Microsoft Technical Computing Modeling the world with greater fidelity Jeff Wierer, Director of Product Management







Client single node shared memory Cluster multiple nodes distributed memory Cloud multiple node distributed memory on demand capacity

Microsoft Technical Computing



Client single node shared memory

Parallel Development on Windows





Parallel Development on Windows







Graphics Inspector

Memory Errors (level mi3) Intel* Parallel Inspector												
🙆 Overview 🔶 🍪 Sources 🔶 🐼 D					etails			Summaries/Subsets 🗌 Relationships 👳				
Problem Sets												
ID 🛋	٥.	Problem		Sou	rces	Modules	0	Object Size	State			
P1	9	Invalid memo	ry access	main	.cpp	update_system.	exe		Not fixed			
P2	٢	Uninitalized n	nemory access	main	.cpp	update_system.	exe		🎙 Not fixed			
P3	٨	Uninitalized n	nemory access	main	.cpp	update_system.	exe		🎙 Not fixed			
P4	٢	Mismatched a	allocation/dealloca	tion main	.cpp	update_system.	exe		🎙 Not fixed			
P5	٢	Mismatched a	allocation/dealloca	tion main	.cpp	update_system.	exe		🎙 Not fixed			
P6	٩	Invalid memo	ry access	main	.cpp	update_system.	exe		🎙 Not fixed			
P7	٩	Invalid memo	ry access	main	.cpp	update_system.	exe		🎙 Not fixed			
P8	٩	Invalid memory access			.cpp	update_system.	exe		🎙 Not fixed			
P9	٩	Memory leak			.cpp	update_system.	exe 5		Not fixed			
P10	0	Memory leak			.cpp	update_system.	.exe 1	2	Re Not fixed		<	
Invalid memory access: Observations in Problem Set												
ID	ID Description 🔺 🕴		Source	Function Mod		ule Object		Size State				
± X6	5 Allocation site		🗄 main.cpp:44	doitx upd		ate_system.exe		Information				
± X7	7 Deallocation site		🖗 main.cpp:52	doitx	updał	e_system.exe	_system.exe		Information			
± X8	EX8 Read		🖉 main.cpp:54	doit×	updał	te_system.exe		庵 Not fixed				





Cluster multiple nodes distributed memory

Windows HPC Server 2008 R2

NOW AVAILABLE



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World Class Performance. Scale to thousands of nodes. Easy to use with existing skills.



Desktop Compute Clouds: Harnessing Idle Cores

Expand the capacity of existing HPC clusters. Utilize idle compute cycles as part of your overall HPC infrastructure.



Cloud

multiple node distributed memory on demand capacity

Windows HPC and Cloud

