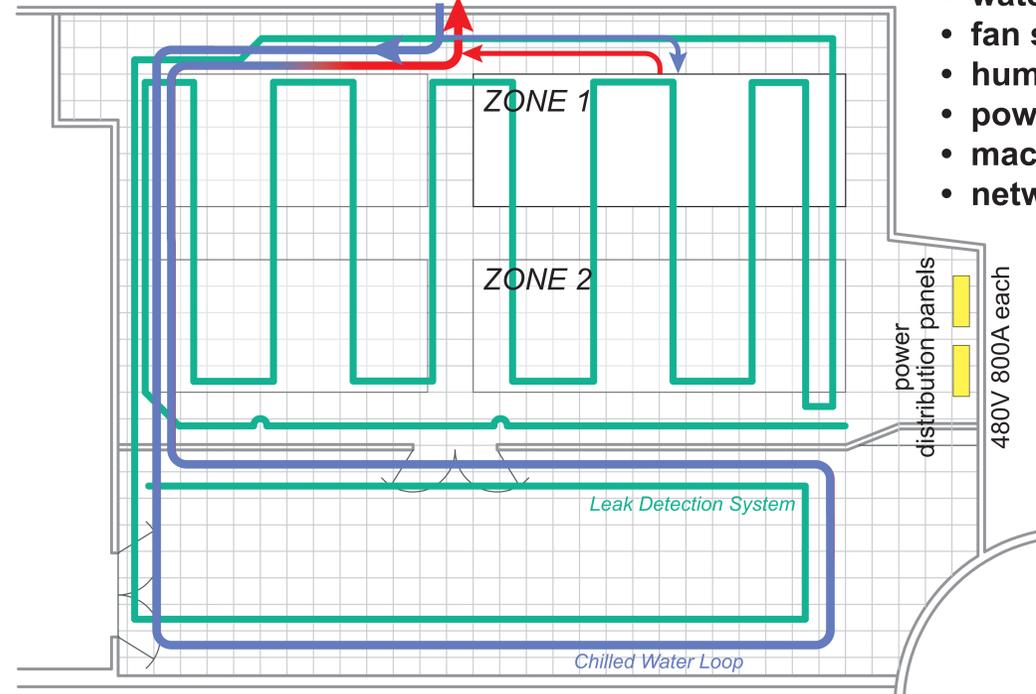


Data Center Observatory

General Schematic

DATA CENTER OBSERVATORY



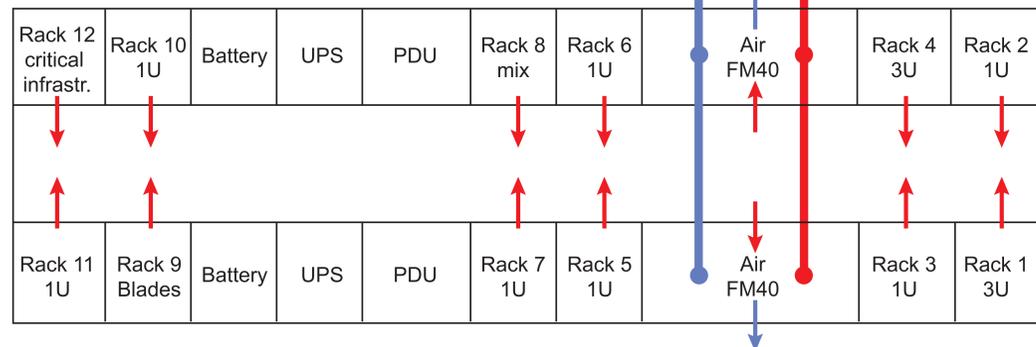
MONITORING / INSTRUMENTATION

- air temperature
- water temperature
- fan speed
- humidity
- power (quantity & quality)
- machine status
- network status

- Grey system for room access security
- Double interlock pre-action sprinkler system
- Distance-read sub-floor leak detection system

ZONE 1

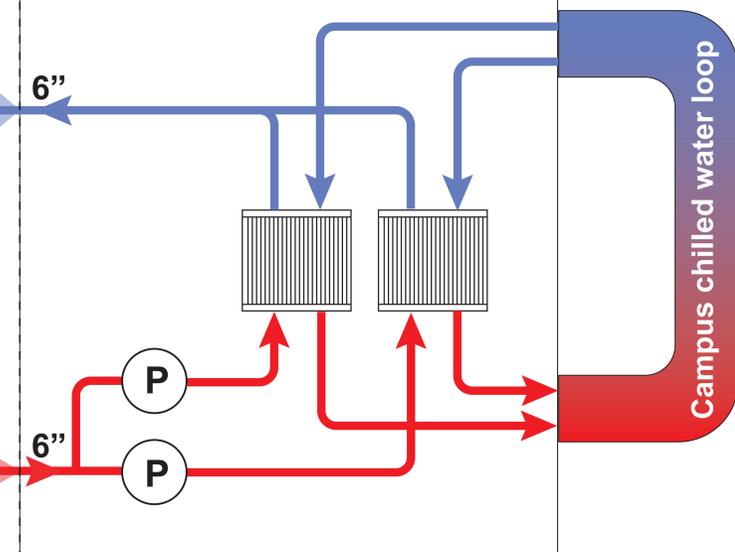
- High density enclosure (HDE)
- 12 racks
- Heat contained within HDE
- Exterior room air is 72 degrees
- Interior (hot aisle) up to 90 degrees
- Battery power for 4 minute shutdown



PUMP ROOM

- Redundant heat exchangers and pumps; use cycled for even wear
- Pumps have back-up generators
- Pumping system also includes:
 - chemical feeder to prevent inline algal growth
 - expansion tank
 - air separator unit

PUMP ROOM (FMS BUILDING)



CIC BUILDING
CIC PARKING GARAGE

CIC GARAGE

- Pipes insulated and heat traced
- Pipe diameters upsized to support 4 minutes of operation in the event of a campus loop failure

Parallel Data
Laboratory



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