Appendix C

Selected Technical References

Content

C.1 Technical Reports C-3

C.1 Technical Reports

NOTE: The World-Wide Web has information available at your fingertips. To find and access reports not listed here, browse the Web sites listed in Appendix A.

Ada83/Ada9X Compatibility Guide, Version 6

Aimed at alerting projects currently writing Ada applications where enhancement or maintenance is required beyond 1997 of any incompatibilities between Ada 83 and Ada 95.

AdaIC
PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/standards/ada95.html

Ada 95 Adoption Handbook

A comprehensive guide to aid Program Executive Officers and Program Managers understand and implement the transition to Ada 95.

AdaIC
PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/standards/ada95.html

Ada 95 Quality and Style: Guidelines for Professional Programmers, Version 1.00.10, October 1995

Prepared by the Software Productivity Consortium. Available through the Ada Information Clearinghouse either electronically or by mail.

AdaIC
PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/standards/ada95.html

AdaIC Available Bindings Report

An authoritative reference that describes the status of the major standards and bindings available to Ada programmers, provides a list of relevant reusable resources, and lists vendors supporting commercial implementations. Available electronically through the AdaIC home page or by mail.

AdaIC
PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/tools/bindings//bindings95/html/toc.html

Ada Implementation Guide (Navy), Vols I and II, March 1992

Naval Information Systems Management
Center Space and Naval Warfare Systems
Command
(703) 602-6903

Ada 95 Language Reference Manual (LRM)

The revised international standard (ISO/IEC 8652:1995) Information Technology – Programming Languages – Ada.

AdaIC
PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/standards/ada95.html

Rationale for Ada 95 Standard

An introduction and explanation of Ada's new features.

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PO Box 46593
Washington, DC 20050-6593
(703) 685-1477
(800) AdaIC-11
http://www.adaic.org/standards/ada95.html

CMU/SEI-92-TR-11, Software Measurement Concepts for Acquisition Managers, January 1992

Provides basic concept program managers can use to integrate measurement into the process for managing software development. Offers initial measures to help resolve issues that arise in software intensive acquisitions. Contains information on measures data definition and collection, software measures for software development issues and sample techniques on: trend analysis, multiple metric relationship analysis, modeling input data analysis, and data interpretation warnings.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-92-TR-19, Software Measurement for DoD Systems: Recommendations for Initial Core Measures, September 1992

Presents recommendations for a set of basic software measures to help plan and manage acquisition, development, and support software systems. Reviews integrating measurement with software process and recommends use of core measures: size (SLOC), effort (staff hours), and quality (counting problems and defects). Provides basic measures implementation guidance. [Does not address "rework" as a core measure.]

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-92-TR-21, Software Effort and Schedule Measurement: A Framework for Counting Staff Hours and Reporting Schedule Information, September 1992

Provides guidance for defining, recording and reporting staff-hours (S-H). Addresses dates concerned with project milestones and contract deliverables and measures of project progress. Discusses how S-H measures can meet the needs of a variety of users and contains recommendations on project applications.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-92-TR-22, Software Quality Measurement: A Framework for Counting Problems and Defects, September 1992

Presents mechanisms for describing and specifying software problems and software defect measures. Explains why problems and defects should be measured and their affects on project software quality, cost, and schedule. Checklists, supporting forms, and measurement results are provided. Includes recommendations for application in ongoing, new, and expanding software projects.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-92-TR-29, Ada Adoption Handbook: A Program Manager's Guide, Version 2.0, October 1992

Provides guidance on adopting the Ada programming language to include what practices have worked and what pitfalls to avoid.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-93-TR-24, Capability Maturity Model for Software, February 1993

Provides an overview of the SEI developed 5-level Capability Maturity Model (CMM) for software process improvement. Describes the CMM process maturity architecture, how CMM is used in practice, and how CMM can be used in the future. Companion report to CMU/SEI-93-TR-25, Key Practices of the Capability Maturity Model, February 1993 (below).

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-93-TR-25, Key Practices of the Capability Maturity Model, February 1993

Companion report to CMU/SEI-93-TR-24 (above). Provides overview of CMM, a description of how to use and interpret key practices associated with the model, and information on how to use the format of the key practices. Key process areas are: requirement management, software project planning, software project tracking and oversight, software subcontract management, software quality assurance, and software configuration management.

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Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-93-TR-23/NIST, Special Publication 500-213, Reference Model for Project Support Environments, Version 2.0, 1993
Contains a comprehensive list of tool capabilities to look for in a SEE developed by the Navy's Next Generation Computer Resources (NGCR) Program.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-94-SREv0.2, Software Risk Evaluation Method, Version 0.2, January 1994
Contains a high-level description of the current version of the Software Risk Evaluation (SRE) method. The SRE is as method to identify, analyze, communicate, and mitigate software technical risks.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-95-SR-004, A Manager's Checklist for Validating Software Cost and Schedule Estimates, 1995
This report provides a checklist of questions to ask and evidence to look for when assessing the credibility of a software cost and schedule estimate. The checklist can be used either to review individual estimates or to motivate and guide organizations toward improving their software estimating processes and practices.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-95-SR-005, Checklists and Criteria for Evaluating the Cost and Schedule Estimating Capabilities of Software Organizations, 1995
This report provides criteria and checklists for evaluating the capability of an organization's software estimating process and the infrastructure that supports it. It also supplies guidelines for good estimating practice. The checklists and guidelines can be used to elicit information for process assessments and to motivate and guide organizations in process improvement efforts.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-96-HB-002, Goal-Driven Software Measurement — A Guidebook
The materials in this guidebook are designed to help you identify, select, define and implement software measures to support your business goals. The measures that result are traceable back to your business goals, so that data collection efforts are better able to stay focused on their intended objectives.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

CMU/SEI-97-HB-OO3, Practical Software Measurement: Measuring for Process Management and Improvement
This guidebook shows how well-established principles and methods for evaluating and controlling process performance can be applied in software settings to help achieve an organization's business and technical goals.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213
(412) 268-7700
http://www.sei.cmu.edu

Software Technology Support Center (STSC), Documentation Technology Report, April 1994
Presents ideas on the documentation tools domain and discusses their value in improving software quality. Explains the features of current documentation tools products available in the marketplace. Includes data on tools, cost, vendor, and acquisition data.

Software Technology Support Center
Ogden ALC/TISE
7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Process Technologies Method and Tool Report, Volume I, March 1994
Defines process technologies, identifies tools and software engineering environments that support process technologies, discusses the value of emphasizing process in improving software quality, and examines the effective use of process technologies.

Software Technology Support Center
Ogden ALC/TISE
7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Project Management and Software Cost Estimation, April 1995

This report increases awareness and understanding of project management technologies, and provides the first step in transferring effective project management principles, methods and products into practical use. This report defines concepts of the software estimation tools domain and identifies their value in improving software quality and productivity. It also explains the capabilities of current project management products available in the marketplace and provides cost, vendor, and acquisition data.

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7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Reengineering Tools Report, Volume I, August 1994

Defines the concepts of software reengineering and discusses their value in improving software quality. Explains how features of current reengineering tools can improve software development and maintenance. Volume 2 provides information about tools products available in the marketplaces including cost, vendor, and acquisition data.

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Ogden ALC/TISE
7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Requirements Engineering and Design Technology Report, October 1995

Defines upper CASE (UC) products and discusses their value in improving software quality. Explains how features of current UC tools can improve software development and maintenance. Provides information on tool products available in the marketplace along with cost, vendor, and acquisition data.

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7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Software Engineering Environment Technology Report, April 1994
Defines the concepts of the software engineering environment (SEE) domain and discusses their value in improving software productivity and quality. Explains how features of the current SEE technology can improve software development and maintenance. Includes information on the tools available in the marketplace along with cost, vendor, and acquisition data.

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Ogden ALC/TISE
7278 Fourth Street
Hill AFB, UT 84056-5205
(801) 775-5555
DSN 775-5555
http://www.stsc.hill.af.mil

STSC, Software Test Technologies Report, August 1994
Defines the concepts of software testing and identifies their value in improving software quality. Explains how features of current testing tools can improve software development and maintenance. Contains information about current testing tools available in the market place and data on cost, vendors, and acquisition of the tools.

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