

estimate

estimate • analyze • plan • control

What's New In SEER for Software

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SEER for Software



- Server Mode Commands:
 - GetLastCommandStatus
 - Allows you to check status of the last run command
 - GetRemainingData
 - OLE automation interface, preferred method of SEER products.
 - Return buffer size limit of 16,380 bytes
 - FlexportOutput server mode command
 - ExportCommands

Sample Script

Excel VBA Macro:

```
'Flexport Output the actvhour template using the !Auto interface
ReturnedData = SEER.RunCommands("FlexportOutput" & vbTab & "actvhour" & vbTab & "!Auto")

'error codes for Export Commands are as follows:
  '-1 = OK; More data available'
  '0 = Success
Status = SEER.RunCommands("GetLastCommandStatus")

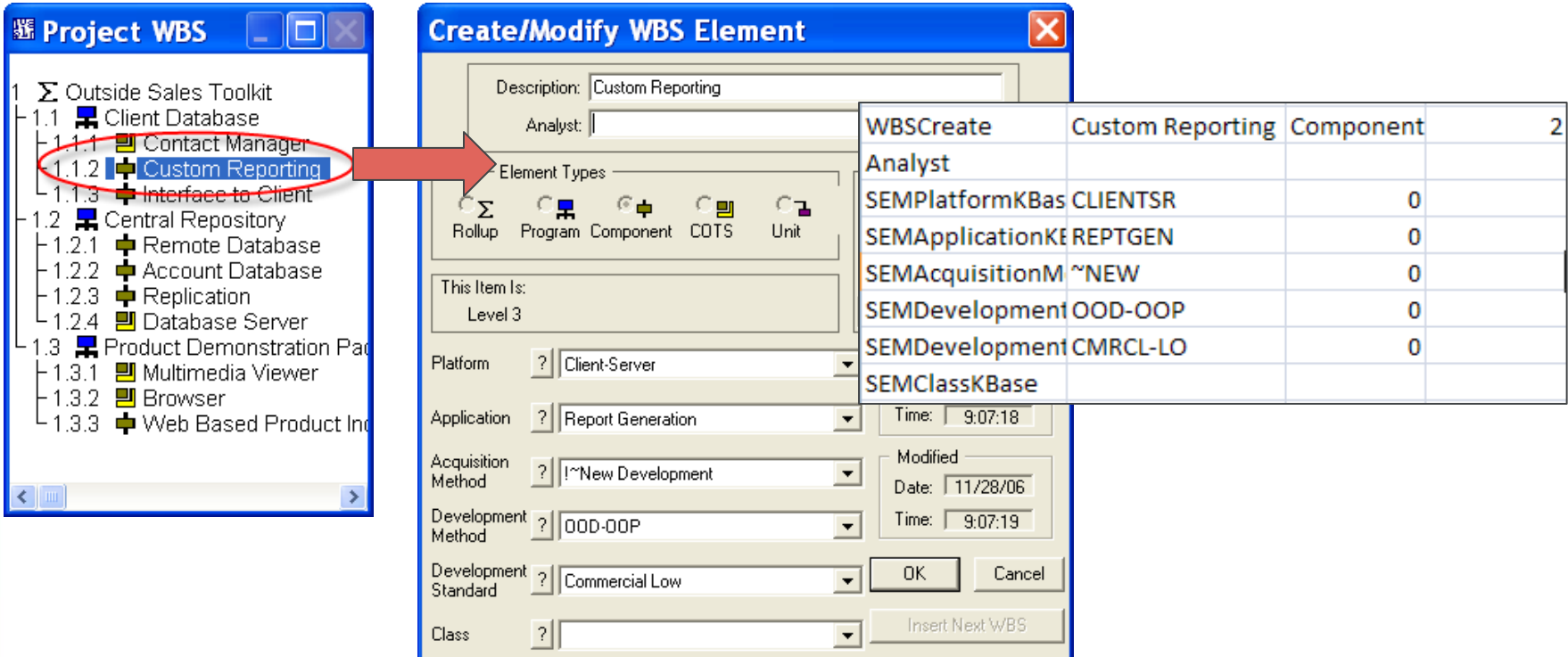
'the OLE buffer can hold upto 16,380 bits of information
'if buffer exceeds 16,380, to get all the data we need to take 16,000
'bits of data at a time. A -1 code tells us that more data is available
If Status = -1 Then

    'while the code = -1 we use the GetRemainingData command and concatenate the
    'all the data until we have the entire output from SEER for SW stored in the
    'ReturnedData variable
    Do While Status = -1
        ReturnedData = ReturnedData & SEER.RunCommands("GetRemainingData")|
        'check to see if more data is available
        Status = SEER.RunCommands("GetLastCommandStatus")
    Loop

End If
```

ExportCommands

Command	Work Element	Output With Kbases	Output With Parameters	Output With Commands	Output To	Output File
ExportCommands	WBS	YES	NO	YES	Clipboard	Output File (Text)



The screenshot shows the 'Project WBS' window on the left with a tree view. The 'Custom Reporting' element is selected and circled in red. An arrow points from this element to the 'Create/Modify WBS Element' dialog box on the right. The dialog box has the following fields:

- Description: Custom Reporting
- Analyst: [Empty]
- Element Types: Rollup, Program, Component, COTS, Unit (Component is selected)
- This Item Is: Level 3
- Platform: Client-Server
- Application: Report Generation
- Acquisition Method: !~New Development
- Development Method: OOD-OOP
- Development Standard: Commercial Low
- Class: [Empty]

Overlaid on the dialog is a table of WBS elements:

WBSCreate	Custom Reporting	Component	2
Analyst			
SEMPlatformKBas	CLIENTSR	0	
SEMApplicationKEREPTGEN		0	
SEMAcquisitionM	~NEW	0	
SEMDevelopment	OOD-OOP	0	
SEMDevelopment	CMRCL-LO	0	
SEMClassKBase			

Custom Report - Maintenance

- Accessible From:
 - Reports
 - Flexible Export
 - Views

Maintenance	
Maintenance Schedule Months	24.00
Maintenance Effort Months	114.18
Maintenance Base Year Cost	2,317,909.12
Cost of Ownership	9,270,771.39
Mgmt Cost for Maint	185,432.73
SW Reqs Cost for Maint	46,358.18
Design Cost for Maint	92,716.36
Code Cost for Maint	880,805.46
Data Prep Cost for Maint	23,179.09
Test Cost for Maint	927,163.65
CM Cost for Maint	115,895.46
QA Cost for Maint	46,358.18
Total Labor Cost for Maint	2,317,909.12
Development Base Year Cost	6,952,862.28
Purchased Items	0

Choose Available Reports

Summary Reports

Cover Sheet

Quick Estimate

Basic Estimate

Monthly Reports

Hours by Month

Detailed Staffing Profile

Cost by Month

Input Reports

Inputs

Inputs with Notes

Inputs vs. Knowledge Base

Inputs vs. Reference

FBS Inputs

FBS Inputs with Notes

FBS Inputs vs. Reference

Labor Category Reports

Person Months

Person Hours

Cost

Yearly Reports

Cost by Fiscal Year

Maintenance Effort by Year

Custom Reports

ProjectMiner Report

Maintenance

Software Metrics

Software Metrics

Activity Report

Estimate To Complete

Risk Analysis

Time Phased Defects

PPMC Report

OK

Cancel

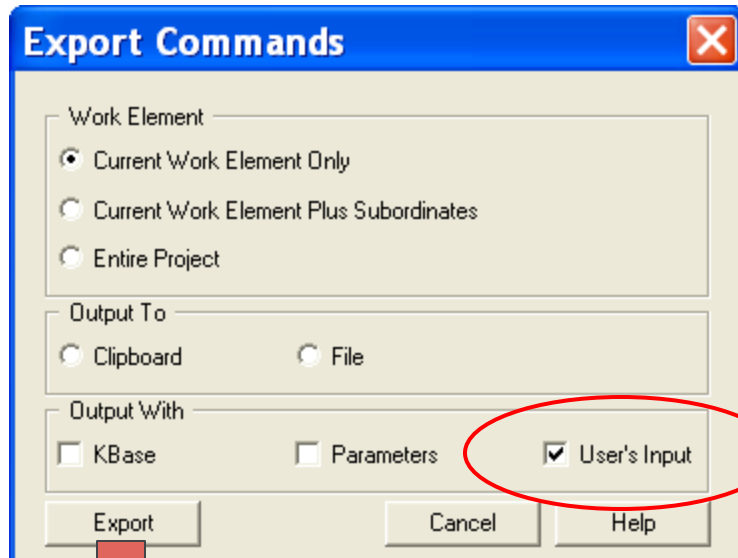
Help

Select All

Deselect All

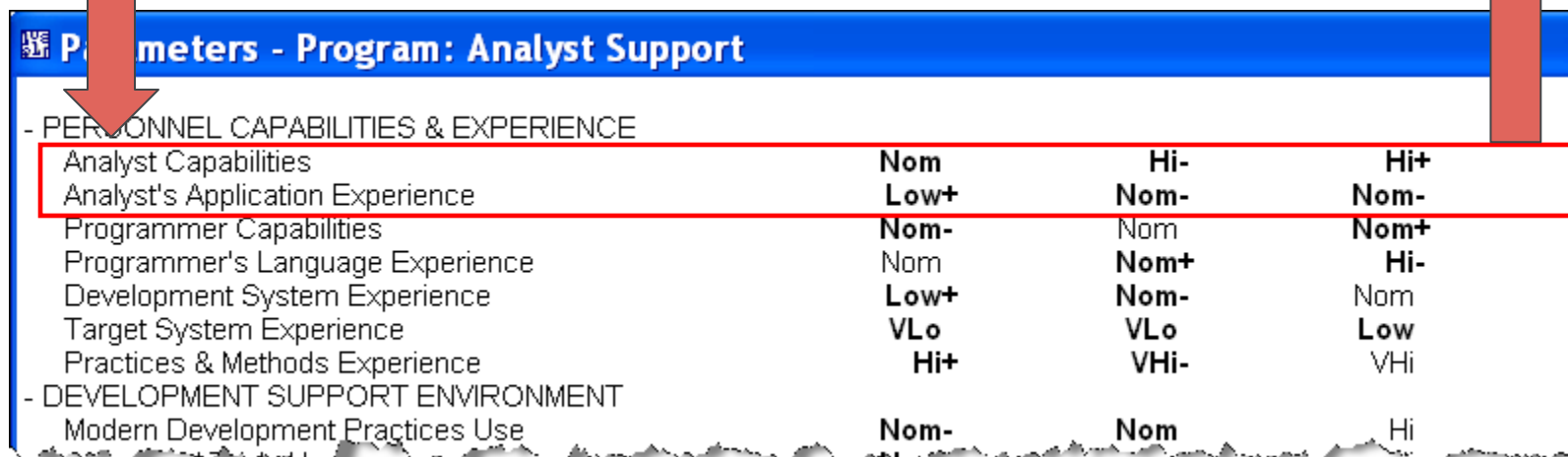
Export Commands Dialog

- User's Input



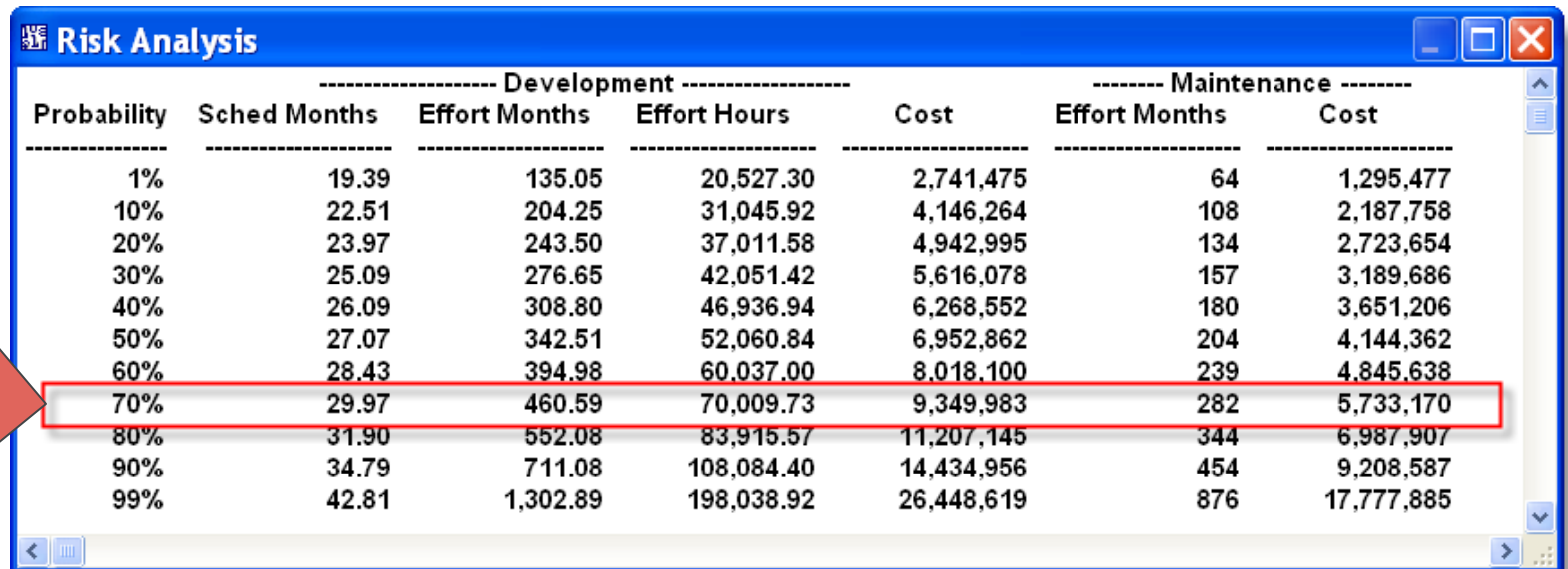
	A	B	C	D
1	WBSCreate	Analyst Su	Program	2 Ar
2	Analyst			
3	Function Implementation Mechanism			
4	PROXY SIZING			
5	Analyst Capabilities	Nom	Hi-	Hi+
6	Analyst's Application Experience	Low+	Nom-	Nom-
7	Programmer Capabilities	Nom-	Nom	Nom+
8	Programmer's Language Experience	Nom	Nom+	
9	Development System Experience	Low+	Nom-	om
10	Target System Experience	VLo	VLo	w

Bolded Parameters Only



PERSONNEL CAPABILITIES & EXPERIENCE			
Analyst Capabilities	Nom	Hi-	Hi+
Analyst's Application Experience	Low+	Nom-	Nom-
Programmer Capabilities	Nom-	Nom	Nom+
Programmer's Language Experience	Nom	Nom+	Hi-
Development System Experience	Low+	Nom-	Nom
Target System Experience	VLo	VLo	Low
Practices & Methods Experience	Hi+	VHi-	VHi
DEVELOPMENT SUPPORT ENVIRONMENT			
Modern Development Practices Use	Nom-	Nom	Hi

Maintenance Cost Risk Chart

Probability	----- Development -----				----- Maintenance -----	
	Sched Months	Effort Months	Effort Hours	Cost	Effort Months	Cost
1%	19.39	135.05	20,527.30	2,741,475	64	1,295,477
10%	22.51	204.25	31,045.92	4,146,264	108	2,187,758
20%	23.97	243.50	37,011.58	4,942,995	134	2,723,654
30%	25.09	276.65	42,051.42	5,616,078	157	3,189,686
40%	26.09	308.80	46,936.94	6,268,552	180	3,651,206
50%	27.07	342.51	52,060.84	6,952,862	204	4,144,362
60%	28.43	394.98	60,037.00	8,018,100	239	4,845,638
70%	29.97	460.59	70,009.73	9,349,983	282	5,733,170
80%	31.90	552.08	83,915.57	11,207,145	344	6,987,907
90%	34.79	711.08	108,084.40	14,434,956	454	9,208,587
99%	42.81	1,302.89	198,038.92	26,448,619	876	17,777,885

Future...SEER for Software



- Proxy Definition: Cosmic Function Points
- ServerMode Commands for Estimate Repository
- Copy/Paste Integration into SEER-IT
- Productive Hours per Person Month Adjustment
- Extended Schedule Adjustment
- Database and Operating System compatibility with:

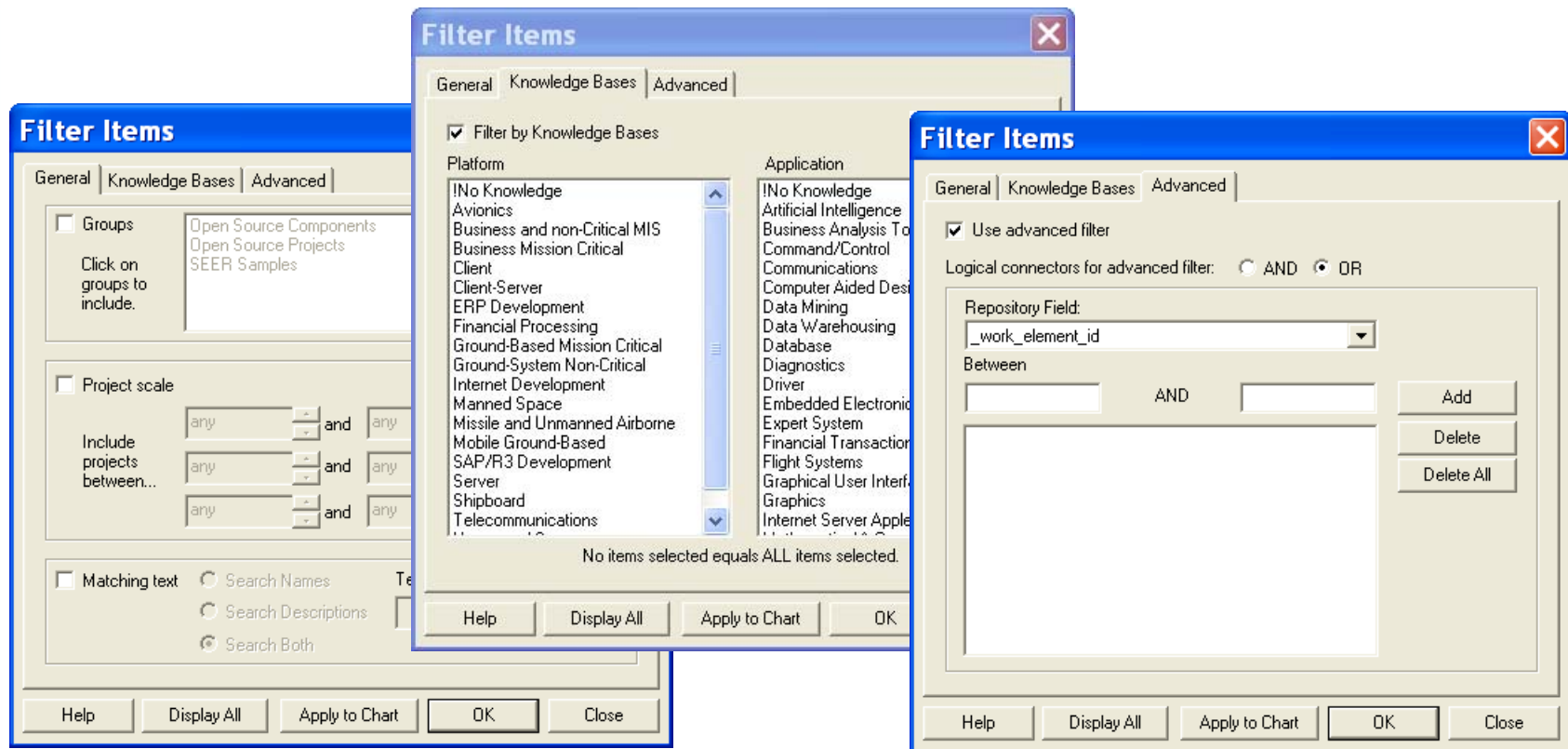
ORACLE®



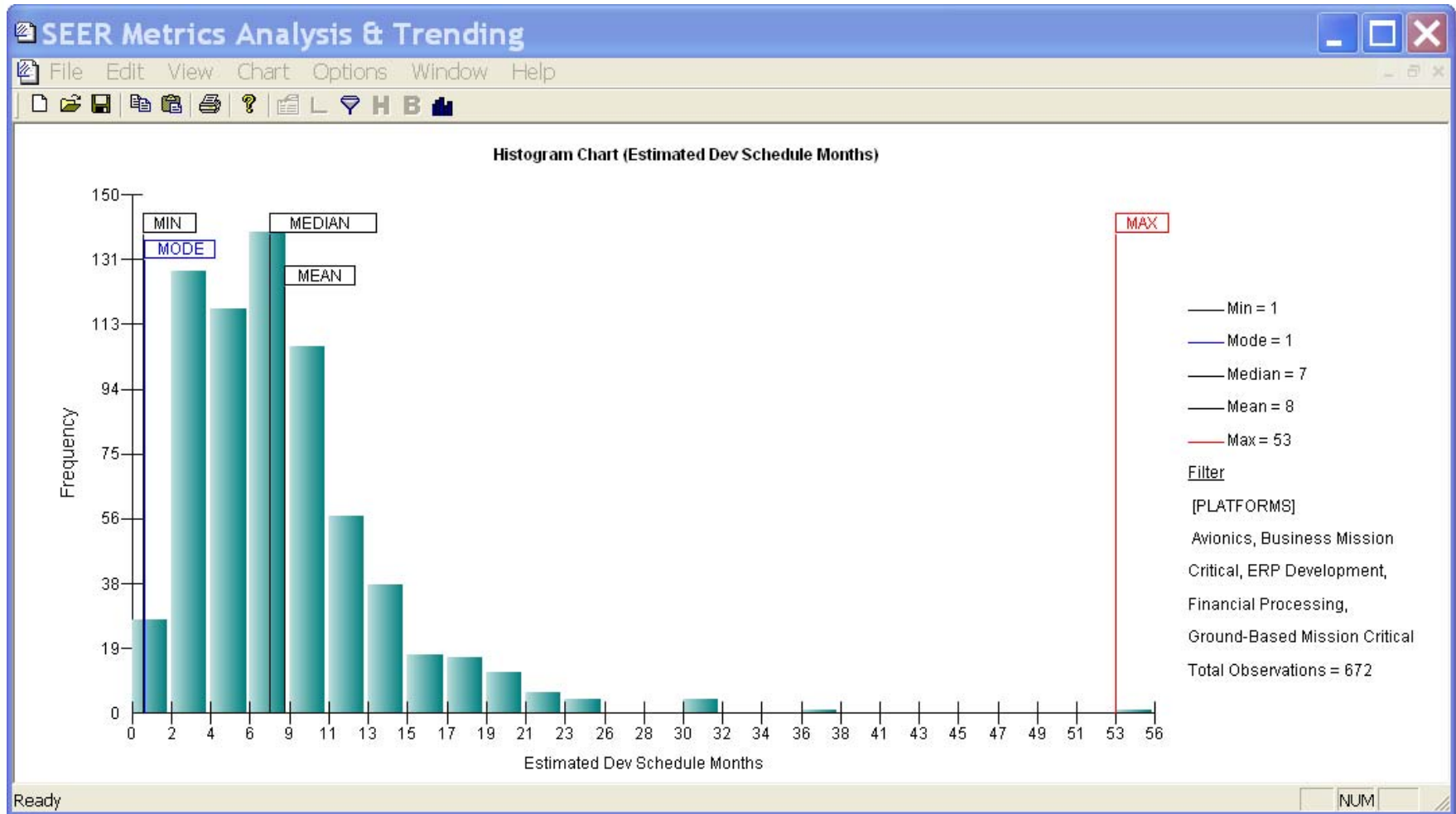
Future... SEER Metrics Analysis & Trending

(Formerly known as SEER-Scatterplot)

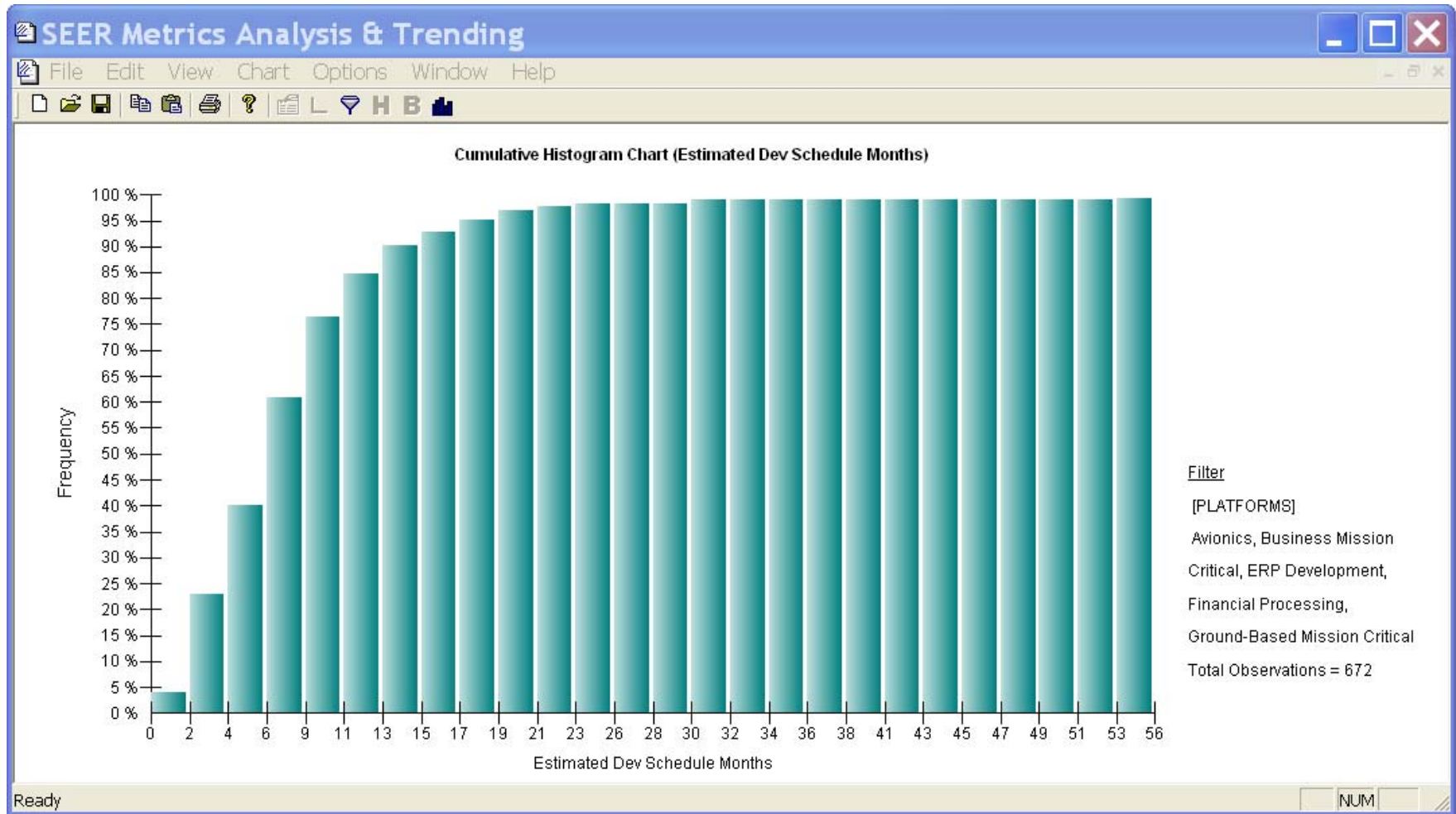
- Filter dialog:



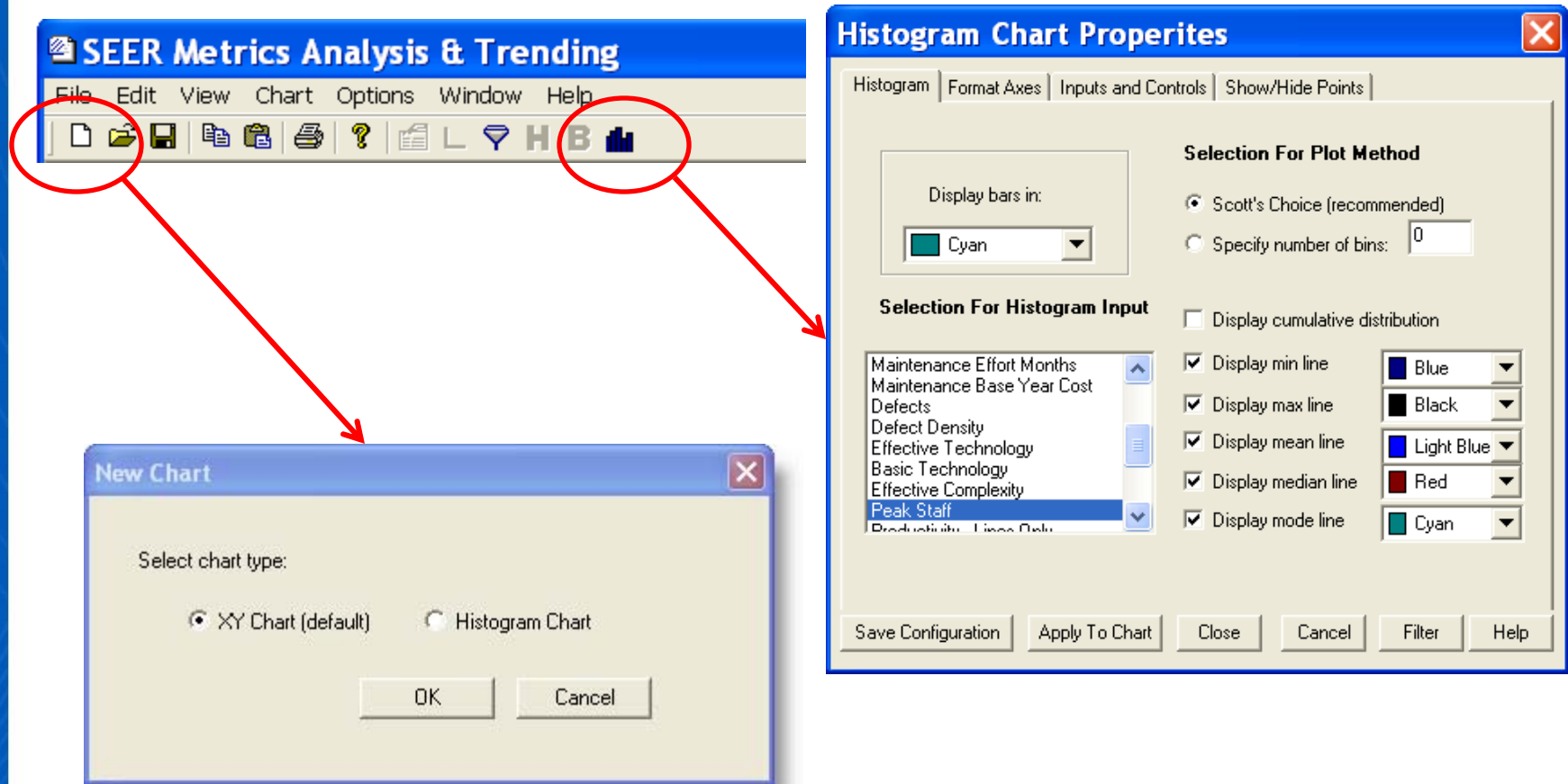
Histogram



Cumulative Histogram




Invoking the Histogram

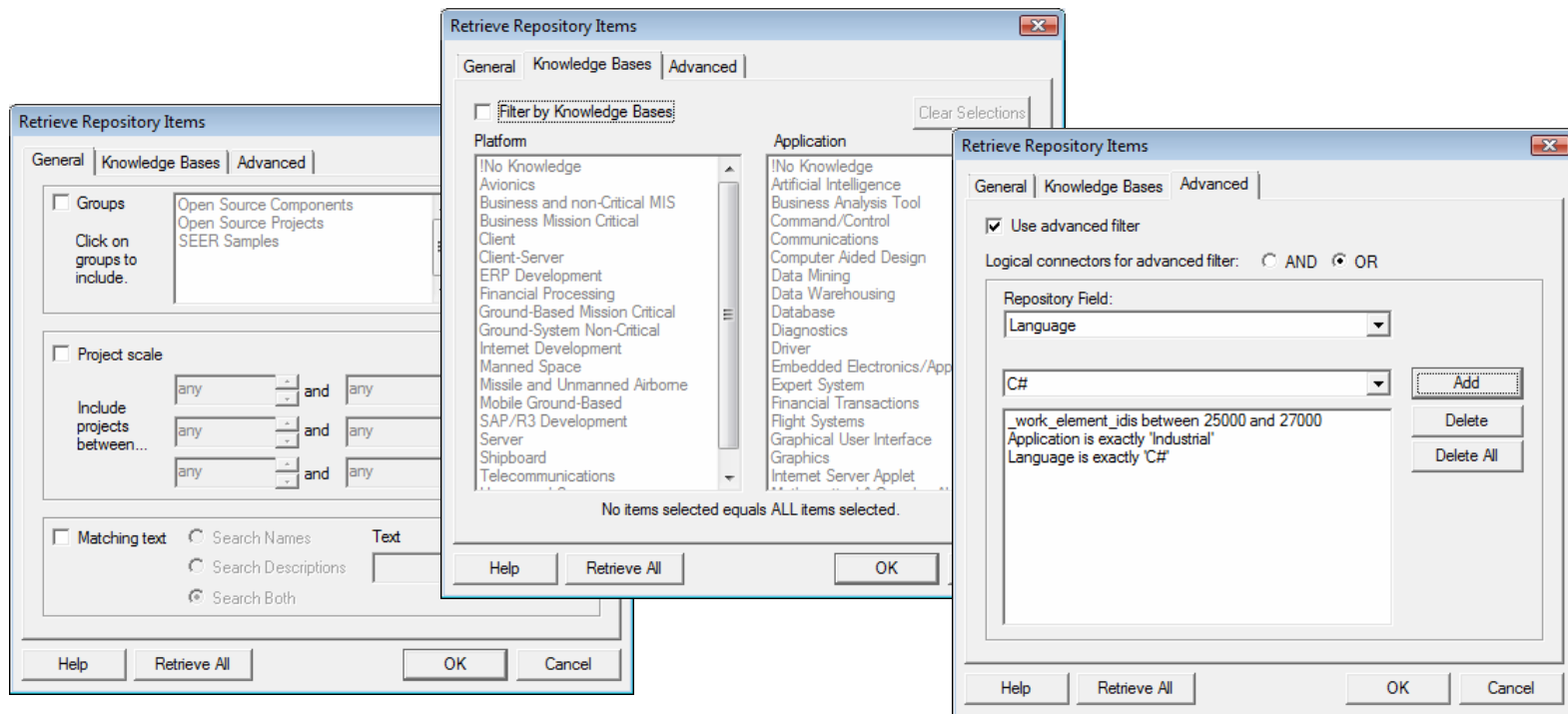


The screenshot illustrates the process of invoking a histogram chart in the SEER Metrics Analysis & Trending application. It shows three windows:

- SEER Metrics Analysis & Trending**: The main application window with a menu bar (File, Edit, View, Chart, Options, Window, Help) and a toolbar. The 'H' icon (Histogram) and the 'B' icon (Bar Chart) are circled in red. Red arrows point from these icons to the 'New Chart' and 'Histogram Chart Properties' windows, respectively.
- New Chart**: A dialog box titled 'New Chart' with a close button (X). It contains the text 'Select chart type:' and two radio buttons: 'XY Chart (default)' (selected) and 'Histogram Chart'. At the bottom are 'OK' and 'Cancel' buttons.
- Histogram Chart Properties**: A dialog box titled 'Histogram Chart Properties' with a close button (X). It has four tabs: 'Histogram' (selected), 'Format Axes', 'Inputs and Controls', and 'Show/Hide Points'.
 - Display bars in:** A dropdown menu showing 'Cyan'.
 - Selection For Plot Method:** Two radio buttons: 'Scott's Choice (recommended)' (selected) and 'Specify number of bins: 0'.
 - Selection For Histogram Input:** A list box containing: Maintenance Effort Months, Maintenance Base Year Cost, Defects, Defect Density, Effective Technology, Basic Technology, Effective Complexity, Peak Staff (highlighted), and Productivity - Line Only.
 - Display cumulative distribution:** An unchecked checkbox.
 - Display min line:** Checked checkbox with a color dropdown set to 'Blue'.
 - Display max line:** Checked checkbox with a color dropdown set to 'Black'.
 - Display mean line:** Checked checkbox with a color dropdown set to 'Light Blue'.
 - Display median line:** Checked checkbox with a color dropdown set to 'Red'.
 - Display mode line:** Checked checkbox with a color dropdown set to 'Cyan'.At the bottom are buttons for 'Save Configuration', 'Apply To Chart', 'Close', 'Cancel', 'Filter', and 'Help'.

Microsoft Project Integration

- New name! Was the “SEER-SEM Client for Microsoft Project” and is now... 
- The repository retrieval dialog has been enriched with many more retrieval options.

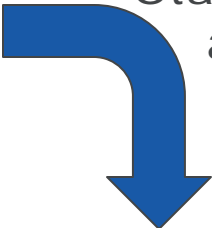


User-Defined Task/Resource Association

- When no resources specified in a source template...

Task Name	Resource Names
Design	
<input checked="" type="checkbox"/> SEER-SEM Component	
Code	
Test	

Standard resource allocations are used.



Resulting plan

Design	Management[8%], Software Requirements[13%], Design[25%], Programming[7%], Data Preparation[5%], Test[10%], Configuration Management[1%], Quality Assurance[1%]
<input checked="" type="checkbox"/> SEER-SEM Component	
Code	Management[22%], Software Requirements[7%], Design[14%], Programming[131%], Data Preparation[20%], Test[66%], Configuration Management[13%], Quality Assurance[1%]
Test	Management[28%], Software Requirements[7%], Design[14%], Programming[132%], Data Preparation[26%], Test[110%], Configuration Management[18%], Quality Assurance[1%]

- When resources are specified in a source template...

Task Name	Resource Names
Design	Designer
<input checked="" type="checkbox"/> SEER-SEM Component	
Code	Programmer
Test	Tester

Resulting plan



Design	Designer[158%]
<input checked="" type="checkbox"/> SEER-SEM Component	
Code	Programmer[418%]
Test	Tester[467%]

- The resource assigned to the task receives all the effort the task has been assigned.
- If there is more than one resource assigned to a task, effort is allocated in proportion to their assignment to the task.

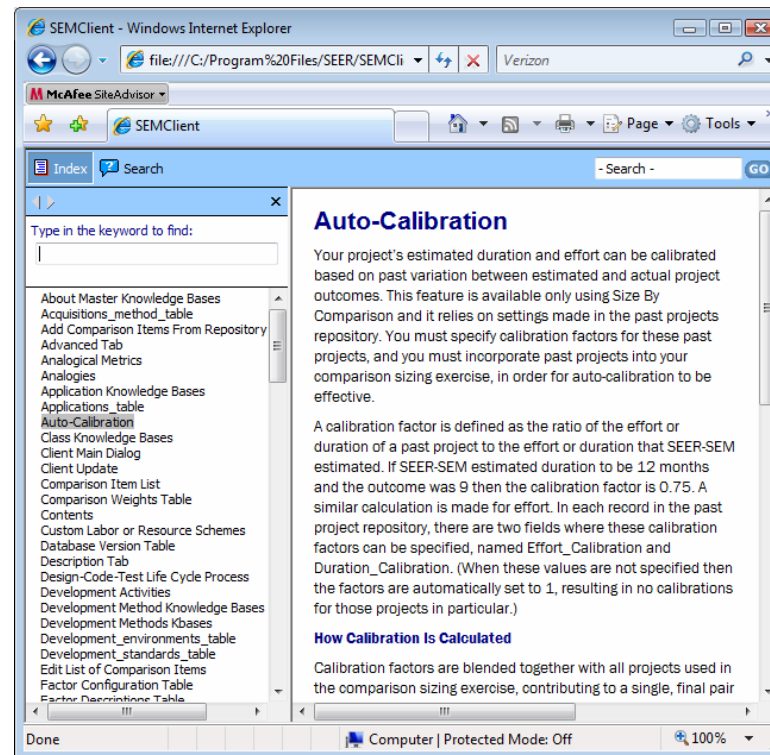
Improved Compatibility with Microsoft Project Server

- Plans output by the MSP Integration can be staffed with actual people via Project Server's enterprise features.
- This is specifically enabled by filling in these Project Server fields:
- Automatic addition of RBS codes to Project's Resource Sheet
- Adding a Generic setting of 'Yes' to resources.

Resource Name	Initials	Generic	RBS Code
Designer	D	Yes	D1
Programmer	P	Yes	P1
Tester	T	Yes	T1

Ready for Vista

- The Help system is now browser-based, assuring its compatibility with Windows Vista.



- The installer also has been made compatible with Windows Vista's revised file structure.