

# Package ‘stmBrowser’

August 29, 2016

**Type** Package

**Title** Structural Topic Model Browser

**Version** 1.0

**Date** 2015-07-02

**Author**

Michael K. Freeman, Jason Chuang, Margaret E. Roberts, Brandon M. Stewart and Dustin Tingley

**Maintainer** Margaret E. Roberts <meroberts@ucsd.edu>

**Description** This visualization allows users to interactively explore the relationships between topics and the covariates estimated from the stm package in R.

**Imports** rjson, stm, jsonlite, httr, utils

**License** MIT + file LICENSE

**URL** <http://structuraltopicmodel.com>

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2015-07-16 23:55:43

## R topics documented:

stmBrowser-package	1
stmBrowser	2

<b>Index</b>	<b>4</b>
--------------	----------

---

stmBrowser-package     *STM Browser*

---

## Description

This package creates a browser visualization of the topics and covariate relationships computed from the Structural Topic Model. The most important and only function in the package is `stmBrowser`, which creates and opens a browser that the user can use to explore the output from the STM.

**Author(s)**

Author: Michael K. Freeman, Jason Chuang, Margaret E. Roberts, Brandon M. Stewart, and Dustin Tingley.

Maintainer: Margaret E. Roberts <meroberts@ucsd.edu>

**References**

Roberts, M., Stewart, B., Tingley, D., and Airoidi, E. (2013) "The structural topic model and applied social science." In Advances in Neural Information Processing Systems Workshop on Topic Models: Computation, Application, and Evaluation. <http://goo.gl/uHkXAQ>

Roberts, M., Stewart, B., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S., Albertson, B., Albertson, B. and Rand, D. (Forthcoming). "Structural topic models for open ended survey responses." American Journal of Political Science <http://goo.gl/0x0tHJ>

**See Also**

[stmBrowser](#)

---

stmBrowser

*Outputs json file and creates visualization from stm.*

---

**Description**

This function outputs necessary json files to a working directory, then opens a browser with the visualization of the relationship between covariates and topics in the stm.

**Usage**

```
stmBrowser(mod, data, covariates, text, id = NULL,
           n = 1000, labeltype = "prob", directory=getwd())
```

**Arguments**

mod	STM model output.
data	Data associated with the stm model
covariates	Names of covariates you are interested in plotting.
text	Name of the variable within the dataset that corresponds to the text.
id	Name of ID variable for each observation.
n	Number of observations to plot. Maximum is 5000.
labeltype	Type of label for topics (see <a href="#">labelTopics</a> in the <b>stm</b> package for more information)
directory	Directory where the stm visualization should be outputted. Default is the current working directory.

**Value**

The html file for the browser will be written to the folder the user selects as `index.html`. The user can open this webpage to view the browser.

**See Also**

[stm](#)

**Examples**

```
library(stm)
data(poliblog5k)
#Create date
dec312007 <- as.numeric(as.Date("2007-12-31"))
poliblog5k.meta$date <- as.Date(dec312007+poliblog5k.meta$day,
                               origin="1970-01-01")

out <- prepDocuments(poliblog5k.docs, poliblog5k.voc, poliblog5k.meta)
stm.out <- stm(out$documents, out$vocab, K=10,
              prevalence=~rating + date,
              data=out$meta,
              max.em.its=1) #generally run models
                          #longer than this.

library(stmBrowser)
setwd(tempdir())
stmBrowser(stm.out, data=out$meta, c("rating", "date"),
          text="text")

#Remove files
unlink("stm-visualization", recursive=TRUE)
```

# Index

\*Topic **package**

stmBrowser-package, 1

labelTopics, 2

stm, 3

stmBrowser, 1, 2, 2

stmBrowser-package, 1