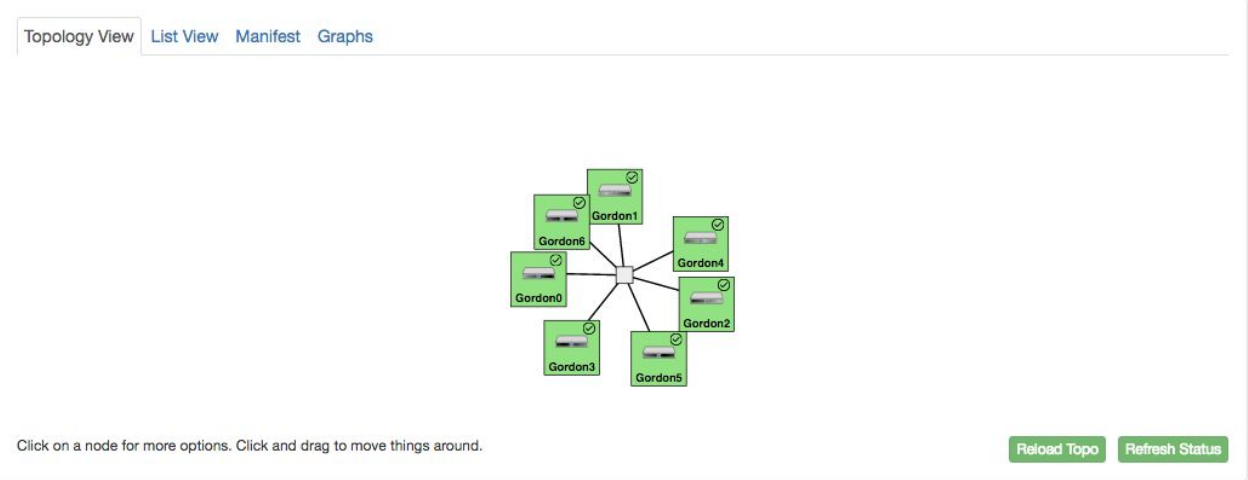
For our group we had the task of emulating Gordon in the cloudlab environment. What we did was end up setting up 6 nodes to represent the compute nodes and I/o nodes. 4 of our nodes are compute nodes and the other 2 are I/O nodes. These nodes have commands and hardware to make them accurately represent a smaller gordon.



SYSTEM COMPONENT	CONFIGURATION
Intel EM64T Xeon E5	*Compute Nodes*
Sockets	2
Cores	16
Clock speed	2.6 GHz
Flop speed	333 Gflop/s
Memory capacity	64 GB
Memory bandwidth	85 GB/s
STREAM Triad bandwidth	60 GB/s
I/O Nodes	
Sockets	2
Cores	12
Clock speed	2.67 GHz
Memory capacity	48 GB
Memory bandwidth	64 GB/s
Flash memory	4.8 TB
Full System	
Total compute nodes	1024
Total compute cores	16384
Peak performance	341 Tflop/s
Total memory	64 TB
Total memory bandwidth	87 TB/s
Total flash memory	300 TB

Here we have accurately represented gordon and its specs. This is seen by looking at the internal of each node. Each node has commands installed so that upon execution they represent gordon. Proportionally the majority of gordons nodes are Compute nodes so that is

why in our project we have made the majority of the nodes to be compute nodes. Once you have looked at the instantiated profile here:
https://www.cloudlab.us/p/PDC-edu-Lab/Gordon3620/0
You can compare it to the node specifications in the screenshot above. I have also tested this by trying to run my assignment 4 on our emulated machine, however since no one in our group did well on assignment 4 the validation is a little interesting. When run on our machine and on palmetto both get the same result which shows the validation to be true, however we dont have a completed assignment 4 and Miriam emailed the professor trying to see if there was a way we could get corrections for a complete validation. The results so far show that its valid on both systems to the extent completed.