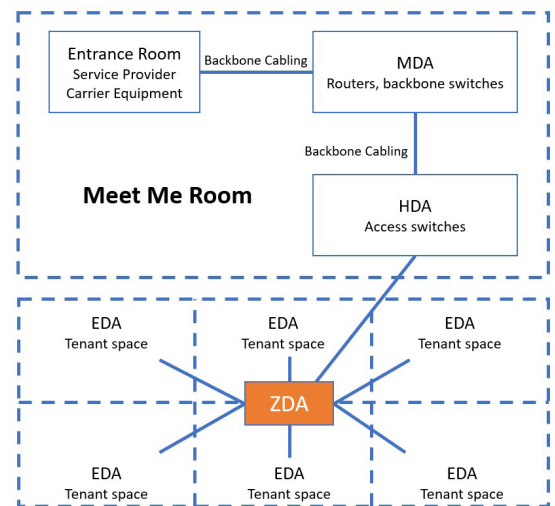# TECH BRIEF

Zone Cabling in the Colocation Data Center

for Rapid Deployments and Improved SLAs

Whether leasing space by the rack unit, cabinet, or cage, as a colocation facility, you need to provide the infrastructure for your tenants' equipment, including power, cooling, physical security and high-bandwidth connections to access providers (ISPs, LECs, etc.). Let's face it – deploying high-bandwidth cabling from the meet-me room (MMR) to the tenant space takes time, space and cost. Thankfully there is a design strategy colos can deploy that helps eliminate these challenges, delivering benefits for both the business and tenants alike.

As referenced by industry standards like ANSI/TIA-942-A and ISO/IEC 24764, a typical enterprise data center includes functional areas, including the main distribution area (MDA), horizontal distribution area (HDA) and equipment distribution area (EDA). Colocation data centers are no different – the MMR houses the MDA or HDA, and each tenant space could be considered an EDA. While uncommon in enterprise data centers, optional zone distribution areas (ZDAs) between the MMR and tenant
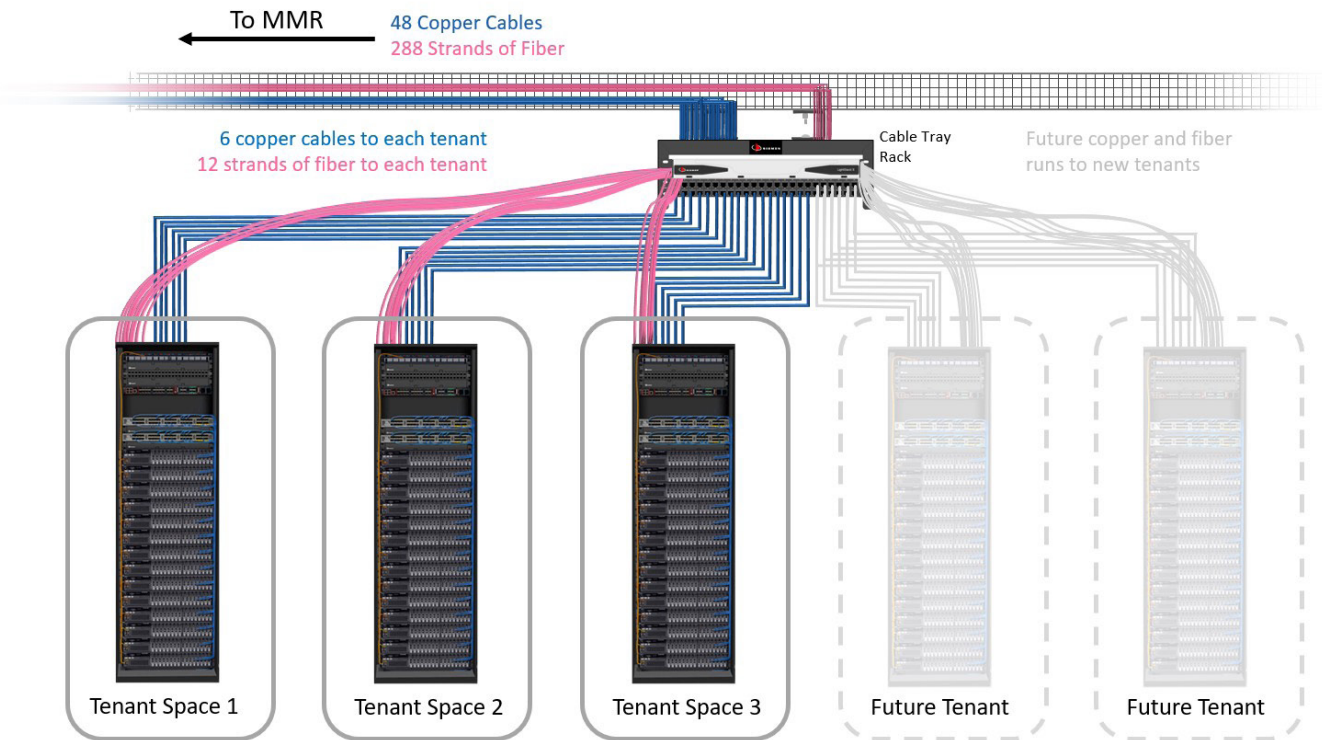

- ZDAs can be located to serve a specific area or number of tenants
- ZDAs can be fully cabled with permanent links from the MMR
- Short links from the ZDA deliver services to tenant spaces
- Spare ports within the ZDA are allocated for future tenants

An ideal Zone Solution

Part of WheelHouse® Advanced Data Center Solutions, Siemon's Cable Tray Rack is the ideal solution for housing ZDAs in a colocation data center. Designed to mount directly to overhead ladder rack or cable tray, the Cable Tray Rack can be mounted above tenant spaces and utilized to house fiber and/or copper patch panels for interconnection from the MMR.

- Robust 12-gauge steel construction with a 60 lb. load rating
- Provides 2U, 4U or 6U of 19-inch rack mount space
- Flexible mounting below, flush or above cable tray
- High-capacity ¼-turn twist lock cable managers
- Ideal for use with pre-terminated copper and fiber to further speed deploy-

SIEMON™

To MMR

48 Copper Cables
288 Strands of Fiber

6 copper cables to each tenant
12 strands of fiber to each tenant

Cable Tray Rack

Future copper and fiber runs to new tenants

Tenant Space 1

Tenant Space 2

Tenant Space 3

Future Tenant

Future Tenant

In the example above, Siemon's Cable Tray Rack houses a 48-port copper patch panel and a 1U high-density fiber enclosure, which are fully cabled from the MMR via 48 copper cables and 288 strands. From the Cable Tray Rack, short strands of copper and fiber deliver services to each of the tenant spaces, and spare ports are allocated for future tenant spaces. Delivering new services requires only short links from the Cable Tray Rack in the ZDA for fast, easier deployment. Tenant connections can also be easily reconfigured at the Cable Tray Rack.

As a growing colocation, every time we acquired a new tenant, we had to pull cable from the meet-me room to the tenant space for access to the local exchange. Not only was it labor-intensive, but it was always a rush to get it done – the faster we could bring a new tenant on line, the faster we grew revenue.

We were skeptical about consolidating cabling at zone distribution areas due to additional components and potential performance issues associated with another connection point. Siemon's low-loss preterminated fiber solutions solved the performance concerns, and once we realized how quickly and easy it was to deploy short links from the Cable Tray Rack to bring a new tenant online, we were sold. We now use this solution throughout our colocation facility, strategically placing the Cable Tray Racks to serve groups of tenant spaces. The time required to bring a new tenant on line has been virtually cut in half!

- Colcation Data Center Owner

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