An introduction to digital critical editions: text encoding using TEI XML and visualization with EVT

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General information

This workshop provides an introduction to the themes of digital philology and electronic editions which also includes a practical approach, with a session dedicated to the preparation and visualization of a critical (or diplomatic) edition. At the end of the course participants will have achieved a basic knowledge with regard to the preparation and publication of digital editions using texts encoded according to the TEI XML standard and EVT.

Participants can download the workshop slides and an archive containing all the material necessary to follow the lecture and complete the training exercises from this link: http://bit.ly/seminarioFD. As an alternative, we encourage those who have their own edition project to bring the basic material: images, transcription in text format and, if available, text already encoded in the TEI XML format. No special knowledge is required, although even minimal expertise in the use of text editors, in particular XML editors (see below), is certainly useful.

The software used for visualization is **EVT – Edition Visualization Technology** (http://evt.labcd.unipi.it/), a tool which has been specifically designed to publish critical (and now

also diplomatic) editions. Since EVT accepts in input documents in the TEI XML format, a large part of the workshop will be dedicated to the fundamental elements of this language, in particular with regard to the preparation of critical editions.

Software used

To attend the workshop you need the following data and programs on your computer:

- an XML editor;

- the folder with the downloadable materials from the link above;

- the latest version of EVT 2 software (if not included in the materials folder).

The most popular XML editor for text encoding is **Oxygen XML Editor**, you can download it and register for a free trial period of thirty days (http://oxygenxml.com/download.html). The best open source (and free) option is the **Visual Studio Code** programming editor (https://code.visualstudio.com/) adding the *Scholarly XML* extension by R. Viglianti: it has been greatly refined, and offers all the basic features when validating against a RelaxNG TEI/XML schema. Another free and open source alternative, although with some limitations since it isn't actively developed anymore (only supports the old DTD schema format, not available for MacOS), is **XML Copy Editor** (http://xml-copy-editor.sourceforge.net/).

In the shared folder (http://bit.ly/seminarioFD), you will find a `materiali.zip` compressed archive which contains the following:

- **critical edition**: the texts we will use to prepare a critical edition;

- **diplomatic edition**: the texts we will use to prepare a diplomatic edition (depending on time availability);

- **doc**: documentation about the encoding scheme, a summary ('cheatsheet') of the TEI elements for the critical apparatus, a manual for the encoding of medieval texts by M. Burghart, a short tutorial about how to use EVT (quick-start.pdf), in addition to this document;

- **exercises**: exercises proposed during the workshop (depending on time availability);

- **evt**: the version of EVT to be used in the workshop (usually the latest version available on the home page unless otherwise specified);

- **xml**: sample and starting documents, with the corresponding TEI schemas, to encode the edition.

You have to download the zipped archive and decompress it on your computer (don't forget this step!), we suggest to do that on your desktop so that it is immediately available. The archive includes the EVT version to be used, in general note that to install any version of EVT on your computer you simply unpack the downloaded archive into a folder on your desktop or elsewhere in your file system.

To view editions produced with EVT locally on your computer see below the note about local browsing.

Basic workflow

A quick summary of the different steps to be taken in order to publish an edition using EVT 2:

1. **encoding**: you prepare your digital edition through TEI XML encoding of one or more documents (note that you can take advantage of XInclude to have a "main" file linking together many other TEI documents);

2. **data preparation**: you copy the different edition components in the appropriate folders and sub-folders of `data` (e.g. single side images go into `data/images/single`);

3. **configuration**: you configure EVT through the main configuration file, `config.json` in the `config` folder;

    3.1. optionally you can add your own CSS rules to the configuration by means of the `custom-style.css` file in the same folder;

4. **testing**: you can verify the result loading the `index.html` file in a browser. **CAVEAT**: loading it straightly in Firefox or Chrome doesn't work anymore unfortunately, see the note about browsers and local testing below.

Documentation and useful links

To encode an edition in the TEI XML format you will need, besides the four basic modules, those related to the *Transcription of primary sources*, to the *Manuscript description* and to the *Critical apparatus*. These are all well documented in the TEI ***Guidelines***: (http://www.tei-c.org/release/doc/tei-p5-doc/en/html/index.html):

Manuscript Description   http://www.tei-c.org/release/doc/tei-p5-doc/en/html/MS.html

Representation of Primary Sources http://www.tei-c.org/release/doc/tei-p5-doc/en/html/PH.html

Critical Apparatus   http://www.tei-c.org/release/doc/tei-p5-doc/en/html/TC.html

We will especially focus on the *Critical Apparatus* module, *parallel segmentation* method, as explained in the *Guidelines*. Other modules may be useful for specific purposes, e.g. *Names dates people and places*, *Linking segmentation and alignment*, etc., and they will be mentioned when necessary.

Digital editions based on EVT 1
Vercelli Book Digitale: http://vbd.humnet.unipi.it/beta2/.

Codice Pelavicino Digitale: http://pelavicino.labcd.unipi.it/.

Humarec Manuscript Viewer. Marciana Gr. Z 11 (379): http://humarec-viewer.vital-it.ch/.

Digital editions based on EVT 2

Pietro da Eboli, *De rebus Siculis Carmen*: http://web.unibas.it/bup/evt2/pde/

Il Rotulo di San Teobaldo: https://www.visitmudi.it/rotulo-di-san-teobaldo/

Progetto VaSto: edizione digitale della Storia fiorentina di Benedetto Varchi (1503-1565)

https://dharc-org.github.io/progetto-vasto/

https://dharc-org.github.io/progetto-vasto/evt2beta2/

TEI - Text Encoding Initiative encoding schemas and *Guidelines*

Home page TEI: http://www.tei-c.org/.

The *Guidelines*: http://www.tei-c.org/release/doc/tei-p5-doc/en/html/index.html.

TEI by Example: http://teibyexample.org/.

**A note about browsers for local testing**

Starting with version 67, Firefox developers decided to follow the same cautious policy already adopted by Chrome (and other browsers), i.e. to prevent the loading of local resources by JavaScript programs running in the browser. While this policy guarantees more security for the user, unfortunately it has the unpleasant side effect of preventing local loading of editions based on EVT (which is implemented in JavaScript) or other similar programs. In other words, while before v. 67 you could just load your local index.html file in Firefox and browse an EVT edition on your computer, which is very convenient to check for progress and fixes, now that is not possible anymore (when using Chrome, Opera, Edge etc. as well). Fortunately there are some solutions that can be adopted to do the local testing of an EVT-based edition:

• if you use Visual Studio Code as an XML editor, but also if you use Oxygen or something else, a very effective method is based on the **Live server extension**:
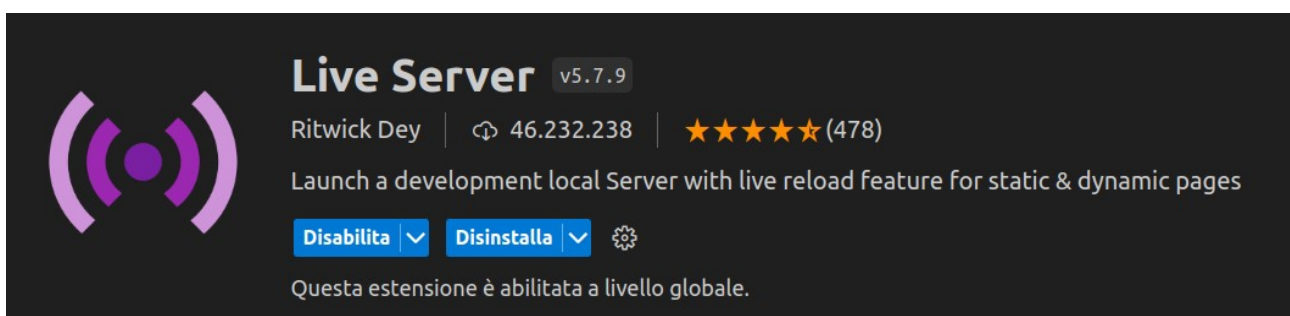
after installing it, to load the edition into the browser you have to

○ select the EVT folder: menu `File → Open folder` open the EVT folder after having unpacked the `materiali.zip` archive, you should be able to see the `index.html` file in the panel on the left:
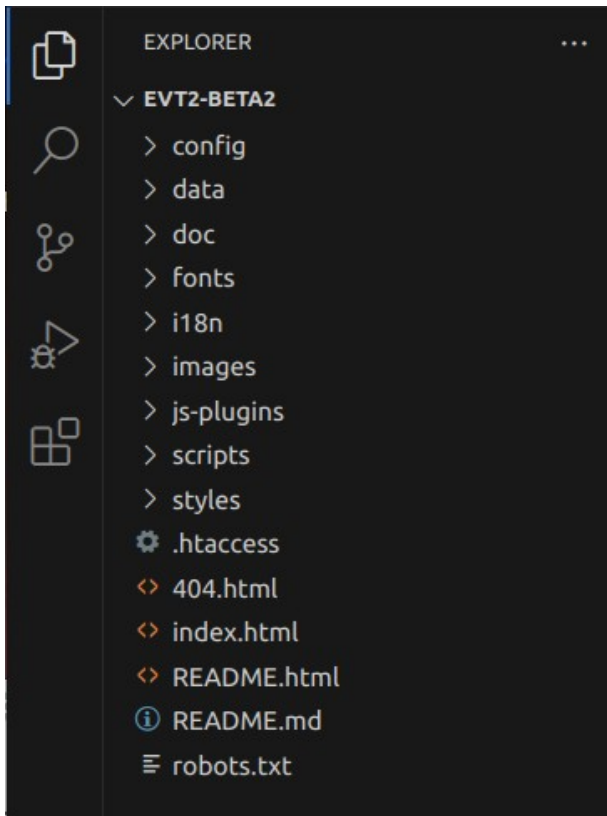
- ○ click on the `Go Live` button in the status bar, bottom right corner:

- launch Chrome from the **command line** with the parameter `--allow-file-access-from-files`:

```
chrome.exe --allow-file-access-from-files
```

or (two separate lines)

```
cd "C:\Program Files (x86)\Google\Chrome\Application\"
.\chrome.exe --allow-file-access-from-files
```

then press CTRL+O to open the index.html file in the EVT folder, or directly drag&drop it on the Chrome window. On a Mac the corresponding instruction is

```
open /Applications/Google\ Chrome.app --args --allow-file-access-from-files
```
or
```
open -a "Google Chrome" --args --allow-file-access-from-files
```

- install an extension that acts as a local web server on Firefox or Chrome, e.g. this one for Chrome:

https://chrome.google.com/webstore/detail/web-server-for-chrome/ofhbbkphhbklhfoeikjpcbhemlocgigb

- download and install **Firefox ESR** version **60**: this version, now very much outdated, predates the introduction of this new security policy and you can install it in parallel with other versions of Firefox (NB: it is **not** recommended to us this version for your usual browsing needs);

- install the development environment following the instructions on the GitHub repository (use the develop branch), an option recommended only for those familiar with git and GitHub-based development: https://github.com/evt-project/evt-viewer-angular

If you use Chrome, the simplest solution is to launch it from the command line, you could also set a script or a dedicated icon on the desktop to that purpose:
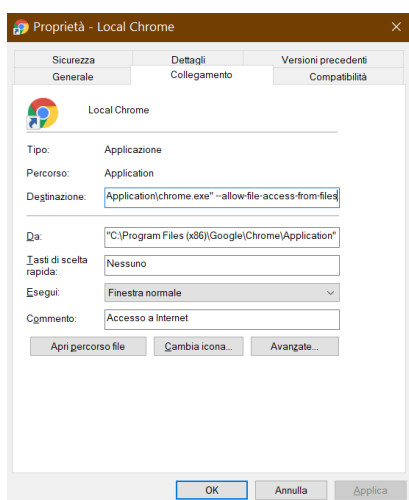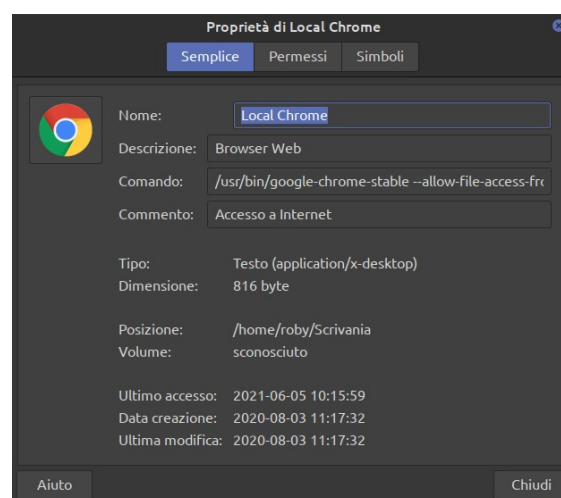
Windows	*Linux*

In any case, the problem only concerns local testing of your TEI documents in EVT, once the final edition is loaded on a web server there are no problems in accessing it with any of the most popular browsers.

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