

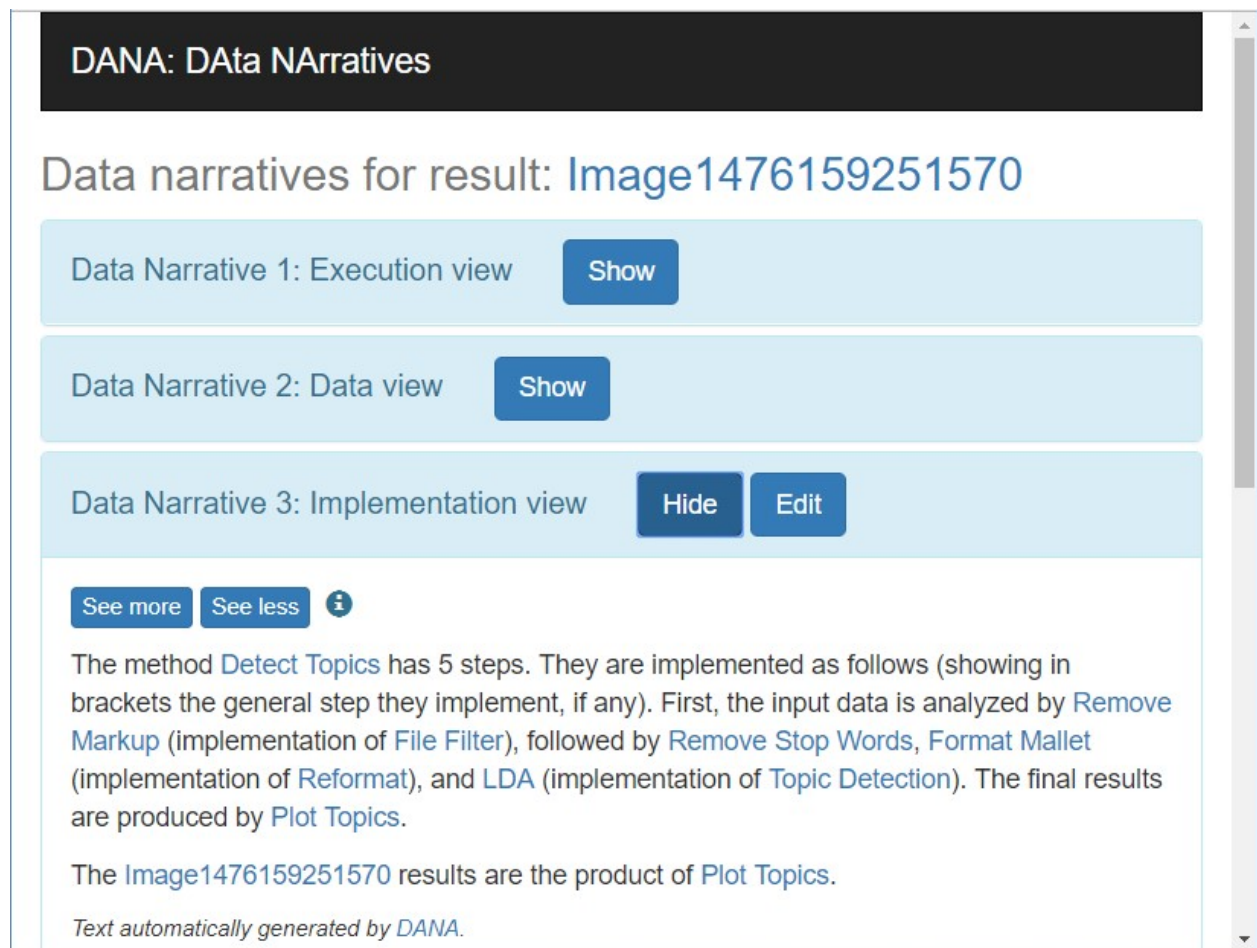
Mockup – 2

The feedback system tentatively will have the following four operations –

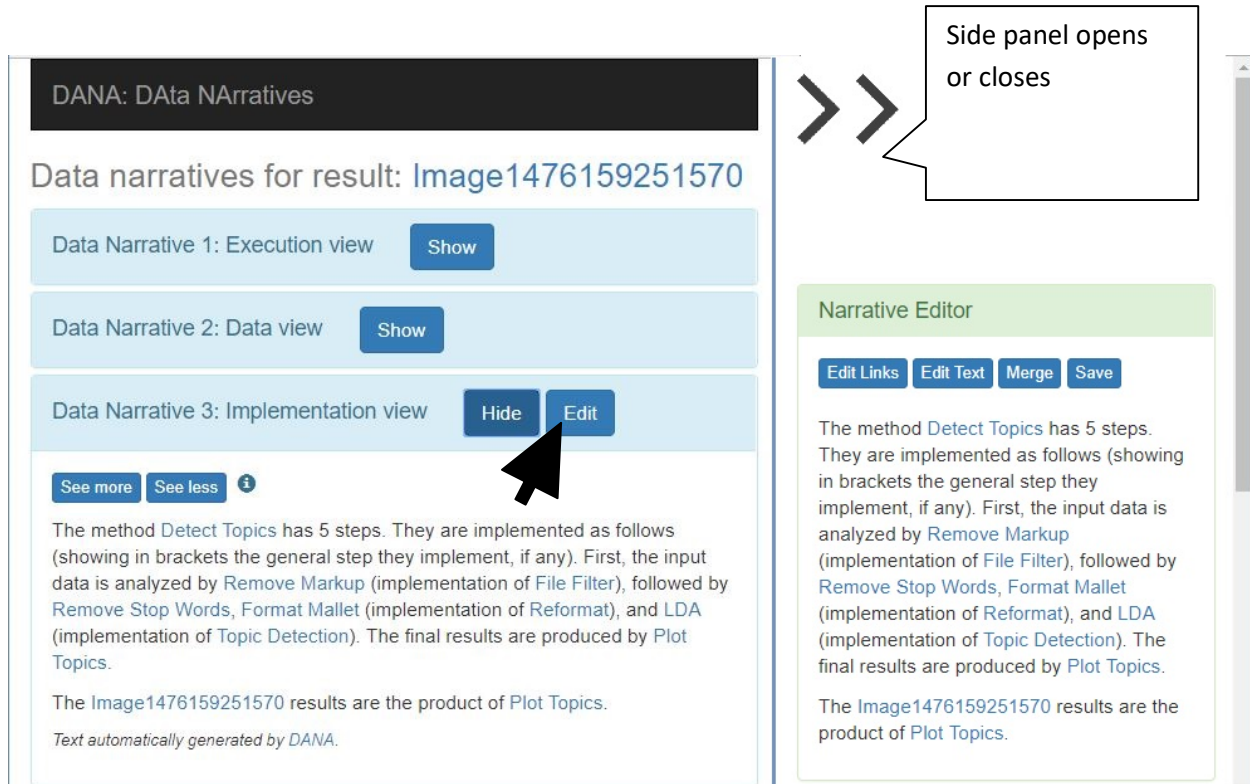
1. Editing the link label so that user can add some semantic information.
2. Editing the sentences in the text.
3. Clicking on a link to add/remove details by retrieving some information about the element clicked from the Knowledge Base and displaying it to the user. This functionality in the future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

Storyboard –

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



- Clicking on edit 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 screenshot shows the DANA: Data Narratives interface. On the left, there's a list of data narratives for result 'Image1476159251570'. The third narrative, 'Implementation view', has 'Hide' and 'Edit' buttons. A mouse cursor is clicking the 'Edit' button. To the right, a side panel titled 'Narrative Editor' is open, showing the text of the selected narrative. A callout box with two arrows points to the side panel, stating 'Side panel opens or closes'.

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 [Hide](#) [Edit](#)

[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.

Narrative Editor

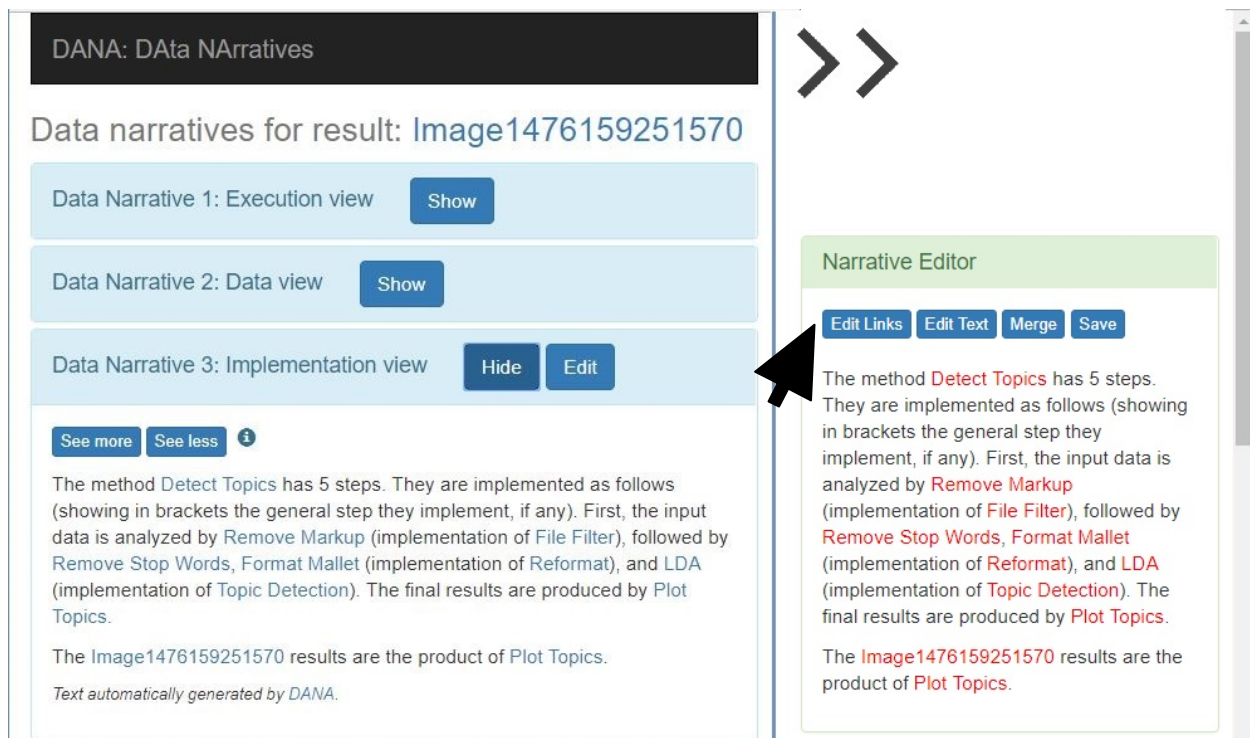
[Edit Links](#) [Edit Text](#) [Merge](#) [Save](#)

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](#).

- The buttons available in the editor are to
 - 'Edit Links' – This is to edit both the link label as well as to add or remove details associated with the element pointed to by the link.
 - 'Edit Text' – To allow direct text editing.
 - 'Merge' – To merge two or more narratives
 - 'Save' – To save the changes so that they are reflected in the narrative account. Metadata about the changes is captured each time user saves their work.

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



The screenshot shows the DANA: Data Narratives interface. At the top, there's a header 'DANA: Data Narratives'. Below it, a section titled 'Data narratives for result: Image1476159251570' lists three data narratives:

- Data Narrative 1: Execution view (with a 'Show' button)
- Data Narrative 2: Data view (with a 'Show' button)
- Data Narrative 3: Implementation view (with 'Hide' and 'Edit' buttons)

Below the list, there are 'See more' and 'See less' buttons. The 'See more' button is active, showing a detailed view of the narrative. The narrative text describes the 'Detect Topics' method, which has 5 steps: Remove Markup (implementation of File Filter), Remove Stop Words, Format Mallet (implementation of Reformat), and LDA (implementation of Topic Detection). The final results are produced by Plot Topics. The text is automatically generated by DANA.

On the right side, there's a 'Narrative Editor' panel. It has four buttons: 'Edit Links', 'Edit Text', 'Merge', and 'Save'. The 'Edit Links' button is highlighted with a black arrow. The panel also shows the same narrative text as the main view, but with the 'Edit Links' button highlighted.

- Clicking on any link will bring up a small box 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. What details are retrieved can be informed by the view of the narrative being edited.

Once, the changed are made, they can be saved, which are reflected in the 'Narrative Editor' widget. Clicking the 'Save' button in the editor widget will save the changes made to the narrative, reflect them on the web page, and on the server.

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

Hide

Edit

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

Merge

Save

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 results are produced by Plot Topics.

The Image1476159251570 results are the product of Plot Topics.

element:http://www.opmw.org/export/4.0/resource/WorkflowExecutionProcess/LDANODE1476159251570

Label

LDA

Details to add/remove

implementation of Topic Detection

detail 1

detail 2

Save

For example, clicking on LDA brings up the box regarding that element/node in the workflow.

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

Hide

Edit

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.

Narrative Editor

Edit Links

Edit Text

Merge

Save

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.

element:http://www.opmw.org/export/4.0/resource/WorkflowExecutionProcess/LDANODE1476159251570

Label [Latent Dirichlet Allocation]

Details to add/remove

implementation of Topic Detection

detail 1 ✓

detail 2 ✓

Save

Once the changes are done, click on 'Save' in the box, to save edits to the Editor.

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

Hide

Edit

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.

Narrative Editor

Edit Links

Edit Text

Merge

Save

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 (detail 2). The final results are produced by Plot Topics.

The Image1476159251570 results are the product of Plot Topics.

- Clicking on 'Edit Text' will allow directly editing the text as in a text area field. 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.

The screenshot displays the 'DANA: Data Narratives' web application. On the left, a sidebar lists three data narratives: '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 one also has 'Hide' and 'Edit' buttons. Below the list, there are 'See more' and 'See less' buttons, and an information icon. The main content area shows the text of 'Data Narrative 3', which describes the 'Detect Topics' method. On the right, a 'Narrative Editor' panel is open, showing the same text in a text area. Above the text area are four buttons: 'Edit Links', 'Edit Text', 'Merge', and 'Save'. An arrow points to the 'Edit Text' button. Below the text area is a '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.

- Clicking 'Save' will reflect the changes to the main narrative on the webpage. But before saving, feedback is elicited from the user on why the changes were made. Once saved, some metadata about the changes will be captured.

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
Hide
Edit

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.

Narrative Editor

Edit Links
Edit Text
Merge
Save

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 (detail 2). The final results are produced by Plot Topics.

The Image1476159251570 results are the product of Plot Topics.

Feedback

Tell us why you made the edits

☐ Option 1
☐ Option 2

Other:

Submit

Metadata expressed as JSON object –

```

{
  user: "abc123",
  date_saved: "2018-01-01",
  time_saved: "12:00:05",
  edits: [
    {
      narrative_view: "implementation_view",
      element: "https://www.opmw.org/.../LDA"
      date: "2018-01-01",
      time: "11:59:13",
      feedback: ["Included detail", "option", "option"],
    }
  ]
}

```

```

    ...
    },
    ...
]
}

```

- Clicking 'Submit' in the feedback must collapse the side panel and show the corresponding narrative in the web page updated with the edits.

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
Hide Edit

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 [Latent Dirichlet Analysis](#) (detail 2). The final results are produced by [Plot Topics](#).

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

Text automatically generated by DANA.

Data Narrative 4: Method view
Show