

## TDataSet Class Reference

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Definition at line 34 of file [TDataSet.h](#).

### Public Types

enum [EBitOpt](#) { [kSet](#) = kTRUE, [kReset](#) = kFALSE }

enum [EDatasetPass](#) {  
    [kContinue](#), [kPrune](#), [kStop](#), [kUp](#),  
    [kStruct](#), [kAll](#), [kRefs](#), [kMarked](#)  
}

enum [ESetBits](#) { [kMark](#) = BIT(22), [kArray](#) = BIT(20) }

► [Public Types inherited from TObject](#)

### Public Member Functions

[TDataSet](#) (const char \*[name](#)="", [TDataSet](#) \*parent=0, [Bool\\_t](#) arrayFlag=[kFALSE](#))  
std::cout << "ctor for " << [GetName\(\)](#) << " - " << [GetTitle\(\)](#) << std::endl; [More...](#)

[TDataSet](#) (const [TDataSet](#) &src, [EDatasetPass](#) iopt=[kAll](#))  
Creates [TDataSet](#) (clone) with a topology similar with [TDataSet](#) \*pattern. [More...](#)

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**TDataSet** (TNode &src)

This copy ctor has been deprecated (left for the sake of the backward compatibility) [More...](#)

virtual **~TDataSet** ()

std::cout << "Default destructor for " << **GetName()** << " - " << **GetTitle()** << std::endl; [More...](#)

virtual **void Add** (TDataSet \*dataset)

virtual **void AddAt** (TDataSet \*dataset, **Int\_t** idx=0)

Add **TDataSet** object at the "idx" position in ds or at the end of the dataset The final result is defined by either **TList::AddAt** or **TObjArray::AddAt** methods. [More...](#)

virtual **void AddAtAndExpand** (TDataSet \*dataset, **Int\_t** idx=0)

!!!! Under construction !!!!! Add **TDataSet** object at the "idx" position in ds or at the end of the dataset The final result is defined by either **TList::AddAt** or **TObjArray::AddAt** methods [More...](#)

virtual **void AddFirst** (TDataSet \*dataset)

Add **TDataSet** object at the beginning of the dataset list of this dataset. [More...](#)

virtual **void AddLast** (TDataSet \*dataset)

Add **TDataSet** object at the end of the dataset list of this dataset. [More...](#)

**TDataSet** \* **At** (**Int\_t** idx) const

virtual **void Browse** (TBrowser \*b)

Browse this dataset (called by **TBrowser**). [More...](#)

virtual **TObject** \* **Clone** (const char \*newname="") const

the custom implementation for the **TObject::Clone** [More...](#)

virtual **void Delete** (**Option\_t** \*opt="")

Delete - deletes the list of the **TDataSet** objects and all "Structural Members" as well This method doesn't affect the "Associated Members". [More...](#)

virtual **TDataSet** \* **Find** (const char \*path) const

Full description see: **TDataSetIter::Find**. [More...](#)

virtual **TDataSet** \* **FindByName** (const char \*name, const char \*path="", **Option\_t** \*opt="") const

Full description see: **TDataSetIter::Find**. [More...](#)

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virtual **TDataSet** \* **FindByPath** (const char \*path) const

Alias for TDataSet::Find(const Char\_t \*path) method. [More...](#)

virtual **TDataSet** \* **FindByTitle** (const char \*title, const char \*path="", **Option\_t** \*opt="") const

Full description see: **TDataSetIter::Find**. [More...](#)

**TObject** \* **FindObject** (const char \*name) const

Must be redefined in derived classes. [More...](#)

**TObject** \* **FindObject** (const **TObject** \*o) const

Must be redefined in derived classes. [More...](#)

virtual **TDataSet** \* **First** () const

Return the first object in the list. Returns 0 when list is empty. [More...](#)

virtual **TSeqCollection** \* **GetCollection** () const

**TList** \* **GetList** () const

virtual **Int\_t** **GetListSize** () const

**TObject** \* **GetMother** () const

**TObjArray** \* **GetObjArray** () const

virtual **TObject** \* **GetObject** () const

The deprecated method (left here for the sake of the backward compatibility) [More...](#)

virtual **TDataSet** \* **GetParent** () const

virtual **Long\_t** **HasData** () const

virtual **TDataSet** \* **Instance** () const

apply the class default ctor to instantiate a new object of the same kind. [More...](#)

**void** **InvertAllMarks** ()

Invert mark bit for all members of this dataset. [More...](#)

virtual **Bool\_t** **IsEmpty** () const

return kTRUE if the "internal" collection has no member [More...](#)

virtual **Bool\_t** **IsFolder** () const

Loading [MathJax]/extensions/MathMenu.js Returns kTRUE in case object contains browsable objects (like containers or lists of other objects). [More...](#)

virtual **Bool\_t** **IsMarked** () const

virtual **Bool\_t** **IsThisDir** (const char \*dirname, int len=-1, int ignorecase=0) const

Compare the name of the **TDataSet** with "dirname" ignorecase flags indicates whether the comparison is case sensitive. [More...](#)

virtual **TDataSet** \* **Last** () const

Return the last object in the list. Returns 0 when list is empty. [More...](#)

virtual **void** **Is** (**Option\_t** \*option="") const

// Is(Option\_t <em>option) // // option - defines the path to be listed // = "</em>" - means print all levels // // [More...](#)

virtual **void** **Is** (**Int\_t** depth) const

// Is(Int\_t depth) // // Prints the list of the this **TDataSet**. [More...](#)

**void** **Mark** ()

**void** **Mark** (**UInt\_t** flag, **EBitOpt** reset=**kSet**)

**void** **MarkAll** ()

Mark all members of this dataset. [More...](#)

virtual **TDataSet** \* **Next** () const

Return the object next to this one in the parent structure This convenient but time-consuming. [More...](#)

virtual **EDataSetPass** **Pass** (**EDataSetPass**(\*callback)(**TDataSet** \*), **Int\_t** depth=0)

// Pass (callback,depth) // // Calls callback(this) for all datasets those recursively // // Parameter: // ===== //  
Int\_t depth >0 the number of levels to be passed // =0 all levels will be passed // // Return (this value must be returned by the user's callback): // ===== // kContinue - continue passing // kPrune - stop passing the current branch, go to the next one// kUp - stop passing, leave the current branch, // return to previous level and continue // kStop - stop passing, leave all branches // // [More...](#)

virtual **EDataSetPass** **Pass** (**EDataSetPass**(\*callback)(**TDataSet** \*, **void** \*), **void** \*user, **Int\_t** depth=0)

// Pass (callback,user,depth) // // Calls callback(this,user) for all datasets those recursively // // Parameter: // ===== //  
Int\_t depth >0 the number of levels to be passed // =0 all levels will be passed // // Return (this value must be returned by the user's callback): // ===== // kContinue - continue passing // kPrune - stop passing the

current branch, go to the next one// kUp - stop passing, leave the current branch, // return to previous level and continue // kStop - stop passing, leave all braches // // [More...](#)

virtual **TString** **Path** () const

return the full path of this data set [More...](#)

virtual **TDataSet** \* **Prev** () const

Return the object that is previous to this one in the parent structure This convinient but time-consuming. [More...](#)

virtual **void** **PrintContents** (**Option\_t** \*opt="") const

Callback method to complete **Is()** method recursive loop This is to allow to sepoarate navigation and the custom invormation in the derived classes (see; **TTable::PrintContents** for example. [More...](#)

virtual **Int\_t** **Purge** (**Option\_t** \*opt="")

Purge - deletes all "dummy" "Structural Members" those are not ended up with some dataset with data inside (those return **HasData()** = 0) [More...](#)

virtual **void** **Remove** (**TDataSet** \*set)

Remove the "set" from this **TDataSet**. [More...](#)

virtual **TDataSet** \* **RemoveAt** (**Int\_t** idx)

Remove object from the "idx" cell of this set and return the pointer to the removed object if any. [More...](#)

virtual **void** **SetMother** (**TDataSet** \*parent=0)

virtual **void** **SetObject** (**TObject** \*obj)

The depricated method (left here for the sake of the backward compatibility) [More...](#)

virtual **void** **SetParent** (**TDataSet** \*parent=0)

Break the "parent" relationship with the current object parent if present parent != 0 Makes this object the "Structural Member" of the "parent" dataset = 0 Makes this object the "pure Associator", i.e it makes this object the "Structural Member" of NO other **TDataSet**. [More...](#)

virtual **void** **SetWrite** ()

One should not use this method but **TDataSet::Write** instead This method os left here for the sake of the backward compatibility To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too. [More...](#)

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virtual **void** **Shunt** (**TDataSet** \*newParent=0)

Remove the object from the original and add it to dataset **TDataSet** dataset != 0 - Make this object the "Structural Member" of "dataset" = 0 - Make this object "Orphan". [More...](#)

virtual **void** **Sort** ()

Sort recursively all members of the **TDataSet** with **TList::Sort** method. [More...](#)

**void** **UnMark** ()

**void** **UnMarkAll** ()

UnMark all members of this dataset. [More...](#)

virtual **void** **Update** ()

**Update()** [More...](#)

virtual **void** **Update** (**TDataSet** \*set, **UInt\_t** opt=0)

Update this **TDataSet** with "set". [More...](#)

virtual **Int\_t** **Write** (const char \*name=0, **Int\_t** option=0, **Int\_t** bufsize=0)

To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too. [More...](#)

virtual **Int\_t** **Write** (const char \*name=0, **Int\_t** option=0, **Int\_t** bufsize=0) const

To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too. [More...](#)

► Public Member Functions inherited from **TNamed**

► Public Member Functions inherited from **TObject**

## Static Public Member Functions

static **TDataSet** \* **GetMainSet** ()

return pointer to the main dataset [More...](#)

static **TDataSet** \* **instance** ()

► Public Member Functions inherited from **TObject**

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## Protected Member Functions

**TDataSet** (const char \***name**, const char \*title)

**void AddMain** (**TDataSet** \*set)

add data set to main data set [More...](#)

**TDataSet** \* **GetRealParent** ()

return real parent [More...](#)

**void MakeCollection** ()

Create the internal container at once if any. [More...](#)

virtual **void SetMother** (**TObject** \*mother)

► Protected Member Functions inherited from **TObject**

## Static Protected Member Functions

static **EDataSetPass** **SortIt** (**TDataSet** \*ds)

static **EDataSetPass** **SortIt** (**TDataSet** \*ds, **void** \*user)

## Protected Attributes

**TSeqCollection** \* **fList**

**TDataSet** \* **fParent**

► Protected Attributes inherited from **TNamed**

## Static Protected Attributes

static **TDataSet** \* **fgMainSet** = &mainSet

## Private Member Functions

**void** **Init** (**TDataSet** &)

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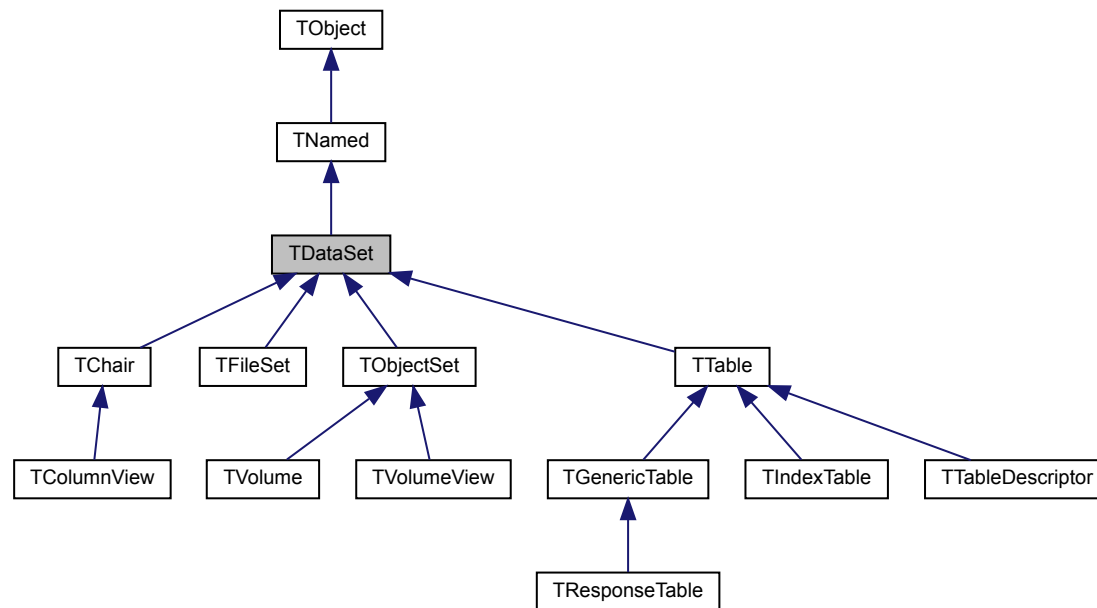
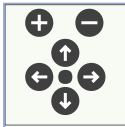
## Friends

```
class TDataSetIter
```

```
#include <TDataSet.h>
```

Inheritance diagram for TDataSet:





[legend]

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## Member Enumeration Documentation

### ◆ EBitOpt

enum **TDataSet::EBitOpt**

Enumerator

kSet	
kReset	

Definition at line **79** of file **TDataSet.h**.

### ◆ EDataSetPass

enum **TDataSet::EDatasetPass**

Enumerator

kContinue	
kPrune	
kStop	
kUp	
kStruct	
kAll	
kRefs	

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Definition at line **40** of file **TDataSet.h**.

## ◆ ESetBits

enum **TDataSet::ESetBits**

Enumerator

kMark	
kArray	

Definition at line **74** of file **TDataSet.h**.

## Constructor & Destructor Documentation

## ◆ TDataSet() [1/4]

```
TDataSet::TDataSet ( const char * name,  
                    const char * title  
                    )
```

inline

protected

Definition at line **62** of file **TDataSet.h**.

## ◆ TDataSet() [2/4]

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```

TDataSet::TDataSet ( const char * name = "",
                    TDataSet * parent = 0,
                    Bool_t      arrayFlag = kFALSE
                    )

```

std::cout << "ctor for " << **GetName()** << " - " << **GetTitle()** << std::endl;

Definition at line **150** of file **TDataSet.cxx**.

## ◆ TDataSet() [ 3 / 4 ]

```

TDataSet::TDataSet ( const TDataSet & pattern,
                    EDataSetPass      iopt = kAll
                    )

```

Creates **TDataSet** (clone) with a topology similar with **TDataSet** \*pattern.

### Parameters:

pattern - the pattern dataset iopt = kStruct - clone only my structural links kAll - clone all links kRefs - clone only refs kMarked - clone marked (not implemented yet) only

All new-created sets become the structural ones anyway.

std::cout << "ctor for " << **GetName()** << " - " << **GetTitle()** << std::endl;

Definition at line **188** of file **TDataSet.cxx**.

## ◆ TDataSet() [ 4 / 4 ]

TDataSet::TDataSet ( **TNode** & **src** )

This copy ctor has been deprecated (left for the sake of the backward compatibility)

Definition at line **206** of file **TDataSet.cxx**.

## ◆ ~TDataSet()

TDataSet::~~TDataSet ( )

virtual

```
std::cout << "Default destructor for " << GetName() << " - " << GetTitle() << std::endl;
```

Definition at line **213** of file **TDataSet.cxx**.

## Member Function Documentation

---

## ◆ Add()

**void** TDataSet::Add ( **TDataSet** \* **dataset** )

inline

virtual

Reimplemented in **TVolume**, and **TVolumeView**.

Loading [MathJax]/extensions/MathMenu.js e **TDataSet.h**.

### ◆ AddAt()

```
void TDataSet::AddAt ( TDataSet * dataset,  
                      Int_t      idx = 0  
                      )
```

virtual

Add **TDataSet** object at the "idx" position in ds or at the end of the dataset The final result is defined by either **TList::AddAt** or **TObjArray::AddAt** methods.

Reimplemented in **TTable**, **TChair**, and **TTableDescriptor**.

Definition at line **235** of file **TDataSet.cxx**.

### ◆ AddAtAndExpand()

```
void TDataSet::AddAtAndExpand ( TDataSet * dataset,  
                               Int_t      idx = 0  
                               )
```

virtual

!!!! Under construction !!!!! Add **TDataSet** object at the "idx" position in ds or at the end of the dataset The final result is defined by either **TList::AddAt** or **TObjArray::AddAt** methods

Definition at line **254** of file **TDataSet.cxx**.

### ◆ AddFirst()

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**void** TDataSet::AddFirst ( **TDataSet** \* dataset )

virtual

Add **TDataSet** object at the beginning of the dataset list of this dataset.

Definition at line **283** of file **TDataSet.cxx**.

## ◆ AddLast()

**void** TDataSet::AddLast ( **TDataSet** \* dataset )

virtual

Add **TDataSet** object at the end of the dataset list of this dataset.

Definition at line **269** of file **TDataSet.cxx**.

## ◆ AddMain()

**void** TDataSet::AddMain ( **TDataSet** \* set )

protected

add data set to main data set

Definition at line **412** of file **TDataSet.cxx**.

## ◆ At()

**TDataSet** \* TDataSet::At ( **Int\_t** idx ) const

inline

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Definition at line **151** of file **TDataSet.h**.

### ◆ Browse()

```
void TDataSet::Browse ( TBrowser * b )
```

virtual

Browse this dataset (called by **TBrowser**).

Reimplemented from **TObject**.

Reimplemented in **TTable**, **TVolume**, **TChair**, **TVolumeView**, **TObjectSet**, and **TColumnView**.

Definition at line **297** of file **TDataSet.cxx**.

### ◆ Clone()

```
TObject * TDataSet::Clone ( const char * newname = "" ) const
```

virtual

the custom implementation fo the **TObject::Clone**

Reimplemented from **TNamed**.

Definition at line **308** of file **TDataSet.cxx**.

### ◆ Delete()

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virtual



```
void TDataSet::Delete ( Option_t * opt = "" )
```

Delete - deletes the list of the **TDataSet** objects and all "Structural Members" as well This method doesn't affect the "Associated Members".

Reimplemented from **TObject**.

Reimplemented in **TTable**, and **TObjectSet**.

Definition at line **320** of file **TDataSet.cxx**.

## ◆ Find()

```
TDataSet * TDataSet::Find ( const char * path ) const
```

virtual

Full description see: **TDataSetIter::Find**.

Note. This method is quite expansive. -- It is done to simplify the user's code when one wants to find ONLY object. If you need to find more than 1 object in this dataset, regard using **TDataSetIter** class yourself.

Definition at line **362** of file **TDataSet.cxx**.

## ◆ FindByName()

```
TDataSet * TDataSet::FindByName ( const char * name,  
                                  const char * path = "",  
                                  Option_t * opt = ""  
                                  ) const
```

virtual

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Full description see: [TDataSetIter::Find](#).

Note. This method is quite expansive. --- It is done to simplify the user's code when one wants to find ONLY object. If you need to find more than 1 object in this dataset, regard using [TDataSetIter](#) class yourself.

Definition at line [378](#) of file [TDataSet.cxx](#).

### ◆ FindByPath()

```
TDataSet * TDataSet::FindByPath ( const char * path ) const
```

virtual

Aliase for TDataSet::Find(const Char\_t \*path) method.

Definition at line [347](#) of file [TDataSet.cxx](#).

### ◆ FindByTitle()

```
TDataSet * TDataSet::FindByTitle ( const char * title,  
                                const char * path = " ",  
                                Option_t * opt = " "  
                                ) const
```

virtual

Full description see: [TDataSetIter::Find](#).

Note. This method is quite expansive. --- It is done to simplify the user's code when one wants to find ONLY object. If you need to find more than 1 object in this dataset, regard using [TDataSetIter](#) class yourself.

Definition at line **394** of file **TDataSet.cxx**.

### ◆FindObject() [1/2]

**TObject\*** TDataSet::FindObject ( const char \* **name** ) const

inline

virtual

Must be redefined in derived classes.

This function is typically used with TCollections, but can also be used to find an object by name inside this object.

Reimplemented from **TObject**.

Definition at line **101** of file **TDataSet.h**.

### ◆FindObject() [2/2]

**TObject\*** TDataSet::FindObject ( const **TObject** \* **obj** ) const

inline

virtual

Must be redefined in derived classes.

This function is typically used with TCollections, but can also be used to find an object inside this object.

Reimplemented from **TObject**.

Definition at line **102** of file **TDataSet.h**.

### ◆First()

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**TDataSet** \* TDataSet::First ( ) const

virtual

Return the first object in the list. Returns 0 when list is empty.

Definition at line **403** of file **TDataSet.cxx**.

### ◆ GetCollection()

virtual **TSeqCollection**\* TDataSet::GetCollection ( ) const

inline

virtual

Definition at line **105** of file **TDataSet.h**.

### ◆ GetList()

**TList**\* TDataSet::GetList ( ) const

inline

Definition at line **106** of file **TDataSet.h**.

### ◆ GetListSize()

**Int\_t** TDataSet::GetListSize ( ) const

inline

virtual

Definition at line **152** of file **TDataSet.h**.

### ◆ GetMainSet()

**TDataSet** \* TDataSet::GetMainSet ( )

static

return pointer to the main dataset

Definition at line **420** of file **TDataSet.cxx**.

### ◆ GetMother()

**TObject**\* TDataSet::GetMother ( ) const

inline

Definition at line **109** of file **TDataSet.h**.

### ◆ GetObjArray()

**TObjArray**\* TDataSet::GetObjArray ( ) const

inline

Definition at line **104** of file **TDataSet.h**.

### ◆ GetObject()

**TObject** \* TDataSet::GetObject ( ) const

virtual

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The deprecated method (left here for the sake of the backward compatibility)

Reimplemented in [TObjectSet](#).

Definition at line [428](#) of file [TDataSet.cxx](#).

### ◆ GetParent()

virtual [TDataSet](#)\* TDataSet::GetParent ( ) const

inline

virtual

Definition at line [111](#) of file [TDataSet.h](#).

### ◆ GetRealParent()

[TDataSet](#) \* TDataSet::GetRealParent ( )

protected

return real parent

Definition at line [166](#) of file [TDataSet.cxx](#).

### ◆ HasData()

virtual [Long\\_t](#) TDataSet::HasData ( ) const

inline

virtual

Reimplemented in [TTable](#), [TChair](#), [TObjectSet](#), and [TFileSet](#).

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Definition at line **112** of file **TDataSet.h**.

### ◆ Instance()

**TDataSet** \* TDataSet::Instance ( ) const

virtual

apply the class default ctor to instantiate a new object of the same kind.

This is a base method to be overridden by the classes derived from **TDataSet** (to support **TDataSetIter::Mkdir** for example)

Reimplemented in **TObjectSet**.

Definition at line **546** of file **TDataSet.cxx**.

### ◆ instance()

**TDataSet** \* TDataSet::instance ( )

inline

static

Definition at line **153** of file **TDataSet.h**.

### ◆ InvertAllMarks()

**void** TDataSet::InvertAllMarks ( )

Invert mark bit for all members of this dataset.

Loading [MathJax]/extensions/MathMenu.js e **TDataSet.cxx**.

## ◆ isEmpty()

**Bool\_t** TDataSet::IsEmpty ( ) const

virtual

return kTRUE if the "internal" collection has no member

Reimplemented in **TFileSet**.

Definition at line **608** of file **TDataSet.cxx**.

## ◆ IsFolder()

virtual **Bool\_t** TDataSet::IsFolder ( ) const

inline

virtual

Returns kTRUE in case object contains browsable objects (like containers or lists of other objects).

Reimplemented from **TObject**.

Reimplemented in **TTable**, **TChair**, **TFileSet**, and **TColumnView**.

Definition at line **129** of file **TDataSet.h**.

## ◆ IsMarked()

**Bool\_t** TDataSet::IsMarked ( ) const

inline

virtual



Reimplemented in **TVolume**, and **TVolumeView**.

Definition at line **154** of file **TDataSet.h**.

### ◆ IsThisDir()

```
Bool_t TDataSet::IsThisDir ( const char *  dirname,  
                             int          len = - 1,  
                             int          ignorecase = 0  
                             )          const
```

virtual

Compare the name of the **TDataSet** with "dirname" ignorecase flags indicates whether the comparison is case sensitive.

Definition at line **555** of file **TDataSet.cxx**.

### ◆ Last()

```
TDataSet * TDataSet::Last ( ) const
```

virtual

Return the last object in the list. Returns 0 when list is empty.

Definition at line **437** of file **TDataSet.cxx**.

### ◆ Is() [1/2]

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**void** TDataSet::ls ( **Option\_t** \* option = "" ) const

virtual

// ls(Option\_t <em>option) // // option - defines the path to be listed // = "</em>" - means print all levels // //

Reimplemented from **TNamed**.

Reimplemented in **TChair**.

Definition at line **495** of file **TDataSet.cxx**.

◆ ls() [ 2 / 2 ]

**void** TDataSet::ls ( **Int\_t** depth ) const

virtual

// ls(Int\_t depth) // // Prints the list of the this **TDataSet**.

// // Parameter: // ===== // Int\_t depth >0 the number of levels to be printed // =0 all levels will be printed // No par - **ls()** prints only level out // //

Reimplemented in **TChair**.

Definition at line **526** of file **TDataSet.cxx**.

◆ MakeCollection()

**void** TDataSet::MakeCollection ( )

protected

Create the internal container at once if any.

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Definition at line **221** of file **TDataSet.cxx**.

### ◆ Mark() [1/2]

```
void TDataSet::Mark ( )
```

inline

Definition at line **156** of file **TDataSet.h**.

### ◆ Mark() [2/2]

```
void TDataSet::Mark ( UInt_t  flag,  
                     EBitOpt reset = kSet  
                     )
```

inline

Definition at line **155** of file **TDataSet.h**.

### ◆ MarkAll()

```
void TDataSet::MarkAll ( )
```

Mark all members of this dataset.

Definition at line **571** of file **TDataSet.cxx**.

## ◆ Next()

```
TDataSet * TDataSet::Next ( ) const
```

virtual

Return the object next to this one in the parent structure This convinient but time-consuming.

Don't use it in the inner loops

Definition at line **447** of file **TDataSet.cxx**.

## ◆ operator=()

```
void TDataSet::operator= ( const TDataSet & )
```

inline

private

Definition at line **52** of file **TDataSet.h**.

## ◆ Pass() [1/2]

```
TDataSet::EDatasetPass TDataSet::Pass ( EDatasetPass*(TDataSet *) callback,  
                                         Int_t depth = 0  
                                         )
```

virtual

// Pass (callback,depth) // // Calls callback(this) for all datasets those recursively // // Parameter: // ===== // **Int\_t** depth >0 the number of levels to be passed // =0 all levels will be passed // // Return (this value must be returned by the user's callback): // ===== // kContinue - continue passing // kPrune - stop passing the current branch, go to the next one // kUp - stop passing, leave the current branch, // return to

Loading [MathJax]/extensions/MathMenu.js // kStop - stop passing, leave all braches // //

Definition at line **689** of file **TDataSet.cxx**.

## ◆ Pass() [2/2]

```
TDataSet::EDataSetPass TDataSet::Pass ( EDataSetPass*(TDataSet *, void *) callback,  
                                     void * user,  
                                     Int_t depth = 0  
                                     )
```

virtual

// Pass (callback,user,depth) // // Calls callback(this,user) for all datasets those recursively // // Parameter: // ===== // Int\_t depth >0 the number of levels to be passed // =0 all levels will be passed // // Return (this value must be returned by the user's callback): // ===== // kContinue - continue passing // kPrune - stop passing the current branch, go to the next one// kUp - stop passing, leave the current branch, // return to previous level and continue // kStop - stop passing, leave all braches // //

Definition at line **730** of file **TDataSet.cxx**.

## ◆ Path()

```
TString TDataSet::Path ( ) const
```

virtual

return the full path of this data set

Definition at line **626** of file **TDataSet.cxx**.

## ◆ Prev()

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**TDataSet** \* TDataSet::Prev ( ) const

virtual

Return the object that is previous to this one in the parent structure This convenient but time-consuming.

Don't use it in the inner loops

Definition at line **464** of file **TDataSet.cxx**.

### ◆ PrintContents()

**void** TDataSet::PrintContents ( **Option\_t** \* opt = " " ) const

virtual

Callback method to complete **Is()** method recursive loop This is to allow to separate navigation and the custom information in the derived classes (see; **TTable::PrintContents** for example.

Reimplemented in **TTable**.

Definition at line **618** of file **TDataSet.cxx**.

### ◆ Purge()

**Int\_t** TDataSet::Purge ( **Option\_t** \* opt = " " )

virtual

Purge - deletes all "dummy" "Structural Members" those are not ended up with some dataset with data inside (those return **HasData()** = 0)

Purge does affect only the "Structural Members" and doesn't "Associated" ones

Reimplemented in **TTable**, and **TChair**.

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Definition at line **758** of file **TDataSet.cxx**.

### ◆ Remove()

**void** TDataSet::Remove ( **TDataSet** \* set )

virtual

Remove the "set" from this **TDataSet**.

Definition at line **641** of file **TDataSet.cxx**.

### ◆ RemoveAt()

**TDataSet** \* TDataSet::RemoveAt ( **Int\_t** idx )

virtual

Remove object from the "idx" cell of this set and return the pointer to the removed object if any.

Definition at line **656** of file **TDataSet.cxx**.

### ◆ SetMother() [ 1 / 2 ]

virtual **void** TDataSet::SetMother ( **TObject** \* mother )

inline

protected

virtual

Definition at line **61** of file **TDataSet.h**.

### ◆ SetMother() [ 2 / 2 ]

virtual **void** TDataSet::SetMother ( **TDataSet** \* parent = 0 )

inline

virtual

Definition at line **122** of file **TDataSet.h**.

### ◆ SetObject()

**void** TDataSet::SetObject ( **TObject** \* obj )

virtual

The deprecated method (left here for the sake of the backward compatibility)

Reimplemented in **TObjectSet**.

Definition at line **480** of file **TDataSet.cxx**.

### ◆ SetParent()

**void** TDataSet::SetParent ( **TDataSet** \* parent = 0 )

virtual

Break the "parent" relationship with the current object parent if present parent != 0 Makes this object the "Structural Member" of the "parent" dataset = 0 Makes this object the "pure Associator", i.e it makes this object the "Structural Member" of NO other **TDataSet**.

Definition at line **784** of file **TDataSet.cxx**.



### ◆ SetWrite()

```
void TDataSet::SetWrite ( )
```

virtual

One should not use this method but **TDataSet::Write** instead This method os left here for the sake of the backward compatibility To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too.

Definition at line **797** of file **TDataSet.cxx**.

### ◆ Shunt()

```
void TDataSet::Shunt ( TDataSet * newParent = 0 )
```

virtual

Remove the object from the original and add it to dataset **TDataSet** dataset != 0 - Make this object the "Structural Member" of "dataset" = 0 - Make this object "Orphan".

Definition at line **810** of file **TDataSet.cxx**.

### ◆ Sort()

```
void TDataSet::Sort ( )
```

virtual

Sort recursively all members of the **TDataSet** with **TList::Sort** method.

Definition at line **874** of file **TDataSet.cxx**.

### ◆ SortIt() [1/2]

```
static EDataSetPass TDataSet::SortIt ( TDataSet * ds )
```

static

protected

### ◆ SortIt() [2/2]

```
static EDataSetPass TDataSet::SortIt ( TDataSet * ds,  
                                       void * user  
                                       )
```

static

protected

### ◆ UnMark()

```
void TDataSet::UnMark ( )
```

inline

Definition at line **157** of file **TDataSet.h**.

### ◆ UnMarkAll()

```
void TDataSet::UnMarkAll ( )
```

UnMark all members of this dataset.

Definition at line **582** of file **TDataSet.cxx**.

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## ◆ Update() [1/2]

```
void TDataSet::Update ( )
```

virtual

### Update()

Recursively updates all tables for all nested datasets in inverse order

Reimplemented in **TTable**, and **TChair**.

Definition at line **864** of file **TDataSet.cxx**.

## ◆ Update() [2/2]

```
void TDataSet::Update ( TDataSet * set,  
                        UInt_t    opt = 0  
                        )
```

virtual

Update this **TDataSet** with "set".

### ATTENTION !!!

This method changes the parent relationships of the input "set"

Reimplemented in **TTable**, and **TChair**.

Definition at line **825** of file **TDataSet.cxx**.

## ◆ Write() [1/2]

```
Int_t TDataSet::Write ( const char * name = 0,  
                        Int_t      option = 0,  
                        Int_t      bufsize = 0  
                      )
```

virtual

To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too.

Reimplemented from **TObject**.

Definition at line **893** of file **TDataSet.cxx**.

## ◆ Write() [2/2]

```
Int_t TDataSet::Write ( const char * name = 0,  
                        Int_t      option = 0,  
                        Int_t      bufsize = 0  
                      )      const
```

virtual

To Write object first we should temporary break the the backward fParent pointer (otherwise **ROOT** follows this links and will pull fParent out too.

Reimplemented from **TObject**.

Definition at line **909** of file **TDataSet.cxx**.

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## Friends And Related Function Documentation

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### ◆ TDataSetIter

friend class **TDataSetIter**

friend

Definition at line **36** of file **TDataSet.h**.

## Member Data Documentation

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### ◆ fgMainSet

**TDataSet** \* TDataSet::fgMainSet = &mainSet

static

protected

Definition at line **57** of file **TDataSet.h**.

### ◆ fList

**TSeqCollection**\* TDataSet::fList

protected

Definition at line **59** of file **TDataSet.h**.

◆ fParent

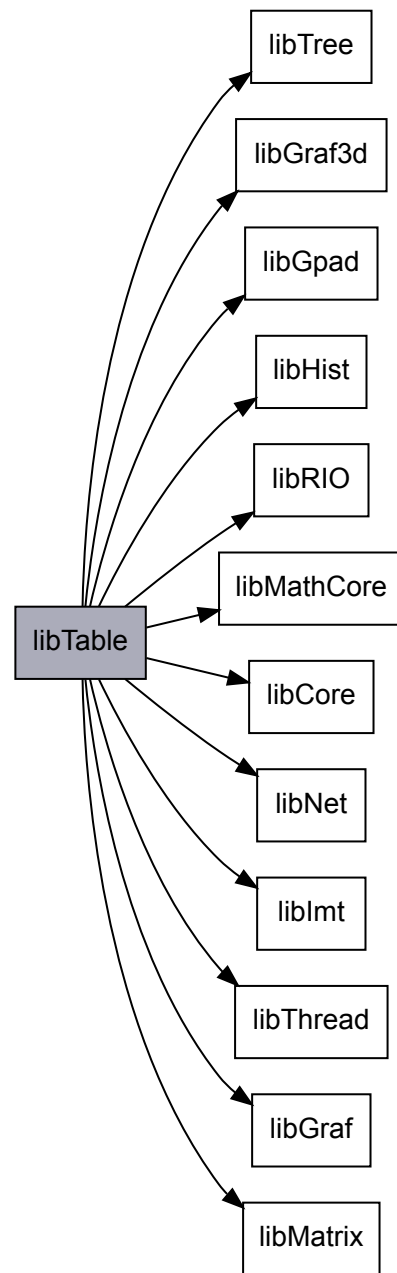
**TDataSet\*** TDataSet::fParent

protected

Definition at line **58** of file **TDataSet.h**.

Libraries for TDataSet:

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

- misc/table/inc/[TDataSet.h](#)
- misc/table/src/[TDataSet.cxx](#)



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