



THE NEED FOR A COMPANY INTRANET AND HOW TO EFFECTIVELY CO-OPT THE IPHONE TO IT

The iPhone offers a whole world of utility and convenience; however, achieving this would require leveraging the latent features offered by iPhone to the hilt.

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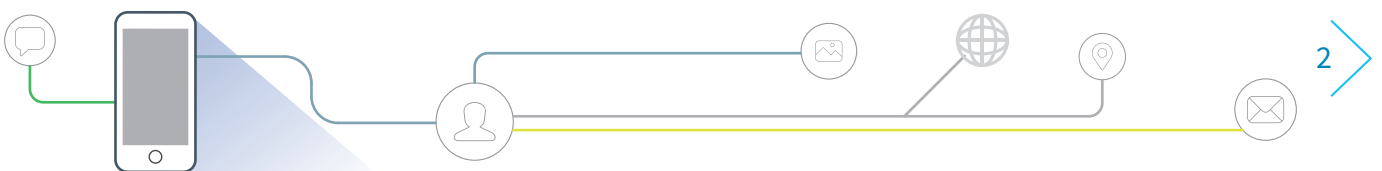
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The Need of Intranet and Internal Mobile Apps

An intranet is in essence a local or restricted communications network, created using the World Wide Web software. On the other hand, the private intranet created by businesses, become a closed or local internet for the benefit of organizational users. Intranet portals serve as a hub of an organization's digital world, and offer spokes of information and applications to support the diverse and increasingly dispersed workforces.

- The Intranet becomes a repository of global documents and other resources for the company, facilitating seamless access across the board and enhanced collaboration. It allows organizations to use much of their existing network infrastructure at considerably higher bandwidth compared to the Internet, becoming an effective replacement for more costly groupware and e-mail applications.
- Security is the number one issue that inhibits companies from embracing the cloud and mobile computing in a big way. Holding and transmitting sensitive corporate data on unsecured devices could leave the room open for lurking cybercriminals who would access such data for nefarious means. Of late, companies have largely resolved this issue by developing their private Intranets.
- Apart from ensuring security, such intranets also boost reliability, as both the hardware and software resides in internal or dedicated servers within the company, with minimal chances of downtime.

The most popular name for creating a company-wide Intranet is Microsoft's Sharepoint, which offers a good Windows based framework. There are, however, several other alternative frameworks available, many of which are open source.



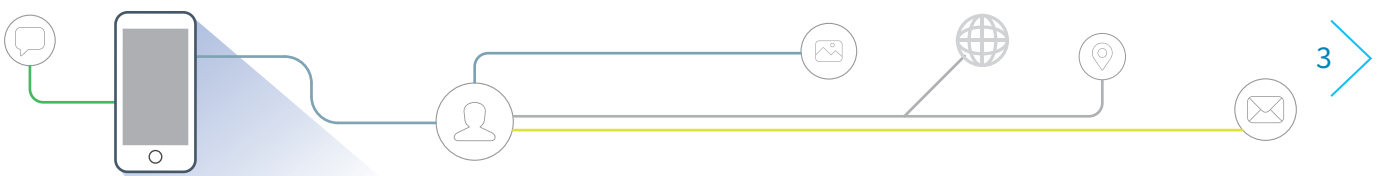
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The Challenge

Success of the intranet, however, depends largely on it being accessible on mobile devices, especially with the growing popularity of **BYOD** (Bring Your Own Device). If employees cannot access the intranet through their personal device then the initiative may remain underutilized and the gains of productivity and collaboration not realized.

The mobile space is fragmented, and there are different versions of the same Intranet software or apps; they make catering to each OS and mobile requirement impossible. This problem is magnified by the iPhone.

For all the advantages iPhones provide, a big stumbling block is the difficulty in integrating these iOS-powered devices with other systems in the organization, which may run on Android, Linux or Windows operating system. In fact, most popular Intranet frameworks are open source in nature, rendering it incompatible with the iPhone. In any case, in today's multi device landscape, people choose to access the same thing from multiple devices depending on their convenience and easy accessibility. Unless there is seamless integration in place, productivity and efficiency don't go hand in hand.



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Integrating the Intranet and other Internal Apps to iPhone

It is straightforward to access the intranet from mobile devices running on Android and Windows, as long as the device has the company's security client software installed. Installing such software, however, presents a challenge on iPhones, as Apple does not allow writing native iPhone apps for external systems. There are very few native intranet applications on the iOS App Store that facilitate the task of networking with the local intranet, and a big reason for this is Apple's big say in the internal development process of such apps.

Integrating the intranet with iPhone devices is often the missing link that stands in the way of seamless integration among all devices in the office. Such an integration would, for instance, make available a function in the internal desktop application on the iPhone as a native app, allowing the user to undertake the same task when on the move and from anywhere, without the hassles of copy-paste/uploads and the associated version conflicts.

1. Jail-break

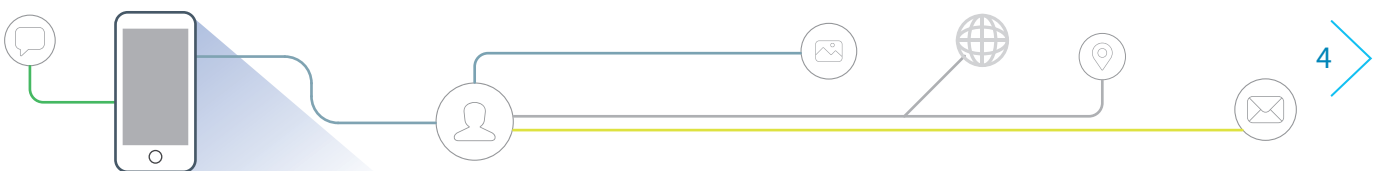
Using a jailbroken iPhone or iPod Touch and uploading an app that integrates the local intranet offers a short-cut solution. Jailbreaking entails bypassing the restrictions Apple has placed on the operating system to install the required apps and tweaks. However, jail-breaking has serious security and ethical implications, and is akin to playing dynamite-it would blow up in the face sooner or later.

However, it is still possible to integrate the intranet with your iPhone in a legit way, even though it may require solving some technical and political challenges along the way.

2. Develop an app using the Enterprise Development License

One option is to develop an iPhone optimized intranet web application using the ComponentOne iPhone Studio or any other suite of development tools for the iPhone.

The iOS Enterprise Development License allows organizations to host and distribute proprietary, in-house iOS apps to employees. This license makes it possible to control the



distribution of apps developed under this scheme within the organization, without involving the App Store and its rigorous restrictive conditions. Small and medium companies where the intranet does not support iOS devices qualify for the ad-hoc distribution arrangement. Apple engineers offer support on code level issues and technical guidance to fast track the development process, on request. The iOS Developer Enterprise Program offers two technical support incidents per membership year.

Developing an intranet app through this route offers a good opportunity to give a face-lift to the legacy (and invariably bulky) desktop application. The best approach is to adopt an MVC style and create the web apps with layers of functionality so that the UI side is switchable very easily while the underlying business logic remains the same regardless of the device used. It is a good idea to undertake the development in an agile methodology, with lots of tiny projects and small iteration cycles, instead of a waterfall project.

Follow this broad modus operandi:

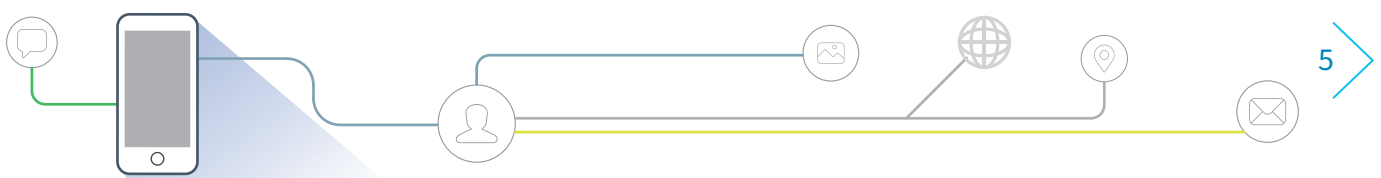
- First develop a straightforward app that would group clients and employees into lists and provide an instant dialer, leveraging the basic functions of any mobile device. It is a good idea to make strict use of the preferred source code management software when developing iPhone apps. Xcode, the integrated development environment (IDE) that offers a suite of software development tools, exposes delicate files to the developer, and fiddling with it can wreak havoc with the entire system.
- Add functionality to the app, to leverage the features offered by iPhone. Some options for add-on include Google Maps integration using Apple's locations services, client call requests using iPhone's notifications service and Google Calendar integration.

The best app operates offline as well as online by caching the data in a local database, and updates itself automatically when connected to the office network.

3. Use iOS Sync for Google Apps

Many enterprises use Google sites as an enterprise intranet. Google for Work offers an extremely low-cost, yet effective alternative to the more traditional CMS type of solution. In such a scenario, using iOS Sync offered by Google for Work is better than developing a fresh app for the iPhone.

iOS Sync allows users to access emails, documents and other files more on the iPhone, with enhanced security added in.



Since iOS Sync is integrated with Gmail and Google Drive apps for iOS, users do not have to download an additional app. iOS Sync for Google Apps is enabled for all users by default, which means that everyone within the domain gets to use Google Apps for Work on their iOS devices.

iOS Sync works when a user logs in to a Google Apps for Work account in any Google iOS app—Gmail, Google Drive, Docs, Sheets, or Slides. On log in, iOS Sync requires the employees to register their devices. The admin gets the option to set standards on passwords, encryption, camera usage, and remote wiping. The admin can also do activation approvals, configure calendars, contacts and wi-fi settings automatically.

4. Use Ready-Made apps

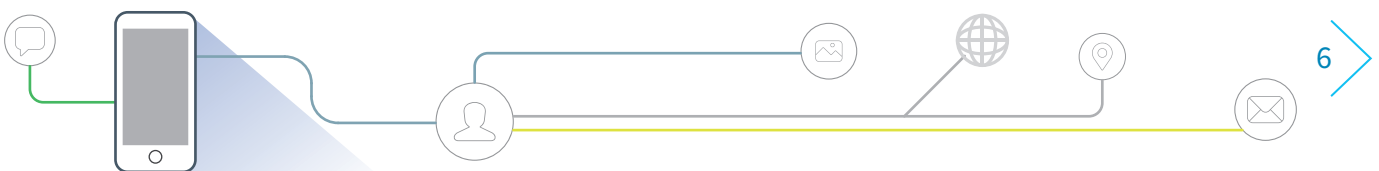
The iTunes app store has a few apps that facilitate connecting the iPhone with the company intranet.

One such app is Bitrix24, aimed at offering seamless collaboration, communication, social networking, workflow and knowledge management solutions to enterprises. The app facilitates two-way data exchange and importing contacts from the intranet. It lets the iPhone and the intranet “negotiate” with one another to make changes in the calendar that resides in one device and is visible on another, thereby facilitating unbridled syncing. The admin gets access to full source code, making it possible to customize the app easily.

Users may leverage the “Access Stream” functionality to get hooked to the workgroup, get updates on projects, carry on discussions with colleagues, receive documents and files, create new tasks, and more, all from a single place. The app uses Open API standards such as REST or SOAP to pull in external information from enterprise software.

There are other apps such as Igloo and “Good for Enterprise” that offer more or less similar possibilities. Both these solutions enable accessing the intranet through the browser, provide a secure depository to store documents and files, and facilitate personalization at a deep level. Such apps generally integrate seamlessly with most Microsoft and Google products, besides Apple products and offer flexible access permissions.

It is not enough to have infrastructure and devices in place. It requires clever strategies and walkthroughs to weave it all together and get the desired functionality out of the infrastructure.



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