

# Back to Back vPC to Support Highly-Available Hosts

## Naming scheme

- dc-a-rtr and dc-b-rtr function as the Aggregation Layer for the Data Center, providing vPC, HSRP, and Layer 3 routing services
- Each Cabinet sports a top-of-rack Layer 2 switch, e.g. dc-211-esx and dc-212-esx in Cabinets 211 and 212, which provide Access Layer services
- Hosts equipped with dual NICs cable one NIC to dc-211-esx and the other to dc-212-esx

## Design

Access Layer switches, e.g. dc-211-esx and dc-212-esx, are bound together using a vPC, presenting themselves as a single switch upward to the Aggregation Layer (dc-a-rtr and dc-b-rtr), which similarly presents a (4) port LACP Channel downward to the Access Layer as though dc-211-esx and dc-212-esx were a single switch. No ports are blocked by Spanning Tree

