

MAKE EML WITH R AND SHARE ON GITHUB

by
Environmental Data Initiative (EDI)



ENVIRONMENTAL DATA INITIATIVE



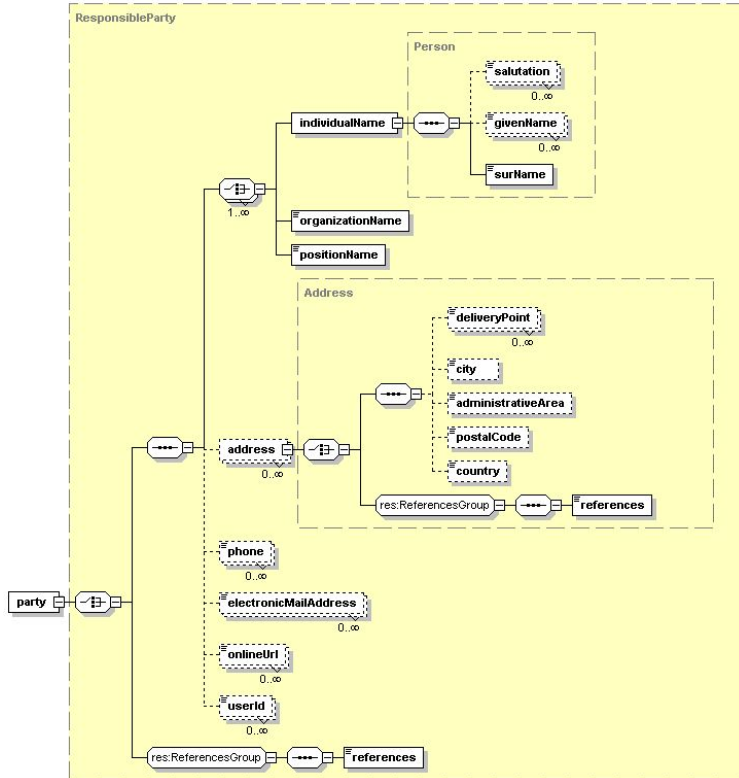
- NSF Division of Environmental Biology
- LTREB, MSB, OBFS, and LTER
- Services
 - Training and counsel on data archival best practices
 - Support for archiving data
 - Data repository (PASTA+)

ECOLOGICAL METADATA LANGUAGE (EML)

- Standard developed by the ecological community
- Detailed, modular, and extensible
- Machine and human readable (XML)
- Facilitates data persistence, discovery and reuse

SCHEMA

XML



```
<creator>
  <individualName>
    <salutation>Mr.</salutation>
    <givenName>Colin</givenName>
    <surName>Smith</surName>
  </individualName>
  <organizationName>Environmental Data Initiative</organizationName>
  <positionName>Information manager</positionName>
  <address>
    <deliveryPoint>680 N. Park Street</deliveryPoint>
    <city>Madison</city>
    <administrativeArea>WI</administrativeArea>
    <postalCode>53706</postalCode>
    <country>USA</country>
  </address>
  <phone phonetype="voice">867-5309</phone>
  <electronicMailAddress>colin.smith@wisc.edu</electronicMailAddress>
</creator>
```

MAKE EML WITH R

- Because ...
 - Open source and free
 - Customizable to workflows
 - Widely used by environmental sciences community
- Methods
 - EML package (*Boettiger et al. 2017*)
 - EMLassemblyline (*EDI and friends*)
 - What do you want?

VERSION CONTROL

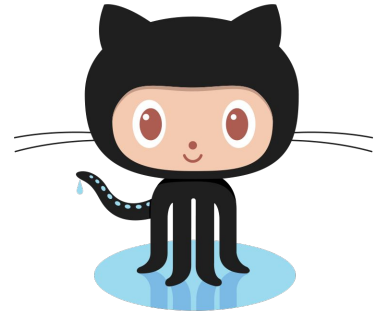
- Helps manage the development process
- Git + RStudio + GitHub



git



Studio®



SOFTWARE INSTALLATION

- Dataset and supporting files are here 
 - https://github.com/clnsmth/make_eml_with_r_and_share_on_github
- R ($\geq 3.2.5$)
- RStudio
- EML R package
- Git
- GitHub
- Connect Git, RStudio, and GitHub

LET THE DEMONSTRATION (A.K.A. FUN) BEGIN!

WHAT TOOLS DO YOU WANT?

- EMLassemblyline (target = data provider)
-

THANKS!

