



## Introduction

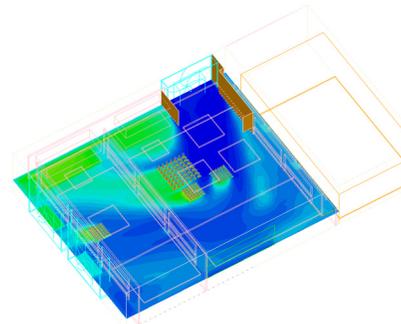
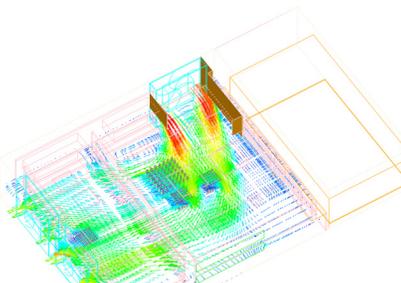
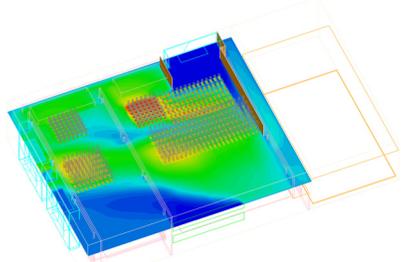
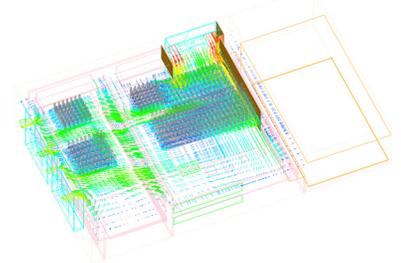
Cisco Systems chose Aavid, Thermal division of Boyd Corporation, to evaluate the overall thermal performance of their TelePresence system and provide a comprehensive thermal solution to cool their product.

## The Challenge

Our analysis of the system found several high power components would overheat without increased heat dissipation.

Airflow was bypassing a critical area of the system, causing thermal problems for several components.

Components downstream in the airflow path were seeing preheated air and low air velocities.



## The Solution

Aavid created a CFD model to characterize the air flow and temperature profile of the system. The critical components and product zones were then identified from the model.

A customized baffle was designed for the cooling air intake to minimize air bypass and direct the airflow over the thermally critical components.

Optimized heat sinks were designed for the thermally critical components to reduce their junction temperatures to an acceptable level.

## The Deliverables/Results

The Aavid solution optimized air flow through the system to maximize heat dissipation of critical components, giving the customer higher system reliability.

The cooling solution gave the customer new design options for system upgrades and to increase performance in the next product generation.