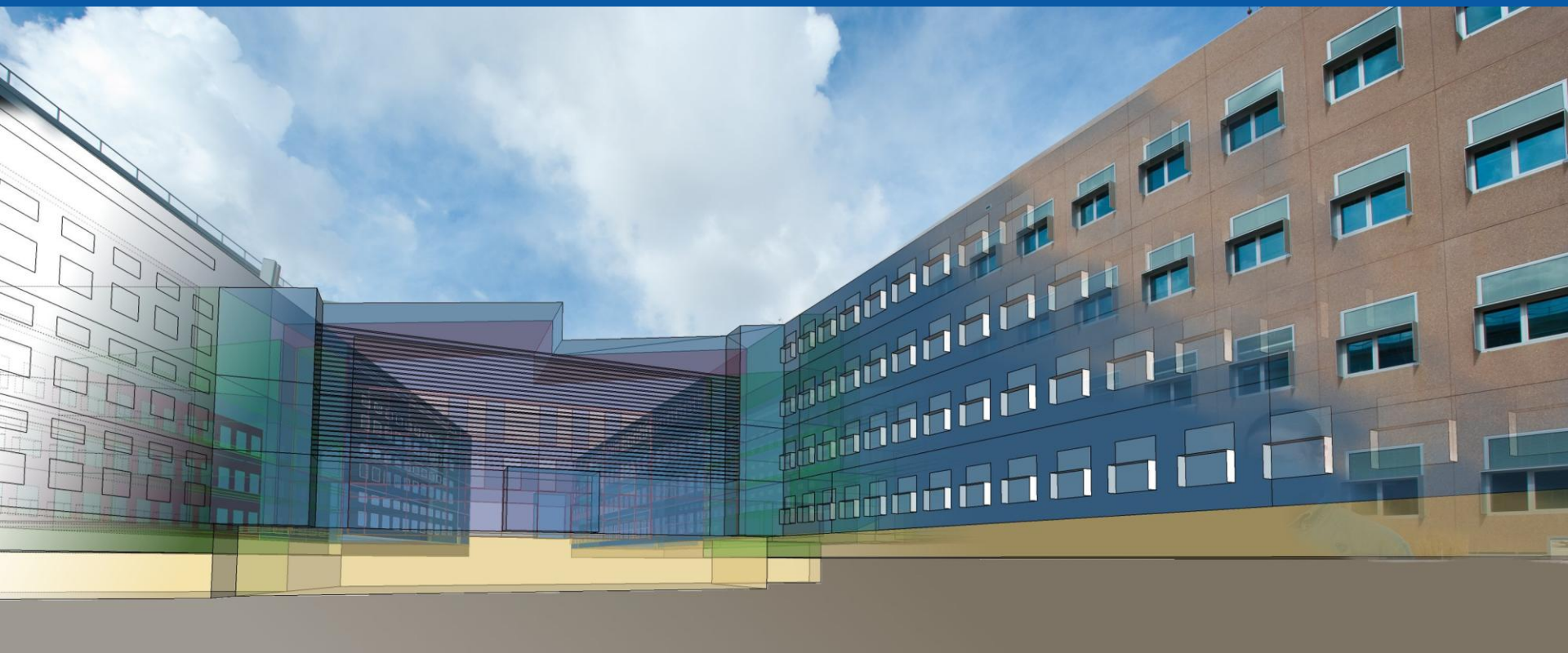
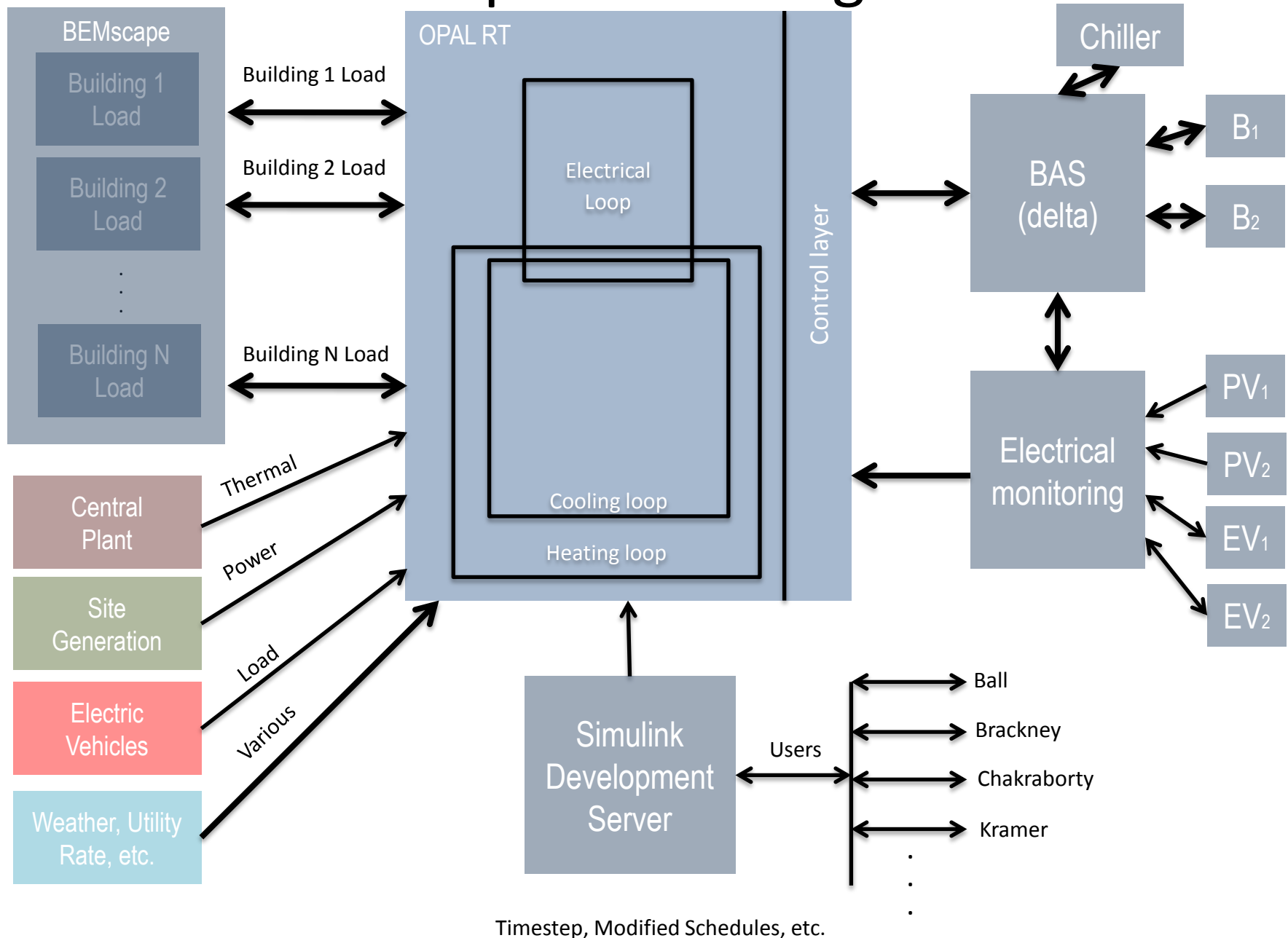


# ESI Campus Modeling Platform

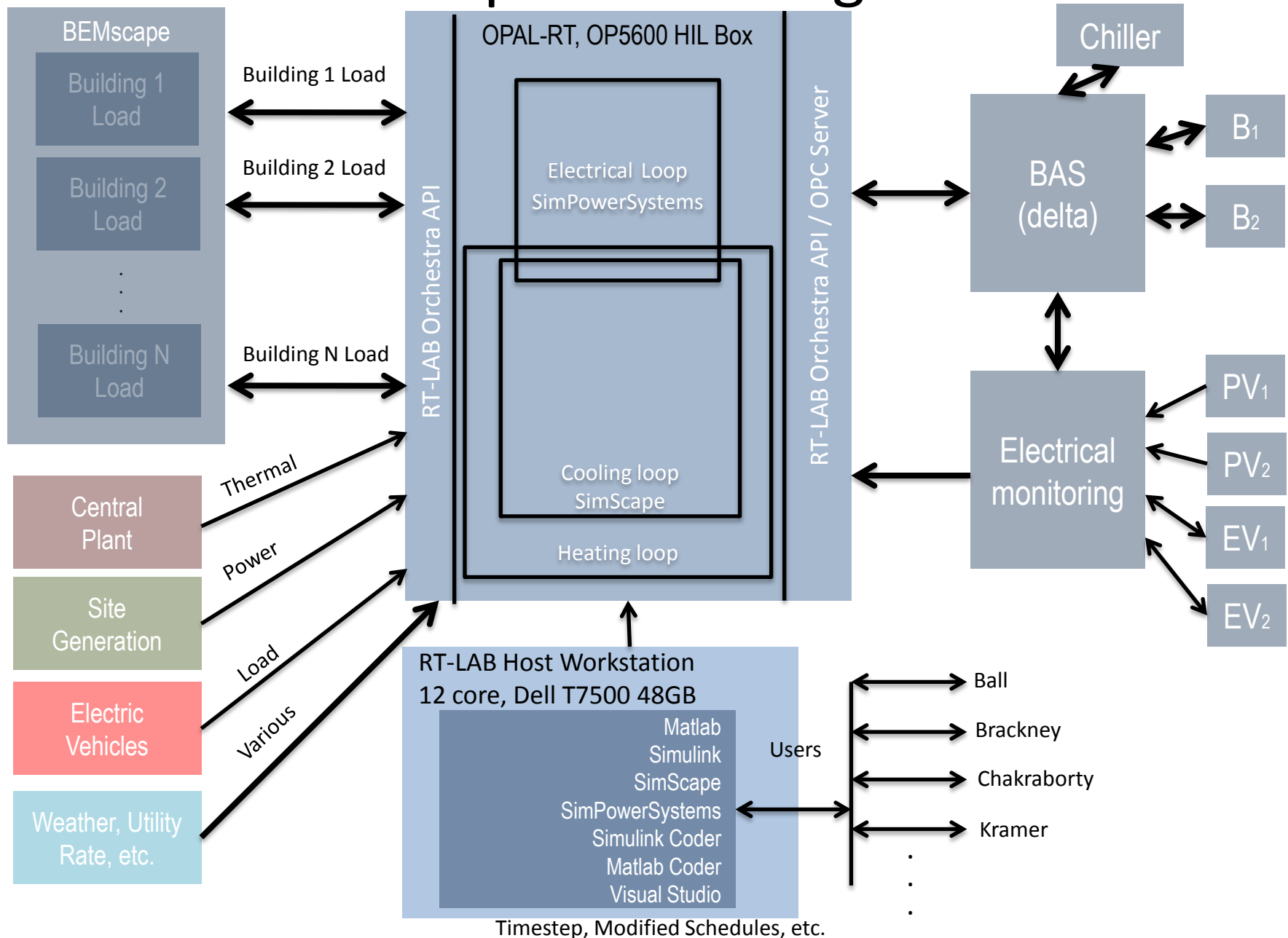


July 16, 2012

# Virtual-Campus modeling Framework



# Virtual-Campus modeling Framework



# Virtual-Campus modeling cost

## Required components

### OPAL-RT Hardware

OP5600 HIL Box (6cores)	\$13,147
Reconfig FPGA I/O system	\$11,624

### OPAL-RT Software

RT-Lab Host license	\$10,063
RT-Lab HIL Target License(1core)	\$22,217
RT-Lab Orchestra License	\$4,448

### OPAL-RT misc

Onsite training 2days	\$2,649
Shipping & Handling	\$1,995

**OPAL-RT subtotal \$66,143**

### Possible Future Additions

RT-Lab OPC Server	\$10,000
KepWare LinkMaster	\$1,000
WonderWare Info Server Client ??	
Extra I/O cards for HIL, Cables ??	
Extra RT-Lab Target core licenses??	

## Option 1

### Host Computer Hardware

Dell T7500 12core , 2.4GHz **\$9,000**  
48 GB RAMM, 3 1TB RAID 5 HDs

### Mathwork/Other Software

MATLAB (x2)	\$3,870
Simulink (x2)	\$5,850
Simscape (x2)	\$3,600
SimPowerSystems (x1)	\$2,700
Simulink Coder (x1)	\$2,925
Matlab Coder (x1)	\$5,850
Visual Studio (x1)	\$500

**subtotal: \$25,295**

**Platform total: \$100,438**

This option includes an extra  
Simulink/Simscape license for model  
Development off the Host workstation.

## Option 2

### Host Computer Hardware

Dell T7500 8core , 2.13GHz **\$6,000**  
24 GB RAMM, 3 1TB RAID 5 HDs

### Mathwork/Other Software

MATLAB (x1)	\$1,935
Simulink (x1)	\$2,925
Simscape (x1)	\$1,800
SimPowerSystems (x1)	\$2,700
Simulink Coder (x1)	\$2,925
Matlab Coder (x1)	\$5,850
Visual Studio (x1)	\$500

**subtotal: \$18,635**

**Platform total: \$90,778**

This option includes only licenses for  
Host workstation and target HIL box.  
All model development done directly on  
The Host computer.