

Why $o = (tr1 - tr2 + ts2 - ts1) / 2$?

- **Offset $o = (tr1 - tr2 + ts2 - ts1) / 2$**
- **Let's calculate the error**
- **Suppose real offset is $oreal$**
 - Child is ahead of parent by $oreal$
 - Parent is ahead of child by $-oreal$
- **Suppose one-way latency of Message 1 is $L1$ ($L2$ for Message 2)**
- **No one knows $L1$ or $L2$!**
- **Then**
 - $tr1 = ts1 + L1 + oreal$
 - $tr2 = ts2 + L2 - oreal$