

# International Symposium on the Grand Challenges for Traceability

part of the TEFSE series of workshops

<http://www.TraceabilityCenter.org/Events/TEFSE07>

March 22<sup>nd</sup> and 23<sup>rd</sup>, 2007.  
Near Lexington, Kentucky, USA.



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## Addressing the Grand Challenges of Traceability

Requirements traceability provides critical support for software engineers as they develop and maintain software systems. Traceability can, for example, help an analyst to ensure that a high level requirement has been refined into lower level design components, built into the executable system, and tested effectively. Traceability also helps analysts to effectively understand, manage, and control changes as they are introduced. Numerous standards such as IEEE Standard 830-1998, CMMI, and ISO 9001 mandate traceability practices as an essential element of the software development life cycle. Unfortunately, practicing traceability is much harder than it would appear and many organizations fail to implement effective traceability practices which they perceive to be costly and unattainable.

During the summer of 2006, members of the traceability community from academia, industry, and government met to identify and define the **Grand Challenges of Traceability**. The challenges are published at <http://www.traceabilitycenter.org/downloads/documents/GrandChallenges>, and identify a number of critical research areas such as link recovery and automated methods, link evolution, link semantics, visualization of traces, traceability practices and metamodels, training and certification, usability issues, tracing across heterogeneous environments, tracing across product lines, and human usability factors, etc.

## The Center of Excellence for Traceability

This symposium is part of a series of events organized by the Center of Excellence for Traceability. The Center is being developed as a partnership of government agencies, businesses, and research institutions with the objective to facilitate, sponsor, and infuse traceability research – and with a focus on the development of practical solutions. The inaugural year of the Center is currently being funded by NASA's Independent Verification and Validation (IV&V) Facility, as part of the facility-supported IV&V research.

## Paper Categories

We invite submissions of high quality papers to the symposium that address the Grand Challenges of Traceability in any of the following categories:

**Research papers** present traceability solutions which are novel or significantly improve existing solutions. (8-10 pages)

**Position papers** describe early work addressing a specific traceability problem or propose new ideas. (4-6 pages)

**Industrial practice and experience papers** present problems or challenges encountered in practice, relate success and failure stories, or report on industrial practice. The focus is on 'what' and on lessons learned, not on an in-depth analysis of 'why.' (4-10 pages)

Papers must describe original work not submitted or presented at other forums. Accepted papers will be published in an ACM online digital library and in a bound conference proceedings. Papers must be submitted electronically following ACM guidelines available at <http://www.traceabilitycenter.org/events/TEFSE07>

## Important Dates

Paper submissions (all categories)

Notification of authors

Camera ready

Symposium

January 12<sup>th</sup>, 2007

February 6<sup>th</sup>, 2007

March 5<sup>th</sup>, 2007

March 22<sup>nd</sup> and 23<sup>rd</sup>, 2007

## Funding

The cost of attending the symposium will be subsidized by a grant from NSF. A limited number of travel stipends are also available for participants and for student volunteers.