

cxcparamx
1.1.0

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Chapter 1

cxcpamx

1.1 Introduction

`cxcpamx` provides C++ Extensions to `cxcpam`, CIAO's IRAF compatible parameter library

- `cxcpamx::simple` provides a simple wrapper around getting parameter values.

Chapter 2

Class Index

2.1 Class List

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

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Chapter 3

Class Documentation

3.1 cxcparamx::simple Class Reference

```
#include <cxcparamx/simple.h>
```

Public Member Functions

- **simple** (int argc, char **argv, const char *mode="rw")
Constructor with file name taken from argv[0].
- **simple** (const char *filename, int argc, char **argv, const char *mode="rw")
Constructor with explicit parameter file name.
- **simple** (const std::string &filename, int argc, char **argv, const char *mode="rw")
Constructor with explicit parameter file name.
- void **get** (const char *name, float &value)
Retrieve a parameter value into a float.
- void **get** (const char *name, double &value)
Retrieve a parameter value into a double.
- void **get** (const char *name, short &value)
Retrieve a parameter value into a short.
- void **get** (const char *name, int &value)
Retrieve a parameter value into an int.
- void **get** (const char *name, long &value)
Retrieve a parameter value into a long.
- void **get** (const char *name, bool &value)
Retrieve a parameter value into an bool.
- void **get** (const char *name, std::string &value)
Retrieve a parameter value into an string.
- float **getf** (const char *name)
Return a parameter value as a float.
- double **getd** (const char *name)
Return a parameter value as a double.
- short **gets** (const char *name)
Return a parameter value as a short.

- int [geti](#) (const char *name)
Return a parameter value as an int.
- long [getl](#) (const char *name)
Return a parameter value as a long.
- bool [getb](#) (const char *name)
Return a parameter value as an bool.
- std::string [getstr](#) (const char *name)
Return a parameter value as an string.

3.1.1 Detailed Description

A simple wrapper class providing polymorphic attribute retrieval.

Instantiating the class opens the parameter file; the file is closed during object destruction.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 `cxtparamx::simple::simple (int argc, char ** argv, const char * mode = "rw")`

Constructor with file name taken from argv[0].

Parameters

| | | |
|----|-------------|--|
| in | <i>argc</i> | the number of elements in <i>argv</i> |
| in | <i>argv</i> | typically, the command line arguments vector passed to <i>main</i> * |
| in | <i>mode</i> | mode with which to open the file |

3.1.2.2 `cxtparamx::simple::simple (const char * filename, int argc, char ** argv, const char * mode = "rw")`

Constructor with explicit parameter file name.

Parameters

| | | |
|----|-----------------|--|
| in | <i>filename</i> | the parameter file name |
| in | <i>argc</i> | the number of elements in <i>argv</i> |
| | <i>argv</i> | typically, the command line arguments vector passed to <i>main</i> |
| in | <i>mode</i> | mode with which to open the file |

3.1.2.3 `cxtparamx::simple::simple (const std::string & filename, int argc, char ** argv, const char * mode = "rw")`

Constructor with explicit parameter file name.

Parameters

| | | |
|----|-----------------|--|
| in | <i>filename</i> | the parameter file name |
| in | <i>argc</i> | the number of elements in <i>argv</i> |
| | <i>argv</i> | typically, the command line arguments vector passed to <i>main</i> |

| | | |
|----|-------------|----------------------------------|
| in | <i>mode</i> | mode with which to open the file |
|----|-------------|----------------------------------|

3.1.3 Member Function Documentation

3.1.3.1 void cxcparamx::simple::get (const char * *name*, float & *value*)

Retrieve a parameter value into a float.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.2 void cxcparamx::simple::get (const char * *name*, double & *value*)

Retrieve a parameter value into a double.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.3 void cxcparamx::simple::get (const char * *name*, short & *value*)

Retrieve a parameter value into a short.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.4 void cxcparamx::simple::get (const char * *name*, int & *value*)

Retrieve a parameter value into an int.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.5 void cxcparamx::simple::get (const char * *name*, long & *value*)

Retrieve a parameter value into a long.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.6 void cxcparamx::simple::get (const char * *name*, bool & *value*)

Retrieve a parameter value into an bool.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.7 void cxcparamx::simple::get (const char * *name*, std::string & *value*)

Retrieve a parameter value into an string.

Parameters

| | | |
|-----|--------------|----------------|
| in | <i>name</i> | parameter name |
| out | <i>value</i> | returned value |

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.8 bool cxcparamx::simple::getb (const char * *name*)

Return a parameter value as an bool.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.9 double cxcpamx::simple::getd (const char * *name*)

Return a parameter value as a double.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.10 float cxcpamx::simple::getf (const char * *name*)

Return a parameter value as a float.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.11 int cxcpamx::simple::geti (const char * *name*)

Return a parameter value as an int.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.12 long cxcpamx::simple::getl (const char * *name*)

Return a parameter value as a long.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.13 short cxcparamx::simple::gets (const char * *name*)

Return a parameter value as a short.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

3.1.3.14 string cxcparamx::simple::getstr (const char * *name*)

Return a parameter value as an string.

Parameters

| | | |
|----|-------------|----------------|
| in | <i>name</i> | parameter name |
|----|-------------|----------------|

Exceptions

| | |
|------------------|---------------------------|
| <i>Exception</i> | if parameter is not found |
|------------------|---------------------------|

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

- simple.h
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