



FUNAMBOL



# Funambol MediaHub

## THE LEADING WHITE LABEL PERSONAL CLOUD SOLUTION FOR MOBILE PHONES AND CONNECTED DEVICES

Funambol MediaHub enables mobile service providers to deliver personal cloud (digital locker) services for mobile phones, tablets, computers and connected devices.

At the heart of MediaHub is the Funambol Server that resides in the cloud. The server is a J2EE application that syncs mobile devices and computers with backend systems such as social networks, email systems and media sharing sites (e.g. Flickr, Picasa, YouTube).

The Funambol Server is the de facto open source implementation of SyncML (also known as the Open Mobile Alliance (OMA) Data Synchronization (DS) standard). SyncML is built into more than one billion mobile phones, enabling them to work out-of-the-box with Funambol to sync PIM data such as contacts, calendars, tasks and notes. Any mobile device with the ability to access the Internet can sync with Funambol.

For phones that do not have SyncML built-in, Funambol provides mobile apps, for example, for iPhone, iPad, Android, BlackBerry, Windows Mobile and Symbian.

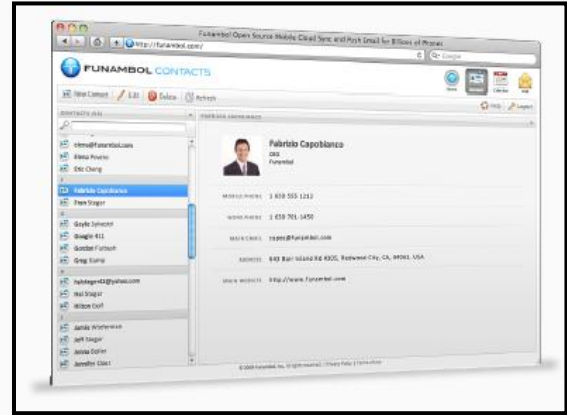
When it comes to deployment, one size does not fit all. MediaHub offers the ultimate flexibility to accommodate varying branding needs and deployment architectures. It combines the benefits of the Funambol Server with the proven performance of an RDBMS and the high reliability and manageability of app servers to deliver a clustered, highly dynamic, scalable and fault-tolerant service. MediaHub includes several components:

- Funambol Portal
- Funambol Server
- Funambol Connectors
- Funambol Mobile Apps
- Carrier-grade RDBMS support

## Funambol Portal

The Funambol Portal is a cloud-based AJAX application that lets users view and edit data that they have synced from other sources. Its capabilities include:

- Easy sign-up process for self-provisioning of user accounts
  - Context-sensitive drop-down menus and context-sensitive toolbars
  - Smart handling of visual effects at various screen sizes and resolutions
  - Support for branding, localization and multiple languages
  - Remote auto-configuration of SyncML settings on user phones
  - Secure data store only accessible by user who owns the data
  - Secure data in transit through SSL encryption
  - Web-based interface for customer service representatives (CSRs)
  - Ability to support new devices and modify existing ones without service disruption
  - User home page with direct access to contacts, calendar, media, user account profile, phone clients and settings, and desktop clients
  - Home page MY CONTACTS functionality: hover-over summary, add /edit / delete contacts, upload contact photo with auto-size reduction, sort contacts by first or last name, quick filtering via initial letters of first or last name, import contacts from Google, Yahoo! and Facebook, tabbed editing user interface, view / add / change / delete contact picture
  - Home page MY EVENTS functionality: hover-over summary, add / edit / delete calendar events, setting of date/time format, start of week and start / end of day, viewing of events for today, tomorrow or next 7, 14, 21 or 30 days. Ability to import from Google Calendar
- Home page MY ACCOUNT includes: edit profile, add / change / remove profile picture, change password
  - Home page MY PHONE includes add / change / remove phone, view last sync date, download mobile clients, set up native sync client, sync native sync client
  - Home page MY DESKTOP includes view last sync date, download desktop sync client
  - Contacts module which includes view contact, add / edit / delete contacts, upload contact photo with auto-size reduction, sort by first or last name, quick filtering via initial letters in first or last name, import Google or Yahoo! contacts, reset contacts and drag-and-drop to expand contact panes
  - Calendar module which includes hover-over summary, add / edit / delete calendar events, day / week / month view, two month mini view with single-click navigation, click-and-drag event creation, click-and-drag event resizing, drag-and-drop event moving, distinguished past vs. upcoming events
  - Pictures, Video and Files modules for displaying synced pictures, videos and files from mobile devices, which can be shared with social networks, downloaded to PCs, or synced with PCs using the Funambol Windows Sync Client





## Funambol Server

The Funambol DS Server is the core of MediaHub. It includes the following capabilities:

- Synchronization (Protocol) Engine which receives information from mobile devices in SyncML format (over HTTP), processes and saves the information in a data store, and sends data to the mobile device in SyncML format to get processed
- Implicit identification and authentication of user's mobile phone
- Bi-directional synchronization/backup-restore of contacts, calendars, tasks, notes and large objects such as rich media with SyncML devices, Outlook, smartphones and other mobile devices
- Server Initiated Synchronization (SIS) with SIS-capable devices
- Inbound and outbound SyncML processors (Funambol Synclets) to pre- and post-process SyncML communications with devices. Funambol Synclets significantly improve the field mapping between specific phones and back-end applications or data stores. Synclets are device or device family specific and can be added, removed or modified at runtime without disrupting MediaHub services
- Authorization Officer to provide flexible user authentication that can easily integrate with an external authentication service (e.g. LDAP)
- Connectors to integrate with virtually any data store or 3rd party app (more below)
- Administration Tool to manage the Funambol system, including users, devices, connectors, logging and much more
- SSL encryption of data exchanged between devices/clients and server; DES and Triple DES encryption for data exchanged between Windows Mobile and Outlook clients and the Funambol Server
- As a J2EE app, the Funambol Server can run on a variety of hardware platforms

## Tiered Administration

Funambol provides tools for administrators at multiple levels:

- Web-based interface for CSRs to support end users. It enables them to manage users and their accounts and phones, as well as send over-the-air configuration messages and view configuration instructions for all mobile phones supported by the portal. It also lets them send the latest Funambol mobile software to a user's phone, reset all data in a user's portal account, disable portal accounts, and view live portal users and their sync information
- Advanced tool for system administrators to manage and fine-tune the Funambol server, connectors, users and devices
- SOAP interface to Funambol administrative functionality to enable auto-provisioning as well as integration with existing admin frameworks

## Funambol Connectors

The software that connects the Funambol Server to an external data source is called a connector. This allows mobile devices to sync data with external sources such as email servers, databases and LDAP directories. MediaHub includes a foundation connector for storing contacts, calendars and tasks in a RDBMS. General connector capabilities include:

- Common "Syncsource" interface to communicate with the Funambol Server Sync Service
- Utilize APIs to connect to external data sources and authentication services (e.g. LDAP)
- Security via remote authentication, SSL encryption and inside or outside firewall deployment



## Funambol Mobile Apps

Phones with built-in SyncML can sync with Funambol without additional software. For phones without SyncML, Funambol provides apps to sync PIM data, pictures, videos and files. Supported devices include iPhone, iPad, Android, BlackBerry, Windows Mobile, Symbian (Nokia), and iPods. Funambol also provides a sync client for Windows and Mac OS X computers.

## Broadest Mobile Device Support

Funambol supports more devices than any other personal cloud solution. The company's open source software has been downloaded millions of times by 50,000 developers worldwide. This world's largest virtual development and QA team tests the software on thousands of devices and wireless networks, enabling the software to provide the broadest device compatibility in the industry.

## Licensing and Support

MediaHub delivers the benefits of open source such as complete flexibility and source code transparency. It is offered under a commercial license that enables customers to adapt the software to their infrastructure and to make changes to the code without sharing their changes. Source code for several key components of MediaHub, such as the portal, are available only to MediaHub customers and are not open source. Technical support and services are available for MediaHub customers including 24x7 support and training. Funambol also offers complete hosting of the service for customers.

## System Requirements

- OS e.g. Red Hat Enterprise Linux
- Relational database e.g. PostgreSQL or MySQL

## About Funambol, Inc.

Funambol is the leading provider of white-label personal cloud solutions for mobile phones and connected devices, powered by open source. Funambol's open source software has been downloaded five million times by 50,000 developers in 200 countries, providing unrivalled device compatibility. MediaHub has been deployed at leading companies in the mobile industry. Funambol is headquartered in Foster City, CA. To learn more, visit [www.funambol.com](http://www.funambol.com).