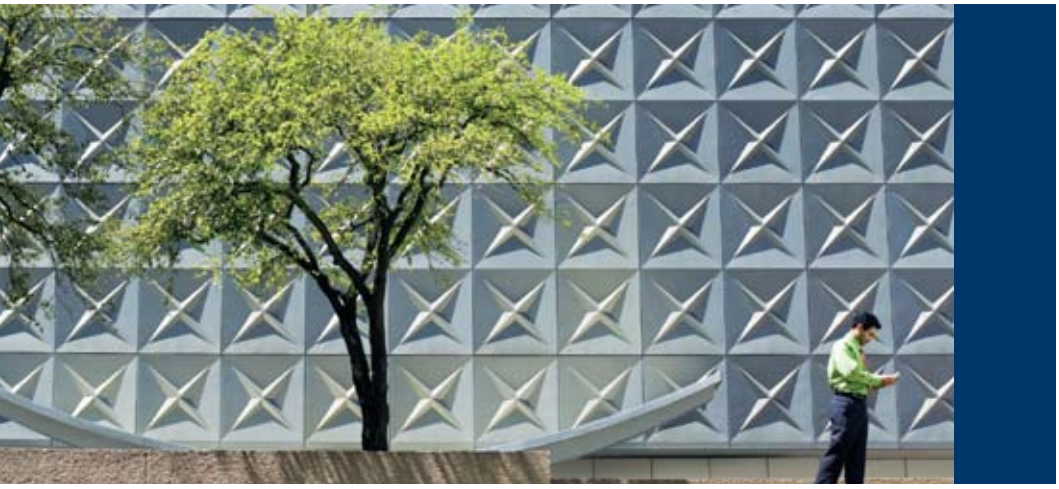
One more complicating factor is that many mobile workers purchase their own mobile devices. Take the case of independent insurance agents, for example. They typically own their own devices and are not too keen about IT departments wanting to install software to monitor and manage their use of their devices. This scenario is particularly likely to be true of iPhone users.

Still, IT departments are responsible for the security of the enterprise and the integrity of the data collected and maintained in the course of doing business. They must protect against security breaches that might occur if phones are "misused," lost or stolen, when sensitive data is in transit and in an environment in which mobile malware delivered via email is a growing threat?

Easier Said Than Done? Not Necessarily.

Getting to the crux of the issue, one might ask the simple question: "Okay, I hear what you're saying. Now tell me how to do it."

Addressing these challenges strategically, organizations need to implement a secure infrastructure that delivers iPhone support without requiring changes to their existing enterprise messaging infrastructures.



They need to find a way to cordon off the consumer aspects of the iPhone from the enterprise aspects. Put another way, they need to create an enterprise only zone on the iPhone. Having done that (no problem, right?), IT can then address the specific security and management functionality required to bring the iPhone into compliance with the organization's rigorous policies.

By addressing the unique challenges posed by the iPhone from a strategic, architectural perspective, IT departments can ensure that on the enterprise-only portion of the iPhone, industry-standard encryption algorithms protect all data that is communicated between their data center servers and iPhone clients. They can also make sure that all of the enterprise data at rest on the device is fully encrypted. They can implement and enforce password access and react to potential threats through device lock-down and/or data wipe. All while leaving the non-enterprise area of the iPhone unaffected.

Additional, essential functionality that can be delivered through the use of such an enterprise isolation approach includes:

- Over-the-air client provisioning and deployment
- Automated, unattended software upgrades
- Support for standard service monitoring tools
- Secure communications with no impact on device processor or battery performance
- Single security solution for all mobile device communications

Beyond supporting secure email, organizations can also enable iPhone users to take action from within their email clients to initiate or complete business processes, such as submission and approval of expense reports, human resources requisitions and purchase orders, or to receive notifications and view CRM activities.

This Is Not Science Fiction

Before you dismiss this approach as science fiction, vaporware or some other figment of someone's imagination, you should know that such a solution exists today.

The solution is called iAnywhere Mobile Office, offered by Sybase, the recognized leader in enterprise mobility.

iAnywhere Mobile Office has been enhanced to provide enterprise-class support for the iPhone. Specifically, the latest release combines enterprise-class email, calendar, contacts and tasks along with a unique approach for enhanced security. The release also offers several administrative and security features that enable enterprises to reduce the total cost of ownership when deploying wireless email and business processes to a variety of mobile devices, including the iPhone, Windows Mobile and Symbian.

This new version of iAnywhere Mobile Office, offering enhanced network security, data protection, device management, profile administration, cross-platform support, and deployment features is now available for iPhone via Apple's App Store.

The Sybase solution delivers all of the functionality and protection described earlier by employing a unique approach: it isolates enterprise data in its own area on the iPhone to comply with enterprise security requirements, while leaving the user's personal data untouched and easily accessible.

It delivers this iPhone support without requiring changes to organizations' enterprise's messaging infrastructures. Its outbound connection model adds an additional layer of security. Enterprises no longer need to open inbound communication ports to the messaging infrastructure; all mobile device connections end within the enterprise DMZ.

And just as Sybase has enhanced iAnywhere Mobile Office to extend support to the iPhone, work is underway to enhance its mobile database and synchronization, mobile application development, and mobile device management and security solutions to help make the iPhone even more enterprise worthy.

A Serious Contender in Need of Enterprise-Class Capabilities

Use of the iPhone in corporate enterprises is inevitable. As of January 2009, more than 17 million iPhones have been sold. Sales are accelerating. In the fourth quarter of 2008 alone, 4.4 million iPhones were sold. The App Store is doing a booming business with more than 15,000 applications and some half a billion downloads (among them iAnywhere Mobile Office). Apple has done a phenomenal job of re-imagining and re-defining the smartphone as a serious computing platform.

As the largest global enterprise software company exclusively focused on managing and mobilizing information from the data center to the point of action, Sybase is working diligently to help organizations maximize the power of mobility. That fact is nowhere more evident than in the enhancement of iAnywhere Mobile Office and other Sybase solutions that continue to help make the iPhone ready for prime time in the enterprise.

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