The Story Editor

Michael A. Gohde

February 24, 2017

1 Overview

In order to make story authorship more accessible to a wider range of users, we have developed a graphical story editing and validation tool. This tool should make it fairly straightforward to edit stories, convert between formats, run validation tasks, and submit drafts for publication.

This document will detail the Story Editor, its features, and its usage in a production environment.

2 The Editor Window

When it is first started, the Story Editor will create a blank story and display a window similar to what is depicted above. This window has a series of controls intended to allow a user to quickly engage in common tasks, such as adding new story nodes, setting the story title, and updating the contents of a given story node.

As shown above, the story editor window consists of the following major components:

Story text area The story text area displays the formatted text content within the selected story node. This field also allows the user to directly edit the "source code" of a story node.

Node List This pane contains a list of all nodes currently defined in the story. Each story node is effectively an individual story unit or decision

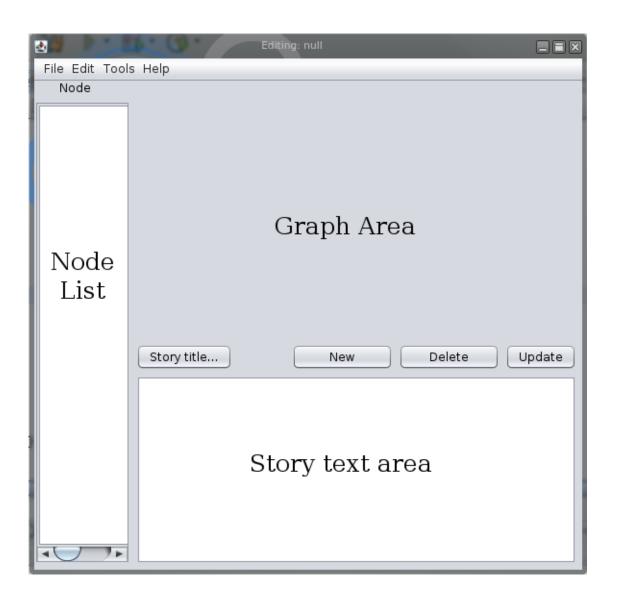


Figure 1: Elements of the editor window

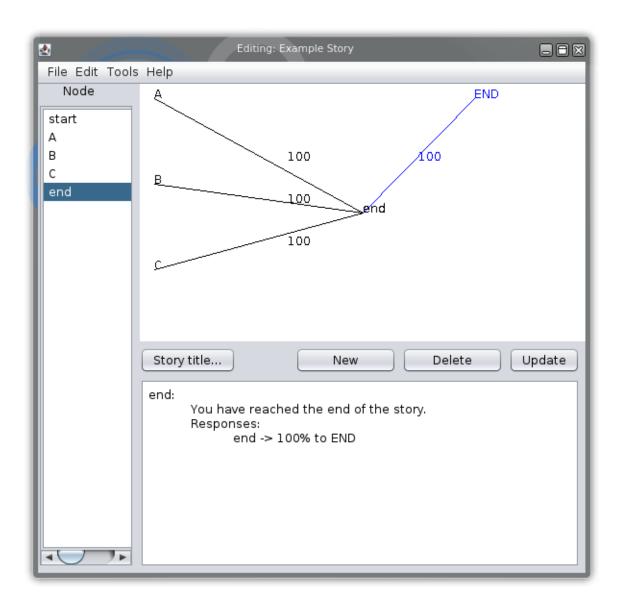


Figure 2: Editor window with active story

point that is presented to the user. The node list automatically updates when nodes are added to or removed from the story.

Graph Area The Story Editor is capable of creating a graphical representation of the currently selected node and its relationships within the story. When the Graph Area is filled, the set of all parent nodes is displayed on the right, the set of all child nodes is displayed on the left, and colored lines are drawn from the currently selected node to its parents and children.

| Color | Meaning |
|-------|---|
| Red | The connected node does not exist. |
| Blue | The connected node is an endpoint for the story. |
| Black | The connected node exists and is not an andpoint. |

List of line colors and their meanings.

3 Menu Options

Much of the validation, import, export, and settings functionality in the Story Editor is contained in its four menus.

The File Menu The File menu contains a set of items related to creating, importing, and exporting storylines.

| Item | Function |
|--------------------|--|
| New | Creates a new storyline. |
| Open | Loads a file in the story definition format. |
| Save | Saves a file in the story definition format. |
| Import from XML | Loads a file in the XML story format used by the Nudge |
| | Support Toolset. |
| Export from XML | Saves a file in the XML story format. |
| Import from Server | Imports a storyline from a Nudge database server. |
| Export to Server | Exports a storyline to a set of temporary tables in a |
| | Nudge database server. |
| Exit | Terminates the application. |

List of items in the File menu and their functions.

The Tools Menu The Tools menu contains a set of items related to changing global application settings, validating the current storyline, and collecting useful data.

| Item | Function |
|--------------|--|
| Sanity test | Runs a series of tests on the current storyline to deter- |
| | mine if it is complete and sufficiently free of errors. |
| Publish | Exports the story to be installed in a production Nudge |
| | server. |
| Set defaults | Allows the user to specify various default values for save |
| | location, database server credentials, etc. |

4 Editing a story

The story editing process is fairly straightforward.

5 Supported Story Formats

In order to maintain wide compatibility with many external toolsets and applications, the Story Editor is capable of reading and writing stories in a large number of formats. Among them, the story definition file, XML, and SQL formats provide the most utility with Nudge tools as implemented.

This section will provide examples of the same story exported to various formats.

Listing 1: Example story in story format.

```
1
   Title:
           Example Story
2
   start:
3
             This is the first node in the story
4
             Responses:
5
                       A \to 100\% \text{ to } A
6
                      B \to 50\% to B, 50% to C
7
8
   A:
9
             You selected option choice A!
10
             Responses:
                       Proceed \rightarrow 100% to end
11
```

```
12
13 B:
             You chose option B and were taken to node B.
14
15
             Responses:
16
                      Proceed \rightarrow 100% to end
17
   C:
18
             You chose option B but were taken to node C!
19
20
             Responses:
21
                      Proceed \rightarrow 100% to end
22
23
   end:
24
             You have reached the end of the story.
25
             Responses:
26
                      end \rightarrow 100% to END
```

Listing 2: Example story in XML format.

```
<story title="Example Story">
1
2
            <node id="start">
3
                     <text>This is the first node in the
                        story </text>
4
                     <answers>
5
                              <option>
6
                                       <text>A</text>
                                       < dest p = "100" > A < / dest >
7
8
                              </option>
9
                              <option>
10
                                       <text>B</text>
11
                                       < dest p = "50" > B < / dest >
                                       < dest p = "50" > C < /dest >
12
13
                              14
                     </answers>
            </node>
15
16
            <node id="A">
17
                     <text>You selected option choice A!</
                         text>
18
                     <answers>
```

```
19
                              <option>
                                       <text>Proceed</text>
20
                                       < dest p = "100" > end < / dest
21
22
                              </option>
23
                     </answers>
24
            </node>
            <node id="B">
25
26
                     <text>You chose option B and were taken
                         to node B.</text>
27
                     <answers>
28
                              <option>
                                       <text>Proceed</text>
29
                                       < dest p="100"> end </ dest
30
31
                              32
                     </answers>
33
            </node>
            <node id="C">
34
35
                     <text>You chose option B but were taken
                         to node C! < / \text{text} >
36
                     <answers>
37
                              <option>
                                       <text>Proceed</text>
38
39
                                       < dest p = "100" > end < / dest
40
                              </option>
41
                     </answers>
42
            </node>
43
            <node id="end">
                     <text>You have reached the end of the
44
                        story.</text>
45
                     <answers>
46
                              <option>
47
                                       <text>end</text>
                                       < dest p="100">END</dest
48
49
                              </option>
```

Listing 3: Set of generated SQL statements.

```
INSERT INTO tmpstorytable VALUES (1, 'Example Story', '
      start', 'This is the first node in the story', 0);
   INSERT INTO tmpanswers VALUES ('Example Story', 'start
      ', 'A', 'A');
   INSERT INTO tmpresults VALUES (1, 'Example Story', 'start
      ', 'A', 0, 100, 'A');
   INSERT INTO tmpanswers VALUES ('Example Story', 'start
      ', 'B', 'B');
   INSERT INTO tmpresults VALUES (2, 'Example Story', 'start
      ', 'B', 0, 50, 'B');
   INSERT INTO tmpresults VALUES (3, 'Example Story', 'start
      ', 'B', 50, 100, 'C');
  INSERT INTO tmpstorytable VALUES (2, 'Example Story', 'A
      ', 'You selected option choice A!',2);
   INSERT INTO tmpanswers VALUES ('Example Story', 'A', 'A
      ', 'Proceed');
   INSERT INTO tmpresults VALUES (4, 'Example Story', 'A', 'A
      ',0,100,'end');
10 INSERT INTO tmpstorytable VALUES (3, 'Example Story', 'B
      ', 'You chose option B and were taken to node B.', 2);
11
   INSERT INTO tmpanswers VALUES ('Example Story', 'B', 'A
      ', 'Proceed');
   INSERT INTO tmpresults VALUES (5, 'Example Story', 'B', 'A
12
      ',0,100,'end');
   INSERT INTO tmpstorytable VALUES (4, 'Example Story', 'C
13
      ', 'You chose option B but were taken to node C!', 2);
   INSERT INTO tmpanswers VALUES ('Example Story', 'C', 'A
      ', 'Proceed');
15
   INSERT INTO tmpresults VALUES (6, 'Example Story', 'C', 'A
      ',0,100,'end');
  INSERT INTO tmpstorytable VALUES (5, 'Example Story', '
16
      end', 'You have reached the end of the story.',2);
```

- 17 | INSERT INTO tmpanswers VALUES ('Example Story', 'end', 'A | ', 'end');
- 18 INSERT INTO tmpresults VALUES (7, 'Example Story', 'end', 'A', 0, 100, 'END');