

# **bionicmessage Groupware Sync Server**

## **Installation and Configuration guide**

For Groupware Sync Server 2

Powered by Funambol Device Sync 6.5 Technology

## ***Introduction***

The BionicMessage GroupWare Sync server is based on Funambol DS-Server 6.5 bundle package, with the inclusion of the GroupDAV scheduling sync support.

## ***Support and Feedback***

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

[matt@mcbriDEMATT.dhs.org](mailto:matt@mcbriDEMATT.dhs.org)

I greatly appreciate feedback from those using this software.

GroupDAV mailing list:  
[groupdav@opengroupware.org](mailto:groupdav@opengroupware.org)

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

Contract integration services are available.

## ***Other useful documents***

Basic documentation for Funambol v6.5 is available from the Funambol Open Source [download page](#).

*[The Funambol Administration guide](#) is particularly useful for post-install configuration.*

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## ***Installation***

After downloading the bundle executable, ensure setup permissions are set

```
chmod +x bmessage_ds6.bin
```

Then run the installer

```
sh bmessage_ds6.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:

<b><u>Funambol bundle structure</u></b>	<b><u>Description</u></b>
▼ ds-server	Funambol DS-Server main directory
• modules	Drop any future GroupDAV connector updates (groupdav-2.0.s4j) into here
• config	Funambol configuration files
• admin	Funambol administration tool
▼ tools	Underlying infrastructure used to run Funambol
▼ tomcat	Apache tomcat 5.5 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
```

NOTE: Users of OS X Leopard will have to launch the administration tool another way due to a bug:

```
sh platform6/lib/nbexec -clusters 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 two choices:

- Calendar (including task sync)
- Contacts

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

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### GroupDAV Calendar Sync Source

SyncML ID:

GroupDAV Server:

Client data type:

text/x-vcalendar for most clients  
text/x-s4j-sife for Funambol clients. text/x-s4j-sift for Funambol tasks

Store location:

Source Name	Server Path
default	/groupdav/Calendar/

NOTE: there MUST be a 'default' source. Use %USER% for OGo multiuser

Inbound processor:

(Advanced setting. Leave blank unless you use one)

Options:

- This is a todo/task sync source
- Use single log files (RECOMMENDED for production use)
- Substitute username for email address on GroupDAV server
- OGo / multi timezone all day event handling

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### GroupDAV Contact Sync Source

SyncML ID:

GroupDAV Server:

Client data type:

text/x-vcard for most clients  
text/x-s4j-sifc for Funambol clients

Store location:

Source Name	Server Path
default	/groupdav/Contacts/

NOTE: there MUST be a 'default' source

Inbound processor:

(Advanced setting. Leave blank unless you use one)

Options:

- Use single log files (RECOMMENDED for production use)
- Substitute username for email address on GroupDAV server

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*Example configurations for event/task 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
GroupDAV Server	GroupDAV server in http://host:port/format
Data format	<p>Funambol offers two sets of data formats:</p> <ul style="list-style-type: none"> <li>● IMC vCal/vCard – used by just about all SyncML clients <ul style="list-style-type: none"> <li>○ text/x-vcalendar (Events and Tasks)</li> <li>○ text/x-vcard</li> </ul> </li> <li>● Funambol SIF XML format – format used by Funambol clients, recommended as data format compatibility is better <ul style="list-style-type: none"> <li>○ text/x-s4j-sife (Events)</li> <li>○ text/x-s4j-sifc (Contacts)</li> <li>○ text/x-s4j-sift (Tasks)</li> </ul> </li> </ul>
Store location	<p>Each GroupDAV sync source requires a 'store' for databases and sync logs. Ideally, this should be a directory within the Funambol bundle</p> <p><b>WARNING:</b> Ensure correct permissions with this directory and the entire Funambol installation to prevent non-Funambol local users from viewing others data.</p>
GroupDAV Source	(From connector version 2.0 onwards, the infrastructure supports multiple backend sources, however, this

	<p>functionality is beyond the scope of this guide)</p> <p>The source(s) on the GroupDAV server to sync, i.e</p> <ul style="list-style-type: none"> <li>• /groupdav/Calendar/ (Citadel)</li> <li>• /zidestore/dav/%USER%/public/Calendar/ (OpenGroupware)</li> </ul> <p>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.</p>
Todo/Task source	Check to set the sync source to 'task' mode
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.
OGGo/Zidestore all day fix (GMT-relative all day)	Under this setting, when all day events are created/modified on the device, they are formatted in a way that OpenGroupware WebUI would detect. (With OpenGroupware WebUI it is advisable to enter in hours manually rather than use all day events)

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

### ***Setting up proper encoding for SIF based sources***

When using SIF based sync sources (i.e text/x-s4j-sif\*), the data coming in and out of the sync source needs to be 'wrapped' in a way that separates it from the SyncML stream, which is also XML. Base64 encoding is used to achieve this. Also, you can encrypt the data with DES for added security.

1. Click on *Server Settings* in the administration tool tree
2. Click *Configure* on the *Data Transformation Manager* row.
3. Click the + “plus” button on the *Data Transformations* group to add a new configuration row, and enter in the SyncML ID of the sync source, and “b64”, respectively.

For more information, see “*Manually Enabling Encryption/Encoding*” in the Funambol Administration guide.

## Configuring your device/client

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

Server	<a href="http://yourip:8080/funambol/ds">http://yourip:8080/funambol/ds</a>
User name and password	<b>Same as used on GroupDAV server</b>

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

## 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 `tomcat55` argument
  - `bin/install-modules.sh tomcat55`
  - Answer 'n' to 'replace database'
- Stop and restart the server
  - `cd ..`
  - `sh tools/bin/funambol.sh stop`
  - `sh tools/bin/funambol.sh start`