

# Computer Model Simulation

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FNAL

# Changing Parameters

- ▶ Update the parameters to get an idea of variation on results

	Half CPU Hit	Normal CPU Hit	Double CPU Hit
<b>Parallel Copy</b>	1.31 (7k)	1.31 (7k)	1.31 (7k)
<b>Serial Copy</b>	1.31 (7k)	1.32 (7k)	1.32 (7k)
<b>Remote Read</b>	1.32 (10k)	1.35 (11k)	1.40 (12k)

- ▶ Changing maximum file transfer times however is unreasonable

	Half Max Tran	Norm. Max Tran	Dble Max Tran
<b>Parallel Copy</b>	1.31 (7k)	1.31 (7k)	1.35 (7k)
<b>Serial Copy</b>	1.32 (7k)	1.32 (7k)	1.35 (7k)
<b>Remote Read</b>	1.35 (11k)	1.35 (11k)	1.35 (11k)

Total Wall Clock Gs (#jobs not started)

# Updating to be clock based

- ▶ Previously simulation was driven by job start time
- ▶ Converted to be purely clock based
  - ▶ Determines first job start and last job start times
  - ▶ Runs from first job start to twice the time to the last job start
  - ▶ Currently moves forward five minutes each cycle
- ▶ Much slower due to all jobs being in system at start
- ▶ Still getting to work
- ▶ Should eliminate jobs not started due to full batch systems
- ▶ Can also update to have jobs sent to sites with free CPUs

# Immediate Plans

- ▶ Get working with new time driven events
- ▶ Debug unexpected results when increasing transfer rate
- ▶ Complete results phase space varying input parameters