

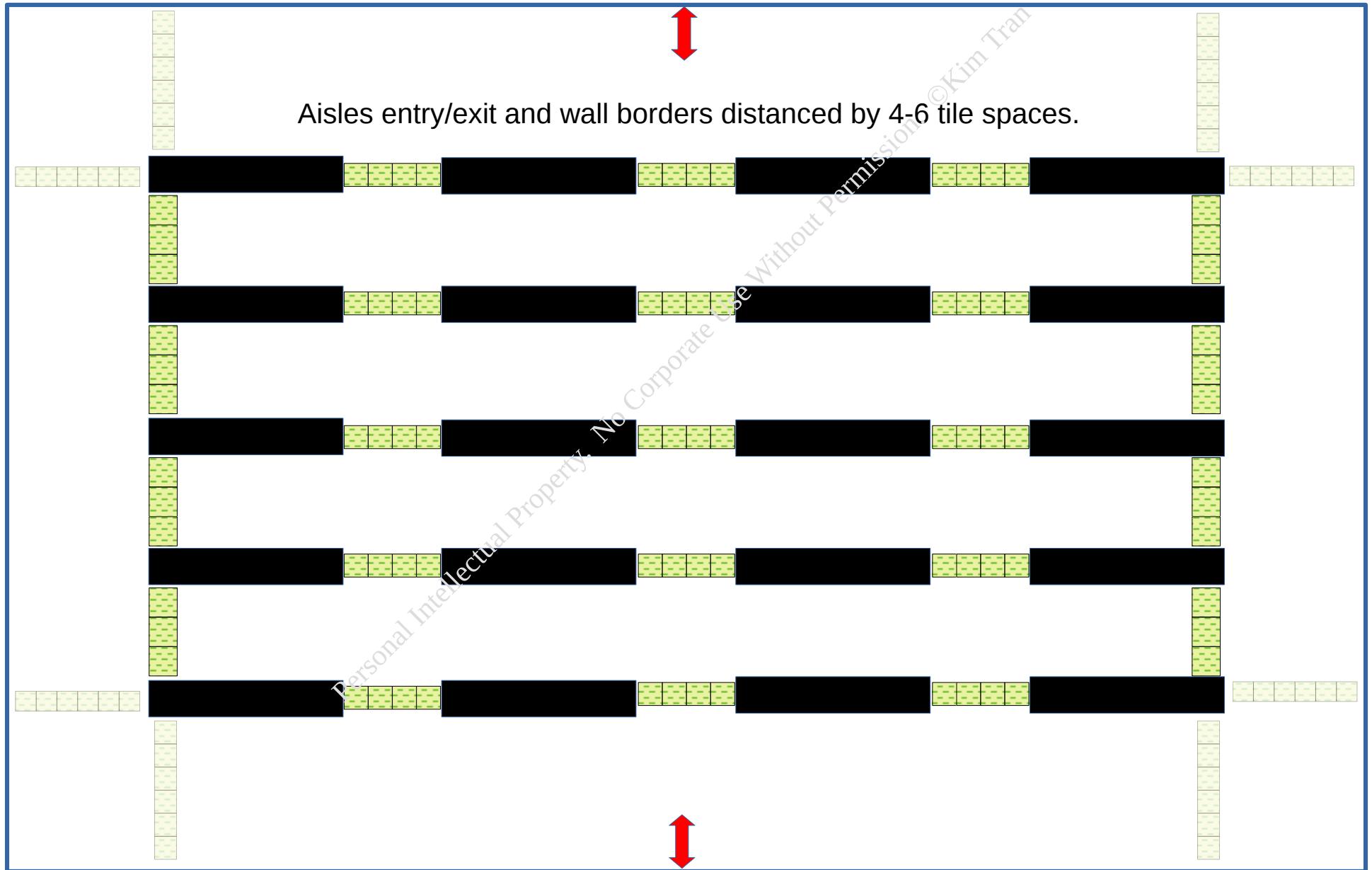
# Revised Lab layout drafting of the 4 major research/development lab environments

Example of best practices standards for lab environment layout

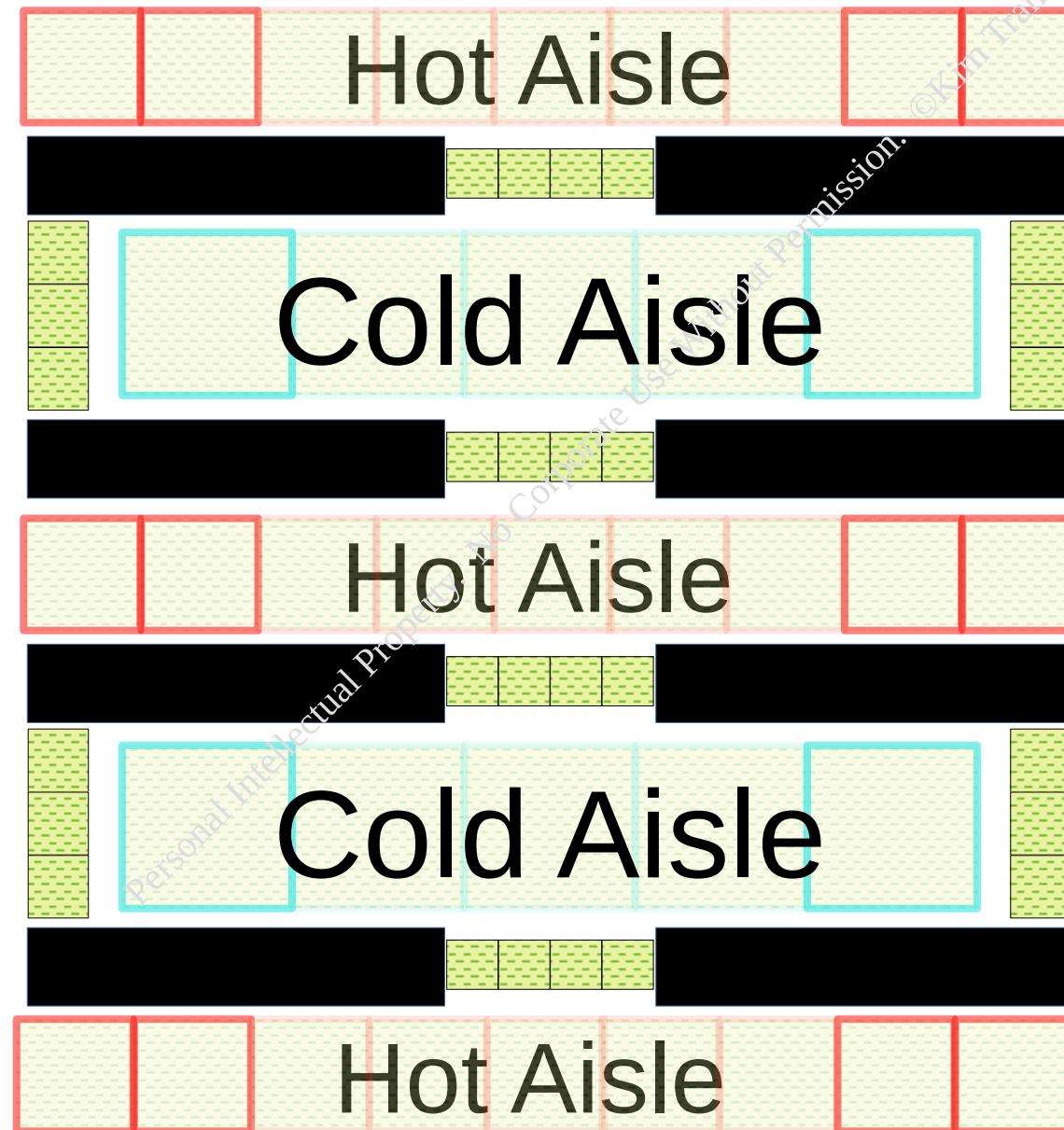
Each lab had their own business unit and their own racks of equipment and gear, i.e. ExtremeIO, ScaleIO, Vmax, Vnx/Unity, Isilon, Celerra, Data Domain, Vplex, Recoverpoint, etc...

Rows and sections of  
racks/cabinets

Rows and sections of  
racks/cabinets



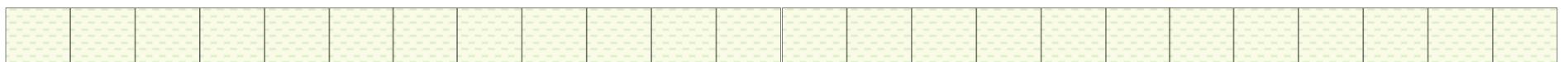
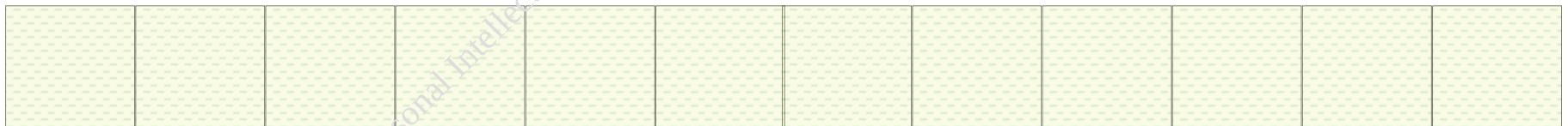
The lab rows are generally separated by 4 tile spaces, the aisles -horizontally.  
The distance between each row is 3 tile spaces – vertically.



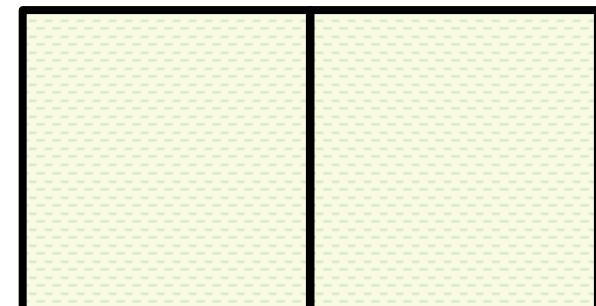
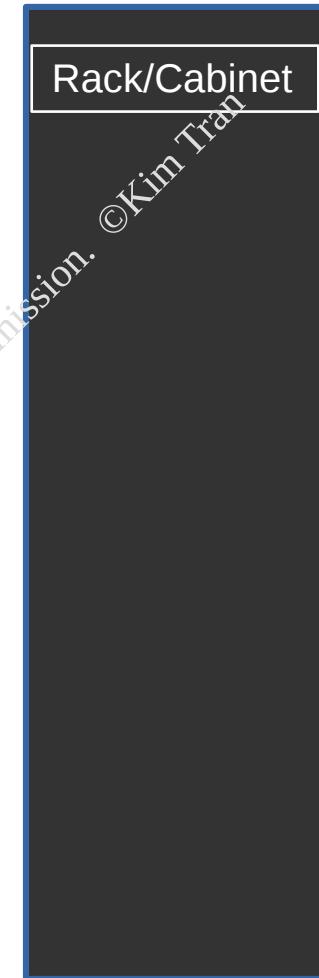
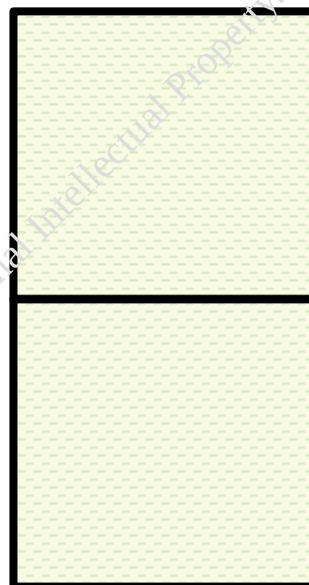
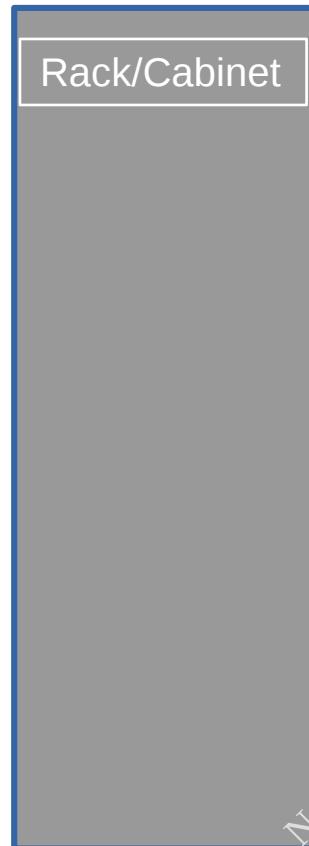
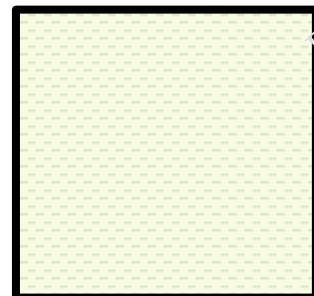
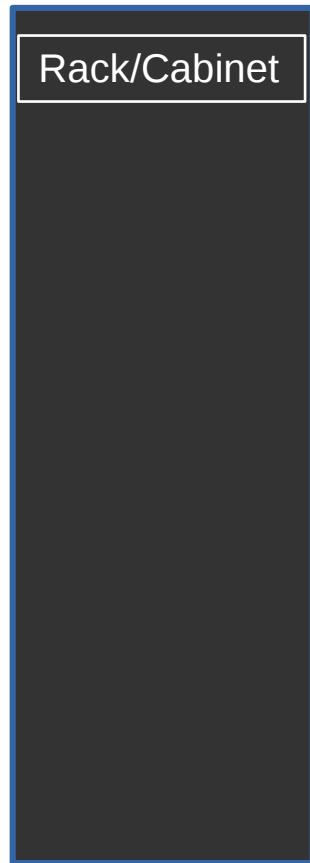
## Rows and sections of racks/cabinets



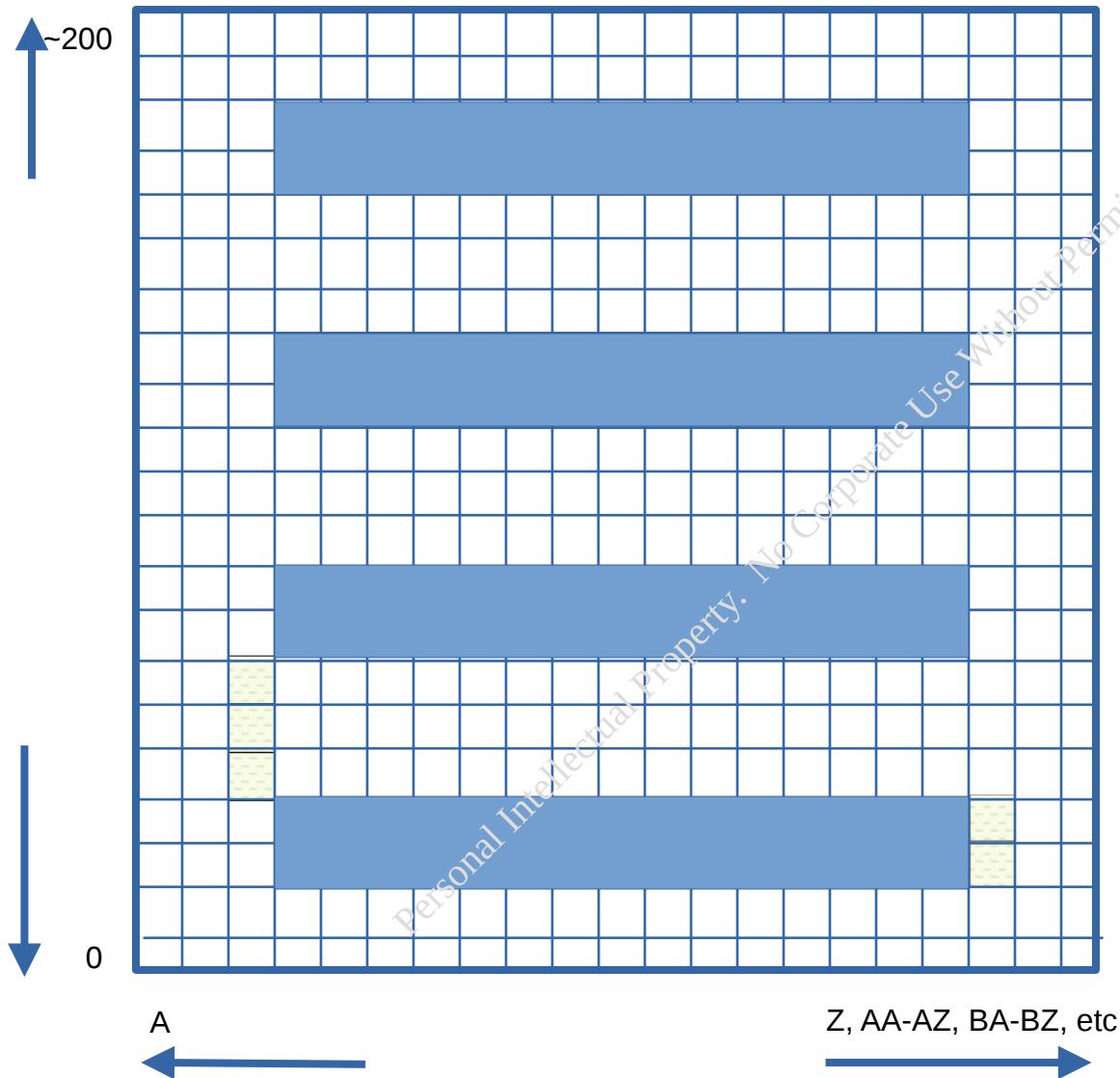
A row is occupying 1 tile space width and 2 tiles space length.  
Number of racks/cabinets in each row is dependent upon layout and  
capacity groupings such at 5, 10, 15, etc...



Alignment on  
tile(s) depending  
on rack or cabinet.



No reason for it  
to not be  
flushed or  
aligned with  
the tile width.

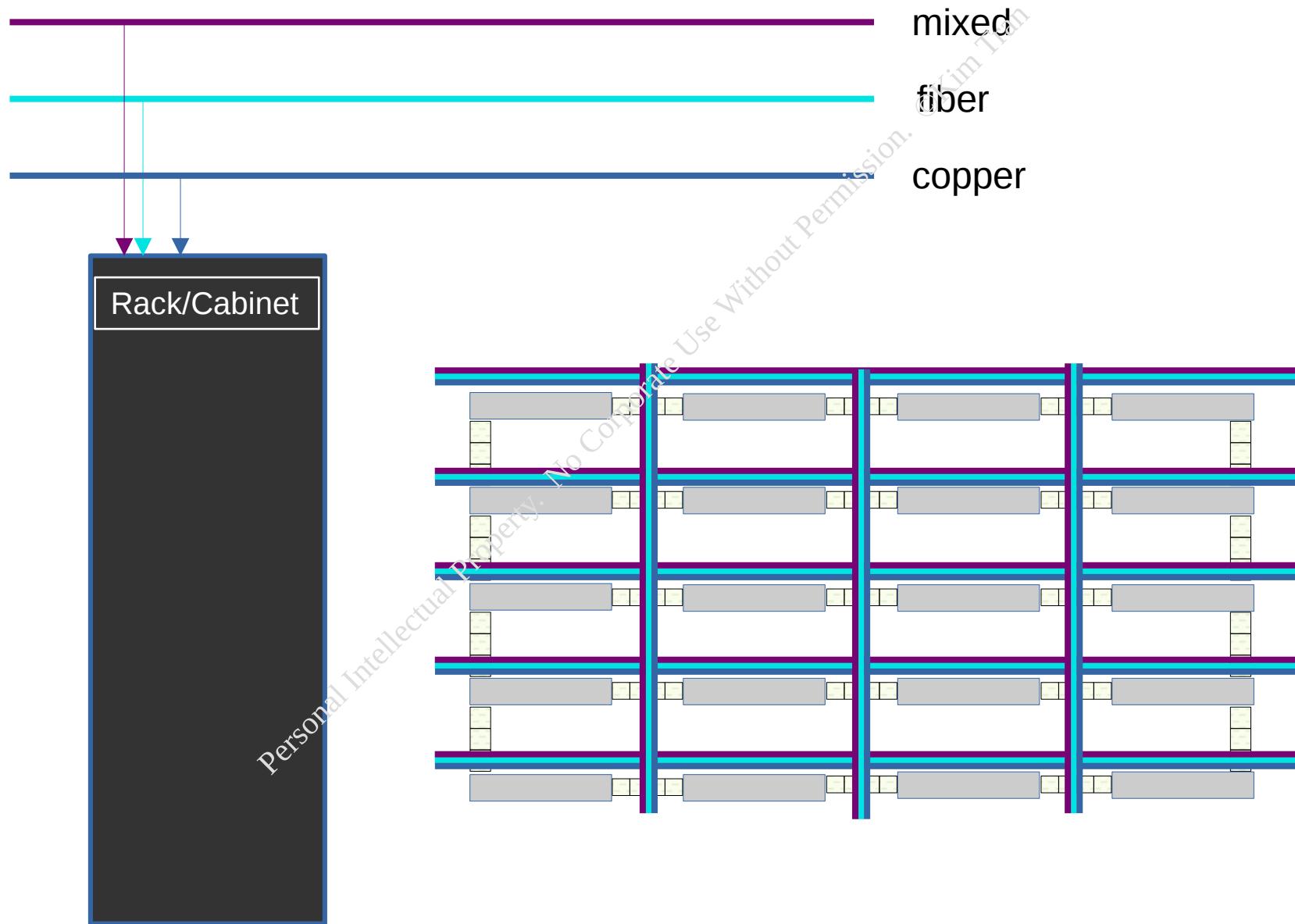


Example floor tile space grid layout, depending on which axis is chosen for numbers or letters, to have a precise grid mapping.

Easier logistics of every x row starts on a certain letter/number.

(i.e. every 5<sup>th</sup> tile space starts a row or ends on a location point, 12F, 84AP, etc...)

Cable trays elevated from the ceiling.  
Ran at the intersection of the aisles and end off row tiles  
to avoid cable run obstruction from the racks/cabinets.



## Generalizations (lab 4):

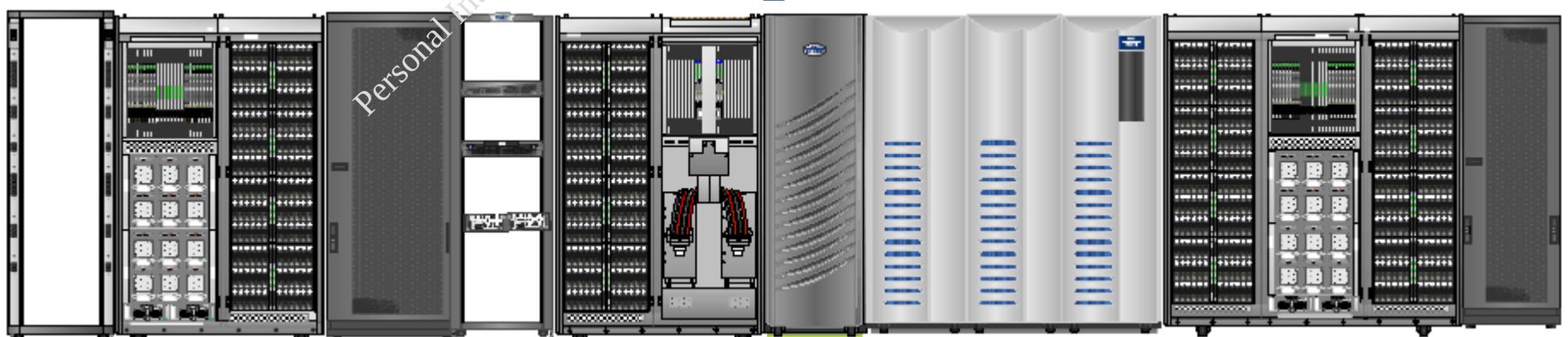
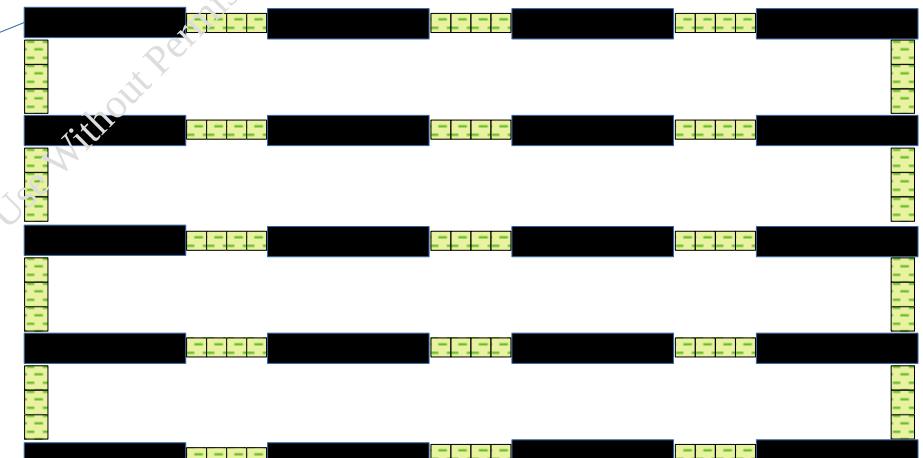
- width of room dimensions 42 tiles  
(24" LxW) [41 tiles + ~1/2 tile on each end]
- length of room dimensions 151 tiles (24" LxW)
- height from floor to ceiling is ~146" / 12'2"

- cable trays distance raised from the floor:
  - bottom tray ~103" / 8'7" (fiber)
  - middle tray ~113" / 9'5" (ethernet)
  - top tray ~118" / 9'10" (fiber/network/inter-lab connections)
- at C7, M/N7, V/W7, AF7, AO/P7

Rows : D6-T6, Y6-AM6

Rows and sections of racks/cabinets

Generalized visual representation only



### Generalizations (lab 3):

- width of room dimensions 43 tiles  
(24" LxW) [42 tiles + ~1/2 tile on each end]
- length of room dimensions 151 tiles (24" LxW)
- height from floor to ceiling is ~146" / 12'2" (if similar to lab 4)

### -cable trays distance raised from the floor (if similar to lab 4):

bottom tray ~103" / 8'7" (fiber)  
middle tray ~113" / 9'5" (ethernet)  
top tray ~118" / 9'10" (fiber/network/inter-lab connections)  
at B/C8, M/N8, V/W8, AE/F8, AP/Q8

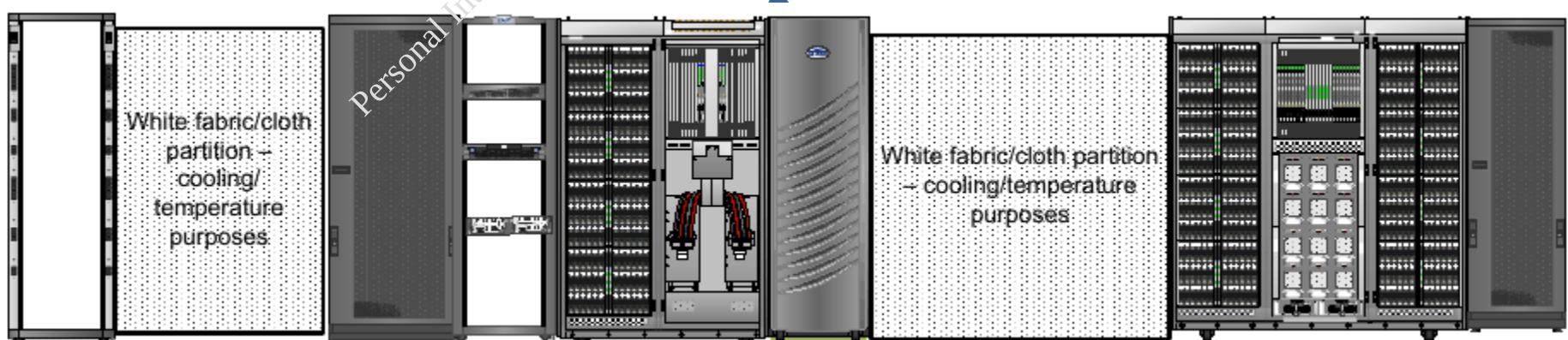
Rows : C6-T6, X6-AP6

Rows in this lab distanced by 3 tile spaces

Generalized visual representation only



Rows and sections of  
racks/cabinets



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## Generalizations (lab 2):

- width of room dimensions 50 tiles  
(24" LxW) [49 tiles + ~1/2 tile on each end]
- length of room dimensions 151 tiles (24" LxW)
- height from floor to ceiling is ~146" / 12'2" (if similar to lab 4)

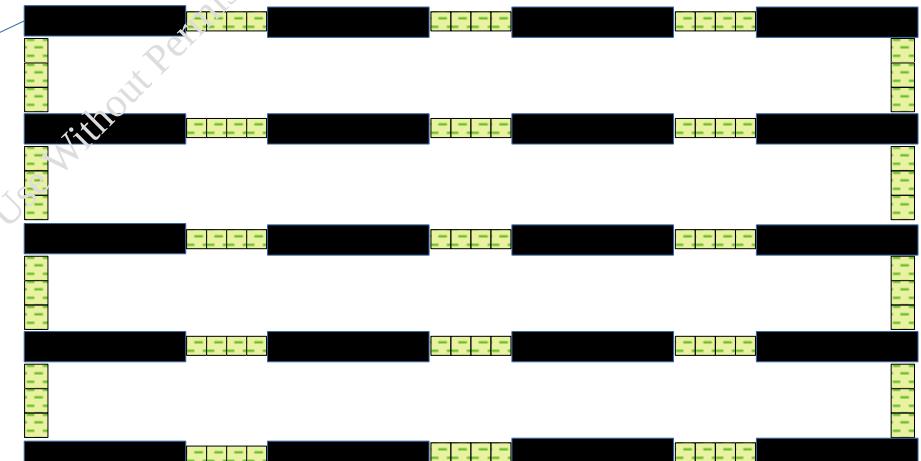
## cable trays distance raised from the floor (if similar to lab 4):

bottom tray ~103" / 8'7" (fiber)  
middle tray ~113" / 9'5" (ethernet)  
top tray ~118" / 9'10" (fiber/network/inter-lab connections)  
at C7, N7, W/X7, AJ/K7, Ax7

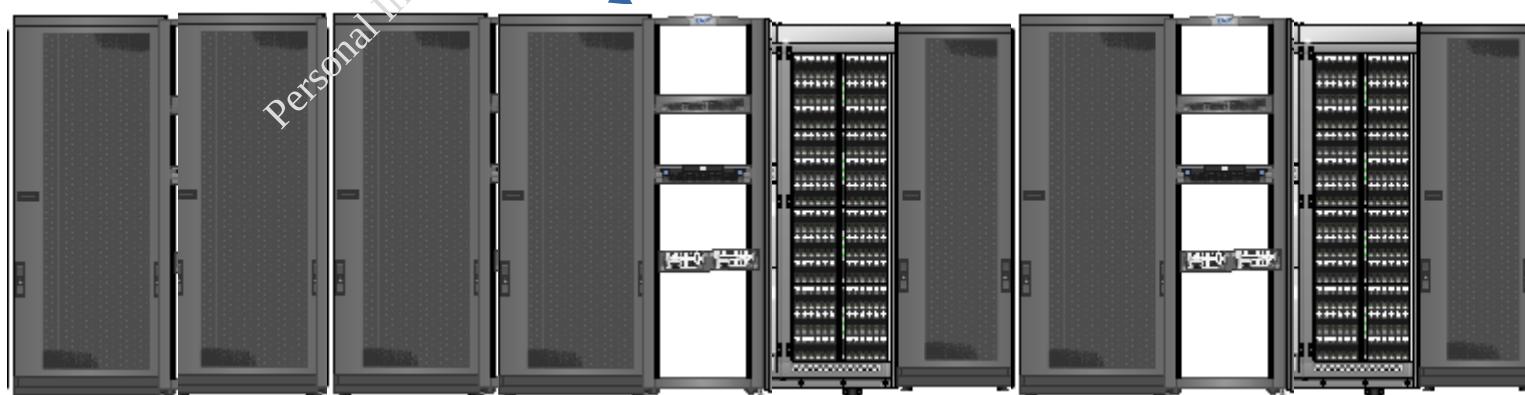
Rows : D6-U6, Z6-AU6

Rows in this lab distanced by 3 tile spaces

Generalized visual representation only



Rows and sections of  
racks/cabinets



## Generalizations (lab 1)

- width of room dimensions 91 tiles (24" LxW)
- length of room dimensions 152 tiles (24" LxW)
- height from floor to ceiling is ~146" / 12'2" (if similar to lab 4)

- cable trays distance raised from the floor (if similar to lab 4):

bottom tray ~103" / 8'7" (fiber)  
middle tray ~113" / 9'5" (ethernet)  
top tray ~118" / 9'10" (fiber/network/inter-lab connections)  
at H7, Q/R7, AD7, AL/M7, AY/Z7, BH/I7, BW/X7, CF7

Rows : D6-U6, Z6-AQ6, AV6-BM6, BS6-CJ6

Rows and sections of racks/cabinets

Generalized visual representation only

