

Opencast, the Opencast Community, and (Opencast) Matterhorn





REPLAY



REPLAY – status quo

- Solution for management of audiovisual objects
- Open Source
- REPLAY 0.7 about to be released
- Operative at ETH Zurich February 16th 2009
- www.replay.ethz.ch

- Project ends June 30th 2009



Opencast (OC) – the idea

- Opencast is an initiative driven by higher education institutions to empower...
- ... **institutions** to make informed choices about capture, processing, and distribution infrastructure for audio/video,
- ... **faculty** to teach courses and share knowledge with their students and learners worldwide without technology getting in the way,
- ... **students** to access and shape media into a more meaningful tool for learning,
- ... **everyone** to easily find and engage with educational video, audio, and other rich media from instructors and institutions around the world.



Opencast Community (OCC)

Federation of institutions and people

- attracted to the Opencast idea
- exchanging ideas, experience, and knowledge
- committed to building an Open Source solution putting into effect the OC idea



OCC – mission statement

Build and deliver an

- Open Source
- enterprise-level
- integrated and interoperable

framework to

- produce,
- process,
- distribute,
- and preserve

audiovisual objects

OCC – active members (01/2009)

Directory of Opencast Community Organizations

Add your organization to the directory.

Asia/Pacific

Australian National University	Australia	
Monash University	Australia	
Tongji University	China	

Europe

Cambridge University	UK	Matterhorn Partner
ETH Zurich	Switzerland	Matterhorn Partner
Freie Universitaet Berlin	Germany	
Open University		
Open University of Catalonia		Matterhorn Partner
OSS Watch		
Oxford University		
River Valley Technologies	UK	
SWITCH	Switzerland	
Universidad Carlos III de Madrid	Spain	
Universita' di Trento	Italy	
University of Copenhagen	Denmark	Matterhorn Partner
University of Geneva	Switzerland	
University of Lyon 2		
University of Nottingham	UK	
University of Osnabrueck	Germany	Matterhorn Partner
University of Oxford	UK	
University of Vigo	Spain	Matterhorn Partner
Videolectures.net	Slovenia	Matterhorn Partner
Yovisto	Germany	

Middle East

Tel Aviv University Computing Division	Israel	
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North America

Case Western University	US	
Columbia University	USA	
Georgia Tech		
Indiana University	USA	Matterhorn Partner
International Computer Science Institute	USA	
Massachusetts Institute of Technology	USA	
Northwestern University	US	Matterhorn Partner
Penn State University		
Stanford School of Medicine		
University of California Berkeley	US	Matterhorn Partner
University of California San Diego		
University of Nebraska-Lincoln	US	Matterhorn Partner
University of Saskatchewan	Canada	Matterhorn Partner
University of Toronto	Canada	Matterhorn Partner



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University of Toronto	Canada	Matterhorn Partner



Opencast Community Project

- Organizational framework for OCC
- The project was originated at UC Berkeley to establish a community of institutions dealing with audiovisual material in academia
- <http://www.opencastproject.org/>



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- Contact Us

Opencast Community

- Participating Organizations
- Showcases
- Hopebox
- Member Directory
- Join Opencast
- ▶ Best Practices Wiki

Opencast Projects

- ▶ Matterhorn
- Google Summer of Code Ideas
- ▶ Research
- virtPresenter
- Open U

User login

Username: *

Password: *

Log in

Create new account

Request new password

Opencast Community | Project

If this is your first time visiting the Opencast website, we suggest:

- 1 Read [About Opencast](#) and the [Mission Statement](#).
- 2 Peruse the [Showcase](#) files and the [Best Practice Guidelines Wiki](#) to see what organizations are doing in the realm of coursecasting
- 3 Learn about [Matterhorn](#), the Opencast build project
- 4 Find out how to [join Opencast Community!](#)

Featured Posts

Update on the Opencast Matterhorn build project

Submitted by: Michelle

Deriving from planning activities that have taken place throughout this past year, a group of institutions from the Opencast community have come together and made a commitment around an Opencast build project. These partners are in the process of developing a proposal to build an open source podcast and rich media capture, processing and delivery system. This system has been named Opencast Matterhorn.

REPLAY 0.6 released

Submitted by: tobias

We are happy to announce the next release of REPLAY, ETH Zurich's solution to produce, handle, index, archive, and distribute audiovisual lecture recordings on a large scale.

Next Steps (post Deep Dive)

Submitted by: Michelle

Thanks to all of you who attended the Deep Dive! From the final discussion, we pulled together the Next Steps list below. We've noted a "Lead" for each activity based on our understanding - please feel free to comment. More information to follow...

Architecture

Submitted by: josh

See below the latest draft version of the Matterhorn Architecture.

Join Opencast

Submitted by: Michelle

There are several ways to join the Opencast community or the Matterhorn project efforts.

Recent Listserv Posts

Title	Author	Posted
resend attachment on agile/ux thread for digest subscribers	adam	1/16/2009
interesting agile and ux	adam	1/16/2009
podcast Digest, Vol 14, Issue 8	markus	1/15/2009
Gstreamer	cab938	1/14/2009
Matterhorn: Publication vs. Distribution	Josh Holtzman	1/13/2009
Call for Data: Podcast Stats (usage, patterns, etc.) and Educational Impact	adam	1/13/2009
Matterhorn: Why Java	Josh Holtzman	1/13/2009
Matterhorn: Software distribution	Josh Holtzman	1/13/2009
Podcast Service Developer	Peter Robinson	1/12/2009
Google summer of code for opencast?	cab938	1/12/2009



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Recent Site Updates

Wiki pages

'Podcasting for Learning in Universities' book

AutoAuditorium Recordings Help Improve Student Performance

General considerations for publishing and distribution

General considerations for educational impact

Project pages

Research

Opencast Matterhorn Partners Meeting 1-16-09



Newest Institutions

Tel Aviv University Computing Division

River Valley Technologies

Universita' di Trento

Universidad Carlos III



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Opencast Matterhorn Built Project

Update on the Opencast Matterhorn build project

[View](#) [Revisions](#)

Submitted by Michelle on Mon, 01/05/2009 - 14:38⁸ Opencast General Forum

Deriving from planning activities that have taken place throughout this past year, a group of institutions from the Opencast community have come together and made a commitment around an Opencast build project. These partners are in the process of developing a proposal to build an open source podcast and rich media capture, processing and delivery system. This system has been named Opencast Matterhorn.

A grant proposal to support this project is still in development, and our ability to move forward with Opencast Matterhorn as we envision it is heavily dependent on being awarded this grant. However, we felt it appropriate to share an overview of the plans to date with the community.

Matterhorn Vision

The Opencast Matterhorn Project proposes to achieve the following:

- Matterhorn partners will define, design and produce an enterprise-level, easy-to-install open source podcast and rich media capture, processing and delivery system.
- Matterhorn will lower the technical skill and cost barriers to scalable podcast deployment and increase the potential for universities to integrate rich media content into their teaching, learning, research, and knowledge-sharing environments.
- Matterhorn will be designed in such a way that it can be easily installed and implemented as an end-to-end system.
- Matterhorn will be highly configurable and services-based, so that organizations can choose to implement only the components they need, or replace default service implementations with their own to meet specific institutional needs.
- User-facing components will be designed in such a way as to ensure a high-quality user experience.

These design considerations seek to meet the podcast and media capture, delivery and archive needs of organizations across the spectrum - from those who have no existing infrastructure to those who want to extend the capabilities of an existing system; from small colleges to large universities; from full service providers to individual departments.

Matterhorn Partners

The institutions below have agreed to commit resources to the project over the next 2 years. The grant, if awarded, will pay for a portion of the resources, but each institution has committed to contributing more than half of the resources on their own.

- University of California Berkeley, Educational Technology Services
- ETH Zürich
- University of Osnabrück
- Cambridge University, Centre for Applied Research in Educational Technologies (CARET)
- Indiana University, University Information Technology Services
- Jozef Stefan Institute, Centre for Knowledge Transfer
- Northwestern University, Academic and Research Technologies (ART)
- Open University of Catalonia
- University of Copenhagen, Faculty of Humanities, ITMEDIA
- University of Nebraska-Lincoln
- University of Saskatchewan, University Learning Centre
- University of Toronto, Adaptive Technology Resource Centre (ATRC)
- University of Vigo, Information and Communication Technologies

Proposed Technical Schedule

- Phase 1: Kick Off (July 2009 – Sept 2009)
- Phase 2: Pilot Release – Minihorn (Oct 2009 – July 2010)
- Phase 3: Matterhorn 1.0 Release (Aug 2010 – June 2011)

Project Governance

The Opencast Matterhorn project will combine aspects of the Apache model with some additional structure for the Matterhorn build project. We encourage a meritocratic, transparent, and inclusive approach to include the larger Opencast community wherever possible.

Of particular relevance to the Opencast community, three stakeholder advisory bodies will be formed (Executive, Functional, and Technical). These bodies will provide guidance and input into the features, functions, and key technology outputs from the project. If you have an interest in serving on one of these advisory bodies, we would welcome your participation. Please let us know if you have an interest.

Interim Solution

For those schools facing immediate pressure, the Opencast community will provide an immediate interim solution in ETH Zurich's REPLAY system and establish a migration path between REPLAY and Matterhorn. REPLAY is an open solution developed in java to integrate, index, archive, and distribute audiovisual lecture recordings on a large scale. An anticipated stable 1.0 version is scheduled for February 2009.



Opencast Matterhorn Built Project

- “Community source”¹ project to build Matterhorn
- Mellon Foundation Grant
- Hewlett co-funded
- Scheduled start: July 2009

1) Cf. <http://www.oss-watch.ac.uk/resources/communitysource.xml>



OCMBP - consortium

- UC Berkeley
- University of Saskatchewan
- University of Nebraska-Lincoln
- Northwestern University
- Indiana University
- University of Toronto
- ETH Zürich
- University of Osnabrück
- Cambridge University
- University of Vigo
- University of Catalonia
- University of Copenhagen
- Jozef Stefan Institute



Matterhorn timeline

Phase 1

Kick Off (July 2009 – Sept 2009)

Phase 2

Pilot Release – Minihorn (Oct 2009 – July 2010)

Phase 3

Matterhorn 1.0 Release (Aug 2010 – June 2011)



Status quo



Photo by David Kolöchter



Status quo

- PuMuKIT
- SURFmedia
- REPLAY
- virtPresenter
- ...



Opencast Community - topics

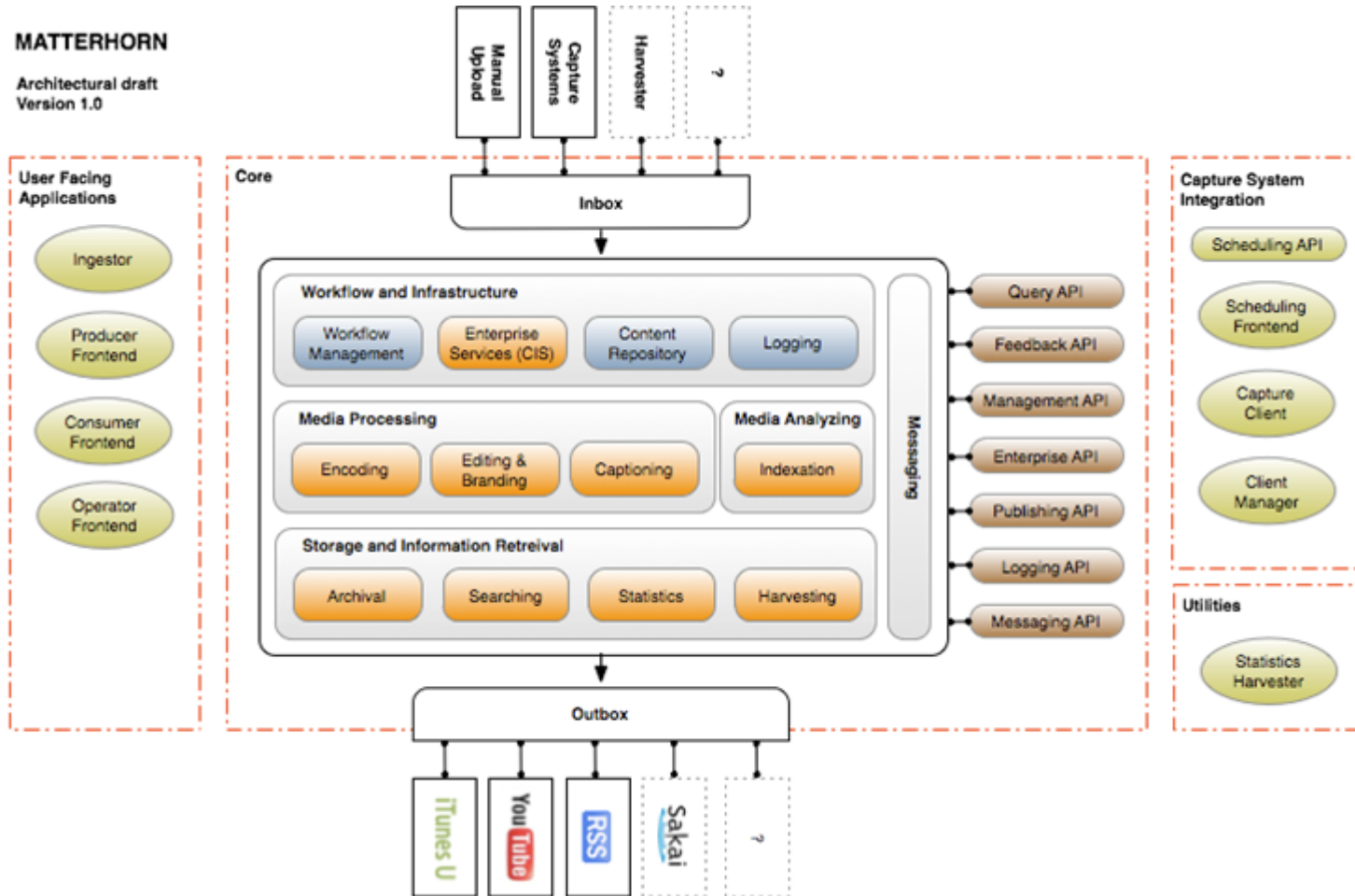
- Metadata
- Standards
- (Archive) Strategies
- Intellectual Property Rights – Open Access
- Matterhorn
- ...



Matterhorn architecture (draft)

MATTERHORN

Architectural draft
Version 1.0



Contact

<http://www.opencastproject.org/>

<http://www.replay.ethz.ch>

schulte@id.ethz.ch



Abbreviations

- OC: Opencast
- OCC: Opencast Community
(federation of institutions)
- OCCP: Opencast Community Project
(Project)
- OCM: Opencast Matterhorn (Product)
- OCMBP: Opencast Matterhorn
Built Project (Project)