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# **TeamDrive Agent Documentation**

*Release 4.3.0*

**TeamDrive Systems GmbH**

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## COPYRIGHT NOTICE

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## INTRODUCTION

This manual will guide you through the installation of your TeamDrive Agent. This document is intended for system administrators and users, who need to install and configure a TeamDrive Agent.

This Installation Guide outlines the deployment of a stand alone TeamDrive Agent, which is not part of a Web Portal.

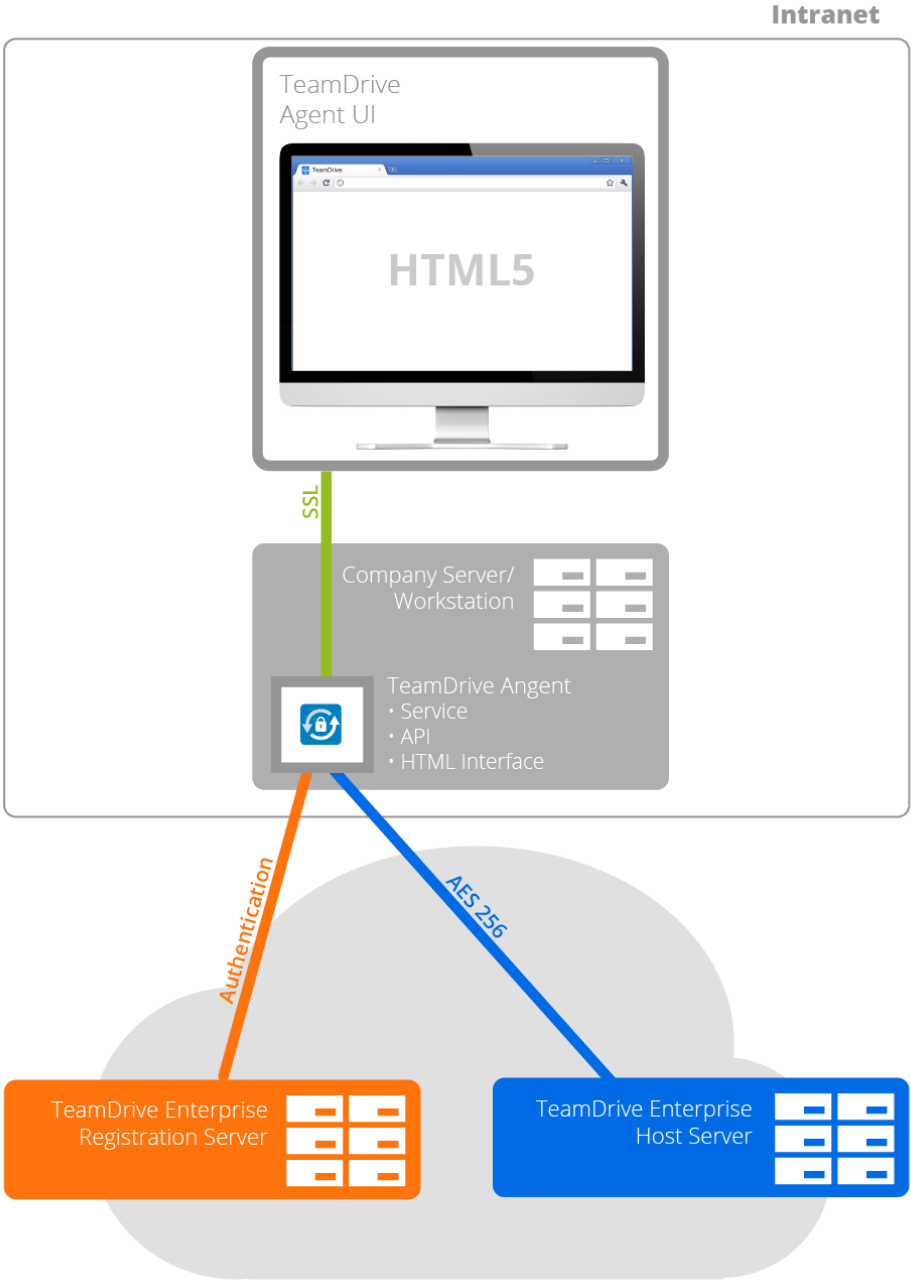
### 2.1 Overview

The TeamDrive Agent is a full featured TeamDrive Client without a graphical user interface. An Agent provides:

- Synchronization of Spaces with the Cloud.
- Synchronization of Spaces with a local file system.
- Synchronization of Spaces with a remote file system.
- Management GUI using a Web App.
- API access using JSON calls.

This figure shows an overview of a TeamDrive Agent installation:

# TeamDrive Agent



Typically, a TeamDrive Agent is installed on a server or network attached storage and communicates with the TeamDrive Cloud.

## WINDOWS INSTALLATION

### 3.1 Requirements

The *TeamDrive Agent* allows a TeamDrive Windows client to be installed and run as a Windows service. The *TeamDrive Agent* can be run without a GUI and allows data to be synchronized in the background, even when a Windows user is not currently logged in.

The support of older Windows versions has been dropped. The minimum supported Windows version is **Windows 7** or **Windows Server 2009**.

In order to install the *TeamDrive Agent*, you will need at least 50 MB of free disk space, a valid email address and Internet access. In the end, the total amount of disk space used will depend on the size of your created and/or joined Spaces.

If it is your first time installing and using TeamDrive you will need to create a TeamDrive account before installing the *TeamDrive Agent*. TeamDrive cannot be used without an account.

### 3.2 Required Skills

When installing the *TeamDrive Agent*, we assume that you have basic knowledge of:

- Starting and stopping of Windows Services
- Configuration of a firewall

### 3.3 Installation

After you have successfully downloaded the *TeamDrive Agent*, double-click the installation file to start the installation.

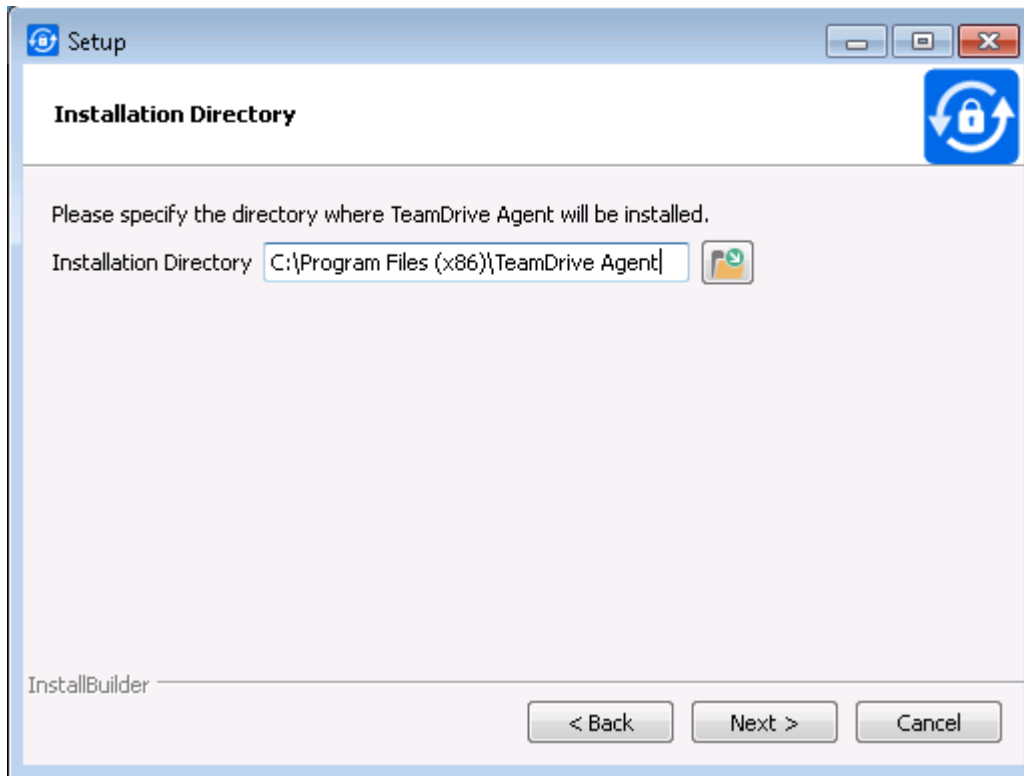
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**Note:** In order to install the *TeamDrive Agent* on a Windows terminal server, you need to put the server into a special installation mode by executing *Change user /install* at a command prompt.

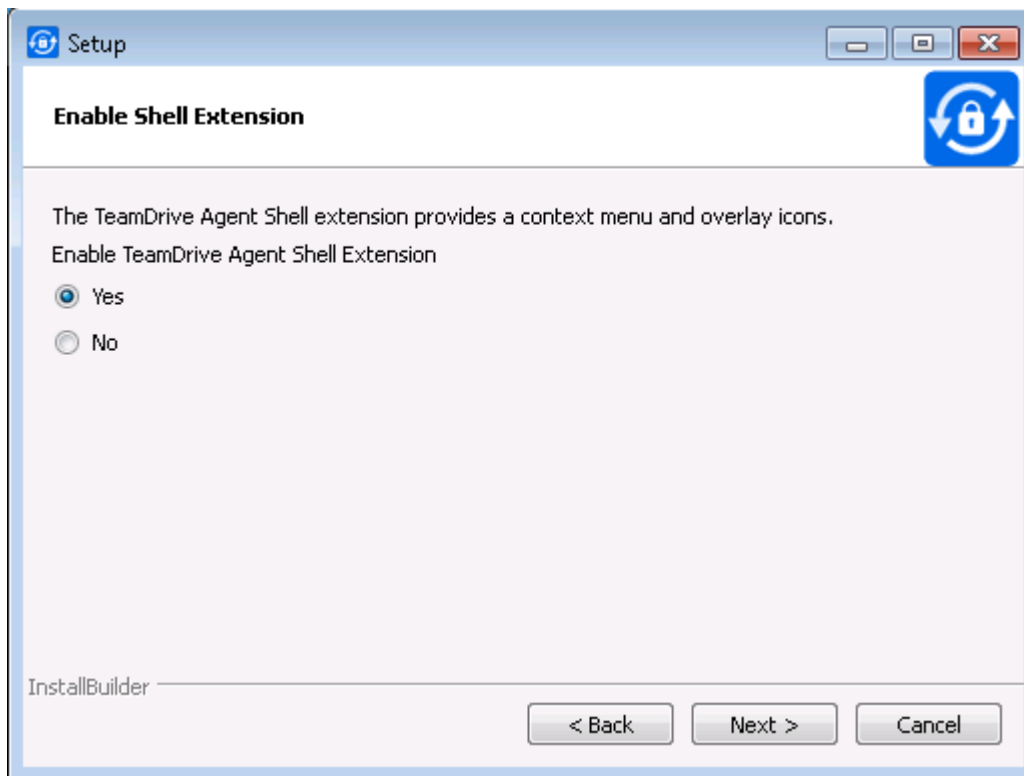
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1. To install the *TeamDrive Agent*, please specify an installation directory as seen in the following screen shot. We recommend not changing the installation directory to another location, as using the default directory will help with future version upgrades.



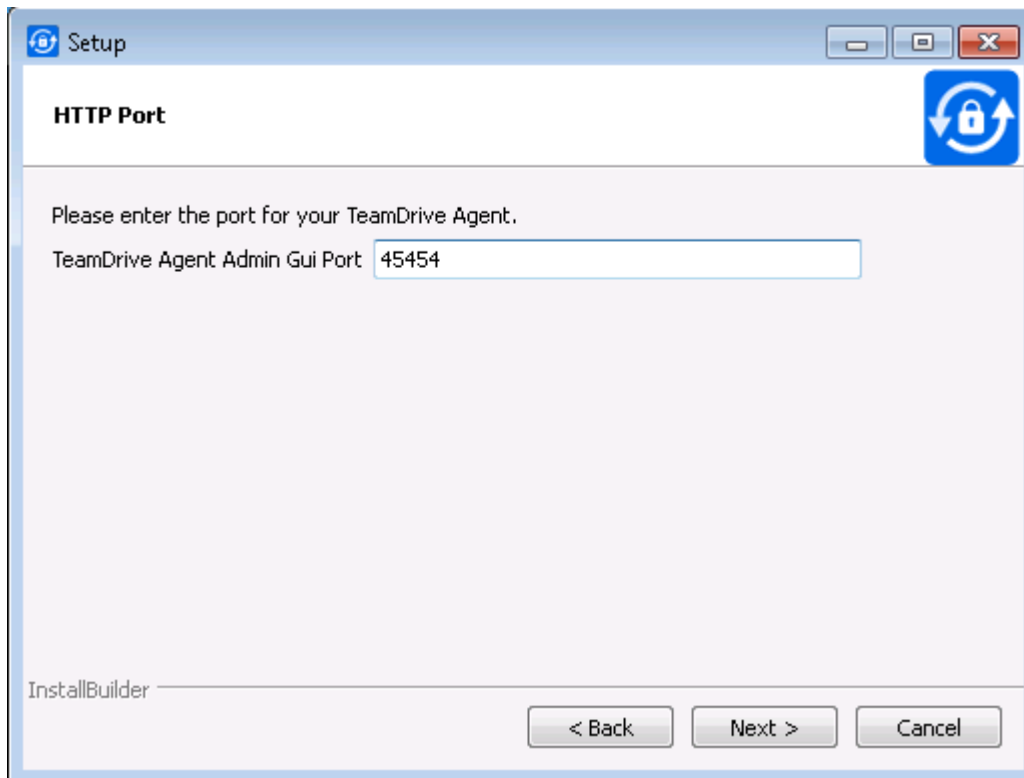


2. Afterwards, you can choose to install a Windows Explorer integration which provides some context menu entries and overlay icons that show the current synchronization status of Spaces, folders and files:



3. In order to administer the *TeamDrive Agent*, you will need to specify a TCP port. This port will be used to

provide an administration interface using your web browser. You can choose another port number, but further examples in this document will use the port *45454*:

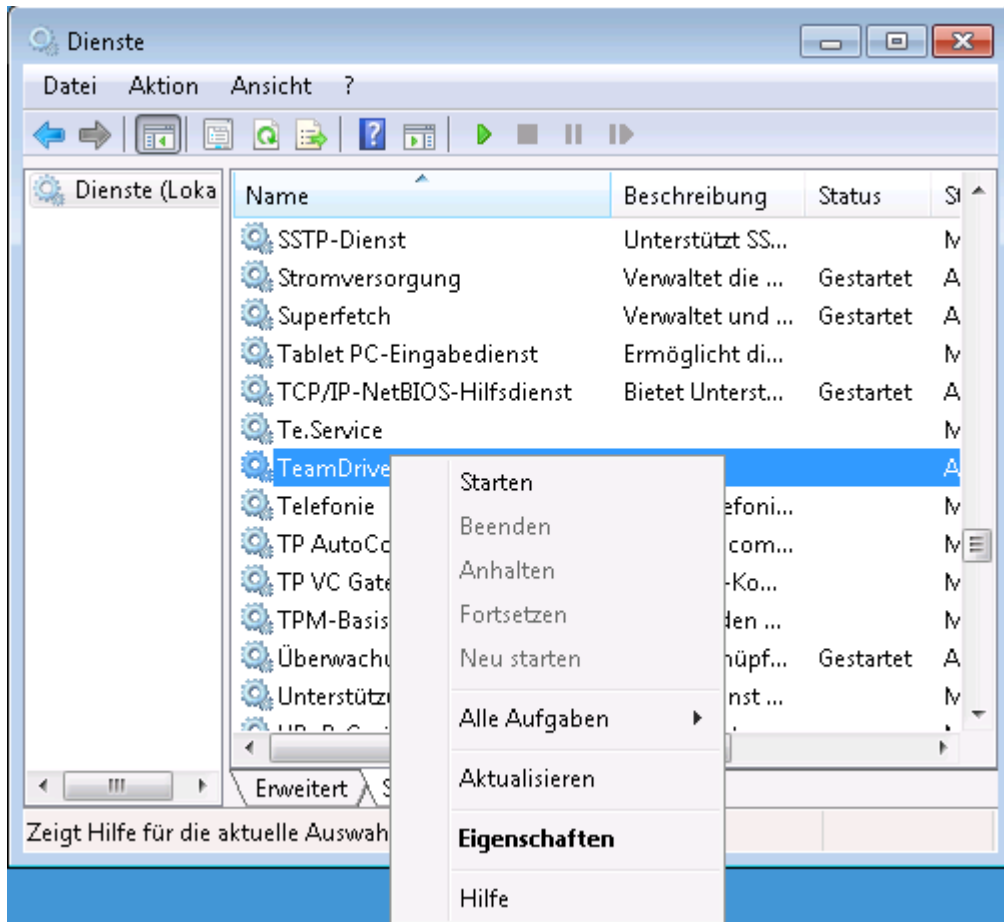


4. During the installation, the *TeamDrive Agent* will be registered as a Windows service under the name "*TeamDrive Agent Client*". Please be aware that the Windows user logged in at the time of the *TeamDrive Agent Client*'s installation is automatically associated with this Windows service. Only this Windows user will be able to access the settings file of the *TeamDrive Agent*.

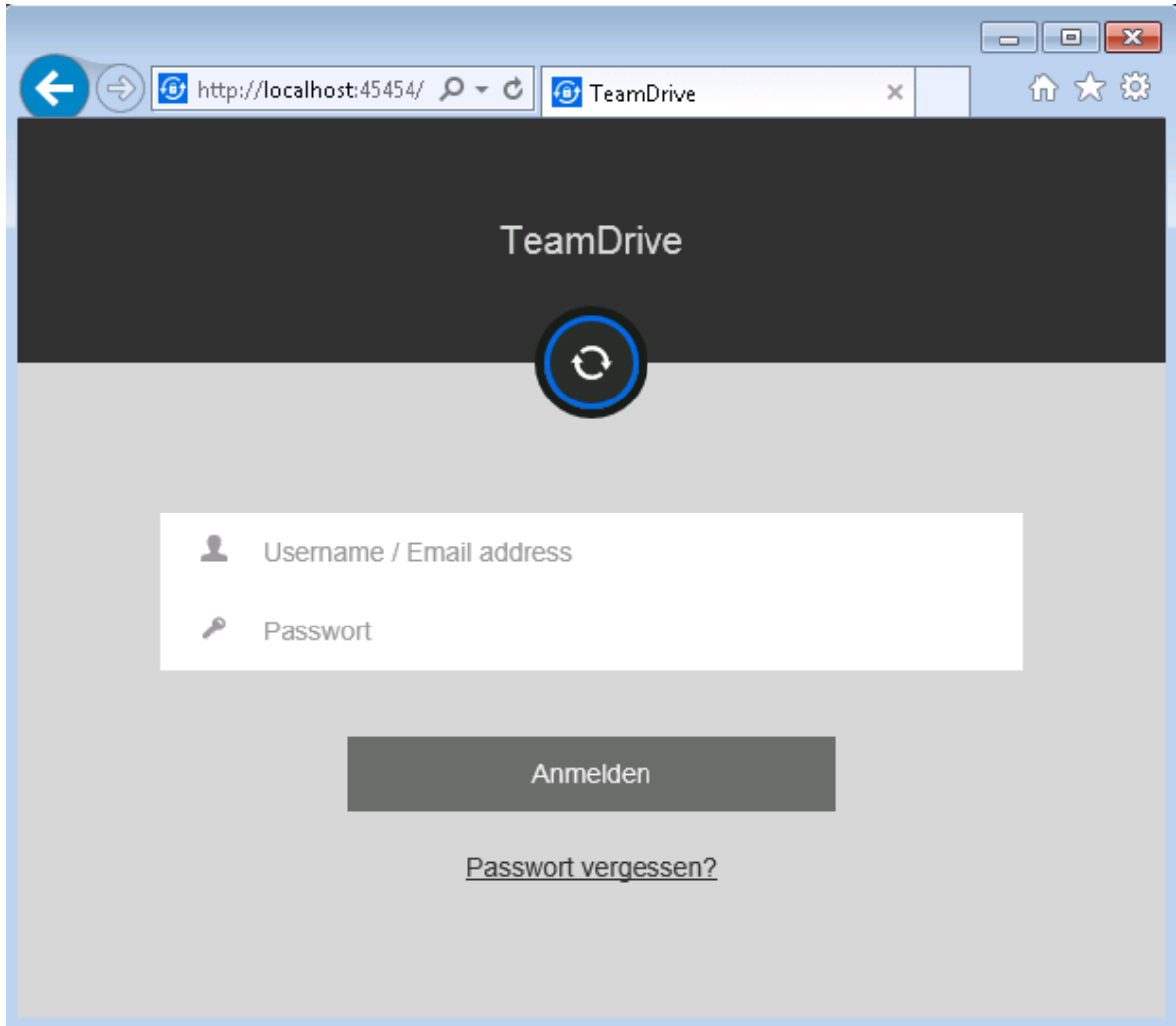
## 3.4 Post-Installation Tasks

To be able to synchronize files with the *TeamDrive Agent*, some initial steps are required.

1. Open the Windows services overview (e.g. on Windows 8 "Control Panel" → "Administrative Tools" → "Services").
2. Please start the Windows service "*TeamDrive Agent Client*":



3. Open your browser and go to <http://localhost:45454>. Please replace the port with the one that was used during installation:



You can now activate Spaces in the administration interface. Your TeamDrive Spaces will now be synchronized in the background.

### 3.5 Changing the Windows User Account

If at some point you wish to change which Windows user you would like to use to manage the *TeamDrive Agent*, you simply need to edit the configuration file “teamdrive.ini”.

You can navigate to the file using “%ProgramData%” → “TeamDrive3” → “teamdrive.ini” or simply `C:\ProgramData\TeamDrive3\teamdrive.ini`. Open the file with a text editor, locate the entry “teamdrive-home-agent=” and replace the old Windows user account with the new desired Windows user account in the given file path. Here is an example of a typical *teamdrive.ini* that was created by the installer:

```
[Settings]
teamdrive-home-agent=C:/Users/teamdrive/AppData/Roaming/TeamDrive3
http-api-port-agent=45454
shell-extension-user-agent=teamdrive
```

Please also look at the documentation of `teamdrived --teamdrive-home` (page 19), `teamdrived --http-api-port` (page 21) and *Platform specific Settings* (page 22).

The setting *shell-extension-user-agent* must be set to the same Windows username as in the *teamdrive-home* setting. Afterwards, please continue with *Post-Installation Tasks* (page 7).

## 3.6 Accessing Network Shares

In order to access Spaces on network shares, the Windows account needs to be changed to a user, who has rights to access network shares. It is recommended to use the Windows account used to install the *TeamDrive Agent*.

---

**Note:** the *TeamDrive Agent* running as a Windows Services may not be able to access mapped network drives. It is recommended to use a *UNC* path directly as a Space root.

---

## 3.7 Uninstalling the TeamDrive Agent

To completely remove the TeamDrive Agent and all files from you System, follow these Steps:

1. Stop the *TeamDrive Agent Client* Windows Service
2. Execute the *uninstall.exe* executable and follow the wizard.
3. You may now delete the *teamdrived --teamdrive-home* (page 19) folder containing the application data.
4. If you have used a different *TeamDrive Data* path, please also delete this folder. See *teamdrived --data-path* (page 19) for details.
5. You can now delete the Spaces path as configured in *teamdrived --spaces-path* (page 19). Keep in mind that this folder may contain your Space key backups. Without the keys, you may no longer be able to access your Spaces.
6. Open a Administrator console and execute this command to also remove the Windows Service:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>sc delete "TeamDrive Agent Client"
[SC] DeleteService SUCCESS
```

## LINUX INSTALLATION

At the moment, you can either use the 64 bit RPM package or the 64 bit .tar.gz file.

### 4.1 Requirements

The Library Dependencies are moderate and should be provided by all recent linux distributions:

Library	Version
GLibc	2.9
GLibc++	3.4.11
libz	

Under Linux, TeamDrive is using the `inotify`<sup>1</sup> API of the Linux kernel to be notified about file modifications. Under some Linux distributions, there is a rather small limit regarding the number of files that can be watched. You can find out the current watch handle limit by executing `cat /proc/sys/fs/inotify/max_user_watches` in a terminal. If this number is lower than the number of files in your Spaces, please increase this value by adding for example `fs.inotify.max_user_watches=100000` to your `/etc/sysctl.conf` file. Please reboot your system afterwards.

### 4.2 Installation on RPM based Distributions

If you are on a RPM based distribution, please install the TeamDrive Agent by installing the rpm file.

The TeamDrive Agent is hosted on a dedicated yum repository. This makes the installation and applying of future updates very easy — you can simply run `yum update` to keep your TeamDrive Agent up to date.

To enable the repository, you need to download the `td-agent.repo` file and place it into the directory `/etc/yum.repos.d/`, e.g. by using `wget`:

```
[root@agent ~]# wget -O "/etc/yum.repos.d/td-agent.repo" \
"http://repo.teamdrive.net/td-agent.repo"
```

This will enable the “TeamDrive Agent Version 4” repository, which you can check by running `yum repolist` afterwards:

```
[root@agent ~]# yum repolist
Loaded plugins: security
repo id          repo name          status
td-agent-4       TeamDrive Agent Version 4  4
base             CentOS-6 - Base    6.367
extras          CentOS-6 - Extras  14
```

<sup>1</sup> <http://man7.org/linux/man-pages/man7/inotify.7.html>

```
updates                CentOS-6 - Updates                1.094
repolist: 7.477
```

To install the TeamDrive Agent, install the following package via yum from the “TeamDrive Agent” repository:

```
[root@agent ~]# yum install teamdrive-Agent
```

Please continue with *Starting and Stopping* (page 12).

## 4.3 Installation on other Distributions

To install the TeamDrive Agent on a non-RPM based distribution, please download the Agent manually for example by using wget:

```
wget http://s3download.teamdrive.net.s3.amazonaws.com/4.<version>/TMDR/linux-x86_64/
↳TeamDrive_Agent_4.<version>_x86_64.tar.gz
```

Please replace *<version>* with the latest release. Now, please extract the *TeamDrive Agent*:

```
tar -xvzf TeamDrive_Agent_4.<version>_x86_64.tar.gz
```

This will extract the TeamDrive Agent into a subdirectory *TeamDrive*.

---

**Note:** The *tar.gz* file does not register a *teamdrive-Agent* command on your system.

---

## 4.4 Starting and Stopping

Before starting the TeamDrive Agent for the first time, please also read *Initial Set-Up* (page 12).

Please start TeamDrive by using the shortcut in your desktop menu or bar. Alternatively, you can execute the global command “teamdrive-Agent” or “./teamdrived” from the installation folder. TeamDrive requires some system settings that are not available by executing the teamdrived.bin executable directly.

---

**Note:** Running TeamDrive as root is not recommended. TeamDrive runs perfectly without privileges.

---

To stop the TeamDrive Agent, please execute:

```
/opt/teamdrive/TeamDriveApi.py '<agent-host>:<port>' quit False
```

Replace *<agent-host>* with the host where your TeamDrive Agent is installed and the port with the one you specified.

## 4.5 Initial Set-Up

To administrate your TeamDrive Agent, you need to enable the HTTP API by setting the *teamdrived --http-api-port* (page 21) option either as a command line argument or as a setting.

Then start the TeamDrive Agent, open your favorite browser and go to *http://<agent-host>:45454*. Replace *<agent-host>* with the host where your TeamDrive Agent is installed and the port with the one you specified. Log-in to your TeamDrive account now.

## 4.6 Activate SSL communication for the Agent web-interface

There are 2 possibilities to active SSL communication:

1. Use the build-in SSL communication as described in `teamdrived-options`. Set *http-api-type* to *ssl* and define the certificate and private key file. The certificate and private key is using the same format like SSL certificates for common web servers.
2. Use a web-server, like the Apache, as a front-end for the ssl communication and forward the requests to the agent using the apache proxy module. This is the recommended configuration in case of using the *inbox-functionality*. Set *http-api-type* to *tcp* and start the agent using the standard port. This is an example apache configuration which must be added to the `ssl / virtual host configuration` and will forward requests to the agents standard port 45454:

```
<Location ~ ^/>
  RewriteEngine On
  # Replace <my-own-ip> with your static IP to disable
  # access to the agents login page for unknown users
  RewriteCond "%{REMOTE_ADDR}" "!"<my-own-ip>"
  RewriteRule (/getLoginInformation|/views/login.html) - [L,R=403]
</Location>

# All requests will be forwarded to the standard port of the agent
# Replace the port number 45454 from your agent configuration
ProxyPass / http://127.0.0.1:45454/
ProxyPassReverse / http://127.0.0.1:45454/
```



## **PERFORMANCE CONSIDERATION**

The TeamDrive Agent is typically used to synchronize data on a central server. These are some guidelines to optimize the performance of the TeamDrive Agent in this situation:

1. Do not mount the file system over the network, which contains the data that will be synchronized. Network shares are much slower than local file systems. Using a network share will limit the number of files and directories per Space.
2. Use more than one TeamDrive Space. Using more than one Space can increase the performance. For example, you could have one Space per project or team.

## UPDATING FROM THE TEAMDRIVE 3 AGENT TO THE TEAMDRIVE 4 AGENT

The application data directory (specified by the `teamdrived --teamdrive-home` (page 19) parameter) is compatible to TeamDrive 3 and will be updated in this process.

1. Perform a full system backup in order to be able to restore your system if you encounter unexpected errors. In case you decide to skip the full system backup, it is of particular importance that you backup the TeamDrive 3 Agent application data directory. The TeamDrive 3 Agent application data directory is located in the 'AppData\Roaming' folder of the Windows user used to install the Agent. You can navigate to the folder using "%ProgramData%" → "TeamDrive3" → "teamdrive.ini" or simply `C:\ProgramData\TeamDrive3\teamdrive.ini`. Open the file with a text editor, locate the entry "teamdrive-home-agent=", copy and navigate to this path and simply backup the "TeamDrive3" folder.
2. Shutdown the TeamDrive 3 Agent.
3. Install the new TeamDrive 4 Agent as described, but do not start the TeamDrive Agent.
4. Make sure that you have only one installation of the TeamDrive Agent. Manually delete older TeamDrive 3 installations in case they are not automatically deleted. Keep in mind that the application data directory will be used by TeamDrive 4 afterwards. Older TeamDrive 3 installations can be found in `C:\Program Files(x86)\`. Manually delete old TeamDrive 3 installations by simply deleting their folders.
5. Start the TeamDrive 4 Agent. See *Initial Set-Up* (page 12).

<p><b>Warning:</b> On Windows, the <code>uninstall.exe</code> will delete the application data directory. Be careful when removing old installations.</p>
---

## TROUBLESHOOTING

TeamDrive stores log output to %APPDATA%\TeamDrive3\logs or ~/.teamdrive/logs. Please search for [Critical] messages that can be a hint to an error.

### 7.1 Administration interface is not available (Linux)

If you are not able to access the administration interface in your browser, please check that TeamDrive has opened a TCP port:

```
[root@agent ~] netstat -twaunp
```

Please edit the settings file and set TeamDrive to open the port 45454. This can be done by editing the file ~/.teamdrive/teamdrive.settings file. This is an example:

```
[root@agent ~] vim ~/.teamdrive/teamdrive.settings
```

Add the following entries:

```
[Settings]
http-api-type=tcp
http-api-port=45454
```

Restart TeamDrive with the following commands:

```
[root@agent ~] killall teamdrived.bin
# Wait 10 seconds
[root@agent ~] ./teamdrived
```

TeamDrive stores log output to %APPDATA%\TeamDrive3\logs or ~/.teamdrive/logs. Please search for [Critical] messages that can be a hint to an error.

### 7.2 Installation error: Problem running post-install step (Windows)

This issue is related to how a Windows Terminal Server works. It is redirecting the CSIDL\_WINDOWS path to user's home directory such as C:\Users\username\Windows. This can be solved by switching the machine to install mode before running the installer, which can be done by running the Programs and Features from *Control Panel* and choosing to *install an application in terminal server*. It can also be done by running `change user /install` command from command prompt and change it back to execution mode by running `change user /execute` after the installer finishes.

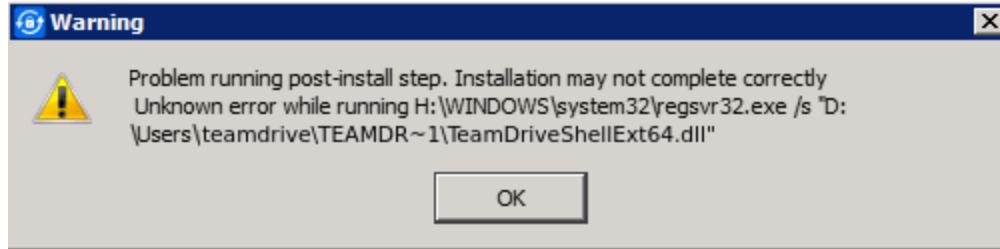


Fig. 7.1: Error message shown by the installation process on a Windows Terminal Server.

## 7.3 Using a system proxy in Windows

Please notice, that services will start under the LOCAL SYSTEM user and have no access to the proxy settings of a standard windows user. You will find different solutions how to set a system proxy for services:

<http://serverfault.com/questions/34940/how-do-i-configure-proxy-settings-for-local-system>

If you want to copy the proxy settings from a TeamDrive Desktop client instance using a system proxy to a TeamDrive Agent instance, set the proxy type to 3 (for manual proxy):

Type=3

in case that you dont want to configure the system proxy as described in the above article. Otherwise the TeamDrive Agent will override the setting with the not configured empty system proxy values.

## SYNOPSIS

**teamdrived** [options] (autostart | shutdown)

## OPTIONS

This is a list of known settings or command line arguments that are used by TeamDrive.

### 9.1 Local Installation Settings

#### **--spaces-path**

Default path for newly created Spaces by the user.

---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this:  
C:/Path/to/Spaces.

---

#### **--teamdrive-home**

Set TeamDrive application data path. Typically `~/.teamdrive` on Linux or Mac OS and `%APPDATA%\TeamDrive3` on Windows.

---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this:  
teamdrive-home=C:/Path/to/Appdata.

---

#### **--data-path**

Default location for temporary data and cache files. Defaults to `teamdrived --teamdrive-home` (page 19)

---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this:  
data-path=C:/Path/to/TeamDrive Data.

---

#### **--default-server**

Default host server to create spaces on

#### **--perform-backup=true/false** (default: true)

Enable / Disable creation of Backups

#### **--backup-path**

Set the Backup path

---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this:  
backup-path=C:/Path/to/Backups.

---

**--language**

Set the user interface language. This setting is deprecated.

Deprecated since version 4.1.3.

**--autostart-delay**

Delay background tasks to speedup system startup time

**--working-set-size**

Maximum cache size

**--enable-folder-decoration=true/false** (default: true)

Enable / Disable file system folder decoration

**--enable-create-favorite-link-to-spaces=true/false** (default: true)

Windows only: creates a shortcut in the Windows explorer favorites to the *teamdrived --spaces-path* (page 19) folder.

**--device=<device>**

if *device* is “softwarecontext”, TeamDrive will use the QtQuick2dRenderer as the rendering backend (Windows only)

**--enable-multi-processes=true/false** (default: false)

Allow spawning of multiple TeamDrive instances.

**--enable-shell-extension=true/false** (default: true)

Enables or disables the Windows Explorer integration or the Finder Extension.

New in version 4.1.2.

**autostart**

Don't show the main window.

**shutdown**

Shutdown the currently running TeamDrive process.

**webgui**

Lauches TeamDrive with a WebGUI instead of the normal user interface.

---

**Note:** Desktop only.

---

## 9.2 Registration Server Communication

**--check-for-updates=true/false** (default: true)

The TeamDrive Client will check for software updates on the Registration Server. Set this value to false, if a software distribution tool will be used to deploy Client installations to your users.

**--auto-accept-invitation=true/false** (default: false)

When set to true, the TeamDrive Client will accept all Space invitations automatically and join these Spaces.

**--auto-accept-invitation-mode** (default: archived)

The mode of operation when joining Spaces automatically. Possible values are: current-version-only, all-versions, directory-information-only, no-sync-to-filesystem, offline-available, archived.

**--auto-invite-users=list**

A list of user names to be automatically invited into newly created Spaces with specified DefaultInvitationRights. The list has to be separated by semicolons and enclosed with double quotes in the settings file. Example: auto-invite-users="abc;def"

**--enable-key-repository**=true/false (default: true)  
Enable / Disable the Key Repository.

## 9.3 Synchronization Settings

**--default-file-permissions**  
Default unix file permissions. Default is 644.

**--default-dir-permissions**  
Default unix directory permissions. Default is 755.

**--scan-enabled**=true/false (default: true)  
On startup, the internal database will be compared with the file system using a file system scan to detect Space changes while TeamDrive was not running.

**--default-publish-expiry-days** (default: 0)  
Default value for the number of days, a file is published. Requires a *HostServer* Version  $\geq 3.5$ . A value of 0 means *unlimited*.

## 9.4 Agent Settings

**--http-api-port**=<host>  
where <host> equals one of the following:

- 1.a port number (e.g. 45454)
- 2.an IPv4 address including the port number (e.g. 127.0.0.1:45454)
- 3.an IPv6 address including the port number (e.g. [::]:45454)
- 4.a pipe or socket name. Requires `http-api-type=local`.
- 5.a pipe or socket name. Requires `http-api-type=local`.

**--http-api-type**  
Sets the type of the HTTP API.

- 1.local: Opens a Named pipe on Windows or a Socket file on Linux
- 2.tcp: Opens a TCP port.
- 3.ssl: Opens a SSL/TLS encrypted TCP socket. See *teamdrived --http-api-private-key* (page 21) and *teamdrived --http-api-certificate* (page 21)

**--http-api-certificate**  
SSL-Server only: A path to a certificate file for the api (PEM format).

---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this:  
`http-api-certificate=C:/Path/to/Certificate.pem`

---

**--http-api-private-key**  
SSL-Server only: A path to a RSA private file for the certificate (PEM format). See also *teamdrived --http-api-certificate* (page 21).



---

**Note:** On Windows, this path may not contain backslashes. Please use slashes instead like this: `http-api-private-key=C:/Path/to/Key.key`.

---

**--idle-shutdown-timeout**

The number of idle seconds, until the TeamDrive Agent shuts itself down. Typically used with automatically shutdown of Linux containers. Default: no timeout.

New in version 4.1.1.

**--http-api-external-register-url**

This url will be used to show a “Register Now” link in the Web UI. This setting is mainly useful for Web Portals.

New in version 4.1.1.

**--http-api-external-login-url**

This url will be used to redirect the Browser if a login is required. This setting is intended to be used for external authentication.

New in version 4.1.1.

**--http-api-compress-replies=true/false (default: true)**

Use a zipped HTTP content-encoding for JSON replies.

New in version 4.1.1.

## 9.5 Platform specific Settings

It is possible to limit a setting to a specific domain. For example if you add `-linux` to a setting, this setting will only affect Linux clients.

Suffix	Description
<code>-mac</code>	Mac OS X only.
<code>-win</code>	Windows only.
<code>-linux</code>	Linux Clients only.
<code>-agent</code>	Used by the Headless Agent.

## CONFIGURATION FILES

TeamDrive reads settings from these locations:

1. Program arguments as mentioned above.
2. The read-only DISTRIBUTOR file in the application installation path, eg. `C:\Program files\TeamDrive\DISTRIBUTOR` or `/opt/teamdrive/DISTRIBUTOR`.
3. A system wide configuraion file. Windows: `%ProgramData%\TeamDrive3\teamdrive.ini`, Linux: `/etc/teamdrive.ini`, Mac OS: `/Users/Shared/teamdrive.ini`.
4. The `teamdrive.settings` file in the application data directory, eg. `teamdrived --teamdrive-home` (page 19). Typically `~/.teamdrive` on Linux or Mac OS and `%APPDATA%\TeamDrive3` on Windows.
5. The Registration Server may also provide some of these settings. Please consult the Registration Server documentation for details.

The majority of arguments can also be added to **[Settings]** Section of the configuraion files.

This is a valid `teamdrive.settings` file that sets two settings on Linux:

```
[Settings]
language=en-US
spaces-path=/home/teamdrive/Spaces
```

And this is the corresponding settings file for Windows:

```
[Settings]
language=en-US
spaces-path=C:/Users/TeamDrive/Documents/Spaces
```

Please note the usage of forward slashes instead of backslashes on Windows. Also notice that a setting in the `teamdrive.settings` file is not prefixed by two dashes (`--`).

## TEAMDRIVE HTTP API

### 11.1 Overview

The *TeamDrive Agent* offers a JSON interface via HTTP, which allows you to operate the *TeamDrive Agent* without using the GUI. The JSON interface can be activated by specifying the `teamdrived --http-api-port` (page 21) option.

The command line application *TeamDriveApi.py* is located in the *TeamDrive Agent* installation directory (e.g. `C:\Program Files (x86)\TeamDrive 3 Agent`). Running this file allows you to use the TeamDrive API directly. See *Options* (page 19) for a list of Options and Settings.

If you would like to use the TeamDrive HTTP API without Python, HTTP *GET* requests can be made directly through *TeamDrive Agent*. The URL will need to be constructed as follows:

```
http://<host>/api/<command>?<parameters>
```

For example:

```
http://[::1]:45454/api/getSpace?id=1
```

The result is a JSON document.

### 11.2 Requirements

In order to run use the interface, you will need the these requirements:

- TeamDrive Desktop Client or *TeamDrive Agent*

The Python module and Command line interface requires

- Python in your *PATH* variable.
- Recommended: docopt for Python.
- `TeamDriveApi.TeamDriveApi.sse()` (page 59) requires *Python 3*.

### 11.3 Security Considerations

Communicating with the *TeamDrive Http Api* contains sensitive information, for example user names, passwords and file data. There are mechanisms to provide authentication and privacy.

### 11.3.1 Restricting the availability of the Api

By restricting the api to the local host, any attempt to access the api from another host will fail:

```
http-api-port=127.0.0.1:<port>
```

Although, this does not prevent the usage of the api from another user of this system.

### 11.3.2 Using a local socket or a named pipe

One can further reduce the availability by specifying the type of the api like this:

```
http-api-type=socket
http-api-port=<name>
```

<name> can be a user defined string. The Unix socket file will be placed in */tmp* on Mac OS X and on Linux.

### 11.3.3 Using HTTPS for communication with the TeamDrive Agent

HTTPS can be enabled by setting *type* to *ssl* like this:

```
http-api-type=ssl
http-api-port=443
```

It is recommended to use port 443 for communication with browsers, because using a non-standard port for HTTPS is considered insecure. Please also have a look at the *teamdrived --http-api-certificate* (page 21) and *teamdrived --http-api-private-key* (page 21) settings.

---

**Note:** The HTTPS server that is used by the TeamDrive Agent is based on the Qt framework, which supports, according to the [documentation](#), the following protocols: SSLv2, SSLv3, TLSv1.0, TLSv1.1 and TLSv1.2.

---

## 11.4 Authentication

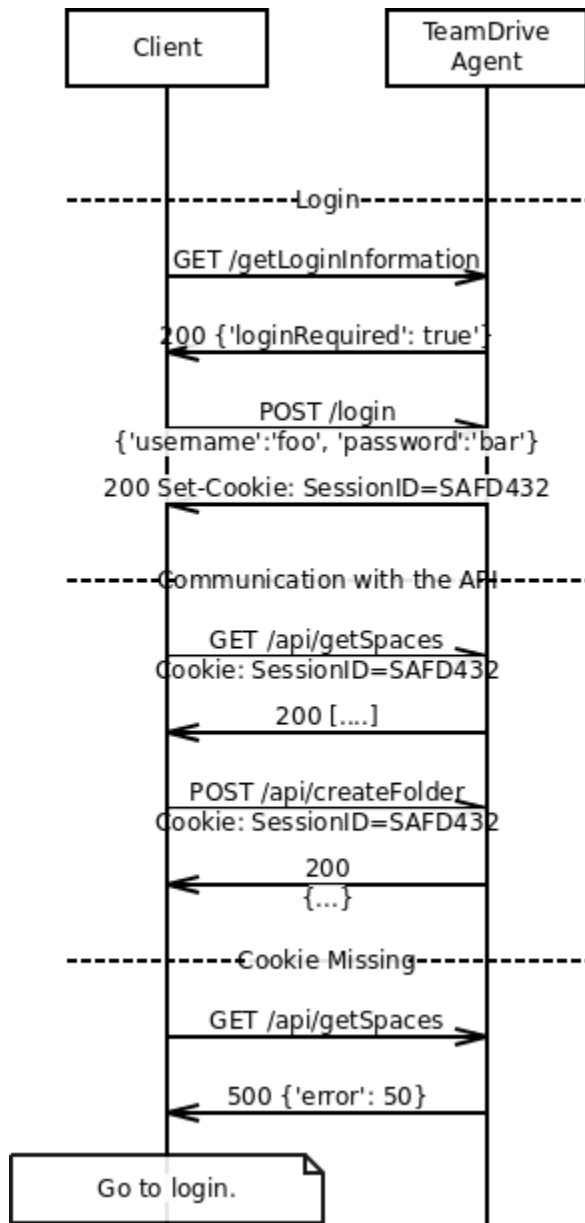
In order to prevent unauthorized users from accessing the *TeamDrive Http Api*, an authentication is **required** to access the api. There are two ways to authenticate clients:

1. Statefull Session Cookies
2. Stateless Authorization Header

### 11.4.1 Session Cookies

Session Cookies are mainly used to authenticate Web Browsers. Using a session requires a call to *TeamDriveApi.TeamDriveApi.login()* (page 50) to retrieve a cookie from the server. *TeamDriveApi.TeamDriveApi.getLoginInformation()* (page 41) can be used to determine if a login is required.

Login with the Api using Cookies should follow this protocol:



In the case of a missing Cookie, a `TeamDriveApi.TeamDriveException.Error_Missing_Session` (page 61) is returned

## 11.4.2 Authorization Header

This stateless alternative to Cookies uses HTTP Basic Authentication. **Every** request to the Api requires an *Authorization Header* following [RFC 2617](#).

Currently, The Agent does *not* answer requests without Authentication Header appropriately. It is expected, that clients send the Authorization Header unconditionally.

## 11.5 Interface Overview

TeamDrive provides two API endpoints:

- The `/api` endpoint provides meta data about all elements of TeamDrive
- The `/files` endpoint provides an interface for reading and writing the file content.

### 11.5.1 Communicating with the `/api` endpoint

This is the reference documentation of the TeamDrive Client API. As a convenience, there is a Python module that provides accessor functions for each API call, which is also usable as a command line interface. Please have a look at all possible usages.

**Example using curl:**

```
$ curl '127.0.0.1:45454/api/getLoginInformation'
{ "isLoginRequired" : true }
```

**Example using the Python module:**

```
>>> from TeamDriveApi import TeamDriveApi
>>> api = TeamDriveApi("127.0.0.1:45454")
>>> map(api.getSpace, api.getSpaceIds())
[{}]
```

**Example using the command line:**

```
./TeamDriveApi.py '127.0.0.1:45454' getLoginInformation
{
  "username": "My Username",
  "apiUrl": "/",
  "isLoginRequired": false
}
```

**Example Session (Initial Login):**

```
# Start TeamDrive:
exec /opt/teamdrive/teamdrived

# Wait for it:
sleep 5

# Log-in
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass login

# Create a new Space
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass createSpace

# Call Functions
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass createFolder

# Quit TeamDrive without logout
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass quit False
```

**Example Session:**

```
exec /opt/teamdrive/teamdrived
sleep 5

# No need to login now
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass createFolder

# Quit TeamDrive without logout
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass quit False
```

**Example Session (After previous Logout:**

```
# If the previous session ended with a logout:
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass quit True

# The next call should start with a login:
exec /opt/teamdrive/teamdrived
sleep 5
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass login
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass createFolder
```

**See also:**

*TeamDriveApi.TeamDriveException* (page 60) for Errors returned by the API.

**See also:**

Chapter *Authentication* (page 25) regarding Authentication.

## 11.5.2 Communicating with the /files endpoint

See *TeamDriveApi.TeamDriveApi.putFile()* (page 52) for Details.

## 11.5.3 Passing Parameters to the API

The format of parameters depend on the HTTP method:

- Parameters for GET-requests should be passed by a query string in the url. For example `curl --user myTeamDriveUser http://127.0.0.1:45454/api/getSpace?id=310`
- Parameters to POST-requests can either be a JSON object or data encoded using `application/x-www-form-urlencoded`.

## 11.6 Interface Description

### 11.6.1 TeamDriveApi.TeamDriveApi

```
class TeamDriveApi.TeamDriveApi (server='[:1]:45454', username='', password='')
```

**Return type** *TeamDriveApi* (page 28)

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.

- **ConnectionRefusedError** – a Connection Error.

**about ()**

Returns information about TeamDrive.

**Returns**

```
{
  "version": "4.0.12 (Build: 1294)",
}
```

Changed in version 4.1.1: no longer returns license infos. call *getLicense* (page 40) instead.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**addAddressbook (name)**

Adds a new Address book entry. TeamDrive will lookup that name on the RegServer. If that fails, an exception is thrown. You cannot add email addresses.

Using this function requires the HTTP POST method.

**Parameters** **name** (*str*) – the new Addressbook's name.

**Returns** the id of the new entry.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – user is unknown.
- **ValueError** – no JSON returned. Wrong URL?

**addComment (fileId, comment, notifyMembers)**

Attaches the comment to the file.

Using this function requires the HTTP POST method.

**See also:**

*getComments* (page 37), *getSpaceComments* (page 43), *addSpaceComment* (page 30) and *removeComment* (page 53)

New in version 4.2.1.

**Parameters** **notifyMembers** (*bool*) – Send notification to all members (default is false)

New in version 4.1.1.

**Parameters**

- **fileId** (*int*) – The corresponding id of the file



- **comment** (*str*) – The content of the new comment

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Adding this comment failed.
- **ValueError** – no JSON returned. Wrong URL?

**addSpaceComment** (*spaceId, comment, notifyMembers*)

Adds this comment to the Space.

Using this function requires the HTTP POST method.

**See also:**

[getComments](#) (page 37), [getSpaceComments](#) (page 43), [addComment](#) (page 29) and [removeComment](#) (page 53)

New in version 4.2.1.

**Parameters** **notifyMembers** (*bool*) – Send notification to all members (default is false)

New in version 4.1.1.

**Parameters**

- **spaceId** (*int*) – The Space id.
- **comment** (*str*) – The content of the new comment

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Adding this comment failed
- **ValueError** – no JSON returned. Wrong URL?

**clearProfilePicture** ()

Clears the profile picture of the current user.

**See also:**

[getProfilePicture](#) (page 42) to retrieve profile pictures and [setProfilePicture](#) (page 57)

New in version 4.1.1.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.

- **ValueError** – no JSON returned. Wrong URL?

**createFolder** (*spaceId*, *filePath*, *trashed*)

Creates a new folder in that Space

**Example:**

```
$ ./TeamDriveApi.py '127.0.0.1:45454' createFolder 3 '/my new folder'
↪False
```

```
{
  "result": true,
  "file": {
    "isDir": true,
    "name": "my new folder",
    "currentVersionId": 0,
    "spaceId": 3,
    "isInFileSystem": false,
    "path": "/",
    "id": 756,
    "permissions": "rwxr-xr-x"
  }
}
```

**See also:**

[getFullFolderContent](#) (page 39) or [getFolderContent](#) (page 38) for getting the content of this folder

New in version 4.0.

**Returns** A dict containing a [File](#) (page 62) object

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **filePath** (*str*) – The full folder path.
- **trashed** (*bool*) – In Trash?

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**createSpace** (*spaceName*, *disableFileSystem*, *spacePath=None*, *importExisting=None*)

Creates a new Space with the given name.

To convert an existing folder into a TeamDrive Space, you need to set the *importExisting* parameter to True.

In case the url is called directly, the default for *disableFileSystem* is False and the *spacePath* is mandatory.

Using this function requires the HTTP POST method.

Throws [TeamDriveException](#) (page 60), if the call fails.

**returns** A dict containig the Id and a [Space](#) (page 61).

**Parameters**

- **spaceName** (*str*) – The Name of the new Space
- **disableFileSystem** (*bool*) – This will disable the synchronization into the file system. TeamDrive will only synchronize meta-data if this is *True*.
- **spacePath** (*str*) – File Path, in which the new Space will be created.
- **importExisting** (*bool*) – Tells the TeamDrive Agent to import an existing directory.

**Return type** dict**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Space creation failed.
- **ValueError** – no JSON returned. Wrong URL?

**deleteFileFromTrash** (*fileId*)

Deletes a file from Trash by physically deleting the file from the server. This call fails, if you do not have the rights to delete files, it is a directory or the file is not in the trash.

Using this function requires the HTTP POST method.

**Example:**

```
>>> api = TeamDriveApi()
>>> for inTrash in api.getFullFolderContent(1, "/", True):
>>>     api.deleteFileFromTrash(inTrash["id"])
```

Throws *TeamDriveException* (page 60), if the call fails.

**See also:**

*removeLocallyFile* (page 54) and *setTrashed* (page 58).

New in version 4.0.

**Parameters** **fileId** (*int*) – The Id of the Space

**Return type** dict**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**deleteSpace** (*id, delInFs, delOnServer, delInDB*)

Deletes a Space.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

**Parameters**

- **id** (*int*) – The Id of the Space
- **delInFs** (*bool*) – Delete the Space in the File System
- **delOnServer** (*bool*) – Deletes the Space on the server. (requires Administrator rights)
- **delInDB** (*bool*) – Deletes the Space in the local Database

**Return type** dict**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Deletion failed
- **ValueError** – no JSON returned. Wrong URL?

**deleteVersion** (*versionId*)

Deletes a file version finally from the server. This call fails, may not have the rights to delete files, Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

**See also:**

*getVersion* (page 47)

New in version 4.1.4.

**Parameters** **versionId** (*int*) – The Id of the version

**Return type** dict**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**getActivities** (*spaceIds=None, fromDate=None, toDate=None*)

Returns a list of all activities for the given space list within the date period or for in the last 30 days. If *hasDetails* is *true*, a call to *getActivityDetails* (page 35) with the given *activityId* will return a list of details.

Possible activity types are:

- *userInvited*
- *userJoined*
- *userLeft*
- *userKicked*
- *commentCreated*
- *commentDeleted*
- *spaceCommentCreated*
- *spaceCommentDeleted*

- versionAdded
- versionDeleted
- versionPublished
- versionUnpublished
- versionExpired

Changed in version 4.2.0.

Added new activity types:

- userRightsChanged
- userProfileUserNameChanged
- userProfileEmailChanged
- userProfilePhoneChanged
- userProfileMobileChanged
- userProfileNotesChanged
- userProfilePictureChanged
- userProfileInitialsChanged
- userLicenseChanged
- userRegEmailChanged
- spaceMaxVersionsOnServerChanged
- spaceMetaDataChanged
- spaceMetaDataDeleted
- spaceDeletedOnServer
- serverAccessSent
- serverAccessFailedToSend
- serverAccessReceived
- serverAccessDeleted
- invitationSent
- invitationFailed
- invitationDeclined
- invitationReceived
- fileAdded
- fileRenamed
- fileMoved
- fileTrashed
- fileUntrashed
- fileDeleted
- fileChanged
- fileCurrentVersionChanged
- folderAdded
- folderRenamed
- folderMoved
- folderTrashed
- folderUntrashed
- folderDeleted
- folderChanged
- fileNameConflict
- fileNameConflictResolved
- filePathInvalid
- filePathInvalidResolved
- versionPublishMetaChanged
- versionConflict
- versionConflictResolved
- versionExported

- emailNotificationSent
- emailNotificationFailedToSend
- workingDirFull
- runningOutOfDiskSpace
- noDiskFreeSpace
- automaticTrashCleanupChanged
- temporaryError

**See also:**

[getActivityDetails](#) (page 35)

New in version 4.1.1.

**Returns** A list of activities.

**Return type** list[dict]

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

Changed in version 4.2.0.

**Parameters**

- **spaceIds** (*str*) – A list of space IDs. If empty, all Spaces will be used.
- **fromDate** (*str*) – ISO 8601 extended format: either YYYY-MM-DD for dates or YYYY-MM-DDTHH:mm:ss, YYYY-MM-DDTHH:mm:ssTZD (e.g., 1997-07-16T19:20:30+01:00) for combined dates and times. If empty the last 30 days will be returned.
- **toDate** (*str*) – ISO 8601 extended format: either YYYY-MM-DD for dates or YYYY-MM-DDTHH:mm:ss, YYYY-MM-DDTHH:mm:ssTZD (e.g., 1997-07-16T19:20:30+01:00) for combined dates and times.

**getActivityDetails** (*activityId*)

Returns a list of all activity details for an activity.

**See also:**

[getActivities](#) (page 33)

New in version 4.1.1.

**Parameters** **activityId** (*str*) – The activityId as returned by [getActivities](#) (page 33)

**Returns** A list of activityDetails.

**Return type** list[dict]

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getActivityMetas** (*activityId*)

Returns a list of all activity meta information for an activity.

**See also:**

[getActivities](#) (page 33)

New in version 4.2.1.

**Parameters** `activityId` (*str*) – The activityId as returned by [getActivities](#) (page 33)

**Returns** A list of activityMeta.

**Return type** list[dict]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getAddressbook** (*id*)

Returns information about a given Addressbook Id.

**See also:**

[getFullAddressbook](#) (page 39) for an example

**Parameters** `id` (*int*) – the Address Id.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getAddressbookByName** (*addressName*)

This is convenience wrapper of the Python module that is not part of the official API.

Returns an Addressbook entry by a given user name. Throws a TeamDriveException, if there is no Space with this name.

**Parameters** `addressName` (*str*) – The Name.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveCallFailed` – There is no Space with this name
- `ValueError` – no JSON returned. Wrong URL?

**getAddressbookIds ()**

Returns all known Addressbook Ids.

**Return type** list[int]**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getComments (fileId)**

Returns a list of all comments that are attached to a specific file in a space.

**Example**

```
>>> api = TeamDriveApi()
>>> api.getComments(4183)
```

**Returns**

```
[
  {
    "creator": "test",
    "creatorAddressId": 1,
    "text": "file baz",
    "created": "2015-09-01T15:15:31Z",
    "commentId": 16,
    "initials": "te"
  },
  {
    "creator": "test",
    "creatorAddressId": 1,
    "deleted": true,
    "created": "2015-09-01T15:15:28Z",
    "commentId": 15,
    "initials": "te"
  }
]
```

**See also:**

[getSpaceComments](#) (page 43), [addComment](#) (page 29), [addSpaceComment](#) (page 30) and [removeComment](#) (page 53)

New in version 4.1.1.

**Parameters** `fileId` (*int*) – The corresponding id of the file**Returns** A list of comments.**Return type** list[dict]**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.



- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getFile** (*id*)

Returns information about the given File Id.

**returns** A *File* (page 62) object

**Parameters** **id** (*int*) – The File id

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getFiles** (*spaceId, filePath, trashed*)

Returns a list of files matching Space Id, file path and trashed flag.

**returns** A list of *File* (page 62) objects

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **filePath** (*str*) – the path of the file in the Space.
- **trashed** (*bool*) – Is the file in the trash?

**Return type** list[dict]

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getFolderContent** (*spaceId, filePath, trashed*)

Returns a list of file Ids in a folder of a Space.

**Example:**

```
python ./TeamDriveApi.py '127.0.0.1:45454' getFolderContent 3 / False
[756, 767, 737, 769, 629, 763, 628, 630, 830, 765]
```

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **filePath** (*str*) – The parent folder path.
- **trashed** (*bool*) – In Trash?

**Return type** list[int]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getFullAddressbook()**

Returns all Addressbook entries at once.

**Example:**

```
$ python ./TeamDriveApi.py '127.0.0.1:45454' getFullAddressbook
```

```
[
  {
    "id": 1,
    "email": "info@teamdrive.net",
    "name": "My Name",
    "icon": "self"
  }
]
```

---

**Note:** As this function was added with TeamDrive 4, the fall back for TeamDrive 3 is to iterate over all Addressbook Ids, therefore this function is much slower.

---

New in version 4.0.

**Return type** list[dict]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getFullFolderContent(spaceId, filePath, trashed)**

Returns a list of file information in a folder of a Space.

**Example:**

```
$ python ./TeamDriveApi.py '127.0.0.1:45454' getFullFolderContent 3 /_
↪False
```

```
[
  {
    "isDir": true,
    "name": "My folder",
    "currentVersionId": 0,
    "spaceId": 3,
    "isInFileSystem": true,
    "hasNameConflict": false,
    "hasVersionConflict": false,
  }
]
```

```

    "path": "/",
    "id": 756,
    "permissions": "rwxr-xr-x"
  },
  {
    "isDir": false,
    "name": "My File",
    "currentVersionId": 0,
    "spaceId": 3,
    "isInFileSystem": true,
    "hasNameConflict": false,
    "hasVersionConflict": false,
    "path": "/",
    "id": 767,
    "permissions": "rwxr-xr-x"
  }
]

```

**Note:** As this function was added with TeamDrive 4, the fall back for TeamDrive 3 is to iterate over `getFolderContent`, therefore this function is much slower.

**See also:**

[getFile](#) (page 38) and [getFolderContent](#) (page 38)

New in version 4.0.

**Returns** A list of [File](#) (page 62) objects

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **filePath** (*str*) – The parent folder path.
- **trashed** (*bool*) – In Trash?

**Return type** list[dict]

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getLicense()**

Returns information about the current License.

**Returns**

```

{
  "distributor": "DOCU",
  "licenseKey": "DOCU-8782-5485-7266",
  "licenses": [
    "WebDAV",
    "Professional"
  ]
}

```

```
    ]
}
```

New in version 4.1.1.

**See also:**

`setLicenseKey` (page 56) to set the license.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getLoginInformation()**

Returns information about the current user.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getMember(spaceId, addressId)**

Returns information about a member of a Space.

**Example:**

```
$ python ./TeamDriveApi.py '127.0.0.1:45454' getMember 3 1
```

**Returns**

```
{
    "status": "active",
    "spaceId": 3,
    "addressId": 1
}
```

**Parameters**

- `spaceId` (*int*) – The Id of the Space
- `addressId` (*int*) – Already known Addressbook Id.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.

- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getProfilePicture** (*id*)

Returns the profile picture of the address.

**See also:**

[setProfilePicture](#) (page 57) to set the profile picture of the current user.

New in version 4.1.1.

**Parameters** **id** (*int*) – The addressId.

**Returns** The picture.

**Return type** bytes | dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.

**getSettings** ()

Returns a *list* of settings, with each setting a *dict*. An incomplete list of settings can be found in the *Options* (page 19) Section.

**Example :**

```
{
    "key": "identifier",
    "label": "readable label",
    "help": "help text",
    "type": "string|path|integer|bool|enum|bitmask",
    "value": "current value",
    "options": ["enum option 1", "enum option 2"],
    "flags": [{bit: <bit flag>, label: "readable label"}, ...]
}
```

[setSetting](#) (page 58) can be used to set a specific setting.

**Return type** list

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**getSpace** (*id*)

Will return information about that Space.

**See also:**

[getSpaceStatistics](#) (page 46) for statistics.

**Example using Python:**

```
>>> api = TeamDriveApi()
>>> map(api.getSpace, api.getSpaceIds())
{.....}
```

**Example using curl:**

```
curl --user myTeamDriveUser http://127.0.0.1:45454/api/getSpace?id=310

:returns: A single :ref:`space-json-data-type`.
```

**Parameters** `id` (*int*) – The Id of the Space**Return type** dict**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceByName** (*spaceName*)

This is convenience wrapper of the Python module that is not part of the official API.

Returns a Space by a given Space name. Throws a `TeamDriveException` (page 60), if there is no Space with this name.

**Parameters** `spaceName` (*str* | *unicode*) – The Name.**Return type** dict**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveCallFailed` – There is no Space with this name
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceComments** (*spaceId*)

Returns a list of all comments that are attached to the Space itself.

**Example**

```
>>> api = TeamDriveApi()
>>> api.getSpaceComments(13)
```

**Returns**

```
[
  {
    "creator": "test",
    "creatorAddressId": 1,
    "text": "file baz",
    "created": "2015-09-01T15:15:31Z",
```

```

        "commentId": 16,
        "initials": "te"
    },
    {
        "creator": "test",
        "creatorAddressId": 1,
        "deleted": true,
        "created": "2015-09-01T15:15:28Z",
        "commentId": 15,
        "initials": "te"
    }
]

```

**See also:**

*getComments* (page 37), *addComment* (page 29), *addSpaceComment* (page 30) and *removeComment* (page 53)

New in version 4.1.1.

**Parameters** `spaceId` (*int*) – The Space id.

**Returns** A list of comments.

**Return type** list[dict]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceIds** ()

Returns a list of all known Spaces Ids.

**Example:**

```

>>> api = TeamDriveApi()
>>> api.getSpaceIds()
[1, 4, 5, 6]

```

**Return type** list[int]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceMemberIds** (*spaceId*)

Returns all Addressbook Ids in a given Space.

**Example:**

```
$ python ./TeamDriveApi.py '127.0.0.1:45454' getSpaceMemberIds 3
[1,2]
```

New in version 4.0.

Deprecated since version 4.1.1: Use *getSpaceMembers* (page 45) instead.

**Return type** list[int]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceMembers** (*spaceId*)

Returns all Member infos in a given Space.

New in version 4.1.

**Return type** list[dict]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpacePermissionLevels** ()

Get a list of possible space permission “levels” (ie. read, read/write, admin, etc.) and their capabilities. Permission levels are returned in order of increasing “magnitude”. The reply of this call is constant and won’t change until the agent is restarted.

**Returns**

```
[
  {
    "id": "none",
    "name": "None",
    "rights": {
      "memberInvite": False,
      "memberKick": False,
      "memberSetRights": False,
      "spaceRename": False,
      "spaceDeleteOnServer": False,
      "filePublish": False,
      "fileDeleteOnServer": False,
      "fileRename": False,
      "fileRestoreFromTrash": False,
      "fileChange": False
    }
  },
  {
    "id": "read",
    "name": "Read"
    "rights": { ... }
  }
]
```



```

    },
    ...
]

```

New in version 4.1.1.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaceStatistics** (*id*)

Returns Space statistics

New in version 4.1.1.

**See also:**

[getSpace](#) (page 42), [getSpaces](#) (page 46) for other information.

**Parameters** `id` (*int*) – The Id of the Space

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getSpaces** ()

Returns a list of all known Spaces.

---

**Note:** As this function was added with TeamDrive 4, the fall back for TeamDrive 3 is to iterate over all Space Ids, therefore this function is much slower.

---

**See also:**

[getSpaceStatistics](#) (page 46) for statistics.

**returns** A list of [Space](#) (page 61) objects, for example

```

[
  {
    "name": "My Space",
    "creator": "$TMDR-1007",
    "icon": "archived",
    "status": "archived",
    "status_message": "Space Archived",
    "id": 1,
    "spaceRoot": "/home/teamdrive/Spaces/My Space",

```

```

        "time": "2015-09-15T11:17:48Z",
        "permissionLevel": "read"
    },
    {
        "name": "Api",
        "creator": "...",
        "spaceRoot": "/home/teamdrive/Spaces/Api",
        "icon": "space",
        "status": "active",
        "status_message": "OK",
        "id": 8,
        "fileId": 1,
        "time": "2015-09-15T11:17:48Z",
        "permissionLevel": "readWrite"
    }
]

```

New in version 4.0.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getVersion** (*versionId*)

Returns a single version.

```

>>> versionId = 42
>>> TeamDriveApi().getVersion(versionId)["versionId"] == versionId

```

New in version 4.1.4.

**Parameters** `versionId` (*int*) – the id of the version

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**getVersions** (*fileId*)

Returns all versions of a file.

New in version 4.1.4.

**Return type** list[dict]

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.

- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**inviteMember** (*spaceId*, *addressId*, *text*, *permissionLevel=None*, *password=None*)

Invites a user into a Space.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

#### Parameters

- **spaceId** (*int*) – The Id of the Space
- **addressId** (*int*) – Already known Addressbook Id.
- **text** (*str*) – Invitation Text
- **permissionLevel** (*str* | *None*) – The new user permission Level. Optional.  
New in version 4.1.1.
- **password** (*str* | *None*) – Optional. The password for the invitation.  
New in version 4.1.1.

**Return type** dict

#### Raises

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Inviting that member failed
- **ValueError** – no JSON returned. Wrong URL?

**joinSpace** (*id*, *disableFileSystem*, *spacePath=None*, *password=None*, *backupPath=None*, *fullRestore=None*)

Accepts an invitation, joins an archived Space or rejoins an active one.

**Note: Password protected Invitations:** Invitations may be protected by a password and accepting these invitations require the password parameter. If an invitation is password protected, *getSpace* (page 42) adds "isPasswordProtected": true to the reply.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

#### Parameters

- **id** (*int*) – The Id of the Space
- **disableFileSystem** (*bool*) – This will disable the synchronization into the file system. TeamDrive will only synchronize meta-data if this is *True*.
- **spacePath** (*str* | *None*) – Optional, Space root in the file system.
- **password** (*str* | *None*) – Optional, Password for accepting this invitation.  
New in version 4.1.1.
- **backupPath** (*str*) – An optional backup path in case the space already exists in the file system.  
New in version 4.2.1.

- **fullRestore** (*bool*) – Do a full restore of the space.

New in version 4.2.1.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Joining failed
- **ValueError** – no JSON returned. Wrong URL?

**kickMember** (*spaceId, addressId*)

Removes a member form this Space.

Removing a member from a Space will not remove this user from *getSpaceMemberIds* (page 44), but will set a this member to status “kicked” in *getMember* (page 41).

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails. For example, if the one doesn’t have the rights to remove a user

New in version 4.0.

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **addressId** (*int*) – Already known Addressbook Id.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Removing this user failed
- **ValueError** – no JSON returned. Wrong URL?

**lockFile** (*fileId*)

Lock a file. Throws *TeamDriveException* (page 60), if the call fails.

New in version 4.2.1.

**Parameters** **fileId** (*int*) – The Id of the File

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.

- **ValueError** – no JSON returned. Wrong URL?

### `login()`

A TeamDrive Client installation is bound to a single TeamDrive account. Calling `login` (page 50) authenticates TeamDrive user and creates a new device. this is typically the first call to an Agent.

Using this function requires the HTTP POST method.

Throws `TeamDriveException` (page 60), if the call fails.

#### Example as Command line:

```
./TeamDriveApi.py '127.0.0.1:45454' --user myUser --pass myPass login
```

#### Example with Curl:

```
curl 'https://127.0.0.1:45454/login' --data-binary '{"username":"MyUser", "password":"My Password"}'
```

#### Example:

```
>>> api = TeamDriveApi("127.0.0.1:45454", "My Username", "My Password")
>>> api.login()
```

---

**Note:** On the desktop client, this call is not available, as the API will not be available until the user has successfully logged in. This is a technical limitation of the Gui Client.

---

#### See also:

Chapter [Authentication](#) (page 25) regarding Authentication.

#### Parameters

- **username** (*str*) – The Username
- **password** (*str*) – The Password

#### Return type

dict

#### Raises

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Logging failed.
- **ValueError** – no JSON returned. Wrong URL?

### `moveFile(spaceId, *args)`

Either `moveFile(self, spaceId, filePath, trashed, newFilePath)` or `moveFile(self, spaceId, fileId, newFilePath)` Moves a file from `filePath` or `fileId` to `newFilePath` in the given Space.

Using this function requires the HTTP POST method.

Throws `TeamDriveException` (page 60), if the call fails.

#### Parameters

- **spaceId** (*int*) – The Id of the Space

- **filePath** (*str*) – the path of the file in the Space.
- **trashed** (*int*) – Is the file in the trash?
- **fileId** – fileId of the file being moved
- **newFilePath** (*str*) – The destination file path.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**performExternalAuthentication** (*authToken*)

Login using an external authentication token. The registration server must be configured to validate the token, refer the chapter “External Authentication” in the “TeamDrive Registration Server Reference Guide” for details.

**Parameters** **authToken** (*str*) – The token generated by the authentication service

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Login failed.

**publishFile** (*fileId*, *password=None*, *expiryDate=None*)

Publishes the recent version of that file. The parameters *password* and *expiryDate* are optional. Throws [TeamDriveException](#) (page 60), if the call fails.

New in version 4.1.

**Parameters**

- **fileId** (*int*) – The Id of the File
- **password** (*str*) – Is the file in the trash?
- **expiryDate** (*str*) – ISO 8601 extended format: either YYYY-MM-DD for dates or YYYY-MM-DDTHH:mm:ss, YYYY-MM-DDTHH:mm:ssTZD (e.g., 1997-07-16T19:20:30+01:00) for combined dates and times.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.

- **ValueError** – no JSON returned. Wrong URL?

#### **putFile** (*spaceId*, *path*, *data*)

This is a Python specific accessor to the “files” API. The files API is another API endpoint to handle file content instead of meta data. Urls used by the files API are generated by concatenating the API endpoint `files/` plus the local Space Id (eg. 3) plus the full file path relative to the Space root (eg. `/my/path/to/the/file`). Such a url could look like this: `http://127.0.0.1:45454/files/3/my/path/to/the/file`. This API does not support reading and writing files that are in the trash.

This Uploads a file into a Space. The file creation is done asynchronously, a successful return code does not indicate a successful upload to the Server. Use `getFiles` (page 38) to request the current state of that file.

#### **Example using telnet:**

```
telnet 127.0.0.1 45454
PUT /files/3/testfile HTTP/1.1
Host: 127.0.0.1:45454
Accept-Encoding: identity
Content-Length: 4

test
```

#### **Example using curl:**

```
echo "test" | curl -X PUT -d @- http://127.0.0.1:45454/files/3/testfile
```

#### **Returns**

a dict containing a *File* (page 62) object

```
{
  "file": {
    "confirmed": false,
    "creator": "local",
    "currentVersionId": 6156,
    "hasComments": false,
    "icon": "default",
    "id": 7195,
    "isDir": false,
    "name": "testfile",
    "path": "/",
    "permissions": "rw-rw-r--",
    "size": 4,
    "spaceId": 3,
    "time": "2015-10-22T14:09:45"
  },
  "result": true
}
```

---

**Note:** In TeamDrive 3, this API endpoint was called `/webdav`.

---

#### **Parameters**

- **spaceId** (*int*) – The Id of the Space

- **path** (*str*) – the path of the file in the Space.
- **data** – The binary data

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.

**putFileContent** (*spaceId, spacePath, filePath*)

---

**Note:** This is not part of the HTTP API. See [putFile](#) (page 52) instead.

---

**Example:**

```
$ python ./TeamDriveApi.py '127.0.0.1:45454' putFileContent 3 /
↳testfile ./testfile
```

**Parameters**

- **spaceId** (*int*) – The Id of the Space
- **spacePath** (*str*) – the path of the file in the Space.
- **filePath** (*str*) – the path to the local file

**Return type** dict

**Raises** **httplib.HTTPException** – a Connection Error.

**quit** (*logout*)

Quits TeamDrive.

Using this function requires the HTTP POST method.

Throws [TeamDriveException](#) (page 60), if the call fails.

**Parameters** **logout** (*bool*) – Quit and also log out the current user. See [login](#) (page 50) to log in afterwards.

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**removeComment** (*commentId*)

Marks this comment as “removed”

Using this function requires the HTTP POST method.

**See also:**



*getComments* (page 37), *getSpaceComments* (page 43), *addComment* (page 29) and *addSpaceComment* (page 30)

New in version 4.1.1.

**Parameters** `commentId` (*int*) – The id of the comment that will be deleted.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveException` – Removing this comment failed
- `ValueError` – no JSON returned. Wrong URL?

**removeLocallyFile** (*id*, *recursive=False*)

Removes a file from the local file system by disabling the offline-available flag, but does not move this file into the trash or removes the file from the Space. This operation is not synchronized to other clients.

A successful return code does not indicate a successful execution, because it is done asynchronously.

Using this function requires the HTTP POST method.

**See also:**

*deleteFileFromTrash* (page 32) and *setTrashed* (page 58).

**Parameters**

- `id` (*int*) – the file to be removed
- `recursive` (*bool*) – Directories only: recursive remove

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveException` – Failed to queue command.
- `ValueError` – no JSON returned. Wrong URL?

**requestResetPassword** (*username*)

This call will reset the password of the user.

New in version 4.1.1.

**Parameters** `username` (*str*) – The Username

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.

- **TeamDriveException** – Logging failed.
- **ValueError** – no JSON returned. Wrong URL?

**resolveVersionConflict** (*versionId*)

Changes the current version of a file to this version and resolves all version conflicts on this file.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

**See also:**

*setCurrentVersion* (page 56)

New in version 4.1.4.

**Parameters** *versionId* (*int*) – The Id of the version

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**restoreLocallyFile** (*id*, *recursive=False*)

Restores a file form the local file system. A successful return code does not indicate a successful execution, because it is done asynchronously. This operation is not synchronized to other clients.

Using this function requires the HTTP POST method.

**Parameters**

- **id** (*int*) – the file to be restored
- **recursive** (*bool*) – Directories only: recursive restore

**Return type** dict

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**setAccountEmail** (*email*)

Sets the account e-mail.

Using this function requires the HTTP POST method.

Returns True, if the license key was successfully changed otherwise raises *TeamDriveException* (page 60) Exception

**See also:**

*setLicenseKey* (page 56) to set the license key.

New in version 4.1.1.

**Parameters** `email` (*str*) – The new e-mail address

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?
- `TeamDriveException` – Failed to set email.

**setCurrentVersion** (*versionId*)

Changes the current version of a file to this version.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails.

**See also:**

*getVersion* (page 47)

New in version 4.1.4.

**Parameters** `versionId` (*int*) – The Id of the version

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveException` – Failed to queue command.
- `ValueError` – no JSON returned. Wrong URL?

**setLicenseKey** (*licenseKey*)

Overwrite the license key of this agent.

Using this function requires the HTTP POST method.

Returns True, if the license key was successfully changed otherwise raises *TeamDriveException* (page 60) Exception

**See also:**

*setAccountEmail* (page 55) to set the registration e-mail address. *getLicense* (page 40) to retrieve license infos.

**Parameters** `licenseKey` (*str*) – The new license key

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.

- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**setMemberPermissionLevel** (*spaceId, addressId, permissionLevel*)

Changes the permission level of another member.

Using this function requires the HTTP POST method.

Throws *TeamDriveException* (page 60), if the call fails. For example, if the one doesn't have the rights to remove a user

New in version 4.1.1.

#### Parameters

- **spaceId** (*int*) – The Id of the Space
- **addressId** (*int*) – Already known Addressbook Id.
- **permissionLevel** (*str*) – the new permission level

**Return type** dict

#### Raises

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Removing this user failed
- **ValueError** – no JSON returned. Wrong URL?

**setProfileInfo** (*email=None, phone=None, mobile=None*)

Sets profile information of the current user.

#### See also:

*setProfilePicture* (page 57) to set the profile picture.

New in version 4.1.1.

#### Parameters

- **email** (*str | None*) – Optional, the new e-mail.
- **phone** (*str | None*) – Optional, the new phone number.
- **mobile** (*str | None*) – Optional, the new mobile number.

#### Raises

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**setProfilePicture** (*data*)

Sets the profile picture of the current user.

#### See also:

`getProfilePicture` (page 42) to retrieve profile pictures and `clearProfilePicture` (page 30) to clear the picture.

New in version 4.1.1.

**Parameters** `data` (*bytes*) – The blob.

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**setSetting** (*key, value*)

Set a Setting. must be a valid key as in `getSettings` (page 42). An incomplete list of settings can be found in the *Options* (page 19) Section.

Using this function requires the HTTP POST method.

**Parameters**

- `key` (*str*) – The name of the setting
- `value` – The new value of the setting

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**setSpaceSetting** (*spaceId, key, value*)

set a Space Setting. must be a valid key as in `getSpaceSettings`.

Using this function requires the HTTP POST method.

New in version 4.1.2.

**Parameters**

- `spaceId` (*int*) – The Space id.
- `key` (*str*) – The name of the setting
- `value` – The new value of the setting

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `ValueError` – no JSON returned. Wrong URL?

**setTrashed** (*fileId, inTrash*)

Moves a file into or out of the trash. Trashing a file also removes the file from the local file system.

Throws *TeamDriveException* (page 60), if the call fails.

Call *deleteFileFromTrash* (page 32) to delete the file physically afterwards.

**See also:**

*removeLocallyFile* (page 54) and *deleteFileFromTrash* (page 32).

New in version 4.0.

**Parameters**

- **fileId** (*int*) – The Id of the Space
- **inTrash** (*bool*) – Is the file in the trash?

**Return type** dict**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **TeamDriveException** – Failed to queue command.
- **ValueError** – no JSON returned. Wrong URL?

**sse** ()

This is the Server Side Events api listening on */sse*. This API sends events according to the Server Side Events specification.

The implementation of the python wrapper requires Python 3.

Example Usage:

```
$ python3 TeamDriveApi.py '127.0.0.1:45454' sse
data: { "event" : "FileEntryChanged", "fileId" : 0, "hasConflict" : 0, "isDir
↪" :
      false, "isTrashed" : false, "name" : "my file", "path" :
      "/home/teamdrive/Spaces/My Space", "spaceId" : 3, "synced" : ↪
↪true }
data: { "event" : "SpaceModified", "spaceId" : 3 }
```

Possible Event types are: *FileEntryChanged*, *VersionEntryChanged*, *FileVersionPublished*, *FileVersionUnpublished* and *SpaceModified*

**Raises**

- **httplib.HTTPException** – a Connection Error.
- **socket.error** – a Connection Error.
- **ConnectionRefusedError** – a Connection Error.
- **ValueError** – no JSON returned. Wrong URL?

**unlockFile** (*fileId*)

Lock a file. Throws *TeamDriveException* (page 60), if the call fails.

New in version 4.2.1.

**Parameters** `fileId` (*int*) – The Id of the File

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveException` – Failed to queue command.
- `ValueError` – no JSON returned. Wrong URL?

**unpublishFile** (*fileId*)

Unpublishes the file. Throws `TeamDriveException` (page 60), if the call fails.

New in version 4.1.

**Parameters** `fileId` (*int*) – The Id of the File

**Return type** dict

**Raises**

- `httplib.HTTPException` – a Connection Error.
- `socket.error` – a Connection Error.
- `ConnectionRefusedError` – a Connection Error.
- `TeamDriveException` – Failed to queue command.
- `ValueError` – no JSON returned. Wrong URL?

## 11.6.2 TeamDriveApi.TeamDriveException

**class** `TeamDriveApi.TeamDriveException` (*name, result*)

In case of an error, the TeamDrive API returns a specific JSON document. Thy python Module will parse this error.

**Example using curl:**

```
curl -s '127.0.0.1:45454/api/getSpaces'
{
  "error": 50,
  "error_message": "CJsonApi::ApiError (Error_Missing_Session)",
  "result": false,
  "status_code": 500
}
```

**Example using the command line:**

```
$ ./TeamDriveApi.py '127.0.0.1:45454' getSpaces
Traceback (most recent call last):
  File "./TeamDriveApi.py", line 1178, in <module>
    main()
  File "./TeamDriveApi.py", line 1174, in main
    result = (getattr(TeamDriveApi, command)(api, *params))
  File "./TeamDriveApi.py", line 307, in getSpaces
    return self._call("getSpaces")
  File "./TeamDriveApi.py", line 204, in _call
```

```

    return self._call(name, params, method)
File "./TeamDriveApi.py", line 205, in _call
    raise TeamDriveException(name, jsonRes)
__main__.TeamDriveException: Call getSpaces failed with {u'status_code': 500, u
↪'error_message': u'CJsonApi::ApiError (Error_Missing_Session)', u'result':
↪False, u'error': 50}

```

**Error\_HTTP\_Method\_Not\_Allowed = 2**

**Error\_Insufficient\_Rights = 30**

**Error\_Internal\_Error = 1**

**Error\_Invalid\_File\_Key = 43**

**Error\_Invalid\_Parameter = 21**

**Error\_Missing\_Parameter = 20**

**Error\_Missing\_Session = 50**  
No or invalid credentials supplied.

See also:

Chapter [Authentication](#) (page 25).

**Error\_Unknown\_AddressId = 42**

**Error\_Unknown\_Error = 3**

**Error\_Unknown\_Space = 40**

**Error\_Unknown\_User = 41**

**Error\_Wrong\_Login = 51**

**getError()**  
The TeamDrive API Exception code :rtype: int

**getErrorString()**  
A human readable version of this error :rtype: str

**getStatusCode()**  
The HTTP status code of this exception. :rtype: int

## 11.7 Common JSON Data Types

The API returns common data types encoded in JSON objects for different API functions. This section provides an overview of some of these data types.

### 11.7.1 Space

This JSON object describes meta information about a single Space.



Member	Description
id	Id of the Space. Used to identify a specific Space
fileId	FileId of the root-folder in this Space. Only present for active Spaces
name	Name of the Space
spaceRoot	Local path to the Space.
invitor	Invitations only: User name who created the invitation.
creator	User name who created the Space
icon	Space icon.
status	Status of the Space.
status_message	Describes the current status of this Space.
hasTrashedFiles	Has trashed files in the Space.
isPasswordProtected	Invitations only: This invitation needs a password. Omitted if false.
time	Datetime of the last modification of this Space.
text	Invitation comment
permissionLevel	Permission level of the current user in this Space. (Not for invitations)
hasComments	Space has comments. (Not for invitations)
newComments	Amount of new comments in the Space. (Not for invitations)
isOfflineAvailable	<code>true</code> , if the Space will be synchronized to the local file system. TeamDrive will only synchronize meta-data if this is <code>false</code> (Not for invitations)

Example:

```
{
  "name": "Api",
  "creator": "...",
  "spaceRoot": "/home/teamdrive/Spaces/Api",
  "icon": "space",
  "status": "active",
  "status_message": "OK",
  "id": 8,
  "fileId": 1
}
```

## 11.7.2 File

This JSON object describes meta information about a single File or directory.

Member	Description
name	File or Folder Name
id	Local Id. Mainly used as parameter.
spaceId	Space Id of the file.
path	Path to the file excluding the name.
currentVersionId	Version id that should be in the file system
isDir	Boolean value. <code>true</code> for directories.
hasNameConflict	File or Folder has a name conflict
hasVersionConflict	File has a version conflict
permissions	Unix permissions
creator	User name of the file creator.
created	file creation time. (Files only)
icon	icon name based on the file extension. (Files only)
confirmed	The current version is synchronized to the server. (Files only)
size	The size in bytes of the current version. (Files only)
time	file creation time. (Files only)
lastModified	Last modification time. (Files only)
publicUrl	URL to the file if it is published. (Files only)
hasComments	Boolean value. (Files only)
isLockedByMe	Boolean value. (Files only)
isLockedByOther	Boolean value. (Files only)
trasher	User name who deleted the file. (Files only)
trashed	deletion time. (Files only)

Example:

```
{
  "isDir": true,
  "name": "My folder",
  "currentVersionId": 0,
  "spaceId": 3,
  "isInFileSystem": true,
  "path": "/",
  "id": 756,
  "permissions": "rwxr-xr-x"
}
```

### 11.7.3 Addressbook Entry

This JSON object describes meta information about a addressbook entry.

Member	Description
id	Addressbook entry Id
name	User display name
email	Registration Email
profile	Profile information
initials	User's initials

Where Profile information is a JSON object containing:

Member	Description
email	Display Email
phone	Phone number
mobile	Mobile nubner
hasProfilePicture	Boolean value. <code>true</code> for User's with profile picture.

## CHANGE LOGS

### 12.1 TeamDrive Agent 4.2.1

web interface:

- added file version page
- name- and version-conflicts are highlighted and can be resolved using the web interface
- fixed a bug uploading files on internet explorer
- added advanced options when joining or activating a space (offline availability, space path, restore from backup, full restore)
- added move-space function to the space info page
- added a 'notify Space members by Email' option when creating Space or file comments

### 12.2 TeamDrive Agent 4.2.0

- changed: *getActivities* (page 33), *getActivityDetails* (page 35).

### 12.3 TeamDrive Agent 4.1.4

- added *getVersion* (page 47), *getVersions* (page 47), *deleteVersion* (page 33), *resolveVersionConflict* (page 55) and *setCurrentVersion* (page 56).

### 12.4 TeamDrive Agent 4.1.3

- deprecated: *teamdrived --language* (page 19).

### 12.5 TeamDrive Agent 4.1.2

- added *setSpaceSetting* (page 58).
- added *teamdrived --enable-shell-extension* (page 20).

## 12.6 TeamDrive Agent 4.1.1

- added `setAccountEmail` (page 55)
- `about` (page 29) no longer returns license info. call `getLicense` (page 40) instead.
- added `requestResetPassword` (page 54)
- added `getProfilePicture` (page 42), `setProfilePicture` (page 57), `clearProfilePicture` (page 30) and `setProfileInfo` (page 57)
- added `getComments` (page 37), `getSpaceComments` (page 43), `addComment` (page 29), `addSpaceComment` (page 30) and `removeComment` (page 53)
- deprecated `getSpaceMemberIds` (page 44)
- added `getSpacePermissionLevels` (page 45), `setMemberPermissionLevel` (page 57), added permission levels to Member related calls.
- added `getSpaceStatistics` (page 46)
- added ability to handle password protected invitations in `joinSpace` (page 48) and `inviteMember` (page 48)
- added `getActivities` (page 33) and `getActivityDetails` (page 35)
- added `teamdrived --idle-shutdown-timeout` (page 22), `teamdrived --http-api-external-register-url` (page 22) and `teamdrived --http-api-external-login-url` (page 22)

## 12.7 TeamDrive Agent 4.1

- Added `createFolder` (page 31), `publishFile` (page 51) and `unpublishFile` (page 60).
- Added documentation of the `/sse` API

## 12.8 TeamDrive Agent 4.0

- All modifying calls require HTTP POST requests, for example `createFolder` or `deleteSpace`
- Client Authentication is **required**
- Added `getSpaces` (page 46), `getFullFolderContent` (page 39), `getFullAddressbook` (page 39), `setTrashed` (page 58) and `createFolder` (page 31)
- Changed the Exception response.
- added `getMember` (page 41) to retrieve the status of a member

## 12.9 TeamDrive Agent 3.3.1

- added `getSpaceMemberIds` (page 44)

## 12.10 Web User Interface 1.0.4

- Added Space activities

## 12.11 Web User Interface 1.0.2

- Create Space Dialog: Added Server selection. (Requires Agent 4.1.2).
- Improved error message if there is no depot usage available.
- Added automatic redirect to the external login url on the login page.
- Fixed a bug regarding custom user rights (Only TeamDrive 3 Spaces affected)

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