TECHNOLOGY NAVIGATOR UPDATE

Status of Society Participation

Most IEEE Society/Councils (S/C) have designated one or more volunteers who will populate the Technology Navigator database with tags that relate to publications, conferences, and standards relevant to the individual S/C organization. The attached PDF lists S/C status of participation and representation of this activity prior to the upcoming launch of Version 1.0 which will be functional and released internally to the S/C's in June for testing. In order to prepare for this launch we are asking the S/C's to complete their work by June 12, 2009.

The Big Picture of the Project

The major goal of this project is to facilitate the discovery of resources in engineering by users from industry and education as well as the general public. The approach involves the application of visual navigation tools and semantic methods to cluster and file resources across discipline and industry sectors. For a demo of the Technology Navigator go to:

http://www.thoughtcap.com/ieee
username: ieee   password: ieeedemo

New Administrative Interface

The new Technology Navigator Administrative Interface will streamline inputting data so that tagging and mapping can take place at once.   The new interface will include the most recent data sets from IEEE Standards, IEEE Conferences, and IEEE Periodicals that are to be applied to tags and sectors.

In about a week, you will receive a user ID/password which will enable you to begin your work. Any questions, please contact Peter Wiesner
p.wiesner@ieee.org

This administrative interface will provide access to the entire S/C inputs and you will be able to see in the overlapping S/C areas what others have already done. This is useful from two points. If you have already completed all your work please review what is in place and look for any missing pieces as the databases are now completed. For example: A conference may have been missed, and standards are now loaded

1)   In the review above you will be able to see how others have possibly tagged and mapped the same material. You may decide to reuse another S/C tag, which in the end will reduce the visual clutter an end user will see when using the Tech Navigator tool.

So, even if you have completed your work a review and an update is very useful.

Location of Administrative Interface

The new tool for populating the database will be available on the IEEE site:

 http://www.ieee.org/go/ta_tagging

You will receive an email with your login credentials when this site is active with the latest input from Standards, Conferences and Periodicals. We will also send out a notification to encourage you and your colleagues to begin populating the database.

Sign on Procedures

A single user name and password will be provided for each S/C to the S/C primary contact. This user name and password may be shared with other volunteers who will be contributing to mapping and tagging the S/C resources.

Educational Support

When you log in, the first thing you will see is a short video that will explain how to use the administrative interface.

For the time being, we have prepared a set of screenshots with explanations that describes how the administrative interface will be used.

S/C volunteers are working with the Technology Navigator admin tools have access to many help resources available, including:

- in-context help (tooltips, look for the "?")
- general feedback/question form
- video tutorial
- Frequently Asked Questions (FAQ)

Please use these resources or contact TechNav help through technav@ieee.org.

Hints for Populating the Technology Navigator Database

Tags are to represent terms that are commonly understood by engineering practitioners and, in many cases, by non-technical users interested in learning more about technology and engineering. The idea is to help users to orient themselves in defining their search for resources that are relevant to their work and studies. The Technology Navigator brings users into a zone where they can begin to see the relationships among disciplines and application areas.

- One way to start developing tags is to examine how your S/C positions its publications and conferences for users that are not necessarily familiar with the inner workings of your technical pursuits. Consider the scope of potential users – students, teachers, engineers from other discipline areas. Include in your thoughts the perspective of non-technical, professionals who would be interested in understanding the relationship of engineering and technology in its various manifestations.
- Think of tags that could provide a reasonably clear path to your organization's resources. It's completely acceptable to create tags that could lead to resources outside of your organization as well as within yours.

Many have asked, how broad or granular are tags? The answer is that the tags will verge towards the middle. Obviously engineering and computing are very broad, and the more useful tags zero in on specific technologies and application areas. However, making the tags too granular runs the risk of cluttering the lists in a way that would not be helpful to non-specialists. One has to remember that the Technology Navigator does not replace IEEE Xplore or other search engines, which are designed to handle queries of varying granularity by informed users.

The Technology Navigator provides an administrative interface for each Society and Council to manage its tags and related resources (Conferences, Publications, Standards, etc.). This administrative interface enables S/C volunteers to:
- edit information (Tag name, Filters, Related Tags) for Tags that have already been created
- create new tags or map existing Tags added by other S/C's to your S/C Tag set
- map Tags to Resources

- edit Resource details (descriptions, web URL's)

Obtaining complete and accurate mapping of Tags to Resources, and fully describing your S/C's Tags by adding Filters and Related Tags, will ensure that your S/C data is findable and relevant to users of the Technology Navigator.

Additionally, "cleaning up" any run-on tag names, duplicate tags, or spelling/grammar errors will make the presentation of your S/C information in the Technology Navigator more user-friendly.

Figure 1: Mapping of Tags for Reliability Society

Technology Navigator — Reliability Society

Search entries: [_____] (Apply)   Password | Logout

1 to 50 (of 100 total)

Tag	R Resources	Related Tags	Filter	Sector
diagnostic tools	2007 IEEE International Symposium on Software Reliability Engineering (ISSRE), Transactions on Reliability, 2007 Annual Reliability and Maintainability Symposium – Product Quality & Integrity (RAMS), 2007 IEEE International Reliability Physics Symposium (IRPS), 2007 18th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2007, 2007 14th International Symposium on Physical & Failure Analysis of ICs (IPFA 2007), 2007 International Electrostatic Discharge Wo...	six sigma, design of experiments (DOE), reliability modeling, reliability prediction analysis	Foundation Technology	Manufacturing & Devices, Healthcare
degradation	2007 IEEE International Symposium on Software Reliability Engineering (ISSRE), Transactions on Reliability, 2007 Annual Reliability and Maintainability Symposium – Product Quality & Integrity (RAMS), 2007 IEEE International Reliability Physics Symposium (IRPS), 2007 18th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2007, 2007 14th International Symposium on Physical & Failure Analysis of ICs (IPFA 2007), 2007 International Electrostatic Discharge Wo...	process failure modes and effects analysis, failure mode & effects baseline, failure analysis, failure rate, field failures, physics of failure, corrosion	Foundation Technology	Defense, Energy, Computing & Information Technology
built-in test	Transactions on Reliability, 2007 IEEE International Symposium on Software Reliability Engineering (ISSRE), 2007 14th International Symposium on Physical & Failure Analysis of ICs (IPFA 2007), 2007 IEEE International Reliability Physics Symposium (IRPS), 2007 18th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2007, 2007 IEEE International Integrated Reliability Workshop (IRW)		Foundation Technology	Energy, Defense
design of experiments (DOE)	2007 IEEE International Symposium on Software Reliability Engineering (ISSRE), 2007 Annual Reliability and Maintainability Symposium – Product Quality & Integrity (RAMS), 2007 14th International Symposium on Physical & Failure Analysis of ICs (IPFA 2007), 2007 18th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2007, 2007 IEEE International Reliability Physics Symposium (IRPS), 2007 IEEE International Integrated Reliability Workshop (IRW)	failure mode & effects baseline, process failure modes and effects analysis, failure modes, six sigma	Foundation Technology	Defense
environmental stress screening	2007 Annual Reliability and Maintainability Symposium – Product Quality & Integrity (RAMS), 2007 14th International Symposium on Physical & Failure Analysis of ICs (IPFA 2007), 2007 IEEE International Reliability Physics Symposium (IRPS), 2007 18th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2007, 2007 International Electrostatic Discharge Workshop (IEW), 2007 IEEE International Integrated Reliability Workshop (IRW)	failure mode & effects baseline, six sigma, design of experiments (DOE)	Foundation Technology	Manufacturing & Devices
diagnostics	2007 Annual Reliability and Maintainability Symposium – Product Quality & Integrity (RAMS), 2007 IEEE International Symposium on Software Reliability Engineering (ISSRE), Transactions on Reliability, 2007 IEEE International...	six sigma	Foundation Technology	Defense

Figure 2: Mapping of Tags for
Dielectrics and Electrical Insulation Society

In conclusion, please begin working on this tool as soon you receive your log-in formation.

If you have questions please e-mail Peter Wiesner at p.wiesner@ieee.org, or call at 732 562 5500. You can also email TechNav@ieee.org at any time.