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All in Sync

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IDC Opinion

How will the recent synchronization software announcements impact the handheld companion market?

The competitive landscape for synchronization software has been fundamentally altered by recent announcements from Palm Computing, Riverbed Technologies, Puma, AvantGo, and others. IDC thinks the new landscape will feature competitors in three synchronization spaces: enterprise, Web/consumer, and personal information management (PIM). Riverbed and Palm Computing will dominate in the enterprise server "sync" industry. Puma and AvantGo will compete in those areas, but they will capture more success in the Web/consumer realm. Finally, standard synchronization capabilities will be populated by a variety of solutions until they are integrated into products that ship as out-of-box solutions. Once products are integrated, smaller providers will be forced to adopt a different business model to avoid being driven out of the market entirely.

Right Here, Right Now

Within the past two months, a variety of the most prominent synchronization software providers have made several announcements. Among the most noteworthy are the following:

- Palm Computing announced at its PalmSource Developer's Conference on October 18 a technology partnership with Riverbed Technologies to create HotSync Server. Palm will resell the Riverbed ScoutSync server synchronization product and rebrand it as the HotSync server. Palm Computing and Riverbed will then work together to develop version 4.0 of the product as a joint effort. In the meantime, Palm will rebrand and sell both the Palm OS and the Windows CE conduits for the ScoutSync product.
- Puma Technologies announced in October the creation of a synchronization portal site, called Intellisync.com. Intellisync.com will offer Puma's Intellisync synchronization software as a Web resource for a variety of uses. Puma already sells its Intellisync synchronization software as an OEM product to a number of portals, including Jump!, Visto, and others.
- AvantGo recently initiated two products: AvantGo.com and AvantGo Enterprise 3. The AvantGo Enterprise 3 product is based on the AvantGo.com architecture and is aimed at business organizations looking to port their server-based applications to mobile devices by using HTML or standard back-end systems. Additionally, AvantGo.com announced on October 25 a major revolution in its services. The vendor will serve up HTML pages written to AvantGo specifications as either HTML or WML, which will enable WAP phone users to access all of AvantGo.com's content.

Given all of these announcements, the market for synchronization software — and especially the server synchronization market — has changed dramatically.

Overview

As the critical driving component in making mobile devices part of the mainstream, synchronization technology recently emerged as a battleground for a wide variety of software and solutions. Companies are looking to provide client and server as well as Internet synchronization capabilities.

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Nothing highlights the ongoing “synching” battle more than the recent announcement of the Palm HotSync Server and the repositioning of other competitors in response to Palm’s new product.

Palm: Everything But the Kitchen Sync

With the HotSync Server announcement, Palm hopes to encroach steadily into the enterprise environment by providing a robust PC and server synchronization architecture. In addition, Palm is looking to provide the complete enterprise story by selling both the Palm OS and Windows CE conduits to the solution. Palm is taking on the enterprise as a cause celebre, looking to expand its hold beyond individual business users and into mainstream deployments.

The only way Palm could penetrate the server synchronization market was to pick a standard means of connecting into enterprise backends and either develop, resell, or endorse the product.

Palm will open up its HotSync APIs to vendors that wish to develop conduits that sit on top of the HotSync Server architecture and synchronize data with the backend. A case in point of this model is the expansion of the existing Palm/Chapura agreement. Chapura’s Exchange conduit will be offered with the server for users who wish to enable customer relationship management (CRM) and Exchange synchronization from one centralized handheld server. Other vendors can look to develop conduits that allow their data to synchronize directly with the server. For companies that replicate documents or other standard shared desktop data, developing a conduit is a natural progression.

Now that Palm has been perceived as endorsing a standard, all vendors know to which product they should develop their conduits. This has implications for other means of connecting handhelds to the backend. The Mobile Application Link (MAL) Forum, for example, offers the MAL protocol as a means of enabling servers and handhelds to talk to each other instead of having to develop conduits to connect each individual application. However, developers are less likely to develop with MAL (a good, albeit unfortunately named technology for those familiar with Romance languages) if it is not the reigning Palm-endorsed standard. Although the MAL Forum could work to get MAL incorporated into the next version of the HotSync product, IDC thinks it is more likely that MAL will become one of several alternative means of communicating and could fall by the wayside as vendors develop for a Palm-supported standard.

With the announcement of HotSync Server, Palm has taken on more than just the enterprise; it has taken on its own partners in a fight for the synchronization space. As Palm stops purveying standalone boxes and bundles more of the necessary enterprise software, the question becomes: What must be an out-of-the-box item and what should be ceded control over to Palm’s partners on which to develop their own business models? Regardless of the answer, with each HotSync Server that Palm purveys, it could be perceived as cannibalizing its partners’ businesses in the process.

With Palm's recent spinoff from 3Com and as it looks to grow in both its own Palm Economy and the overall handheld industry, it would be well advised not to pique its partners. Palm will need to be exceedingly careful not to step on the toes of those who helped pave the way for the Palm OS platform. All of its third-party developers — the key elements of the so called Palm Economy — may now be wary of finding themselves in direct competition with the company they are actually trying to help. Channel conflict is a dangerous gambit, and Palm will need to steer carefully through these murky and wave-ridden waters

However, the issue for Palm Computing is one of golden handcuffs. As the reigning leader in handheld devices, it has a vested interest in seeing market segments expand, supporting standards, and seeking new growth opportunities. What may displease one partner could delight another, as they see Palm endorsing one synchronization server, thus knowing to which product to write their conduits.

Palm has a responsibility to products and features that it believes will grow market segments, such as the enterprise. This strategy will expand the market further for Palm and its partners, even if it means temporarily stifling the growth of other partners in the process.

The synchronization world has been an ad hoc world up to this point. Although certain companies have attempted to institute standards, such as the MAL from AvantGo and Puma and the conduit method from Riverbed, a dozen providers have offered a dozen separate synchronization solutions. This hodgepodge confuses both the handheld market and any IT buyer looking for a one-size-fits-all answer to their encroaching handheld deployment and support issues. Offering a solution at this time was a necessary evil; as the market leader, Palm was the only vendor that could proactively push such a standard forward.

This announcement has not been an easy one for Palm's partners to digest, however. The synchronization market has seen a wild repositioning of company directions and missions of late as well as some fairly personal attacks of one company against another in public reports. Suffice it to say, the announcement is good news for the overall Palm Economy and good news for most of Palm's software partners, but it is bad news for those companies that had built their business on the synchronization shortcomings of others.

IDC believes the synchronization market was always rife for this kind of takeover. Relying on the shortcomings of others is a perilous game. Palm is no more out of line in providing synchronization software than in providing a PIM solution (e.g., Palm Desktop). Synchronization was seen, and remains seen, as a necessary element

of the out-of-the-box experience for individual users and now for enterprise users as well.¹

Will It Matter in the End?

All of this may be a moot point in another three to five years. Once a critical mass of handhelds is in the enterprise, IT departments will look for synchronization solutions to be offered as a natural extension to their existing database products. This will be the same model that the back-end databases now synchronize natively with other mobile devices, such as notebooks.

Since the major back-end providers have yet to offer scalable, robust, capable synchronization products as a standard part of the package, Palm and its partners provided these capabilities through a separate server dedicated to handling the handheld requests. When back-end providers notice a large infiltration of these devices in the enterprise, IDC expects all of the server synchronization products from handheld vendors to fall by the wayside, as backends provide this capability natively rather than as an add-on product. (For more thoughts on the future of the server synchronization market, see *Software: What's Hot for Handhelds?*, IDC #18483, March 1999.)

It's a Hard Knock Life

In the meantime, before synchronization becomes an out-of-box commodity item from back-end vendors, Riverbed and its competitors can be seen repositioning their solutions in relation to this new competitive landscape.

As a young market and as relatively new companies, all is far from lost for Palm's partners. The question is: In which of these three areas do they position themselves, and how do they reposition their own server synching initiatives in light of the new Palm-branded solution? In essence, can multiple server synchronization solutions coexist or will the market standardize on one?

IDC believes companies in the synchronization business will have three areas in which to compete, as follows:

- Enterprise synchronization, including back-end enterprise resource planning, CRM systems, and other standard systems
- Web-based synchronization either for portals, Web-based PIMs, or other Web management systems
- PIM calendar/consumer synching for individual users with nonenterprise-protected data to synchronize

¹However, since HotSync Server is not an out-of-the-box item and has to be licensed separately, the question remains as to whether or not it was Palm's domain to enter this area.

For the next year, a variety of solutions and communication strategies will proliferate between the synchronization products and their host systems. Longer term, IDC thinks a HotSync Server solution will be chosen as the standard Palm OS enterprise backend. If Microsoft should choose to enter this arena with a homegrown or a partnered solution, it will be Palm's major competitor, not the individual server synchronization solutions from an AvantGo or a Puma. Going forward, integrated solutions will challenge the whole business model for server synchronization as it exists today.

In the end, the value proposition to the enterprise is a solution sell. If a Palm Computing or a Microsoft sales rep can go in and offer IT both devices and the back-end management — the often alluded to but rarely achieved “end-to-end” solution — then they will capture control of the enterprise market. In the same way, however, an integrated solution from a back-end vendor would outsell them both. Other market opportunities will rely on small deployments and individual users whose corporations have not yet adopted a standard or Web-based PIM and application synchronization.

Competitive Landscape

The main competitors each bring their own strengths and weaknesses to the various markets. In this emerging market, setbacks and the crumbling of business models are standard fare, and now these synchronization providers must reevaluate whether or not to compete or change their business strategies.

IDC thinks Palm HotSync server will win in the enterprise synchronization space, with stiff competition coming mostly from back-end solutions and a Microsoft “ActiveSync server” solution, should one come down the pike. AvantGo Enterprise 3.0 and Puma's Vulcan project will reap niche wins in their particular focus areas (PIM and email for Puma and Web-based solutions for AvantGo), but the lion's share will go to Palm and Riverbed for Palm OS-based deployments. Puma and AvantGo and ASL Connect will have a much stronger story on the Windows CE front in the enterprise space.

In the portal space, IDC thinks AvantGo and Puma are poised for large growth and wins. With the Web-to-WML push from AvantGo, combined with its recent bundling and licensing announcements and the Puma portal play coming from its ProxiNet acquisition, IDC thinks these two vendors will continue to be major players in this space. Their competition will come from other portal sites, such as Yahoo! and MSN Mobile in terms of content provisioning and synchronization engine providers, such as Starfish, which are also looking to target the Web-based synchronization space.

Finally, in the personal connectivity space, IDC thinks Puma, Chapura, and GlobalWare will continue to have strong stories to tell. Puma may lose out on some opportunities to Chapura, especially since its product now offers an even tighter integration with the Palm OS product line. Meanwhile, GlobalWare will have to watch carefully what Lotus Notes looks to provide with its EasySync solution.

Puma

Puma Technologies is one of the oldest and best reputed vendors in the synchronization space. Puma is also a competitive company, pouncing on new business opportunities and models with amazing agility.

At the moment, Puma offers products in all three of the synchronization categories. It offers Web-based capabilities through its licensing agreements with various portals and Web calendaring companies. The enterprise arm comes via the Vulcan initiative, coupled with the Satellite Forms development tool. Finally, individual calendaring synchronization is provided by the Intellisync product line, now including Intellisync.com. IDC thinks Puma will see its future success in its Exchange and Notes products for individual users through Intellisync.com and through portal and content partnerships. In a head-to-head competition, the Vulcan product suite is likely to lose out to the Palm HotSync server. Not only is Palm backing the server synchronization product but it also offers more than just PIM and email support; it includes PIM and email, along with CRM and ERP system support. While every user may not need this, any that are thinking of long-term deployment in the enterprise will turn to Palm over Puma.

However, a number of enterprises in the interim will look to do nothing more than support PIM and email. For these opportunities, Puma offers the best solution. In addition, the Satellite Forms development tool, despite its expense, is a solid tool for fast database deployment development.

Finally, Puma's biggest play will remain in its stronghold area: the OEMing of its technology to other users, especially as more and more portal sites look to offer synchronization to a multitude of devices. Currently, this is a space that only Puma and Starfish play in. In addition, its own pure portal play, through Intellisync.com, is likely to further Puma's presence in the consumer mindset, especially as the personal companion market segments broaden and the number of devices any one professional uses multiplies. Not everything needs to be controlled through the IT department, and for individual users or small and home businesses, this will become a growing opportunity that Puma can fill.

ASL Connect/Extended Systems

ASL Connect is an enterprise server synchronization provider. It offers a back-end Notes synchronization solution, which powers IBM's MobileConnect suite, bundled with IBM's WorkPad series. IDC thinks ASL Connect, now that it is a part of Extended Systems, will do reasonably well with niche opportunities and would be well served to look for other vendors that may be seeking to provide server synchronization products out of the box.

As a standalone solution, the ASL Connect product suite is going head to head with the HotSync Server, and IDC thinks it could face some major challenges in Palm-dominated deployments. However, if and when enterprises look to deploy Windows CE solutions, the

HotSync server solution is likely to be seen as lacking, and ASL Connect (and other Windows CE providers) can reap some new opportunities here. Though Palm will sell and support CE, it is unlikely to parallel Palm OS support simply because it is not Palm's core competency. (The same would be true of Microsoft if it offered Palm OS support).

This is why partnering to provide the solutions makes a great deal of sense. By offering an outside vendor's product and their support capabilities as long as that third party has the internal resources to support both sides of the party, the product is much less likely to be seen as biased, limited, or proprietary. This is where ASL Connect could penetrate the market and provide Windows CE, or both WinCE and Palm OS support, to the backend, whether it is for an IBM or other hardware vendor, as well as a Microsoft or possibly a Symbian in the future.

In the interim, however, ASL Connect has a tough road to hoe against the Palm standard, and it is likely to see most of its wins through existing pilots and Lotus Notes shops. For Exchange or Palm back-end deployments, the win is more likely than not to go to Palm.

Riverbed

Out of all the Palm providers, Riverbed and Chapura come out soundly on top of the Palm OS world. With existing major deployments and now the partnering with Palm, Riverbed has greater access to future product development and integration with the market leader.

IDC foresees Riverbed's only challenge is making sure it can keep up with the support demands that may be generated from the Palm HotSync product offering. As a small start-up company (spun off from NobleStar in the summer of 1998), Riverbed may find itself inundated with requests from customers for custom conduit development and unable to keep up with demand. Though this is a relatively good problem to have, a problem is still a problem, and Riverbed will need to make sure its own organization is ramped up enough to handle incoming support, development, and deployment requests should HotSync Server take off.

In the meantime, Riverbed is not out of the other competitive areas entirely. With its ScoutWeb product and the Scout design tools, Riverbed is still entrenched in markets outside of the server synchronization business. However, in the server synchronization business, Riverbed has come into its own and should enjoy notoriety and success from the Palm partnership, which it can leverage to develop and sell other products.

AvantGo

AvantGo has been a player for several years in the handheld space. Always known better for its Web endeavors than its enterprise back-end solutions, AvantGo has recently been placing more attention on

its connection protocol initiative (MAL) and enterprise scalability. AvantGo has also been extremely active in the consumer/individual user space with its avantgo.com portal and its recent foray into the WAP space with WML and HTML support.

On the enterprise side, for organizations with Web-ready or Web-deployed applications, the AvantGo Enterprise product makes a lot of sense. These applications are already HTML-based, and to convert them into the AvantGo channel format would take relatively little effort. For these companies, there is not the same issue of integrating with legacy back-end systems because the Web is serving as their data-collection and data-repository method.

Beyond the Web space, AvantGo's story will face some major challenges. Since the majority of companies have not yet Web-enabled their enterprise applications, IDC thinks AvantGo Enterprise 3.0 will see severe competition from the Palm HotSync server product in Palm OS deployment situations. AvantGo's product will be relegated in the short term to Web-based opportunities within select markets and pilot tests that may already be underway.

Long term, IDC thinks AvantGo has a much more interesting play in the Web portal synchronization space. As an enabler of Web-to-WAP content, AvantGo.com is likely to continue growing its market share among individual users, now of both personal companions and smart phones. With IBM's recent licensing of the avantgo.com technology and the new bundling deals with Palm's Vx and several Windows CE vendors, AvantGo.com is the star on which AvantGo can hitch its hopes. The Enterprise product helps round out its offerings, but IDC thinks it will not see nearly the success and acclaim that the WAP/Web solution will garner.

Chapura

Chapura, like Riverbed, is also sitting pretty. Given its strong relationship with Palm in out-of-the-box CD bundling already, the move to the server synchronization product is a natural extension of Chapura's relationship with Palm. IDC thinks Chapura, with its limited and single-minded focus on Exchange synchronization, will serve Palm well in this capacity as it offers a focused and tested solution, which probably also came at a good price for Palm given its existing relationship with Chapura. This enables Palm to offer back-end and email support, rounding out its own offering, and brings even more notoriety and recognition to this small company, based in Mobile, Alabama.

Synchrologic

IDC thinks Synchrologic will face increasing pressure as it attempts to enter the Palm enterprise synchronization space. Synchrologic is a relative newcomer to this industry, offering a Palm OS product, which debuted in 1999, with plans to offer a Windows CE product in the future.

Synchrologic comes at the handheld space from the top down. It provided laptop and desktop connectivity prior to its life as a handheld synchronization vendor, and its core competencies stem from that legacy systems experience.

However, Synchrologic offers no more than many of its competitors, which have longer handheld industry experience and a mature product line to offer a Palm OS deployment opportunity. Given that Synchrologic still lacks a Windows CE solution, its solution is also less complete than the HotSync and other competitive products. IDC thinks Synchrologic will have its work cut out for it if it intends to remain successfully in the handheld server synchronization space. The vendor now has to play catch up to existing rivals and will be competing against Palm directly in sales situations.

RiverRun and WaveWare

Similarly, IDC thinks RiverRun and WaveWare will face increasingly intense competition from their partner Palm. These two companies have not seen stellar sales or attach rates to their current server synchronization and management products, and they will find competing against Palm Computing and Riverbed an intense challenge.

IDC suspects these two parties may not remain economy members for long unless they can differentiate their offering from the host of other Palm OS server synchronization products hitting the market. Indeed, each company already suffered from finding customers and gaining recognition when just in competition with other Palm Economy server start-ups. Competing against the big Kahuna itself may wipe out these vendors.

GlobalWare

GlobalWare provides a Lotus Notes solution, called Pylon. Pylon supports both Notes mail and the Lotus Notes databases, which can be built into the Lotus Notes architecture. Despite GlobalWare's straddling of the enterprise and the individual spaces, it is likely to do well short term since there are very few Lotus Notes-based solutions in the market. Its main competition is Lotus's own EasySync, which does not support full database synchronization like the Pylon product.

GlobalWare could look to provide the Notes conduit, separately or bundled, for the Palm HotSync server product, since Notes integration is still noticeably missing from the HotSync server product line. All in all, the GlobalWare solution is still somewhat unique in offering both database and email connectivity. IDC thinks if GlobalWare can position itself correctly and get into Notes shops with an add on conduit to the HotSync server or a product of its own for Notes Sync, it could see strong short- and even longer-term success.

Conclusion

The Palm HotSync Server is a forward-thinking move. At the moment, users are largely satiated with the internal capabilities of their personal companions and are looking more for integration with their corporate groupware and scheduler than with their CRM back-end systems.

However, if personal companions and Palm in particular hope to get through the enterprise front door, some sort of scalable, supportable back-end solution is necessary.

The dilemma remains whether Palm is cannibalizing its own partners. Palm built an industry based on the need for synchronization, only to end up alienating a number of its partners, especially those that have created businesses by providing solutions that Palm's existing synchronization lacks.

In the end, the argument boils down to how much synchronization needs to come with the device and how much Palm should look to provide before it enters into competition with its own licensees and partners at the exclusion of others.

Many of the companies will now be in head-to-head competition. For those looking to provide a Palm enterprise solution, the story will be murkier. Vendors such as Puma and AvantGo will likely rely on the sale of a totally unbiased solution: Windows CE and Palm.

As much as others are likely to continue pursuing the lucrative enterprise story, they are likely to lose out in Palm OS deployments to Palm's own solution. The rest, however, will look to place their bets in the consumer pool. The consumer realm looks to be gearing up, especially with the emergence of WAP browsers and multiple devices. IDC thinks competitors like Puma and AvantGo will continue to offer a large presence and see their brand-name loyalty coming from this opportunity.

For the enterprise space, however, the competition has changed dramatically. Until the "big back-end boys" get into this space, IDC thinks Palm and Riverbed will dominate, fighting against a Windows CE-type solution should one be developed and leaving niche and individual opportunities to the other enterprise server synchronization vendors in the Palm Economy.

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Extremely
Well

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐

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