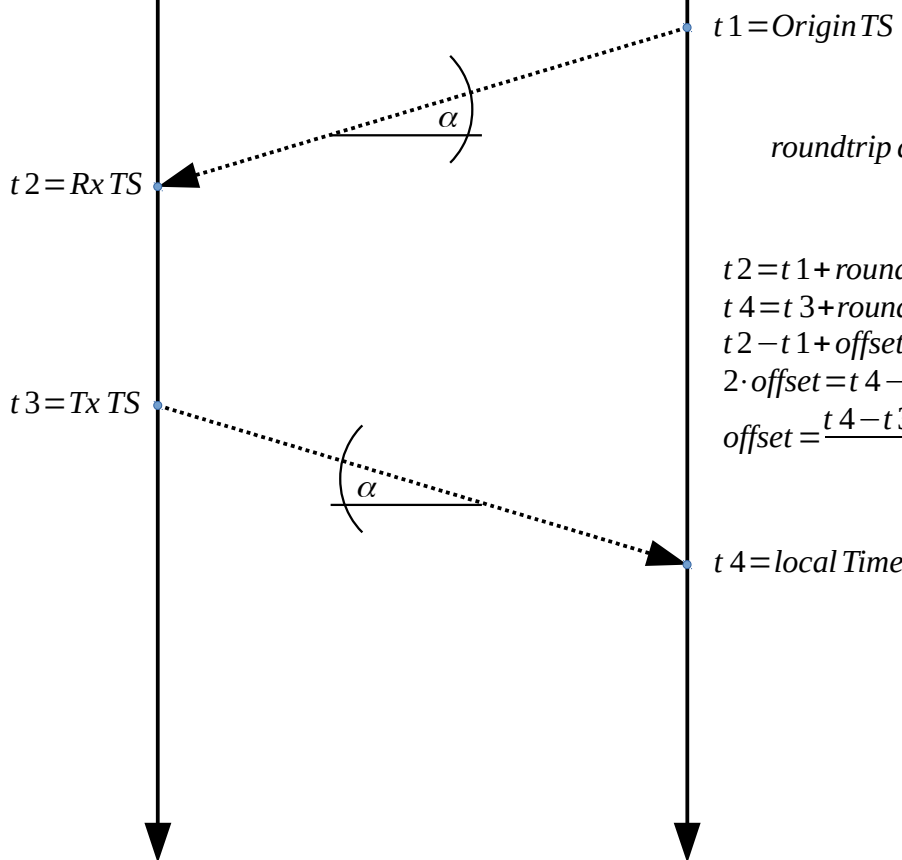


Server

Client



$$\text{roundtrip delay} = \frac{(t_4 - t_1) - (t_3 - t_2)}{2}$$

$$t_2 = t_1 + \text{roundtrip delay} - \text{offset} \rightarrow \text{rtd} = t_2 - t_1 + \text{offset}$$

$$t_4 = t_3 + \text{roundtrip delay} + \text{offset} \rightarrow \text{rtd} = t_4 - t_3 - \text{offset}$$

$$t_2 - t_1 + \text{offset} = t_4 - t_3 - \text{offset}$$

$$2 \cdot \text{offset} = t_4 - t_3 - t_2 + t_1$$

$$\text{offset} = \frac{t_4 - t_3 - t_2 + t_1}{2}$$