future facilities

6SigmaRoom or 6SigmaRoom^{Lite}

Which is best for me?

6SigmaRoom and **6SigmaRoom^{Lite}** are two similar products designed for different predictive modeling applications. **Room** is intended for detailed data center design, while **Room^{Lite}** is more suited to concept design using capacity planning items.

This feature comparison should help you decide which tool is best for you.

The Virtual Facility

The **Virtual Facility** - a full 3D model of the physical data center - is the model that you create to test your design, or to test any changes planned for an existing facility. Our CFD (computational fluid dynamics) solver is used to predict and validate the model, and you can run what-if scenarios to test whether the design will meet key availability, physical capacity and cooling efficiency requirements.

Solve Faster, in Higher Resolution

The 6SigmaDCX suite uses a grid to define the boundaries of the Virtual Facility.

RoomLite uses larger grid cells - this gives you fast solve times, but lower resolution results. Use Room Lite for speedy concept design.

Room uses much smaller grid cells - these increase the solve time, but also give a much more in-depth picture of what's happening in your facility. Use Room for maximum resolution and detail.

Model Your IT

RoomLite approximates your IT equipment.

Room models individual IT equipment. If you want simulation results and plots for your IT equipment, you need Room.

Model Complex Controls

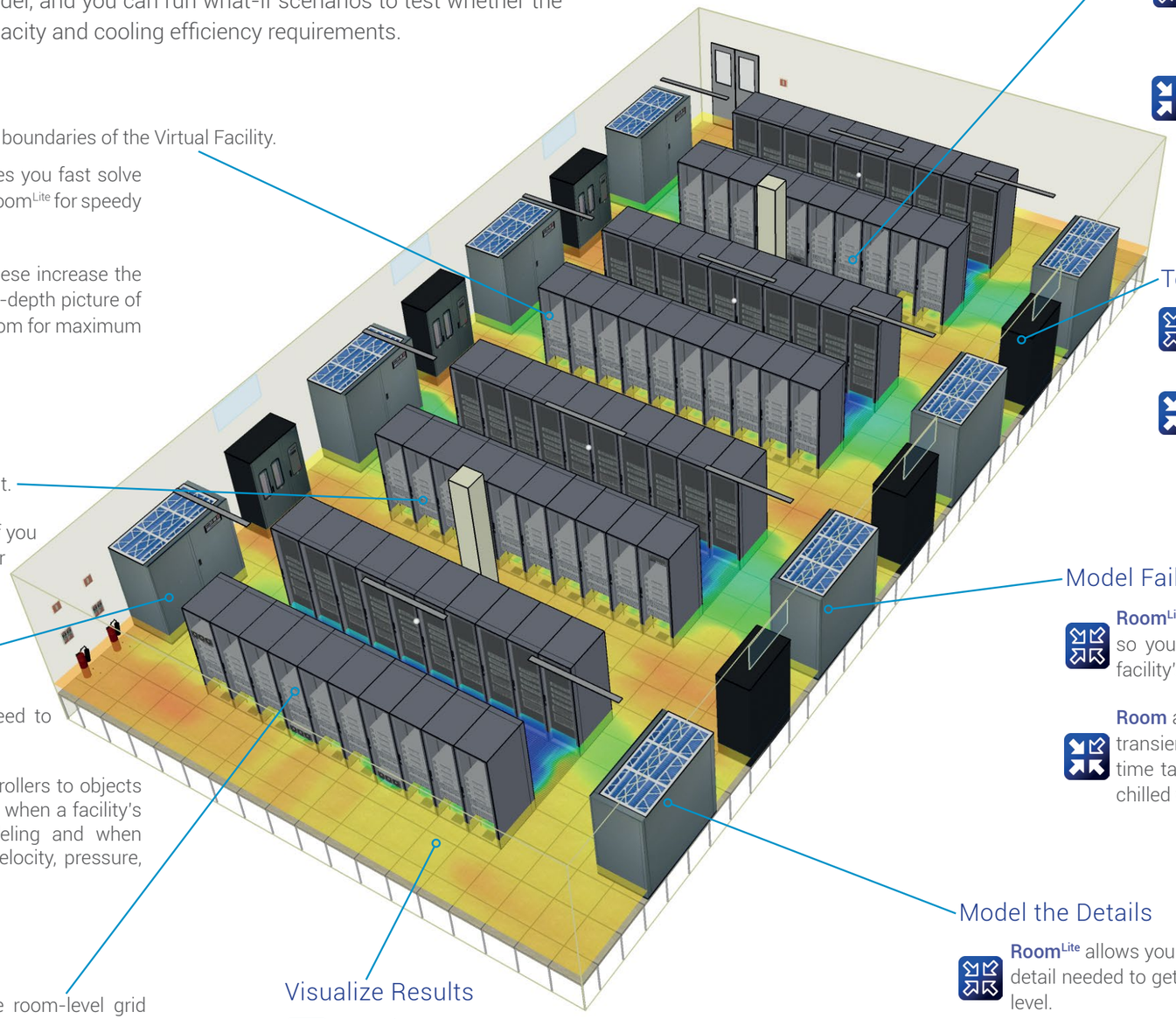
RoomLite comes with everything you need to model a simple cooling control strategy.

Room allows you to add additional controllers to objects such as fans, vents and ACUs. It is ideal when a facility's control strategy requires precise modeling and when you want to exercise full control over velocity, pressure, temperature, and humidity.

Add Cabinet Detail

RoomLite treats cabinets as part of the room-level grid - it's perfect if you don't need a high resolution analysis of what's happening inside them.

Room will grid and explicitly model the internal details of cabinets. This allows you to see detailed simulation results and plots for individual IT equipment.



Visualize Results

RoomLite is balanced to provide enough information for analysis without over-complicating matters.

Room was designed with the ultimate flexibility for visualizing results - it features a wide range of result plots to enable detailed analysis.

Import Asset & CAD Data, Integrate With DCIM

RoomLite allows you to import asset data into your model via a CSV file, and to import CAD data in .dwg and .dxf formats.

Room allows asset and CAD data to be imported, adding the ability to import CAD in .stl and .xml file formats. Room can also integrate with a wide range of market-leading DCIM tools.

Test Your Power Network

RoomLite allows you to set cabinets to a specified IT power.

Room gives you the ability to create full power connectivity, test failures on any part of the power network, and visualize phase balance, breaker loads and panel schedules.

Model Failure Scenarios & Transients

RoomLite allows you to explore what-if failure scenarios, so you can see the worst-case scenario and test your facility's redundancy.

Room allows you to do this, and adds the ability to model transient failure scenarios. This allows you to observe the time taken for a facility to overheat following an ACU or chilled water system failure.

Model the Details

RoomLite allows you to model your facility with the level of detail needed to get accurate results down to the cabinet level.

Room has additional functionality that allows you to model external flows (i.e. around buildings and chiller plants), model evaporative cooling pads and room humidity, and calculate solar intensity. Room can also model office environments and generate human comfort calculations.

Contact Future Facilities to Find Out More.

For a decade, Future Facilities has provided computational fluid dynamics (CFD) software and consultancy services to the world's largest data center owner-operators and to the industry's leading consultancies.

With global offices, our managed engineering services and modeling software are relied on to deliver unique insight into the current and future performance of our clients' mission critical data centers. We call our approach 'predictive simulation'.

Arrange a Demo

We'll show you exactly how you can get the most out of our 6SigmaDCX engineering analysis suite.

Take a Trial

Take a free, no-obligation trial. Includes full technical and engineering support for 30 days.

Request an Assessment

Ask our highly experienced DC engineers to assess your data center(s).

6Sigma DCX