

## Mockup – 3

The feedback system tentatively will have the following three operations –

1. Editing the link label so that user can add some semantic information.
2. Editing the sentences in the text.
3. Clicking on a link to add/remove details by retrieving some information about the element clicked from the Knowledge Base and displaying it to the user. This functionality in the future can be integrated with the visualization system.

Storyboard –

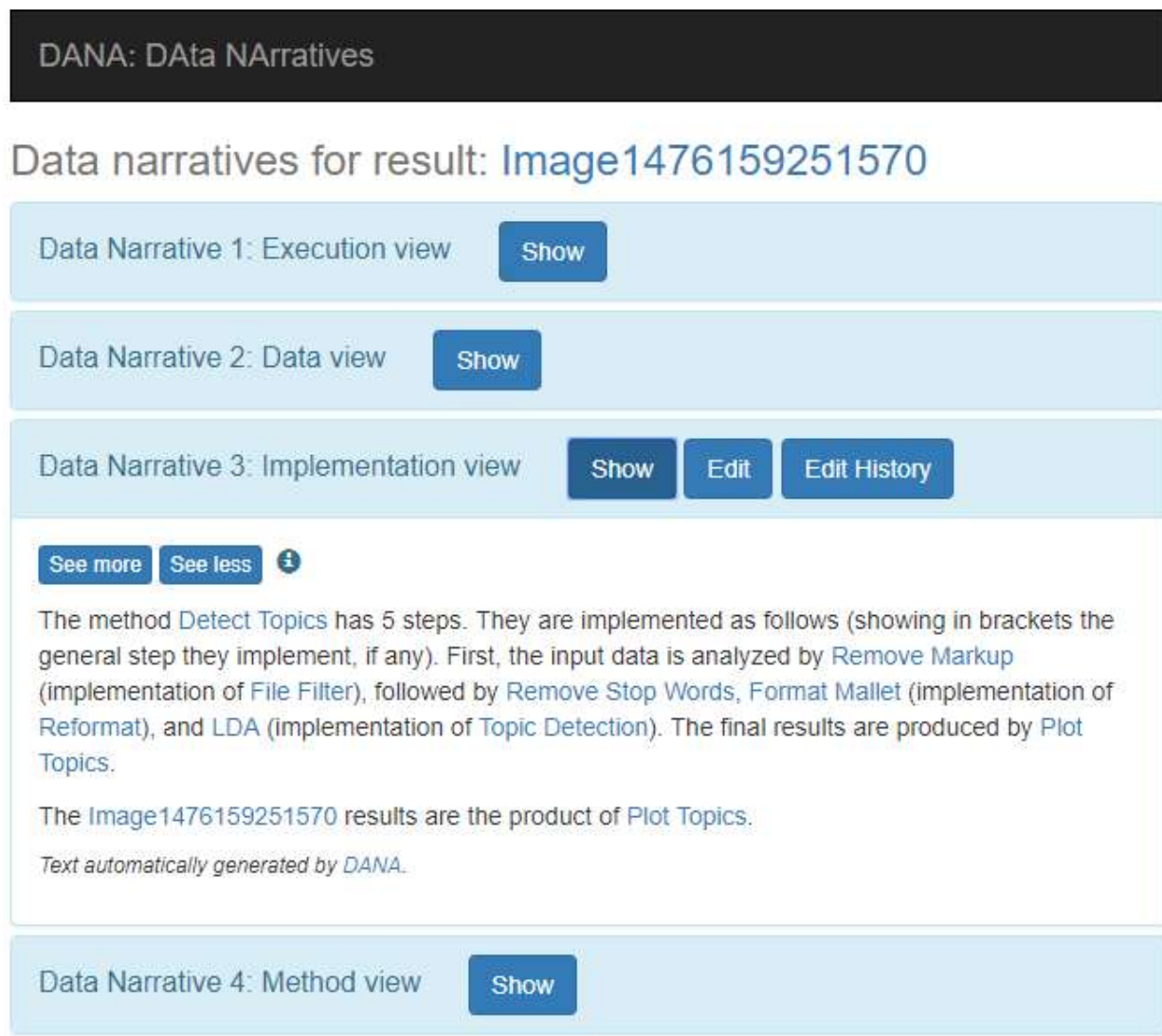


Fig. 1 – Initial view of narrative accounts.

- Page loads with narratives. On expanding narrative to view it, an 'Edit' button appears in the heading along with 'Edit History', as in Fig. 1.

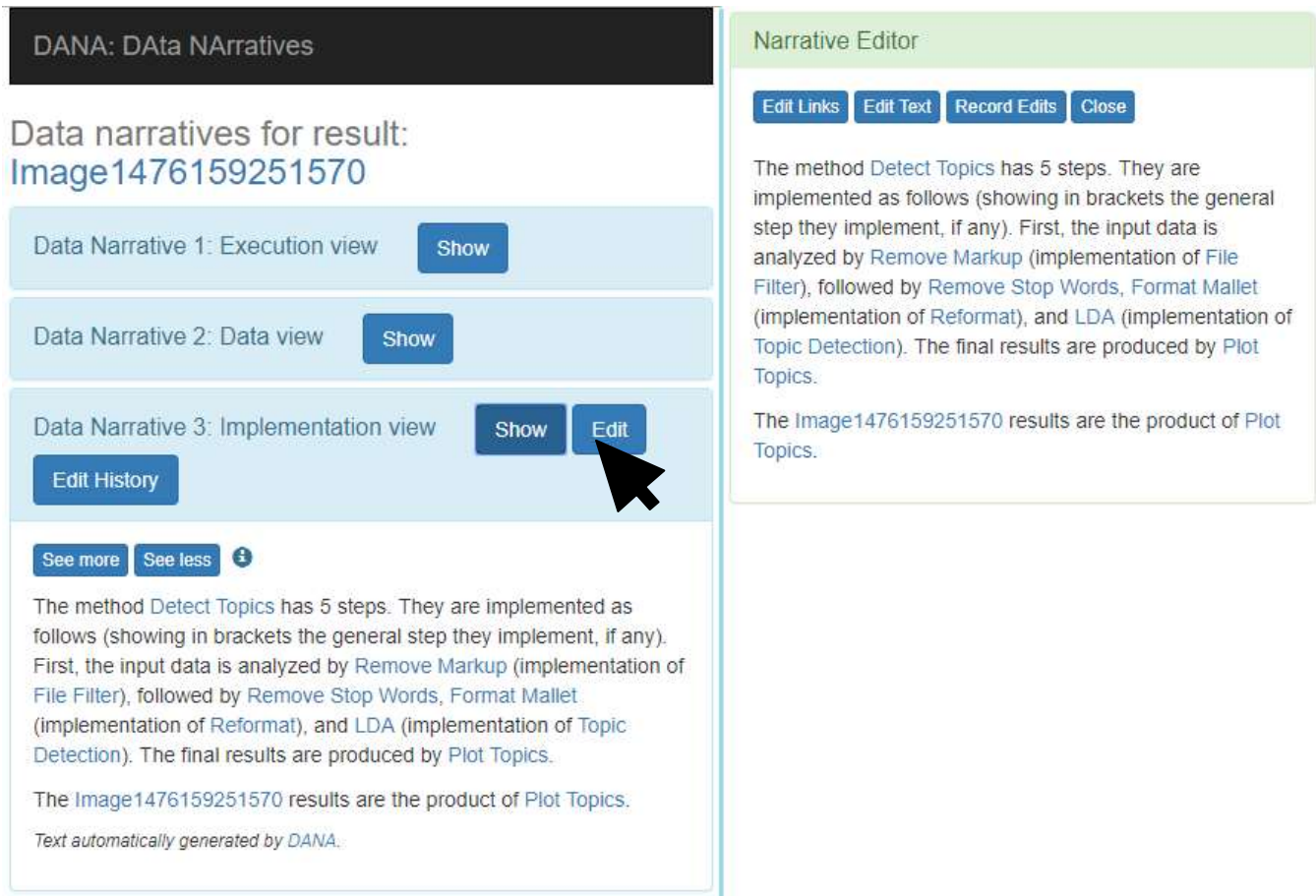


Fig. 2 – Narrative Editor opens up in side panel.

- Clicking on 'Edit' button as in Fig. 2 opens up a side panel with 'Narrative Editor' widget. The side panel is collapsible and can be resized so that the contents on the page adapt to the dimensions. The purpose of opening the Editor to the side of the narrative on the web page is for easy comparison between the edited version and the original.
- The buttons available in the editor are

1. 'Edit Links' – This is to edit both the link label as well as to add or remove details (extra information provided as explanation) associated with the element pointed to by the link.
2. 'Edit Text' – To allow direct text editing.
3. 'Record Edits' – To save the edits as the latest in the edits made on this particular narrative so far. Metadata about the changes is captured each time user records the edits.
4. 'Close' – To collapse the Narrative Editor and return to a full view of the narratives.

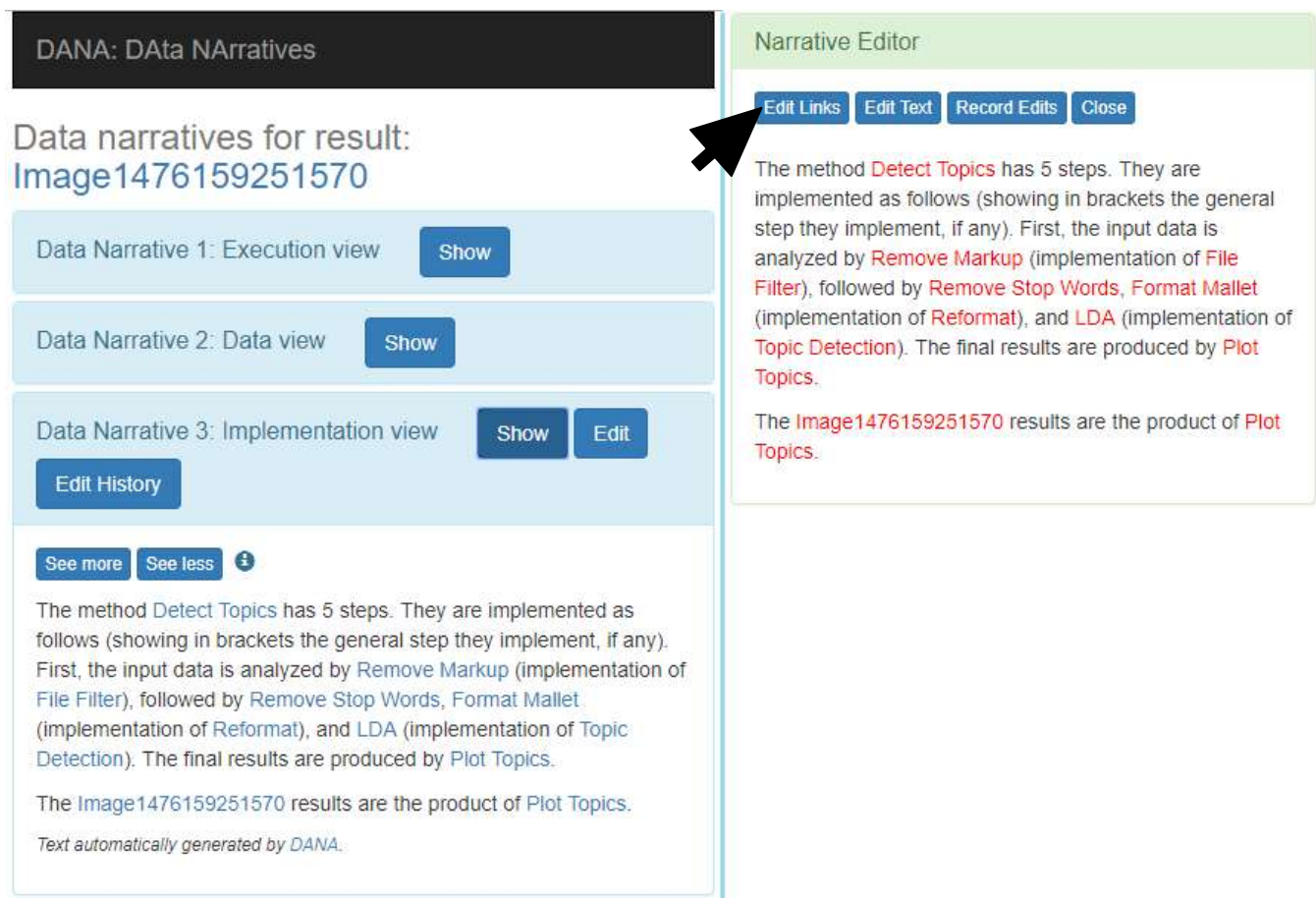


Fig. 3 – Entering into mode where you can edit the links

- Clicking 'Edit Links' as in Fig. 3 shows the links that can be edited. This can be done by changing the color of the links, say to red.

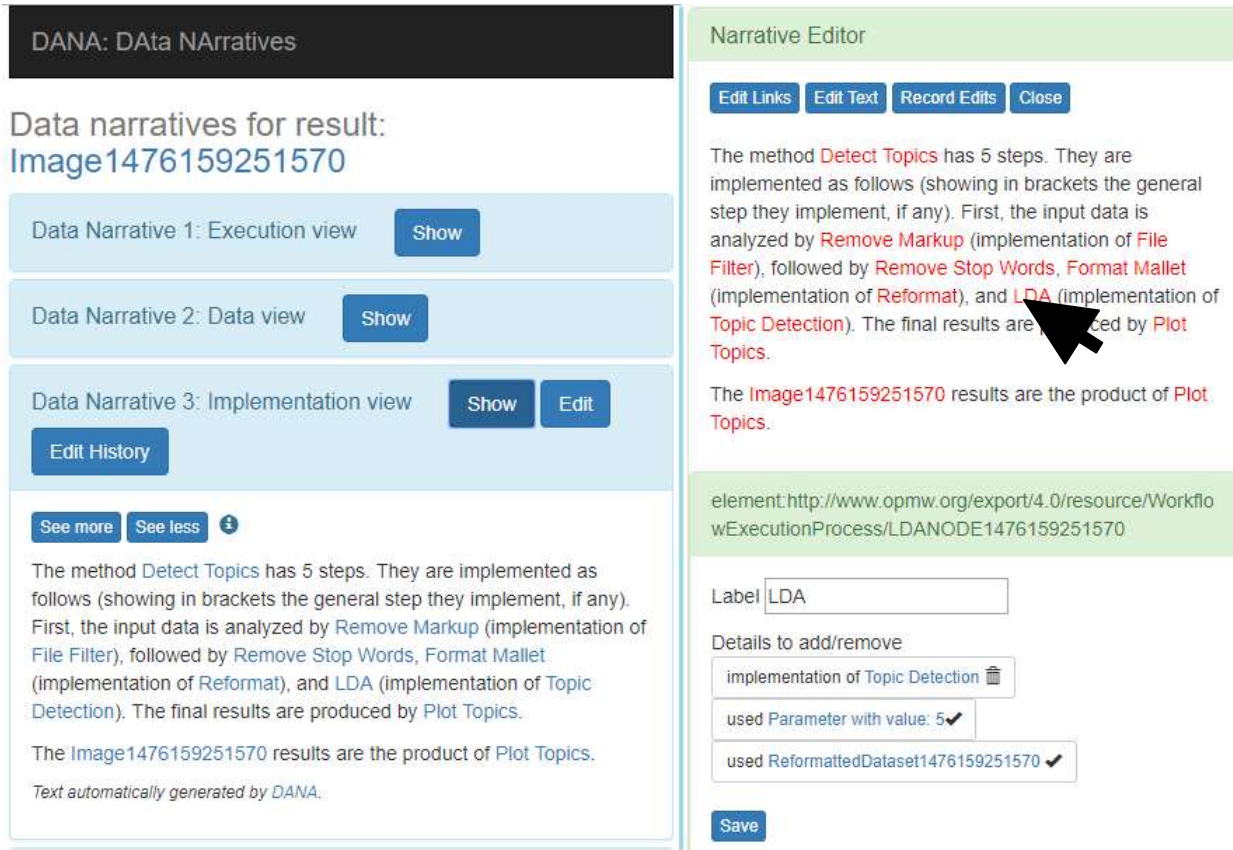


Fig. 4 – Editing of a link (clicking on LDA for example)

- Clicking on any link will bring up a small box as in Fig. 4 beneath the narrative where the editing can be done. Two such operations can be done –
  1. Editing the link label – By overwriting the default label, in the text input field.
  2. Selecting details about the element to add/remove in the text narrative – This information has to be retrieved from the Knowledge Base.

The details in (2) are additional information about the node that can be inferred from the semantic graph and other resources that make up the knowledge base. Some of these details are relevant to one or more views (eg. the fact that LDA is an implementation of Topic Detection is significant in Implementation View), while other details have greater significance in some other view (eg. the specific software used for LDA and information such as the



project website are relevant in Software View). Since there could be many such supplementary details about a link, we could display those details of greater relevance to the view being edited.

The screenshot displays the DANA: Data Narratives interface. On the left, a sidebar lists three data narratives for result 'Image1476159251570': 'Data Narrative 1: Execution view', 'Data Narrative 2: Data view', and 'Data Narrative 3: Implementation view'. Each narrative has a 'Show' button, and the third has an 'Edit' button. Below these is an 'Edit History' button and a 'See more'/'See less' toggle. The main content area shows the text of the selected narrative, which describes the 'Detect Topics' method and its steps. On the right, the 'Narrative Editor' is active, showing a text area with the same content. Above the text area are buttons for 'Edit Links', 'Edit Text', 'Record Edits', and 'Close'. Below the text area is a 'Save' button, which is highlighted by a mouse cursor. The editor also shows a URL for the element and a list of details to add/remove, including 'implementation of Topic Detection' and 'used Parameter with value: 5'.

Fig. 5 – Make changes and save them locally in the Editor

- For example, clicking on LDA brings up the box regarding that element/node in the workflow. Once the changes are done, click on 'Save' in the box, to save edits to the Editor as in Fig. 5. These edits are saved locally only in the editor and are not reflected in the narratives on the web page (refer Fig. 6).

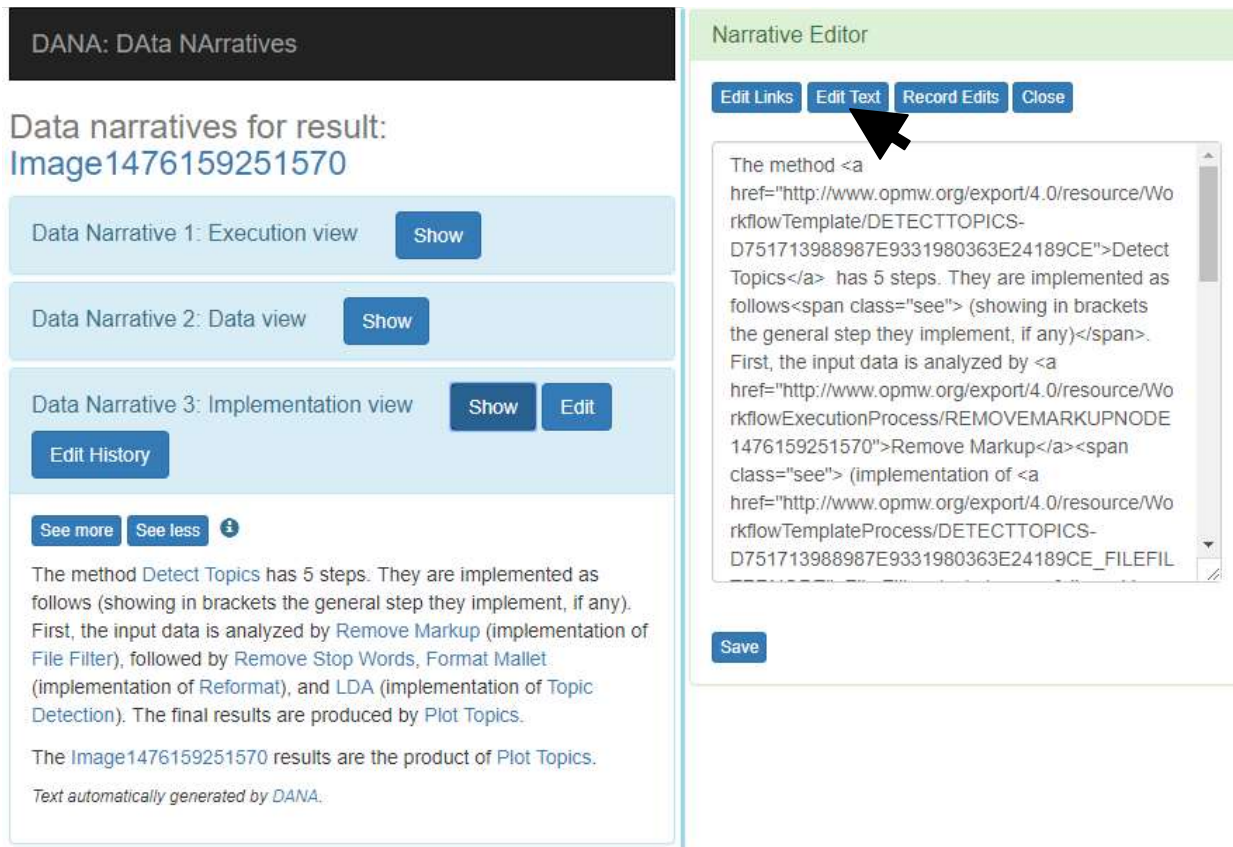


Fig. 6 – Entering into mode where user can directly edit the text

- Clicking on 'Edit Text' will allow directly editing the text as in a text area field. Since it is necessary to edit links (add or remove them), users should be able to directly edit the HTML (refer Fig. 7). Assuming that the user will not misuse their power to alter the narrative, they can edit any part of the text. Changes can be saved locally with the 'Save in Editor' button.

One problem that needs to be addressed is how the user should be able to edit (insert/remove) links. The links should be marked out as different from the explanation pattern text. And to make the adding of these links easier, the editor could be integrated with the workflow visualization so that clicking on a node in the visualization could highlight/add that link to the text.

DANA: Data Narratives

Data narratives for result:  
Image1476159251570

Data Narrative 1: Execution view

Show

Data Narrative 2: Data view

Show

Data Narrative 3: Implementation view

Show

Edit

Edit History

See more

See less

ⓘ

The method Detect Topics has 5 steps. They are implemented as follows (showing in brackets the general step they implement, if any). First, the input data is analyzed by Remove Markup (implementation of File Filter), followed by Remove Stop Words, Format Mallet (implementation of Reformat), and LDA (implementation of Topic Detection). The final results are produced by Plot Topics.

The Image1476159251570 results are the product of Plot Topics.

*Text automatically generated by DANA.*

Narrative Editor

Edit Links

Edit Text

Record Edits

Close

The method Detect Topics has 5 steps. They are implemented as follows (showing in brackets the general step they implement, if any). First, the input data is analyzed by Remove Markup (implementation of File Filter), followed by Remove Stop Words, Format Mallet (implementation of Reformat), and Latent Dirichlet Allocation (used ReformattedDataset1476159251570 ). The final results are produced by Plot Topics.

The Image1476159251570 results are the product of Plot Topics.

Name your edit

Briefly describe your edit

Tell us why you made the edits

☐ To increase abstraction

☐ To increase specificity

Other:

Submit

Fig. 8 – Recording Edits

- Clicking 'Record Edits' will save all the edits made since opening the Editor as an 'edit session'. The user is prompted to enter a name/identifier (optional, or default identifier will be used) and give a brief description of the edits that were made. Also, feedback is elicited from the user on why the changes were made. On submitting, this 'edit session' must be added to the history of the edit sessions for this particular narrative account.

A sample metadata captured, expressed as JSON object –

```
{
  user: "abc123",
  date_saved: "2018-01-01",
  time_saved: "12:00:05",
  description: "expanded link label abbreviation"
  edits: [
    {
      narrative_view: "implementation_view",
      element: "https://www.opmw.org/.../LDA"
      edit_type: "link_label"
      before: "LDA"
      after: "Latent Dirichlet Allocation"
      date: "2018-01-01",
      time: "11:59:13",
      feedback: ["increased clarity",...],
      ...
    },
    ...
  ]
}
```



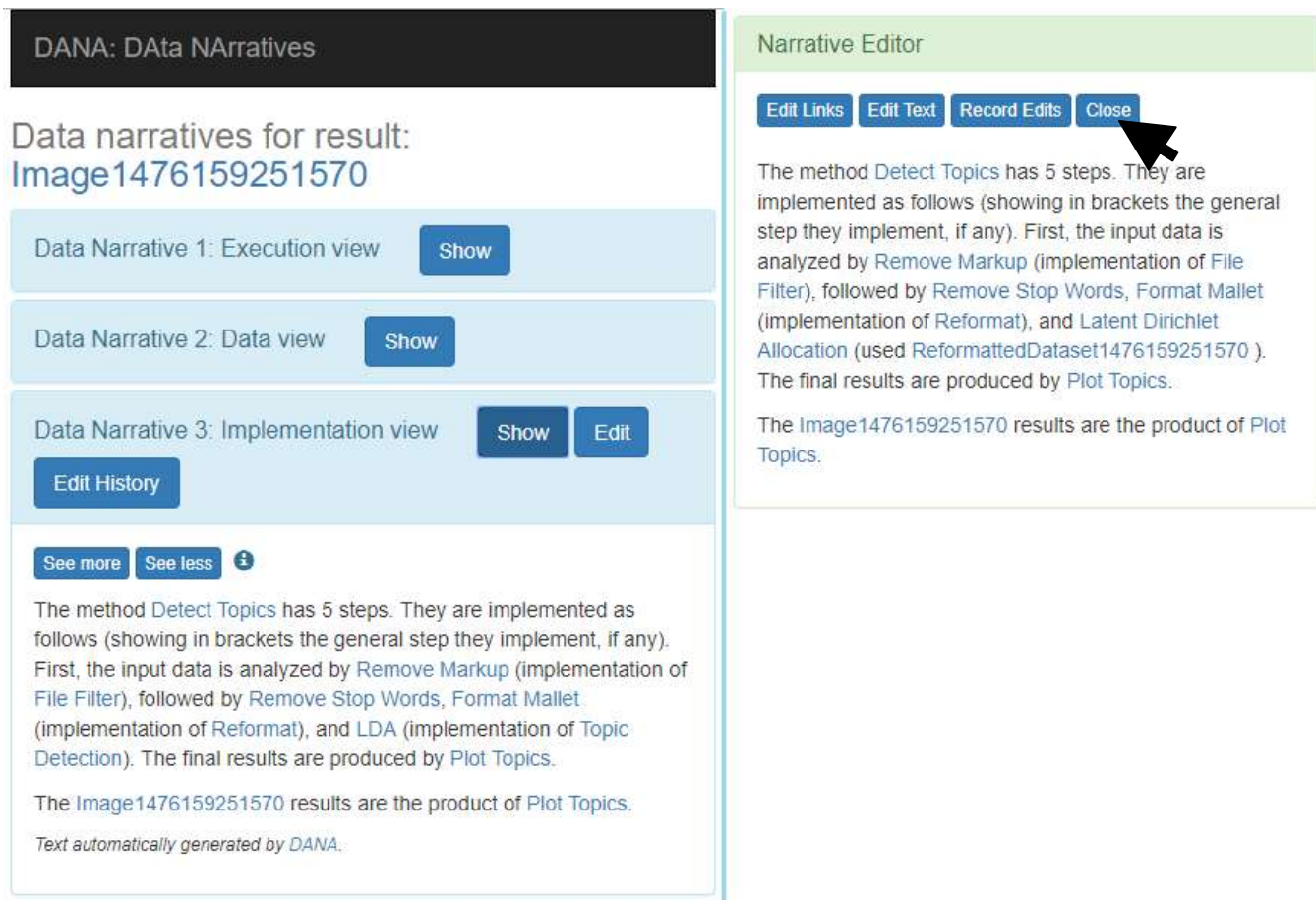


Fig. 9 – Closing the Narrative Editor

- Now that an 'edit session' is recorded, the user is free to make more edits. Otherwise, the Narrative Editor can be closed by clicking on 'Close' as in Fig. 9.

DANA: DATA NARRATIVES

Data narratives for result:  
Image1476159251570

Data Narrative 1: Execution view 

Show

Data Narrative 2: Data view 

Show

Data Narrative 3: Implementation view 

Show

Edit

Edit History

See more

See less

i

The method Detect Topics has 5 steps. They are implemented as follows (showing in brackets the general step they implement, if any). First, the input data is analyzed by Remove Markup (implementation of File Filter), followed by Remove Stop Words, Format Mallet (implementation of Reformat), and LDA (implementation of Topic Detection). The final results are produced by Plot Topics.  
The Image1476159251570 results are the product of Plot Topics.  
*Text automatically generated by DANA.*

Edit History

Close

u123	edit3	2m ago	
uABC	edit2	Feb 15	
uXYZ	edit1	Dec 31, 2017	

Fig. 10 – Opening up the history of edits, which is displayed chronologically

- The history of edits on this particular narrative view can be brought up by clicking on 'Edit History'. This opens up a side panel with a listing of the 'edit sessions'. It will display some information such as the user who made the edit, the brief description that was given while saving the edit and the time of edit. Clicking on the 'eye' will display the edited narrative.

DANA: DATA NARRATIVES

Data narratives for result:  
Image1476159251570

Data Narrative 1: Execution view
Show

Data Narrative 2: Data view
Show

Data Narrative 3: Implementation view
Show
Edit

Edit History

See more
See less
i

The method [Detect Topics](#) has 5 steps. They are implemented as follows (showing in brackets the general step they implement, if any). First, the input data is analyzed by [Remove Markup](#) (implementation of [File Filter](#)), followed by [Remove Stop Words](#), [Format Mallet](#) (implementation of [Reformat](#)), and [LDA](#) (implementation of [Topic Detection](#)). The final results are produced by [Plot Topics](#).

The [Image1476159251570](#) results are the product of [Plot Topics](#).

Text automatically generated by DANA.

Edit History

Close

u123	edit3	2m ago	
uABC	edit2	Feb 15	
uXYZ	edit1	Dec 31, 2017	

**Description:** Changed link label

The method [Detect Topics](#) has 5 steps. They are implemented as follows (showing in brackets the general step they implement, if any). First, the input data is analyzed by [Remove Markup](#) (implementation of [File Filter](#)), followed by [Remove Stop Words](#), [Format Mallet](#) (implementation of [Reformat](#)), and [Latent Dirichlet Allocation](#) (used [ReformattedDataset1476159251570](#) ). The final results are produced by [Plot Topics](#).

The [Image1476159251570](#) results are the product of [Plot Topics](#).

Fig. 11 – Viewing a particular edit by expanding it

An issue to be discussed is – in what order to display the edit history. Two options are –

1. To display them in chronological order, the latest edit at the top of the list (shown in mockup – refer Fig. 10).
2. To rank them based on votes by the owners of the narrative.