



MultiTes: A Knowledge Organization Thesaurus Construction Tool for College Libraries under the University of Burdwan

Sukumar Mandal

Assistant Professor, Department of Library and Information Science, The University of Burdwan, Kolkata, India

Abstract

This paper discuss the knowledge organization system in digital environment through thesaurus construction tools. Subject organization and retrieval in a range of information systems and settings including Web sites and digital libraries. Electronically available documents on the Web are exploding at an ever-increasing rate. Many Web documents, however, contain rich knowledge that describes the document's content. The Web can be viewed as a body of text containing two fundamentally different types of data: the contents and the tags. A tag is in HTML (Hyper-Text Mark-up Language) meta-data describing the layout and linking structure between the text. For these kinds of documents we can apply different approaches to extract and structure terms automatically. These approaches are based on a statistical model and syntactic analysis that describe the data of interest, including relationships, and context keywords. In this research paper highlights to extracting and structuring terms from documents posted on the Web to construct a thesaurus. The proposed tool, MultiTes is used to construct domain independent thesaurus from HTML pages. MultiTes is used to capture the internal structure of meta information embedded in HTML documents and this thesaurus construction tool installed and configured in Ubuntu 14.04 through wine software for College Libraries under the University of Burdwan.

Keywords: Knowledge organisation, Thesaurus construction tools, Thesauri, Ontology, Taxonomy

Introduction

In general usage, a thesaurus is a reference work that lists words grouped together according to similarity of meaning (containing synonyms and sometimes antonyms), in contrast to a dictionary, which provides definitions for words, and generally lists them in alphabetical order. The main purpose of such reference works is to help the user "to find the word, or words, by which [an] idea may be most fitly and aptly expressed" – to quote Peter Mark Roget, architect of the best known thesaurus in the English language (Roger, 1852). The word "thesaurus" is derived from 16th-century New Latin, in turn from Latin thēsauros, which is the latinisation of the Greek θησαυρός (thēsauros), literally "treasure store", generally meaning a collection of things which are of big importance or value (and thus the

medieval rank of thesaurer was a synonym for treasurer). This meaning has been largely supplanted by Roget's usage of the term. Communication of information is one of the basic necessities of human societies of all times. Information in any format can be communicated through various means across space and time (Rajendra, 2005). The long-term goal of this research goes beyond the Dewey Decimal Classification that is used as a case. It addresses the questions of if and how the modelling approach and the FRBR -based model itself can be generalized and applied to other classification systems, multilingual and multicultural vocabularies, and even non - KOS resources that share similar characteristics (Žumer, Zeng & Mitchell, 2012). The eScience Thesaurus is now hosted on the eScience Portal for New England Librarians' website. It provides a comprehensive list of more than 50 different terminologies and concepts, with links to seminal and relevant literature, resources, grants, and interviews on a variety of eScience-related topics (Read...[et al], 2013). The knowledge organization is also available in digital environment through thesauri construction software and it can provide better access to digital collections.(Bhat, 2013).

Types of Taxonomies

Taxonomies help organize content to facilitate the use, management, and governance of documents and other information. Taxonomies differ in scale (from small to enterprise) and complexity. Complexity ranges from a list of simple controlled vocabularies of terms:

To **Simple hierarchies** of terms that organize them into categories;

To **Complex hierarchies**, which require thesaurus capabilities (e.g. for creating and maintaining terms and their complex reciprocal relationships); and

To **Ontologies**, which also require customizable semantic relationships between terms.

Components of Taxonomy

The components of taxonomy management are described in the following way:

Development includes creating, importing/exporting, and modifying the taxonomy; assigning user roles and permissions; thesaurus capabilities such as merging and subsuming terms, designating candidate and approved terms, indicating term creation date and modification date, permitting multiple hierarchies, disallowing illegal relationships, term editing functionality, and relationship rules enforcement.

Deployment includes classifying and metadata tagging the documents according to the taxonomy; it also includes integration with external ECM, RM, search, and other applications that use the taxonomy.

Maintenance and Governance includes modifying and administering all aspects of the taxonomy in a controlled manner, approval workflows, and activity logging.

User Functionality includes capabilities for different types of users. It includes access, search, browse, and presentation of taxonomy content; different views, visualizations, and reporting; generating reports in different displays; and customization capabilities.

Most organizations are at an early stage of their Information Architecture initiatives, and

therefore should prioritize Development. They should place less priority on Maintenance and Governance, User Functionality, and Deployment, although all are important.

Tools for thesaurus construction

Thesaurus construction tools is one of the important for knowledge organization in library and information services. The classic meaning of a thesaurus is a kind of dictionary that contains synonyms or alternative expressions for each term, and possibly even antonyms (Hedden, 2008). There are many thesaurus construction tools are available in knowledge society including here is a list of known (i) auto-categorization/taxonomy management tools

(i)	Auto-categorization/taxonomy management tools	Autonomy	Data Harmony MAIstro	Inxight
		Endeca	Fast Search & Transfer	Nstein Technologies
		Siderean	Mondeca ITM T3	SchemaLogic
		Smartlogic Semaphore	Synaptica	TopBraid Enterprise Vocabulary Net (EVN)
		Vivisimo	WebChoir	Wordmap
		Teragram		
(ii)	Building thesauri and taxonomies	a.k.a	PoolParty	TCS-10
		Termtree	TemaTres	MultiTes
		Lexaurus		
(iii)	Graphically representing taxonomies	FreeMind	MindManager	Data Harmony Thesaurus Master
		Visio		

(ii) tools for building thesauri and taxonomies and (iii) tools for graphically representing taxonomies .These tools are represents in the table-1.

Table – 1: Thesaurus construction tools

(i) Auto-categorization/taxonomy management tools

(a) Autonomy (<http://www.autonomy.com>)

Autonomy is a powerful Content Intelligence tool for organizing, revealing and controlling content. t the center of autonomy is Ontology manager, where organizations define terms and vocabularies according to their own business needs. Those terms are then put to work to drive content tagging as well as information visualization. It can help the automatic categorization; autonomy channels; automatic clustering; automatic Taxonomy generation and etc.

(b) Data Harmony MAIstro (<http://www.dataharmony.com>)

Data Harmony software provides knowledge management solutions to organize the information resources, based on a well-built and systematically applied taxonomy or thesaurus and managed all languages and concept categorization for precise tagging and smarter search. Data Harmony’s software tools enabled to construct a logical framework of topics reflecting the vocabulary of any subject area. The search results becomes

information, quickly and accurately found and exports taxonomy files in XML, OWL, SKOS, and 11 other formats.

(c) Endeca (<http://endeca.com>)

The Endeca Information Access Platform thrives on robust, well-constructed and well-maintained taxonomies. The Wordmap Endeca Taxonomy Connector also allows you to leverage taxonomy in Endeca's powerful auto-classification engine for improved content indexing and it provides software to analyze and cluster unstructured text. The data and functions of Wordmap are available via imported and exported XML, a documented Java API and taxonomy connectors. Wordmap can thus provide enterprise-class integration capabilities.

(d) Fast Search & Transfer (<http://www.fastsearch.com>)

Headed by former FAST Search architect Paul Kelly, the FirstServis Enterprise Search Practice delivers best practice and thought leadership in information management and access solutions across Australia, New Zealand and South-East Asia and it focus on search and metadata and its depth of experience on the Microsoft FAST and SharePoint platforms. The essential features enterprise search deployment, connectivity solutions, personal & social search, Taxonomy management, automatic content classification and Website Search.

(e) Inxight (<http://www.inxight.com>)

Access relevant information regardless of data type, data domain, or data source, improve data quality for more effective decision making and business operations and save time and money with a single solution for complete and accurate information. Extract, transform, and load data into a data warehouse to create a complete view, access data from Hadoop to combine unstructured and structured data for increased insight and unlock meaning from unstructured documents with native text data processing.

(f) Mondeca ITM T3 (<http://www.mondeca.com>)

Mondeca's Smart Content Factory (SCF) leverages the power of semantic technologies to boost the productivity of content management and delivery processes and bring about new smarter ways to interact with content. SCF helps clients to aggregate relevant domain data models and vocabularies and Content Management Systems.

(g) Nstein Technologies (<http://www.nstein.com>)

Nstein Technologies (TSX: EIN) provides next generation content management solutions that help information-rich enterprises centralize, understand and manage vast amounts of content. Nstein's Content Management and Web Publishing solutions both rely on Nstein's patented Text Mining Engine for semantic & text analysis.

(h) Schema Logic (<http://schemalogic.com>)

Schema Server is part of the SchemaLogic Integrator, which is described as an architecture that supports the robust enterprise scale implementation of metadata and reference data propagation and integration to enterprise applications such as content

management, digital asset, commerce, search, portals, transform hubs and other metadata configurable applications. SchemaServer's vocabulary management engine is based on the ANSI z39.19 standards and fully supports the requirements as described.

(i) Siderean (<http://www.siderean.com>)

Siderean offered a semantic search system. Enterprise search embraced semantic technology, tri-plex, rich metadata, and standards as competitors pursued proprietary solutions. The company sought to use semantic methods to deliver a more effective enterprise search solution. Siderean was one of the early adopters of Lucene for keyword retrieval. The firm was an early entrant into the SGML/XML data management approach to information retrieval.

(j) Smart logic Semaphore (<http://www.smartlogic.com>)

The Smartlogic's Semaphore Ontology Manager is a multi-user system that manages the entire taxonomy life-cycle. A management environment for all types of Knowledge Organization Systems (taxonomy, thesauri, ontology, controlled vocabulary, etc.) The Semaphore Ontology Manager provides a user interface in which to develop a taxonomy, a logic layer that ensures the consistency and accuracy of the information entered ideally conforming to the ISO 2788 standard.

(k) Synaptica (<http://www.synaptica.com/djcs/synaptica>)

Synaptica is a client-server web application that can be installed locally on a client's intranet or extranet server. Alternatively, Synapse Corporation can host client systems servers located in the Denver Technological Center in Colorado USA, which means the client needs no special equipment. Synaptica supports the creation of electronic thesauri in compliance with ANSI/NISO Standard Z39.19-1993. Features include simple search (descriptors or keywords); power search (over a dozen filters); popup windows displaying term details; expandable hierarchies and relationships and etc.

(l) Teragram (<http://www.teragram.com>)

Teragram, a provider of multilingual natural language processing technologies, recently announced the launch of Semantic Term Manager v. 2.0 (STM v. 2.0), software that enables management of content and maintenance of ontologies in enterprise content repositories and databases. STM v. 2.0 helps corporate librarians to maintain ontologies and integrate this information directly with Teragram's TK240 taxonomy management tool. The combination of these two programs allows knowledge workers to maintain metadata across repositories and databases and to automatically tag documents according to the defined taxonomies. These tools help to simplify the enterprise search and retrieval process.

(m) TopBraid Enterprise Vocabulary Net (EVN)

(http://www.topquadrant.com/solutions/ent_vocab_net.html)

Top Braid Composer is the world's most powerful semantic applications and fully compliant with W3C standards for developing, managing and testing configurations of

ontologies and linked data. The essential features are Flexible Data Model, Vocabulary Editing, search (simple and advanced), SKOS, Import/Export (RDBMs, RSS feeds, spreadsheets, XML, SPARQL endpoints, RDF and OWL) and etc.

(n) Vivisimo (<http://vivisimo.com>)

Vivisimo Partnership with WAND helps Enterprise Search Customers Improve Relevancy of Search Results. With the new interface, users see exactly how they are modifying their search. Vivisimo provides enterprises with innovative search solutions that help end-users find and take advantage of all appropriate and available information, regardless of source, location or type and easy-to-use interfaces, flexible security management and a modern architecture that enables quick deployment.

(o) WebChoir (<http://webchoir.com>)

Web Choir, Inc. is an outgrowth from the Liu-Palmer collaboration, creators of the original Thesaurus Construction System. TermChoir is a hierarchical with alphabetical list of information organizing and searching tool that enables information professionals to create and search varieties of hierarchical subject categories, controlled vocabularies, and taxonomies based on either pre-defined standards or a user-defined structure. A modified and less expensive client/server version, TCS-10, also is available (an upgrade from the original Thesaurus Construction System).

(p) Word map (<http://www.wordmap.com>)

It is used by information professionals to develop the category and term sets that bring consistency, precision and control to enterprise information management. The data and functions of Wordmap are available via imported and exported XML, a documented Java API and taxonomy connectors. Wordmap can thus provide enterprise-class integration capabilities. The major advantages of wordmap include editors can freely define and develop metadata values; relationship typing and custom metadata attributes are supported; multiple taxonomies with cross-mappings; security model, allowing user and group privileges over elements and branches, Complete localization support, with UTF-8 and ISO locales and extracted and edited from the www site.

(ii) Tools for building thesauri and taxonomies

(a) a.k.a (http://www.a-k-a.com.au/aka_classification)

a.k.a. software is a suite of tools for developing and managing enterprise information governance framework . a.k.a. manages metadata, taxonomies (thesauri, controlled vocabularies), disposition schedules, inventories, data maps and other information governance structures which are published in a wide range of formats to enable delivery into eCM systems and to the web. Synercon North America specializes in the provision of tools and services for best practice records and information management (RIM). The ISO 15489 Standard for Records Management provides the conceptual framework for sustainable records and information management and it also provides on ISO 15489 standards, functional taxonomies for records management and Metadata modeling for

records management.

(b) Pool Party (<http://www.poolparty.biz/>)

Pool Party technologies are mainly based on Java. PoolParty can be run on 64bit Linux (Debian GNU/Linux 6, CentOS/Red Hat Enterprise Linux 6, Ubuntu LTS) or 64bit Windows (Windows Server 2008 R2) and server side required minimum of 2 GB RAM dedicated to Apache Tomcat (4 GB are recommended) per service (PPT, PPX, PPS). There are options to cluster PoolParty services. No additional database has to be installed. On client side there is only a browser needed to maintain PoolParty thesauri and used as cloud - based service and publish data and vocabularies as 'Linked Open Data'.

(c) Term tree (<http://www.termtree.com.au>)

Term Tree, originally released January 1999, is now a maintenance only product and no longer available for download. 121 is now the product being actively developed and we suggest you evaluate 121 in preference to Term Tree. Term Tree 2000 verifies the validity of links as the thesaurus is created and automatically constructs all required reverse relationship links. Reports are available for: Concatenations from top terms down; Term hierarchies starting from top terms; Term relationships; KWIC and KWOC and Categories and Classifications.

(d) Tema Tres (<http://www.tematres.com>)

A web application for managing documentation languages - especially good at hierarchical thesauri and cataloging vocabularies but also useful for navigation structures. Features (version 0.9) include standard thesaurus relations between terms (USE/UF, BT/NT, RT/RT). No limits on number of terms, levels of hierarchy, alternative labels. Systematic or alphabetical navigation. Multilingual interface, in English, Spanish or Portuguese. Output in SKOS-Core, Dublin Core and Z Thes formats.

(e) Multi Tes (<http://www.multites.com>)

Supports an unlimited number of thesauri (both monolingual and multilingual). Automatic validation of conflicting relationships. Up to 100 million terms per thesaurus and an unlimited number of hierarchies. Support for ANSI/NISO relationships plus user defined relationships and comment fields. Import module allows you to import any electronic thesaurus without re-keying. Reports include: Alphabetical, Hierarchical (two-way, showing each term in its hierarchical context), TopTerm, Classified, Rotated (KWOC), and Microthesauri and it supports HTML and XML file generator.

(f) Lexaurus (<http://public.lexaurus.net/>)

Lexaurus Bank version 5 was released in December 2011. It is a powerful terminology management system for publishing term or concept based vocabularies, concept schemes, data definitions, taxonomies and thesauri. It facilitates the import, export and cross-mapping of terminology structures in a variety of formats currently supporting SKOS, VDEX (token and nested), XVD, ESD Toolkit, Zthes,i2b2 (ontology and concept) and Snomed and etc.. It is completely multilingual both in terms of the data it contains and the user interface for the

application.

(iii) Tools for graphically representing taxonomies

(a) Data Harmony Thesaurus Master (<http://www.dataharmony.com>)

Data Harmony Thesaurus Master facilitates development and maintenance of subject-based thesauri, with the full range of thesaural relationships, and it permits importation of external taxonomies. Reciprocal relationships are validated and entered automatically and adheres to thesaurus construction standards (ISO 2788, ISO 5964, and NISO Z39.19). and can be set to allow polyhierarchies (Multiple Broader Terms) and understanding of the subject area.. Thesauri can printed as any of the display views, and can be saved as XML files or other formats.

(b) Mind Manager (<http://www.mindjet.com/>)

The idea originated from discussions with the New Zealand Inland Revenue Department during 2012 wanting to refine their folder structure taxonomies. The functionality is focused on providing a more visual and intuitive way of creating and reducing folder development time for using MindManager and add in MapFolderMaker for creating and managing folder taxonomies . A user develops the folder structure using MindManager and then uses the one click function to create a corresponding Microsoft Folder structure on a hard drive or server (standard or corresponding colour folders).

(c) Free Mind (http://freemind.sourceforge.net/wiki/index.php/Main_Page)

The purpose of this module is to export a site's taxonomy in Freemind format, and so to offer an alternative navigational tool to those already provided by modules such as taxonomy dhtml. Also the module will be upgraded to include an import option, so that Freemind can be used as a graphical taxonomy design tool and Currently, the module displays or exports a vocabulary and lanning views integration.

(d) Visio (<http://boxesandarrows.com/automating-diagrams-with-visio/>)

Visio is a taxonomy development tools and it outlines the general and advanced graphic types of taxonomies, the components of the tazonomy management process. It help organize content to facilitate the use, management, and governance of documents and other information. Taxonomies differ in scale (from small to enterprise) and complexity and it helps list of simple controlled vocabularies of terms, simple hierarchies and customizable semantic relationships between terms and etc.

4. Development of MultiTes in a given area

Development of MultiTes is one of the important task for college libraries under the University of Burdwan on Ubuntu 14.04 through wine software. This wine software help the installation of windows related software like .exe file. This research work selected because Installation of MultiTes is very easy task in Windows operating system and Linux (Ubuntu 14.04) operating system. The process of installation is described in the following way: (i) Download the MultiTes from the <http://www.multites.com/> (ii) Permission the .exe

file i.e read, write and execute. (iii) Installation of Wine in Ubuntu 14.04 through terminal by using the following command **sudo apt-get install wine** (iv) Configure the wine just click ok button to activate or run wine (v) Right click on MultiTes software and open its windows program loader and then click next for the installation of thesaurus construction tool like MultiTes (vi) When installation is complete the MultiTes will come in two ways under wine browse C drive and under programs MultiTes and this screen will generate in the *Figure - 1*. (vii) Finally to open and create the new file for thesaurus construction for CLBU.

5. Testing of MultiTes on Ubuntu 14.04

In knowledge organization thesaurus construction which gives how to accomplish several tasks to build a thesaurus in college libraries. The sample thesaurus is based on "Geographic Locations". Most functions have shortcuts associated with them. Some make optional the use of a mouse, such as using Ctrl-F4 or Esc to close most windows. Other functions are accessible by "right clicking" on an item, where a popup menu with context-sensitive options appears. Here is what you are going to do in this section:

- (i) Create your first thesaurus
- (ii) Input terms (raw vocabulary)
- (ii) Build relationships between terms
- (iv) Use the Quick Data Entry screen
- (v) Display Term information
- (vi) View more options to enter New Terms
- (vii) View more options to build Relationships
- (viii) Print the Alphabetical Report
- (ix) Create second thesaurus

Start the system on the File menu, click New, the system will prompt you for a filename and location. Type Geographic Locations and press Enter, the system will now prompt you for a description for this thesaurus. In Description enter Thesaurus of Geographic Locations and press Enter. In input terms Press Ctrl-N and type USA and press Enter to save the new term. In this section Press Ctrl-A. Select code UF, then press Tab. Type United States of America and press Enter. Click Yes when prompted to add the term. Press the Esc key to close this window and go back to the main browser. Press Ctrl-Q and type in the terms and relationships as show below. Click the Save button. The system will import the terms and relationships, and it will create all the corresponding reciprocal relationships in a single operation. The main browser shows the terms with their corresponding status, type, flag, relationships, notes, and categories. Term record information window can be accessed by first selecting the term to display from the main window (i.e. highlight USA), then use any of the following: In the main list, double click on the term in the main grid (i.e. USA); In the main list, highlight a term and press Enter; Right click on a term and select Display Term Record; On the main menu, select Term - Display Term Record (or use its short cut Ctrl-Z); Click On the main menu, select Term - Display Term Record (or use its short cut Ctrl-Z); Click the Display button on the button bar. Terms can be added to the thesaurus in

many ways : Click the New Term button on the button bar Select Term - New term and copy a term to the clipboard (from another application) and then Edit - Paste term record. Select File, Import to import a text file with your terms. Relationships can be added to the thesaurus in many ways: Right click on a term, then select Add Relationships; Right click on a term, then select +Rel Wiz; Select Term - Add Relationships (or use its shortcut Ctrl-A); Click the +Rel Wiz on the button bar; Display the Term Record and then click the Add Rels... button; Display the Term Record and then click the +Rel Wiz button and select File, Import to import a text file with your terms and relationships. On the Reports menu, click Alphabetical and click the Print button. On the File menu, click New and type TEST and save this file

6. Results

Knowledge organization is an essential in college libraries under the University of Burdwan and possible through thesaurus construction software like MultiTes. This research study select the MultiTes because its support both the operating system (Windows and Linux). The result of MultiTes are represents in different ways but here only shows the important subject indexing. It also possible to create the HTML files for the Web as well as intranet towards next automated and digital library system and these results are represents in the following way:

6.1 Thesaurus construction interface

Interface of thesaurus construction is to vary from software to software. In this section used the MultiTes Thesaurus construction software (Figure-2). All the terms are appeared in this screen for preparing and maintaining the controlled vocabulleries. Search facilities is possible for the existing term in thesaurus construction. Appart from this here also possible in advanced search, managed categories, quick entry, refresh list, new term, display term and flag term. It also highlights the important fields like file, edit, define, term and reports.

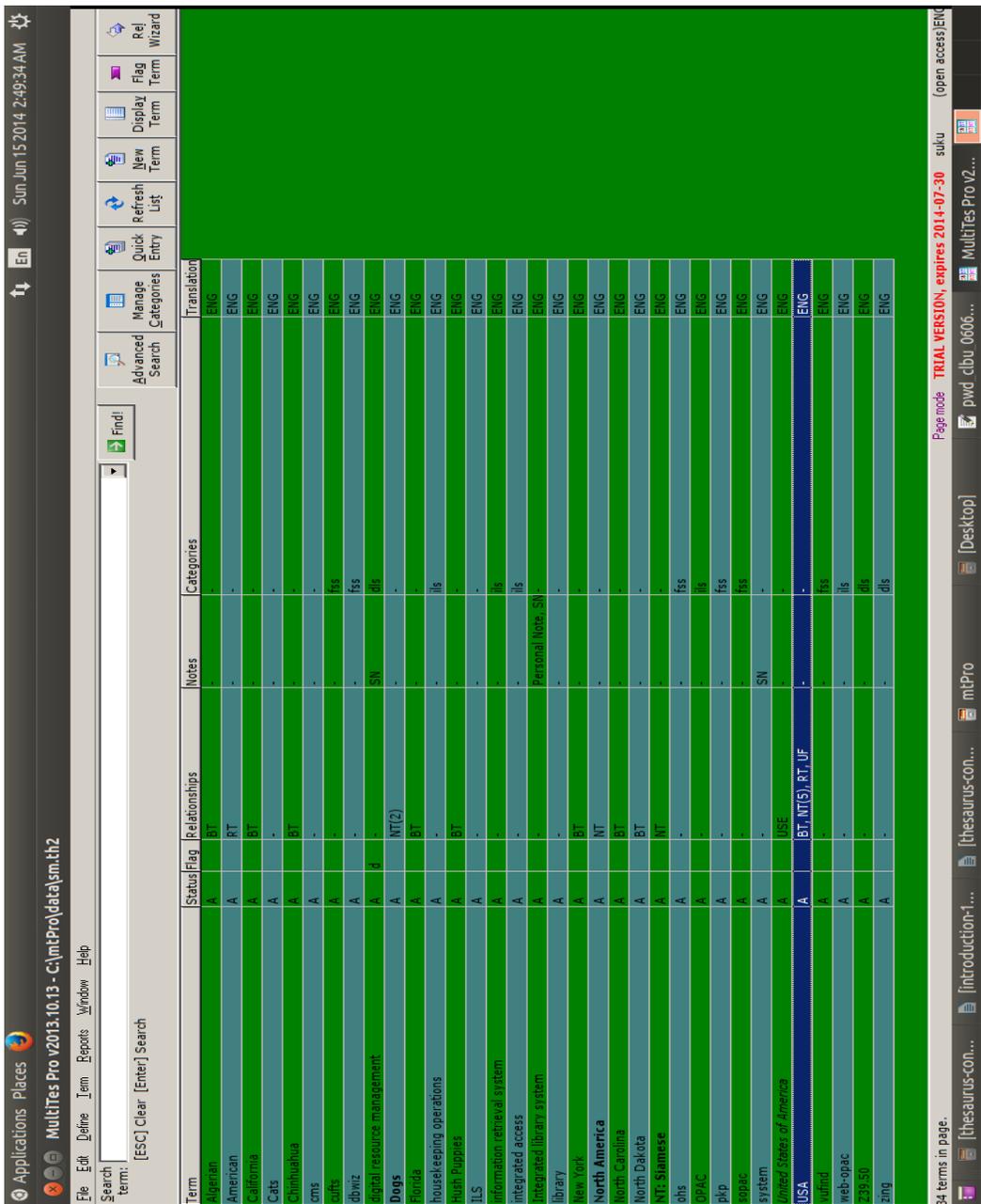


Figure – 2: Thesaurus construction interface

6.2 Record details of United States of America

The screen display the term of United States of America and their relationships use USA. Thesaurus construction by MultiTes in record levels it is clear that the USA is broader term. The Figure – 3 will generate the record details of United States of America.

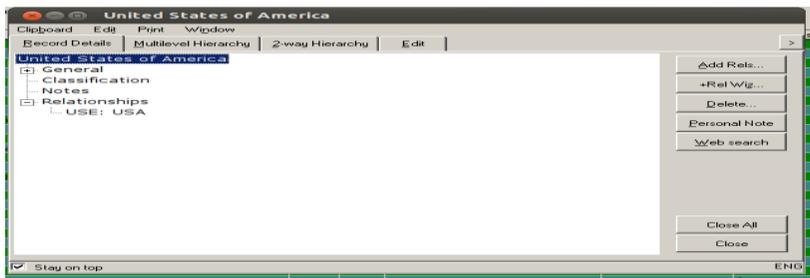


Figure – 3: Record details of United States of America

6.3 Record details of USA

USA is a use term in MultiTes for the construction of Thesaurus in record details of USA. The Figure – 4 display the details of USA which is relevant term under the relationships including UF: United States of America; BT: North America; NT: California; NT: Florida; NT: Newyork; NT: North Carolina; NT: North Dakota and RT: American.

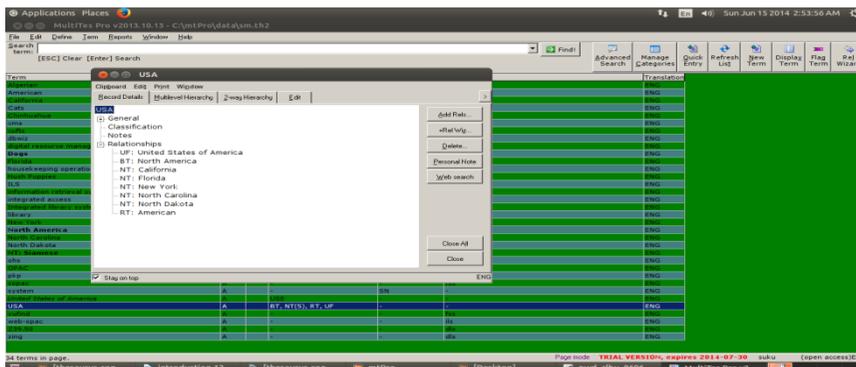


Figure – 4: Record details of USA

6.4 Multilevel Hierarchy

A multilevel hierarchical display format saves time for the controlled vocabulary user because all levels of the broader and narrower terms related to a given term are immediately visible. This is in contrast with the flat format described above, in which only one level of broader or narrower terms is displayed in Figure -5 and the user is required to navigate from term to term one level at a time to discover the full hierarchy. In both multilevel formats described in the following sections, the sibling terms (the related terms at the same level) of the given term are only displayed by viewing the broader term. Because the entire hierarchy is repeated over and over again, these display formats are far more space-consuming than the flat format and hence less desirable for a printed controlled vocabulary. However, if the hierarchies are not very deep, e.g., only three or four levels, the extra space required could be justifiable.

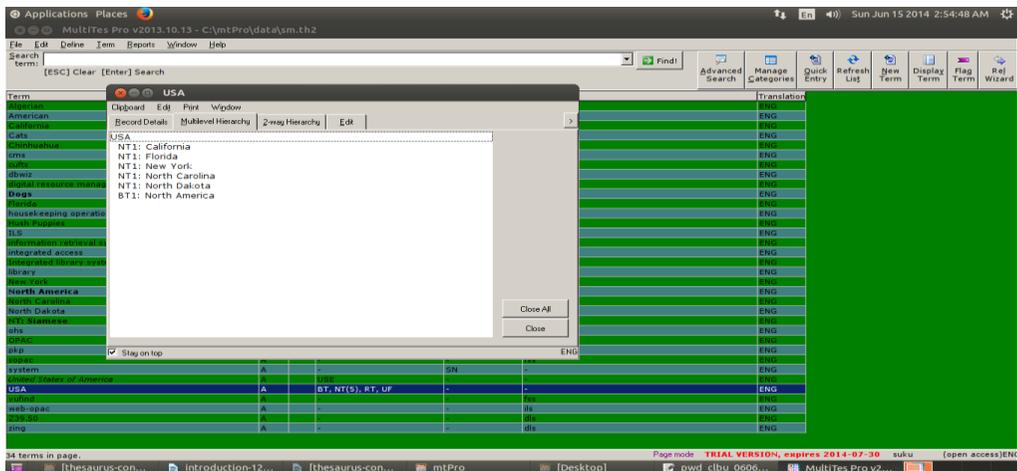


Figure – 5: Multilevel Hierarchy

6.5 2-way Hierarchy

Hierarchical terms are displayed in the thesaurus in two ways, alphabetical and hierarchical but both indicate a hierarchy in which an individual term belongs. Lists every term in the thesaurus in one alphabetical sequence and uses broader terms (BT) and narrower terms (NT) to indicate hierarchical relationships between different terms in the same class. A broader term is more general and indicates the next level up in that hierarchy, a narrower term is more specific and indicates the next level down in that hierarchy, eg North America broader term USA. Allows the user to see where each individual term belongs in relation to the class in which it resides. It allows the user to look up or down a hierarchy to choose either a broader or more specific term. The Figure – 6 will generate the 2 - way hierarchies in MultiTes thesaurus construction.

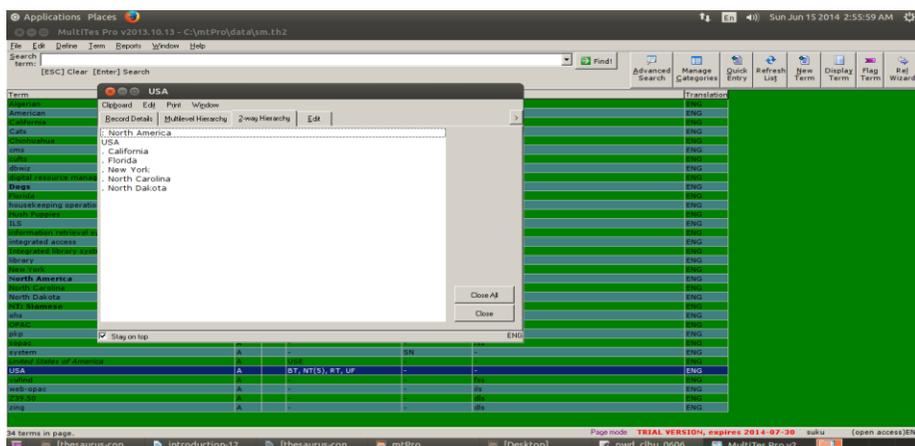


Figure – 6: 2-way Hierarchy

6.6 HTML Conversion for access Thesaurus through web

Hypertext is becoming a popular approach to the online presentation of large corpora of information. On the reports menu, click report generator and select output to HTML. Go to the display items tab and select USE, UF, BT,, NT, and RT and click the print button. Click the save button to accept the default name repgen.htm and use Mozilla firefox to display the /var/www/html/repgen.htm file. The Figure – 7 will represent the HTML page of MultiTes thesaurus construction for the users as well as researchers.

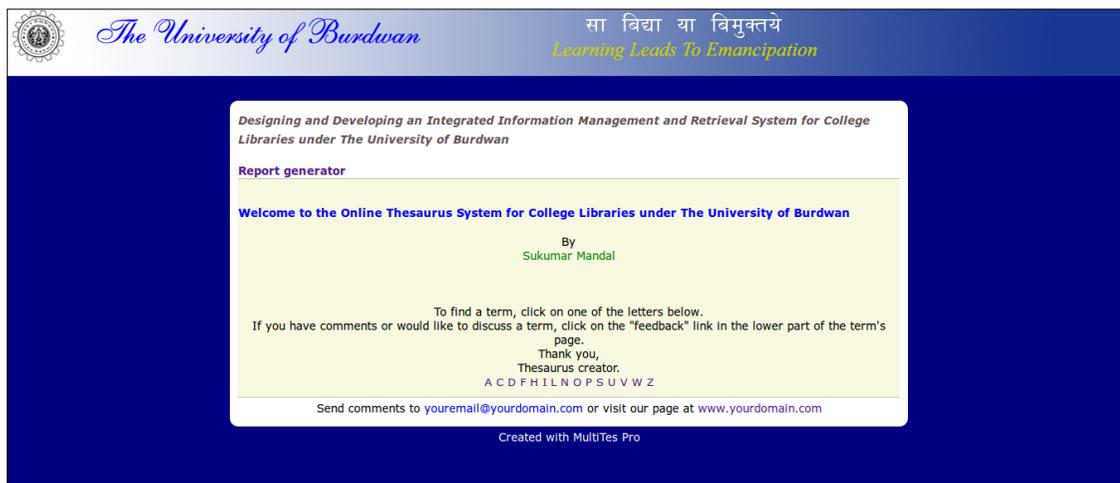


Figure – 7: HTML Conversion for access Thesaurus through web



7. Conclusion

A thesaurus is never “finished,” unless it is no longer being used for indexing or its database is no longer being updated. Plan for maintenance before you even begin developing your thesaurus. A thesaurus which is not well-maintained quickly becomes a liability rather than an asset. The idea of thesaurus construction tool is to guide all the indexers and all the searchers to use the same term for the same concept, so that search results will be as complete as possible. If the thesaurus is multilingual, equivalent terms in other languages are shown too. Following international standards, concepts are generally arranged hierarchically within facets or grouped by themes or topics. Unlike a general thesaurus used for literary purposes, information retrieval thesauri typically focus on one discipline, subject or field of study. The two main purposes of a thesaurus are essential in integrated library management and retrieval system for college libraries under the University of Burdwan :

(i)	<i>To help people choose the appropriate concept term(s) quickly and easily so that a search can later be made on a retrieval system for information relating to the term(s); and</i>
(ii)	<i>To determine the standardised vocabulary used for these terms.</i>

A thesaurus also has a classification system of its own. However, this classification system is not about helping you find the concept in one or more books on a library shelf via a number. The classification is merely there to help you see how various terms are interrelated in a hierarchical manner and to let you know precisely what term to use when searching for information on a retrieval system.

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