



InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

Areas That Should Be Covered Validated

Case Study 12: Antarctic Treaty Searchable Database

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with input from Paul Arthur Berkman
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Creator of the Fonds		
TOPIC	SPECIFICS	SOURCE
Name	EvREsearch LTD (http://www.evresearch.com). The digital entity was produced by Dr. Paul Arthur Berkman and George James Morgan, III from EvResearch LTD with Internet hosting by Native Voices International (http://www.nvi.net), which is Mr. Morgan's other company.	FR, pg. 1, author
Location	Columbus, Ohio, United States	Web site
Origins	EvREsearch Ltd. was founded in 1999 by two partners: Dr. Paul Arthur Berkman and George James Morgan III. The company was founded, in part, to implement and sustain the discover relationships within and between collections of public domain policy documents (such as the <i>Antarctic Treaty Searchable Database</i>). Dr. Berkman also a research professor in the Bren School of Environmental Science & Management at the University of California, Santa Barbara.	Web site, author
Legal Status	EvREsearch Ltd is a Limited Liability Company that that was incorporated in May 1999.	Author
Legislation	United States and international copyright laws United States and International patent laws	Web site
Norms	Norms related to policies that have been adopted or referenced by the Antarctic Treaty System for environmental and ecosystem protection, scientific cooperation, rational resource utilization and other topics. In addition norms are related to grants from the National Science Foundation.	Inferred, author
Funding	Initial funding was provided in 1998 by the National Science Foundation (Division of Undergraduate Education and Office of Polar Programs). Support to update the <i>Antarctic Treaty Searchable Database</i> (http://aspire.tierit.com/) from 2000-2003 was provided by EvREsearch LTD. Funding from the National Science Foundation (National Science Digital Library program – http://www.nsdl.org) resumed from 2003-2006 in collaboration from the Marine Mammal Commission. Throughout, access to the <i>Antarctic Treaty Searchable Database</i> has been continuously sustained by EvREsearch LTD.	FR, pg. 9, author
Resources	EvREsearch LTD has one location in Columbus, Ohio.	Web site

Governance	Dr. Paul Arthur Berkman is the CEO and George James Morgan III is the President of EvREsearch LTD. Dr. Berkman also is a research professor in the Bren School of Environmental Science & Management at the University of California, Santa Barbara.	Web site
Mandate	The mission of EvREsearch LTD is to: <i>“provide added value to the management, distribution, protection and rapid integration of digital information based on user-defined objectives, independent of scale, in all sectors of society across the world.”</i>	author
Philosophy	The philosophy underlying the implementation of the <i>Antarctic Treaty Searchable Database</i> , as well as other collections of digital information, is that discovery of relationships within and between authentic electronic records must derived from dynamic solutions that are based on user-defined criteria. To be objective and comprehensive, these dynamic solutions to integrate digital information must utilize the inherent structural features of the digital resources as well as their content and context.	author
Mission	The EvREsearch LTD mission with the <i>Antarctic Treaty Searchable Database</i> is and has been to facilitate objective discovery of relationships within and between policy documents that have been adopted by the Antarctic Treaty System from 1959 through the present. These Antarctic policy documents are accurate texts from authentic government sources (Department of State and Marine Mammal Commission). The dynamic integration of these texts utilizes the patented technology (“Information Management, Retrieval and Display Systems and Associated Methods”) from EvREsearch LTD without contamination by extraneous markup.	Inferred, author
Functions	• Administration • Research • Production • Analysis • Dissemination • Education	Inferred, author
Recognitions	Funding from the National Science Foundation as well as collaboration with the Department of State and the Marine Mammal Commission are recognized. United States and foreign patent and copyright protections by EvREsearch LTD also are recognized. Contributions from collaborators in the InterPARES program are recognized through their co-authorship.	author
Activities Resulting in Document Creation		
<i>Administrative and Managerial Framework</i>		
TOPIC	SPECIFICS	SOURCE
General Description	The management and administration of the <i>Antarctic Treaty Searchable Database</i> has been coordinated by Dr. Paul Arthur Berkman with input from an advisory board that has been constituted in conjunction with his grant from the National Science Foundation, National Science Digital Library program. Additional input has been received from individuals in the National Science Foundation, Department of State and many other institutions in the United States and abroad that are involved with the Antarctic Treaty System.	Inferred, author
Type of activities	• Overall project design and implementation • Accounting , budgeting and reporting • Convening and reporting on advisory board meetings • Presentations at professional meetings • Project review	author

	- Design and implementation of sustainability strategies for long-term preservation - Assessment of technical implementation features in relation to conventional solutions	
Documents resulting from activities	Berkman, P.A. 2002. <i>Science into Policy: Global Lessons from Antarctica</i> . Academic Press, San Diego. (an interdisciplinary textbook)	author
Existence of a RM and/or archives program	Backup copies of the databases are kept. Creation of a webCDserver™ technology (patent pending) to archive fully executable replicas of the Web site on static storage media. Each annual update of the <i>Antarctic Treaty Searchable Database</i> (now in its 5 th edition), from 1999-2005, has been archived on a webCDserver™.	FR, pg. 38, author
Individuals responsible for preservation	Dr. Paul Arthur Berkman and Mr. George James Morgan, III	author
Existence of preservation strategies	Within the EvREsearch LTD offices based on preservation of webCDserver™ replicas of Web sites.	author
Legal Requirements and Constraints	United States and international copyright laws United States and international patent laws Laws applicable to grant funds from the National Science Foundation.	Web site, author
Normative Requirements and Constraints	Norms are related to grants from the National Science Foundation.	Inferred
Technological Requirements and Constraints	Not applicable for the administrative activities.	
Digital entity being studied		
General Description	The <i>Antarctic Treaty Searchable Database</i> was produced in 1999 using materials from the Department of State to meet the teaching needs of Dr. Berkman in an undergraduate course that he been offering since 1982. The <i>Antarctic Treaty Searchable Database</i> is now in its 5 th Edition, and is widely used in many spheres around the world, as indicated by Web site that link to the database from: international government organizations (e.g., Antarctic Treaty Secretariat), non-governmental organization (e.g., Scientific Committee on Antarctic Research), national government agencies (e.g., Library of Congress), commercial institutions (e.g., International Association of Antarctic Tour Operators) and academic institutions (e.g., Oxford University) around the world. The purpose of the <i>Antarctic Treaty Searchable Database</i> is elaborated upon on page 2 of the Final Report.	FR, pg. 2, 9, 20, 29 author
Type of activities	- Compilation and generation of accurate digital information resources from the authentic source, United States Department of State (depository government for the 1959 Antarctic Treaty), with supplementary materials from Marine Mammal Commission - The information resources in the <i>Antarctic Treaty Searchable Database</i> are the diverse measures that have been approved by the Antarctic Treaty Consultative Parties from 1959 to the present - Identification of rules to automatically “break” the digital resources	FR, pg. 9-10, author

	into discrete granules (e.g., Articles within a Convention) that: (a) contain tags with that define their unique parent-child relationships; and (b) can be dynamically combined in relational schema • Implementation of patented Digital Integration System™ (DigIn®) from EvREsearch LTD enables users to dynamically generate expandable-collapsible hierarchies that objectively and comprehensively identify relationships within and between the relevant parent information resources in the collection without metadata or markup • Continuous implementation and maintenance of a public-access Web site (http://aspire.tierit.com/) from 1999 through the present along with periodic distribution of webCDserver™ with annual updates of the <i>Antarctic Treaty Searchable Database</i>	
Documents resulting from activities	The types of policy documents included in the <i>Antarctic Treaty Searchable Database</i> are noted on page 4 of the Final Report. An activity workflow diagram is on page 13. Documents originated from various sources in “hardcopy” or digital form that were used to generate discrete information granules that preserve the unique provenance of their parent-child relationship. Each resulting granule was: (a) automatically tagged with its unique parent-child relationship; (b) indexed; (c) made comprehensively searchable; and (d) dynamically organized into expandable-collapsible hierarchies with only the relevant granules.	FR, pg. 3-4 FR, pg. 12, Author
Existence of preservation strategies	The aggregation levels are based on the inherent parent-child relationships within the documents. Processes are documented. Dr. Berkman informally updates and preserves data. ASCII is used to avoid obsolescence.	FR, pg. 23 FR, pg. 27 FR, pg. 38
Legal Requirements and Constraints	United States and international copyright laws United States and international patent laws	Web site
Normative Requirements and Constraints	Norms related to policies that have been adopted or referenced by the Antarctic Treaty System for environmental and ecosystem protection, scientific cooperation, rational resource utilization and other topics. In addition norms are related to grants from the National Science Foundation.	FR, pg. 9 Inferred, author
Technological Requirements and Constraints	The <i>Antarctic Treaty Searchable Database</i> allows the searching of Treaty documents, the integration of digital record entities, and the dynamic generation of hierarchical displays to dynamically and comprehensively reveal objective relationships within and between digital records. The database is implemented with the proprietary Digital Integration System™ (DigIn®) from EvREsearch LTD. DigIn® automatically integrates digital record entities without markup, metadata or databases. “The digital record entities are individual files with text in ASCII format and inserted figures (saved as “jpg” files).” DIGIN technology and processes are described in detail in the Final Report on pages 15 to 18 and 23 to 26. “Each of the information granules or digital record entities in the current <i>Antarctic Treaty Searchable Database</i> contains its unique provenance information in a categorical header tag as well as its title.” The database is Hosted by NVI (Native Voices International).	FR, pg. 3, author FR, pg. 3 FR, pg. 15-18; pg. 23-26 FR, pg. 22 Inferred