Practical Software and Systems Measurement

Practical Software and Systems Measurement
A foundation for objective project management

PSM Users’ Group
Conference
Keystone, Colorado

July 18-22, 2005

Measurement in Support of System and Process Integrity
2005 PSM Users’ Group Conference

Sponsored by the PSM Support Center
and the International Council on
Systems Engineering

Conference Welcome
and Introductions
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Objectives

• Conference Participants
  - User perspectives - share lessons learned
  - Discuss guidance for new areas
  - Information on related initiatives

• PSM Project Expectations
  - Technical Inputs in development of new guidance
  - Interaction with users - experiences using PSM

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Logistics

• Registration/Logistics at the Conference Center – see Jeannie

• If you need to be reached during the meetings,  970-496-4142

• Turn in evaluation forms and survey before leaving (drawing for prize)

• Meals
  - Breakfast daily
  - Lunch provided - Tuesday / Thursday
  - Dinner - Wednesday at Snake River Saloon
Conference Dinner

- Wednesday, 20 July
  - 7:00pm  Cash Bar
  - 8:00pm  Dinner
  - Snake River Saloon
  - ½ Block East of the Keystone Inn (same side of road)
  - Please select your entrée (yellow sheet in your conference packet) and return to the registration desk by the end of lunch Tuesday
  - Spouses welcome (see Jeannie for cost info)

Logistics (cont.)

- PSM Polo Shirts are available at the registration table
  - Extra 2005 shirts on sale for $35.00
  - PSM Polo Shirts from previous years, are on sale for $20.00, while they last

- After Meeting
  - Presentations and Workshop Materials Available from PSM Web Site
    (www.pmsc.com)
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Agenda

- **Tuesday**
  - Presentations, 0830 - 1700
- **Wednesday**
  - Presentations, 0830 - 1300
  - Workshops, 1415 - 1730
- **Thursday**
  - Workshops, 0830 - 1200
  - Workshops, 1300 - 1715
- **Friday**
  - Presentations, 0830 - 0950
  - Workshop Outbriefs, 1020 - 1130

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Workshops

- COSYSMO
- COSOSIMO
- SE Technical Measures
- Measurement Specification Lite
- Implementing and Sustaining Commitment
- Recommended Measures for ROI Activities
- Acquisition Measurement
- Organizational and Enterprise Measurement
- Security Measurement
- IEEE Standard 1044
- Information Needs for High-Maturity Measurement Survey
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Accomplishments This Year

• New Technology Papers in Development
  - Acquisition Measurement (draft)
    • Draft 0.5 released March 2005
    • Includes Guidance, ICM Table, Acquisition WBS, and Acquisition Cost Model
  - Measurement of Safety and Security (draft)
    • PSM/UK/Australia collaboration
    • Security Measurement, Version 2 released July 2005
    • Safety measurement, Version 2, scheduled for Fall 2005
  - Systems Engineering Technical Measures
    • PSM/INCOSE/Industry collaboration
    • Draft 2 released March 2005
    • Draft 3 scheduled for October 2005

Accomplishments This Year (cont)

• New Technology Papers in Development (cont.)
  - Process Improvement Measurement
    • Draft 0.7 released March 2005
    • Final scheduled for late Summer 2005
• Contributed to COSYSMO Model
2005 Activities - Get Involved

- Participate in workshops – provide inputs and recommendations
- Review products as available
- Additional examples to support guidance - Measurement Specifications
- Experience Reports
- Case Studies and Papers

2005 Activities – PSM Insight

- Plans are underway to update PSM Insight
- Focus will be on:
  - Enterprise orientation
  - Server data entry
  - Output results to intranet/internet
  - Security
  - TSP/PSP measure templates
- We are looking for additional partners for this activity – if you are interested, talk to Cheryl Jones
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2005/2006 Schedule - Public Courses

- **PSM Training**
  - Fall 2005 - VA area

- **PSM Insight Training**
  - Fall 2005 - VA area

- **PSM Train-the-Trainer Course**
  - Fall 2005 - New Jersey

- **Technical Working Group Meetings**
  - PSM TWG - Feb/Mar 2006, Herndon, VA
  - Users’ Group Meeting - July 2006, Colorado

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PSM Performance Management
June 2005

[Graph showing the number of students over time for different courses: 1 to 2 Day Course, 1/2 Day Course, Meas. Planning Workshop, Other.]
## PSM Participating Organizations

### DoD and Government
- US Air Force AFMC
- US Air Force SSSG
- US Air Force STRATCOM
- US Air Force STSC
- US Army AMC
- US Army CECOM
- US Army RDECOM-ARDEC
- US Army SAALT
- US Army SMDC
- USMC MCTSSA
- US Navy AEDC
- US Navy ASN RDA
- US Navy FMSO
- US Navy NAVAIR
- US Navy NAVSEA
- US Navy NAWC
- US Navy NRL
- US Navy NSWC
- US Navy NUWC
- US Navy OPTEVFOR
- OSD NII
- OSD PA&E
- ODUSD (S&T)
- Aerospace Corp.
- Central Intelligence Agency
- Dept of Homeland Security, Customs & Border Protection
- DAU-DSMC
- DCMA
- DFAS
- DISA
- DLA
- FAA
- IDA
- MITRE Corp.
- NASA
- Sandia National Lab
- Soc. Sec. Admin.
- Software Engineering Institute

### Industry
- ACS GSG
- Accenture, Quality and PI
- Allon Science and Technology
- American Sys. Corp.
- Ameritrade Corporation
- Argon Engineering Associates
- Assurance Engineering
- BAE Systems
- Bloodworth Int. Tech.
- Boeing
- Booz Allen Hamilton
- Borland TeraQuest
- CMIS
- Computer Technology Associates
- Carnegie Mellon Univ.
- Computer Sciences Corp.
- Center for Systems Management
- David Consulting Group
- Distributive Software
- Federal Reserve Bank
- First Line Partners
- Fraunhofer Ctr. For Experimental Software Engineering
- GTE
- Galactar, Inc.
- General Dynamics
- General Scientific Corporation
- Graeme & Garland
- Hawaiian Electric
- IBM
- IEEE
- IFPUG
- ITRI
- INCOSE
- ITABHI
- Independent Engineering, Inc.
- Jacobs Sverdrup
- James Gregory Assoc.
- Kodak Health Imaging
- L3 Communications
- Lexmark International
- Lockheed Martin
- Measurement-By-Management
- Nat. Renewable Energy Lab.
- Northrop Grumman
- OAO Corporation
- Pragma Systems Corporation
- PRICE Systems, LLC
- Q-Labs
- QSM
- Quality Plus Tech.
- Raytheon - Hughes
- Reiter Consultants
- Robbins Gioia, LLC
- Rockwell Collins
- SAIC
- Sallie Mae
- Sentel
- SETA
- Software Engineering Assoc., Inc.
- Software Management Solutions
- Software Metrics, Inc.
- Systems and Software Consortium, Inc (SSCI)
- Tecolote Research, Inc.
- Texas Guaranteed Student Loan Corporation
- Titan Corporation
- Tivo
- United Defense
- Univ. Southern CA
- Upsart Systems, LLC
- User Trust Network
- US West
- VITech, Ltd.
- VPI / State University
- West Virginia High Tech. Consortium
- West Virginia University
- Whitaker Group
- Wind River Systems
- Xcel Energy
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PSM Participating Organizations

International
- ADI Limited (Australia)
- Amdocs (Israel)
- Australian Defence Force Academy (Australia)
- Australia SoC Technology Centre (Australia)
- BAE Systems (Australia)
- Centro de Investigacion en Matematicas (Mexico)
- Defence Materiel Org.-Australian DoD (Australia)
- Defense Science and Technology Labs (UK)
- Ericsson Espana SA (Spain)
- General Dynamics (Canada)
- Jacobs Sverdrup Technology (Australia)
- Kozo Keikaku Engineering, Inc. (Japan)
- Liveware I.S.S.A. (Argentina)
- NRC (Canada)
- S-3 Consulting Pty. Ltd (Australia)
- Saab Systems Pty. Ltd. (Australia)
- Software Improvements Pty. Ltd. (Australia)
- Software Quality Institute (Australia)
- Tangram Hi-Tech Solutions (Israel)
- Tenix ESD (Australia)
- ti Metricas (Brazil)
- UK Ministry of Defense (UK)
- University of York/ York Metrics Ltd. (UK)

Transition Organizations

DoD and Government
- US Army RDECOM – ARDEC (PSM Support Center)
- US Air Force Software Technology Support Center
- US Navy NAVAIR
- Naval Undersea Warfare Center
- Aerospace Corporation
- Defense Contract Management Agency
- Defense Acquisition University - Defense Systems Management College
- Federal Aviation Administration
- MITRE Corporation
- Software Engineering Institute
Transition Organizations

Industry
- Argon Engineering Associates
- Borland TeraQuest
- Center for Systems Management
- Computer Sciences Corporation
- David Consulting Group
- Distributive Software
- INCOSE
- Lockheed Martin
- Northrop Grumman
- Quality Plus Technologies, Inc.
- Q-Labs
- Robbins-Giioa, LLC
- Software Metrics, Inc.
- Systems and Software Consortium, Inc (SSCI)
- Texas Guaranteed Student Loan Center
- Titan Corporation

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