

Classes Diagram and Details

Package in package 'Model'

Classes Diagram and Details
Version Phase 1.0 Proposed
Zakelis created on 25/02/2018. Last modified 25/02/2018

Class diagram

Class diagram in package 'Classes Diagram and Details'

Class
Version 1.0
Zakelis created on 25/02/2018. Last modified 25/02/2018

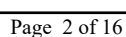


Figure 1: Class

scandirpp

Package in package 'Classes Diagram and Details'

scandirpp
Version 1.0 Phase 1.0 Proposed
Zakelis created on 25/02/2018. Last modified 25/02/2018

scandirpp diagram

Class diagram in package 'scandirpp'

scandirpp
Version 1.0
Zakelis created on 25/02/2018. Last modified 25/02/2018

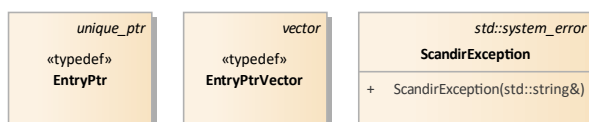


Figure 2: scandirpp

EntryPtr

Class «typedef» in package 'scandirpp'

EntryPtr
Version 1.0 Phase 1.0 Proposed
Zakelis created on 25/02/2018. Last modified 25/02/2018
Extends `unique_ptr`

EntryPtrVector

Class «typedef» in package 'scandirpp'

EntryPtrVector
Version 1.0 Phase 1.0 Proposed
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Extends `vector`

ScandirException

Class in package 'scandirpp'

ScandirException
Version 1.0 Phase 1.0 Proposed
Zakelis created on 25/02/2018. Last modified 25/02/2018
Extends `std::system_error`

OPERATIONS

◆ ScandirException (dir : std::string&) : Public

Properties:

initializer = std::system_error(errno, std::system_category(), std::string("Error scanning directory \"" + dir +
"\"").c_str())

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

HttpHandler

Class in package 'Classes Diagram and Details'

HttpHandler

Version 1.0 Phase 1.0 Proposed

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ATTRIBUTES

◆ documentRootPath : std::string Private

[Is static False. Containment is Not Specified.]

◆ netInfo : zia::api::NetInfo Private

[Is static False. Containment is Not Specified.]

◆ rawData : zia::api::Net::Raw Private

[Is static False. Containment is Not Specified.]

◆ serverCoreId : ServerCoreId Private

[Is static False. Containment is Not Specified.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) HttpHandler

Target: Private serverCoreId (Class) ServerCoreId
«alias»

OPERATIONS

◆ HttpHandler (rawData : zia::api::Net::Raw , netInfo : zia::api::NetInfo , documentRootPath : std::string& , serverCoreId :
ServerCoreId) : Public

Properties:

explicit = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ~HttpHandler () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

OPERATIONS

◆ run () : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ReqParser

Class in package 'Classes Diagram and Details'

ReqParser

Version 1.0 Phase 1.0 Proposed

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ATTRIBUTES

◆ dividedRequestLines : std::vector<std::string> Private

[Is static False. Containment is Not Specified.]

◆ dividedRequestWords : std::vector<std::string> Private

[Is static False. Containment is Not Specified.]

◆ path : std::string Private

[Is static False. Containment is Not Specified.]

◆ request : zia::api::HttpRequest Private

[Is static False. Containment is Not Specified.]

◆ response : zia::api::HttpResponse Private

[Is static False. Containment is Not Specified.]

◆ rootfolder : std::string Private

[Is static False. Containment is Not Specified.]

◆ type : std::map<std::string, zia::api::http::Method> Private

[Is static False. Containment is Not Specified.]

OPERATIONS

◆ createResponse (potentialError : std::string , errorReason : std::string) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ fileExists () : bool Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ fillHeaders (prm1 : std::string) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]




OPERATIONS	
 <code>fillResponseHeader () : void Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>getBody (prm1 : size_t) : void Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>parseHttpFormat (prm1 : std::string) : zia::api::HttpResponse Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>ReqParser (_rootfolder : std::string) : Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>~ReqParser () : Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>treatHttp1_1 () : void Public</code> [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	

ServerConfig

Class in package 'Classes Diagram and Details'

ServerConfig
Version 1.0 Phase 1.0 Proposed
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ATTRIBUTES	
 <code>ServerConf : zia::api::ConfObject Private</code> [Is static True. Containment is Not Specified.]	
 <code>WebSiteConfs : std::map<ServerCoreId, zia::api::ConfObject> Public</code> [Is static True. Containment is Not Specified.]	
OPERATIONS	
 <code>DefaultConfig () : void Private</code> [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>FormatIPAddress (addr : sockaddr_in&, port : int, host : std::string) : void Public</code> [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 <code>isConfigFileExists (path : std::string&) : bool Private</code> [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	


OPERATIONS
 LoadConfigFromFile (prm1 : std::string&) : zia::api::ConfObject Private [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 LoadDefaultServerConfig () : void Private [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 LoadDefaultWebSiteConf () : void Private [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ServerCore

Class in package 'Classes Diagram and Details'

ServerCore
Version 1.0 Phase 1.0 Proposed
Zakelis created on 25/02/2018. Last modified 25/02/2018
Extends zia::api::Net


ATTRIBUTES
 documentRootPath : std::string Private [Is static False. Containment is Not Specified.]
 isRunning : bool Private [Is static False. Containment is Not Specified.]
 max_sd : int Private [Is static False. Containment is Not Specified.]
 port : int Private [Is static False. Containment is Not Specified.]
 readfds : fd_set Private [Is static False. Containment is Not Specified.]
 serverCoreId : ServerCoreId Private [Is static False. Containment is Not Specified.]
 serverName : std::string Private [Is static False. Containment is Not Specified.]
 serverSocket : std::shared_ptr<zia::api::ImplSocket> Private [Is static False. Containment is Not Specified.]

ATTRIBUTES
 serverThread : std::shared_ptr<std::thread> Private

[Is static False. Containment is Not Specified.]

 threadPool : ThreadPool Private

[Is static False. Containment is Not Specified.]

 timeout : timeval Private

[Is static False. Containment is Not Specified.]


ASSOCIATIONS
 Association (direction: Source -> Destination)

Source: Public (Class) ServerCore


Target: Private serverCoreId (Class) ServerCoreId
«alias»
 Association (direction: Source -> Destination)

Source: Public (Class) ServerCore


Target: Private threadPool (Class) ThreadPool

OPERATIONS
 config (conf : zia::api::Conf&) : bool Public
Properties:
override = true


[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 getDocumentRootPath () : std::string & Public Const


[Is static False. Is abstract False. Is return array False. Is query True . Is synchronized False.]

 getServerCoreId () : ServerCoreId Public

[Is static False. Is abstract False. Is return array False. Is query True . Is synchronized False.]

 getThreadPool () : ThreadPool & Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]




 reset_fds () : void Private

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 run (cb : Callback) : bool Public
Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]


 send (sock : zia::api::ImplSocket* , resp : Raw&) : bool Public

OPERATIONS	
Properties: override = true	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 ServerCore (serverCoreId : ServerCoreId , conf : zia::api::Conf& , callback : zia::api::Net::Callback) : Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 ~ServerCore () : Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 stop () : bool Public Properties: override = true	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ServerCoreId

Class «alias» in package 'Classes Diagram and Details'

ServerCoreId
 Version 1.0 Phase 1.0 Proposed
 Zakelis created on 25/02/2018. Last modified 25/02/2018
 Extends int









ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) ThreadPool	Target: Private serverCoreId (Class) ServerCoreId «alias»
 Association (direction: Source -> Destination)	
Source: Public (Class) ServerCore	Target: Private serverCoreId (Class) ServerCoreId «alias»
 Association (direction: Source -> Destination)	
Source: Public (Class) HttpHandler	Target: Private serverCoreId (Class) ServerCoreId «alias»

ServerLauncher

Class in package 'Classes Diagram and Details'

ServerLauncher
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ATTRIBUTES	
 m_instance : ServerLauncher Private	[Is static True. Containment is Not Specified.]
 servers : std::map<unsigned int, std::shared_ptr<zia::api::Net>> Private	[Is static False. Containment is Not Specified.]
OPERATIONS	
 getServer (serverCoreId : ServerCoreId) : zia::api::Net * Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 handleSignal (signal : int) : bool Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 Instance () : ServerLauncher& Public	[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 launch () : void Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 operator= (prm1 : ServerLauncher&) : ServerLauncher& Private	
Properties: bodyLocation = classDec	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 ServerLauncher (prm1 : ServerLauncher&) : Private	
Properties: bodyLocation = classDec	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 ServerLauncher () : Private	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 ~ServerLauncher () : Private	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

SignalHandler


Class in package 'Classes Diagram and Details'

SignalHandler
Version 1.0 Phase 1.0 Proposed

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ELEMENTS OWNED BY SignalHandler
 **SIGNALS** : Enumeration «Enumeration»
ATTRIBUTES
 **_mask** : int Private


[Is static False. Containment is Not Specified.]

 **numSignals** : int Public Const = 6

[Is static True. Containment is Not Specified.]

OPERATIONS
 **handleSignal** (signal : int) : bool Public

[Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.]

 **SignalHandler** (mask : int) : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 **~SignalHandler** () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

SIGNALS*Enumeration «Enumeration» owned by 'SignalHandler', in package 'Classes Diagram and Details'***SIGNALS**

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ATTRIBUTES
 **SIG_UNHANDLED** : Public = 0


Physical signal not supported by this class

[Is static False. Containment is Not Specified.]

 **SIG_NOOP** : Public = 1





The application is requested to do a no-op (only a target that platform-specific signals map to when they can't be raised anyway)

[Is static False. Containment is Not Specified.]

 **SIG_INT** : Public = 2

Control+C (should terminate but consider that it's a normal way to do so; can delay a bit)

[Is static False. Containment is Not Specified.]

ATTRIBUTES	
 SIG_TERM : Public = 4 Control+Break (should terminate now without regarding the consequences)	[Is static False. Containment is Not Specified.]
 SIG_CLOSE : Public = 8 Container window closed (should perform normal termination, like Ctrl^C) [Windows only; on Linux it maps to SIG_TERM]	[Is static False. Containment is Not Specified.]
 SIG_RELOAD : Public = 16 Reload the configuration [Linux only, physical signal is SIGHUP; on Windows it maps to SIG_NOOP]	[Is static False. Containment is Not Specified.]
 DEFAULT_SIGNALS : Public = SIG_INT SIG_TERM SIG_CLOSE	[Is static False. Containment is Not Specified.]

ThreadPool

Class in package 'Classes Diagram and Details'

ThreadPool
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ATTRIBUTES	
 condVar_ : std::condition_variable Private	[Is static False. Containment is Not Specified.]
 jobs_ : std::queue<std::function <void ()>> Private	[Is static False. Containment is Not Specified.]
 lock_ : std::mutex Private	[Is static False. Containment is Not Specified.]
 serverCoreId : ServerCoreId Private	[Is static False. Containment is Not Specified.]
 shutdown_ : bool Private	[Is static False. Containment is Not Specified.]
 threads_ : std::vector<std::thread> Private	[Is static False. Containment is Not Specified.]

ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Class) ThreadPool


Target: Private serverCoreId (Class) ServerCoreId
«alias»

 Association (direction: Source -> Destination)

Source: Public (Class) ServerCore

Target: Private threadPool (Class) ThreadPool

OPERATIONS

 doJob (func : std::function <void ()>) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 operator= (prm1 : ThreadPool&) : ThreadPool& Public

Properties:

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 ThreadPool (nbThreads : int) : Public


Properties:

explicit = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 ~ThreadPool () : Public


[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 ThreadPool (prm1 : ThreadPool&) : Public

Properties:

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 threadRun () : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ZiaException



Class in package 'Classes Diagram and Details'

ZiaException

Version 1.0 Phase 1.0 Proposed

Zakelis created on 25/02/2018. Last modified 25/02/2018


ELEMENTS OWNED BY ZiaException

ELEMENTS OWNED BY ZiaException
 errors : Enumeration «Enumeration»
ATTRIBUTES
 type : errors Private

[Is static False. Containment is Not Specified.]

ASSOCIATIONS
 Association (direction: Source -> Destination)

Source: Public (Class) ZiaException


Target: Private type (Enumeration) errors
«Enumeration»**OPERATIONS**
 what () : char* Public Const

Properties:

throws = ()

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query True . Is synchronized False.]

 ZiaException (_type : errors) : Public


Properties:

throws = ()

initializer = type(_type)

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 ~ZiaException () : Public

Properties:

throws = ()

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

errors*Enumeration «Enumeration» owned by 'ZiaException', in package 'Classes Diagram and Details'*

errors


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ATTRIBUTES
 CREATE_SOCKET : Public

[Is static False. Containment is Not Specified.]

ATTRIBUTES	
 DELETE_SOCKET : Public	[Is static False. Containment is Not Specified.]
 CREATE_THREAD : Public	[Is static False. Containment is Not Specified.]
 DELETE_THREAD : Public	[Is static False. Containment is Not Specified.]
 BAD_ALLOC : Public	[Is static False. Containment is Not Specified.]

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) ZiaException	Target: Private type (Enumeration) errors «Enumeration»

static_constructor

Class «struct» in package 'Classes Diagram and Details'

static_constructor
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ELEMENTS OWNED BY static_constructor
 constructor : Class «struct»

ATTRIBUTES	
 c : constructor Public	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) static_constructor «struct»	Target: Public c (Class) constructor «struct»

constructor

Class «struct» owned by 'static_constructor', in package 'Classes Diagram and Details'

constructor

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ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Class) static_constructor «struct»

Target: Public c (Class) constructor «struct»

OPERATIONS

 constructor () : Public

Properties:

bodyLocation = classDec

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ParsingStatus


Enumeration «Enumeration» in package 'Classes Diagram and Details'

ParsingStatus


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ATTRIBUTES

 TYPE : Public


[Is static False. Containment is Not Specified.]

 FILE_ : Public

[Is static False. Containment is Not Specified.]

 USER_AGENT : Public

[Is static False. Containment is Not Specified.]

 HOST : Public

[Is static False. Containment is Not Specified.]

 ACCEPT_LANGUAGE : Public

[Is static False. Containment is Not Specified.]