

Sistemas Distribuidos

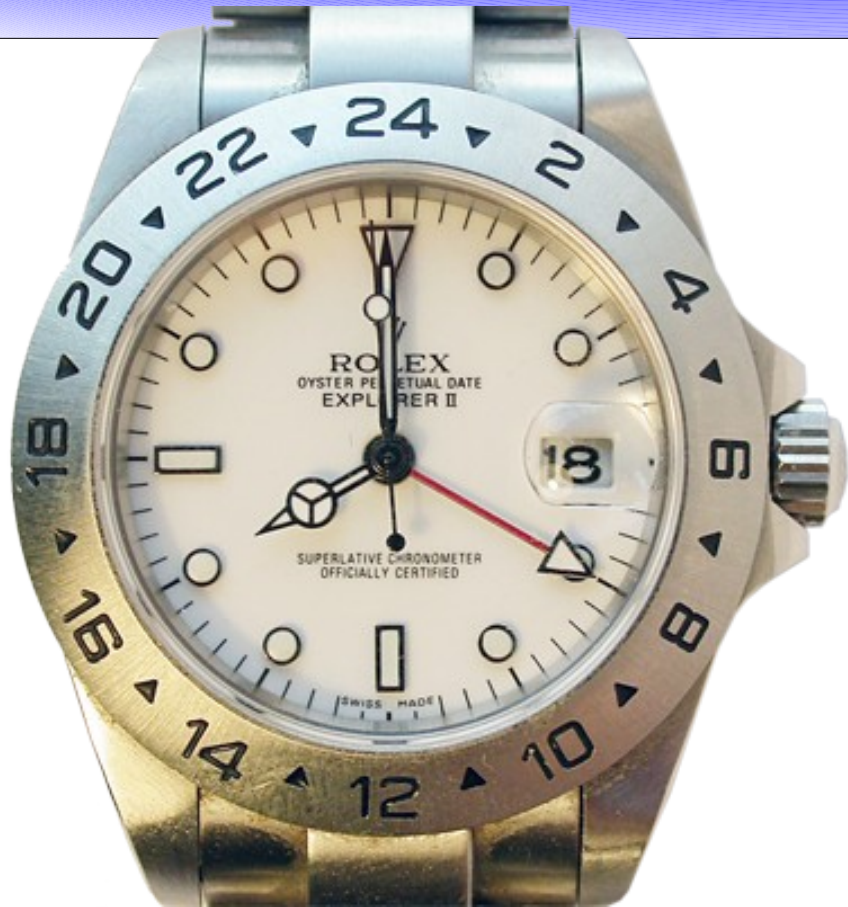
Miércoles, 1 de febrero

Sincronización

Medición del tiempo

- Importancia
- Relatividad
- Simultaneidad

Relojes físicos



8:00:00



8:00:00

Sept 18, 2011
8:00:00

Relojes físicos



8:01:24

Sesgo = +84 seconds
+84 seconds/35 days
Desviación = +2.4 sec/day

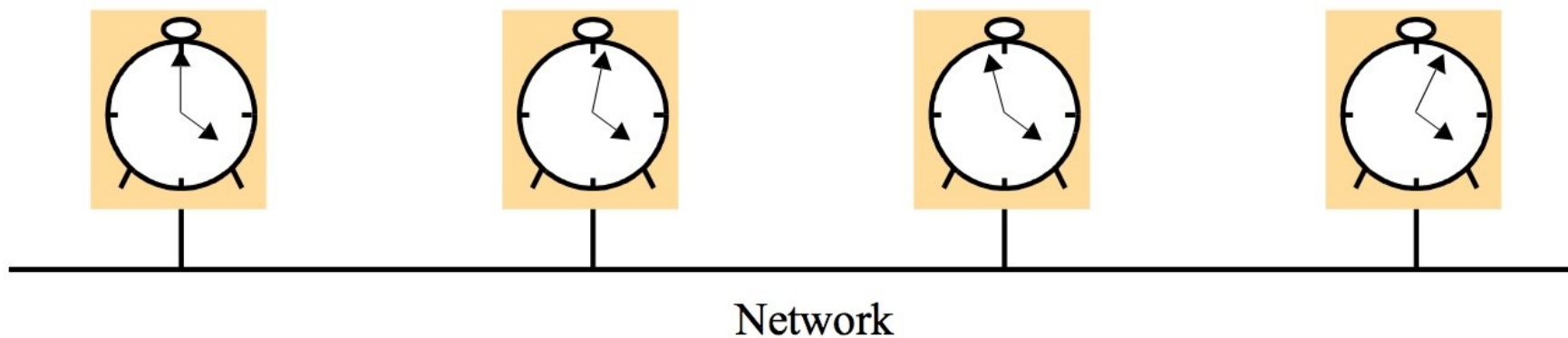


8:01:48

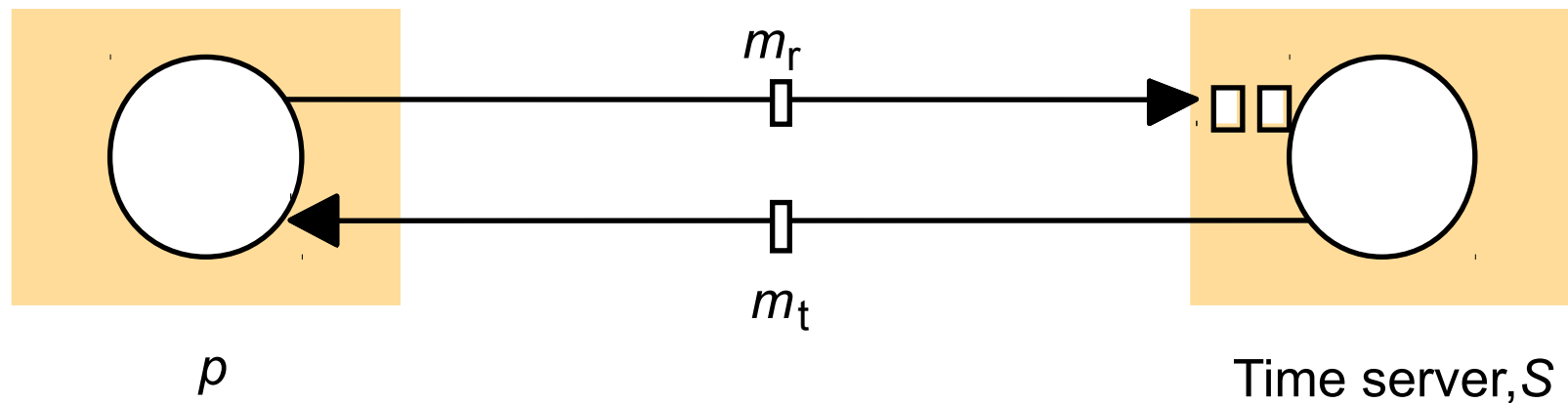
Sesgo = +108 seconds
+108 seconds/35 days
Desviación = +3.1 sec/day

Oct 23, 2011
8:00:00

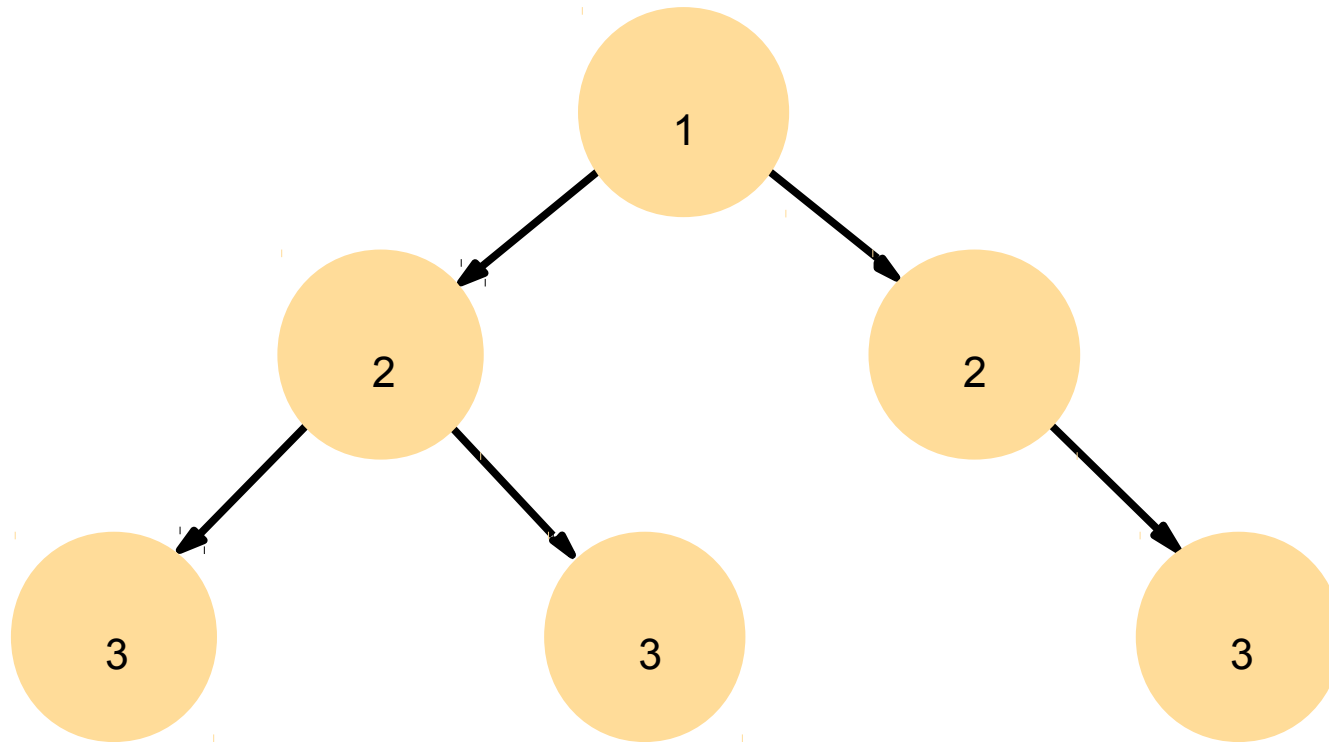
Relojes en red



Sincronización con un servidor

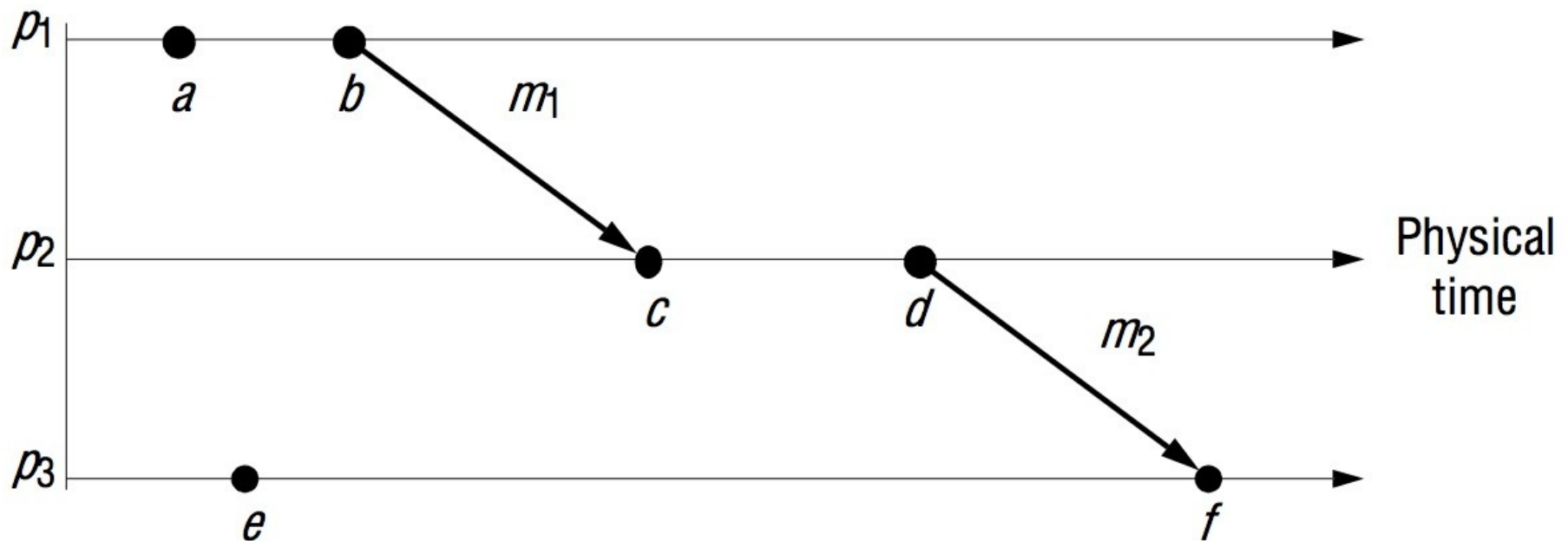


Subred de sincronización

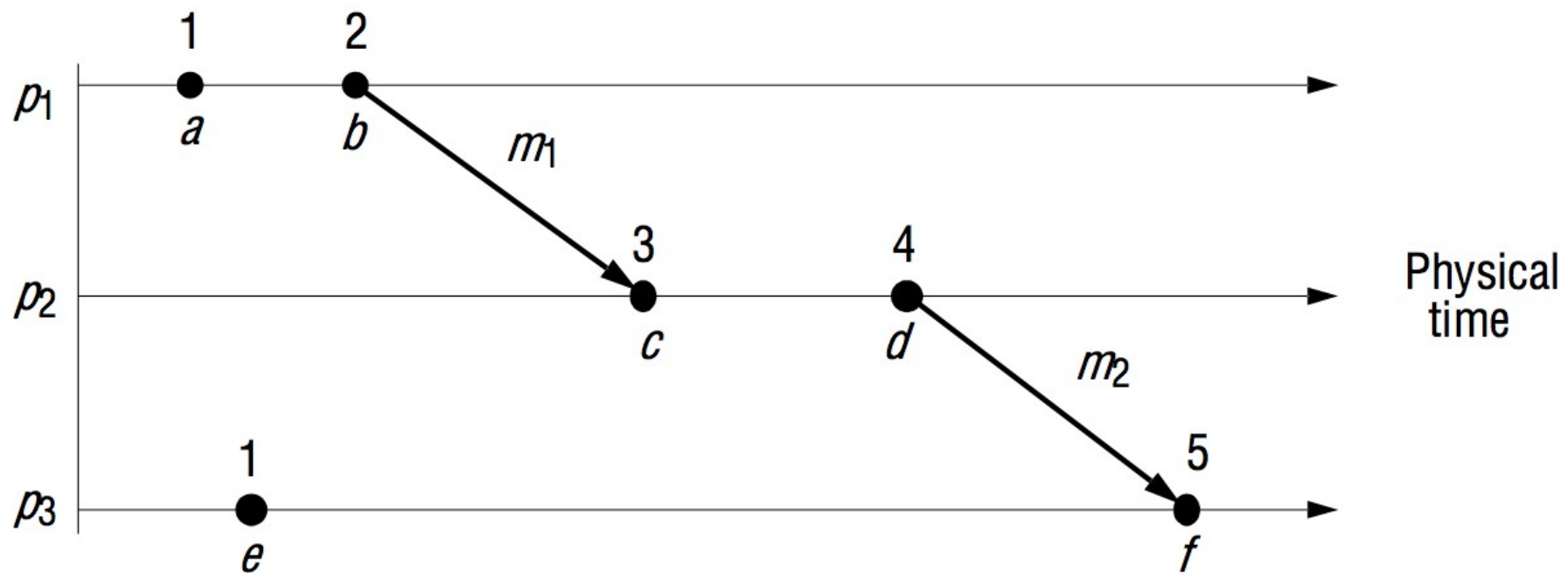


Note: Arrows denote synchronization control, numbers denote strata.

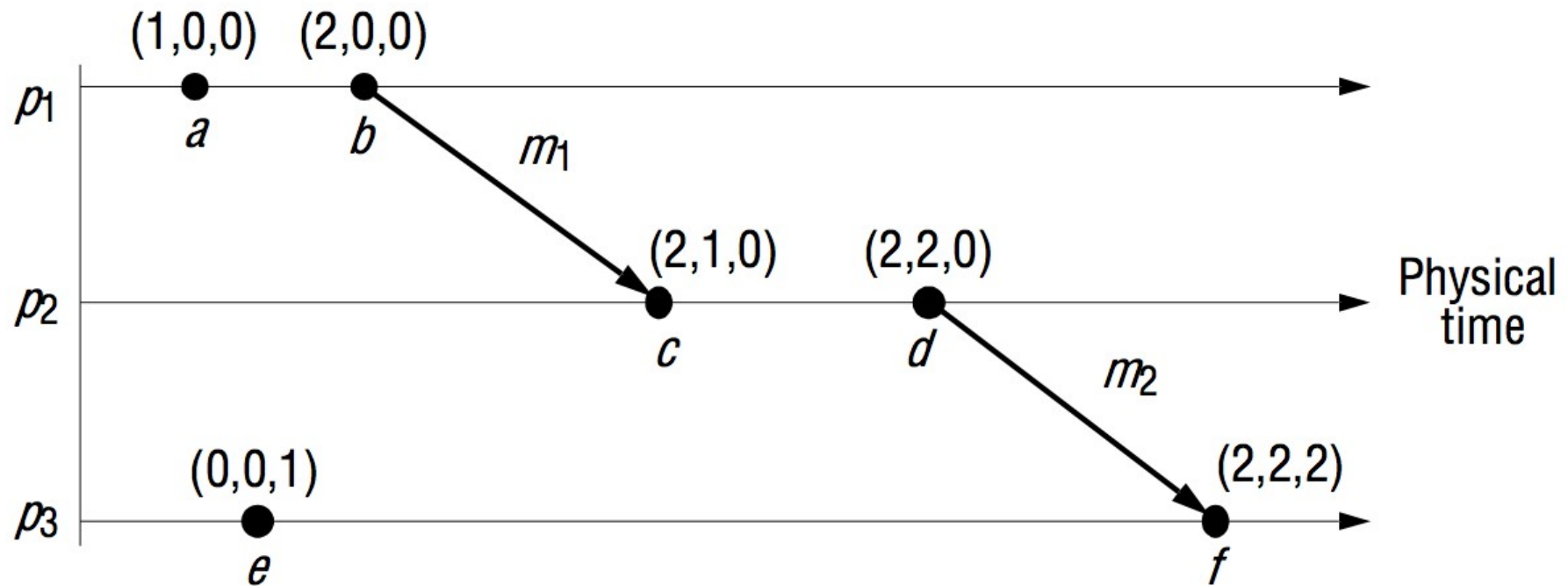
Eventos en 3 procesos



Timestamps de Lamport

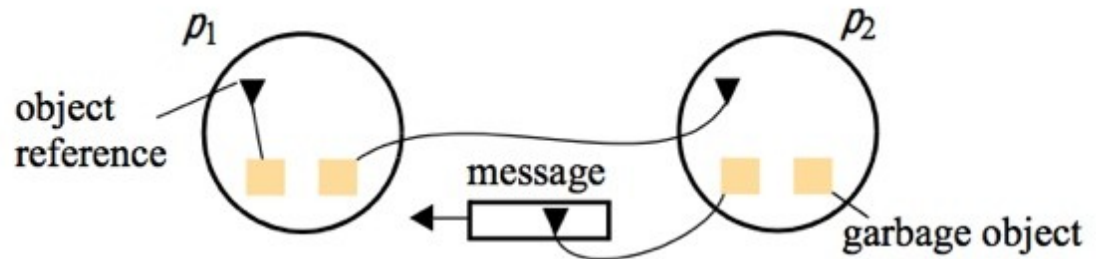


Relojes vectoriales

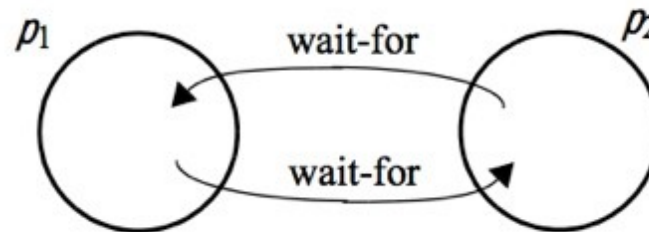


Detectando propiedades globales

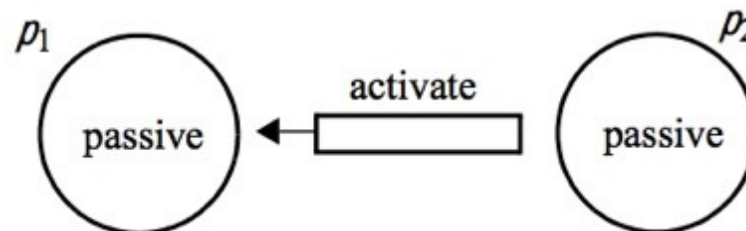
(a) Garbage collection



(b) Deadlock



(c) Termination



Cortes

