

BionicMessage Groupware Sync Server

Installation and Configuration guide

DRAFT – preview release

Introduction

The BionicMessage GroupWare Sync server is based on Funambol DS-Server 3.0 bundle package, with the inclusion of the GroupDAV scheduling and Citadel email synchronization sources. Also included are synclets to support popular client types among GroupDAV connector users.

Support

Please contact me or the GroupDAV mailing list with questions, not Funambol.

matt@mcbriDEMATT.dhs.org

GroupDAV mailing list: groupdav@opengroupware.org

Subscribe/unsubscribe: <http://www.groupdav.org/maillinglist.html>

Contract integration services are available.

As a service to the Citadel community, I offer remote installation services for standalone Funambol server for \$20USD when using Palm Synthesis or Windows Mobile clients. Please see the website as to weather this service will be suitable.

<http://bionicmessage.net/?q=node/9>

Other useful documents

Installation

After downloading the bundle executable, ensure setup permissions are set

```
chmod +x bmessage_ds5.bin
```

Then run the installer

```
sh bmessage_ds5.bin
```

The installer will ask you to accept the Funambol license and prompt for a install directory before extracting the contents of the distribution.

First run

The installer will ask to start the server once it is finished. For manual starts, enter your installation directory and run:

```
sh tools/bin/funambol.sh start
```

Similarly, to stop the server

```
sh tools/bin/funambol.sh stop
```

Structure

Note the layout of the server bundle:

<u>Funambol bundle structure</u>	<u>Description</u>
▼ ds-server	Funambol DS-Server main directory
• modules	Drop any future GroupDAV connector updates (groupdav-1.1.s4j) into here
• config	Funambol configuration files
• admin	Funambol administration tool
▼ tools	Underlying infrastructure used to run Funambol
▼ tomcat	Apache tomcat 5.0 application/web server
• conf	Tomcat configuration. Modify server.xml to change http port
• hypersonic	HSQLDB database
• bin	Start/run scripts
• jre-1.5.0	Java runtime. (If you are running non-x86, you could drop your JRE here)

Post install configuration

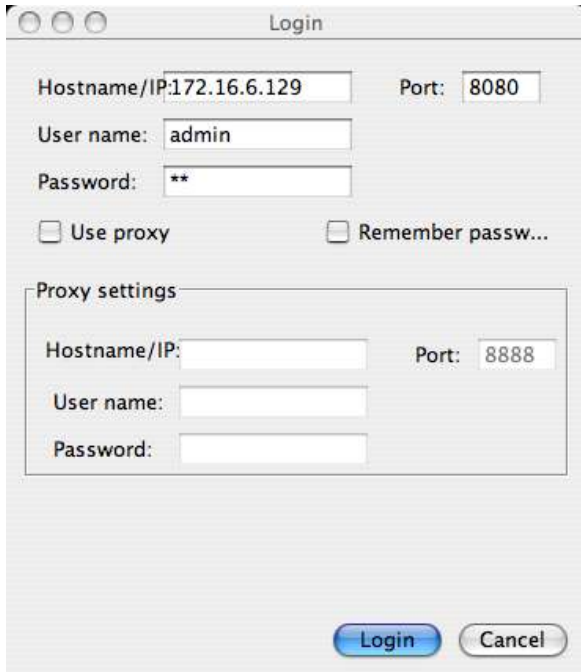
Funambol administration tool

The Funambol administration tool can be used to configure GroupDAV sync settings and other aspects of the Funambol server, such as authentication.

Launch it by entering the admin/bin directory and running funamboladmin:

```
cd admin/bin
```

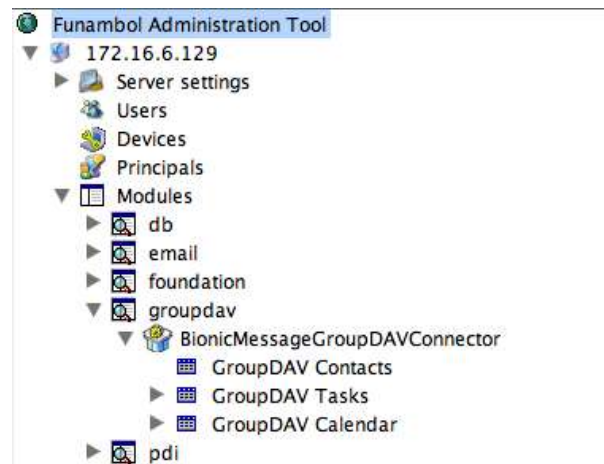
```
./funamboladmin
```



After startup, login, by going to the File menu and clicking login.

There may be a delay when logging in, be patient.

If login fails, stop and start server again to be sure. If problem persists, see the troubleshooting section.



The left hand pane of the Funambol administration tool lists available configuration options and modules. Of interest to us is the “groupdav” module. Expanding Modules->groupdav->BionicMessageGroupDAVConnector shows three choices:

- Contacts
- Tasks (inoperative)
- Calendar

Double clicking on contacts or calendar will take you to a source configuration screen.

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vCal Source Administration Panel	Contact Source Admin Panel
SyncML Source...: comalies-cal-v	SyncML Source: comalies-card-v
Source Type: text/x-vcalendar	Data format: text/x-vcard
GroupDAV U...: http://comalies.citadel.org:2000	Valid types: text/x-vcard, text/x-s4j-sifc
Server Source: /groupdav/Calendar	GroupDAV Server: http://comalies.citadel.org:2000
Store Location: /opt/Funambol/stores/comalies-cal-v/	GroupDAV Sour...: /groupdav/Contacts/
Path to timezone file: CURRENTLY NOT IN USE <small>Paths on Windows should be double backslashed i.e C:\funambol</small>	Use %USER% for multi user OGo etc.
<input type="checkbox"/> Use email address as server login	On Windows, double backslash paths
<input checked="" type="checkbox"/> Use single log file (recommended)	i.e C:\\funambol\\stores
<input type="checkbox"/> OGo1/ZS 1.4 All Day Events Fix <small>(See documentation before turning on)</small>	<input type="checkbox"/> Use email address as server login
	<input type="checkbox"/> Use single log files (recommended)
Version 1.1.1868 on 2007/09/... <input type="button" value="Save Settings"/>	Version 1.1.1868 on 2007/09/17 20:00 by ... <input type="button" value="Save settings"/>

Example configurations for event and contact sync sources.

Each sync source has various configuration options:

SyncML Source	Clients will use this URI to tell Funambol they want to sync with this source
Data format	Funambol offers two sets of data formats: <ul style="list-style-type: none"> ● IMC vCal/vCard – used by just about all SyncML clients <ul style="list-style-type: none"> ○ text/x-vcalendar ○ text/x-vcard ● Funambol SIF XML format – format used by Funambol clients, recommended as data format compatibility is better <ul style="list-style-type: none"> ○ text/x-s4j-sife (Events) ○ text/x-s4j-sifc (Contacts)
GroupDAV Server	GroupDAV server in http://host:port/ format
GroupDAV Source	The source on the GroupDAV server to sync, i.e <ul style="list-style-type: none"> ● /groupdav/Calendar/ (Citadel) ● /zidestore/dav/so/%USER%/public/Calendar/ (OpenGroupware) For servers such as OpenGroupware where the username is part of the source URL, use “%USER%” in its place. The GroupDAV connector will substitute the user name from the client into this URL.
Store location	Each GroupDAV sync source requires a 'store' for databases and sync logs. Ideally, this should be a directory within the Funambol bundle WARNING: Ensure correct permissions with this directory and the entire Funambol installation to prevent non-Funambol local users from accessing authentication data.
Use single log files	By default, to assist with debugging and bug fixing, the connector will output two log files (connector and storelog) for each sync, uniquely

timestamped. This setting changes this behavior to reuse the same log file, recommended for production environments.
--

Click “Save settings” to activate the sync source. Should you want to reconfigure it later, just expand the Calendar/Contact type node.

Additional configuration for Symbian S60 Clients (Nokia E and N series)

The S60 SyncML client assumes a different sync source naming scheme, and Funambol needs to be configured to 'correct' this before this client can be used. Two synclets also need to be configured to pre and post-process data from S60 clients to ensure correct dates flow between them.

1. Open `ds-server/config/com/funambol/server/engine/pipeline/PipelineManager.xml`
2. Near the top of the PipelineManager.xml there is a configuration section for ChangeSourceUriSynclet. Below, there is a configuration to change `./cal` to `cal`. Copy this block (from `<void method="put">` to `</void>`) and change it to suit your sync source.
3. Save PipelineManager.xml
4. Open `ds-server/com/funambol/server/com/funambol/server/engine/pipeline/bsh/NokiaS60.bsh`
5. Change the EVENTS_URI definition to match your sync source. Note the `!./` in front.
6. Save NokiaS60.bsh. Open NokiaS60in.bsh.
7. Change EVENTS_URI to match your sync source as before.
8. Save NokiaS60in.bsh
9. Restart server

Additional configuration for Synthesis SyncML client (PalmOS)

As with S60, additional synclet configuration is required to ensure trouble free operation for Synthesis.

1. Open `ds-server/config/com/funambol/server/engine/pipeline/bsh/SynthesisIn.bsh`
2. Change the EVENTS_URI and CONTACTS_URI definitions to match your sync sources.
3. Save SynthesisIn.bsh
4. Restart server

Furthermore, for each client synced, their timezone will need to be set in Funambol. This will be covered after the first sync.

Configuring your device/client

Each client usually shares the same range of configuration settings. Here are the 'generic' ones:

Server	http://yourip:8080/funambol/ds
User name and password	Same as used on GroupDAV server

Add in the events and contact sync sources you configured before, and you should be ready to sync.

Special notes for Palm Synthesis client configuration

Configure Synthesis to sync against a non-existent sync source for events on first sync. This is so

SyncML version should be set to SyncML 1.1. This setting is hidden in the advanced options dialog – tap the “Options” button at the top of the profile screen.

Filter options (N days before to N days in the future) needs to be turned off for events.

Post-sync configuration for Palm Synthesis event sync

After the first sync, you need to configure the timezone for your Palm device in the Funambol administration tool. As you did in the post-install configuration, start and log into your Funambol server.

1. Double-Click the *Devices* node in the left pane to access the devices panel
2. List all the devices known to the server by clicking the “Search” button
3. Select your device from the table and click “Edit”

Device Details

ID :

Type :

Timezone :
 Convert dates to this timezone

Charset :

Address :

Msisdn :

Notification Builder :

Notification Sender :

Description :

4. Select your timezone from the dropdown
5. Tick “Convert dates to this timezone”
6. Fill in the type and description fields to keep Funambol happy.
7. Click Save.
8. Configure Synthesis to sync against your GroupDAV Calendar sync source
9. Sync.

Troubleshooting

Enabling advanced logging

In the Funambol administration tool, logging can be configured in *Server Settings->Logging*. Turning up the verbosity can reveal more about server and connector operations.

Tomcat stderr file

`tools/tomcat/catalina.out` catches stdout and stderr output, which often contains exceptions which aren't logged.

Connector/Store logs

Connector and store logs for each sync source can be found in the store directory you configured for your sync source.

Installing connector updates

You may need to update the GroupDAV connector version in the future. To do this:

- Open a terminal and “cd” into the `ds-server` directory.
- Export the environment variable `J2EE_HOME` to be “`tools/tomcat`”. This needs to be an absolute path, i.e:
 - `export J2EE_HOME=/opt/Funambol/tools/tomcat`
- Export the environment variable `JAVA_HOME` to be “`tools/jre_1.5.0`”, this also needs to be an absolute path
 - `export JAVA_HOME=/opt/Funambol/tools/jre_1.5.0`
- Copy the module archive (i.e `groupdav-1.1.s4j`) into `ds-server/modules`
- Run `bin/install-modules.sh` with the `tomcat50` argument
 - `bin/install-modules.sh tomcat50`
 - Answer 'n' to 'replace database'
- Stop and restart the server
 - `cd ..`
 - `sh tools/bin/funambol.sh stop`
 - `sh tools/bin/funambol.sh start`