

The  GNOME™ Conference  
**GUADDEC**

Improving the file sync cloud provider  
integration in GNOME

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## Why this is needed

- 🐾 Unified way of accessing synced folders, sharing files
- 🐾 Having a cross platform API
- 🐾 Get rid of status icons

### **Goal:**

Provide an API to allow sync clients to expose their functionality to other applications

# Cloud Providers DBUS interface

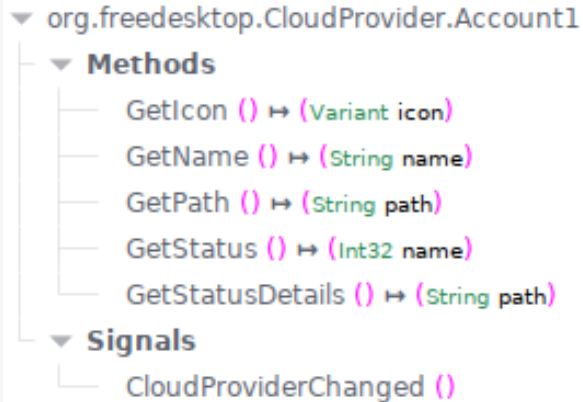


Figure 1: org.freedesktop.CloudProvider.Account1 DBus-Interface

## Object path

- ▼ /org/nextcloudgmbh/nextclouddev
  - ▼ **Interfaces**
    - ▶ org.freedesktop.DBus.Introspectable
    - ▶ org.freedesktop.DBus.ObjectManager
    - ▶ org.freedesktop.DBus.Peer
    - ▶ org.freedesktop.DBus.Properties
  - ▼ /org/nextcloudgmbh/nextclouddev/Account0Folder0
    - ▼ **Interfaces**
      - ▶ org.freedesktop.CloudProvider.Account1
      - ▶ org.freedesktop.DBus.Introspectable
      - ▶ org.freedesktop.DBus.Peer
      - ▶ org.freedesktop.DBus.Properties
      - ▶ org.gtk.Actions
      - ▶ org.gtk.Menus
    - ▶ /org/nextcloudgmbh/nextclouddev/Account1Folder1

Figure 2: DBus object for Cloud Provider Accounts

## Server implementation: Nextcloud client

```
cp = CloudProvider(connection,  
                    "org.examplecloud.synclient",  
                    "/org/examplecloud/syncclient");  
acc = Account1Skeleton();  
acc.connect("handle_get_name", onGetName)  
acc.connect("handle_get_icon", onGetIcon)  
acc.connect("handle_get_path", onGetPath)  
acc.connect("handle_get_status", onGetStatus)  
  
cp.exportAccount(account_object_name, acc)  
cp.exportMenu(account_object_name, getModel())  
cp.exportActions(account_object_name, getActionGroup())
```

## Client implementation: nautilus

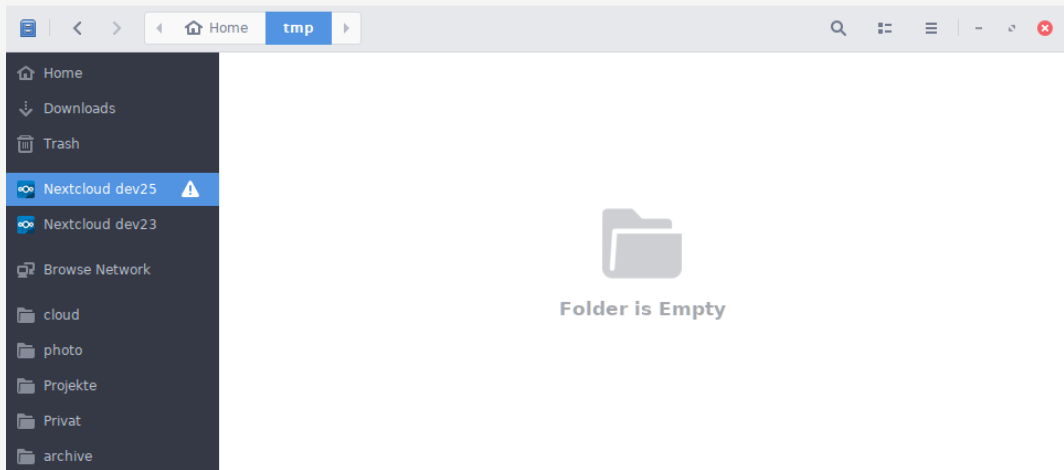
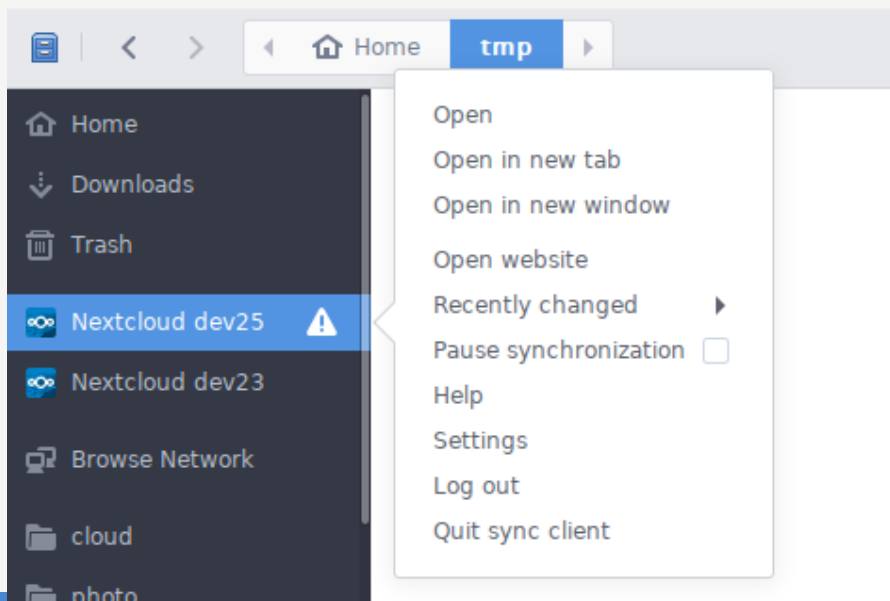


Figure 3: nextcloud-client-sidebar.png

## Client implementation: nautilus



## Client implementation: How to use it

```
cloudProviders = CloudProviders()
cloudProvider.connect("changed", onManagerChanged)

def onManagerChanged(self)
    providers = cloudProviders.getProviders()
    for provider in providers:
        status = provider.getStatus()
        name = provider.getName()
```



# Interaction with file cloud providers

- 🐾 Show state of sync process
- 🐾 Interact with the sync client (start/stop/settings)
- 🐾 *Select folder to sync with the cloud provider*
- 🐾 *Inform about changes of files*
- 🐾 *Sharing with other users, via mail or public link*
- 🐾 *Commenting on files*
- 🐾 *Browse versions*

# Thank you

Any feedback / discussion about further cloud integration is welcome.

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