



# **Funambol Domino Connector Quick Start Guide**

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# 1. Introduction

The purpose of this document is to describe how to manage and administer the Domino SyncSource component using the SyncAdmin console.

This document is intended to be read by the administration users.

## 1.1. Related Documents

The following documents are related to this design document:

- [1] Funambol Interchange Format
- [2] Internet Calendaring and Scheduling Core Object Specification - [RFC 2445]
- [3] Funambol Modules Development Guide
- [4] Funambol SyncServer 5.0.x Administration Guide

## 2. Setting Domino Connector

### 2.1. Funambol Domino Connector Installation Procedure

The Funambol Domino Connector is distributed as a standard Funambol module [3]. The distribution contains the following files:

- funambol-domino-<major>.<minor>.<buildnumber>.s4j (the module)
- the release notes
- the readme.txt
- this guide

To install the module you have to follow this steps:

1) put the s4j file in the directory

`<installation dir>/ds-server/modules`

2) modify “install.properties” file adding “funambol-domino-3.x.x” to the modules list:

***modules-to-install=foundation-3.0.1,pdi-3.0.1,pimweb-3.0.1,funambol-db-3.0.1,funambol-domino-3.x.x***

3) start installation modules command.

4) copy NCSO.jar lib to Funambol server classpath `<installation dir>/server/lib`. This file must be compatible with Domino Server version. For instance if Domino server is 6.5.3 version, NCSO.jar must be 6.5.3 or compatible.

In the domino\_connector\_3.0.8 version is included the NCSO of the Domino Server 7.0 version

For more details about the Funambol module installation see [4].

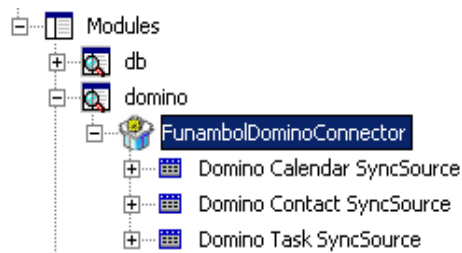
During the installation the following steps are performed automatically:

1. the database is initialized creating the connector specific tables and registering the connector into the server.
2. the DominoOfficer.xml file is copied in the directory:

`<installation dir>/ds-server/config/com/funambol/server/security`

### 2.2. Configuring the Domino Connector

Once the installation completed, you can use the Administration Tool to configure the Domino connector. In the tree structure at the left of the window, click on *Modules*, then click on *domino*.



**Figure 1: Installed modules tree**

Then click on *DominoConnector*. This will display the Domino Connector Configuration Panel:

**Figure 2: Domino Connector configuration panel**

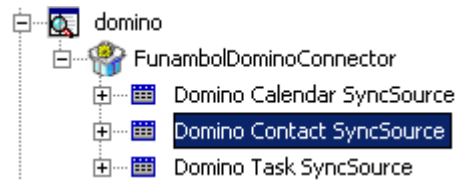
**Officer Configuration Configuration:**

<i>Property</i>	<i>Description</i>
BackEnd Server:	The address of the back-end server (i.e. Domino server)
Port	The port used by domino server to communicate with DIIOp protocol. Default port is 63148
SSL	Check this option fs you want to use a secure connection between the Sync Server (Funambol) and the Back-End Server (Domino)

\* for more information refer the chapter about Setting Up a Secure Connection Using SSL

## 2.3. Configuring SyncSource

To set up the Domino Connectors SyncSources go in the Administration Console and check the following tree structure



**Figure 3: Domino SyncSources types Tree**

All SyncSources have the following properties:

Property	Description
Source URI	The sync source URI [i.e. “./contacts” ].
Name	The SyncSource name. [i.e. “contacts” ]
Host	The Domino server hostname/ip address.
Port	The Domino DIIOP server port. (default: 63148)
Type	Should the Data content be SIF-XML format or vcard/ical format? (see next table)
Encryption	Should the Data content be encrypted using DES algorithm?
Encoding	Should the Data content be encoded using Base64 algorithm?

The tables below show the configuration to use the Domino SyncSource with mobile phone or with Funambol clients that use SIF-XML format.

### Domino SyncSources configuration to use Mobile Phone

SyncSource	Property	Value
Domino Calendar SyncSource		
	Type	i-carl
Domino Contact SyncSource		
	Type	vcard

### Domino SyncSources configuration to use Funambol Clients that use SIF-XML format

SyncSource	Property	Value
Domino Calendar SyncSource		
	Type	SIF-E
Domino Contact SyncSource		
	Type	SIF-C

<i>SyncSource</i>	<i>Property</i>	<i>Value</i>
Domino Task SyncSource		
	Type	SIF-T

## 2.4. Officer Configuration

In order to set the Officer for Funambol Domino Connector you have to set the parameters in the file; at the moment you have to set no parameters .:

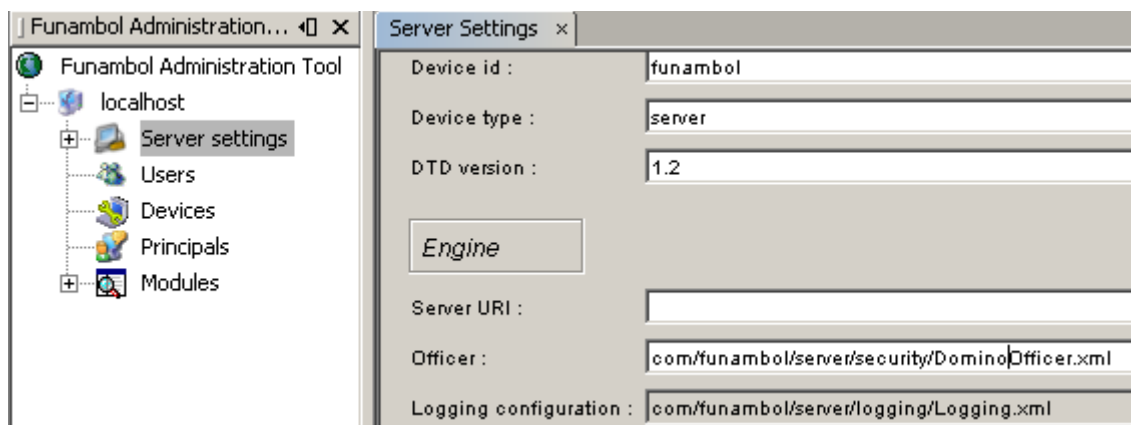
```
<installation dir>\ds-server\config\funambol\server\security\DominoOfficer.xml
```

This is an example of the DominoOfficer.xml file:

```
<?xml version="1.0" encoding="UTF-8"?>
<java version="1.4.0" class="java.beans.XMLDecoder">
  <object class="com.funambol.domino.security.DominoOfficer">
    <void property="serverAuth">
      <string>none</string>
    </void>
  </object>
</java>
```

In the Admin tool you have to specify the correct Officer:

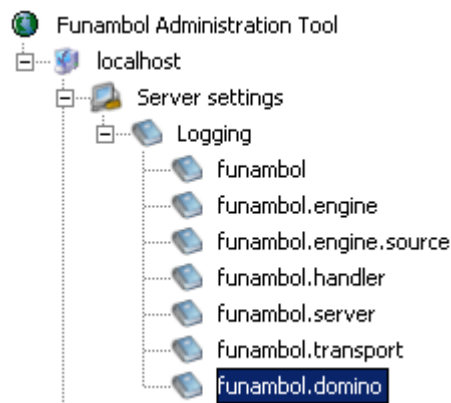
Officer : com/funambol/server/security/DominoOfficer.xml



**Figure 4: Officer Settings**

## 2.5. Enabling Log

To modify the logging level and other properties, go the Administration Tool, and check out the following tree structure:



**Figure 5: Log Tree**

Click on any of the categories: funambol, funambol.engine and so on, to display their logging configuration panel:

**Figure 6: Domino Log configuration panel**

Modify the options to obtain the desired logging.

## 2.6. Setting Up a Secure Connection using SLL

To use SSL, Domino Server and Funambol Server must have a common trusted root certificate from a certificate authority. This process is best covered as a series of steps.

### Step 1

Create a key ring. Open the Server Certificate Admin (certsrv.nsf) database on a Domino server and use its forms to create and populate a key ring. See *Administering the Domino System, Volume 2* or the Domino Administrator Help for detailed information. For testing purposes, you can use the CertAdminCreateKeyringWithSelfCert form to create a key ring with a self-certified certificate.



## Step 2

Move the keyring to the server. The keyring consists of a keyring file (KYR file) and stash file (STH file). These files are generated on the computer from which you're accessing the Server Certificate Admin database. Move or copy the two keyring files to the computer containing the Domino server. Place them in the server's data directory. For example, if you create a keyring with a self-certified certificate using default names and copy the files to a computer with a server whose data files are installed at C:\Lotus\Domino\Data, the server files would be:

```
C:\Lotus\Domino\Data\selfcert.kyr C:\Lotus\Domino\Data\selfcert.sth.
```

## Step 3

Starting or restarting the DIIOP task generates a file named TrustedCerts.class in the Domino data directory. Copy TrustedCerts.class to the Funambol Server classes directory:

```
<installation dir>/webapps/funambol/WEB-INF/classes
```

and restart Funambol Server.

## Step 4

Enable the domino server for SSL. In the Server document in the server's Domino Directory, go to the Ports tab, then the Internet Ports tab. Under SSL settings, specify the SSL key file name (for example, selfcert.kyr). Go to the DIIOP tab. Ensure that the SSL port number is correct-it defaults to 63149. Enable the SSL port. Set Name & password and Anonymous authentication as desired.

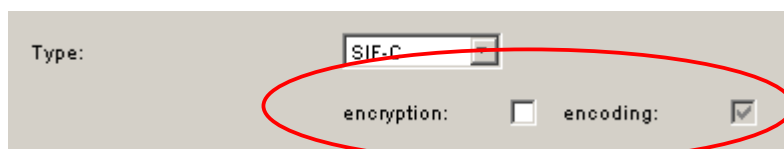
Finally if you enabled the SSL property the Funambol Server should communicate with Domino Server using a Secure Connection.

\*For more informations about Domino Server SSL configurations you can check the following URL:

[http://www-128.ibm.com/developerworks/lotus/library/ls-Java\\_access\\_pt1/index.html](http://www-128.ibm.com/developerworks/lotus/library/ls-Java_access_pt1/index.html)

## 2.7. Enabling Data Transformation

In order to enable the Encryption Communication between syncML client (i.e. The Funambol WM plug-in) and the Funambol Server/Domino Connector you have to check the "encryption/encoding" checkbox in the SyncSource configuration Panel



**Figure 7: encryption settings**

if the encryption is enable the synchronization will be provided with DES and BASE64 encoding

You can also check the configuration in the Data transformation panel in the Server Settings section (Figure 8) in the Administration Tool.

**DataTransformer Manager Configuration**

**Transformers for incoming items** + -

Name	Class
b64	com.funambol.server.engine.transformer....
des	com.funambol.server.engine.transformer....

**Transformers for outgoing items** + -

Name	Class
b64	com.funambol.server.engine.transformer....
des	com.funambol.server.engine.transformer....

**Transformations required** + -

Source URI	Transformation
domscal	b64
domscard	b64

Save

**Figure 8: DataTransformer Manager Configuration panel**

Here you can set in the 3th table the transformations required for each sync source with the Transformers available in the tables above.