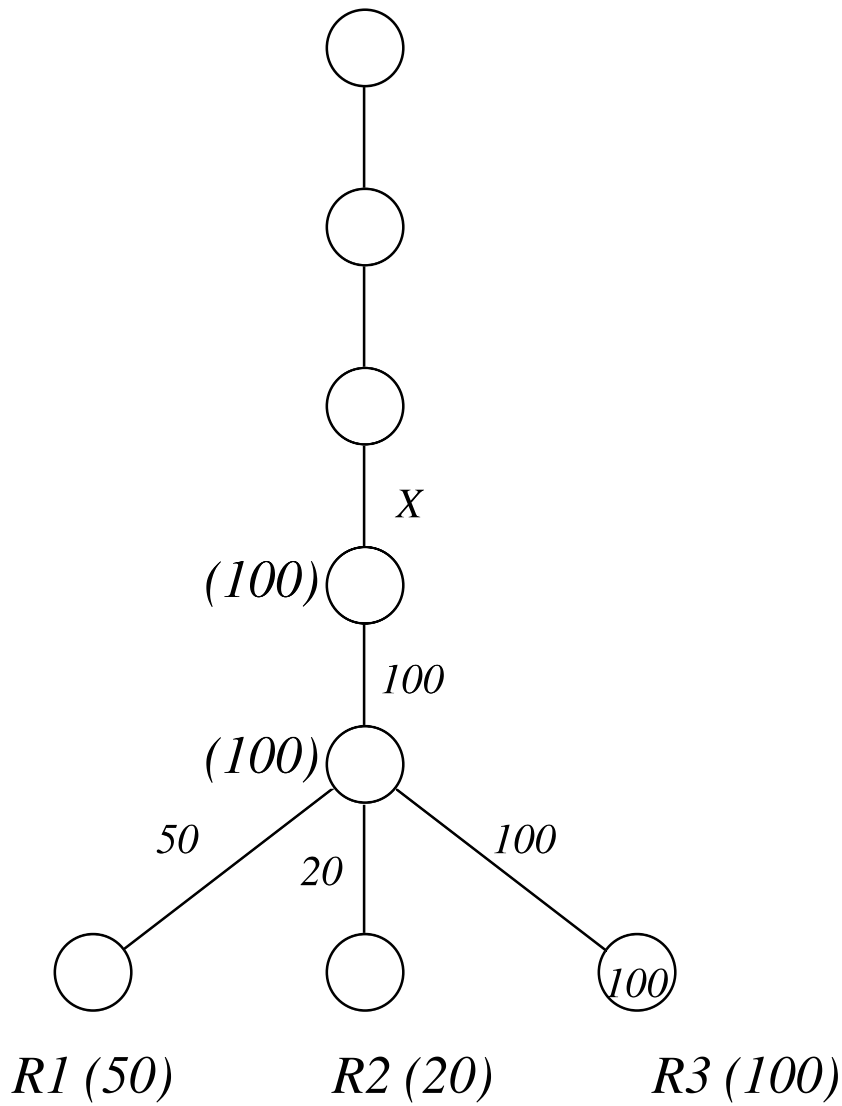
Problem: Fred's picture



Why does it happen

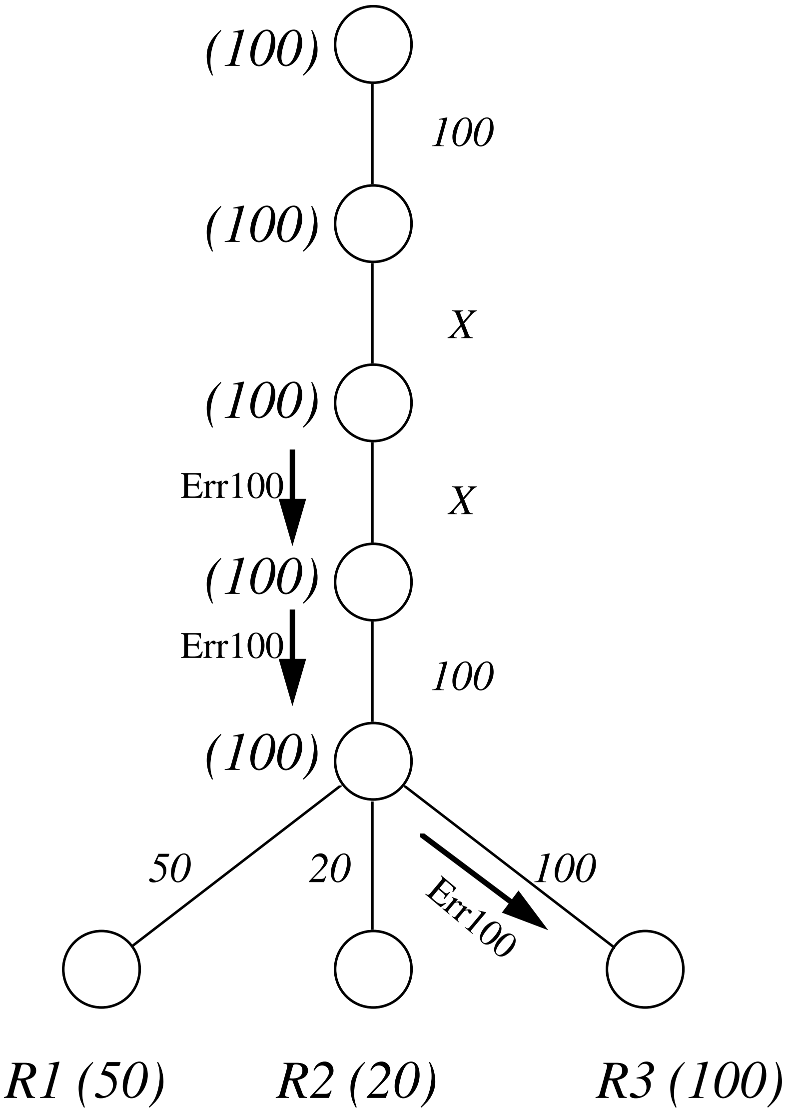
- Merging needed for scaling
- Merging loses information about smaller requests
- Persistent bigger requests deny service to the rest.

Our Approach

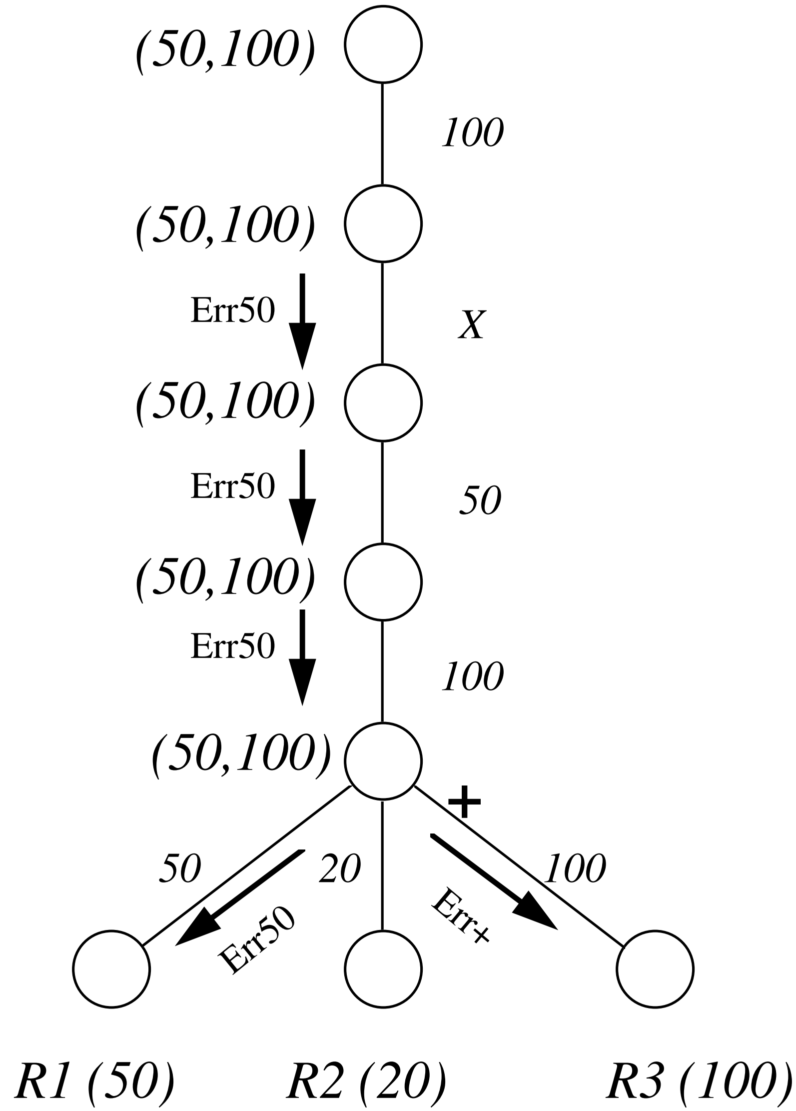
- Make smaller requests visible after a failure of the biggest one
- Scaling prevents making ALL requests visible
- We try to identify the biggest request that CAN succeed along the full path

Mechanism

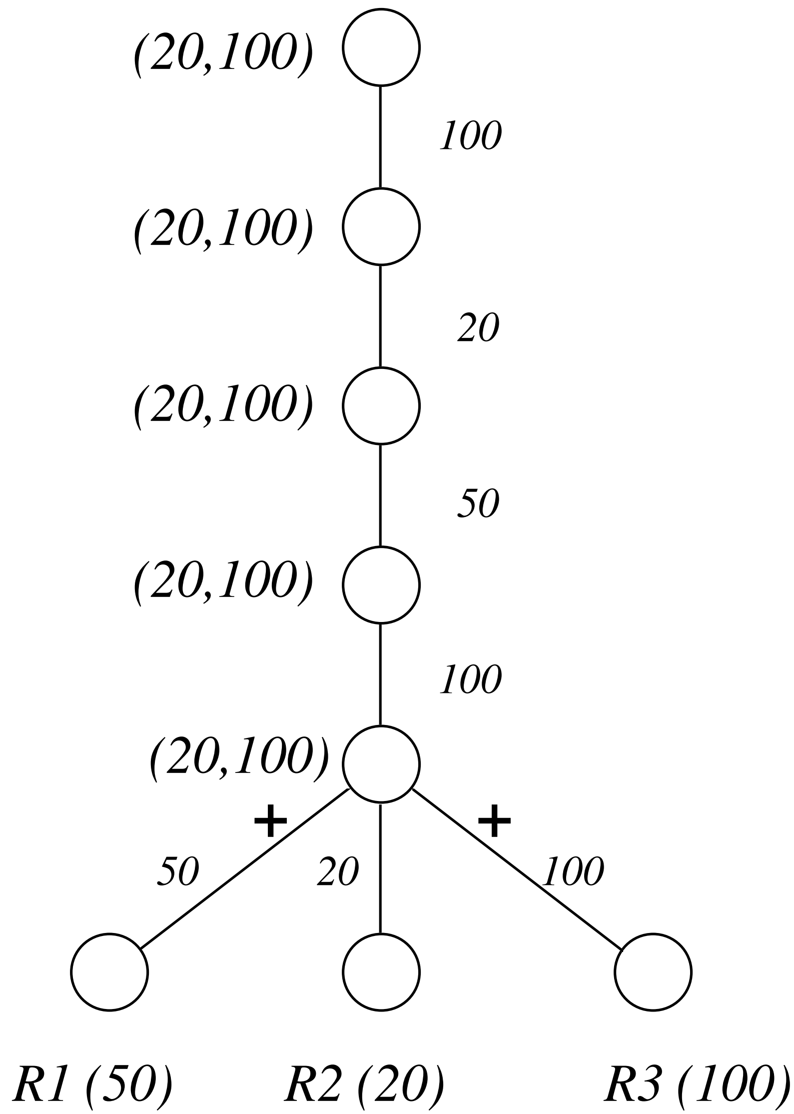
- Takes effect only when the problem occurs
- Uses two flowspecs, one for successful and one for partially failed requests.
- Action required only at branch points
- Improved error reporting



(100)
100
(100)
X
(100)
Err100
X
(100)
Err100
100
(100)
50
20
100
Err100
R1 (50)
R2 (20)
R3 (100)



(50,100)
100
(50,100)
Err50
X
(50,100)
Err50
50
(50,100)
Err50
100
(50,100)
+
50
20
100
Err50
Err+
R1 (50)
R2 (20)
R3 (100)


(20,100)
100
(20,100)
20
(20,100)
50
(20,100)
100
(20,100)
+
+
50
20
100
R1 (50)
R2 (20)
R3 (100)