

App Guidelines

For Apps at RWTH Aachen University

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History

History of changes in this document.

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1	0.1	24.07.2013	Erstellung des Dokuments	M. Politze
2	0.2	25.07.2013	Richtlinien Ergänzt	M. Politze

3	0.3	15.08.2013	Umfassende Ergänzungen, Kommentare, Fragen an RWTH Institutionen	U. Schroeder
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6	0.5	30.06.2014	English translation	M. Politze
7	0.5	04.08.2014	Added / Updated information services: L ² P 2013 and CAMPUS	M. Politze
8	0.6	25.03.2015	Added/Updated Information about RWTH Affiliated systems, Modified content (spellcheck, grammar) Appendix (VV for RWTH Affiliated Systems, and Third Party Apps)	V. Lukarov

1 Introduction

We are happy that you would like to invest your time and talent to create an app for RWTH Aachen University. We want to keep an attractive variety of apps for all members of the university. These guidelines define certain quality standards, basic design rules, and security rules to protect the user and her personal data. All apps and tools used in the context of RWTH Aachen University should follow these guidelines.

We want to support good and innovative apps from initial idea until release to the public, and we offer our help during the development of your app with templates and samples.

These guidelines are continuously upgraded. Each new app is a specific ecosystem and it might raise different points, situations, and questions that have not been anticipated. The guidelines will grow and receive update with each new occurrence. Please, do not hesitate to contact us if you have any questions concerning the guidelines. Take a look at them every once in a while, to make sure you and your app is up to date with them.

1.1 App Registration

Before you can start developing your app for RWTH Aachen University you have to register as a developer. We need the following information to register you as a developer:

- Contact information including name and email address.
- Relationship with RWTH Aachen.
- Working title of your application.
- Short description of your app (Couple of sentences is enough).

Please send your information to servicedesk@itc.rwth-aachen.de and we will supply you with all additional information needed. If you want to take advantage of the L²P API in your application, please contact CiL (elarning@rwth-aachen.de) as well.

After registering with us, you will receive an app key. This key is used to identify your app when communicating to the different information services at RWTH Aachen. The app key is only intended for your app and it should not be passed to anyone else. Please keep the app key at a safe place and handle it with special care e.g. do not upload it to publicly visible source code repositories. Also please use your app key only for one app. If you are developing multiple apps we will gladly issue multiple app keys to you.

1.2 RWTH and L²P Appstore

The RWTH Appstore is a website listing all apps that can be used in context of RWTH Aachen University. Potential users will receive a better impression of your app in the RWTH Appstore where the app name, descriptions and screenshots will be provided. To download and install an app the user will be redirected to the platform specific app store. Additionally, each app that uses the L²P API will be posted in the L²P App store in the category "Third Party" with the same information.

1.3 Trust Levels

Your app will have a level of trust based on the state and regarding the conformity with these guidelines. The level of trust will be displayed in the RWTH Appstore and it will de-

scribe a recommendation about the credibility of a certain app. The level of trust depends on the following things:

- Source code and the architecture of the app.
- Future development of improvements and end user support.
- RWTH Affiliation

Only certified apps will be eligible to access all information service of RWTH Aachen.

1.3.1 Level 1: Experimental Apps

Your app it will be listed as “experimental” during development. The users will see this level in the app store and during the app authorization. This app level does not save and collect any personal data, other than what was explicitly intended by the user.

We encourage you to develop a good and safe app, but during the development most of the guidelines do not apply to your app. However, once you plan to publish your app to a wider public (e.g. in an app store), your app will be inspected for compliance with the guidelines in this document. Your app will be listed as “external app” or “RWTH Certified App” in the RWTH Appstore after successful inspection. If your app violates these guidelines, we will warn you, and if no measures are taken we will revoke your access to information services of RWTH Aachen.

1.3.2 Level 2: External Apps

The level “external” is minimum requirement for apps published to a wider public e.g. in an app store. Before publishing, any app listed as “external” has to be reviewed on a functional basis according to these guidelines.

After a successful review the information about the app in the RWTH Appstore and L²P App store will be updated. This information will also contain information how to download and install your app. Furthermore, the developer himself is solely responsible for providing support to the users.

After publishing your app we will randomly select some apps for additional reviews. You do not have to notify us every time you update your app. If review reveals that your updated app violates these guidelines, the app may be reduced to an “experimental app”.

1.3.3 Level 3: RWTH Certified App

RWTH certified app has to comply with the same guidelines as “external apps”. Additional requirements are that the source code of the app needs to be reviewed by RWTH affiliated institution. Usually, an “RWTH certified app” is developed and maintained in cooperation with an institute of RWTH Aachen University (e.g. during classes, practical classes and lab sessions, by Medien-MATSE etc.). The RWTH institute has to review the source code of app before the initial and subsequent releases, to verify compliance with these guidelines. The responsibilities for further development and support of the app can be either the developer(s), or the cooperating institute of RWTH Aachen.

1.3.4 Level 4: RWTH Owned Apps

“RWTH Owned” apps are developed by one or more employees of RWTH Aachen as part of their duties and responsibilities. These apps are published by an RWTH Institute. The RWTH institute works on updates, future development, and support.

This level signals the user the maximum trust because the app is officially offered by RWTH Aachen.

2 App Types

There are two major categories of apps. Apps for mobile devices, and web based apps.

2.1 Apps for mobile devices

Applications on devices could be developed for: Android devices (phones and tablets), iOS devices (phones and tablets), and Microsoft devices (Windows phones and tablets). App publications in the respective App stores (Appstore, Google Play, Windows Store) depend on the rules and regulations of the respective store.

2.2 Web based applications/Desktop Applications

Developers can develop apps for L²P directly, or using OAuth for authentication and the L²P API. Moreover, external systems which are from RWTH Institutes or RWTH Affiliated Organizations can have their systems/tools/applications integrated inside the L²P learning platform.

- At the moment, only the CiL team can develop apps directly for the L²P learning platform.
- If you want to develop desktop applications which use the information services of RWTH Aachen (which also include the L²P API), and would like to integrate your app in L²P please refer to section 1.1. There is a possibility to embed your app as an iFrame inside L²P (either as an app for the Dashboards, or as a separate module). For detailed information about app possibilities, please contact CiL (elarning@rwth-aachen.de).
- If you work at RWTH Institute and have a system/application/tool that you would like to have inside your course room in L²P, please contact CiL (elarning@rwth-aachen.de) for additional information and guidance.

3 Content Guidelines

The content guidelines apply to the content that is displayed in your app. This includes the content that is downloaded within the app, and also content that is generated by users and displayed in your app. We will check compliance with these guidelines on a random sample basis.

If your app meets one of the following criteria it may be excluded from the RWTH Appstore and the L²P App store and may be denied to access information services.

- Display contents that show violence, glorify violence or threaten thirds.
- Display pornographic contents.
- Deceptive or misleading behavior, Identity theft or manipulation of the user.
- Saving or publishing personal, private or confidential data without explicit consent of the user.

- Violation of brand and intellectual property rights.
- Illegal activities or encouraging the user to participate in illegal activities.
- Support of gambling betting or lotteries.
- Spreading of computer viruses, worms, Trojans or malware.
- Display of faked error messages (Scareware).
- Display of ads.
- Query user credentials such as TIM-ID or passwords.
- Present other functionalities to the user than listed in the app metadata.
- Contact information for technical support, name of the app and version information cannot be displayed in the app.

4 Technical Guidelines

Your app should also comply with some technical guidelines to guarantee the stability of the app infrastructure, the information services, the device, and the app itself.

If your app meets one of the following criteria, it may be excluded from the RWTH Appstore and L²P App store and may be denied to access information services.

- Vast reduction of battery time of the device when the app is not in use.
- Not documented or hidden functionality, especially when not conform with the purpose of the app.
- Usage of APIs that are not intended for public usage.
- Usage of information services of RWTH Aachen that are not intended to be used by apps.
- Usage of information services of RWTH Aachen that do not use OAuth2 for app authorization.
- Excessive Usage of network or network services such that:
 - Costs are incurred for the user.
 - The functionality of the information services is affected.
- Usage or saving the position of the user without explicit consent.
- Missing exception handling and resulting crashes of the app.
- The app not being responsive for more than three seconds without showing a loading indicator.
- Consistent usage of the “back” button for navigation and to close the app.
- Prevent users from initiating, receiving or end telephone calls.
- Prevent users from sending or receiving SMS or MMS messages.
- The app crashes when calls, SMS or MMS messages are received.

5 Information Services

When developing an app in context of RWTH Aachen University, you will get access to different information services operated by institutions at the university. The access to these information services is personalized based on the user and the app. Access to the information has to be granted by the user using the OAuth interface to comply with this personalization.

Currently the following information services are offered to be used by apps:

- OAuth
- L²P 2007
- L²P 2013
- CAMPUS / CAMPUS Office

6.1 Authorization

To access the information services of RWTH Aachen University your app has to be authorized by the user using an OAuth workflow. A complete description of the workflow and a technical description of the web services offered are provided under the following URL <https://oauth.campus.rwth-aachen.de/doc/>.

Operated and maintained by: IT Center

Contact: servicedesk@itc.rwth-aachen.de

Technical Documentation: <https://oauth.campus.rwth-aachen.de/doc>

Status: publicly available, stable

6.2 L²P 2013

Operated and maintained by: CiL, IT Center

Contact: elarning@rwth-aachen.de

Technical Documentation:

https://www3.elarning.rwth-aachen.de/_vti_bin/l2pservices/api.svc/v1/documentation

Status: publicly available, stable

OAuth2 scope: l2p2013.rwth

6.3 L²P 2007

Operated and maintained by: CiL, IT Center

Contact: elarning@rwth-aachen.de

Technical Documentation: <https://www2.elarning.rwth-aachen.de/L2PWebservices/...>

Endpoint	Description
L2PExerciseCourseService.asmx	Access to exercises
L2PFoyerService.asmx	Access to foyer
L2PInformationService.asmx	Access to general course room information
L2PLearningMaterialService.asmx	Access to learning materials
L2PLiteratureService.asmx	Access to literature
L2PSettingsService.asmx	Access to settings
L2PPublicDomainService.asmx	Access to public domain
L2PSharedDomainService.asmx	Access to shared domain
L2PTutorDomainService.asmx	Access to tutor domain

Status: publicly available, stable, no longer under active development / support

OAuth2 Scope: l2p.rwth

6.4 CAMPUS / CAMPUS Office

Operated and maintained by: IT Center

Contact: servicedesk@itc.rwth-aachen.de

Technical Documentation: Not yet available

Status: closed preview, partially stable

OAuth2 scope: campus.rwth

6 Enforcement of the Guidelines

An app that violates one or more of these guidelines may be excluded from the RWTH and L²P app stores and will not be granted access to information services of RWTH Aachen. We will notify the author of the app using the mail address that was supplied when registering the app.

If you encounter any questions regarding these guidelines, samples or templates the level of trust of your app or the way it is displayed in the RWTH or L²P app store please contact us at servicedesk@itc.rwth-aachen.de and elarning@rwth-aachen.de.