

CoMSES Net CodeMeta Support

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CoMSES Computational Model Library

CoMSES Net Computational Model Library

CoMSES | OpenABM | WEST BIG DATA INNOVATION HUB

About the CoMSES Model Library [more info](#)

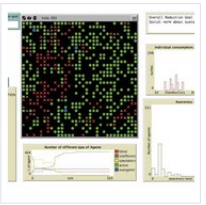
Please check out our [model archive tutorial](#) or [contact us](#) if you have any questions or concerns about archiving your model.

CoMSES Net also maintains a [curated database of over 7500 publications of agent-based and individual based models](#) with additional metadata on availability of code and bibliometric information on the landscape of ABM/IBM publications that we welcome you to explore.

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Searching on [ordering: -peer_reviewed](#) [clear](#), displaying 10 of 845 results

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Peer reviewed

A model of environmental awareness spread and its effect in resource consumption reduction

Giovanna Sissa | Published Sun Jun 21 11:41:38 2015 | Last modified Mon Aug 17 16:07:15 2015

The model reproduces the spread of environmental awareness among agents and the impact of awareness level of the agents on the consumption of a resource, like energy. An agent is a household with a set of available advanced smart metering functions.

Archive a model

Search

Keywords

Published After

Archiving your model: 1. Getting Started

219.5 ms

Tutorials

chyhuang

5 Jan '19

Steps to this tutorial:

- Getting started
- Uploading your files 86
- Adding contributors 8
- Inputting metadata
- Final notes 15

What you need to archive your code:

- Information:** Title, Description, List of contributors, Release notes, Operating system, Platform, Programming language, License.
- Files:** Code file, Narrative documentation file
- Optional:** Repository URL, Input data files, Simulation output files, Image/media files

structured data on codebase landing pages + codemeta integration #351

Edit

New issue



alee opened this issue on May 18, 2018 · 4 comments



alee commented on May 18, 2018 • edited ▾

Member



Each codebase release should have its own specific CodeMeta associated with it. Embed structured json-ld data in the landing page, and provide it in the downloaded archive.

Google's schema.org testing tool (ignore warning about deprecation - <https://developers.google.com/search/blog/2020/07/rich-results-test-out-of-beta>):

<https://search.google.com/structured-data/testing-tool/u/0/>

<https://search.google.com/test/rich-results>

Assignees



No one—assign yourself

Labels



feature

open science

Projects



None yet

Milestone



Crosswalk

CoMSES Net_Citation File Format Core (CFF-Core) 1.0.2 ☆ 📄 🔗			
File Edit View Insert Format Data Tools Add-ons Help Last edit was on November 13, 2019			
↶ ↷ 🖨 🔍 100% ⌵ \$ % .0 .00 123 ⌵ Arial ⌵ 10 ⌵ B <i>I</i> U <u>A</u> 🔗 🔍 🔍 ⌵ ⌵ ⌵ ⌵ ⌵ ⌵			
A1	fx	Property	
	A	B	C
1	Property	Citation File Format Core (CFF-Core) 1.0.2	CoMSES Net Object Model Properties
2	codeRepository	repository-code	Codebase.repository_url
3	programmingLanguage		Codebase.programming_languages
4	runtimePlatform		Codebase.platforms
5	targetProduct		
6	applicationCategory		
7	applicationSubCategory		
8	downloadUrl	repository-artifact	CodebaseRelease.download_url
9	fileSize		CodebaseRelease.archive_size
10	installUrl		
11	memoryRequirements		
12	operatingSystem		Codebase.os
13	permissions		
14	processorRequirements		
15	releaseNotes		CodebaseRelease.release_notes
16	softwareHelp		
17	softwareRequirements		CodebaseRelease.dependencies
18	softwareVersion		CodebaseRelease.version_number
19	storageRequirements		
20	supportingData		
21	author	authors	CodebaseRelease.contributors
22	citation		CodebaseRelease.citation_text
23	contributor		
24	copyrightHolder		
25	copyrightYear		CodebaseRelease.last_published_on (year)
26	creator		CodebaseRelease.submitter
27	dateCreated		CodebaseRelease.date_created
28	dateModified		CodebaseRelease.last_modified
29	datePublished	date-released	CodebaseRelease.last_published_on
30	editor		
31	encoding		
32	fileFormat		
33	funder		
34	keywords	keywords	Codebase.tags
35	license	license/license-url	Codebase.license

Crosswalk: CodeMeta Object Model

```
1686 + class CodeMeta():
1687 +     DEFAULT_DATE_FORMAT = '%Y-%m-%d'
1688 +     INITIAL_DATA = {
1689 +         "@context": ["https://doi.org/doi:10.5063/schema/codemeta-2.0", "http://schema.org"],
1690 +         "@type": "SoftwareSourceCode",
1691 +         "provider": {
1692 +             "@id": "https://www.comses.net",
1693 +             "@type": "Organization",
1694 +             "name": "CoMSES Net",
1695 +             "url": "https://www.comses.net/"
1696 +         },
1697 +     }
1698 +
1699 +     def __init__(self, metadata: dict):
1700 +         if not metadata:
1701 +             raise ValueError("Must initialize with a dictionary of codemeta values")
1702 +         self.metadata = metadata
1703 +
1704 +     @classmethod
1705 +     def from_release(cls, release: CodebaseRelease):
1706 +         metadata = cls.INITIAL_DATA.copy()
1707 +         metadata.update(
1708 +             name=release.codebase.title,
1709 +             identifier=str(release.codebase.identifier),
1710 +             license=release.license.url,
1711 +             description=release.codebase.description.raw,
1712 +             softwareVersion=release.version_number,
1713 +             version=release.version_number,
1714 +             operatingSystem=release.os
```


Include in package download

The screenshot shows the CoMSES website interface. At the top, there's a navigation bar with links like 'About', 'Model Library', 'Community', etc. Below this is a header for 'Computational Model Library'. The main content area displays the 'Artificial Anasazi (version 1.1.0)' model page. It includes a 'Download Version 1.1.0' button, a list of authors (Marco Janssen), DOI (10.25937/kp4-g724), model version (1.1.0), license (GPL-2.0), operating system (Independent), programming language (Logo), and dependencies. A small thumbnail image of the model simulation is visible on the left. At the bottom, there's a cookie consent banner.

Artificial Anasazi (version 1.1.0)

Submitted by: Marco Janssen Software Framework: NetLogo Programming Language: Logo

southwest us archaeology population dynamics

Replication of the well known Artificial Anasazi model that simulates the population dynamics between 800 and 1350 in the Long House Valley in Arizona. See also Marco A. Janssen (2009) Understanding Artificial Anasazi, Journal of Artificial Societies and Social Simulation 12 (4) 13 <http://jasss.soc.surrey.ac.uk>

Download Version 1.1.0

Authors
Marco Janssen

DOI
10.25937/kp4-g724

Model Version
1.1.0

License
GPL-2.0

Operating System
Operating System
Independent

Programming Language
Logo

Dependencies
{ 'programming_language':
{ 'name': 'logo (variant)',
'version': '5.0.3' }}

This website uses cookies and Google Analytics to help us track user engagement and improve our site. If you'd like to know more information about what data we collect and why, please see [our data privacy policy](#). If you continue to use this site, you consent to our use of cookies.

artificial-anasazi_v1....zip

The top part of the screenshot shows a Windows File Explorer window displaying the contents of a zip file named 'artificial-anasazi_v1.1.0.zip'. The files listed are 'code', 'docs', and 'codemeta.json'. The bottom part shows a code editor with the 'codemeta.json' file open. The JSON content is as follows:

```
{
  "@context": "http://schema.org",
  "@type": "SoftwareSourceCode",
  "isPartOf": {
    "@type": "WebApplication",
    "applicationCategory": "Computational Model",
    "operatingSystem": "Any",
    "name": "CoMSES Model Library",
  }
}
```

Structured data

Search appearance

Structured data

Recipes



Apple Pie by Grandma

Example.com

4.8 ★★★★★ 7,462 reviews

1 hr 30 min · 512 calories

Search appearance

Structured data

```
<html>
<head>
  <title>Apple Pie by Grandma</title>
  <script type="application/ld+json">
    {
      "@context": "https://schema.org/",
      "@type": "Recipe",
      "name": "Apple Pie by Grandma",
      "author": "Elaine Smith",
      "image": "http://images.edge-generalmills.com/56459281-6fe6-4d9d-984f-385c9488d824.jpg",
      "description": "A classic apple pie.",
      "aggregateRating": {
        "@type": "AggregateRating",
        "ratingValue": "4.8",
        "reviewCount": "7462",
        "bestRating": "5",
        "worstRating": "1"
      },
      "prepTime": "PT30M",
      "totalTime": "PT1H30M",
      "recipeYield": "8",
      "nutrition": {
        "@type": "NutritionInformation",
        "calories": "512 calories"
      },
    },
  </script>

```

Structured data on codebase landing pages

Google Structured Data Testing Tool



https://www.comses.net/codebases/2222/releases/1.1.0/

NEW TEST



```
7 <link rel="apple-touch-icon" sizes="144x144" href="/static/favicon/apple-touch-icon.png">
8 <link rel="icon" type="image/png" sizes="32x32" href="/static/favicon/favicon-32x32.png">
9 <link rel="icon" type="image/png" sizes="16x16" href="/static/favicon/favicon-16x16.png">
10 <link rel="manifest" href="/static/favicon/site.webmanifest">
11 <link rel="mask-icon" href="/static/favicon/safari-pinned-tab.svg" color="#5bbad5">
12 <meta name="msapplication-TileColor" content="#da532c">
13 <meta name="theme-color" content="#ffffff">
14 <title>
15   Artificial Anasazi
16 </title>
17 <meta name="description" content="Replication of the well known Artificial Anasazi model th
18 <script type="application/ld+json">
19   {"@context": "http://schema.org", "@type": "SoftwareSourceCode", "isPartOf": {"@type": "Web
20 </script>
21 <link id='discourseEmbedUrl' rel='canonical' href='https://www.comses.net/codebases/2222/rele
22
23 <meta name='citation_author' content='Marco Janssen'>
24   <meta name='citation_author_email' content='marco.janssen@asu.edu'>
25   <meta name='citation_author_institution' content='School of Sustainability'>
26 <meta name='citation_publication_date' content='2013/04/27'>
27 <meta name='citation_online_date' content='2013/01/17'>
28 <meta name='citation_journal_title' content='CoMSES Computational Model Library'>
29 <meta name='citation_publisher' content='CoMSES.Net'>
30 <meta name='citation_title' content='Artificial Anasazi v1.1.0'>
31 <meta name='citation_language' content='en'>
32 <meta name='citation_doi' content='10.25937/krp4-g724'>
33 <meta name='dc.identifier' content='10.25937/krp4-g724'>
34
```

SoftwareSourceCode

0 ERRORS 4 WARNINGS

@type	SoftwareSourceCode
name	Artificial Anasazi
description	Replication of the well known Artificial Anasazi model that simulates the population dynamics between 800 and 1350 in the Long House Valley in Arizona. See also Marco A. Janssen (2009) Understanding Artificial Anasazi, Journal of Artificial Societies and Social Simulation 12 (4) 13 http://jasss.soc.surrey.ac.uk
version	1.1.0
identifier	https://doi.org/10.25937/krp4-g724
dateCreated	2013-01-17T22:30:45+00:00
dateModified	2018-10-18T21:42:29+00:00
keywords	southwest
keywords	us
keywords	archaeology
keywords	population dynamics
runtimePlatform	NetLogo

Open Modeling Foundation: Accessibility Standards



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Standards

Accessibility

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[Interoperability](#)

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Accessibility

Note

These standards promote and enable discovery and access for model code, documentation, and metadata. Comments and suggestions are welcomed, and will be carefully considered by the OMF Working Groups and Membership. The standards goals and minimum implementation standards aim to capture concerns and practices among the members of OMF. Individual application domains may extend these standards to capture additional context relevant to their domain.

Overview of Accessibility Standards

Goals for Accessibility Standards

- Human readable model source code should be openly accessible in archives which adhere to FORCE11 software citation principles and expose their metadata in open, interoperable formats.
- Model source code should have an appropriate OSI approved license.
- Authors of published model-based research should make model source code accessible.
- Funding agencies should require model source code developed in sponsored research to be accessible and

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CoMSES Net and Global Modeling Science



- Actively partnering with researchers and stakeholders in the US and abroad
- Supporting a global community of modeling scientists with cyberinfrastructure and incentives for best practices
- Advancing critical modeling science we need to better understand our planet and manage it sustainably into the future