Artivity

Athanasios Velios  Sebastian Faubel  Moritz Eberl

Libre Graphics Meeting 2016
London
15-18 April
The problem

Art is about the process not about the outcome
Gino Ballantyne: As Long as the Band Plays and Everyone Marches in Step
The solution

• Capture the process
POLLOCK PAINTS A PICTURE

BY Robert Goodnough POSTED 11/26/12 7:00 AM

In a visit to Jackson Pollock’s Long Island studio, a fellow artist chronicles a “ritual dance”

Far out on Long Island, in the tiny village of Springs, with the ocean as background and in close contact with open, tree-studded fields where cattle graze peacefully, Jackson Pollock lives and paints. With the help of his wife, Lee Krasner—a former Hofmann student and an established painter in her own right—he has remodeled a house purchased there to fit the needs of the way of life they have chosen, and a short distance away is a barn which has been converted into a studio. It is here that Pollock is engrossed in the strenuous job of creating his unique world as a painter.

Before settling on the Island, Pollock worked for ten years in a Greenwich Village studio. Intermittently he made trips across the country, riding freight trains or driving a Model A Ford, developing a keen awareness of vast landscape and open sky. “You get a wonderful view of the country from the top of a freight car,” he explains. Pollock loves the outdoors and has carried with him and into his painting a sense of the freedom experienced before endless space.
The solution

• Capture the process
  – observation → text
  – motion picture

• Making event
  – but not the method / research
The solution for digital art

• Everything managed on the desktop
  – art/design software
  – stored/modified files
  – online research
  – communication

• Capture
  – technique
  – method/research
  – output
The solution for digital art

- Everything managed on the desktop
  - art/design software
  - stored/modified files
  - online research
  - communication

- Capture
  - technique
  - method / research
  - output

- Automate it!
NEPOMUK - The Social Semantic Desktop - FP6-027705

Networked Environment for Personalized, Ontology-based Management of Unified Knowledge

NEPOMUK brings together researchers, industrial software developers, and representative industrial users, to develop a comprehensive solution for extending the personal desktop into a collaboration environment which supports both the personal information management and the sharing and exchange across social and organizational relations.

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**Contact Information**

<table>
<thead>
<tr>
<th>Name of coordinating person</th>
<th>Dr. Ansgar Bernardi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating Organization</td>
<td>DFKI GmbH - Knowledge Management Department</td>
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<td>Email</td>
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<td>+49 631 20575 102</td>
</tr>
</tbody>
</table>

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NEPOMUK CONSORTIUM 2006-2008
The Zeitgeist Project

The Zeitgeist event aggregation framework and related projects.

Zeitgeist is an event aggregation framework for the user's activities and notifications (files opened, websites visited, conversations held with other people, etc.) and makes the relevant information available to other applications.

This project groups together Zeitgeist and all other applications (graphical user interfaces, data sources for Zeitgeist, etc.) which are heavily based upon it.

To keep up-to-date with the latest developments in a user-understandable way see: http://www.omgubuntu.co.uk/tag/zeitgeist/

Home page

Project group information

Maintainer: Zeitgeist Project Team
Driver: Self Lotfy

Bug tracker: launchpad.net/

Download RDF metadata

Latest questions

PPA For Zeitgeist? Posted on 2015-07-25
Is Zeitgeist active developed now in 2015? Posted on 2015-01-11
How to Add applications/filetypes activity? Posted on 2014-06-06
XMP metadata Posted on 2013-11-28
Not sure how to develop a web app upon this Posted on 2013-11-21

Projects

- Activity Log Manager
- Autonomous Music Rating with Zeitgeist
- GNOME Activity Journal
- Sezen
- Zeitgeist Data-Sources
- Zeitgeist Dacahub
- Zeitgeist Explorer
- Zeitgeist Extensions
- Zeitgeist Filesystem
- Zeitgeist Framework
- Zeitgeist Java
- Zeitgeist Project Website
- Zeitgeist Sharp
- gnome-journal
- ibzeitgeist

Announcements

Zeitgeist 0.9.16 "Experience" released on 2015-07-08
Hey everyone, on behalf of the Zeitgeist team I am happy to announce the rele...

Activity Log Manager 0.9.7 released on 2013-07-10
On behalf of the Zeitgeist Team I am happy to announce Activity Log Manager 0...

Activity Log Manager 0.9.6 released on 2013-07-04
On behalf of the Zeitgeist Team I am happy to announce Activity Log Manager 0...

Zeitgeist 0.9.14 "Diamond" released on 2013-06-18
Hey everyone, on behalf of the Zeitgeist team I am happy to announce the rele...

Zeitgeist Explorer 0.2 "Shiny" Released on 2013-06-14
Hey everyone, on behalf of the Zeitgeist team I am happy to announce the rele...
W3C PROV ontology
as long as the band plays and...

drawing.svg
drawing19.svg
drawing20.svg
drawing21.svg
drawing22.svg
drawing23.svg
drawing24.svg
drawing25.svg
drawing26.svg
drawing27.svg
drawing28.svg
drawing32.svg
drawing43.svg
drawing44.svg
drawing45.svg
drawing46.svg
drawing47.svg
drawing48.svg
drawing49.svg
drawing50.svg
drawing51.svg
drawing-1.svg
drawing-2.svg
drawing-3.svg
drawing-4.svg
drawing-5.svg
drawing-6.svg
drawing-7.svg
drawing-8.svg
drawing-9.svg
drawing-10.svg
drawing-11.svg
drawing-12.svg
drawing-13.svg
drawing-14.svg
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drawing-16.svg
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drawing-35.svg
drawing-36.svg
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drawing-38.svg
drawing-39.svg
drawing-40.svg
drawing-41.svg
drawing-42.svg
elective psychopathy.svg
for the minds of people ar...
sheetdrawing15.svg
sheetdrawing17.svg
sheetdrawing18.svg
silkscript.svg
those little pills.svg
three steps.svg
trial
try2
wave
wave2
wave3
wave4
wave5
wave6
wave7
wave8
<prefix nfo: <http://www.semanticdesktop.org/ontologies/2007/03/22/nfo#> />
<prefix prov: <http://www.w3.org/ns/prov#> />

<query>
  <select>
    <distinct>?
      <fileUrl> ?creationDate
    </distinct>
  </select>
  <from>
    <http://localhost:8890/artivity/1.0/{USERNAME}/activities>
  </from>
  <where>
    
    {?
      <editing> prov:used ?file .

      <file> a nfo:FileDataObject .
      <file> nfo:fileCreated ?creationDate .
    }
  </where>
  <order>
    <by> desc(?creationDate) </by>
  </order>
</query>
Gino Ballantyne: As Long as the Band Plays and Everyone Marches in Step
prefix nfo: <http://www.semanticdesktop.org/ontologies/2007/03/22/nfo#>
prefix prov: <http://www.w3.org/ns/prov#>

select ?accessTime ?page ?fileUrl
from <http://localhost:8890/artivity/1.0/{USERNAME}/activities>
from <http://localhost:8890/artivity/1.0/{USERNAME}/activities/web>
where
{
  ?file a nfo:FileDataObject .

  ?editing prov:startedAtTime ?editingStart .
  ?editing prov:endedAtTime ?editingEnd .

  ?page a nfo:WebDataObject .


  filter(?editingStart <= ?accessTime && ?accessTime <= ?editingEnd)
}
order by desc(?accessTime) limit 50
The Book of Kells is an illuminated manuscript written in the Insular Tradition. It is a collection of four Gospels, the Book of Acts, Psalms, and other religious texts, written in Latin. The manuscript is known for its elaborate decoration and use of the Kells script, a distinctive form of Insular script. The book is illuminated with illustrations and marginalia, and it is believed to have been produced in the 8th or 9th century. The Book of Kells is considered one of the most beautiful and significant manuscripts in the world.
As Long as the Band Plays and Everyone Marches in Step
(wifi – GPS data)
As Long as the Band Plays and Everyone Marches in Step

Gino Ballantyne: As Long as the Band Plays and Everyone Marches in Step
Potential answers

• One artist over time
  – development of work
  – development of technique

• Many artists
  – overview of current trends
  – in an organisation/studio/class/department

• Many artists over time
  – Trends in digital arts over time
  – Trends in methods and online research
Who cares?

• Artists
  – self-archiving

• Researchers interested in art history
  – data about context – mode of work

• Researchers interested in technique
  – data about software tools and settings
    • authenticity of digital art
Who else?

- Invoicing for freelancers / design studios
  - time spent of projects – people involved – resources used
- Group design
  - attribution – justification – annotation
- University administration
  - provide data for REF
- Teaching / learning
  - share instructions – automated assessment – evaluate exercises
- Developers of creative software
  - find out about the popularity / use of features
Topics

Current Release

- Apps
- Features
- Platform Support
- Architecture

Upcoming Release

- Architecture
- Features
- Platform Support
Artivity Explorer

Graphical User Interface for viewing Artivity data.

Recently used files
- Review file data
- Export file data

---

<table>
<thead>
<tr>
<th>File</th>
<th>Editing Time</th>
<th>Last Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2london.jpg</td>
<td>1:51:29</td>
<td>Tue, 12:12</td>
</tr>
<tr>
<td>test.svg</td>
<td>1:44:07</td>
<td>Tue, 12:10</td>
</tr>
<tr>
<td>Artivity Krita.kra</td>
<td>0:36:52</td>
<td>Tue, 11:21</td>
</tr>
<tr>
<td>Screenshot from 2015-09-24</td>
<td>0:00:46</td>
<td>Mon, 02:27</td>
</tr>
<tr>
<td>Krita Plugin.kra</td>
<td>0:03:21</td>
<td>Mon, 02:25</td>
</tr>
<tr>
<td>test16.svg</td>
<td>0:00:12</td>
<td>Fri, 02:38</td>
</tr>
<tr>
<td>test12.svg</td>
<td>0:00:22</td>
<td>Fri, 02:21</td>
</tr>
<tr>
<td>test10.svg</td>
<td>0:00:10</td>
<td>Fri, 12:43</td>
</tr>
<tr>
<td>test5.svg</td>
<td>0:00:48</td>
<td>Fri, 11:41</td>
</tr>
<tr>
<td>test1.svg</td>
<td>0:01:56</td>
<td>Fri, 11:27</td>
</tr>
</tbody>
</table>
Artivity Explorer

Graphical User Interface for viewing Artivity data.

Recently used files
Review file data
Export file data
Artivity Explorer

Graphical User Interface for viewing Artivity data.

- Recently used files
- Review file data
- Export file data

Choose this format if you want to import Artivity data into a graph database compatible with the Resource Description Format.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents</td>
<td>The agents involved in the creation process.</td>
</tr>
<tr>
<td>Activities</td>
<td>File editing steps and movements.</td>
</tr>
<tr>
<td>Web Activities</td>
<td>Web browsing activities.</td>
</tr>
</tbody>
</table>

Format:
- RDF
- CSV

Directory:
/home/sabine

File:
export.rdf

Export file data

RDF / XML
Browser Extensions

Log browser history into Artivity.

Toggle logging
Platform Support

Operating Systems
- Ubuntu

Creative Tools
- Inkscape
- Krita

Web Browsers
- Mozilla Firefox
- Google Chrome
- Opera
Architecture (Current)

FRONTENDS

Artivity Explorer
Native GUI

Agents
Browsers, Creative Tools

MIDDLEWARE

Artivity HTTP REST API
User Daemon

BACKEND

OpenLink Virtuoso Database

Agents
Browsers, Creative Tools

Artivity Explorer
Native GUI

SPARQL

JSON

N3, libartivity (C++)

SPARQL
Topics

Current Release

- Apps
- Features
- Platform Support
- Architecture

Upcoming Release

- Architecture
- Features
- Platform Support
Architecture (Development)

FRONTENDS
- Artivity Explorer
  - Web GUI

MIDDLEWARE
- Artivity HTTP REST API
  - User Daemon

BACKEND
- OpenLink Virtuoso

Bullet points:
- JSON
- SPARQL
- N3, libartivity (C++)
Features (Development)

Artivity Explorer
- Recently Used Files
- Review Activity Data
- Export Activity Data
+ Video Playback
+ Publish to Repositories (e-prints, orcid)
+ Add Comments / Notes

Browser Extensions
- Toggle Logging
+ Add Filters
<table>
<thead>
<tr>
<th>Operating Systems</th>
<th>Creative Tools</th>
<th>Web Browsers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ubuntu</td>
<td>Inkscape (Extension)</td>
<td>Mozilla Firefox</td>
</tr>
<tr>
<td>Mac OS X</td>
<td>Krita</td>
<td>Google Chrome</td>
</tr>
<tr>
<td>Windows</td>
<td>Photoshop CC</td>
<td>Opera</td>
</tr>
<tr>
<td></td>
<td>Illustrator CC</td>
<td></td>
</tr>
</tbody>
</table>
Readme

The Artivity Project aims to produce an open desktop logging framework for arts practice. It allows for capturing detailed data about the creation process of digital artwork and its context. This data can be used to study the techniques, workflow and sources of inspiration in the creation process of digital media. The project is executed as a cooperation with the University of the Arts, London and Semiodesk GmbH. It is currently funded by JISC.

Summary

This repository currently contains the following modules:

- **artivity-apid**: OS daemon which provides a REST API for logging events from clients into Artivity.
- **artivity-explorer**: Simple user interface for viewing the activity events for drawings.
- **artivity-extension-firefox**: Browser extension for web browsers which are based on Mozilla Firefox.
- **artivity-extension-chromium**: Browser extension for web browsers which are based on Google Chrome.
- **artivity-extension-krita**: An extension to Krita for logging undo/redo events in Artivity.
- **artivity-inkscape**: Modified version of Inkscape for logging undo/redo events in Artivity.
- **libartivity**: A C++ client library for communication with the Artivity database.

Installing
Thank you!

Visit us at http://bitbucket.org/semiodesk/artivity