FunEntryICFGNode49 {fun: indirect test{ in line: 46 file: library.c }} IntraICFGNode50 {fun: indirect test{ ln: 46 fl: library.c }} AddrStmt: [Var90 <-- Var91] %s.addr = alloca %struct.a struct\*, align 8 { ln: 46 fl: library.c } IntraICFGNode51 {fun: indirect test{ ln: 46 fl: library.c }} AddrStmt: [Var92 <-- Var93] %a.addr = alloca i32, align 4 { ln: 46 fl: library.c } IntraICFGNode52 {fun: indirect test{ ln: 48 fl: library.c }} AddrStmt: [Var94 <-- Var95] %fun ptr = alloca void (%struct.a struct\*, i32)\*, align 8 { ln: 48 fl: library.c } IntraICFGNode53 {fun: indirect test} StoreStmt: [Var90 <-- Var88] IBBNode 206 store %struct.a struct\* %s, %struct.a struct\*\* %s.addr, align 8 IntraICFGNode54 {fun: indirect test} FunEntryICFGNode206 {fun: free} StoreStmt: [Var92 <-- Var89] store i32 %a, i32\* %a.addr, align 4 IntraICFGNode55 {fun: indirect test{ ln: 48 cl: 9 fl: library.c }} StoreStmt: [Var94 <-- Var0] store void (%struct.a struct\*, i32)\* null, void (%struct.a struct\*, i32)\*\* %fun ptr, align 8, !dbg !26 { ln: 48 cl: 9 fl: library.c } IntraICFGNode56 {fun: indirect test{ ln: 49 cl: 6 fl: library.c }} LoadStmt: [Var102 <-- Var92] %0 = load i32, i32\* %a.addr, align 4, !dbg !27 { ln: 49 cl: 6 fl: library.c } IntraICFGNode57 {fun: indirect test{ ln: 49 cl: 8 fl: library.c }} CmpStmt: [Var103 <-- (Var102 predicate38 Var25)] %cmp = icmp sgt i32 %0, 0, !dbg !29 { ln: 49 cl: 8 fl: library.c } IntraICFGNode58 {fun: indirect test{ ln: 49 cl: 6 fl: library.c }} BranchStmt: [Condition Var103] Successor 0 ICFGNode59 Successor 1 ICFGNode60 br i1 %cmp, label %if.then, label %if.else, !dbg !30 { ln: 49 cl: 6 fl: library.c } IBBNode 63 IntraICFGNode63 {fun: indirect test{ ln: 54 cl: 2 fl: library.c }} LoadStmt: [Var114 <-- Var94] %1 = load void (%struct.a struct\*, i32)\*, void (%struct.a struct\*, i32)\*\* %fun ptr, align 8, !dbg !34 { ln: 54 cl: 2 fl: library.c } IntraICFGNode64 {fun: indirect test{ ln: 54 cl: 10 fl: library.c }} IBBNode 59 IBBNode 60 LoadStmt: [Var115 <-- Var90] %2 = load %struct.a struct\*, %struct.a struct\*\* %s.addr, align 8, !dbg !35 { ln: 54 cl: 10 fl: library.c } IntraICFGNode59 {fun: indirect test{ ln: 50 cl: 11 fl: library.c }} IntraICFGNode60 {fun: indirect test{ ln: 52 cl: 11 fl: library.c }} IntraICFGNode65 {fun: indirect test{ ln: 54 cl: 13 fl: library.c }} StoreStmt: [Var94 <-- Var106] StoreStmt: [Var94 <-- Var111] LoadStmt: [Var116 <-- Var92] store void (%struct.a struct\*, i32)\* @first, void (%struct.a struct\*, i32)\*\* %fun ptr, align 8, !dbg !31 { ln: 50 cl: 11 fl: library.c } store void (%struct.a struct\*, i32)\* @second, void (%struct.a struct\*, i32)\*\* %fun ptr, align 8, !dbg !33 { ln: 52 cl: 11 fl: library.c } %3 = load i32, i32\* %a.addr, align 4, !dbg !36 { ln: 54 cl: 13 fl: library.c } IntraICFGNode61 {fun: indirect test{ ln: 50 cl: 3 fl: library.c }} IntraICFGNode62 {fun: indirect test} CallICFGNode66 {fun: indirect test{ ln: 54 cl: 2 fl: library.c }} BranchStmt: [Unconditional branch] BranchStmt: [Unconditional branch] CallPE: [Var160 <-- Var115] Successor 0 ICFGNode63 Successor 0 ICFGNode63 call void %1(%struct.a struct\* %2, i32 %3), !dbg !34 { ln: 54 cl: 2 fl: library.c } br label %if.end, !dbg !32 { ln: 50 cl: 3 fl: library.c } br label %if.end CallPE: [Var161 <-- Var116] call void %1(%struct.a struct\* %2, i32 %3), !dbg !34 { ln: 54 cl: 2 fl: library.c } CallPE: [Var130 <-- Var115] call void %1(%struct.a struct\* %2, i32 %3), !dbg !34 { ln: 54 cl: 2 fl: library.c } CallPE: [Var131 <-- Var116] call void %1(%struct.a struct\* %2, i32 %3), !dbg !34 { ln: 54 cl: 2 fl: library.c } IBBNode 67 RetICFGNode67 {fun: indirect\_test{ ln: 54 cl: 2 fl: library.c }} IntraICFGNode68 {fun: indirect test{ ln: 56 cl: 2 fl: library.c }} LoadStmt: [Var118 <-- Var90] %4 = load %struct.a\_struct\*, %struct.a\_struct\*\* %s.addr, align 8, !dbg !37 { ln: 56 cl: 2 fl: library.c } IntraICFGNode69 {fun: indirect test{ ln: 56 cl: 5 fl: library.c }} GepStmt: [Var $1\overline{1}9 \leftarrow Var118$ ] %field a = getelementptr inbounds %struct.a struct, %struct.a struct\* %4, i32 0, i32 0, !dbg !38 { ln: 56 cl: 5 fl: library.c } IntraICFGNode70 {fun: indirect test{ ln: 56 cl: 13 fl: library.c }} StoreStmt: [Var119 <-- Var121] store i32 10, i32\* %field a, align 4, !dbg !39 { ln: 56 cl: 13 fl: library.c } IntraICFGNode71 {fun: indirect test{ ln: 57 cl: 2 fl: library.c }} LoadStmt: [Var122 <-- Var90] %5 = load %struct.a\_struct\*, %struct.a\_struct\*\* %s.addr, align 8, !dbg !40 { ln: 57 cl: 2 fl: library.c } IntraICFGNode72 {fun: indirect test{ ln: 57 cl: 5 fl: library.c }} GepStmt: [Var123 <-- Var122] %field b = getelementptr inbounds %struct.a\_struct, %struct.a\_struct\* %5, i32 0, i32 1, !dbg !41 { ln: 57 cl: 5 fl: library.c } IntraICFGNode73 {fun: indirect test{ ln: 57 cl: 13 fl: library.c }} StoreStmt: [Var123 <-- Var125] store i32 11, i32\* %field\_b, align 4, !dbg !42 { ln: 57 cl: 13 fl: library.c } IntraICFGNode74 {fun: indirect test{ ln: 59 cl: 10 fl: library.c }} LoadStmt: [Var126 <-- Var90] %6 = load %struct.a struct\*, %struct.a struct\*\* %s.addr, align 8, !dbg !43 { ln: 59 cl: 10 fl: library.c } CallICFGNode75 {fun: indirect test{ ln: 59 cl: 2 fl: library.c }} CallPE:  $[Var4\overline{4} \leftarrow Var126]$ call void @my free(%struct.a struct\* %6), !dbg !44 { ln: 59 cl: 2 fl: library.c } IBBNode 23 FunEntryICFGNode23 {fun: my free{ in line: 35 file: library.c }} IntraICFGNode24 {fun: my free { ln: 35 fl: library.c } } AddrStmt: [Var45 <-- Var46] %s.addr = alloca %struct.a struct\*, align 8 { ln: 35 fl: library.c } IntraICFGNode25 {fun: my free} StoreStmt: [Var45 <-- Var44] store %struct.a struct\* %s, %struct.a struct\*\* %s.addr, align 8 IntraICFGNode26 {fun: my free { ln: 36 cl: 7 fl: library.c }} LoadStmt: [Var49 <-- Var45] %0 = load %struct.a struct\*, %struct.a struct\*\* %s.addr, align 8, !dbg !22 { ln: 36 cl: 7 fl: library.c } IntraICFGNode27 {fun: my free { ln: 36 cl: 7 fl: library.c } } CopyStmt:  $[\overline{Var50} \leftarrow Var49]$ %1 = bitcast %struct.a struct\* %0 to i8\*, !dbg !22 { ln: 36 cl: 7 fl: library.c } CallICFGNode 28 {fun: my free { ln: 36 cl: 2 fl: library.c } } IBBNode 29 RetICFGNode29 {fun: my free{ ln: 36 cl: 2 fl: library.c }} IntraICFGNode30 {fun: my free { ln: 37 cl: 1 fl: library.c } } ret void, !dbg !24 { ln: 37 cl: 1 fl: library.c } FunExitICFGNode31 {fun: my free{ ln: 35 fl: library.c }} IBBNode 76 RetICFGNode76 {fun: indirect\_test{ ln: 59 cl: 2 fl: library.c }} IntraICFGNode77 {fun: indirect test{ ln: 60 cl: 1 fl: library.c }} ret void, !dbg !45 { ln: 60 cl: 1 fl: library.c } FunExitICFGNode78 {fun: indirect\_test{ ln: 54 cl: 2 fl: library.c }}

Dominator

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