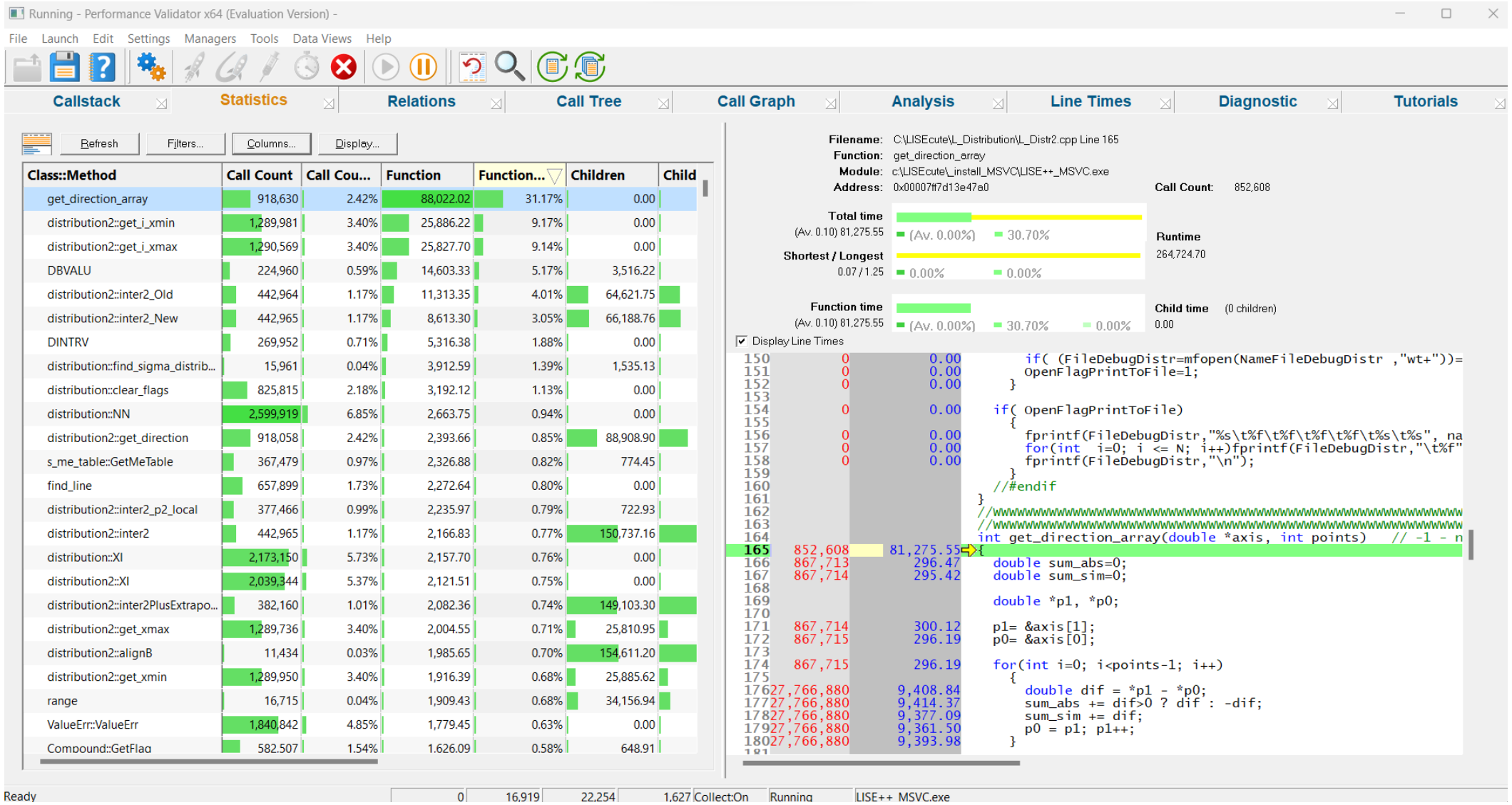
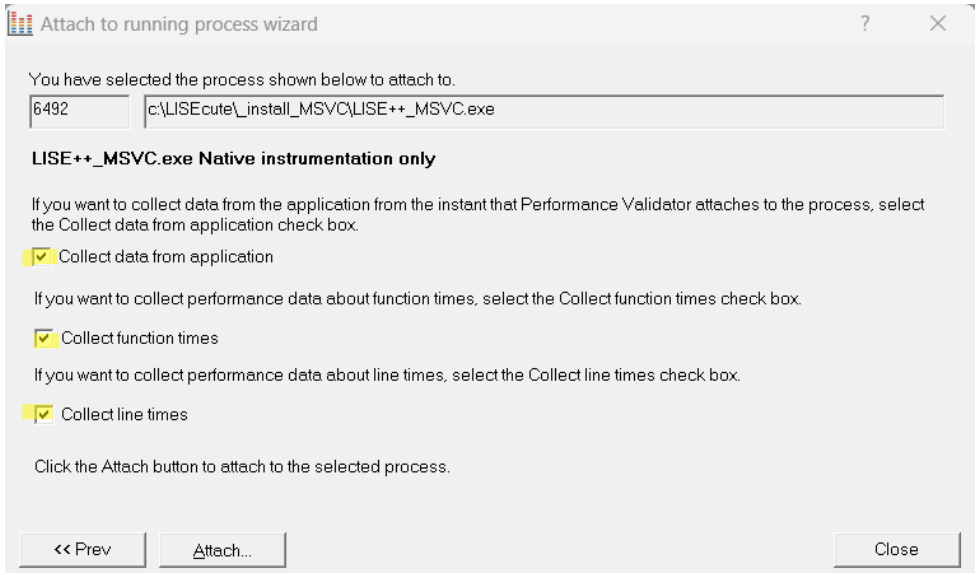
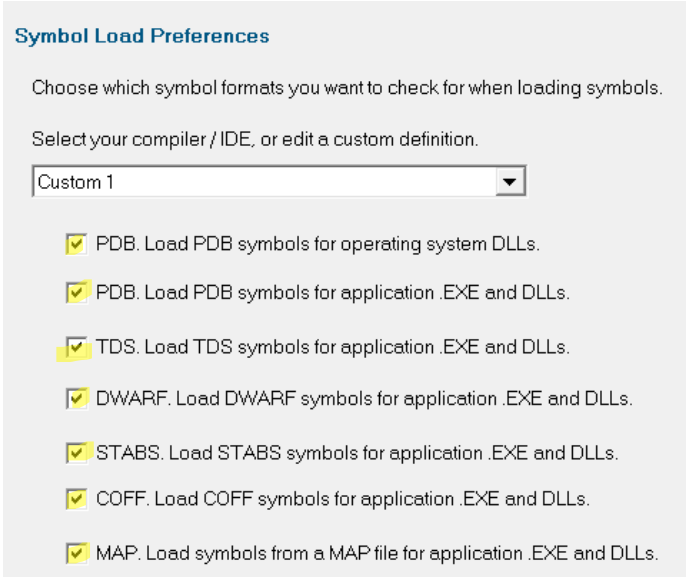
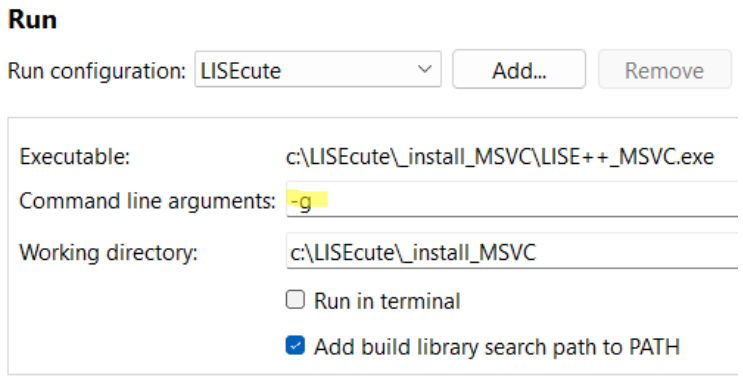
Performance Validator



Set Up


Attach to running process wizard
You have selected the process shown below to attach to.
6492
c:\LISEcute_install_MSVC\LISE++_MSVC.exe
LISE++_MSVC.exe Native instrumentation only
If you want to collect data from the application from the instant that Performance Validator attaches to the process, select the Collect data from application check box.
Collect data from application
If you want to collect performance data about function times, select the Collect function times check box.
Collect function times
If you want to collect performance data about line times, select the Collect line times check box.
Collect line times
Click the Attach button to attach to the selected process.
<< Prev
Attach...
Close

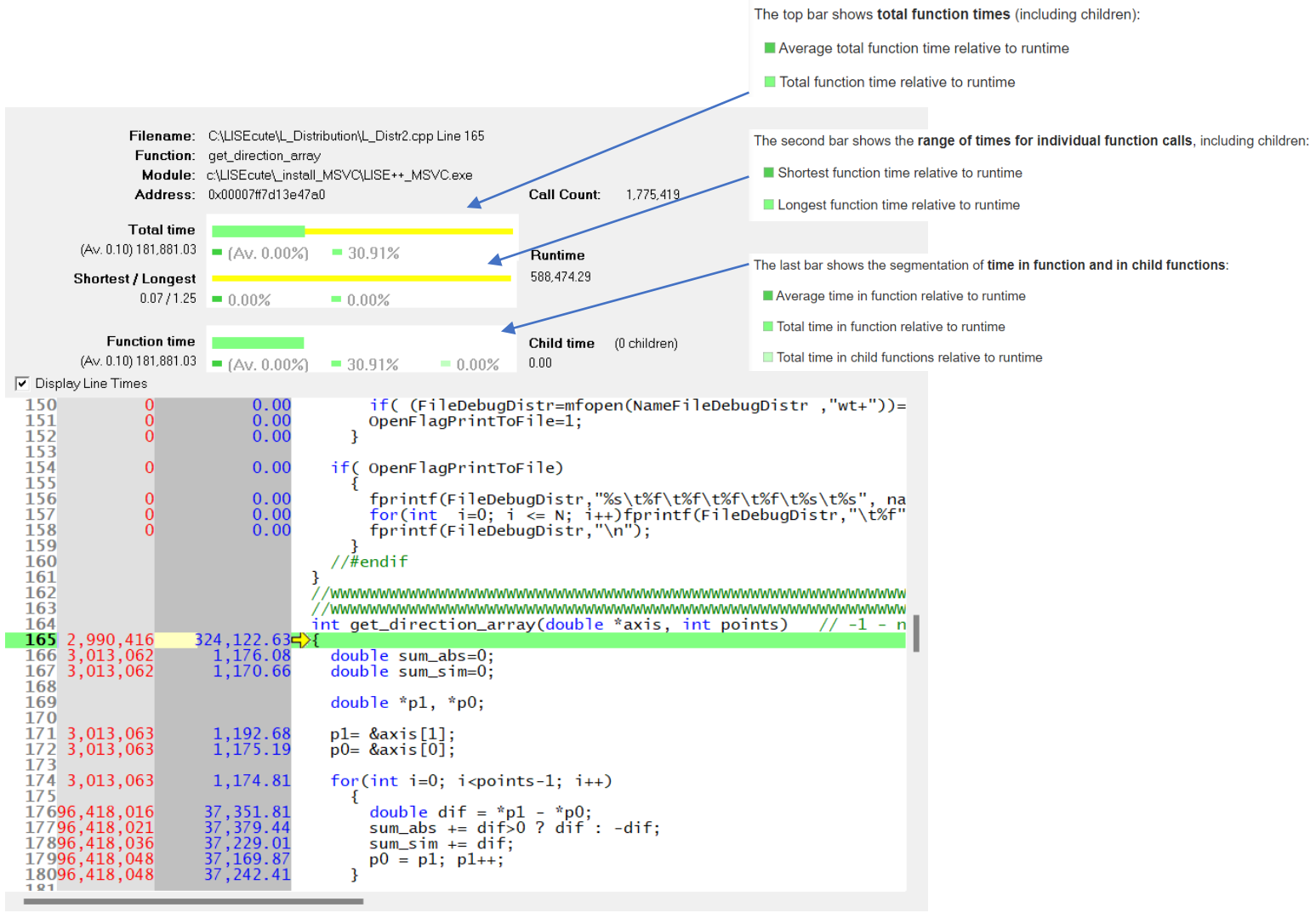

Symbol Load Preferences
Choose which symbol formats you want to check for when loading symbols.
Select your compiler / IDE, or edit a custom definition.
Custom 1
PDB. Load PDB symbols for operating system DLLs.
PDB. Load PDB symbols for application .EXE and DLLs.
TDS. Load TDS symbols for application .EXE and DLLs.
DWARF. Load DWARF symbols for application .EXE and DLLs.
STABS. Load STABS symbols for application .EXE and DLLs.
COFF. Load COFF symbols for application .EXE and DLLs.
MAP. Load symbols from a MAP file for application .EXE and DLLs.


Run
Run configuration:
LISEcute
Add...
Remove
Executable:
c:\LISEcute_install_MSVC\LISE++_MSVC.exe
Command line arguments:
-g
Working directory:
c:\LISEcute_install_MSVC
Run in terminal
Add build library search path to PATH

Statistics + Source Code View

Num ...	Av Func	Av Fu...	Av Total	Av Tot...	Call C...	Call Cou...

Attribute	Description
Num Children	# of child functions
Av Function	Average time a function takes to execute
Av Total	Average total time a function + child functions takes to execute
Call Count	# of times a function is called
Function	Time it takes a function to execute
Children	Time a function's child functions take to execute
Total	Time a function + child functions take to execute
Longest	Longest time a function + child functions take to execute
Shortest	Shortest time a function + child functions take to execute



Visit count | Time

Relations

Most called and most time consuming functions

Class::Method	Children	Children %	Total	Total %	Module
MainWindow::CmTransAll	1,457,911.43	99.48%	1,457,911.43	99.48%	lise++_msvc.exe
nucleusReglage	1,444,834.10	98.58%	1,444,834.10	98.58%	lise++_msvc.exe
c_rendmom	1,358,509.46	92.69%	1,358,509.46	92.69%	lise++_msvc.exe
transmission	1,352,900.15	92.31%	1,352,901.08	92.31%	lise++_msvc.exe
tab_range	110,295.58	7.53%	110,311.95	7.53%	lise++_msvc.exe
trans_ChargeState	1,365,994.69	93.20%	1,365,994.69	93.20%	lise++_msvc.exe

Promote | Promote All

Functions called by function: MainWindow::CmTransAll

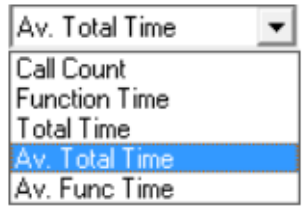
Class::Method	Call Count	Call Cou...	Function	Function...	Children	Ch
Celement::equal	925,503	0.55%	5,855.29	0.40%	4,760.71	
Celement::Z	3,546,507	2.10%	4,423.20	0.30%	0.00	
Celement::Celement	819,116	0.49%	1,463.80	0.10%	9,341.59	
Celement::N	961,875	0.57%	1,212.48	0.08%	0.00	

Promote | Promote All

Callers of function: MainWindow::CmTransAll

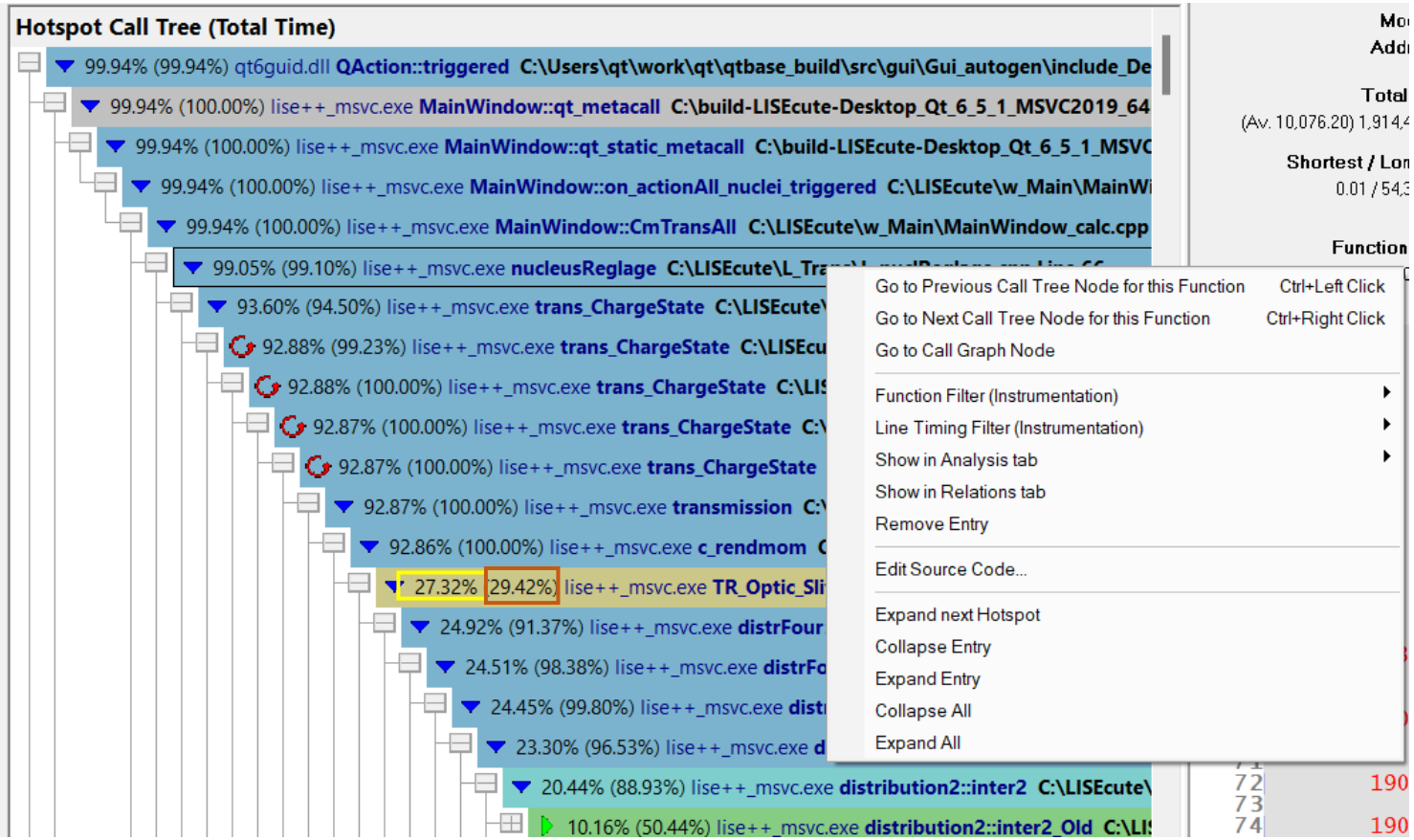
Class::Method	Call Count	Call Cou...	Function	Function...	Children	Child
MainWindow::on_actionAll_nuc...	1	0.00%	0.00	0.00%	0.00	

Display:




```
109
110  3,546,507      4,423.20    int Z() const {return z;};
111    961,875      1,212.48    int N() const {return n;};
112  2,877,644      3,599.48    int A() const {return a;};
113        142          0.25    int Q() const {return q;};
114
115     57,994         71.38    void ChangeVerify(bool v){Verify=v;};
116     57,994         70.30    bool GetVerify() const {return Verify;};
117
118  1,039,689      1,296.14    double Zd() const {return double(z);};
119      4,916          5.92    double Nd() const {return double(n);};
120  2,209,067      2,709.61    double Ad() const {return double(a);};
121     71,934         97.18    double Qd() const {return double(q);};
122
123        517          0.68    void SetQ(int q_init)   {q=q_init;};
124                             bool IsPrimaryBeam();
125  1,310,619      1,613.96    bool IsGamma() {return (z==0 && n==0);};
```

Call Tree

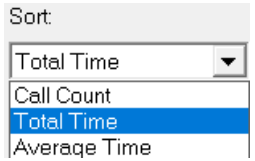


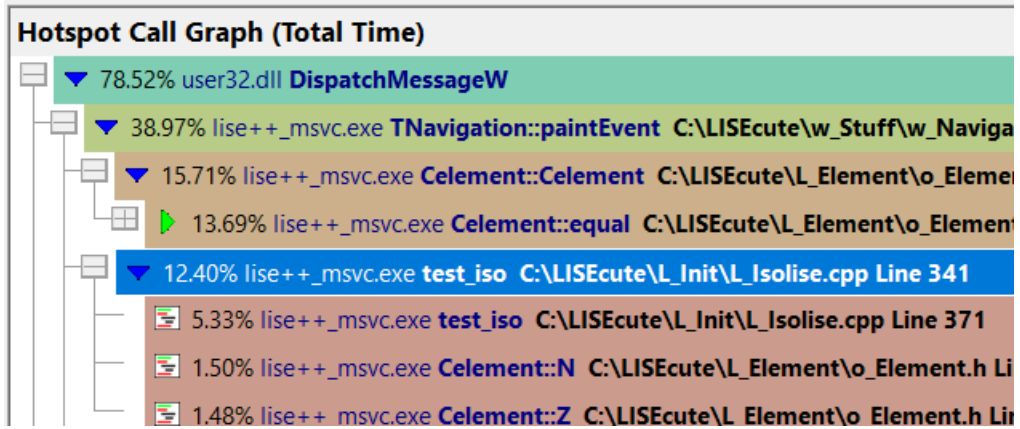
Call tree colours

The tree is coloured using the customisable Hotspot Colours settings that range from 100% down to 0%.

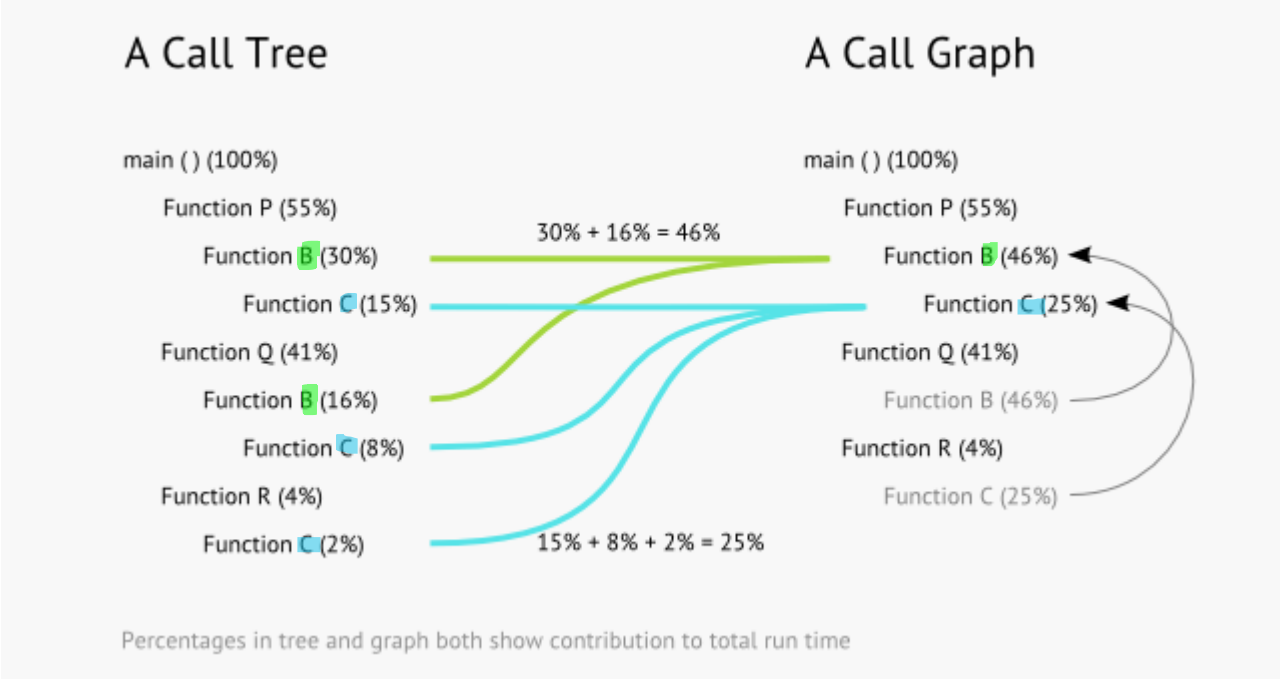
TR_Optic_Slit -> Contributed 29.42% of its parent's function time
Contributed 27.32% to total run time

Call Graph

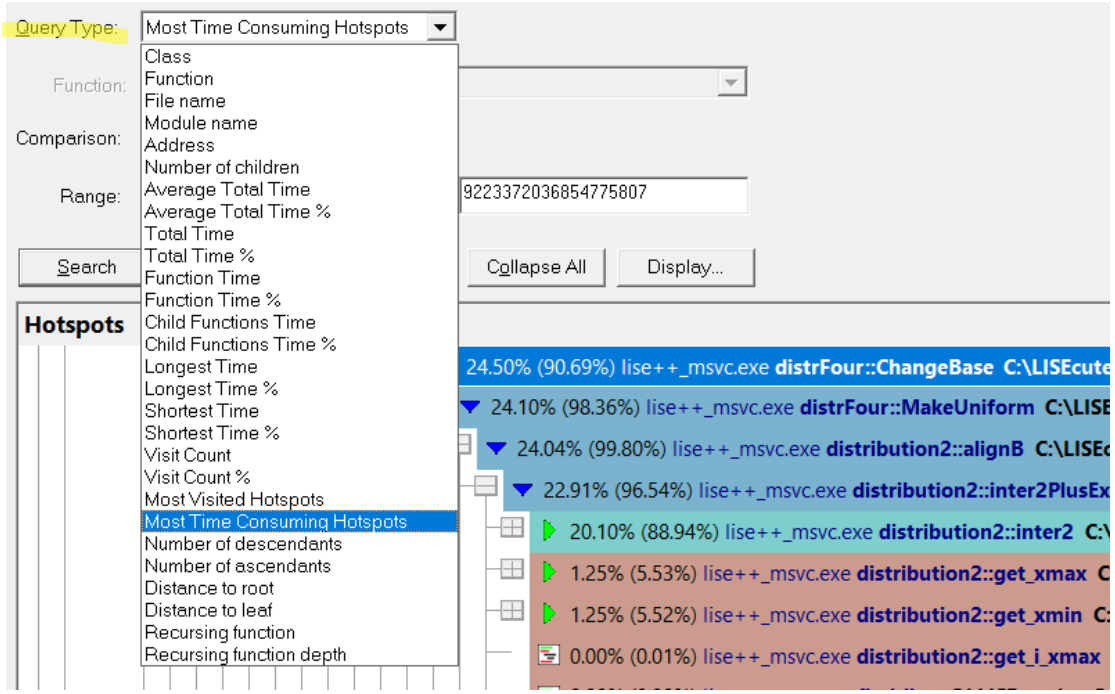




Multiple locations vs. Once



Analysis + Line Times



File	Visit Count	Total
C:\LISEcute\L_Distribution\o_Distr2.h	66	0.68
C:\LISEcute\L_Dbf\d_getrec.cpp	11,820	20.77
C:\LISEcute\L_Dbf\d_getfld.cpp	12,760	7.62
C:\LISEcute\L_Dbf\d_delrec.cpp	0	0.00
C:\LISEcute\L_Dbf\d_cpystr.cpp	0	0.00
C:\LISEcute\L_Dbf\d_addrec.cpp	0	0.00
C:\LISEcute\L_Calise\L_Charges_optimum.cpp	340	0.31
C:\LISEcute\L_Calise\L_Charges_global.cpp	703	3,006.81