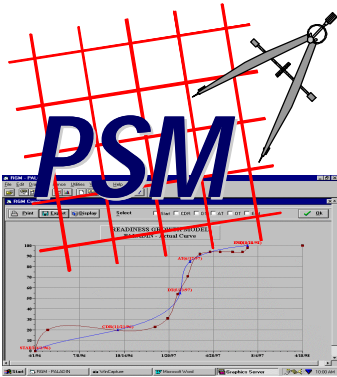


Practical Software Measurement

Practical Software Measurement
A foundation for objective project management



**Insight and the
Readiness Growth
Model (RGM)**

*Office of the Under Secretary of Defense
Acquisition and Technology*

*Joint Logistics Commanders
Joint Group on Systems Engineering*

Insight and RGM 1

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**PSM Insight and the
Readiness Growth Model**

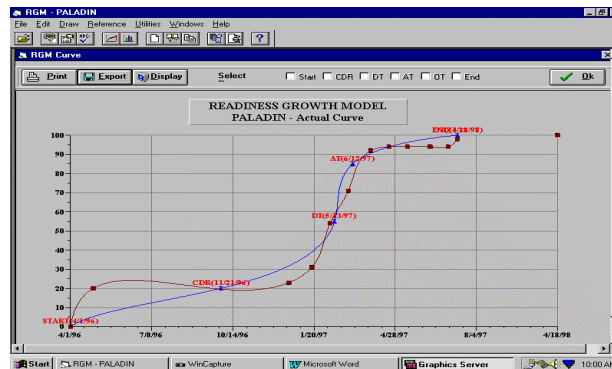
- **What's Happening with RGM & Insight**
- **Tool Demonstrations**
- **Workshop**

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Readiness Growth Model Actual Curve Compared to Ideal Curve



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Genesis of the RGM (Circa later 80's)

- **Software-intensive Systems Undergoing Operational Test Were Failing Due to Immature Software**
- **Army Test & Evaluation Community Began Seeking Better Assurance That Software Was "Ready for Test"**

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The Need for RGM

- ***Shortcomings of 12-Step Approach***
 - ***Discrete Measurement***
 - ***Stand-alone Results***
 - ***No Bottom-line System Assessment***
- ***1991 ARDEC Solution***
 - ***Single, Composite Index***

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RGM Features

- ***Quantitative and graphical***
- ***Comprehensive***
- ***Predictive***
- ***Adaptable***
- ***Tailorable***
- ***Versatile***
- ***Multi-Use/Domain Independent***

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Program Evaluation Using RGM

The screenshot shows the 'Scores' window in the RGM - PALADIN application. The window contains a table with the following data:

Phase	RGM Category	RGM Measure	Score	1	2	3	4	5	6	7	8
Score Date		Score Date	10	4/30/96	2/26/97	3/31/97	4/30/97	5/30/97	6/30/97	7/31/97	8/31/97
CDR(20)	Ripars		10	10	10	10	10	10	10	10	10
	Ripars Stability		10	10	10	10	10	10	10	10	10
DT(75)	Component Level	Test Coverage	4	0	0	4	4	4	4	4	4
	Component Level	Test Success	3	0	0.04	3	3	3	3	3	3
	Engineering Testing	Test Coverage	6	0	0	2	2	5	5	5	5.6
	Engineering Testing	Test Success	6	0	0	1.75	2.88	2.88	2.88	3	3
	Fault Profiles		12	0	0	0	6	9	9.53	10.5	10.6
	Comradly		4	0	0	0	3.5	3.5	3.5	3.5	3.5
AT(30)	Test Coverage	CSCI	7	0	0	0	6.97	6.97	6.97	6.98	6.98
	Test Coverage	System - Bench	5	0	0	0	5	5	5	5	5
	Test Coverage	System - Field	4	0	0	0	0	3.57	3.6	3.68	3.68
	Test Success	CSCI	7	0	0	0	0	6.32	6.3	6.97	6.97
	Test Success	System - Bench	5	0	0	0	0	4.52	4.52	4.52	4.52
DT(15)	Test Success	System - Field	2	0	0	0	0	2.23	2.25	2.3	2.3
	Test Coverage		5	0	0	0	0	4.33	4.33	4.98	4.98
	Test Success		10	0	0	0	0	9.13	9.15	9.27	9.27
		Total Score	100	20	23.04	30.75	63.35	70.19	91.26	92.5	93.4

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RGM Demonstration

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PSM Insight

Over the past year and a half, the PSM Insight Development Team has been developing an automated tool to implement and support the PSM process. Insight version 2.0 was released at STC-98 and allows analysts and managers to address project information needs and obtain insight into project risks and issues.

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Insight Demonstration

 **Insight 2.10**

 **Users Manual**

 **Electronic Import/Export**



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Workshop Format

- ***About the Workshop***
 - ***Objectives***
 - ***Agenda***
- ***Benefits of Attending***
- ***Who Should Attend***
- ***Intended Output***

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Objectives of the Workshop

- ***Review Current and Future Tool Requirements***
- ***Identify Types of Analyses Needed***
- ***Preview RGM and Highlight Integrated Tool Approach***
- ***Assess Applicability of the Tools With Development Methodologies***
- ***Identify Types of Data Currently Collected by Users***
- ***Identify User Types/Profiles***

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Agenda

- **0830-0915 RGM and Insight Status**
- **0915-0930 User Surveys**
- **0930-1000 User input on managing s/w development using measurement tools**
- **1000-1030 Break**
- **1030-1130 User input**
- **1130-1300 Lunch**
- **1300-1500 User input**
- **1500-1530 Break**
- **1530-1600 Workshop Wrap-up**
- **1600-1700 Open Q&A and tool free play**

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What We'll Really Be Doing

- **0830-0840 Take attendance and pretend to be working**
- **0840-1000 Champagne brunch by the pool**
- **1000-1030 Break**
- **1030-1130 Visit gift shops in the Village**
- **1130-1300 Lunch**
- **1300-1500 Nap**
- **1500-1530 Break**
- **1530-1630 Chair lift to top of mountain**
- **1630-1700 Workshop wrap-up**

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Benefits of Attending

- ***Use and Learn the Measurement Tools Being Sponsored by DoD and Used Throughout DoD and Industry***
- ***Integrate Your Measurement Requirements Into the Tools -- Impact Future Development***
- ***Find Out How Others Are Using Measurement Tools to Manage S/W Development Efforts***

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Who Should Attend

- ***High Level Managers***
- ***Mid-level Managers***
- ***Developers***
- ***Data Analysts***

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Intended Output

- ***Identify Weaknesses and Shortcomings of Current Tools***
- ***Define Users Needs in Terms of Analysis and Data Requirements***
- ***Provide Refined and Focused User Requirements for Input to Program Review***