Application Brief

Enterprise Solutions

Managing Handhelds across the Enterprise

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Managing Handhelds Across the Enterprise

Today's IT organizations are challenged with deploying and maintaining a constantly changing array of complex information systems critical to the success of the enterprise. Handheld computers are the latest and most promising new element of the information management landscape.

IT organizations now see the growing handheld user community as a powerful, cost-effective opportunity to enhance the scope and effectiveness of their information systems, increase productivity for the mobile workforce, and gain a competitive edge in the marketplace.

Until now, two major obstacles have hindered organizations considering enterprise-scale handheld deployments: managing large numbers of handheld computers and extending mission-critical applications, data, and services to handheld users. Palm, Inc. addresses both issues with two powerful new solutions for the enterprise: the Palm HotSync® Server and the Palm™ Ethernet Cradle.

Palm HotSync® Server
Portable Synchronization. Sponsored by IT.

Palm HotSync Server software is an open platform for managing the handheld computers in use by today's highly mobile enterprise workforce. This robust software solution provides the infrastructure to directly and concurrently synchronize hundreds of Palm™ handhelds, with enterprise data and services including email, calendars, mission-critical applications and database servers.

The Palm HotSync Server is also a platform for application development and customization. IT organizations with development resources can deliver in-house applications to the handheld community using familiar tools and skills such as Microsoft's Visual Basic. In addition, leading enterprise software vendors are using the Palm HotSync Server platform to create handheld extensions to their line-of-business applications. The end result is "anywhere, anytime" information access for the end user, enhancing productivity under the direct management and support of the enterprise IT organization.
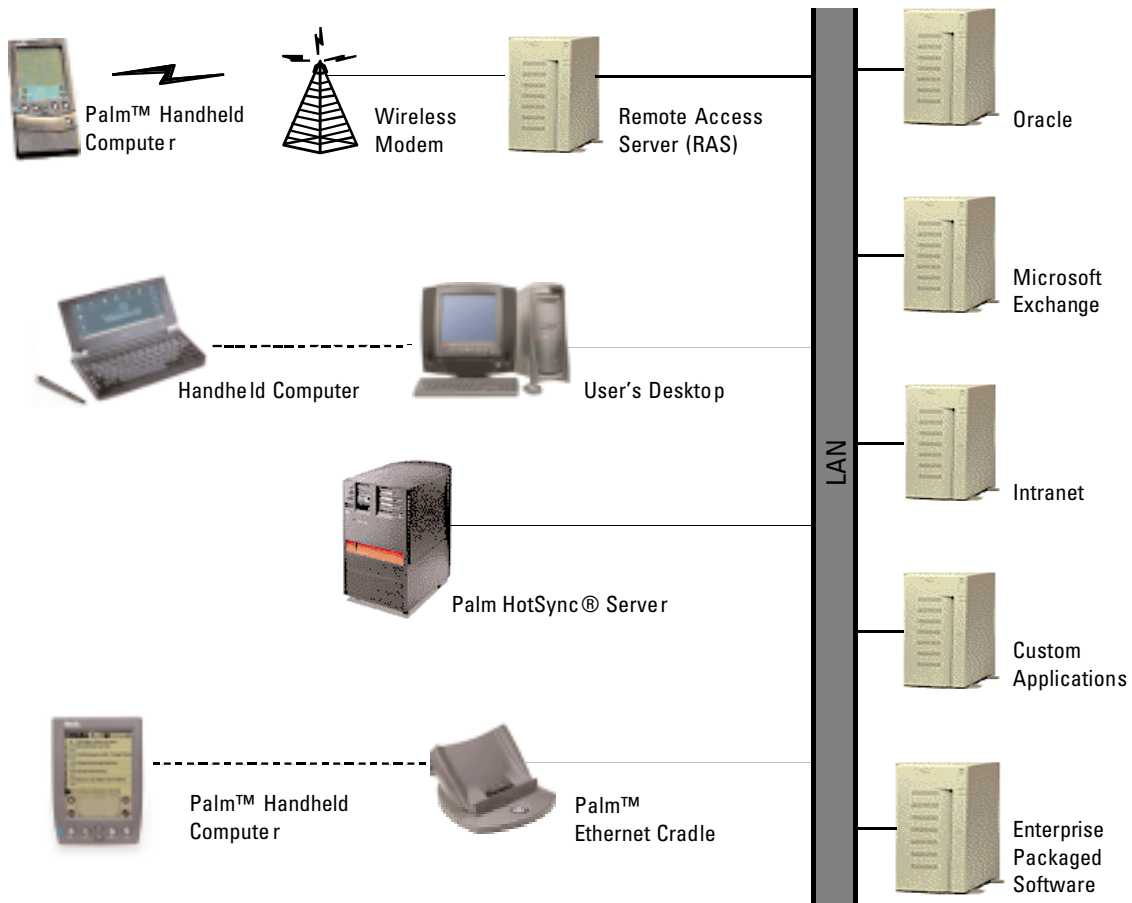
Centralized synchronization incorporates handhelds into the mainstream information management environment with features such as standard builds, asset tracking, automatic and centralized software distribution, data backup, and the ability to safely synchronize handheld data with corporate databases and mission-critical applications.

For enterprise workers, portable synchronization enhances productivity by providing truly mobile integration with the enterprise information resource, retaining the simplicity and functionality they currently enjoy. They gain the ability to send and receive e-mail and calendar updates via corporate e-mail servers, to back up and restore the contents of their handhelds using a centralized server rather than a single desktop. These capabilities ensure IT management control of a standardized handheld community, and ensure the timeliness and accuracy of the enterprise information resource.

Key benefits of the Palm HotSync® Server include:
- Open architectural platform
- Centralized administration
- Centralized information and application distribution
- Fully documented Conduit Application Programming Interface (API) for application development and integration
- Regular and reliable backup
- Enhanced security
- Centralized synchronization software
- Support for both wireless remote and wireline access
- One-button server/desktop synchronization

The Palm HotSync® Server fits easily and quickly into existing enterprise IT infrastructures. It includes device-side software that first authenticates, then creates and executes a synchronization session with the server program over any existing TCP/IP network. The Desktop Proxy Agent, located on the user's desktop, transparently initiates a server synchronization session as part of the familiar HotSync® technology process. Users can also dial into the Palm HotSync Server from any location, guaranteeing truly mobile productivity.

Palm™ Handheld Computer

Wireless Modem

Remote Access Server (RAS)

Oracle

Microsoft Exchange

Handheld Computer

User's Desktop

Intranet

LAN

Palm HotSync® Server

Custom Applications

Palm™ Handheld Computer

Palm™ Ethernet Cradle

Enterprise Packaged Software

The Palm HotSync® Server offers centralized management and integration services to IT and both wireline and wireless access to end users.

The server software can be installed and operational in a matter of minutes for small implementations utilizing a networked Windows NT machine with an IP address. Palm HotSync® Server Conduits provide synchronization services for groupware and mission-critical applications such as Microsoft Exchange. The Palm HotSync Server is a cost-effective, extensible platform for large-scale deployment of mission-critical, productivity-enhancing applications to handhelds–via both wireless and wireline connections.

Palm™ Ethernet Cradle

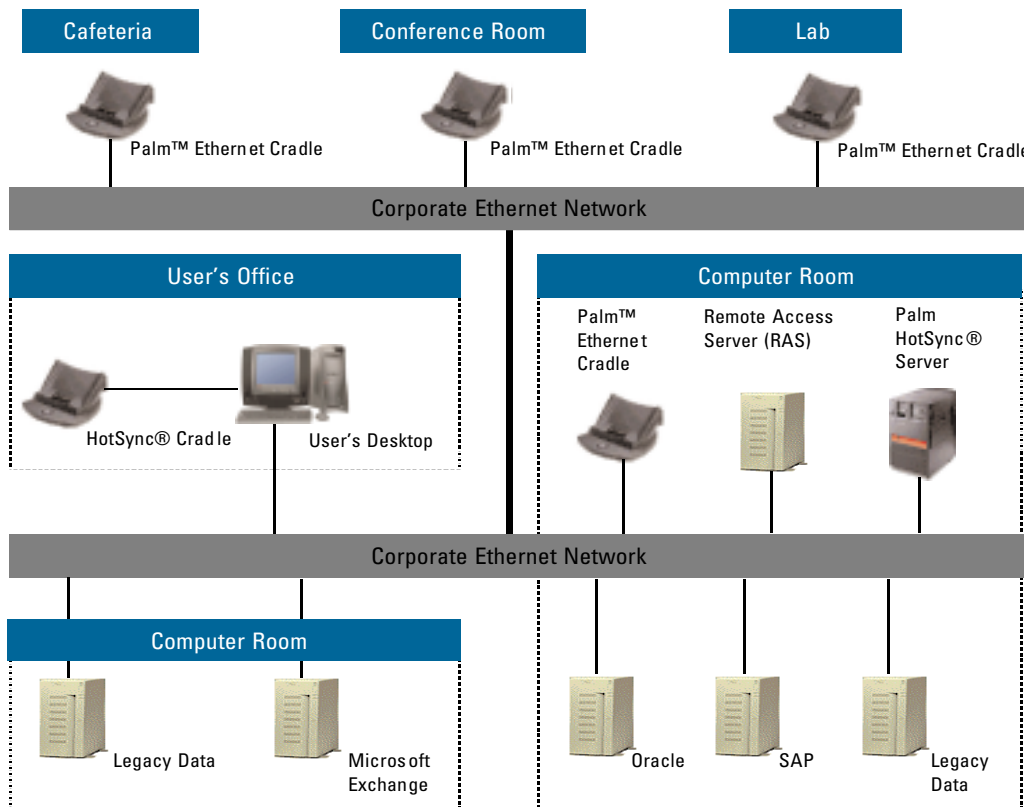### Reliable Network and Data Access throughout Corporate Facilities.

Managing handheld computers and integrating them with the enterprise information resource is just part of the solution. Providing access to handheld users, regardless of the user's location, is the other. The Palm™ Ethernet Cradle adds a location-independent Ethernet node to the corporate network.

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Unlike the standard desktop cradle, which is linked to a single user's desktop computer, the Palm™ Ethernet Cradle is linked to the corporate network via the Palm HotSync® Server, Palm Network HotSync technology (which provides network access to the user's desktop), or other data synchronization server software. As a result, any Palm™ handheld user can use *any* Palm Ethernet Cradle on the network to synchronize their handheld with the their own desktop as well as with corporate groupware and line-of-business applications and data. Users have full access from conference rooms, lobbies, and cafeterias–using the network already in place.

Simple Palm OS® applications provide a choice of synchronizing with the user's desktop computer, the Palm HotSync Server, or any other network-accessible synchronization server. The cradle supports many Palm OS products, including all Palm™ III and Palm™ VII handheld series as well as IBM WorkPad 20X and 30X handheld products, Franklin Covey handheld products and the Symbol SPT 1500 handheld. Through a 10 Mbps Ethernet connection, this easy-to-install and easy-to-use tool leverages the Dynamic Host Configuration Protocol (DHCP) servers that already exist in most networks.

Key benefits of the Palm™ Ethernet Cradle include:
• Location-independent access to data and services
• Leverage of existing network infrastructure
• One-button server/desktop synchronization
• Lower cost per synchronization access point
• IEEE 802.3 compliance
• Easy to install

The Palm™ Ethernet Cradle can be located anywhere on the network, giving handheld users access to desktop HotSync®, HotSync® Server or other data synchronization servers from any location.

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Easy Integration with Enterprise Systems

Today, more than 70,000 developers, as well as solution providers and OEM partners, are adapting existing applications and peripherals to the Palm OS® platform and developing innovative new applications for mobile computing. As a result, enterprise IT departments have a broad choice of hardware, access to a wide variety of packaged and custom solutions, and a standard open platform that is both easy to deploy and offers broad user appeal. The Palm HotSync® Server and the Palm™ Ethernet Cradle deliver a compelling package for the enterprise to enhance the economy and effectiveness of their information systems by leveraging the advantages of handheld computing.

The following examples illustrate just some of the possible applications of the Palm HotSync Server and the Palm Ethernet Cradle in the enterprise.

Scenarios for Success

1. Gaining Visibility, Flexibility, and Control for IT

The proliferation of handheld computers in the enterprise represents both a challenge and, more important, an opportunity for IT organizations.

Your IT organization is facing increasing pressure for support and integration from the growing handheld community. At the same time, you must expand the scope and effectiveness of information systems, as well as reduce costs and maintain standards and control. The Palm HotSync Server and the Palm Ethernet Cradle have been engineered to meet these challenges.

Centralized Device Management for Reliable, Cost-Effective Support

Current Situation	IT is charged with defining a mobile technology strategy for the organization. Many of the company's top executives are demanding formal support for their handheld computers. Hundreds of other employees are also using handhelds extensively, but this usage remains outside the IT organization's scope.
Impact to Organization	The proliferation of handheld computers outside the realm of mainstream IT standards and practices impacts the ability of end users and IT to take full advantage of enterprise applications and data.
Palm™ Solution	The IT group standardizes on the Palm OS® platform, including Palm™ handhelds and the Palm HotSync Server. Users connect to the server and register themselves, giving IT clear visibility not only into the number of handhelds in the company, but also the OS versions, the applications, and the memory available on each handheld.

In addition, IT standardizes on the Server Conduit for Microsoft Exchange e-mail and calendaring services. This standardization allows IT to provide e-mail and calendar updates as a centralized service, removing individual Conduits from single-user desktops. Since IT has only the single Server Conduit to service and support rather than hundreds of individual desktops, the number of support calls is reduced. Server logs of synchronization sessions will prove invaluable in troubleshooting the support calls that do come in.

Key Benefits
- Reduces operational cost (support and maintenance)
- Tracks and manages the handheld user community
- Creates and maintains application and environment standards for handhelds

2. Enhancing Productivity for a Workforce in Motion

Companies have been forced to rely on laptop computers to provide information services to mobile workers. These computers inherit all the hardware and software complexities of desktop systems, with their extensive (and expensive) support requirements. And like desktop systems, laptops run the risk of downtime through operating system, application, and connectivity software and hardware incompatibilities. The use of laptops is simply not a feasible solution for many mobile workers. Handheld computers offer a simple, cost-effective alternative.

Handheld Access to E-mail

Current Situation

A company's sales managers need to travel at least two days a week. Although they have laptops to help them stay in contact with the home office and the rest of their customers, most managers turn them on only sporadically. Reasons range from weight ("they are too heavy to carry around") to long boot times. Laptops are also expensive to maintain and can be subject to downtime.

Impact to Organization
- Lost revenue opportunities result from unread e-mail
- Declining customer satisfaction
- Sales force does not have timely information
- Sales force cannot respond quickly to customers

Palm™ Solution

The IT department deploys the Palm HotSync® Server to provide simplified remote access to e-mail. Now, instead of carrying laptops on every trip, sales managers take their Palm™ handhelds and wireless modems to update their e-mail three or four times a day. They can filter out unimportant messages, and respond quickly to the important ones. With easier access to e-mail and tight remote coordination with the home office, the company has gained an advantage over the competition.

Key Benefits

- Enhances opportunities to increase revenue
- Improves effectiveness of sales force
- Reduces message cost and access time
- Improves communication with sales force

Mobile Intranet Delivers Key Information to Regional Managers

Current Situation

A retail building materials company provides regional sales managers with flash sales results via web pages on the corporate intranet. But the application has not been fully successful. Managers are frequently out visiting store locations and find that paper printouts of the reports are always out of date by several hours or even days. Usage of the application was high at introduction, but has steadily declined.

Impact to Organization

An innovative information delivery mechanism fails for lack of mobile extension. The sales manager's inventory and merchandising decisions still seem to be one step behind competitive stores in key areas.

Palm™ Solution

Corporate IT installs the Palm HotSync® Server, allowing managers to refresh their flash sales reports at any time by synchronizing with them remotely. They now use the information many times a day to make on-the-spot sales decisions and in discussions with other managers, improving overall focus and productivity. The application becomes very popular among managers, who want remote access to it as they travel from store to store.

Key Benefits

- Improves decision making
- Streamlines the flow of information
- Enhances collaboration

Improved Productivity for Workers On-Site

Current Situation   Effective collaboration is critical to the success of any large enterprise. At most large company headquarters, employees constantly move between multiple buildings to engage with company services and other employees, attend meetings, and so on. Location and schedule changes are commonplace, and workers can only receive updates to their schedules and other information at a single site. Busy schedules do not permit regular access to that site, and as a result, information is not kept current.

Impact to Organization   Critical time is lost when employees on-site are tied to a single location to receive e-mail, calendar information, and updates.

Palm™ Solution   IT deploys Palm™ Ethernet Cradles throughout corporate facilities. Handheld users can now synchronize with both desktop and server data quickly and easily, without returning to their offices or even booting a PC.

Key Benefits
- Enhances employee productivity
- Improves decision-making ability
- Enhances collaboration

3. Extending Line-of-Business Applications to Handhelds

IT organizations and enterprise software vendors alike can use the Palm HotSync® Server as the platform for delivering mission-critical applications to handheld users. The Palm HotSync Server architecture uses plug-in software modules, called Conduits, to incorporate virtually any application as an additional service under server control.

A fully documented Application Programming Interface (API) based on the Microsoft COM standard allows for rapid Conduit development. Applications developed for the Palm HotSync Server can be specifically tailored for handheld users in enterprise computing environments. Examples include group scheduling, time tracking, sales and workforce automation, and project management. Developers can also create specialized vertical applications for industries including financial services, healthcare, legal, and professional services.

Improving Customer Service with Remote Access to Customer Response Management (CRM) Information

Current Situation Customer service managers want remote access to a weekly summary of problems to help improve problem resolution skills among phone representatives.

Impact to Organization Limited access to the Customer Response Management (CRM) system has a negative impact on the performance of customer service managers and the company as a whole. Managers are not reviewing information frequently enough because it is distributed as inconvenient e-mail attachments.

Palm™ Solution Using the Palm HotSync® Server, the company extends its CRM system to provide first-level customer service managers with remote access to three types of information: Call Drivers, Example Problems, and Basic Statistics. With this data on their handhelds, managers will be better able to respond when upper management asks questions about how the organization is doing. They will also become much more proactive about making process change suggestions, thanks to new insights made possible by on-the-fly access to the information they need to stay ahead of the curve.

Key Benefits • Improves internal communication
• Raises the bar on customer service
• Pinpoints and resolves problems early

Mobile Medical Management Reduces Costs, Improves Productivity

Current Situation Without bedside access to critical information, a hospital needs to use a complex system of computerized records and paperwork to guarantee the correct treatment and medication for each patient.

Impact to Organization Current system and management reporting tools, while effective, are extremely time-consuming and costly. The ability to provide complete health care economically is essential to the success of every healthcare provider.

Palm™ Solution The hospital develops two mobile data collection applications that utilize Palm™ handhelds, Palm™ Ethernet Cradles, and the Palm HotSync® Server. One solution provides barcode-scanning capabilities and pick lists for data capture; the other provides simultaneous, two-way communication between multiple handhelds and the enterprise server.

With Palm Ethernet Cradles deployed throughout the hospital, healthcare providers can now send and receive the most up-to-date patient information from virtually any where. By extending critical information to mobile healthcare workers, these applications ultimately provide a better, safer healthcare system.

Key Benefits
- Reduces administration costs
- Reduces delays in information creation and distribution
- Increases accuracy and depth of information
- Reduces data entry errors

Streamlining Incident Reporting with Quality Results

Current Situation A parcel delivery company delivers hundreds of millions of letters and packages a year. To manage this huge workload, the company contracts with commercial airlines to transport mail, most of which is bundled into mail receptacles such as bags, crates, or trays. While all parties strive to provide the best possible service, receptacles are sometimes mishandled or damaged.

Impact to Organization A paper-based process logs incidents days or weeks after the fact. This method is prone to error and often contains incomplete or illegible information. At times, the months-long process from data collection to airline resolution compromises the quality of service and potential collection of large sums of money. The company needs a better way to monitor vendor performance.

Palm™ Solution Working with a systems integrator, the IT organization chooses to adopt the portable and inexpensive Symbol SPT 1500 barcode scanning handhelds based on the Palm OS® platform, coupled with the Palm HotSync® Server.

Ramp clerks can now scan a receptacle's bar code to capture information such as date, airline, and flight number. Pull-down menus and pick-lists streamline the data collection process even further. At the end of the day, clerks place their handhelds in a Palm™ Ethernet Cradle and upload the data to the central database. As a result, managers around the country have fast access to accurate tracking information.

Key Benefits
- Reduces data entry errors
- Speeds data entry time
- Improves quality of information

Enterprises in diverse industries are using the portable power of Palm™ handheld computers and the Palm HotSync® Server to connect users with mission-critical data, leverage existing technology, maximize return on investment for custom applications, and enhance existing business practices. Because any enterprise application can be extended to a handheld through a HotSync Server Conduit, the possibilities are as wide-ranging as corporate needs for mission-critical mobile applications. And with the Palm Ethernet Cradle, users have location-independent access to server-based data and services.

Palm Makes It Simple

Simplicity remains a basic design principle of all Palm™ handheld products. That simplicity extends to the service and support programs available for both the Palm HotSync® Server and the Palm™ Ethernet Cradle. Enterprise IT organizations are assured of enterprise-class support from the global leader in handheld computing.

For More Information
To learn more about how the Palm HotSync® Server and the Palm™ Ethernet Cradle can help you manage and administer handheld computers in your organization, contact your local representative today or visit www.palm.com/enterprise.

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