

How to Use the Topologi Collaborative Markup Editor in a Teaching Lab

Rick Jelliffe

For Educators and Trainers

The Topologi Collaborative Markup Editor has peer-to-peer networking features that can assist in training labs for

- learning XML, SGML and related technologies,
- using XML and related technologies to perform coursework.

In the context of a computer lab on a LAN, these features provide:

- simple deployment of applications to all machines,
- directory diary, to allow students to go to predefined directories immediately,
- messaging and screenshots between students, allowing collaboration,
- messaging and screenshots from students to the tutor or teacher, allowing the tutor to stay at their computer,
- remote access features.

The Topologi Collaborative Markup Editor runs on Windows systems, Linux and Mac OS X.

Deploying XML Applications

The markup editor can be configured using an XAR (XML Application Archive). These are ZIP files containing the DTDs and stylesheets for the application in particular locations.

The tutor can trial XARs by placing them in the `xar/local` directory on their machine. These are only visible to the tutor. When the XAR is ready for deployment, the tutor can move it to the `xar/peer` directory, and instructs the students to select in their editor `Net>XAR Update`.

When developing XAR applications, tutors should be aware of the following:

Directory Diary

- The name of the XAR must be *XXX-dd.dz2* where *XXX* is the name that will appear in the Document Type list (with “_” replaced by spaces, and not including any “-” characters), and where *dd* should be some version number (e.g., starting with 00 or 01).
- An XAR file unpacks into the /schemas directory only if there has been an increase in the version number. During development, delete the entry in the schemas/ directory every time you alter the XAR.
- The XAR (and plugin) mechanism will look in the following order for XAR files for a given name: xar/local, xar/peer, xar/server, xar/topologi. When it finds a directory with one or more entries, it will use the highest versioned entry in that directory. So even if your xar/local directory has a version 01 and you put a version 02 in xar/peer, the version 01 in xar/local will be used.

Directory Diary

The File Chooser boxes feature a Diary with the directories that the user has accessed over the last week. This helps a user return to their workplace fast.

As well, the user can also see the directories that their peers have been accessing.

If the computer lab has a shared disk, the tutor can use the Diary feature to hold the directories that the students will need. The students open the tutor’s diary at the correct day, and then have the list of directories they need immediately.

The diary system has the following limitations built-in:

- on Windows systems, directories on the C: drive are not advertised. (This can be altered);
- diary sharing only happens between systems of the same operating system family: a Macintosh machine does not give diary information to a Windows system.

Messaging

When students arrive, they should assume an identity by selecting Net>Assume Identity. This way, their messages will have their names. Depending on other login practises for the machines, their names may already be registered.

No set up is required for peer-to-peer access on a LAN. The editors will all see each other. If there are multiple labs sharing the same LAN, then instruct the users to change their group name to some appropriate name, by Options>Options>Expert>Peer-to-peer settings.

To send a message, select Net>Send a Message... They will see the names of all their peers. (The teacher might make their name easier to find by using an identifier starting with “A”.) A single line field appears, and the users can send a small focused message.

The message will appear in the status bar (at the bottom of their application) of the receiver.

ScreenShots

The student may want to know how to handle certain text: for example, they may not understand what tag to use, or they may want help with a paragraph.

The students should have an identity, as for sending messages.

To send a screenshot, select Net>Send a Screenshot... and select the peer. The text inside the editor will be sent.

At the receiving end, a pop-up box will come up announcing the availability of a screenshot. If the recipient selects “Yes” the screenshot will appear in a special box. The recipient can

- attach an editable note to some part
- draw/erase red lines on the screen shot to aid location
- return the screenshot to the sender.

The original sender then receives the screenshot with the same tool, and can perform the same kinds of actions. In this way, the two ends can have a dialogue about their text.

The start and end line numbers of the viewed text are also shown in the Screenshot tool’s frame.

The Screenshots tool will not work on unregistered versions. Registration numbers can be obtained from info@topologi.com. For the Community Edition, registration is free for training and charitable uses. So a university student using the editor for private editing, a Masters student or lecturer using the editor to develop a research system, and technical or administrative staff using the editor as part of their work should pay. But for use in training labs, classrooms, during lectures and required work with an on-line tutor, the free license is available.

Remote Access

The peer-to-peer features of the editor also can work over the Internet, using the Topologi Relayer product. Contact sales@topologi.com for pricing.

The Relayer allows a remote user to join a peer group, using HTTP. They have the same capabilities as a user on a local LAN.

This feature can be used to allow remote students access to tutors or laboratories.