Cboe Latency Equalization

Customer Cage NY4 → **Equinix NY4 Spool Hub** + **Cboe NY4 Cage PoP** + **NY4 – NY5 Laterals** (EQUINIX — EQUINIX) → **Cboe NY5 Matching Engine**

11μ RTT

Customer Cage NY5 → **Equinix NY5 Spool Hub** + **Edge Devices** + **Cboe NY5 Cage** / **NY4 – NY5 Fiber Distance Replication** → **Cboe NY5 Matching Engine**

11μ RTT
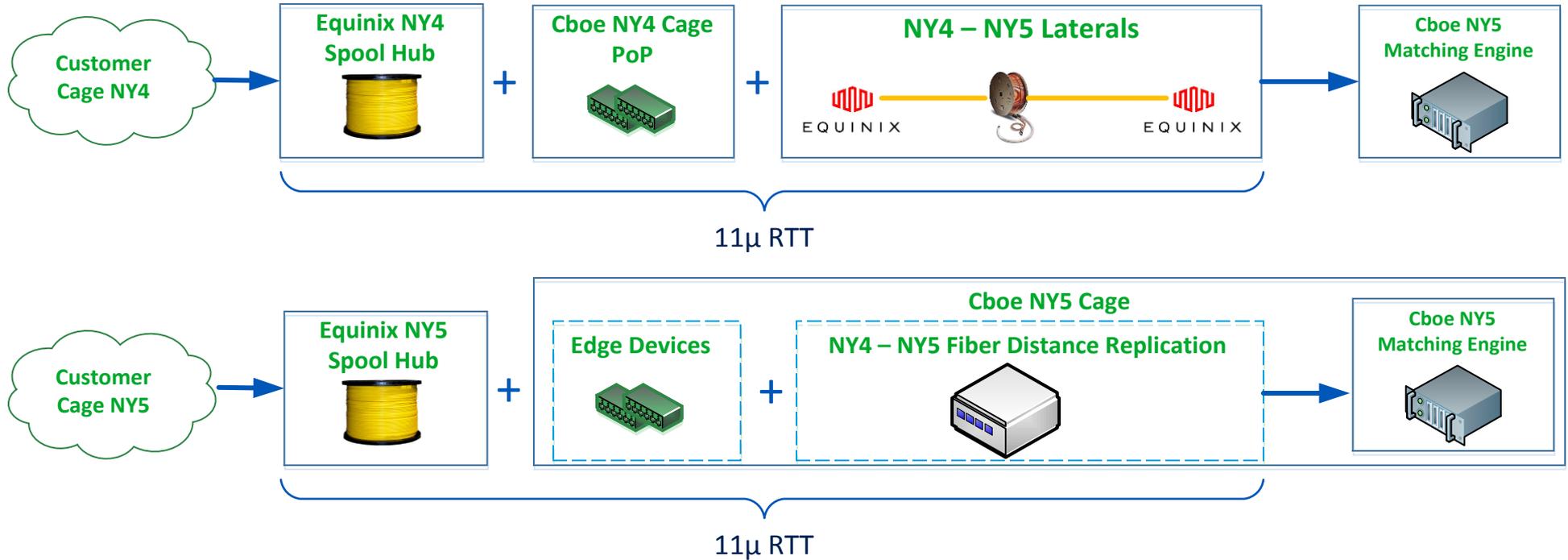
- Cboe/Equinix Latency Equalization Infrastructure provides an equal optical length of fiber to customers connecting in either the NY4 or NY5 Secaucus, NJ data centers.

- Fiber cross connects to customer cages are run from Equinix Latency Equalized Hubs using equal lengths of single-mode fiber to each customer cage. The additional slack fiber is stored on the Cboe side of the cross connect. Regardless of the customer's distance from the Equinix Latency Equalized Hub, the fiber spool length is identical.

- Latency Equalized Hubs within NY4/NY5 are connected via fiber trunks to the matching engines in the NY5 data center. Since the NY5 Latency Equalized Hub is much closer to the matching engines, these fiber trunks connect through additional lengths of fiber to replicate the distance between NY4 to NY5. It is imperative that customers order cross connects only in their local data centers. For example, the Letter of Authorization (LOA) for a customer cage located in NY4 will specify a NY4 demarcation. In this scenario, attempting to order a NY4-to-NY5 cross connect would greatly increase your fiber distance and overall latency to the matching engine in NY5 – duplicating the latency equalized engineered distance. Customers with cages outside of NY4/NY5 Secaucus campus should order cross connects to the NY4 Latency Equalized Hub for the lowest latency.

- Finally, the fiber patch between assigned demarcation point and the Cboe outside network device is adjusted to a custom length, ensuring the total fiber optical length is within acceptable tolerances.

- Every customer fiber path and trunk is tested end-to-end using a proprietary Optical Backscatter Reflectometer (OBR).