Breakout Session 3 on To Control or To Optimize? That's the question
Conflict resolution in the SAS community by
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SAS problems-goals
— QoS
— Performance
— Security and safety
— Quality of experience
— Failure management
— Energy
— Cost
— Privacy
— Reliability

Both optimization and control require:
— measurable goals
— measurements
— control or optimization variables (parameters)
— objective prioritization (weights)

Dimension in x axis uncertain/certain and well defined
Dimension in y axis continuous and discrete

Extremes:
— discrete and well defined: control does not work, optimization does (geographical virtual machine placement problem)
— continuous and uncertain: control works very well, optimization doesn't
— continuous and certain: battery discharge of mobile device
— the other two are unclear

If you have oscillatory behavior but you need guarantees of learning the goal, than control works better

Human contributed uncertainty

When do we need to do simulation and when we don't? And can you do simulations in all the situations?