CTAN goes 2.0 — New community features and more

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Abstract
The portal of the Comprehensive \TeX{} Archive Network (CTAN) is continuously improving. Additional features for the personalized interaction with the portal and the contribution to its contents are now publicly available. This allows — among other features — registered and authenticated users to rate packages and leave comments on them.

In addition, CTAN announcements are now available on the portal and via RSS feeds.

1 Introduction

In the Web context the magical number is 2.0. This is originated in the term Web 2.0 as coined by Eric Knorr in 2003 [Kno03]. It is associated with the enrichment of the user experience by community functions. The community member is not only a pure consumer but can contribute to the Web content.

CTAN is based on the principle of contribution of material and participation of community members on the level of packages. Anyone can upload a package to CTAN. The CTAN team helps to ensure consistency and a high quality of the information provided in the catalogue of packages. This aims not only at direct online use but also at the production of \TeX{} distributions like \TeX{} Live and MiK\TeX{}.

With the new features of the CTAN portal we enter the era of Web 2.0. Community members are now enabled to contribute information to CTAN as well. First of all, this information augments the package description with rating and commenting of packages. Thus it allows other members to benefit from the experiences with packages shared on the CTAN portal.

2 CTAN taken personally

From the start, CTAN has been built with user management and login capabilities. Until now, I have used this feature as the only user for managing the portal. The registration has been deactivated and the login page hidden.

2.1 Experiences with the guest book

The CTAN portal has had a guest book since its relaunch in 2012 [Neu13]. Soon spammers found this page and started to pollute the entries. I have manually deleted offending entries — sometimes quite quickly. Nevertheless it was annoying.

Thus I have added a list of stop words to the portal. Whenever I delete a guest book entry I also add one or more stop words. The stop words are checked when a new guest book entry is submitted. The entry is automatically deleted when a stop word is found.

As a result, I observed that trash was reduced but did not vanish completely. It’s an arms race and I am certain that it will continue. Thus it became clear that something has to be done to avoid a similar effect for the community features.

![Figure 1: The login and registration (“Join”) links](image)

2.2 Registration and login

CTAN has had a strict security and privacy policy since its beginnings. As one consequence we have activated an encrypted communication via HTTPS some time ago. The new community features follow this spirit. We take care of your data and you have control over the information presented about you on the Web.

One change is visible on each page: the links to the page for login and registration (“Join”). They appear in the upper right corner of each page, as shown in figure 1.

To get started you have to register a new account to gain access to the community features. We collect a few pieces of information during the registration process. You can choose a nearly arbitrary account name. If all privacy guards are active then only this alias will be seen on the Web portal. Nevertheless we prefer attributions to you with your real name. Thus it needs to be given. At least the CTAN team wants to know who the members are. Finally you need a working email address. This is used during the registration process to verify that you can be reached if required — for instance if you forgot your password.

Two things are used to identify a user: the first is the account name and the second is the email address. Thus the portal tries to avoid different accounts being created with identical account names or email addresses.

A few more settings can be made on the registration page to get things right immediately. After you have submitted the registration an email will be sent to the email address you have entered. It contains a confirmation link to a page where you can set up your initial password and activate the account. Now you can log in and participate.
A few situations deserve special treatment. It appears obvious that a user name already in use cannot be chosen. If you enter an email address which is already in use, you cannot register a second account for it. This is most probably the case when you have forgotten that you had already registered. Just login — or request a password renewal if you’ve forgotten that as well.

The login is fairly simple. You can use the link on each page to get to the login page. Alternatively if you request a private page without being logged in you are automatically redirected to the login page first.

The login uses your account name and your password. The password is not known to the CTAN team and cannot easily be uncovered. Remember our privacy policy — we try to protect your privacy.

If you happen to forget your account name or password you can request an email with a reminder or a link to a page which allows you to choose a new password.

You can even decide to delete your account on CTAN. In this case you cannot login to this account any more and the information gathered by the system is deleted.

2.3 Your personal dashboard

You have a personalized starting page — called a dashboard. It is accessible exclusively to you. Nobody else sees this page. This page is usually shown immediately after you log in. A sample is shown in figure 2.

![Dashboard for Gerd Neugebauer](image)

**Figure 2**: A sample dashboard

From your dashboard you can see which data is stored for your account. Nearly everything can be modified at any time. The only fixed value is the account name. It is your unique identifier for the system. Once chosen during registration it cannot be altered. Thus choose wisely.

You can see there statistics about your ratings. There you can find a link to the complete list of your ratings and comments. With two clicks you can reach a particular package page. There you can revise your rating and your comments at any time and as often as you like.

2.4 More preferences for you

Any community member has had a small set of settings used even without being logged in. This consists mainly of the selection of the skin — the appearance of the Web pages. Some time ago, this was augmented by the option to disable hyphenation and the selection of the language. This has been requested particularly because the cut-and-paste operation has revealed insufficient support of the UTF-8 character encoding by several programs. This leads to mysterious unprintable characters for the hyphenation marks in pasted text.

The selection of the skin and the hyphenation flag are stored locally in the browser. Thus they can be used without login. On the other hand, they are bound to a single browser and cannot be shared between different computers or devices.

These choices can now be found on the settings page. This page provides access to additional settings if the member is logged in. The complete group of settings about your account and privacy can be found there too. Notably, most of the fields from the registration can be modified here.

2.5 Your public account page

Each registered community member has a /home page as the URL /home/account. This /home page shows all information about the account which has been approved by the user.

Currently the public account page is similar to the dashboard (see figure 3). But this might change in the future.

2.6 Identifying package authors

The strict privacy policy of CTAN prevents an author’s email address from being shown prominently on the Web. The CTAN team does not have the capacity to extend the information about authors with a flag signaling the agreement of the author to pass on their email address. Nor do we have the capacity to get such an agreement from each of the more than 2000 authors.

Authors are usually interested in getting feedback on their packages. Thus in most cases it is
not hard to find an email address in a “readme” file, the package documentation, or even the source code. Now an author is also enabled — and encouraged — to provide his email by registering as a CTAN community member and establishing a link to the CTAN author which should already be in place. Thus package users can more easily find the email address and get in contact with the author.

The association works via the email address of a contributor known to the CTAN team. If a user registers an account with the same email address then he is asked to establish an association. For instance, I have chosen the account name “gene”. In the CTAN catalogue someone named me “neugebauer”. Since the email addresses were identical, the system has offered me the possibility to establish an association and I did it. Now a link is on my /author page pointing to my /home page and vice versa.

This additional association between package authors and CTAN accounts allows visitors to find the email address of an author more quickly. Of course, the publication of the email address remains under the control of the contributor.

2.7 Package upload simplified

Package upload is one place where a contributor can profit from having a CTAN login. As you may already know, the upload form is pre-filled with the data from the last visited package page. This means that if you navigate to a page which is related to a package then this information is kept during the current browser session. The page can be the package page under /pkg/... or a package-related page in the tex-archive/ tree.

When you are logged in, your name and email address is filled additionally. Thus the procedure to upload an update of one of your packages becomes rather simple:

- Login
- Select the package from the list of your packages
- Press “Upload”
- Fill in the version number, announcement text, and select the file to be uploaded
- Press “Submit contribution” and you are done

With these simplifications, authors can be further encouraged to upload their package developments to CTAN.

3 Sharing your experience — Rating and commenting packages

The user rating of products can be a good source of information. We see this kind of feedback on many online shops. A visitor can get an impression of the experiences of other users. Now we carry this over to the packages on CTAN.

3.1 New building blocks on package pages

Each package has a page on CTAN which presents the data gathered in the catalogue about this package. For instance, the package biblatex is associated with the page https://www.ctan.org/pkg/biblatex.

When looking at the package pages in recent years, they may have seemed a bit underpopulated. This is fixed now. More information and functionality is in place. An example can be seen in figure 4.
On this page you can find three new sections. The section “Community Comments” lists the comments and ratings of the CTAN community members. The section “Rating Profile” shows some statistics about the average rating, the number of votes and the distribution of the votes. The section “My Rating” allows you to rate the current package or modify your previous rating. This functionality is available to authenticated members only.

The aim of the CTAN team is to avoid abuse and nonsense content. Thus we do not allow anonymous ratings and comments. As a side effect this policy allows you to review your rating and adapt it to your current experiences with the most recent version of the package.

When you enter the rating for a package you are asked for several fields. First is the number of stars — more is better. You can enter a textual comment. It contains whatever you have to say but is optional. Finally you are asked to rate yourself. This provides an indication for the readers on how deeply you are involved with the package. By the way, it is legitimate for an author to rate their own package. Even this can provide insights for readers.

In figure 4 you see the sections with a few ratings and comments. The packages await your contribution with ratings and comments.

4 CTAN and JavaScript — Supporting old-fashioned ways

Nowadays the Web is nearly unusable without JavaScript. This creeps into CTAN as well. CTAN uses JavaScript, but sparsely. Nevertheless the 2.0 features make use of JavaScript. You will not be able to see or use much without JavaScript enabled — don’t even try.

Recently a complaint reached me about the use of JavaScript on the archive browser pages. Since some directories are huge it can take some time to render the directory listing. In order to show some kind of progress the implementation uses an asynchronous AJAX call — i.e. JavaScript — to get the data while a CTAN banner is rotating. If JavaScript was not available the banner rotated forever since no attempt is made to load the data.

This has been fixed. A page without JavaScript is used automatically — it may take slightly longer before the browser shows a reaction. At least the basic functionality of browsing the archive directory and searching can be used without JavaScript now.

5 Feeds from the Lion — News on CTAN

The TEX world is constantly evolving. New and updated packages can be found on CTAN. The announcements have been published via the mailing list ctan-ann@dante.de for a long time. This mailing list is run by DANTE e.V. Anyone interested can subscribe to receive the email via the administration page, https://lists.dante.de/mailman/listinfo/ctan-ann.

Newsgroups supplement this service. For instance the newsgroup comp.text.tex receives the announcements from the mailing list.

5.1 Gmane is dead — Long live CTAN

Gmane has been a good and reliable way to access many mailing lists. When it went down at the end of June 2016 we felt that there was a gap to be filled — at least for CTAN and the TEX world. With the end of Gmane, there was no good way to learn of changes via a news feed. This functionality is now provided by the CTAN portal.

![CTAN home page](image)

Figure 5: Announcements on the CTAN home page

The CTAN home page (see figure 5) now shows the four most recent announcements on ctan-ann. In addition, a link to a page with a larger list is provided (see figure 6). On this page you can find the orange buttons for “Atom” and “RSS”. They are links to the respective feeds. Currently the formats Atom 1.0 and RSS 2.0 are supported. You can enter these URLs in the feed reader of your choice to read them.

Maybe you are interested in single packages only. In this case you can navigate to the respective package page. If there have been announcements for this package, you can again find the four most recent ones listed and a link to a page with more, and again the orange buttons for “Atom” and “RSS” with the links for the newsfeeds.

5.2 Activity diagrams — sort of

On the package page you can sometimes find a diagram with (sort of) spectral lines. The idea was to visualize the activity of the package development in
some way. The only information available at CTAN are the announcements. Thus the announcements are shown in this diagram (see figure 7).

This diagram can be misleading in several situations. The association of an announcement to a package relies on a heuristic which tries to identify the package name in the announcement text. This heuristic works fairly well for recent announcements but may fail for older ones or announcements for several bundled packages.

6 The road ahead

The CTAN portal is evolving. And features can be added, modified, or even removed entirely.

6.1 The light on the horizon

With the new possibility of identifying users, we are able to approach more functionality. Things which should not be allowed anonymously can be opened for community members or package authors.

We can envision allowing package authors to see and edit the catalogue entry for their package. For instance the description and the topics might be made accessible in this way. Nowadays this information is maintained by the CTAN team. Anyone can submit suggestions for improvements by sending an email. But such a process might be offered on the portal as well.

For any user, one can envision lists on the home page containing links to packages of interest or documentation. For the user this list acts as a personal library. These can be taken into account when rating a package. One could consider making such lists public. Thus lists of packages for special interests could be maintained by the community.

Another possibility would be to make the community features themselves configurable for an authenticated user. If someone does not like the rating and commenting, then this could be disabled. But I suspect this configuration would not be often used.

6.2 It’s your turn to contribute to www.ctan.org

In this article, you have seen some of the new community features of the CTAN portal. Now it is up to you to make best use of it. Visit the CTAN portal, register, and start rating the packages you know best from your daily use. Please share the wealth of your experiences with some of the packages on CTAN and make the portal more fruitful for others.

Enjoy www.ctan.org and keep on TEXing.

References


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