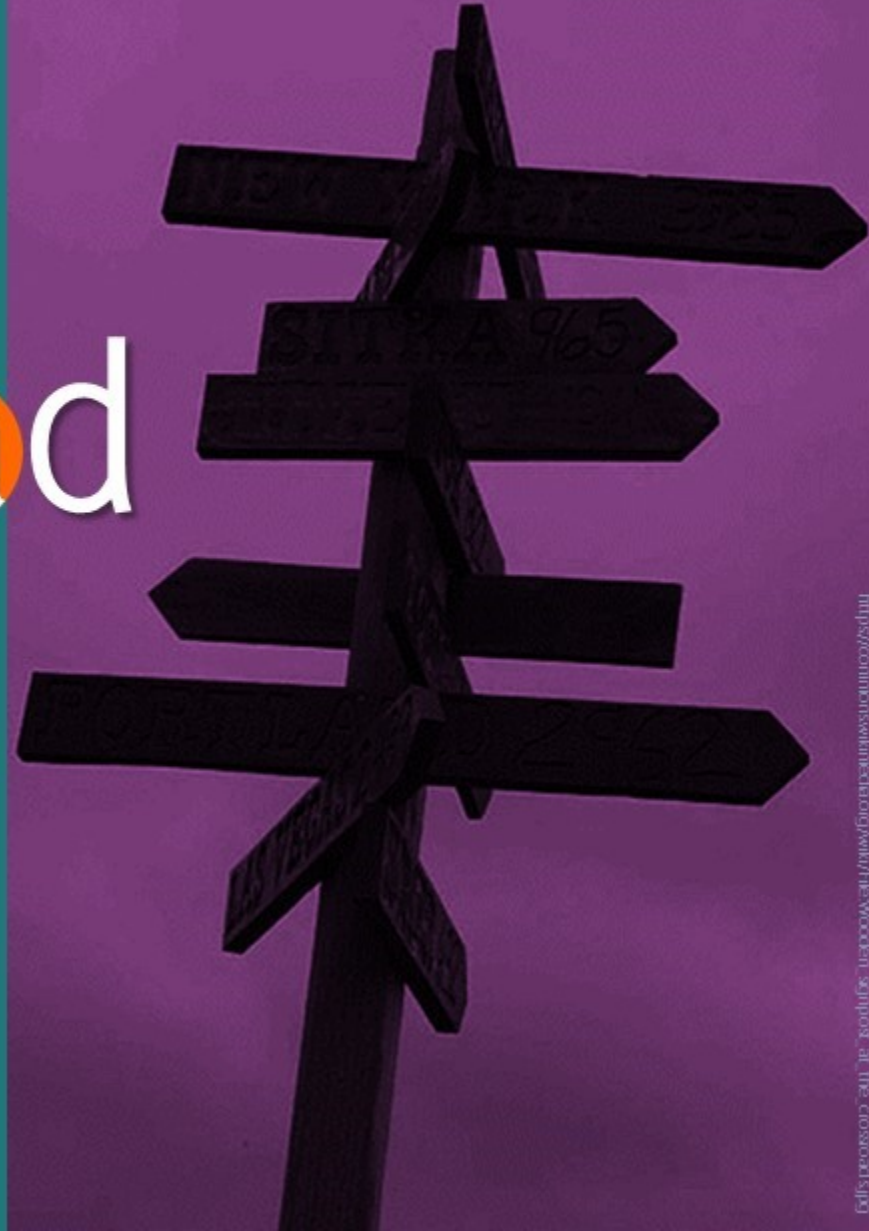


Looking Ahead

AtoM's Governance,
Development, and Future



First, we look back...

View archival description

Series – Miscellaneous records (draft)

Title and statement of responsibility area

Title proper	Miscellaneous records
--------------	-----------------------

Level of description	Series
----------------------	--------

Notes	
-------	--

(Creation)	
------------	--

Archival Institution

City of Vancouver Archives

Creator(s)

○ Townley, Matheson and Partners

Digital object



Archival description area

Name of creator	Townley, Matheson and Partners
-----------------	--------------------------------

Scope and content	Series consists of miscellaneous materials created or recieved by Townley, Matheson and Partners, including contract agreements and material and labour specifications used to articulate project requirements to clients and contractors, architectural ... »
-------------------	--

Notes area

Arrangement	No original arrangement of the records was apparent. Series has been arranged into files by the archivist based on the documentary form and content of the records. The 12 drawings in this series have been arranged and described as discrete items and are ... »
-------------	---

Control area

Description record Identifier	152724
-------------------------------	--------

Dates of creation, revision and deletion	Created: 29 Apr 2004.
--	-----------------------

Accession area

	2012-09-04/1
--	--------------

Edit

Delete

Add new

Duplicate

Move

Link digital object

Import digital objects

Link physical storage

Fonds

◀ Show all

▼ Fonds Add. MSS. 1399 - To...

► Series Architectural drawing...

► Series Project photographs (...)

► Series Miscellaneous record...

Import

○ XML

○ CSV

Export

○ Dublin Core 1.1 XML

○ EAD 2002 XML

Atom's Development

ICA/CDS OSARIS
report v1

ICA/CIT report: Market
Survey of Commercially
Available Off-the-Shelf
Archival Management
Software (January 2003)

UNESCO Grant to ICA:
Online Guide to Archival
Sources Related to Human
Rights Violations

Technical
analysis
begins



WORLD BANK GROUP



2002

2008

2001

ICA/CDS, ICA/CIT,
UNESCO discuss
how to advance
OSARIS project

2003

2004

2005

2006

2007

2008



ICA/CIT: OSARIS
Functional
Requirements
report



Peter Van Garderen
(Artefactual) hired to build
open source application

0.1-ALPHA

0.2-ALPHA



2005: Open Archives System

OpenArchivesSystem



Open Source, Open Standards, Open Architecture

Project Plan

(v.1 -- Dec. 9, 2005)

OpenArchivesSystem: Project Plan (v.1 -- Dec. 9, 2005)

Archival Description	Access	Physical Control	Accessioning
<ul style="list-style-type: none">★ multi-level cataloging★ archival authority control★ controlled vocabularies★ finding aid publishing	<ul style="list-style-type: none">★ search and browse★ digital object retrieval★ OAI-PMH harvesting★ exhibits★ research room management★ researcher files★ reproduction requests	<ul style="list-style-type: none">★ box management★ conservation scheduling★ digital repository interfaces★ digital preservation monitoring★ digital file integrity utilities★ digital file migration utilities	<ul style="list-style-type: none">★ appraisal records★ disposition scheduling★ record transfer documentation★ deed of gift documentation★ accession registry★ digitization of analogue materials★ capture of digital objects
System Administration			

The original project vision submitted by Peter Van Garderen, December 9, 2005


ICA-Atom 1.0-beta



- Released at the 2008 ICA Congress in Kuala Lumpur, July 21-27
- Distributed as a demo CD
- Workshop and presentation given



ICA-Atom's first use...



Human Rights Violations: An International Guide to Archival Sources

help | contact us | log in

español | français | >>

[home](#) [search](#) [browse](#) [add](#)

search for 'military regime' resulted in 4 hits

Impunity fonds
Testimonies, interviews and information gathered by SERPAJ to document the human rights violations incurred by the military regime.

El Popular photograph collection
Photographs from the El Popular newspaper.

Papers of the International Military Tribunal
Official transcripts of court proceedings, summaries of interrogations, and document books containing compilations and translations of the evidence.

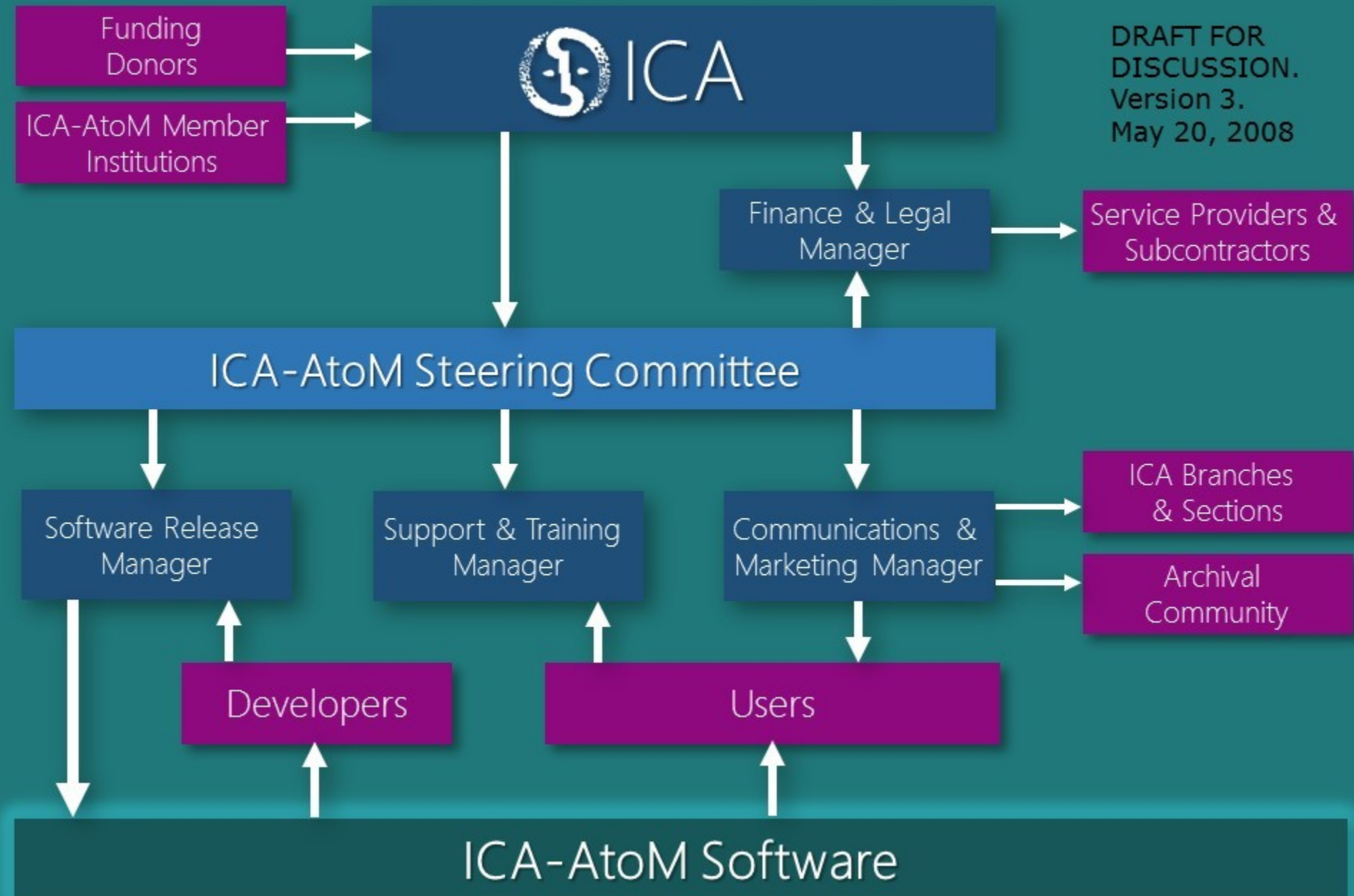
National Commission Pro Referendum fonds
Correspondence, project files, presentations.

ICA-AtOM Project Goals

The purpose of the ICA-AtOM Project is to provide free and open-source software:

- that enables institutions to make their archival holdings available online, especially those who could not otherwise afford to do so
- that manages archival descriptions in accord with ICA standards
- that provides multi-lingual interfaces and content translation features
- that supports multiple collection types
- that is fully web-based, user-friendly and follows accessibility best practices
- that is flexible and customizable
- that is useful to both small and large institutions alike
- that supports single or multi-repository implementations

ICA-AtoM Proposed Governance Model



a Atom's Development

2008



ICA Atom

FIRST
NON-BETA
RELEASE

2014

atom
access to memory

2.0

0.X-BETA

1.0-BETA

1.1

1.2

1.3

2009

2010

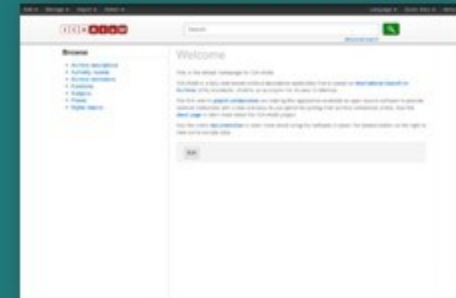
2011

2012

2013



TRILLIUM THEME



AtOM's Development

2013

2019

ICA AtOM

1.x

 **atom**
access to memory

2.0

2.1

2.2

2.3

2.4



JOB SCHEDULER



CLIPBOARD

2012

2014

2015

2016

2017

2018

1.3.1

2.0.1

2.1.1

2.2.1

AtoM 2.4



- Full bulk import / export via the user interface
- Search index improvements
- Authority records and repositories on the Clipboard

Development Philosophy

Community-based development

- Standards-based
- Open source / Creative Commons
- Multilingual support
- Generalize specific use cases
- Include all features in public release
- Iterative development via multiple contributions over subsequent releases



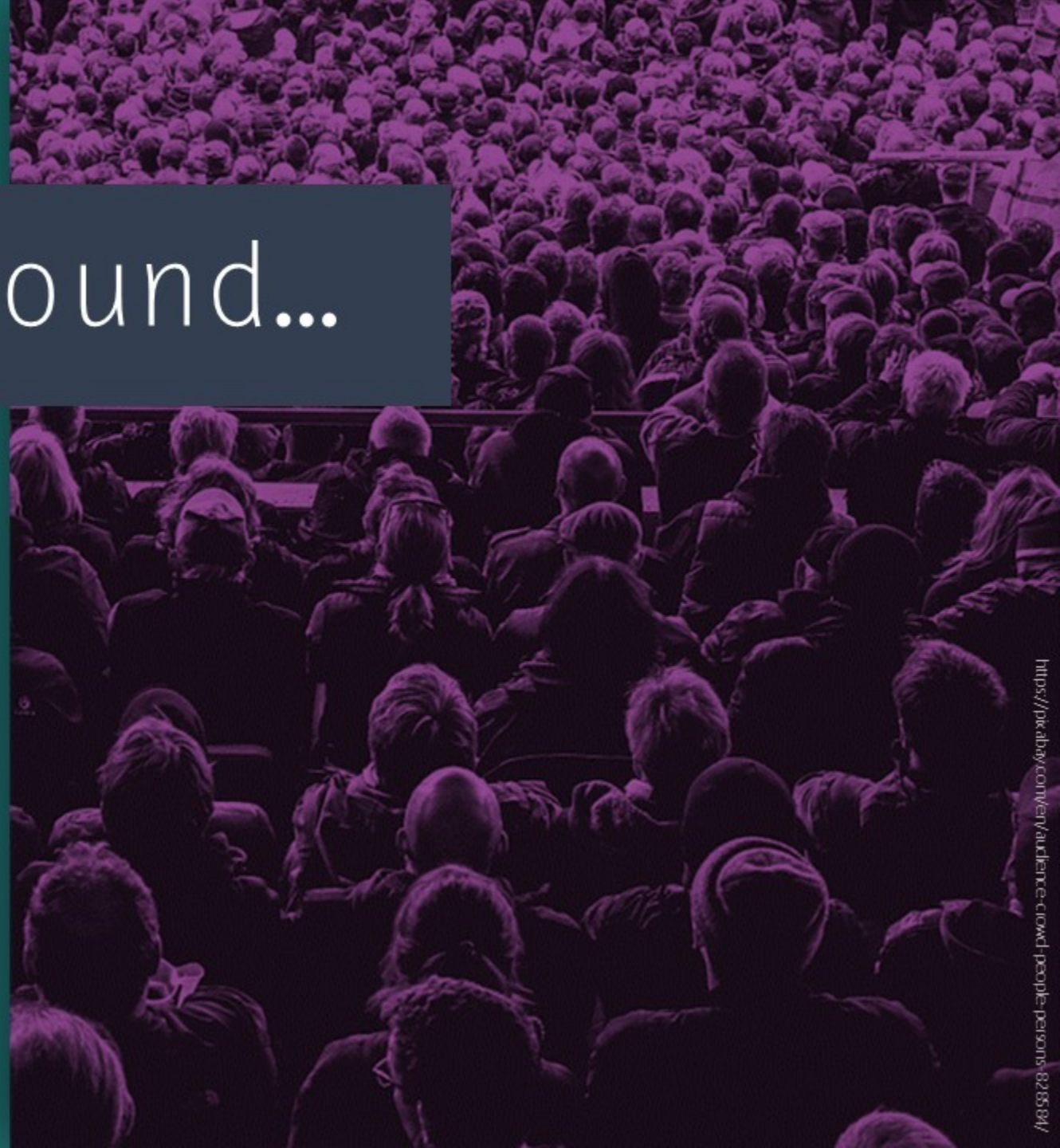
Bounty model of business

- Maintain: documentation, software, wiki, etc.
- Produce additional resources (e.g. videos, presentations, webinars)
- Participate in user forum
- Offer additional paid services
- Always include development in public project

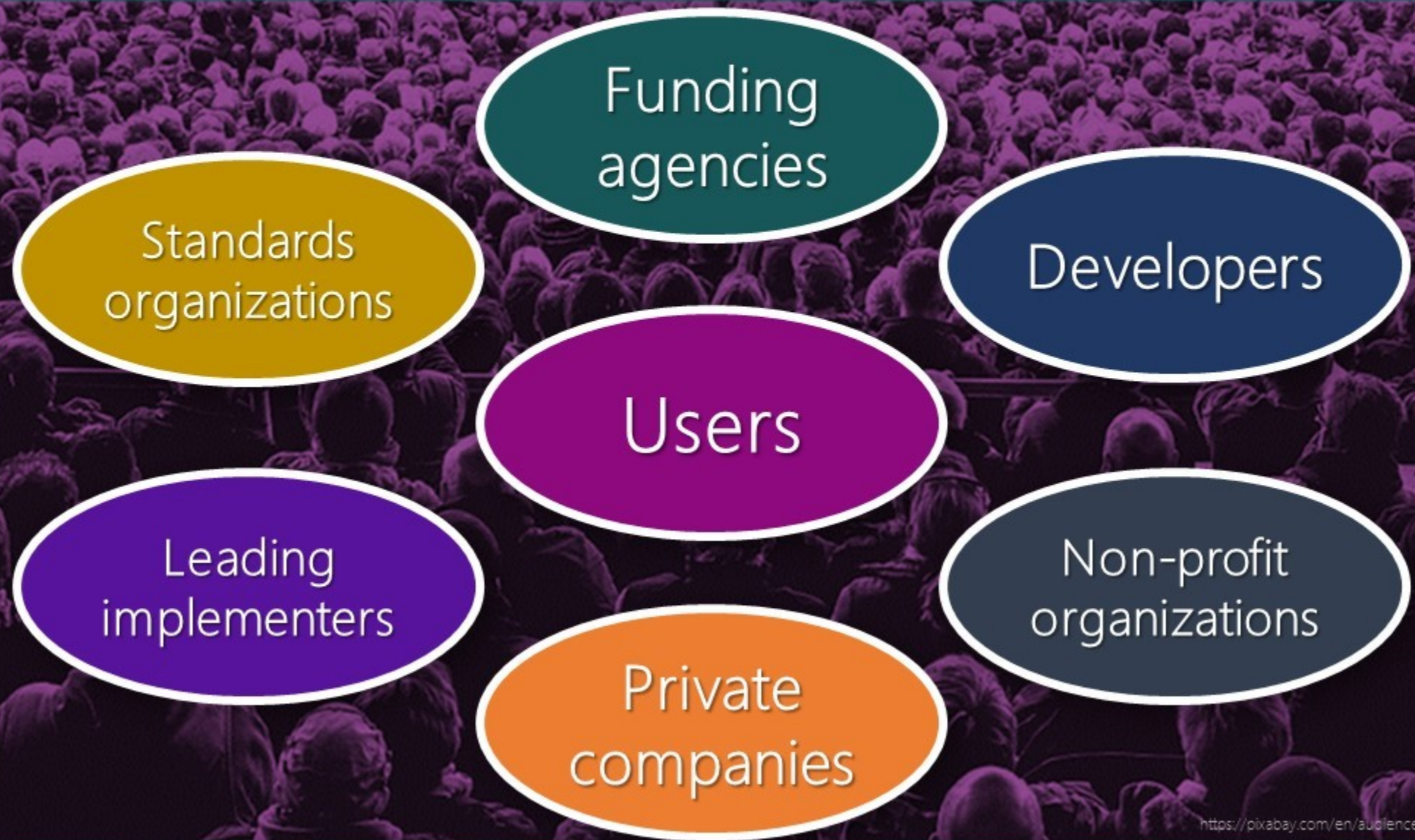


Read more: <https://wiki.accesstomemory.org/Development/Philosophy>

Now we look around...



The Open Source Ecosystem



The Open Source Ecosystem

Standards
organizations

How does the creation or modification of standards relate to the development of open-source tools? Should standards be created with software development in mind?

The Open Source Ecosystem

Funding
Agencies

Funding agencies play a key role in open-source software development, but what is their role once the tools have been developed?

The Open Source Ecosystem



Developers

Leading
implementers

Users

Developers work for non-profit organizations or private companies. They may also work for leading implementers, or simply be technically-minded users.

Leading implementers are institutions that provide community support, funding and/or development. These tend to be universities and research institutions.

Having a large pool of users is a sign of software maturity and stability.

The Open Source Ecosystem

Non-profit
organizations

Private
companies

These organizations provide sustainability for mature open-source software tools by offering software development and release management, hosting, tech support, data migration, training, consulting, documentation, user forums and other critical services. However, finding a viable business model can be a challenge.

Open-source Business Models

When grant funding ends or doesn't cover all costs, there are different ways of making open-source software viable and self-sustaining. Here are three common models:

- Membership model
- Bounty development model
- Services model

Membership Model

The software is free and open-source but purchase of a membership allows users to gain access to certain privileges or services. Some membership models mean that only members get access to certain types of documentation, training materials, issue reporting systems and/or member-only user forums. Other membership models provide privileges such as a role in governance, discounts on training and meeting events, but don't restrict documentation etc. Examples:

- Lyrasis (ArchivesSpace, CollectionSpace)
- BitCurator Consortium
- DuraSpace (DSpace, Archivematica, DuraCloud, Fedora)
- Islandora Foundation
- Open Preservation Foundation (JHOVE, Jpylyzer, FIDO, xcorrSound)

The money raised is used to support continued development and software release management.

Bounty Development Model

The software is free and open-source but development of new features and enhancements depends on one or more institutions providing funding. The new features and enhancements are added to subsequent public releases of the software. Sometimes called "Professional Open Source." Examples:

- Artefactual Systems (Archivematica, AtoM)
- Data Curation Experts (Hydra, Blacklight, Fedora)
- DiscoveryGarden (Islandora)
- Hudson Mologlo (ArchivesSpace)

Services Model

The software is free and open-source, but there are organizations that provide related services such as hosting, technical support, data migration, consulting, training and customization. These organizations may or may not be the lead developers of the tools. Examples:

- Artefactual Systems (Archivematica, AtoM)
- DuraSpace (DSpace, Archivematica, DuraCloud, Fedora)
- DiscoveryGarden (Islandora)
- Cottage Labs (Hydra, Fedora)
- AVPreserve (Archival Management System, Exactly, Fixity + other tools)
- KEEP Solutions (RODA, DSpace + other tools)

Other Open-source models

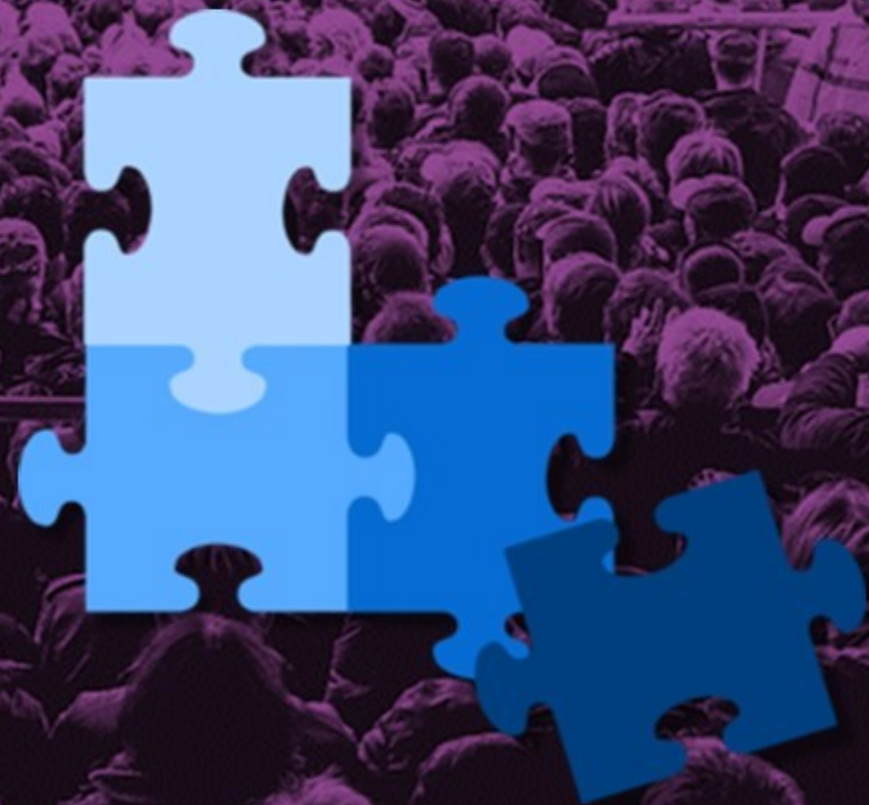
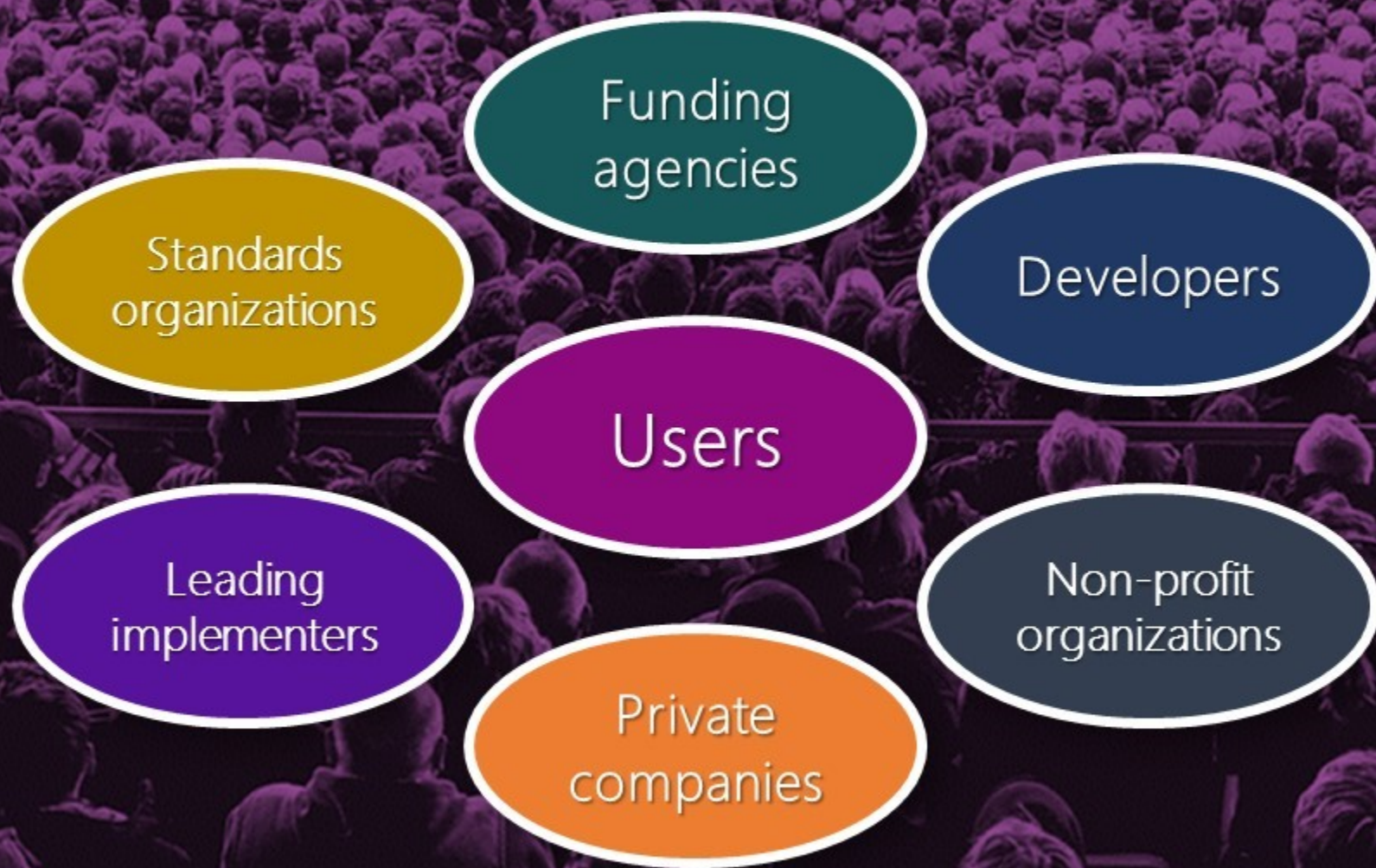
Franchising model:

The software is free and open-source, but the name and logo(s) are proprietary and can only be used with permission. The owners of the name and logo(s) sell the rights to organizations to provide technical support, hosting and customization services.

Proprietary add-on / "freemium" model:

The software is free and open-source, but organizations develop proprietary add-ons or plugins or have "enterprise" or "professional" versions that add more functionality or scalability.

Where Do You Fit In?



Looking ahead...

**METADATA IS A
LOVE NOTE
TO THE FUTURE**

Non-backwards compatible changes in dependencies...



Symfony

- PHP Framework
- Version used in AtoM 1.4 (deprecated in 2012)
- Current Symfony version: 3.3



elasticsearch

- Search index
- Version used in AtoM 1.7 (deprecated in Jan 2017)
- Current ES version: 5.3

Newer Technologies and Development Philosophies...

The gRPC logo is displayed in white on a teal rectangular background. It features the text "gRPC" with a stylized "g" that includes an upward-pointing arrow and a rightward-pointing arrow.The word "Microservices" is written in a bold, white, sans-serif font. It is surrounded by a cluster of blue gears of various sizes. Each gear contains a white icon representing different aspects of technology and business, such as a lightbulb, a bar chart, a calendar, a trophy, a puzzle piece, a handshake, a megaphone, a person, a magnifying glass, and a pencil.

And Major Changes Coming in our International Standards...

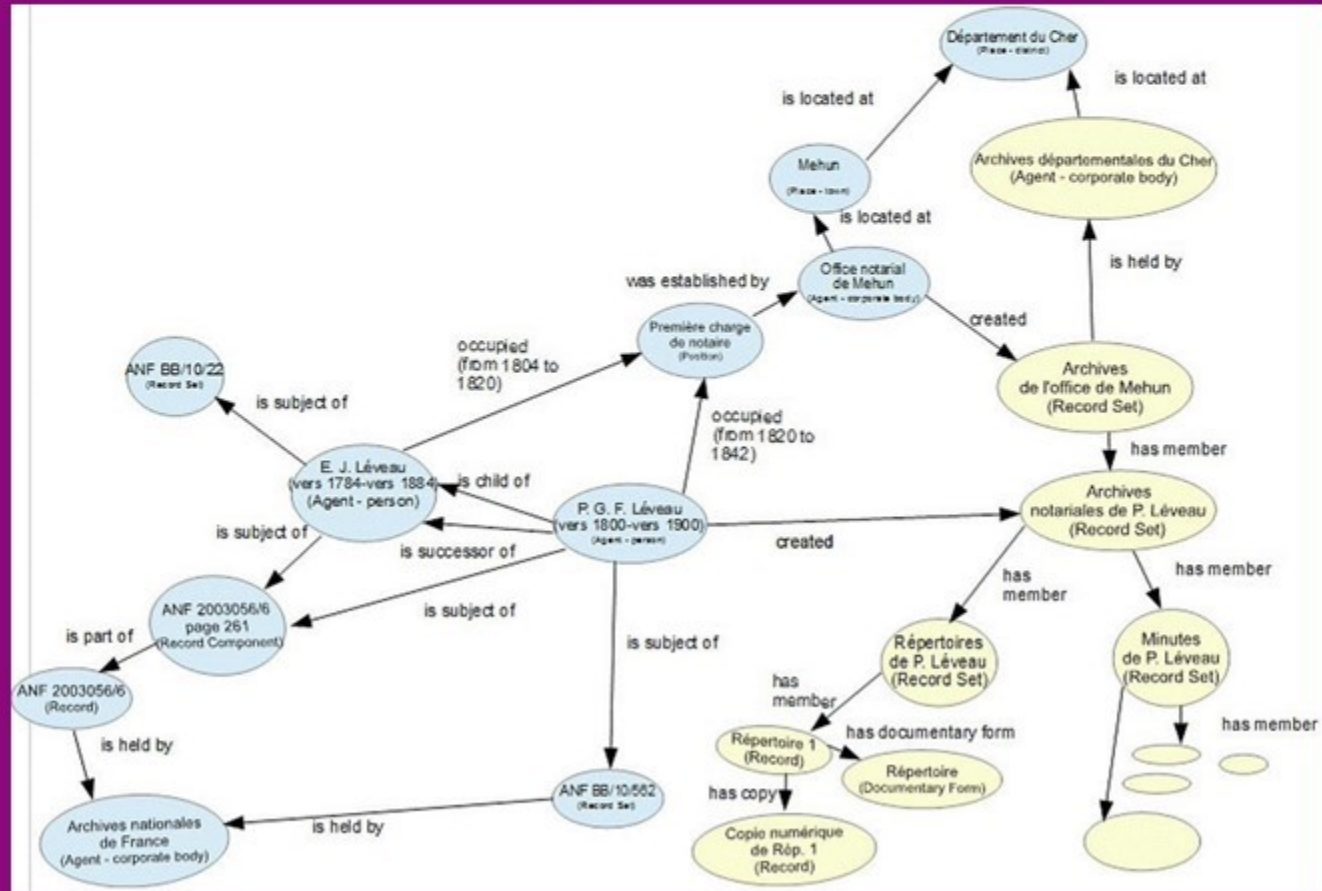
INTERNATIONAL COUNCIL ON ARCHIVES
CONSEIL INTERNATIONAL DES ARCHIVES
EXPERTS GROUP ON ARCHIVAL DESCRIPTION



RECORDS IN CONTEXTS
A CONCEPTUAL MODEL FOR ARCHIVAL DESCRIPTION

Consultation Draft v0.1
September 2016

Comments are welcome at egad@ica.org

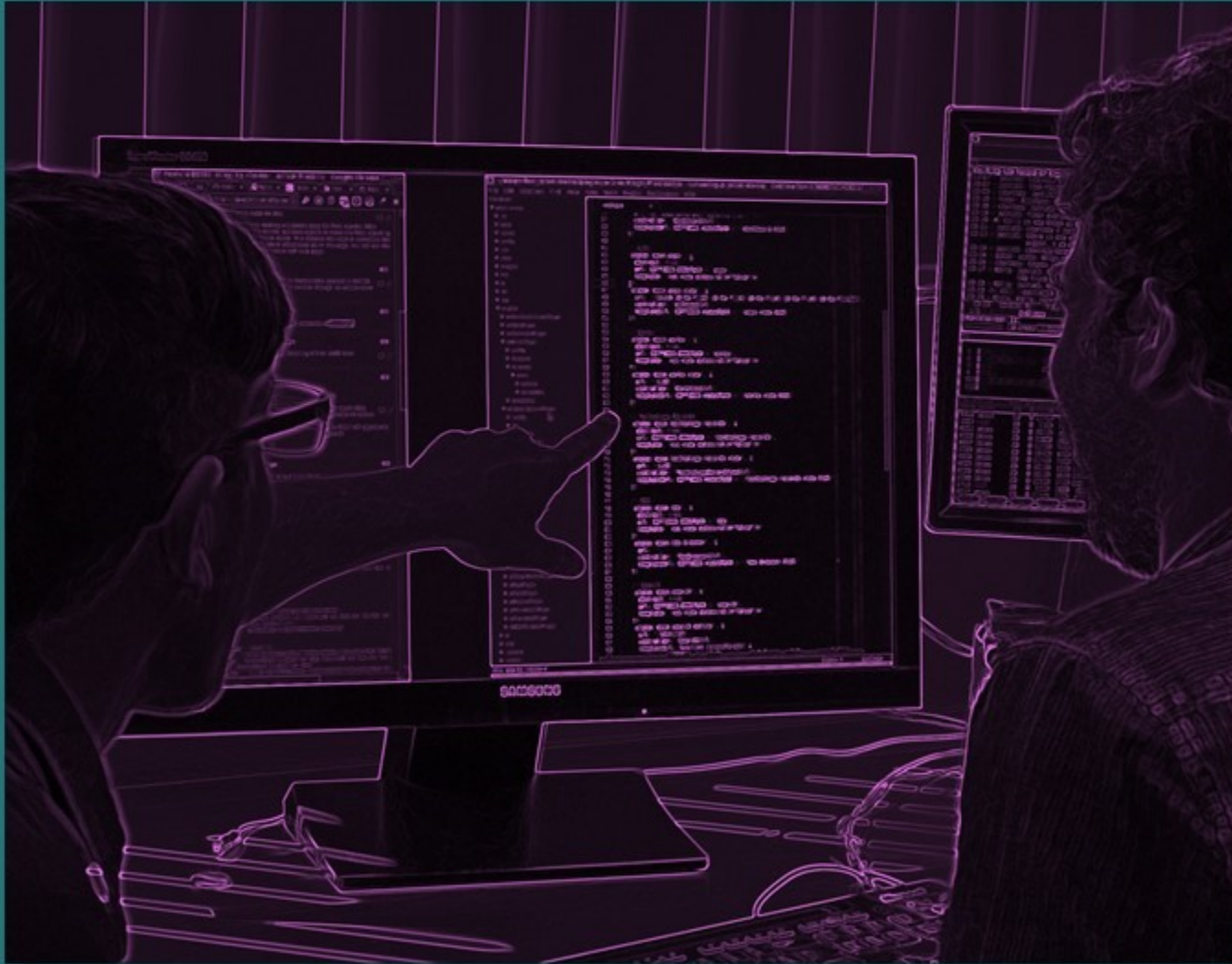


The background of the slide is a deep space image of the Veil Nebula (NGC 6960). It features intricate, wispy structures of interstellar dust and gas, primarily in shades of red and cyan, set against a dark, star-filled sky. A small, bright star with a green 'a' label is visible near the center of the image.

Provide an opportunity

for AtOM's evolution

AURA AtoM Upgrade/Rewrite Analysis

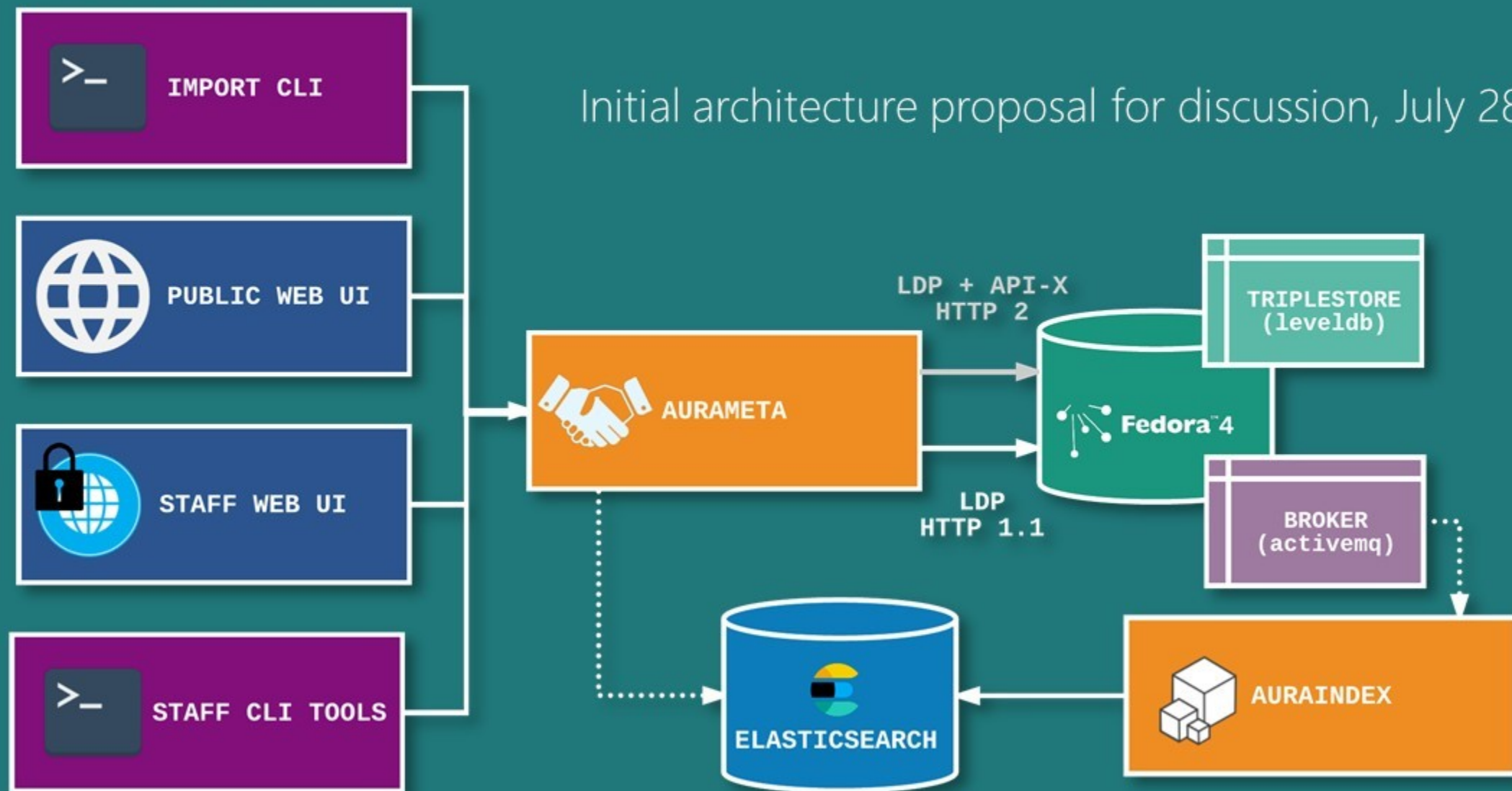


Artefactual's internal task force to begin considering possible technologies and development patterns for a next-generation version of AtoM.

- Highlight biggest current bottlenecks
- Research emerging technologies and standards
- Develop proposed models for implementation
- Consider upgrade paths
- Begin researching funding and community support options

AURA AtoM Upgrade/Rewrite Analysis

Initial architecture proposal for discussion, July 28, 2016



AURA AtoM Upgrade/Rewrite Analysis

Initial design goals:

- Use well-supported, stable open-source technologies
- Modular not monolithic
- Support linked data
- Separate front and back-end
- Scale to hundreds of millions of records
- Build permissions, accessibility, and internationalization in from the start
- Full multi-repository support
- Address the challenge of federation (contributing to portals, etc)



description

access

reporting

But these are just our ideas.

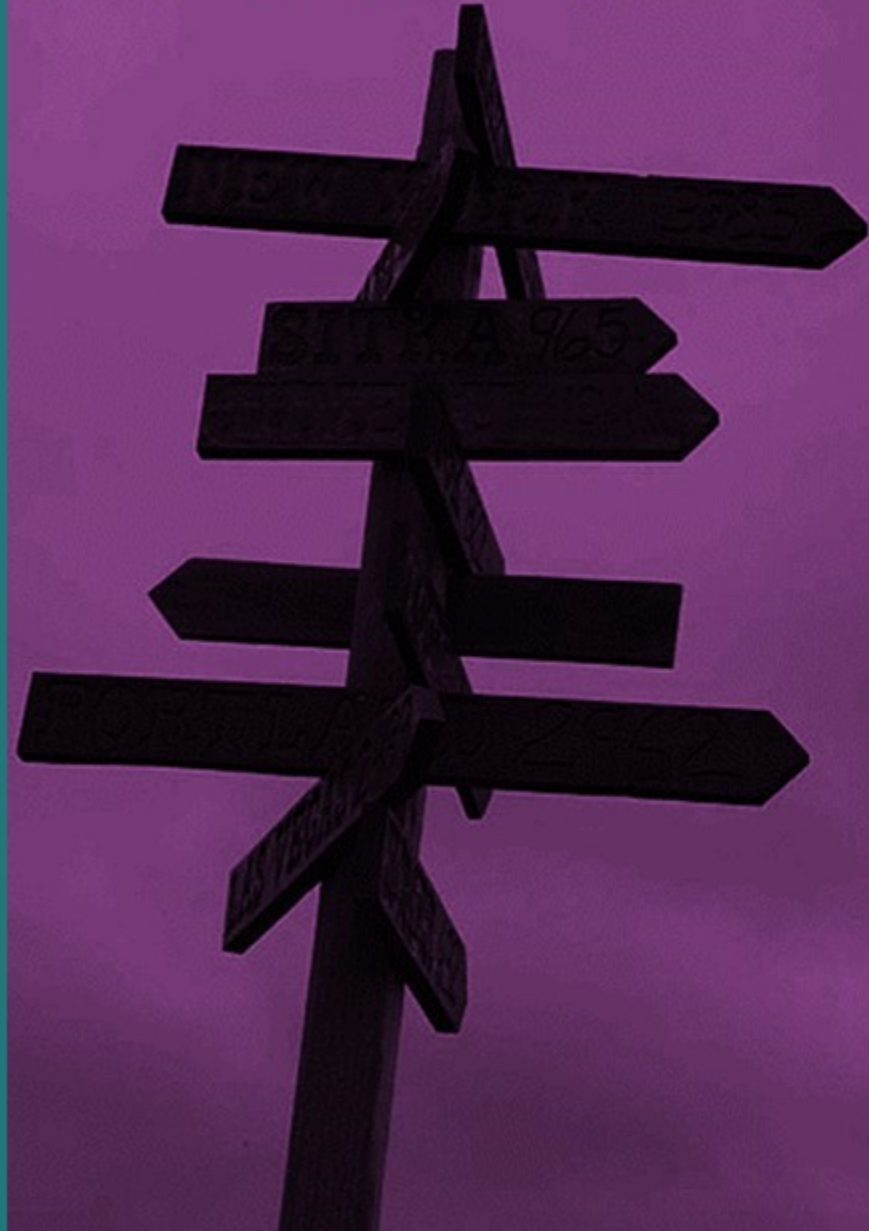


A large crowd of people is seen from behind, filling the frame. The image is in a dark, monochromatic color scheme, possibly black and white or a very dark blue. The people are densely packed, and their heads and shoulders are visible, creating a textured, almost abstract pattern of silhouettes. The perspective is from behind the crowd, looking forward.

We can't do this without you.

Issues to consider:

- How should we fund the project?
- How should we govern the project?
- How should we build the project?



Questions?



info@artefactual.com

