

Abbreviations

State	Abbreviation	Explanation
Last-in-subdirectory-1	LIS1	Coroutine 1 has generated last object in a current subdirectory
Last-in-subdirectory-2	LIS2	Coroutine 2 has generated last object in a current subdirectory
p1 lexicographically earlier	P1U	Current pathname from coroutine 1 is earlier lexicographically
p2 lexicographically earlier	P2U	Current pathname from coroutine 2 is earlier lexicographically
p1=p2	=	Both current pathnames names match (below their respective parent subpaths), both are the same kind of object, and if filenames, their file-data-sizes match.
Actions		
Suspend S1	SS1	Suspend coroutine 1 (don't increment it on the next loop iteration) because we expect the other coroutine may catch up and re-sync
Suspend S2	SS2	Suspend coroutine 2 (don't increment it on the next loop iteration) because we expect the other coroutine may catch up and re-sync
Record P1	RP1	Record pathname 1 and instruct its coroutine not to descend into it (if it's a subdirectory).
Record P2	RP2	Record pathname 2 and instruct its coroutine not to descend into it (if it's a subdirectory)
Exhaust S1	ES1	Exhaust coroutine 1's current subdirectory, recording everything found
Exhaust S2	ES2	Exhaust coroutine 2's current subdirectory, recording everything found

State and Actions

State					Action						Notes
P1U	P2U	=	LIS1	LIS2	SS1	SS2	RP1	RP2	ES1	ES2	
0	0	1	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	1	1	0	0	1
1	0	0	0	0	0	1	1	0	0	0	
0	1	0	0	0	1	0	0	1	0	0	
1	0	0	1	0	0	0	1	1	0	1	2
0	1	0	0	1	0	0	1	1	1	0	2
1	0	0	0	1	0	1	1	0	0	0	
0	1	0	1	0	1	0	0	1	0	0	
0	0	1	1	1	0	0	0	0	0	0	4
0	0	0	1	1	0	0	1	1	0	0	1
1	0	0	1	1	0	0	1	1	0	0	
0	1	0	1	1	0	0	1	1	0	0	
0	0	0	0	1	0	0	1	1	1	0	1,2

State					Action						Notes
P1U	P2U	=	LIS1	LIS2	SS1	SS2	RP1	RP2	ES1	ES2	
0	0	0	1	0	0	0	1	1	0	1	1,2
0	0	1	0	1	0	0	0	0	1	0	2,3,4
0	0	1	1	0	0	0	0	0	0	1	2,3,4

Notes

1	P1 and P2 are both files but file sizes differ, or P1 and P2 are not of the same type
2	Exhaust the coroutine that's not last in subdirectory
3	IFF the matched pathnames are not both subdirectories
4	Matched elements by definition should not be recorded