Computer Room

The support equipment such as HVAC floor mounted air handlers, coolant distribution units, electrical PDU, static switches, fire suppression tank may require around 40% of overall space in the equipment area.

The cabinet and rack layout should be considered to allow for maximum flexibility. A data center may significantly change its ITE inventory every 3 to 5 years.

The data center planner should coordinate early on with mechanical and electrical systems designers. The computer rooms should be designed in a manner to provide adequate space for current equipment, growth, technology refresh, personnel and equipment circulation, and support equipment.

Production, development, and test systems should be in separate areas of the computer room, preferably in separate rooms served by dedicated networks.

Expansion should be planned into computer rooms. With the multitude of elements that affect the IT
environment, it is difficult to plan for exact expansion needs.

The mechanical should be segregated from ITE in the computer room for class F3 and F4 facilities since installation; servicing and maintenance will typically be performed by different personnel.

The physical barrier is recommended to accomplish the segregation between the mechanical and ITE, permeable to the airflow or by installing the HVAC components in a separate room adjacent to the computer room with opening for the airflow.

Revision #1
Created 3 October 2025 11:08:31 by RISA
Updated 3 October 2025 11:08:44 by RISA