Geospatial Rights Management

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12 December 2007
Presentation Overview

• What is Geospatial Rights Management?
• Overview of the GeoDRM Reference Model Standard
• How we added Geospatial Rights Management to an ORCHESTRA Pilot
• Developing harmonised licensing terms based on Creative Commons
• What are the implications for data sharing in a distributed environment?
What is Geospatial Rights Management?

Geospatial Rights Management enables the electronic licensing of geospatial resources to manage and protect IPR.
OGC Implementation Specification Download

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http://www.opengeospatial.org/standards/as/geodrmrm
GeoRM Architecture – Automated Rights Management

rm = rights managed

Application \( rm \)

Service \( rm \)

Data \( rm \)

Interoperable Rights Management Framework

[Diagram showing the relationship between Application, Service, and Data with the term 'rm' indicating rights managed]
How we added Geospatial Rights Management to an ORCHESTRA Pilot

Stage 1: Open Access Services

Stage 2: Authentication and Authorisation

Stage 3: Prototype Rights Management
Pilot Deployment Architecture

Key
- ORCHESTRA Component
- GeoRM Component

Components:
- License Broker
- License Manager
- Authorization Service
- PDP Proxy
- Gatekeeper
- Authentication Service
- UAA Service
- Client Proxy
- Map Client
- Map Service
Developing harmonised licensing terms

Digital Content

Private Resource
• privacy
• sensitive data
• secret data

Public Resource
• open access data
• public domain
• freedom of information

Commercial Resource
• subscription
• pay as you go

Emergency Resource
• risk management
• crisis management
• disaster management
Extending Creative Commons

- Private Conditions
- Commercial Conditions

Pricing Model
- Commercial Access Use Case
- Public Access Use Case
- Private Access Use Case

Licence Model
- Rights Managed
- No Rights Reserved
- Some Rights Reserved

Security Model

Public Domain Use Case

Information Society Technologies
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<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution</td>
<td>You let others copy, distribute, display, and perform your copyrighted work — and derivative works based upon it — but only if they give credit the way you request</td>
</tr>
<tr>
<td>Non-commercial</td>
<td>You let others copy, distribute, display, and perform your work — and derivative works based upon it — but for non-commercial purposes only</td>
</tr>
<tr>
<td>No Derivative Works</td>
<td>You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it</td>
</tr>
<tr>
<td>Share Alike</td>
<td>You allow others to distribute derivative works only under a license identical to the license that governs your work</td>
</tr>
<tr>
<td>Non-disclosure</td>
<td>You let others use your copyrighted work — on the condition that the work or any derived work is not disclosed to a third party</td>
</tr>
<tr>
<td>Commercial</td>
<td>You let others use your copyrighted work for commercial purposes— and may expect financial compensation</td>
</tr>
<tr>
<td>Emergency</td>
<td>You let others use your copyrighted work for emergency purposes</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Protected</td>
<td>You let others use your copyrighted work subject to additional constraints – which may be enforced using a technical protection measure</td>
</tr>
<tr>
<td>Identity</td>
<td>is established electronically</td>
</tr>
<tr>
<td>Click-through</td>
<td>agree to terms and conditions</td>
</tr>
<tr>
<td>Temporal</td>
<td>for a specified period of time</td>
</tr>
<tr>
<td>Geographic</td>
<td>for a specified geographic area</td>
</tr>
<tr>
<td>Trial access</td>
<td>access limited for trial purposes</td>
</tr>
<tr>
<td>Encrypted</td>
<td>content is digitally encrypted</td>
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Conclusions

• ORCHESTRA has proven the technical feasibility of electronic licensing of geospatial resources

• We have developed an example licensing model building on the terms defined by Creative Commons

• Using this approach we can simplify and reduce the overheads licensing data in a manual way

• We need to work together as a community to develop harmonised terms for data sharing

• Geospatial Rights Management is a key enabler to building sustainable networks of information.
Thank you!

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