opt_jr_doc

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Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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2.1 File List

Here is a list of all files with brief descriptions:

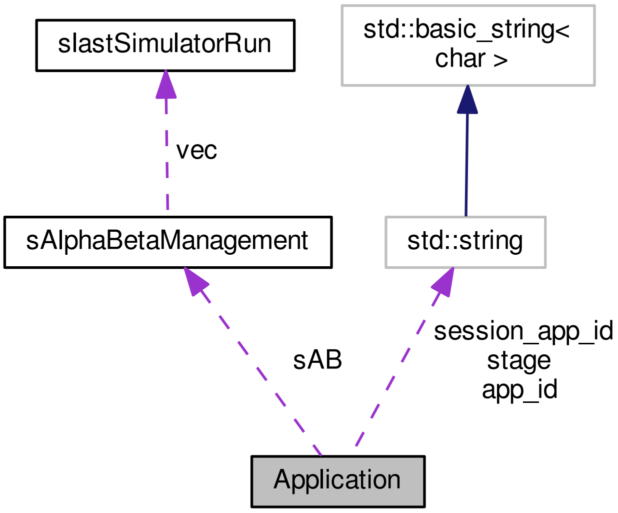
Chapter 3

Class Documentation

3.1 Application Class Reference

`#include <application.hh>`

Collaboration diagram for Application:



Public Member Functions

- Application (std::string session_app_id, std::string app_id, double w, double chi_0, double chi_C, double m, double M, double V, double v, double D, double csi, std::string St, int DatasetSize)
- double ObjFunctionComponent (sConfiguration &configuration, MYSQL ∗conn, optJrParameters &par)

Public Attributes

- int mode
- std::string session_app_id

- std::string app_id
- double w
- double term_i
- double chi_0
- double chi_C
- double m
- double M
- double V
- double v
- double Deadline_d
- double csi
- std::string stage
- int datasetSize
- double nu_d
- int currentCores_d
- int nCores_DB_d
- int bound
- double R_d
- double R_bound_d
- double baseFO
- double initialBaseFO
- float alpha
- float beta
- sAlphaBetaManagement sAB
- int boundIterations
- int vm

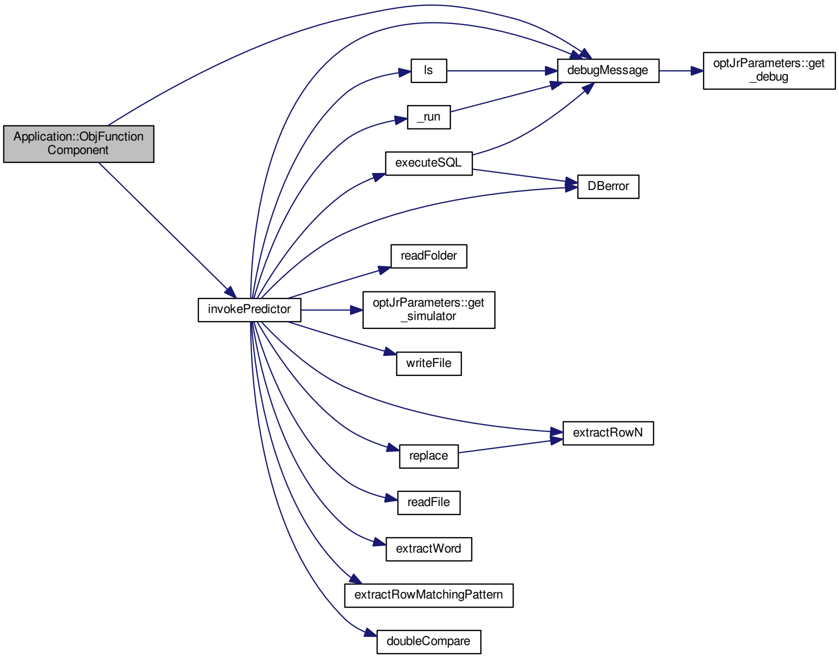
3.1.1 Constructor & Destructor Documentation

3.1.1.1 Application::Application (std::string *session_app_id,* std::string *app_id,* double *w,* double *chi_0,* double *chi_C,* double *m,* double *M,* double *V,* double *v,* double *D,* double *csi,* std::string *St,* int *DatasetSize*)

3.1.2 Member Function Documentation

3.1.2.1 double Application::ObjFunctionComponent (**sConfiguration** & *configuration,* MYSQL ∗ *conn,* **optJrParameters** & *par*)

Here is the call graph for this function:



3.1.3 Member Data Documentation

3.1.3.1 float Application::alpha

3.1.3.2 std::string Application::app_id

3.1.3.3 double Application::baseFO

3.1.3.4 float Application::beta

3.1.3.5 int Application::bound

3.1.3.6 int Application::boundIterations

3.1.3.7 double Application::chi_0

3.1.3.8 double Application::chi_C

3.1.3.9 double Application::csi

3.1.3.10 int Application::currentCores_d

3.1.3.11 int Application::datasetSize

3.1.3.12 double Application::Deadline_d

3.1.3.13 double Application::initialBaseFO

3.1.3.14 double Application::m

3.1.3.15 double Application::M

3.1.3.16 int Application::mode

3.1.3.17 int Application::nCores_DB_d

3.1.3.18 double Application::nu_d

3.1.3.19 double Application::R_bound_d

3.1.3.20 double Application::R_d

3.1.3.21 sAlphaBetaManagement Application::sAB

3.1.3.22 std::string Application::session_app_id

3.1.3.23 std::string Application::stage

3.1.3.24 double Application::term_i

3.1.3.25 double Application::V

3.1.3.26 double Application::v

3.1.3.27 int Application::vm

3.1.3.28 double Application::w

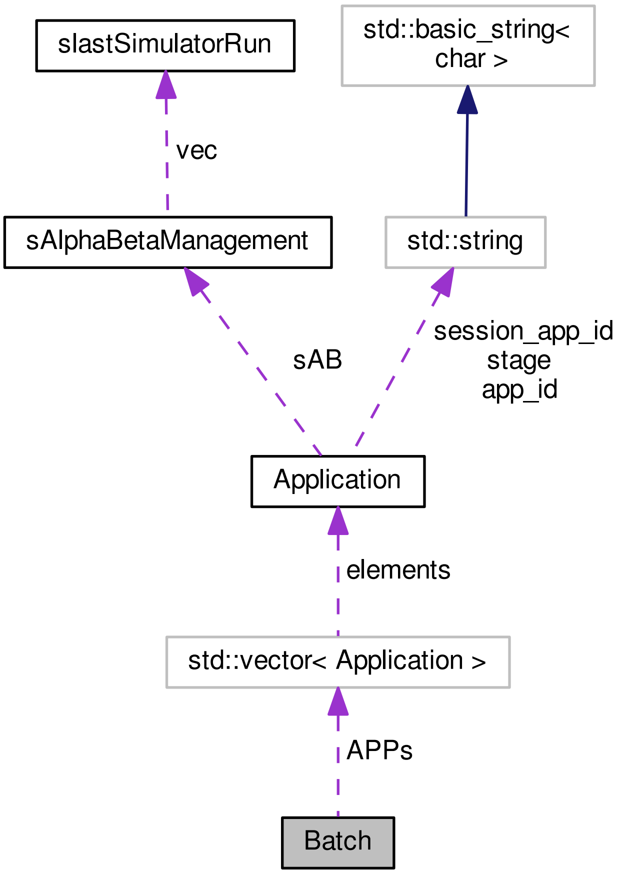
The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.cpp

3.2 Batch Class Reference

```
#include <batch.hh>
```

Collaboration diagram for Batch:



Public Member Functions

- Batch (std::vector< Application > apps)
- void calculate_nu (optJrParameters &par)
- void initialize (sConfiguration &configuration, MYSQL ∗conn, optJrParameters &par)
- void fixInitialSolution (optJrParameters &par)
- sCandidates approximatedLoop (int &iteration, optJrParameters &par)

Public Attributes

- std::vector< Application > APPs

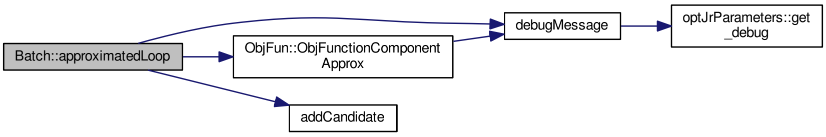
3.2.1 Constructor & Destructor Documentation

3.2.1.1 Batch::Batch (std::vector< Application > *apps*) [inline]

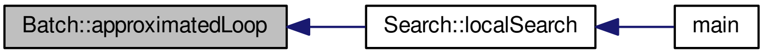
3.2.2 Member Function Documentation

3.2.2.1 sCandidates Batch::approximatedLoop (int & *iteration*, optJrParameters & *par*)

Here is the call graph for this function:

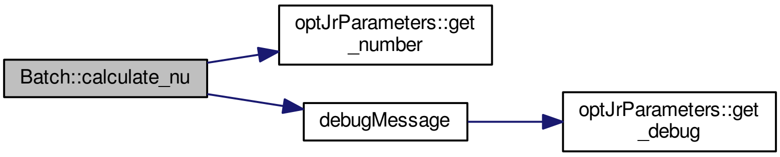

Batch::approximatedLoop
ObjFun::ObjFunctionComponent Approx
debugMessage
optJrParameters::get _debug
addCandidate

Here is the caller graph for this function:

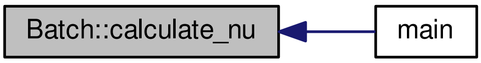


3.2.2.2 void Batch::calculate_nu (optJrParameters & *par*)

Here is the call graph for this function:

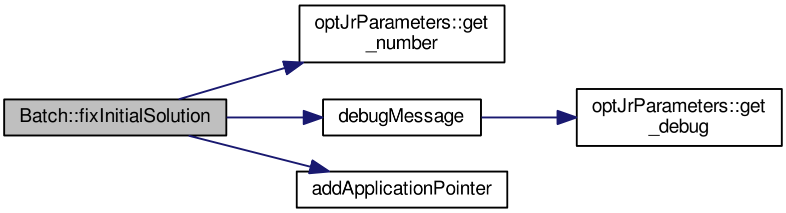


Here is the caller graph for this function:

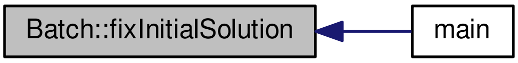


3.2.2.3 void Batch::fixInitialSolution (optJrParameters & *par*)

Here is the call graph for this function:

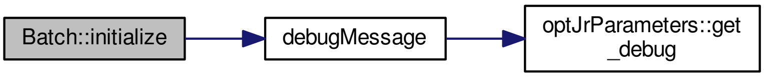


Here is the caller graph for this function:

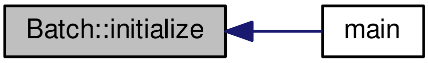


3.2.2.4 void Batch::initialize (sConfiguration & *configuration,* MYSQL ∗ *conn,* optJrParameters & *par*)

Here is the call graph for this function:



Here is the caller graph for this function:



3.2.3 Member Data Documentation

3.2.3.1 std::vector< Application > Batch::APPs

The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/batch.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/batch.cpp

3.3 Bounds Class Reference

```
#include <bounds.hh>
```

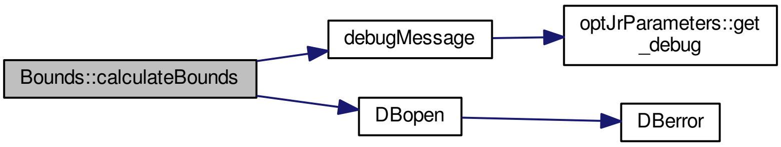
Static Public Member Functions

- static void calculateBounds (Batch &app_manager, int n_threads, sConfiguration &configuration, MYSQL ∗conn, optJrParameters &par)

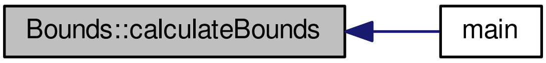
3.3.1 Member Function Documentation

3.3.1.1 void Bounds::calculateBounds (**Batch** & *app_manager,* int *n_threads,* **sConfiguration** & *configuration,* MYSQL ∗ *conn,* **optJrParameters** & *par*) [static]

Here is the call graph for this function:



Here is the caller graph for this function:



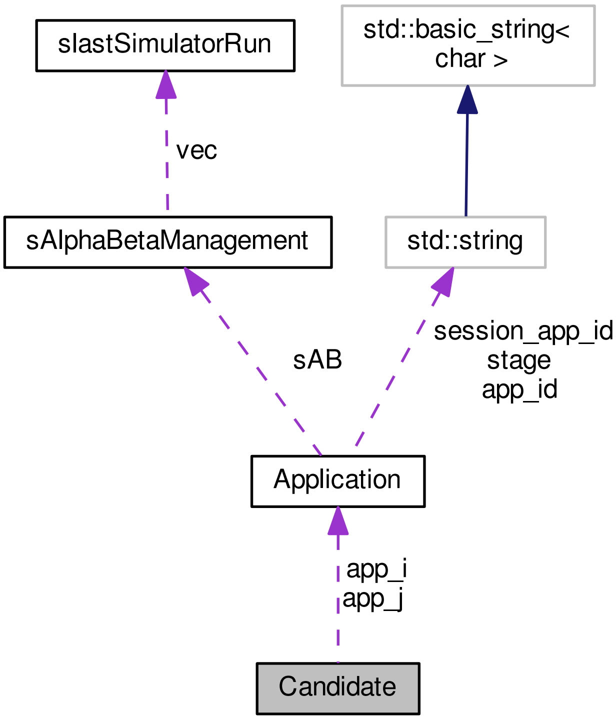
The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/bounds.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/bounds.cpp

3.4 Candidate Class Reference

```
#include <candidates.hh>
```

Collaboration diagram for Candidate:



Public Member Functions

- Candidate (Application ∗i, Application ∗j, int NCi, int NCj, double D_FO, int d_i, int d_j)

Public Attributes

- Application ∗ app_i
- int newCoreAssignment_i
- int delta_i
- double real_i
- Application ∗ app_j
- int newCoreAssignment_j
- int delta_j
- double real_j
- int nodes_i
- int nodes_j
- double deltaFO

3.4.1 Constructor & Destructor Documentation

3.4.1.1 Candidate::Candidate (Application ∗ *i*, Application ∗ *j*, int *NCi*, int *NCj*, double *D_FO*, int *d_i*, int *d_j*) [inline]

3.4.2 Member Data Documentation

3.4.2.1 Application∗ Candidate::app_i

3.4.2.2 Application∗ Candidate::app_j

3.4.2.3 int Candidate::delta_i

3.4.2.4 int Candidate::delta_j

3.4.2.5 double Candidate::deltaFO

3.4.2.6 int Candidate::newCoreAssignment_i

3.4.2.7 int Candidate::newCoreAssignment_j

3.4.2.8 int Candidate::nodes_i

3.4.2.9 int Candidate::nodes_j

3.4.2.10 double Candidate::real_i

3.4.2.11 double Candidate::real_j

The documentation for this class was generated from the following file:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/candidates.hh

3.5 ObjFun Class Reference

```
#include <objectiveFunction.hh>
```

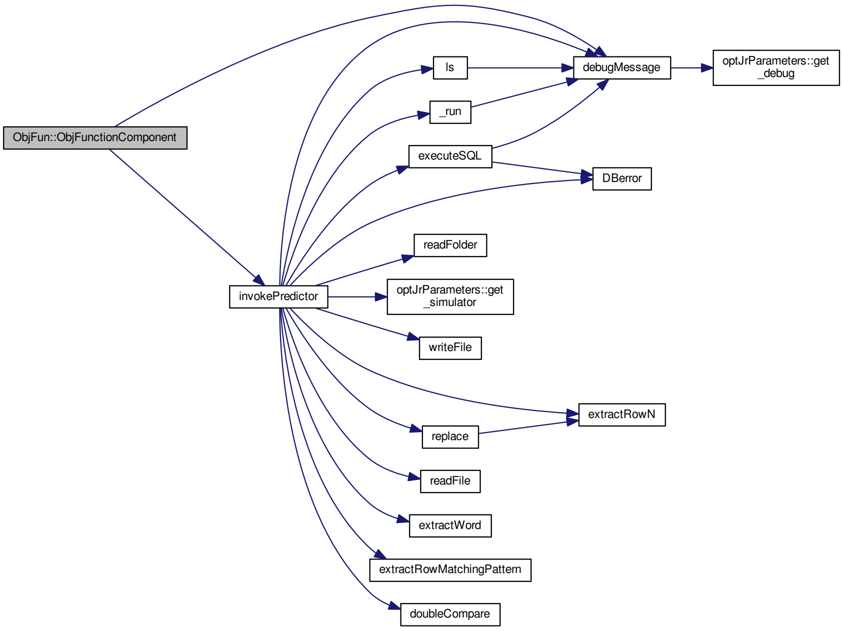
Static Public Member Functions

- static double ObjFunctionComponent (sConfiguration &configuration, MYSQL ∗conn, Application &app, optJrParameters &par)
- static double ObjFunctionComponentApprox (Application &App, optJrParameters &par)
- static double ObjFunctionGlobal (sConfiguration &configuration, MYSQL ∗conn, Batch &App_manager, optJrParameters &par)

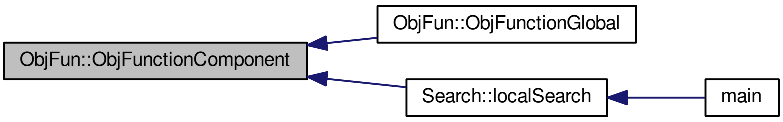
3.5.1 Member Function Documentation

3.5.1.1 double ObjFun::ObjFunctionComponent (sConfiguration & *configuration,* MYSQL ∗ *conn,* Application & *app,* optJrParameters & *par*) [static]

Here is the call graph for this function:

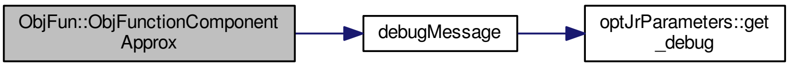


Here is the caller graph for this function:

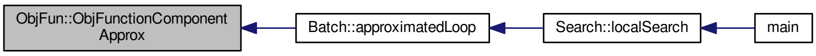


3.5.1.2 double ObjFun::ObjFunctionComponentApprox (Application & *App,* optJrParameters & *par*) [static]

Here is the call graph for this function:

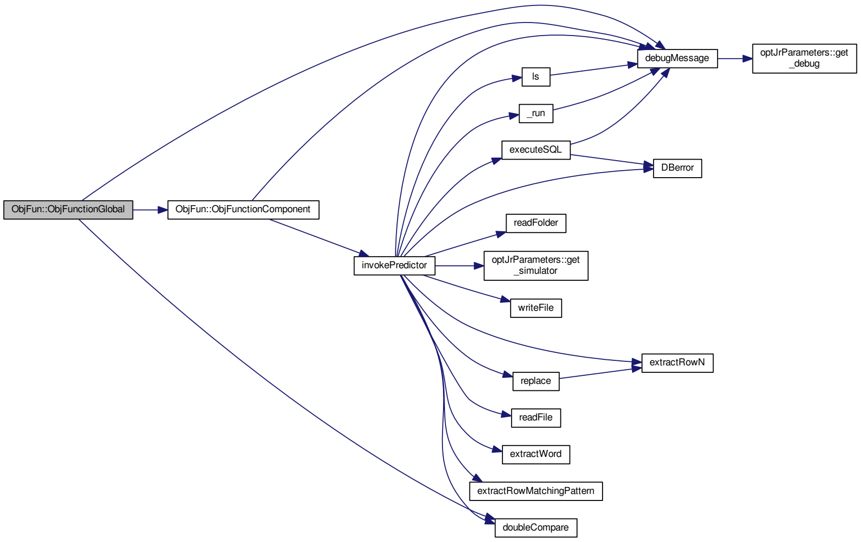

ObjFun::ObjFunctionComponent Approx
debugMessage
optJrParameters::get_debug

Here is the caller graph for this function:



3.5.1.3 double ObjFun::ObjFunctionGlobal (**sConfiguration** & *configuration,* **MYSQL** ∗ *conn,* **Batch** & *App_manager,* **optJrParameters** & *par*) `[static]`

Here is the call graph for this function:



The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/objectiveFunction.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/objectiveFunction.cpp

3.6 optJrParameters Class Reference

```
#include <optjrParameters.hh>
```

Public Member Functions

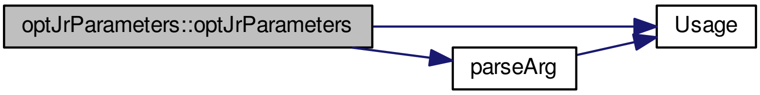
- optJrParameters (char ∗∗args, int argc)
- const std::string get_filename ()
- const int get_debug ()
- const int get_cache ()
- const int get_globalFOcalculation ()
- const int get_K ()
- const int get_simulator ()

- const int get_number ()
- const int get_maxIteration ()

3.6.1 Constructor & Destructor Documentation

3.6.1.1 optJrParameters::optJrParameters (char ∗∗ *args*, int *argc*)

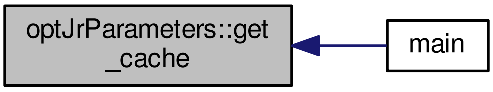
Here is the call graph for this function:



3.6.2 Member Function Documentation

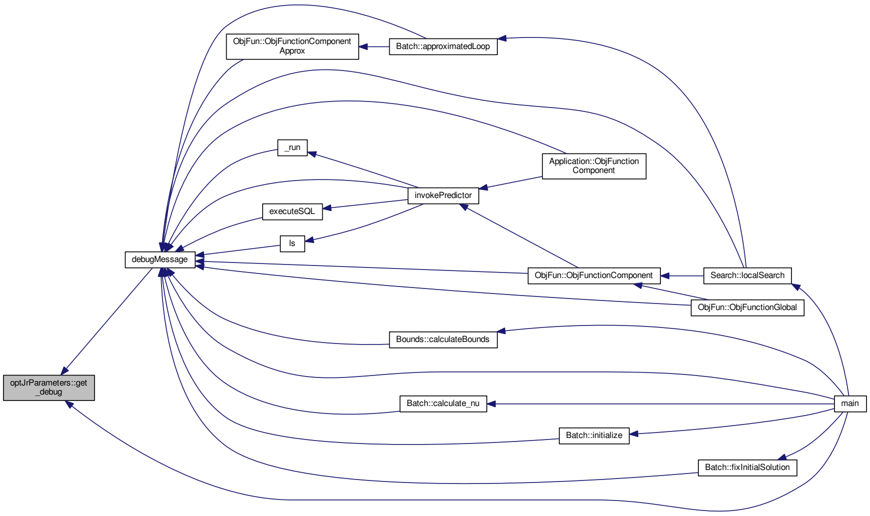
3.6.2.1 const int optJrParameters::get_cache ( )

Here is the caller graph for this function:



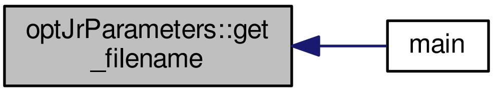
3.6.2.2 const int optJrParameters::get_debug ( )

Here is the caller graph for this function:


ObjFun::ObjFunctionComponent Approx
Batch::approximatedLoop
_run
Application::ObjFunction Component
invokePredictor
executeSQL
ls
debugMessage
ObjFun::ObjFunctionComponent
Search::localSearch
ObjFun::ObjFunctionGlobal
Bounds::calculateBounds
optJrParameters::get _debug
Batch::calculate_nu
main
Batch::initialize
Batch::fixInitialSolution

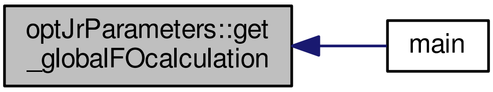
3.6.2.3 const std::string optJrParameters::get_filename ( )

Here is the caller graph for this function:



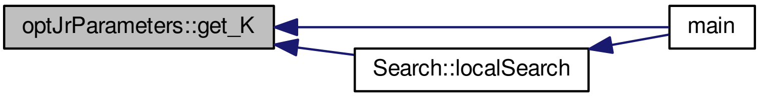
3.6.2.4 const int optJrParameters::get_globalFOcalculation ( )

Here is the caller graph for this function:



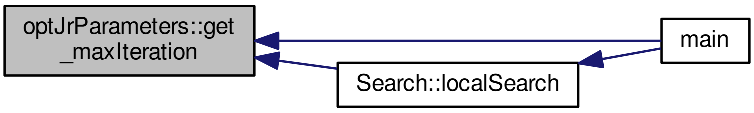
3.6.2.5 const int optJrParameters::get_K ( )

Here is the caller graph for this function:



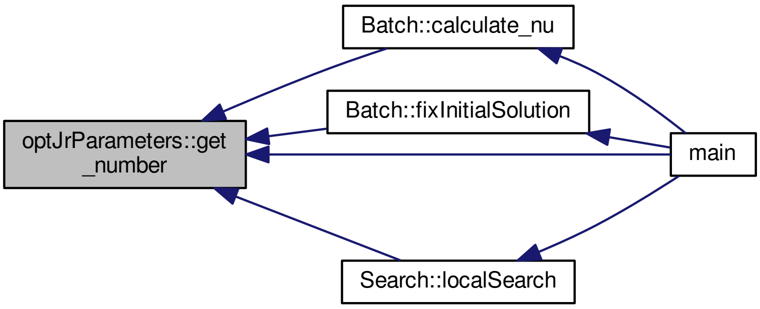
3.6.2.6 const int optJrParameters::get_maxIteration ( )

Here is the caller graph for this function:



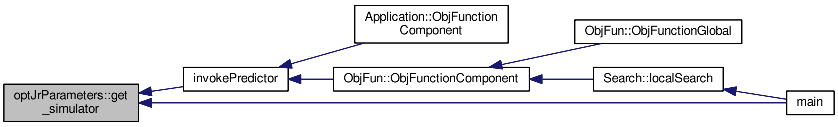
3.6.2.7 const int optJrParameters::get_number ( )

Here is the caller graph for this function:



3.6.2.8 const int optJrParameters::get_simulator ( )

Here is the caller graph for this function:


Application::ObjFunction Component
ObjFun::ObjFunctionGlobal
invokePredictor
ObjFun::ObjFunctionComponent
Search::localSearch
optJrParameters::get _simulator
main

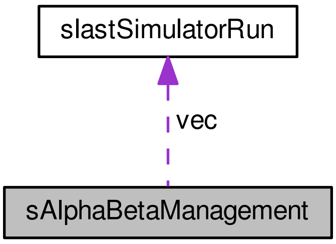
The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrParameters.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrparameters.cpp

3.7 sAlphaBetaManagement Class Reference

```
#include <application.hh>
```

Collaboration diagram for sAlphaBetaManagement:



Public Attributes

- slastSimulatorRun vec [HYP_INTERPOLATION_POINTS]
- int index

3.7.1 Member Data Documentation

3.7.1.1 int sAlphaBetaManagement::index

3.7.1.2 slastSimulatorRun sAlphaBetaManagement::vec[HYP_INTERPOLATION_POINTS]

The documentation for this class was generated from the following file:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.hh

3.8 Search Class Reference

```
#include <search.hh>
```

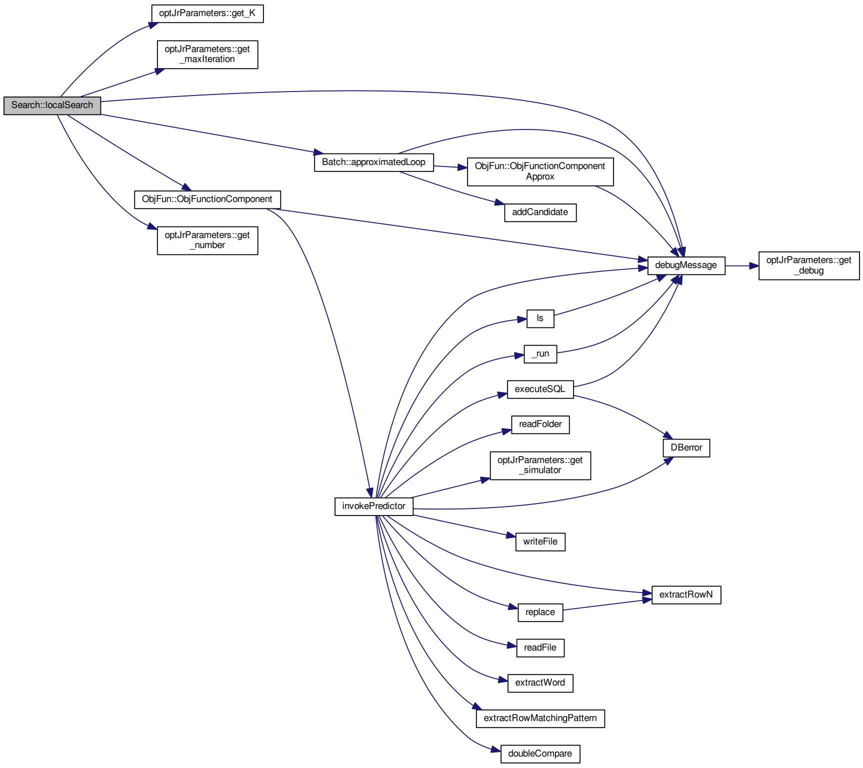
Static Public Member Functions

- static void localSearch (sConfiguration &configuration, MYSQL ∗conn, Batch &App_manager, optJrParameters &par)

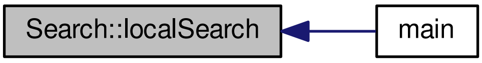
3.8.1 Member Function Documentation

3.8.1.1 void Search::localSearch (**sConfiguration** & *configuration,* **MYSQL** ∗ *conn,* **Batch** & *App_manager,* **optJrParameters** & *par*) [static]

Here is the call graph for this function:



Here is the caller graph for this function:



The documentation for this class was generated from the following files:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/search.hh
- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/search.cpp

3.9 slastSimulatorRun Class Reference

```
#include <application.hh>
```

Public Attributes

- int nCores
- double R

3.9.1 Member Data Documentation

3.9.1.1 int slastSimulatorRun::nCores

3.9.1.2 double slastSimulatorRun::R

The documentation for this class was generated from the following file:

- /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.hh

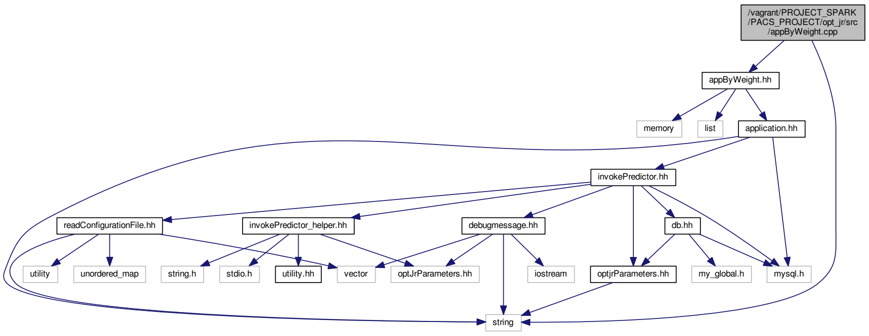
Chapter 4

File Documentation

4.1 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/appByWeight.cpp File Reference

```
#include "appByWeight.hh"
```

Include dependency graph for appByWeight.cpp:



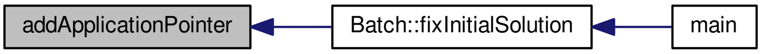
Functions

- void addApplicationPointer (appByWeight &LP, Application &App)

4.1.1 Function Documentation

4.1.1.1 void addApplicationPointer (appByWeight & *LP*, Application & *App*)

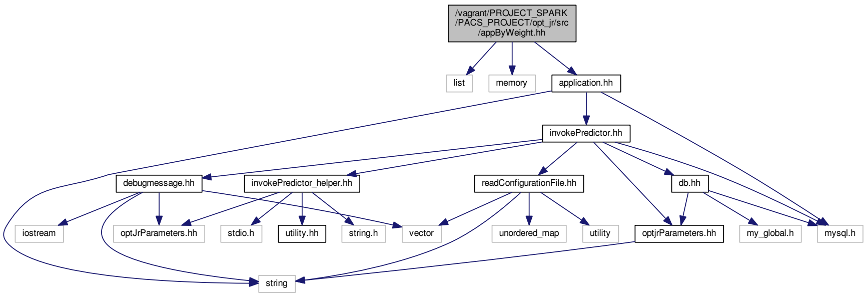
Here is the caller graph for this function:



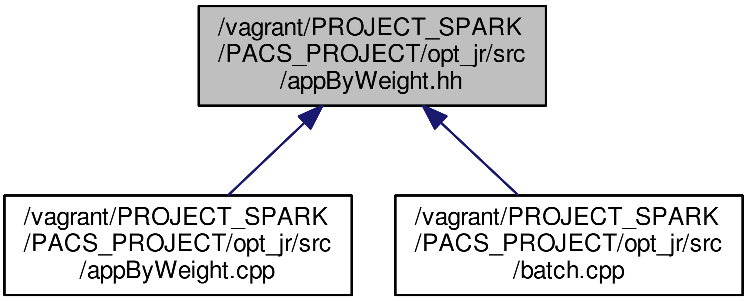
4.2 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/appByWeight.hh File Reference

```
#include <list>
#include <memory>
#include "application.hh"
```

Include dependency graph for appByWeight.hh:



This graph shows which files directly or indirectly include this file:



Typedefs

- using appByWeight = std::list< Application ∗ >

Functions

- void addApplicationPointer (appByWeight &LP, Application &App)

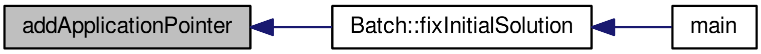
4.2.1 Typedef Documentation

4.2.1.1 using appByWeight = std::list< Application∗ >

4.2.2 Function Documentation

4.2.2.1 void addApplicationPointer (appByWeight & *LP*, Application & *App*)

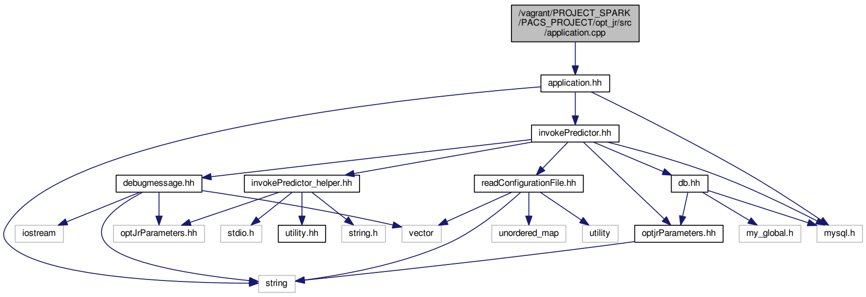
Here is the caller graph for this function:



4.3 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.cpp File Reference

```
#include "application.hh"
```

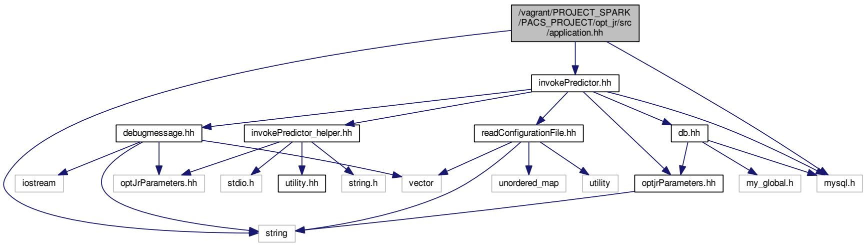
Include dependency graph for application.cpp:



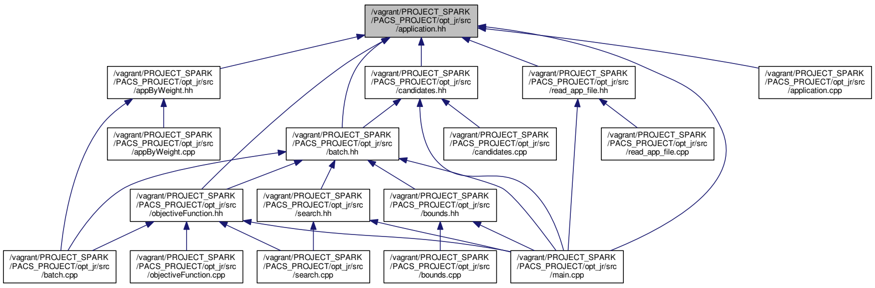
4.4 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/application.hh File Reference

```
#include <string>
#include <mysql.h>
#include "invokePredictor.hh"
```

Include dependency graph for application.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp

Classes

- class slastSimulatorRun
- class sAlphaBetaManagement
- class Application

Macros

- #define HYP_INTERPOLATION_POINTS 2
- #define WHOLE_EXECUTION_TIME 0
- #define RESIDUAL_EXECUTION_TIME 1
- #define R_ALGORITHM 0
- #define CORES_ALGORITHM 1
- #define NCORES_ALGORITHM 2

4.4.1 Macro Definition Documentation

4.4.1.1 #define CORES_ALGORITHM 1

4.4.1.2 #define HYP_INTERPOLATION_POINTS 2

4.4.1.3 #define NCORES_ALGORITHM 2

4.4.1.4 #define R_ALGORITHM 0

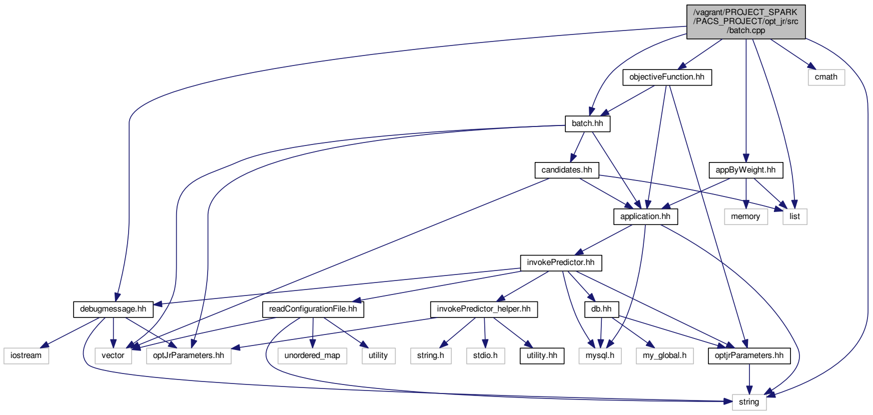
4.4.1.5 #define RESIDUAL_EXECUTION_TIME 1

4.4.1.6 #define WHOLE_EXECUTION_TIME 0

4.5 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/batch.cpp File Reference

```
#include "batch.hh"
#include "debugmessage.hh"
#include "objectiveFunction.hh"
#include "appByWeight.hh"
#include <string>
#include <cmath>
#include <list>
```

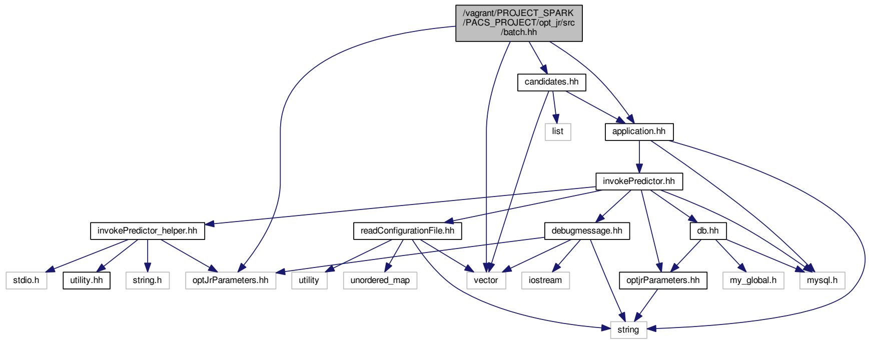
Include dependency graph for batch.cpp:



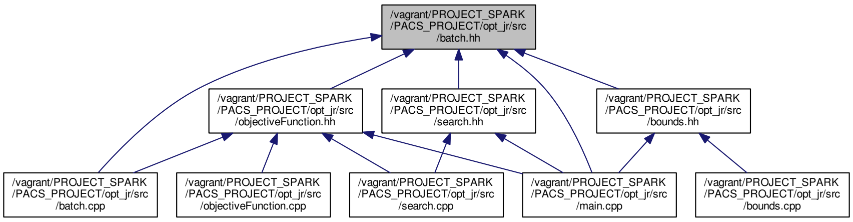
4.6 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/batch.hh File Reference

```
#include <vector>
#include "optJrParameters.hh"
#include "application.hh"
#include "candidates.hh"
```

Include dependency graph for batch.hh:



This graph shows which files directly or indirectly include this file:



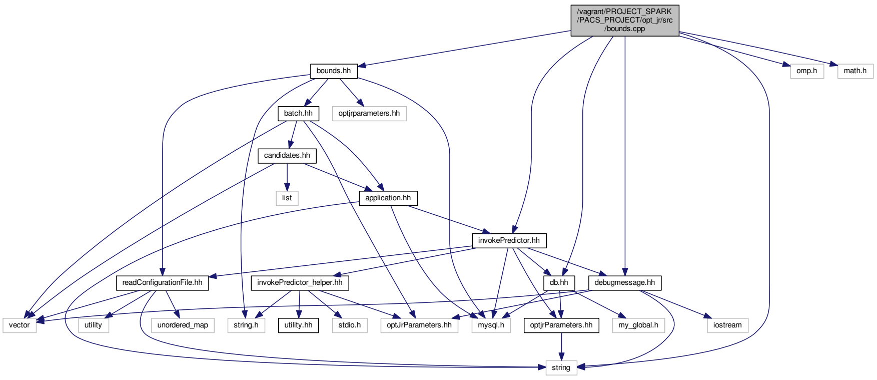
Classes

- class Batch

4.7 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/bounds.cpp File Reference

```
#include "bounds.hh"
#include "debugmessage.hh"
#include "db.hh"
#include "invokePredictor.hh"
#include <omp.h>
#include <math.h>
```

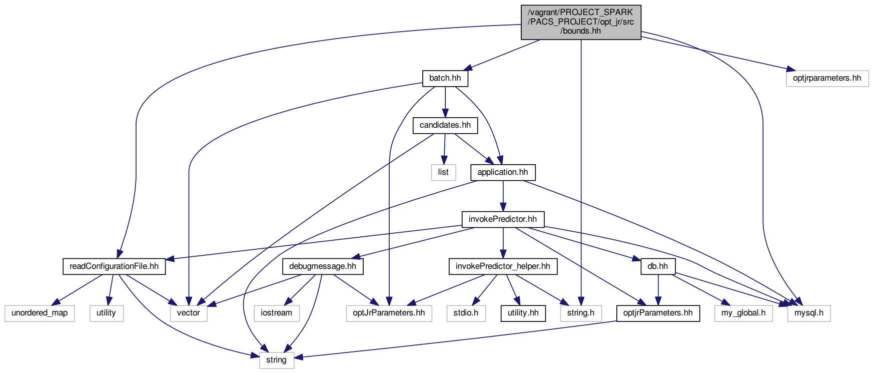
Include dependency graph for bounds.cpp:



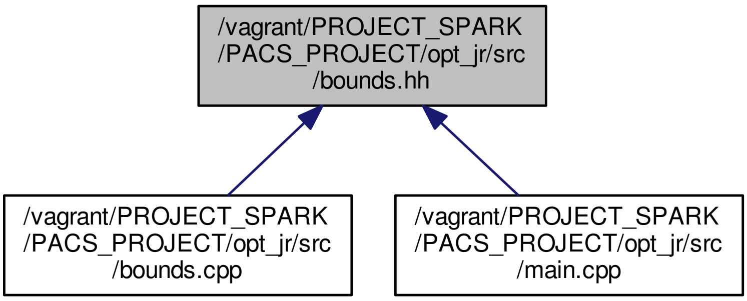
4.8 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/bounds.hh File Reference

```
#include "batch.hh"
#include "readConfigurationFile.hh"
#include "optjrparameters.hh"
#include <mysql.h>
#include <string.h>
```

Include dependency graph for bounds.hh:



This graph shows which files directly or indirectly include this file:



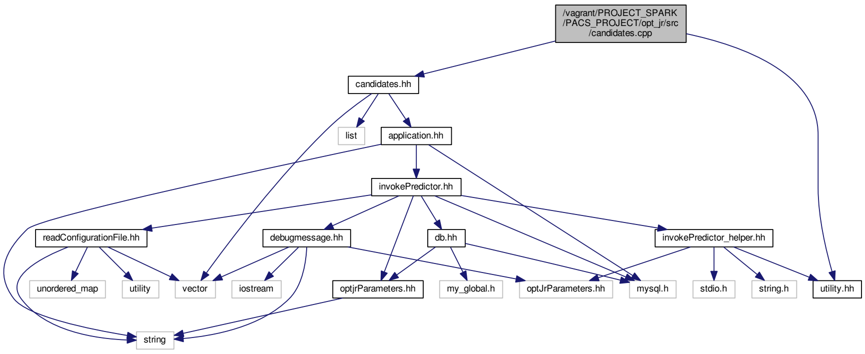
Classes

- class Bounds

4.9 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/candidates.cpp File Reference

```
#include "candidates.hh"
#include "utility.hh"
```

Include dependency graph for candidates.cpp:



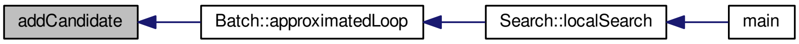
Functions

- void addCandidate (sCandidates &cand, Application &app_i, Application &app_j, int contr1, int contr2, double delta, double delta_i, double delta_j)

4.9.1 Function Documentation

4.9.1.1 void addCandidate (**sCandidates** & *cand*, **Application** & *app_i*, **Application** & *app_j*, int *contr1*, int *contr2*, double *delta*, double *delta_i*, double *delta_j*)

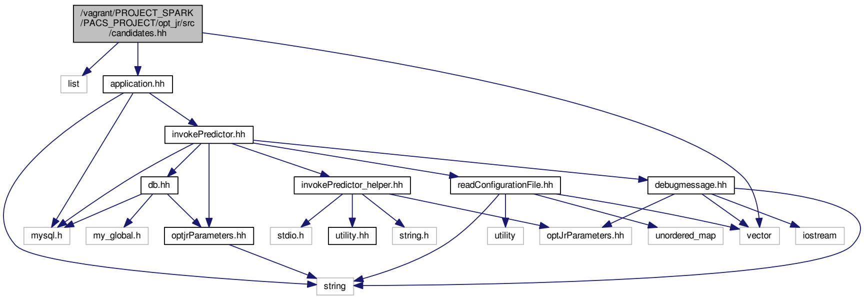
Here is the caller graph for this function:



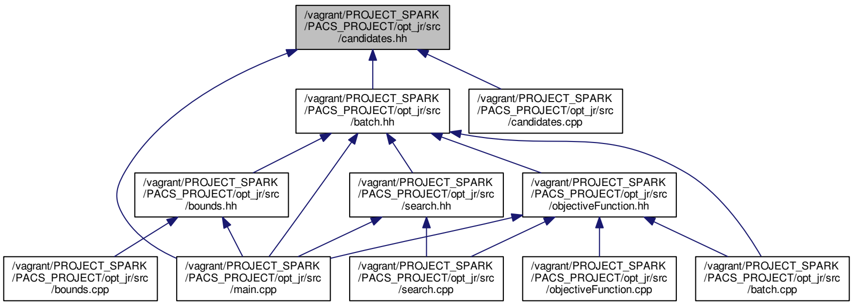
4.10 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/candidates.hh File Reference

```
#include <list>
#include <vector>
#include "application.hh"
```

Include dependency graph for candidates.hh:



This graph shows which files directly or indirectly include this file:



Classes

- class Candidate

Typedefs

- using sCandidates = std::list< Candidate >

Functions

- void addCandidate (sCandidates &cand, Application &app_i, Application &app_j, int contr1, int contr2, double delta, double delta_i, double delta_j)

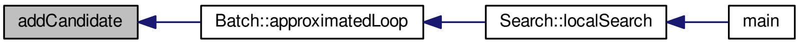
4.10.1 Typedef Documentation

4.10.1.1 using **sCandidates** = std::list<**Candidate**>

4.10.2 Function Documentation

4.10.2.1 void addCandidate (**sCandidates** & *cand,* **Application** & *app_i,* **Application** & *app_j,* int *contr1,* int *contr2,* double *delta,* double *delta_i,* double *delta_j*)

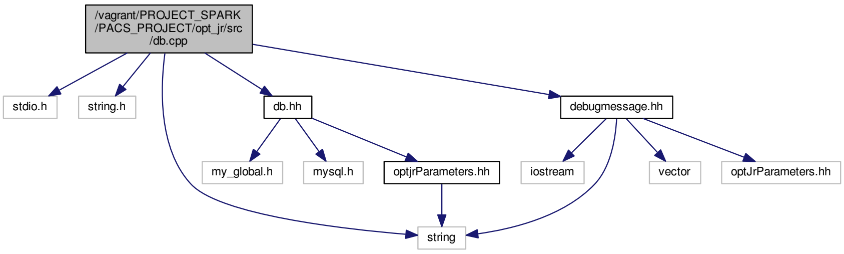
Here is the caller graph for this function:



4.11 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/db.cpp File Reference

```
#include <stdio.h>
#include <string.h>
#include <string>
#include "db.hh"
#include "debugmessage.hh"
```

Include dependency graph for db.cpp:



Functions

- void DBerror (MYSQL ∗conn, char ∗msg)
- MYSQL_ROW executeSQL (MYSQL ∗conn, char ∗statement, optJrParameters par)

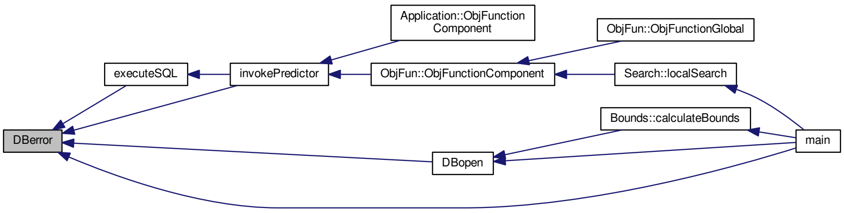
- MYSQL ∗ DBopen (char ∗host, char ∗login, char ∗passw, char ∗dbName)
- void DBclose (MYSQL ∗conn)

4.11.1 Function Documentation

4.11.1.1 void DBclose (MYSQL ∗ *conn*)

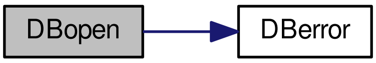
4.11.1.2 void DBerror (MYSQL ∗ *conn*, char ∗ *msg*)

Here is the caller graph for this function:

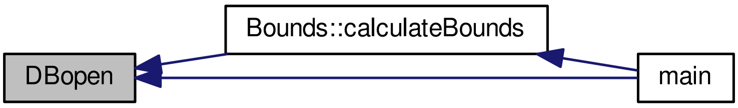

Application::ObjFunction Component
ObjFun::ObjFunctionGlobal
executeSQL
invokePredictor
ObjFun::ObjFunctionComponent
Search::localSearch
Bounds::calculateBounds
DBerror
main
DBopen

4.11.1.3 MYSQL∗ DBopen (char ∗ *host*, char ∗ *login*, char ∗ *passw*, char ∗ *dbName*)

Here is the call graph for this function:

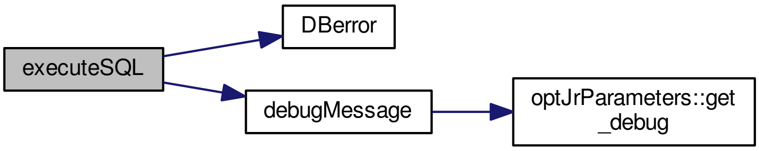


Here is the caller graph for this function:

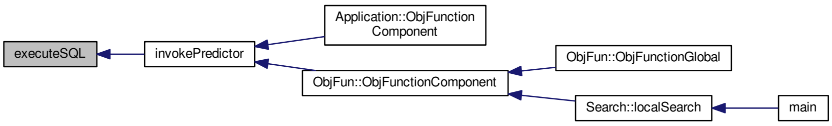


4.11.1.4 MYSQL_ROW executeSQL (MYSQL ∗ *conn,* char ∗ *statement,* optJrParameters *par*)

Here is the call graph for this function:



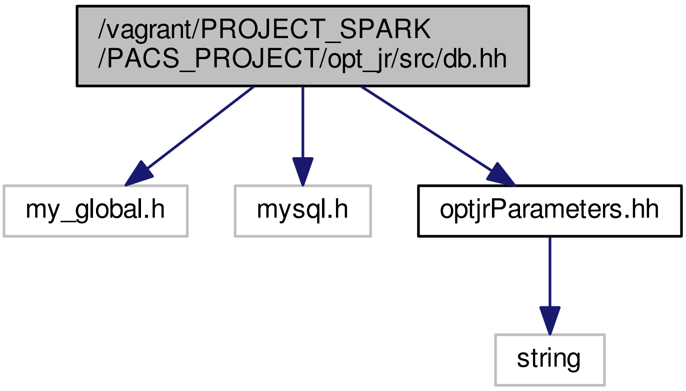
Here is the caller graph for this function:


executeSQL
invokePredictor
Application::ObjFunctionComponent
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

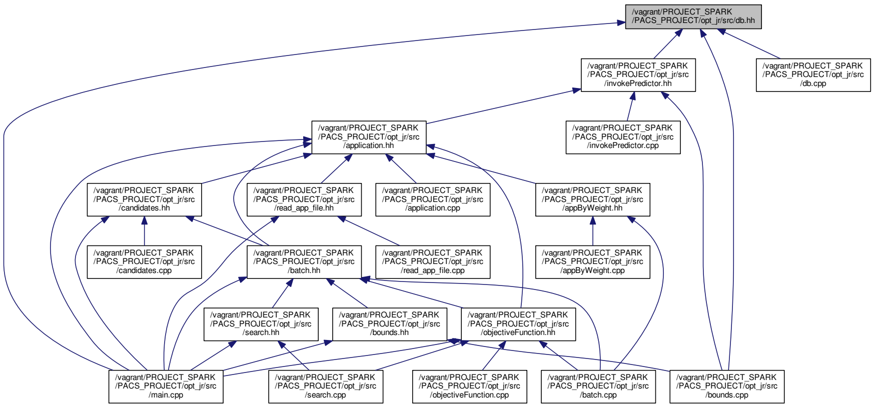
4.12 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/db.hh File Reference

```
#include <my_global.h>
#include <mysql.h>
#include "optjrParameters.hh"
```

Include dependency graph for db.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src/db.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /db.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp

Functions

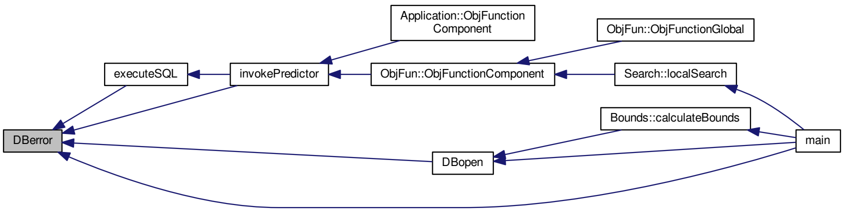
- void DBerror (MYSQL ∗conn, char ∗msg)
- MYSQL_ROW executeSQL (MYSQL ∗conn, char ∗statement, optJrParameters par)
- MYSQL ∗ DBopen (char ∗host, char ∗login, char ∗passw, char ∗dbName)
- void DBclose (MYSQL ∗conn)

4.12.1 Function Documentation

4.12.1.1 void DBclose (MYSQL ∗ *conn*)

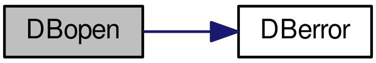
4.12.1.2 void DBerror (MYSQL ∗ *conn,* char ∗ *msg*)

Here is the caller graph for this function:

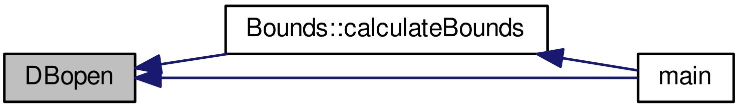

Application::ObjFunction Component
ObjFun::ObjFunctionGlobal
executeSQL
invokePredictor
ObjFun::ObjFunctionComponent
Search::localSearch
Bounds::calculateBounds
DBerror
main
DBopen

4.12.1.3 MYSQL∗ DBopen (char ∗ *host*, char ∗ *login*, char ∗ *passw*, char ∗ *dbName*)

Here is the call graph for this function:

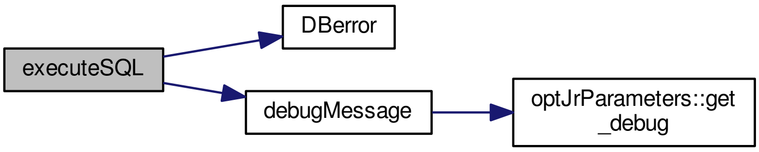


Here is the caller graph for this function:

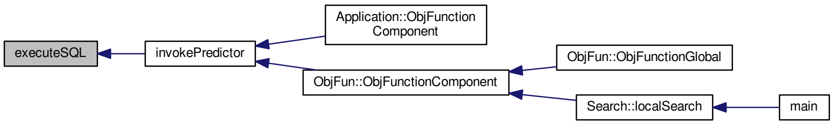


4.12.1.4 MYSQL_ROW executeSQL (MYSQL ∗ *conn*, char ∗ *statement*, optJrParameters *par*)

Here is the call graph for this function:



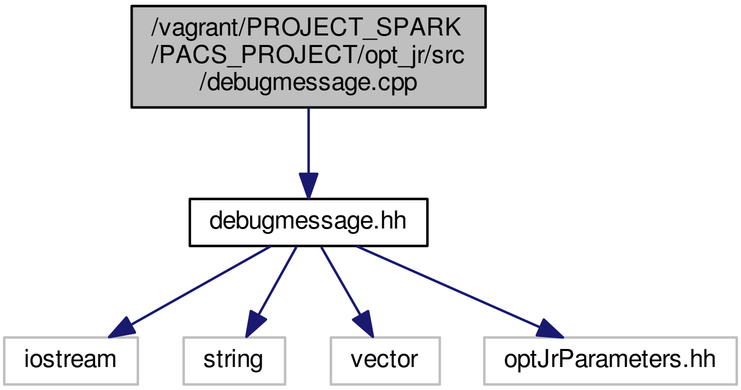
Here is the caller graph for this function:



4.13 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/debugmessage.cpp File Reference

```
#include "debugmessage.hh"
```

Include dependency graph for debugmessage.cpp:



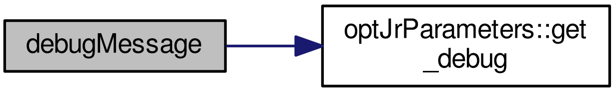
Functions

- void debugMessage (std::string &string, optJrParameters &par)

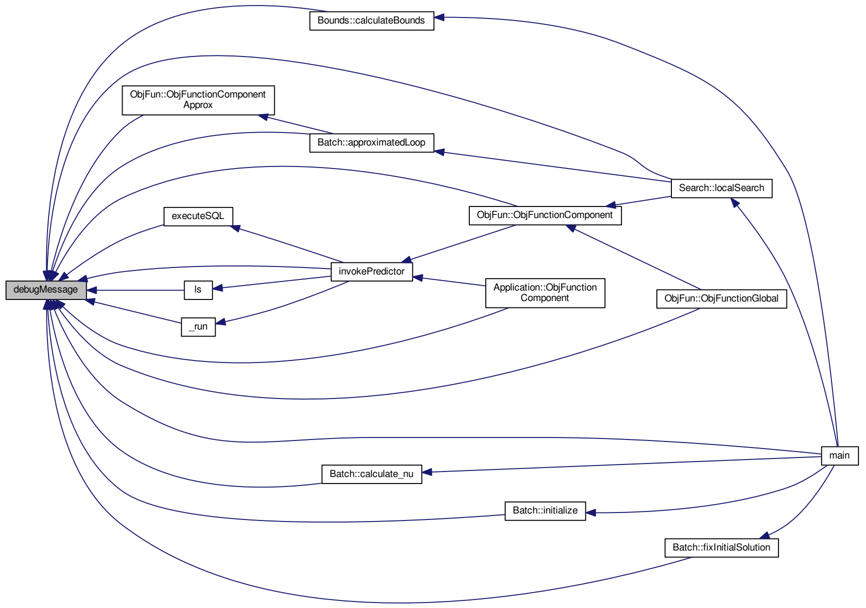
4.13.1 Function Documentation

4.13.1.1 void debugMessage (std::string & *string*, optJrParameters & *par*)

Here is the call graph for this function:



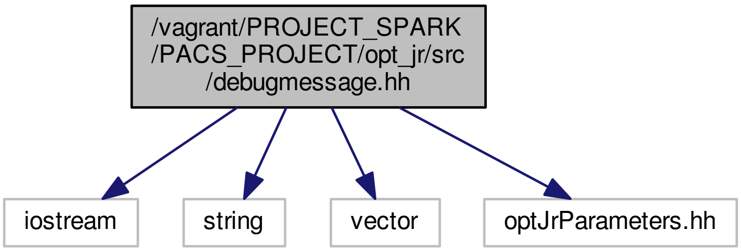
Here is the caller graph for this function:



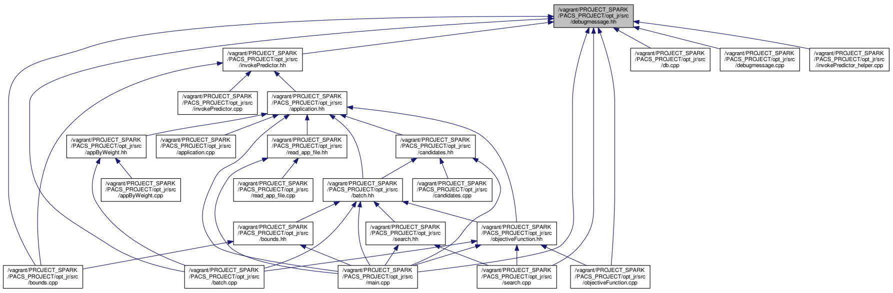
4.14 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/debugmessage.hh File Reference

```
#include <iostream>
#include <string>
#include <vector>
#include "optJrParameters.hh"
```

Include dependency graph for debugmessage.hh:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /debugmessage.hh
iostream
string
vector
optJrParameters.hh

This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /debugmessage.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /db.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /debugmessage.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor_helper.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp

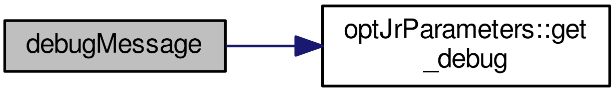
Functions

- void debugMessage (std::string &string, optJrParameters &par)

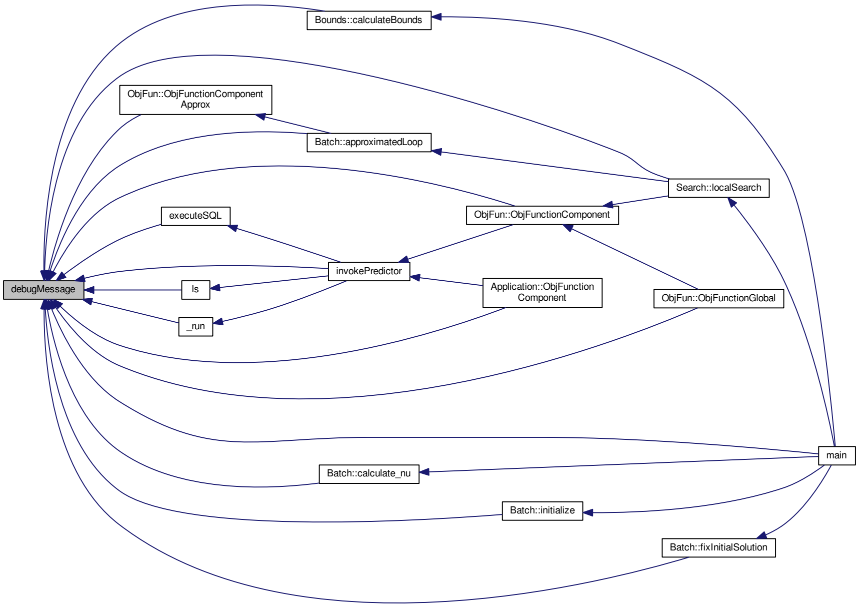
4.14.1 Function Documentation

4.14.1.1 void debugMessage (std::string & *string*, optJrParameters & *par*)

Here is the call graph for this function:



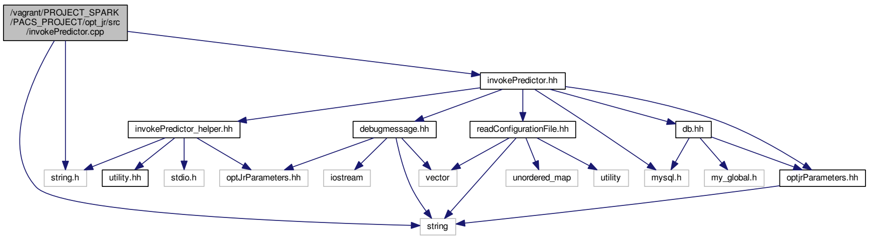
Here is the caller graph for this function:



4.15 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/invokePredictor.cpp File Reference

```
#include "invokePredictor.hh"
#include <string>
#include <string.h>
```

Include dependency graph for invokePredictor.cpp:



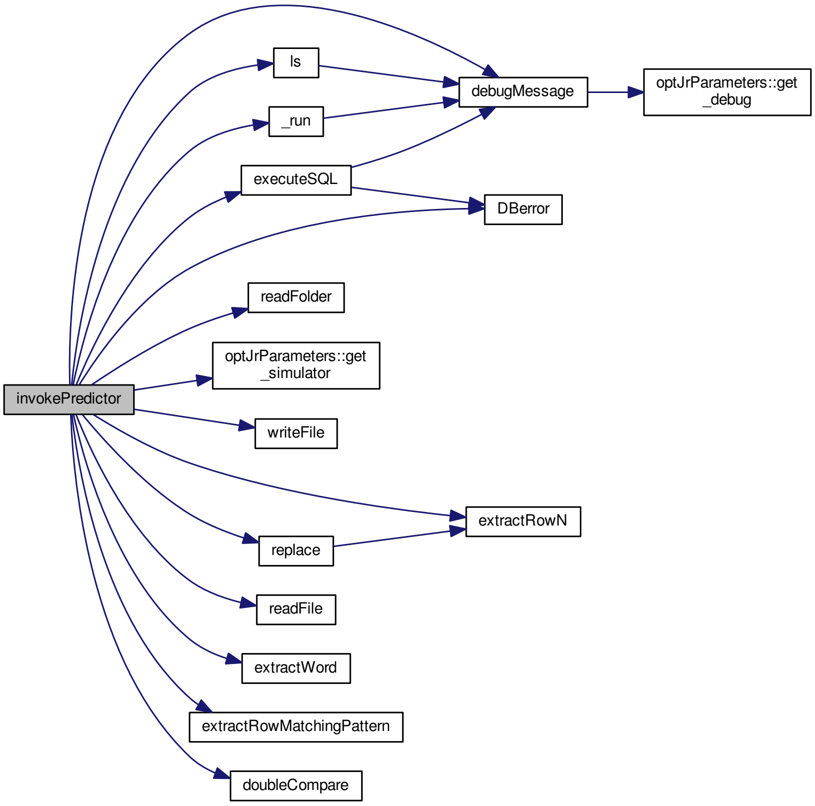
Functions

- char ∗ invokePredictor (sConfiguration &configuration, MYSQL ∗conn, int nNodes, int currentCores, char ∗memory, int datasize, char ∗sessionId, char ∗appId, char ∗stage, optJrParameters &par, int flagDagsim)

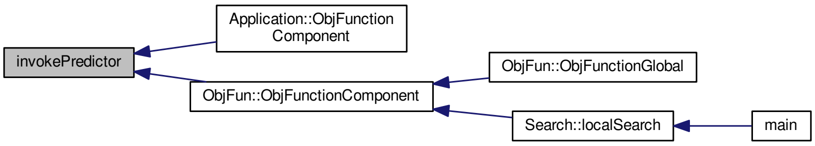
4.15.1 Function Documentation

4.15.1.1 char∗ invokePredictor (**sConfiguration** & *configuration,* MYSQL ∗ *conn,* int *nNodes,* int *currentCores,* char ∗ *memory,* int *datasize,* char ∗ *sessionId,* char ∗ *appId,* char ∗ *stage,* **optJrParameters** & *par,* int *flagDagsim*)

Here is the call graph for this function:



Here is the caller graph for this function:

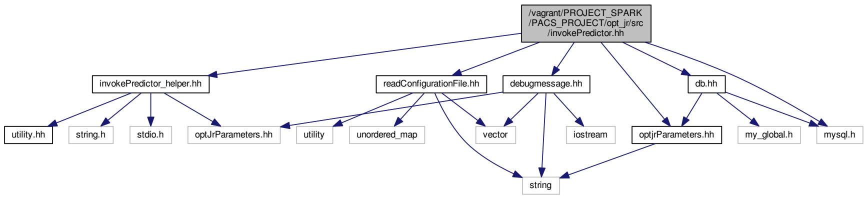

invokePredictor
Application::ObjFunctionComponent
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.16 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/invokePredictor.hh File Reference

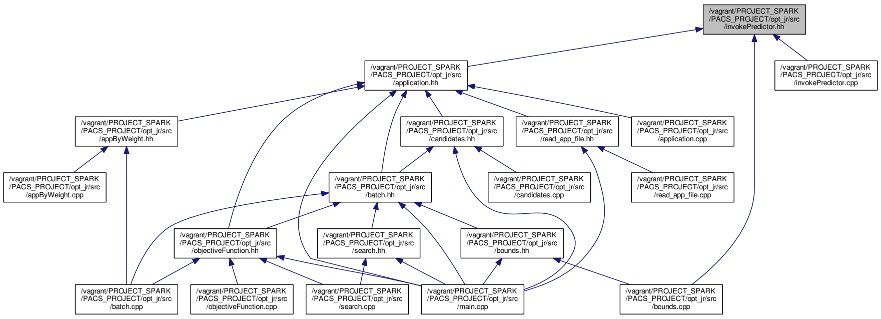
```
#include "invokePredictor_helper.hh"
```

```
#include "readConfigurationFile.hh"
#include "optjrParameters.hh"
#include "debugmessage.hh"
#include "db.hh"
#include <mysql.h>
```

Include dependency graph for invokePredictor.hh:



This graph shows which files directly or indirectly include this file:



Macros

- #define WHOLE_DAGSIM 0
- #define RESIDUAL_DAGSIM 1

Functions

- char ∗ invokePredictor (sConfiguration &configuration, MYSQL ∗conn, int nNodes, int currentCores, char ∗memory, int datasize, char ∗sessionId, char ∗appId, char ∗stage, optJrParameters &par, int flagDagsim)

4.16.1 Macro Definition Documentation

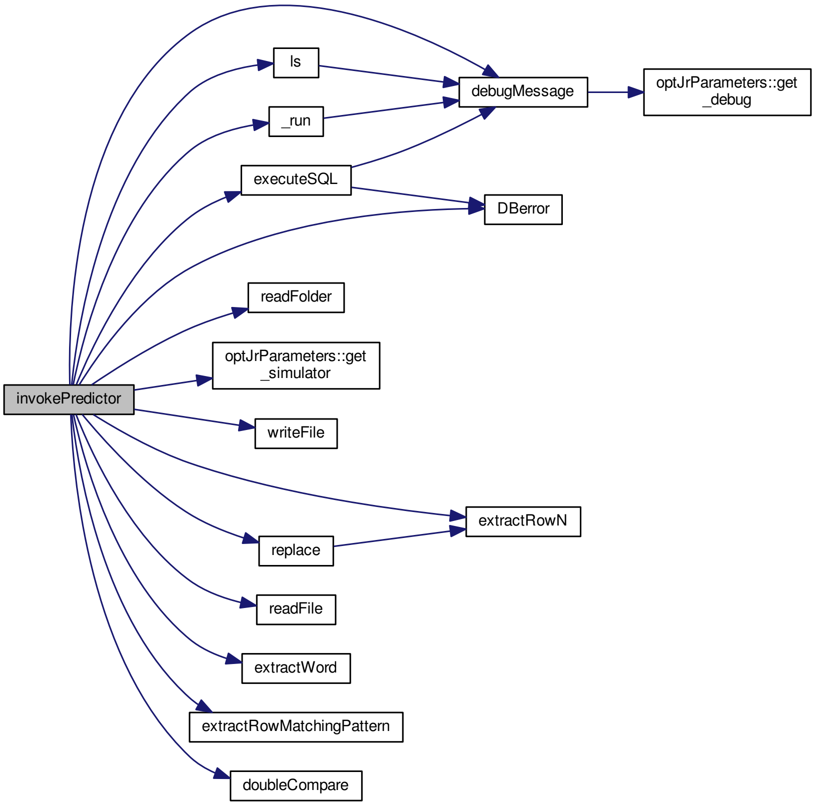
4.16.1.1 #define RESIDUAL_DAGSIM 1

4.16.1.2 #define WHOLE_DAGSIM 0

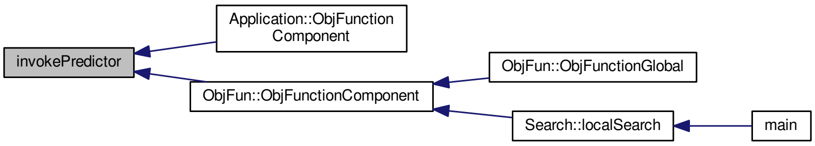
4.16.2 Function Documentation

4.16.2.1 char∗ invokePredictor (**sConfiguration** & *configuration,* MYSQL ∗ *conn,* int *nNodes,* int *currentCores,* char ∗ *memory,* int *datasize,* char ∗ *sessionId,* char ∗ *appId,* char ∗ *stage,* **optJrParameters** & *par,* int *flagDagsim*)

Here is the call graph for this function:



Here is the caller graph for this function:

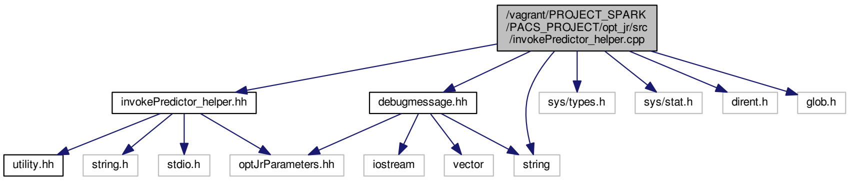

Application::ObjFunctionComponent
invokePredictor
ObjFun::ObjFunctionGlobal
ObjFun::ObjFunctionComponent
Search::localSearch
main

4.17 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/invokePredictor_helper.cpp File Reference

```
#include "invokePredictor_helper.hh"
```

```
#include "debugmessage.hh"
#include <string>
#include <sys/types.h>
#include <sys/stat.h>
#include <dirent.h>
#include <glob.h>
```

Include dependency graph for invokePredictor_helper.cpp:



Macros

- #define BIG_LINE 4000
- #define BIG_TEXT 20000

Functions

- char ∗ readFolder (char ∗path)
- void writeFile (const char ∗filepath, const char ∗data)
- char ∗ ls (char ∗pattern, optJrParameters &par)
- char ∗ extractRowN (char ∗text, int row)
- char ∗ replace (char ∗text, char ∗newLine)
- char ∗ readFile (char ∗filename)
- char ∗ _run (char ∗cmd, optJrParameters &par)
- char ∗ extractWord (char ∗line, int pos)
- char ∗ extractRowMatchingPattern (char ∗text, char ∗pattern)

4.17.1 Macro Definition Documentation

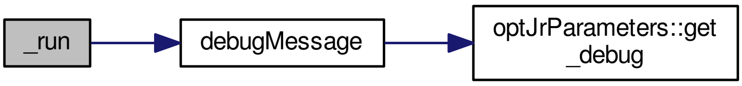
4.17.1.1 #define BIG_LINE 4000

4.17.1.2 #define BIG_TEXT 20000

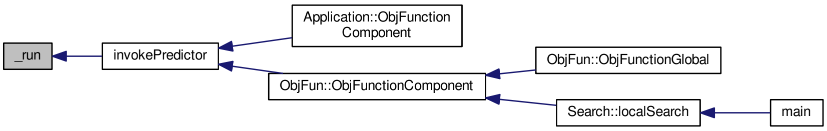
4.17.2 Function Documentation

4.17.2.1 char∗ _run (char ∗ *cmd,* optJrParameters & *par*)

Here is the call graph for this function:

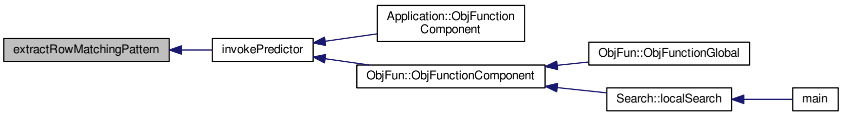


Here is the caller graph for this function:



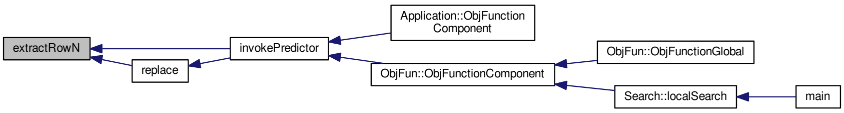
4.17.2.2 char∗ extractRowMatchingPattern (char ∗ *text,* char ∗ *pattern*)

Here is the caller graph for this function:


extractRowMatchingPattern
invokePredictor
Application::ObjFunction
Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

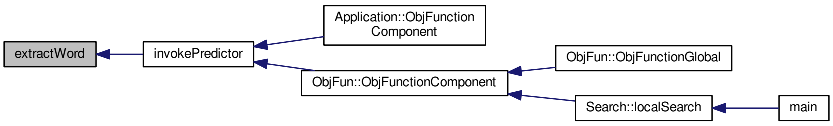
4.17.2.3 char∗ extractRowN (char ∗ *text,* int *row*)

Here is the caller graph for this function:



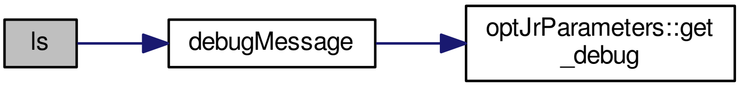
4.17.2.4 char∗ extractWord (char ∗ *line,* int *pos*)

Here is the caller graph for this function:

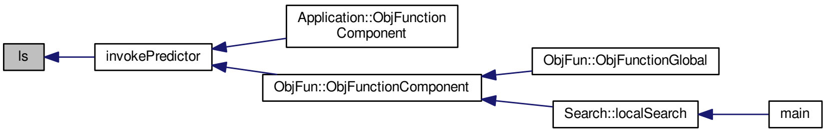


4.17.2.5 char∗ ls (char ∗ *pattern,* optJrParameters & *par*)

Here is the call graph for this function:

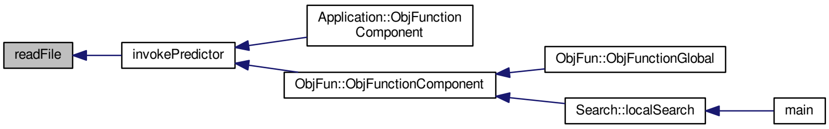


Here is the caller graph for this function:



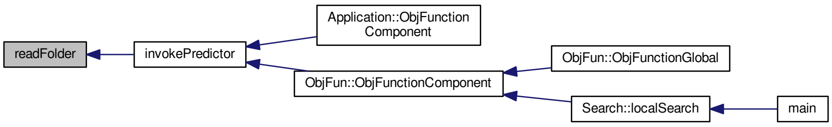
4.17.2.6 char∗ readFile (char ∗ *filename*)

Here is the caller graph for this function:



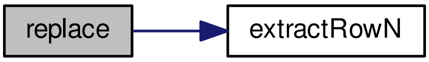
4.17.2.7 char∗ readFolder (char ∗ *path*)

Here is the caller graph for this function:

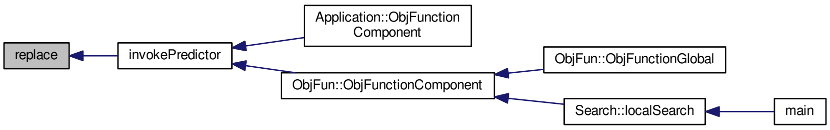

readFolder
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.17.2.8 char∗ replace (char ∗ *text,* char ∗ *newLine*)

Here is the call graph for this function:

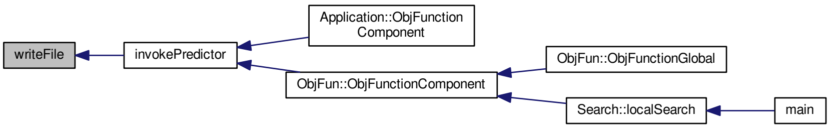


Here is the caller graph for this function:


replace
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.17.2.9 void writeFile (const char ∗ *filepath,* const char ∗ *data*)

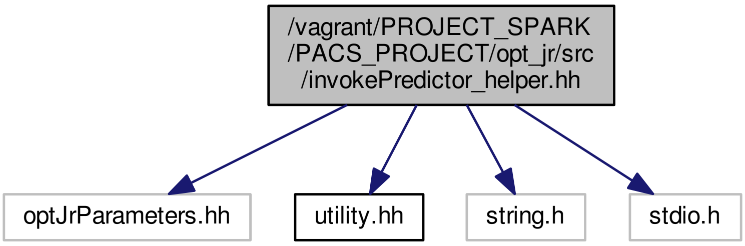
Here is the caller graph for this function:


writeFile
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

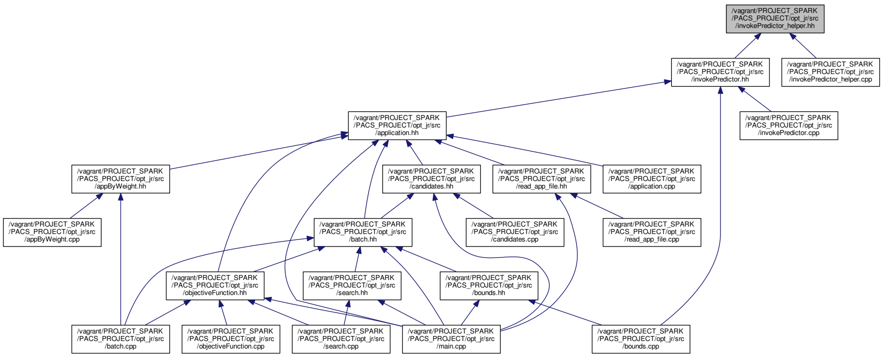
4.18 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/invokePredictor_helper.hh File Reference

```
#include "optJrParameters.hh"
#include "utility.hh"
#include <string.h>
#include <stdio.h>
```

Include dependency graph for invokePredictor_helper.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor_helper.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor_helper.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp

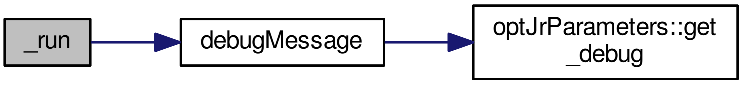
Functions

- char ∗ readFolder (char ∗path)
- void writeFile (const char ∗filepath, const char ∗data)
- char ∗ ls (char ∗pattern, optJrParameters &par)
- char ∗ extractRowN (char ∗text, int row)
- char ∗ replace (char ∗text, char ∗newLine)
- char ∗ readFile (char ∗filename)
- char ∗ _run (char ∗cmd, optJrParameters &par)
- char ∗ extractWord (char ∗line, int pos)
- char ∗ extractRowMatchingPattern (char ∗text, char ∗pattern)

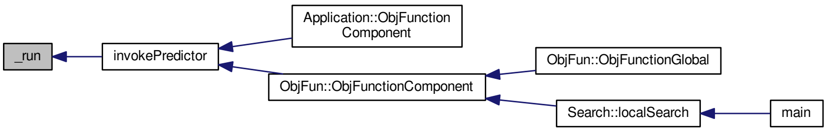
4.18.1 Function Documentation

4.18.1.1 char∗ _run (char ∗ *cmd,* optJrParameters & *par*)

Here is the call graph for this function:

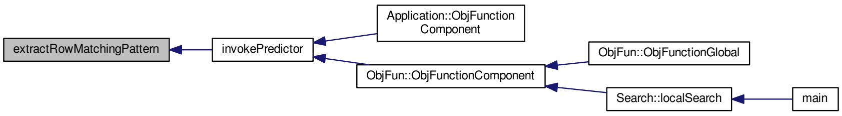


Here is the caller graph for this function:


_run
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

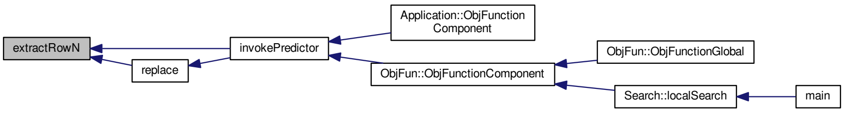
4.18.1.2 char∗ extractRowMatchingPattern (char ∗ *text,* char ∗ *pattern*)

Here is the caller graph for this function:


extractRowMatchingPattern
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

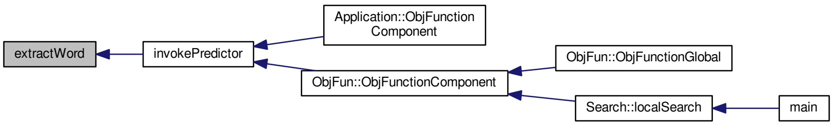
4.18.1.3 char∗ extractRowN (char ∗ *text,* int *row*)

Here is the caller graph for this function:


extractRowN
replace
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

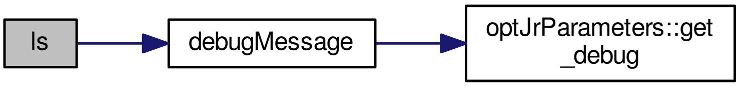
4.18.1.4 char∗ extractWord (char ∗ *line,* int *pos*)

Here is the caller graph for this function:

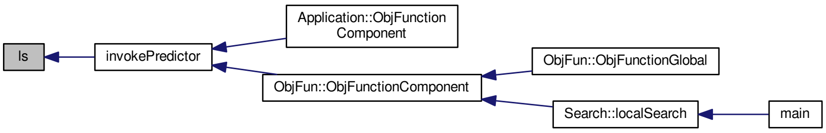


4.18.1.5 char∗ ls (char ∗ *pattern,* optJrParameters & *par*)

Here is the call graph for this function:

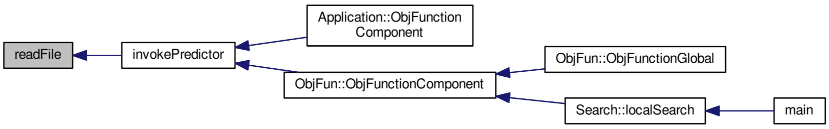


Here is the caller graph for this function:



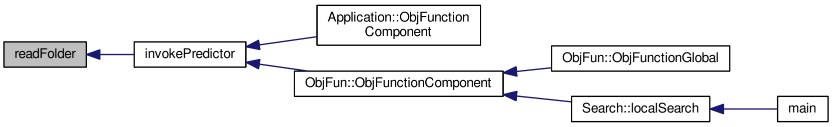
4.18.1.6 char∗ readFile (char ∗ *filename*)

Here is the caller graph for this function:



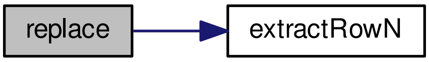
4.18.1.7 char∗ readFolder (char ∗ *path*)

Here is the caller graph for this function:

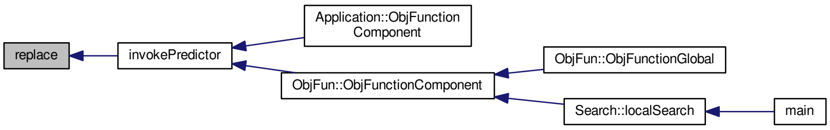

readFolder
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.18.1.8 char∗ replace (char ∗ *text,* char ∗ *newLine*)

Here is the call graph for this function:

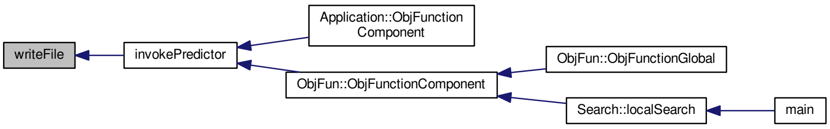


Here is the caller graph for this function:


replace
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.18.1.9 void writeFile (const char ∗ *filepath,* const char ∗ *data*)

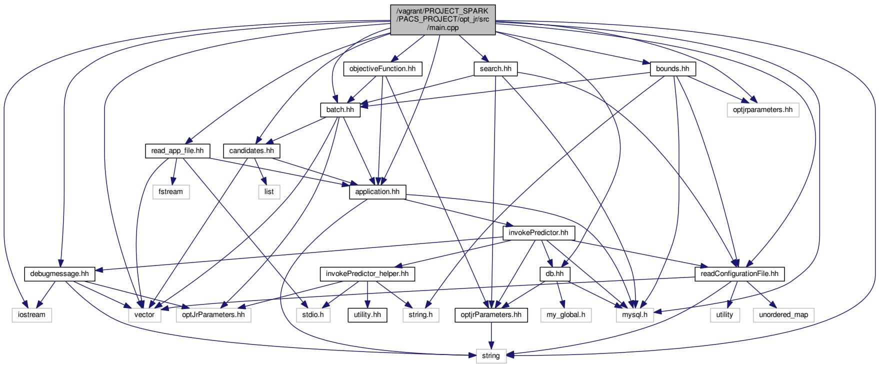
Here is the caller graph for this function:


writeFile
invokePredictor
Application::ObjFunction Component
ObjFun::ObjFunctionComponent
ObjFun::ObjFunctionGlobal
Search::localSearch
main

4.19 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/main.cpp File Reference

```
#include <iostream>
#include <string>
#include <mysql.h>
#include <vector>
#include "optjrparameters.hh"
#include "readConfigurationFile.hh"
#include "debugmessage.hh"
#include "db.hh"
#include "application.hh"
#include "read_app_file.hh"
#include "batch.hh"
#include "bounds.hh"
#include "search.hh"
#include "objectiveFunction.hh"
#include "candidates.hh"
```

Include dependency graph for main.cpp:



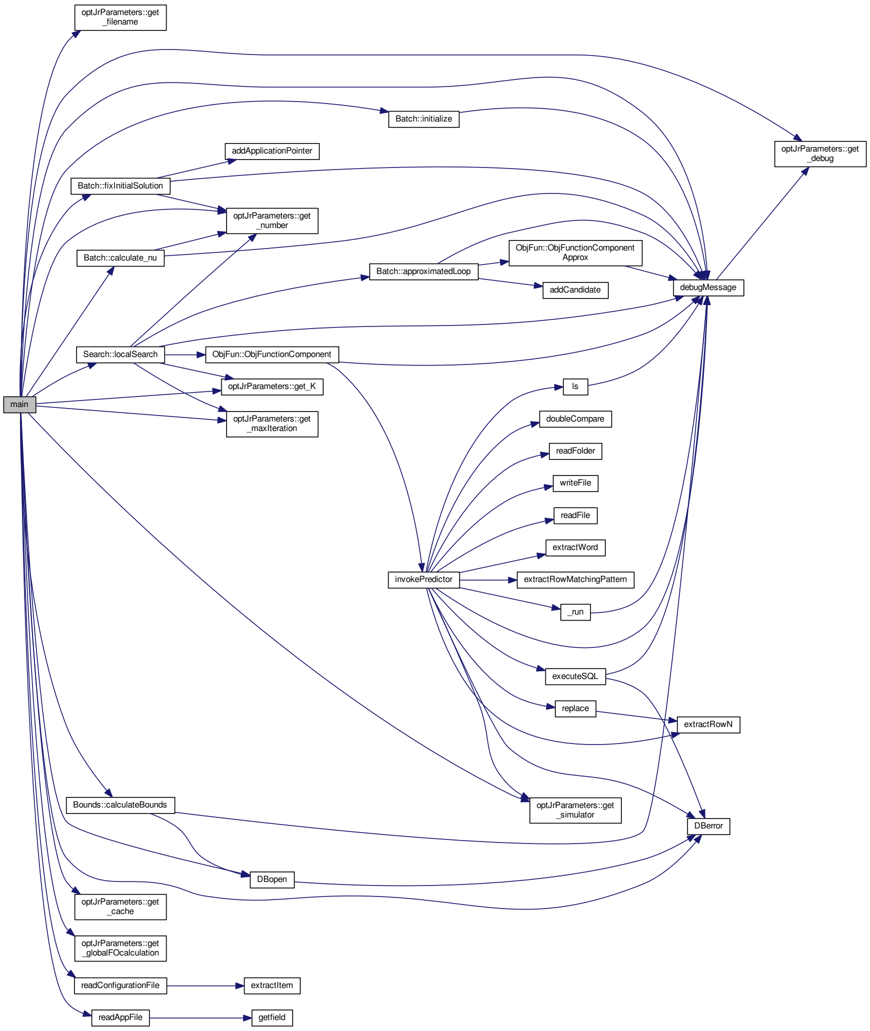
Functions

- int main (int argc, char ∗∗argv)

4.19.1 Function Documentation

4.19.1.1 int main (int *argc,* char ∗∗ *argv*)

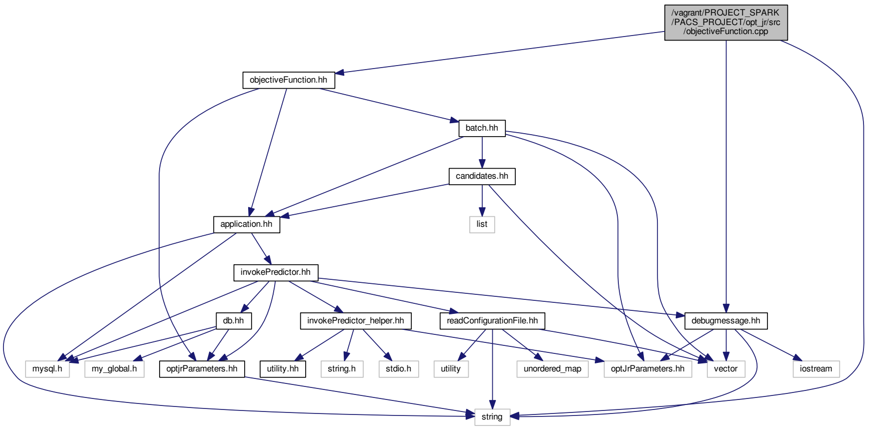
Here is the call graph for this function:



4.20 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/objectiveFunction.cpp File Reference

```
#include "objectiveFunction.hh"
#include <string>
#include "debugmessage.hh"
```

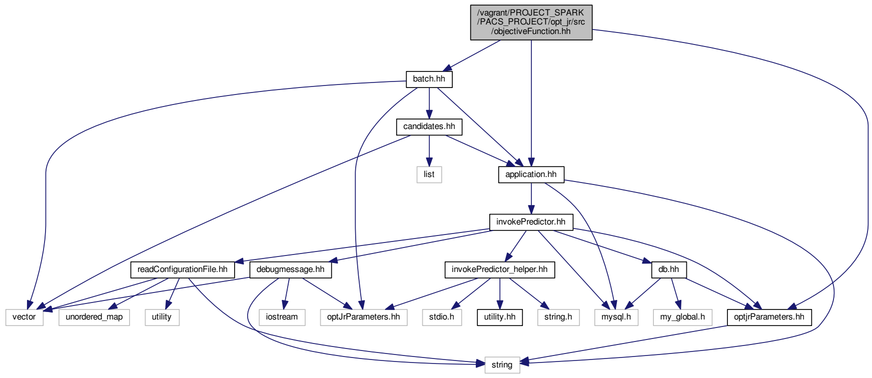
Include dependency graph for objectiveFunction.cpp:



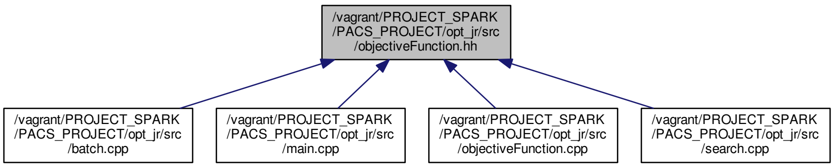
4.21 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/objectiveFunction.hh File Reference

```
#include "application.hh"
#include "optjrParameters.hh"
#include "batch.hh"
```

Include dependency graph for objectiveFunction.hh:



This graph shows which files directly or indirectly include this file:



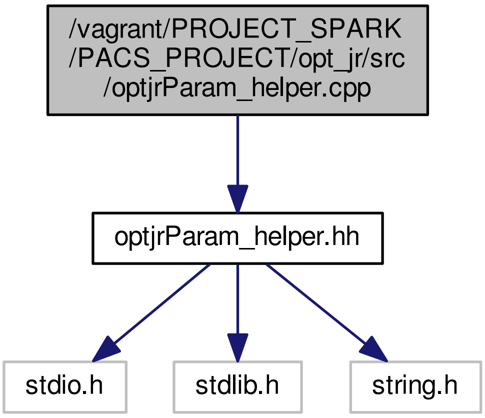
Classes

- class ObjFun

4.22 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrParam_helper.cpp File Reference

```
#include "optjrParam_helper.hh"
```

Include dependency graph for optjrParam_helper.cpp:



Functions

- void Usage ()
- char ∗ parseArg (char ∗string, char ∗gap, int type)

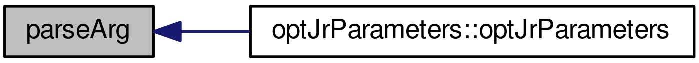
4.22.1 Function Documentation

4.22.1.1 char∗ parseArg (char ∗ *string,* char ∗ *gap,* int *type*)

Here is the call graph for this function:

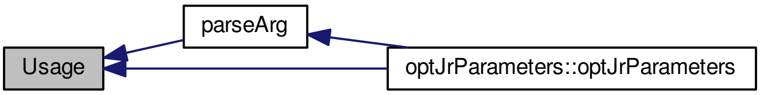
parseArg
Usage

Here is the caller graph for this function:



4.22.1.2 void Usage ( )

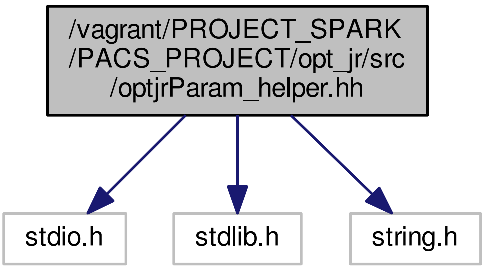
Here is the caller graph for this function:



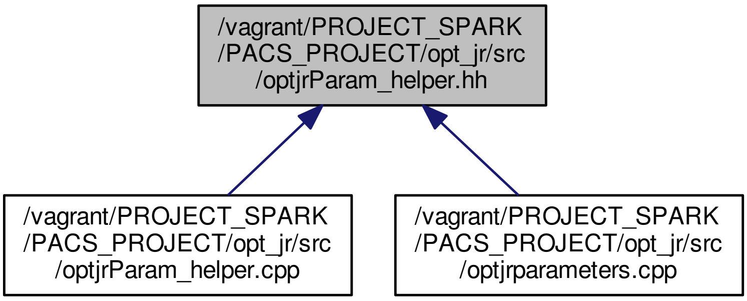
4.23 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrParam_helper.hh File Reference

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
```

Include dependency graph for optjrParam_helper.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /optjrParam_helper.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /optjrParam_helper.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /optjrparameters.cpp

Macros

- #define ARGS 8
- #define FILENAME "-f="
- #define NUM_N "-n="
- #define LIST_LIMIT "-k="
- #define DEBUG "-d="
- #define MAX_ITERATIONS "-i="
- #define SIMULATOR "-s="
- #define GLOBAL_FO_CALCULATION "-g"
- #define NUMBER 0
- #define STRING 1
- #define YES_NO 2
- #define NO 0
- #define YES 1

Functions

- void Usage ()
- char ∗ parseArg (char ∗string, char ∗gap, int type)

4.23.1 Macro Definition Documentation

4.23.1.1 #define ARGS 8

4.23.1.2 #define DEBUG "-d="

4.23.1.3 #define FILENAME "-f="

4.23.1.4 #define GLOBAL_FO_CALCULATION "-g"

4.23.1.5 #define LIST_LIMIT "-k="

4.23.1.6 #define MAX_ITERATIONS "-i="

4.23.1.7 #define NO 0

4.23.1.8 #define NUM_N "-n="

4.23.1.9 #define NUMBER 0

4.23.1.10 #define SIMULATOR "-s="

4.23.1.11 #define STRING 1

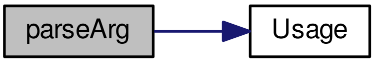
4.23.1.12 #define YES 1

4.23.1.13 #define YES_NO 2

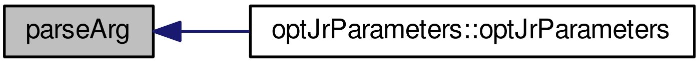
4.23.2 Function Documentation

4.23.2.1 char∗ parseArg (char ∗ *string*, char ∗ *gap*, int *type*)

Here is the call graph for this function:

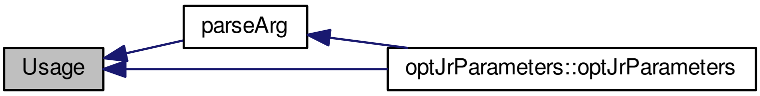


Here is the caller graph for this function:



4.23.2.2 void Usage ( )

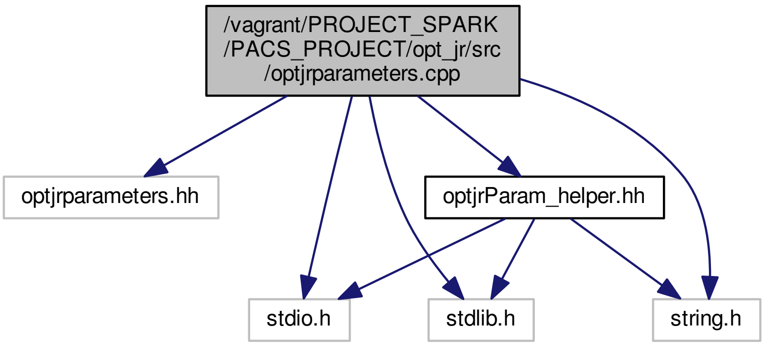
Here is the caller graph for this function:



4.24 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrparameters.cpp File Reference

```
#include "optjrparameters.hh"
#include "optjrParam_helper.hh"
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
```

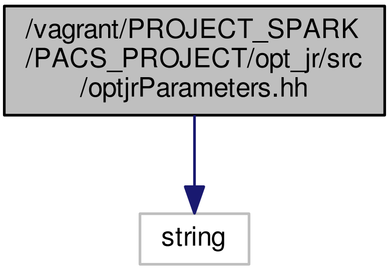
Include dependency graph for optjrparameters.cpp:



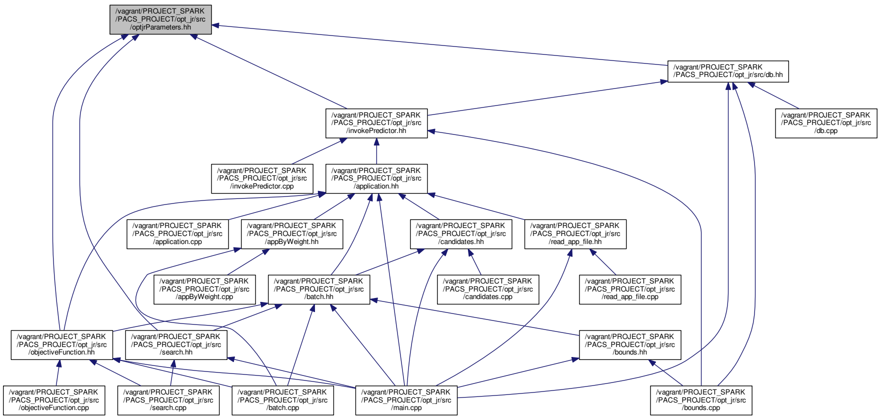
4.25 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/optjrParameters.hh File Reference

```
#include <string>
```

Include dependency graph for optjrParameters.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /optjrParameters.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src/db.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /db.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp

Classes

- class optJrParameters

Macros

- #define DAGSIM 0
- #define LUNDSTROM 1

4.25.1 Macro Definition Documentation

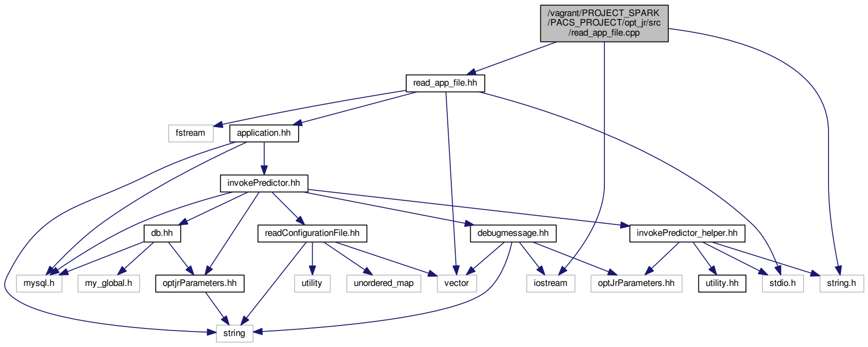
4.25.1.1 #define DAGSIM 0

4.25.1.2 #define LUNDSTROM 1

4.26 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/read_app_file.cpp File Reference

```
#include "read_app_file.hh"
#include <string.h>
#include <iostream>
```

Include dependency graph for read_app_file.cpp:



Macros

- #define MAX_APP_LENGTH 1024

Functions

- char ∗ getfield (char ∗line, int num)
- std::vector< Application > readAppFile (FILE ∗stream)

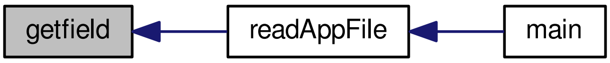
4.26.1 Macro Definition Documentation

4.26.1.1 #define MAX_APP_LENGTH 1024

4.26.2 Function Documentation

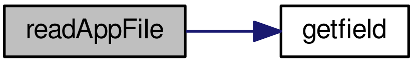
4.26.2.1 char∗ getfield (char ∗ *line,* int *num*)

Here is the caller graph for this function:

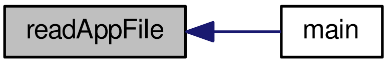


4.26.2.2 std::vector<Application> readAppFile (FILE ∗ *stream*)

Here is the call graph for this function:



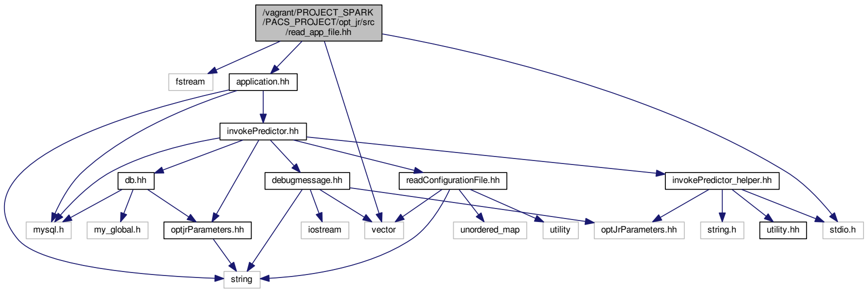
Here is the caller graph for this function:



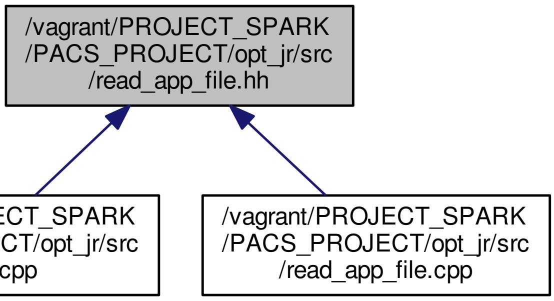
4.27 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/read_app_file.hh File Reference

```
#include <fstream>
#include <stdio.h>
#include <vector>
#include "application.hh"
```

Include dependency graph for read_app_file.hh:



This graph shows which files directly or indirectly include this file:



Functions

- char ∗ getfield (char ∗line, int num)
- std::vector< Application > readAppFile (FILE ∗stream)

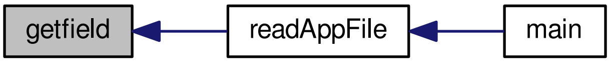
Variables

- const int MAX_LINE_LENGTH = 1024
- const int _SESSION_APP_ID = 1
- const int _APP_ID = 2
- const int _W = 3
- const int _CHI_0 = 4
- const int _CHI_C = 5
- const int _M = 6
- const int _m = 7
- const int _V = 8
- const int _v = 9
- const int _D = 10
- const int _St = 11
- const int _Dsz = 12
- const int PARAMETERS = 12

4.27.1 Function Documentation

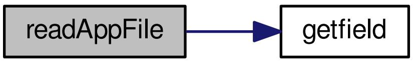
4.27.1.1 char∗ getfield (char ∗ *line,* int *num*)

Here is the caller graph for this function:

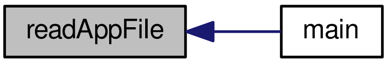


4.27.1.2 std::vector< Application > readAppFile (FILE * *stream*)

Here is the call graph for this function:



Here is the caller graph for this function:



4.27.2 Variable Documentation

4.27.2.1 const int _APP_ID = 2

4.27.2.2 const int _CHI_0 = 4

4.27.2.3 const int _CHI_C = 5

4.27.2.4 const int _D = 10

4.27.2.5 const int _Dsz = 12

4.27.2.6 const int _M = 6

4.27.2.7 const int _m = 7

4.27.2.8 const int _SESSION_APP_ID = 1

4.27.2.9 const int _St = 11

4.27.2.10 const int _V = 8

4.27.2.11 const int _v = 9

4.27.2.12 const int _W = 3

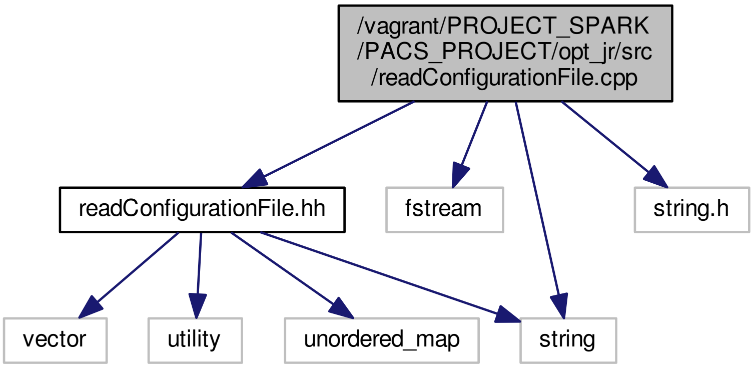
4.27.2.13 const int MAX_LINE_LENGTH = 1024

4.27.2.14 const int PARAMETERS = 12

4.28 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/readConfigurationFile.cpp File Reference

```
#include "readConfigurationFile.hh"
#include <fstream>
#include <string>
#include <string.h>
```

Include dependency graph for readConfigurationFile.cpp:



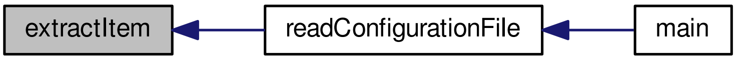
Functions

- char ∗ extractItem (char ∗const string, char ∗const left, const char ∗const right)
- sConfiguration readConfigurationFile ()

4.28.1 Function Documentation

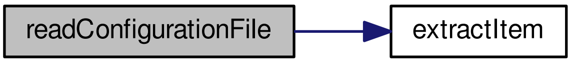
4.28.1.1 char ∗ extractItem (char ∗const *string,* char ∗const *left,* const char ∗const *right*)

Here is the caller graph for this function:

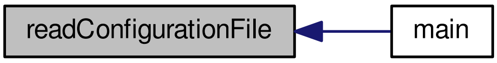


4.28.1.2 sConfiguration readConfigurationFile ( )

Here is the call graph for this function:



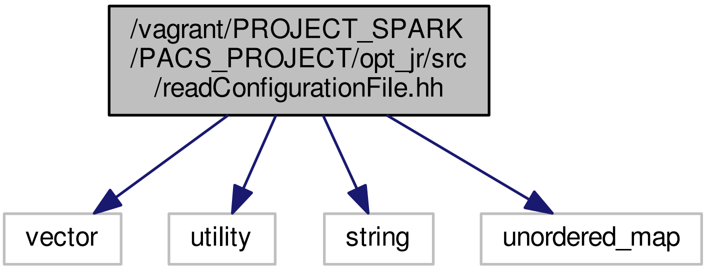
Here is the caller graph for this function:



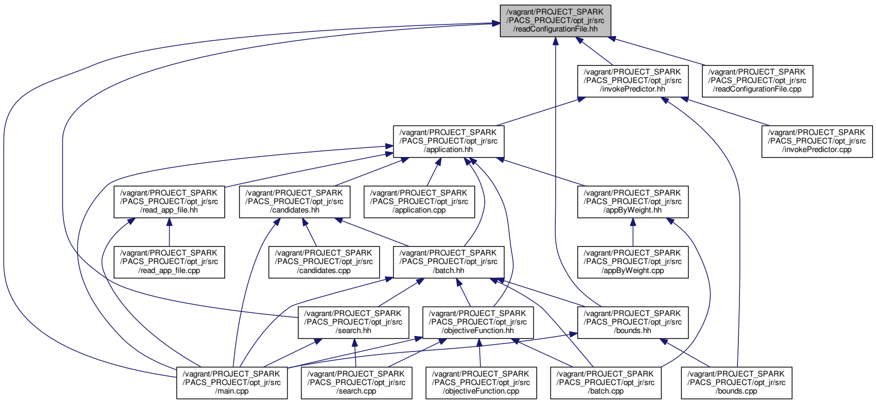
4.29 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/readConfigurationFile.hh File Reference

```
#include <vector>
#include <utility>
#include <string>
#include <unordered_map>
```

Include dependency graph for readConfigurationFile.hh:



This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /readConfigurationFile.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /readConfigurationFile.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp

Typedefs

- using sConfiguration = std::unordered_map< std::string, std::string >

Functions

- sConfiguration readConfigurationFile ()

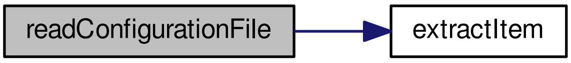
4.29.1 Typedef Documentation

4.29.1.1 using sConfiguration = std::unordered_map<std::string,std::string>

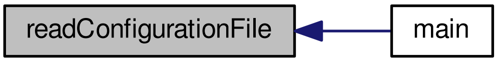
4.29.2 Function Documentation

4.29.2.1 sConfiguration readConfigurationFile ( )

Here is the call graph for this function:



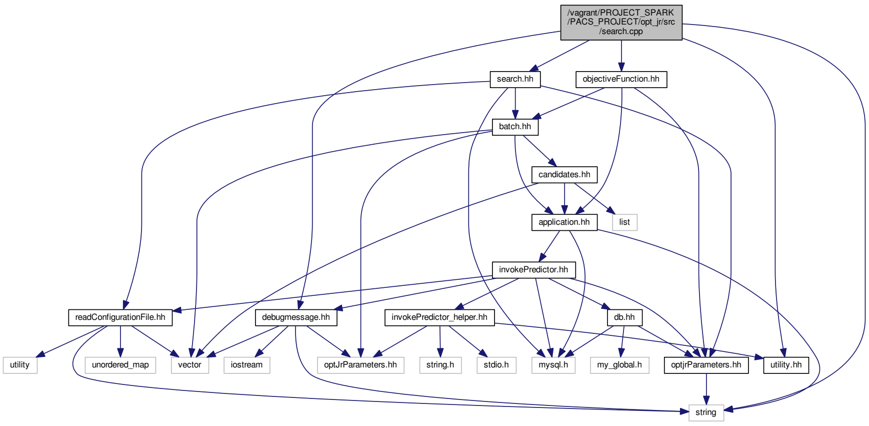
Here is the caller graph for this function:



4.30 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/search.cpp File Reference

```
#include "search.hh"
#include "debugmessage.hh"
#include "utility.hh"
#include "objectiveFunction.hh"
#include <string>
```

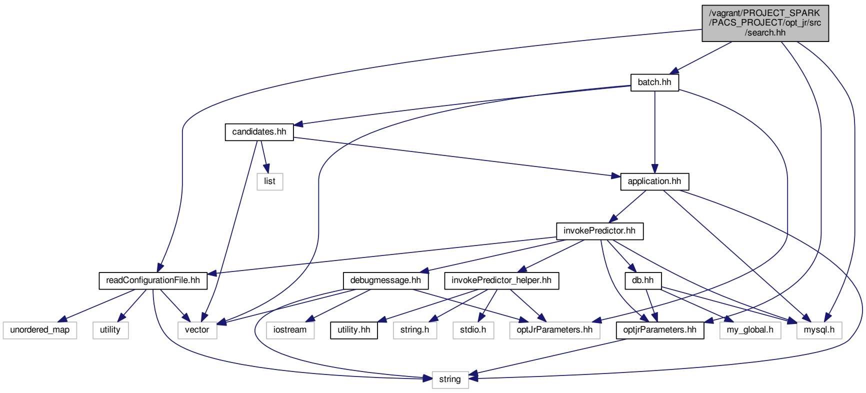
Include dependency graph for search.cpp:



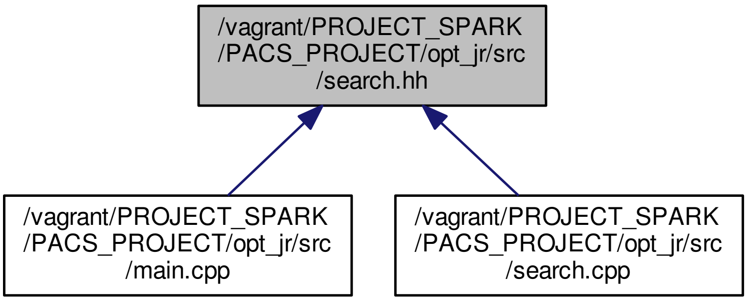
4.31 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/search.hh File Reference

```
#include "readConfigurationFile.hh"
#include "batch.hh"
#include "optjrParameters.hh"
#include <mysql.h>
```

Include dependency graph for search.hh:



This graph shows which files directly or indirectly include this file:



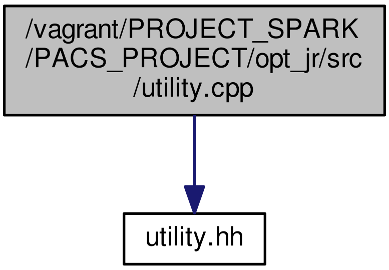
Classes

- class Search

4.32 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/utility.cpp File Reference

```
#include "utility.hh"
```

Include dependency graph for utility.cpp:



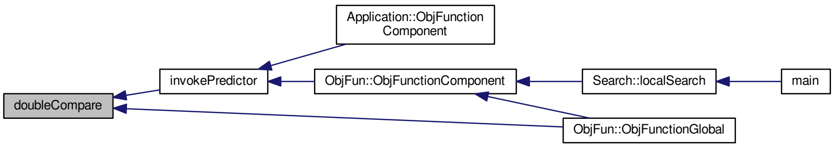
Functions

- int doubleCompare (double a, double b)

4.32.1 Function Documentation

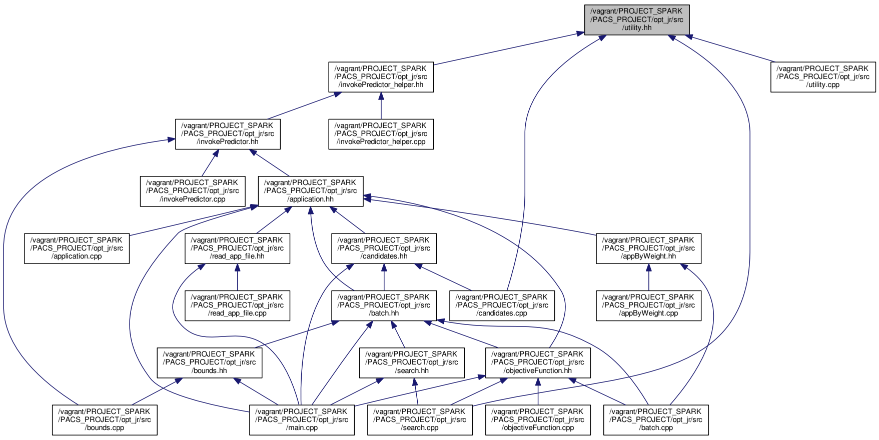
4.32.1.1 int doubleCompare (double *a*, double *b*)

Here is the caller graph for this function:



4.33 /vagrant/PROJECT_SPARK/PACS_PROJECT/opt_jr/src/utility.hh File Reference

This graph shows which files directly or indirectly include this file:


/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /utility.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor_helper.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /utility.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor_helper.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /invokePredictor.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /application.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /read_app_file.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /candidates.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /appByWeight.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.hh
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /bounds.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /main.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /search.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /objectiveFunction.cpp
/vagrant/PROJECT_SPARK /PACS_PROJECT/opt_jr/src /batch.cpp

Functions

- int doubleCompare (double a, double b)

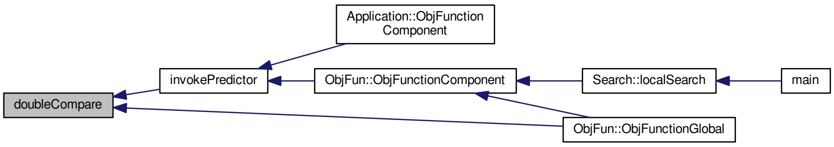
Variables

- const double epsilon = 0.001

4.33.1 Function Documentation

4.33.1.1 int doubleCompare (double *a*, double *b*)

Here is the caller graph for this function:


Application::ObjFunction Component
invokePredictor
ObjFun::ObjFunctionComponent
Search::localSearch
main
doubleCompare
ObjFun::ObjFunctionGlobal

4.33.2 Variable Documentation

4.33.2.1 const double epsilon = 0.001