Bergermeister Home Automation

Source Code Documentation (SCD)

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

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GNCommon::NDataAuthentication	
Namespace containing Data Authentication and Validity Checking utilities	14
GNCommon::NNotification	
Namespace containing system Alerts	14

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

GNCommon::NComponent::GTcEvent< auiMaxListeners >
GNCommon::NComponent::GTcEvent < xuiMaxListeners >
GNCommon::NContainers::GTcLinkedList < GTcType >
local:common::NCommon::NComponent::GTcListener> 17 and the common:: NComponent:: GTcListener>
GNCommon::NContainers::GTcList < GTcType >
GNCommon::NComponent::GTcListener
GNCommon::NContainers::GTcListNode < GTcType >
$\label{lem:common::NCommon::NComponent::GTcListener> 19} GNCommon::NComponent::GTcListener> 19$
GNCommon::NContainers::GTcQueue < GTcType >
GNCommon::GTcStopWatch
GNCommon::NDataAuthentication::TcCRC32
GNCommon::NNotification::Tcldentifier
GNCommon::NComponent::TcModel
GNCommon::NNotification::TcAlert
GNCommon::NNotification::TcStatus 34

Chapter 3

Class Index

3.1 Class List

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

GNCommon::NComponent::GTcEvent< auiMaxListeners >
GNCommon::NContainers::GTcLinkedList < GTcType >
GNCommon::NContainers::GTcList < GTcType >
GNCommon::NComponent::GTcListener
GNCommon::NContainers::GTcListNode < GTcType >
GNCommon::NContainers::GTcQueue < GTcType >
GNCommon::GTcStopWatch
GNCommon::NNotification::TcAlert
GNCommon::NDataAuthentication::TcCRC32
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Chapter 4

File Index

4.1 File List

Here is a list of all documented files with brief descriptions:

C:/Projects/BergermeisterHome/Software/Common/inc/ Constants.n	?
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C:/Projects/BergermeisterHome/Software/Common/inc/Containers/ List.h	??
C:/Projects/BergermeisterHome/Software/Common/inc/Containers/ ListNode.h	??
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C:/Projects/BergermeisterHome/Software/Common/src/ StopWatch.cpp	??
C:/Projects/BergermeisterHome/Software/Common/src/Component/ Listener.cpp	??
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C:/Projects/BergermeisterHome/Software/Common/src/DataAuthentication/ CRC32.cpp	??
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Chapter 5

Namespace Documentation

5.1 GNCommon Namespace Reference

Namespace containing Common components and infrastrucutre.

Namespaces

NDataAuthentication

Namespace containing Data Authentication and Validity Checking utilities.

NNotification

Namespace containing system Alerts.

Classes

class GTcStopWatch

Typedefs

- typedef bool Tb8
- typedef char Tc8
- typedef signed char Ti8
- typedef unsigned char Tu8
- typedef signed short Ti16
- typedef unsigned short Tu16
- typedef signed long Ti32
- typedef unsigned long Tu32
- typedef signed long long Ti64
- typedef unsigned long long Tu64
- typedef float Tf32
- · typedef double Tf64

5.1.1 Detailed Description

Namespace containing Common components and infrastrucutre.

5.1.2 Typedef Documentation

5.1.2.1 Tb8 typedef bool GNCommon::Tb8 Type definition for 8-bit boolean primitive Definition at line 54 of file Types.h. 5.1.2.2 Tc8 typedef char GNCommon::Tc8 Type definition for 8-bit character primitive Definition at line 55 of file Types.h. 5.1.2.3 Tf32 typedef float GNCommon::Tf32 Type definition for 32-bit single-precision floating point primitive Definition at line 64 of file Types.h. 5.1.2.4 Tf64 typedef double GNCommon::Tf64 Type definition for 64-bit double-precision floating point primitive

Definition at line 65 of file Types.h.

5.1.2.5 Ti16

typedef signed short GNCommon::Ti16

Type definition for signed 16-bit integer primitive

Definition at line 58 of file Types.h.

5.1.2.6 Ti32

typedef signed long GNCommon::Ti32

Type definition for signed 32-bit integer primitive

Definition at line 60 of file Types.h.

5.1.2.7 Ti64

typedef signed long long GNCommon::Ti64

Type definition for signed 64-bit integer primitive

Definition at line 62 of file Types.h.

5.1.2.8 Ti8

typedef signed char GNCommon::Ti8

Type definition for signed 8-bit integer primitive

Definition at line 56 of file Types.h.

5.1.2.9 Tu16

typedef unsigned short GNCommon::Tul6

Type definition for unsigned 16-bit integer primitive

Definition at line 59 of file Types.h.

5.1.2.10 Tu32

typedef unsigned long GNCommon::Tu32

Type definition for unsigned 32-bit primitive

Definition at line 61 of file Types.h.

5.1.2.11 Tu64

typedef unsigned long long GNCommon::Tu64

Type definition for unsigned 64-bit integer primitive

Definition at line 63 of file Types.h.

5.1.2.12 Tu8

typedef unsigned char GNCommon::Tu8

Type definition for unsigned 8-bit integer primitive

Definition at line 57 of file Types.h.

5.2 GNCommon::NDataAuthentication Namespace Reference

Namespace containing Data Authentication and Validity Checking utilities.

Classes

• class TcCRC32

5.2.1 Detailed Description

Namespace containing Data Authentication and Validity Checking utilities.

5.3 GNCommon::NNotification Namespace Reference

Namespace containing system Alerts.

Classes

- class TcAlert
- class Tcldentifier
- · class TcStatus

Enumerations

enum TcComponentId : Tu8 { TcComponentId::XeNone = 0, TcComponentId::XeServer = 1, TcComponentId::XeSensor = 2 }

Enumeration of Alert Component Identifiers.

- enum TcCriticality : Tu8 { TcCriticality::XeNone = 0, TcCriticality::XeNotice = 1, TcCriticality::XeWarning = 2, TcCriticality::XeAlarm = 3 }
- enum TcEventId: Tu32 { Xeldentifier, XeStatus, XeTimestamp, XeData }
- enum TcGroupId : Tu8 { TcGroupId::XeNone = 0, TcGroupId::XeNetwork = 1 }

5.3.1 Detailed Description

Namespace containing system Alerts.

5.3.2 Enumeration Type Documentation

5.3.2.1 TcComponentId

```
enum GNCommon::NNotification::TcComponentId : Tu8 [strong]
```

Enumeration of Alert Component Identifiers.

Enumerator

XeNone	Enumerated Component: None
XeServer	Enumerated Component: Server
XeSensor	Enumerated Component: Sensor

Definition at line 12 of file ComponentId.h.

5.3.2.2 TcCriticality

```
enum GNCommon::NNotification::TcCriticality : Tu8 [strong]
```

Enumeration of Alert Criticality Identifiers

Enumerator

XeNone	Enumerated Alert Level: None
XeNotice	Enumerated Alert Level: Notice
XeWarning	Enumerated Alert Level: Warning
XeAlarm	Enumerated Alert Level: Alarm

Definition at line 12 of file Criticality.h.

5.3.2.3 TcEventId

```
enum GNCommon::NNotification::TcEventId : Tu32 [strong]
```

Enumeration of Alert Event Identifiers

Definition at line 12 of file EventId.h.

5.3.2.4 TcGroupId

```
enum GNCommon::NNotification::TcGroupId : Tu8 [strong]
```

Enumeration of Group Identifiers

Enumerator

XeNone	Enumerated Group: None
XeNetwork	Enumerated Group: Network

Definition at line 12 of file Groupld.h.

Chapter 6

Class Documentation

6.1 GNCommon::NComponent::GTcEvent < auiMaxListeners > Class Template Reference

Public Member Functions

- void MNotify (void *aopSender, const Tu32 auildentifier)
- GTcEvent & operator+= (const GTcListener &aorListener)
- GTcEvent & operator-= (const GTcListener &aorListener)

Protected Attributes

- GNCommon::NContainers::GTcListNode < GTcListener > voBuffer [auiMaxListeners]
- $\bullet \quad \mathsf{GNCommon::} \mathsf{NContainers::} \mathsf{GTcLinkedList} < \mathsf{GTcListener} > \mathbf{voListeners}$

6.1.1 Detailed Description

template<Tu32 auiMaxListeners> class GNCommon::NComponent::GTcEvent< auiMaxListeners>

Definition at line 14 of file Event.h.

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

• C:/Projects/BergermeisterHome/Software/Common/inc/Component/Event.h

6.2 GNCommon::NContainers::GTcLinkedList< GTcType > Class Template Reference

Public Member Functions

- void MInitialize (GTcListNode < GTcType > *aopBuffer, Tu32 auiSize)
- Tb8 MIsInitialized (void) const
- Tb8 MInsertAtHead (GTcType &aorObject)
- Tb8 MInsertAtTail (GTcType &aorObject)
- Tb8 MInsert (GTcType &aorObject)
- Tb8 MRemoveHead (void)
- Tb8 MRemoveTail (void)
- Tb8 MRemove (GTcType &aorObject)

Protected Attributes

- GTcListNode < GTcType > * vopBuff
- GTcListNode < GTcType > * vopHead
- GTcListNode < GTcType > * vopTail
- Tu32 vuiSize
- Tu32 vuiCount
- Tb8 vbInitialized

6.2.1 Detailed Description

```
\label{lem:class} \begin{tabular}{ll} template < class $\tt GTcType > $\tt class $\tt GNCommon::NContainers::GTcLinkedList < \tt GTcType > $\tt class {\tt GNCommon::NContainers::GTcLinkedList < \tt class {\tt GNCommon::NContainers::GTcLinkedList < \tt class {\tt GNCommon::NContainers::GTcLinkedList < \tt class {\tt GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon::GNCommon:
```

Definition at line 11 of file LinkedList.h.

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

· C:/Projects/BergermeisterHome/Software/Common/inc/Containers/LinkedList.h

6.3 GNCommon::NContainers::GTcList< GTcType > Class Template Reference

Public Member Functions

- GTcList (GTcType *aopBuffer, const Tu32 auiCapacity)
- GTcList (const GTcList< GTcType > &aorList)
- virtual GTcList< GTcType > & operator= (const GTcList< GTcType > &aorList)
- virtual Tb8 MAdd (const GTcType &aorItem)
- virtual Tb8 MInsert (const GTcType &aorltem, const Tu32 auilndex)
- virtual Tb8 MRemove (const GTcType &aorItem)
- virtual Tb8 MRemvoeAt (const Tu32 auiIndex)
- · virtual void MClear (void)
- virtual Tb8 MContains (const GTcType &aorItem) const
- virtual Tu32 MIndexOf (const GTcType &aorItem) const
- Tu32 MCapacity (void) const
- Tu32 MCount (void) const

Public Attributes

- GTcType *& VorItem
- const Tu32 & VuirCapacity
- const Tu32 & VuirCount

Protected Attributes

- GTcType * vopBuffer
- Tu32 vuiCapacity
- Tu32 vuiCount

6.3.1 Detailed Description

template < class GTcType > class GNCommon::NContainers::GTcList < GTcType >

Definition at line 8 of file List.h.

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

• C:/Projects/BergermeisterHome/Software/Common/inc/Containers/List.h

6.4 GNCommon::NComponent::GTcListener Class Reference

Public Types

• typedef void(* TsHandle) (void *aopListener, void *aopParameter)

Public Member Functions

- GTcListener (void *aopInstance, const TsHandle aopHandle)
- void * MGetInstance (void) const
- TsHandle MGetHandle (void) const
- Tb8 operator== (const GTcListener &aorListener)

Protected Attributes

- void * vopInstance
- · TsHandle vopHandle

6.4.1 Detailed Description

Definition at line 7 of file Listener.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/Component/Listener.h
- C:/Projects/BergermeisterHome/Software/Common/src/Component/Listener.cpp

6.5 GNCommon::NContainers::GTcListNode < GTcType > Class Template Reference

Public Member Functions

- void MSetObject (GTcType &aorObject)
- GTcType * MGetObject (void)
- void MSetNext (GTcListNode < GTcType > *aopNode)
- void MSetPrev (GTcListNode < GTcType > *aopNode)
- GTcListNode < GTcType > * MSGetNext (void)
- GTcListNode < GTcType > * MSGetPrev (void)
- Tb8 MInsertAfter (GTcListNode < GTcType > &aorNode)
- Tb8 MInsertBefore (GTcListNode < GTcType > &aorNode)
- Tb8 MRemove (void)

Protected Attributes

- GTcListNode < GTcType > * vopNext
- GTcListNode < GTcType > * vopPrev
- GTcType voObject
- Tb8 vbAvailable

6.5.1 Detailed Description

```
template < class GTcType > class GNCommon::NContainers::GTcListNode < GTcType >
```

Definition at line 11 of file ListNode.h.

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

• C:/Projects/BergermeisterHome/Software/Common/inc/Containers/ListNode.h

6.6 GNCommon::NContainers::GTcQueue < GTcType > Class Template Reference

Public Member Functions

- **GTcQueue** (GTcType *aopBuffer, Tu32 auiSize)
- Tb8 MEnqueue (GTcType &aorElement)
- Tb8 MDequeue (GTcType &aorElement)
- Tb8 MIsEmpty (void) const
- Tb8 MIsFull (void) const
- Tu32 MCount (void) const

6.6.1 Detailed Description

```
template < class GTcType > class GNCommon::NContainers::GTcQueue < GTcType >
```

Definition at line 8 of file Queue.h.

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

• C:/Projects/BergermeisterHome/Software/Common/inc/Containers/Queue.h

6.7 GNCommon::GTcStopWatch Class Reference

Public Member Functions

- GTcStopWatch (const GTcStopWatch &aorStopWatch)
- GTcStopWatch & operator= (const GTcStopWatch &aorStopWatch)
- · void MStart (void)
- Tu64 MStop (void)
- Tu64 MElapsed (void)

Protected Attributes

- Ti64 vIStart
- Ti64 vlEnd
- Tb8 vbRunning

Static Protected Attributes

- static const Ti64 xlMaxQuadPart = 9223372036854775807
- static const Tu64 xulTimeBase = 1000000LL
- static Tu64 vulFrequency = 0

6.7.1 Detailed Description

Definition at line 10 of file StopWatch.h.

6.7.2 Member Data Documentation

6.7.2.1 xulTimeBase

const Tu64 GNCommon::GTcStopWatch::xulTimeBase = 1000000LL [static], [protected]

Microseconds

Definition at line 14 of file StopWatch.h.

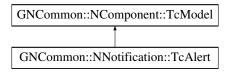
The documentation for this class was generated from the following files:

- C:/Projects/BergermeisterHome/Software/Common/inc/StopWatch.h
- C:/Projects/BergermeisterHome/Software/Common/src/StopWatch.cpp

6.8 GNCommon::NNotification::TcAlert Class Reference

#include <Alert.h>

Inheritance diagram for GNCommon::NNotification::TcAlert:



Public Member Functions

- TcAlert (void)
- ∼TcAlert (void)
- TcAlert (const TcAlert &aorAlert)
- TcAlert & operator= (const TcAlert &aorAlert)
- void MSetIdentifier (const TcIdentifier &aorID)
- void MSetStatus (const TcStatus &aorStatus)
- void MSetTimestamp (const Tu64 aulTimestamp)
- void MSetData (const Tu64 aulData)
- Tcldentifier MGetIdentifier (void) const
- TcStatus MGetStatus (void) const
- Tu64 MGetTimestamp (void) const
- Tu64 MGetData (void) const

Static Public Attributes

- static const Tu32 XuiSizeOfIdentifier = sizeof(TcIdentifier)
- static const Tu32 XuiSizeOfStatus = sizeof(TcStatus)

Protected Attributes

- Tcldentifier volD
- TcStatus voStatus
- Tu64 vulTimestamp
- Tu64 vulData

Additional Inherited Members

6.8.1 Detailed Description

Alert Class

Definition at line 19 of file Alert.h.

6.8.2 Constructor & Destructor Documentation

```
6.8.2.1 TcAlert() [1/2]

TcAlert::TcAlert (

void )
```

Default Constructor

Definition at line 13 of file Alert.cpp.

6.8.2.2 \sim TcAlert()

```
TcAlert::~TcAlert ( void )
```

Default Destructor

Definition at line 24 of file Alert.cpp.

Copy Constructor

Parameters

aorAlert | Alert Constant Reference to copy

Definition at line 33 of file Alert.cpp.

6.8.3 Member Function Documentation

6.8.3.1 MGetData()

MGetTrigger

Returns

this->vulData constant 64-bit Integer Data

Definition at line 136 of file Alert.cpp.

6.8.3.2 MGetIdentifier()

MGetIdentifier

Returns

this->voID constant TsIdentifier

Definition at line 109 of file Alert.cpp.

6.8.3.3 MGetStatus()

MGetStatus

Returns

this->voStatus constant TsStatus

Definition at line 118 of file Alert.cpp.

6.8.3.4 MGetTimestamp()

MGetTimestamp

Returns

this->vulTimestamp constant 64-bit Integer Timestamp

Definition at line 127 of file Alert.cpp.

6.8.3.5 MSetData()

MSetData

Parameters

aulData constant 64-bit Integer Data

Definition at line 96 of file Alert.cpp.

6.8.3.6 MSetIdentifier()

MSetIdentifier

Parameters

aorID | Identifier Structure Constant Reference

Definition at line 57 of file Alert.cpp.

6.8.3.7 MSetStatus()

MSetStatus

Parameters

aorStatus | Status Structure Constant Reference

Definition at line 70 of file Alert.cpp.

6.8.3.8 MSetTimestamp()

MSetTimeStamp

Parameters

aulTimestamp | constant 64-bit Integer Timestamp

Definition at line 83 of file Alert.cpp.

```
6.8.3.9 operator=()
```

operator= Override

Parameters

aorAlert | Alert Constant Reference to copy

Returns

*this GTcAlert Reference

Definition at line 43 of file Alert.cpp.

6.8.4 Member Data Documentation

6.8.4.1 voID

TcIdentifier GNCommon::NNotification::TcAlert::voID [protected]

Encoded Identifier

Definition at line 26 of file Alert.h.

6.8.4.2 voStatus

TcStatus GNCommon::NNotification::TcAlert::voStatus [protected]

Encoded Status

Definition at line 27 of file Alert.h.

6.8.4.3 vulData

Tu64 GNCommon::NNotification::TcAlert::vulData [protected]

64-bit Additional Data

Definition at line 29 of file Alert.h.

6.8.4.4 vulTimestamp

Tu64 GNCommon::NNotification::TcAlert::vulTimestamp [protected]

64-bit Timestamp of Occurrence

Definition at line 28 of file Alert.h.

6.8.4.5 XuiSizeOfIdentifier

const Tu32 GNCommon::NNotification::TcAlert::XuiSizeOfIdentifier = sizeof(TcIdentifier) [static]

Size of Identifier

Definition at line 22 of file Alert.h.

6.8.4.6 XuiSizeOfStatus

```
const Tu32 GNCommon::NNotification::TcAlert::XuiSizeOfStatus = sizeof( TcStatus ) [static]
```

Size of Status

Definition at line 23 of file Alert.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Alert.h
- C:/Projects/BergermeisterHome/Software/Common/src/Notification/Alert.cpp

6.9 GNCommon::NDataAuthentication::TcCRC32 Class Reference

Public Member Functions

- Tu32 MGet (const Tu8 *aucpBuffer, const Tu32 auiBytes, const Tu32 auiSeed=xuiDefaultSeed) const
- Tb8 MVerify (void) const

Protected Member Functions

- Tu32 mGetLE (const Tu8 *aucpBuffer, const Tu32 auiBytes, const Tu32 auiSeed=xuiDefaultSeed) const
- Tu32 mGetBE (const Tu8 *aucpBuffer, const Tu32 auiBytes, const Tu32 auiSeed=xuiDefaultSeed) const

Static Protected Attributes

- static const Tu32 xuiDefaultSeed = 0xFFFFFFF
- static const Tu32 xuiTableCRC = 0x6FCF9E13
- static const Tu32 xuiShift8 = 8
- static const Tu32 xuiMaskByte = 0x000000FF
- static const Tu32 xuiMaskAlign = 0x00000003
- static const Tu32 xuiTableSize = 256
- static const Tu32 xuiTable [xuiTableSize]

6.9.1 Detailed Description

Definition at line 14 of file CRC32.h.

6.9.2 Member Data Documentation

6.9.2.1 xuiTable

```
const Tu32 TcCRC32::xuiTable [static], [protected]
```

Table obtained from http://www.efg2.com/Lab/Mathematics/CRC.htm

Definition at line 23 of file CRC32.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/DataAuthentication/CRC32.h
- C:/Projects/BergermeisterHome/Software/Common/src/DataAuthentication/CRC32.cpp

6.10 GNCommon::NNotification::Tcldentifier Class Reference

#include <Identifier.h>

Public Member Functions

- Tcldentifier (void)
- Tcldentifier (const Tcldentifier &aorldentifier)
- ∼Tcldentifier (void)
- Tcldentifier & operator= (const Tcldentifier & aorldentifier)
- Tb8 operator== (const Tcldentifier &aorldentifier)
- Tb8 operator!= (const Tcldentifier &aorldentifier)

Public Attributes

- Tu8 vucIndex
- TcGroupId voGroup
- TcComponentId voCompDet
- TcComponentId voCompGen

6.10.1 Detailed Description

Alert Identifier

Definition at line 16 of file Identifier.h.

6.10.2 Constructor & Destructor Documentation

Default Constructor

Initializes the internal members to default values.

Returns

None

Formal Parameters

None

Local Symbols

None

Definition at line 27 of file Identifier.cpp.

```
6.10.2.2 Tcldentifier() [2/2]
 TcIdentifier::TcIdentifier (
             const TcIdentifier & aorIdentifier )
 Copy Constructor
 Copies the internal members of the given Identifier to this Identifier via the assignment operator.
 Returns
     None
Formal Parameters
      Local Symbols
       None
 Definition at line 48 of file Identifier.cpp.
6.10.2.3 \simTcldentifier()
 TcIdentifier::~TcIdentifier (
            void )
 Destructor
 Nothing to destruct.
 Returns
     None
Formal Parameters
       None
Local Symbols
       None
 Definition at line 66 of file Identifier.cpp.
```

6.10.3 Member Function Documentation

6.10.3.1 operator"!=()

Inequality Operator

Compares this Identifier to the given Identifier and returns if they are not equal.

Returns

True if any of this Identifier's internal members are not equal to the given Identifier's internal members, False otherwise

Formal Parameters

Local Symbols

None

Definition at line 135 of file Identifier.cpp.

6.10.3.2 operator=()

Assignment Operator

Copies the internal members of the given Identifier

Returns

Identifier object reference to this Identifier

Formal Parameters

Local Symbols

None

Definition at line 84 of file Identifier.cpp.

6.10.3.3 operator==()

Equality Operator

Compares this Identifier to the given Identifier and returns if they are equal.

Returns

True if all of this Identifier's internal members equal the given Identifier's internal members, False otherwise

Formal Parameters

Local Symbols

```
kbEqual Flag indicating if the Identifiers are equal
```

Definition at line 107 of file Identifier.cpp.

6.10.4 Member Data Documentation

6.10.4.1 voCompDet

TcComponentId GNCommon::NNotification::TcIdentifier::voCompDet

Bits 16 - 23 : Detecting Component

Definition at line 21 of file Identifier.h.

6.10.4.2 voCompGen

TcComponentId GNCommon::NNotification::TcIdentifier::voCompGen

Bits 24 - 31 : Generating Component

Definition at line 22 of file Identifier.h.

6.10.4.3 voGroup

TcGroupId GNCommon::NNotification::TcIdentifier::voGroup

Bits 8 - 15 : Group

Definition at line 20 of file Identifier.h.

6.10.4.4 vucIndex

Tu8 GNCommon::NNotification::TcIdentifier::vucIndex

Bits 0 - 7: Index

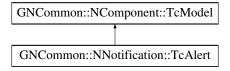
Definition at line 19 of file Identifier.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Identifier.h
- C:/Projects/BergermeisterHome/Software/Common/src/Notification/Identifier.cpp

6.11 GNCommon::NComponent::TcModel Class Reference

Inheritance diagram for GNCommon::NComponent::TcModel:



Public Attributes

• GTcEvent < xuiMaxListeners > VoEvent

Static Protected Attributes

• static const Tu32 xuiMaxListeners = 16

6.11.1 Detailed Description

Definition at line 10 of file Model.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/Component/Model.h
- C:/Projects/BergermeisterHome/Software/Common/src/Component/Model.cpp

6.12 GNCommon::NNotification::TcStatus Class Reference

#include <Status.h>

Public Member Functions

• TcStatus (void)

Default Constructor.

TcStatus (const TcStatus &aorStatus)

Copy Constructor.

∼TcStatus (void)

Destructor.

• TcStatus & operator= (const TcStatus &aorStatus)

Assignment Operator.

• Tb8 operator== (const TcStatus &aorStatus)

Equality Operator.

• Tb8 operator!= (const TcStatus &aorStatus)

Inequality Operator.

Public Attributes

- Tu8 vucActive: 1
- Tu8 vucAcknowledged: 1
- Tu8 vucCleared: 1
- Tu8 vucTrigger: 1
- Tu8 vucSpare1: 4
- TcCriticality voCriticality
- Tu8 vucSpare2
- Tu8 vucChildren

6.12.1 Detailed Description

Alert Status

Definition at line 15 of file Status.h.

6.12.2 Constructor & Destructor Documentation

```
6.12.2.1 TcStatus() [1/2]
 TcStatus::TcStatus (
               void )
 Default Constructor.
 Initializes the internal members to default values.
 Returns
      None
Formal Parameters
       None
Local Symbols
       None
 Definition at line 25 of file Status.cpp.
 6.12.2.2 TcStatus() [2/2]
 TcStatus::TcStatus (
               const TcStatus & aorStatus )
 Copy Constructor.
 Copies the internal members of the given Status to this Status via the assignment operator.
 Returns
      None
Formal Parameters
      [ in ] aorStatus Status object reference to be copied
Local Symbols
       None
```

Definition at line 50 of file Status.cpp.

```
6.12.2.3 ∼TcStatus()
 TcStatus::\sim TcStatus (
               void )
 Destructor.
 Nothing to destruct
 Returns
      None
Formal Parameters
       None
Local Symbols
       None
 Definition at line 68 of file Status.cpp.
 6.12.3 Member Function Documentation
 6.12.3.1 operator"!=()
 Tb8 TcStatus::operator!= (
               const TcStatus & aorStatus )
 Inequality Operator.
 Compares this Status to the given Status and returns if they are not equal.
 Returns
      True if any of this Status's internal members are not equal to the given Status's internal members
Formal Parameters
      [ in ] aorStatus Status object reference to be compared
Local Symbols
       None
```

Definition at line 146 of file Status.cpp.

6.12.3.2 operator=()

Assignment Operator.

Copies the internal members of the given Status

Returns

Status object reference to this Status

Formal Parameters

```
[ in ] aorStatus Status object reference to be copied
```

Local Symbols

None

Definition at line 87 of file Status.cpp.

6.12.3.3 operator==()

Equality Operator.

Compares this Status to the given Status and returns if they are equal.

Returns

True if all of this Status's internal members equal the given Status's internal members

Formal Parameters

```
[ in ] aorStatus Status object reference to be compared
```

Local Symbols

```
kbEqual Flag indicating if the Statuses are equal
```

Definition at line 114 of file Status.cpp.

6.12.4 Member Data Documentation

6.12.4.1 voCriticality TcCriticality GNCommon::NNotification::TcStatus::voCriticality Bits 8 - 15 : Alert Level Definition at line 23 of file Status.h. 6.12.4.2 vucAcknowledged Tu8 GNCommon::NNotification::TcStatus::vucAcknowledged Bit 1: Acknowledged Flag Definition at line 19 of file Status.h. 6.12.4.3 vucActive Tu8 GNCommon::NNotification::TcStatus::vucActive Bit 0 : Active Flag Definition at line 18 of file Status.h. 6.12.4.4 vucChildren Tu8 GNCommon::NNotification::TcStatus::vucChildren Bits 24 - 31: Number of Child Alerts Definition at line 25 of file Status.h. 6.12.4.5 vucCleared Tu8 GNCommon::NNotification::TcStatus::vucCleared Bit 2: Cleared Flag

Definition at line 20 of file Status.h.

6.12.4.6 vucSpare1

Tu8 GNCommon::NNotification::TcStatus::vucSpare1

Bits 4 - 7 : Spare Flags

Definition at line 22 of file Status.h.

6.12.4.7 vucSpare2

Tu8 GNCommon::NNotification::TcStatus::vucSpare2

Bits 16 - 23 : Spare

Definition at line 24 of file Status.h.

6.12.4.8 vucTrigger

Tu8 GNCommon::NNotification::TcStatus::vucTrigger

Bit 3: Trigger Available Flag

Definition at line 21 of file Status.h.

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

- C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Status.h
- C:/Projects/BergermeisterHome/Software/Common/src/Notification/Status.cpp

Chapter 7

File Documentation

7.1 C:/Projects/BergermeisterHome/Software/Common/inc/DataAuthentication/CRC32.h File Reference

Package interface for the CRC32 class.

#include <Types.h>

Classes

• class GNCommon::NDataAuthentication::TcCRC32

Namespaces

• GNCommon

Namespace containing Common components and infrastrucutre.

• GNCommon::NDataAuthentication

Namespace containing Data Authentication and Validity Checking utilities.

7.1.1 Detailed Description

Package interface for the CRC32 class.

Definition in file CRC32.h.

7.2 CRC32.h

```
00001
00005 #pragma once
00006
00007 #include <Types.h>
00009 namespace GNCommon
00010 {
00012
           namespace NDataAuthentication
00013
00014
              class TcCRC32
00015
           protected:
                                 // Protected Attributes
00016
            static const Tu32 xuiDefaultSeed = 0xFFFFFFF;
static const Tu32 xuiDefaultSeed = 0xFFFFFFFF;
00017
             static const Tu32 xuiTableCRC = 0xfFfFFFFF;

static const Tu32 xuiTableCRC = 0x6FCF9E13;

static const Tu32 xuiShift8 = 8;

static const Tu32 xuiMaskByte = 0x0000000FF;

static const Tu32 xuiMaskAlign = 0x00000003;

static const Tu32 xuiTableSize = 256;

static const Tu32 xuiTable[ xuiTableSize ];
00018
00019
00020
00021
00022
00023
00024
         public:
                             // Public Methods
00025
                 TcCRC32( void );
00026
00027
                  Tu32 MGet (const Tu8* aucpBuffer, const Tu32 auiBytes, const
00028
      Tu32 auiSeed = xuiDefaultSeed ) const;
00029
00030
                 Tb8 MVerify( void ) const;
00031
         protected:
00032
                                 // Protected Methods
                 Tu32 mGetLE( const Tu8* aucpBuffer, const Tu32 auiBytes, const
      Tu32 auiSeed = xuiDefaultSeed ) const;
00034
                 Tu32 mGetBE( const Tu8* aucpBuffer, const Tu32 auiBytes, const
00037 }
```

7.3 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Alert.h File Reference

Package interface for the Alert Class.

```
#include <Types.h>
#include <Component\Model.h>
#include <Notification\ComponentId.h>
#include <Notification\Identifier.h>
#include <Notification\Status.h>
```

Classes

· class GNCommon::NNotification::TcAlert

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

• GNCommon::NNotification

Namespace containing system Alerts.

7.3.1 Detailed Description

Package interface for the Alert Class.

Definition in file Alert.h.

7.4 Alert.h

```
00001
00005 #pragma once
00006
00007 #include <Types.h>
00008 #include <Component\Model.h>
00009 #include <Notification\ComponentId.h>
00010 #include <Notification\Identifier.h>
00011 #include <Notification\Status.h>
00012
00013 namespace GNCommon
00014 {
00016
             namespace NNotification
00017
00019
                  class TcAlert : public GNCommon::NComponent::TcModel
00020
                                 // Public Type Definitions
              public:
00021
                     static const Tu32 XuiSizeOfIdentifier = sizeof(
        TcIdentifier );
       static const Tu32 XuiSizeOfStatus
TcStatus );
00023
00025 protected:
                                      // Protected Attributes
00025 protected: // Protected Attributes
00026 TcIdentifier voID;
00027 TcStatus voStatus;
00028 Tu64 vulTimestamp;
00029 Tu64 vulData;
00031 public: // Public Methods
00032 TcAlert ( void );
00033 ~TcAlert ( void );
00034 TcAlert ( const TcAlert& aorAlert );
00035 TcAlert& operator=( const TcAlert& aorAlert );
00036
00036
00037 void MSetIdentifier( const TcIdentifier& aorID );
00038 void MSetStatus ( const TcStatus& aorStatus );
00039 void MSetTimestamp ( const Tu64 aulTimestamp );
00040 void MSetData ( const Tu64 aulData );
00041
              TcIdentifier MGetIdentifier( void ) const;
TcStatus MGetStatus ( void ) const;
Tu64 MGetTimestamp ( void ) const;
00042
00043
00044
00045
                      Tu64
                                        MGetData ( void ) const;
00046
                };
00047
            }
00048 }
00049
```

7.5 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/ComponentId.h File Reference

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

· GNCommon::NNotification

Namespace containing system Alerts.

Enumerations

enum GNCommon::NNotification::TcComponentId:: Tu8 { GNCommon::NNotification::TcComponentId::XeNone = 0, GNCommon::NNotification::TcComponentId::XeSensor = 2 }

Enumeration of Alert Component Identifiers.

7.6 Componentld.h

```
00001
00005 #pragma once
00006
00007 namespace GNCommon
00008 {
         namespace NNotification
00009
00010
00012
            enum class TcComponentId : Tu8
00013
00014
               XeNone = 0,
               XeServer = 1,
XeSensor = 2
00015
00016
         };
00017
00018
        }
00019 }
00020
```

7.7 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Criticality.h File Reference

Package interface for the Alert Criticality Enumeration.

Namespaces

• GNCommon

Namespace containing Common components and infrastrucutre.

• GNCommon::NNotification

Namespace containing system Alerts.

Enumerations

• enum GNCommon::NNotification::TcCriticality : Tu8 { GNCommon::NNotification::TcCriticality::XeNone = 0, GNCommon::NNotification:: = 1, GNCommon::NNotification::TcCriticality::XeWarning = 2, GNCommon::NNotification::TcCriticality::XeAlarm = 3 }

7.7.1 Detailed Description

Package interface for the Alert Criticality Enumeration.

Definition in file Criticality.h.

7.8 Criticality.h

```
00005 #pragma once
00006
00007 namespace GNCommon
00009
        namespace NNotification
00010
00012
           enum class TcCriticality : Tu8
00013
              XeNone = 0,
XeNotice = 1,
00014
00015
00016
             XeWarning = 2,
        };
00017
              XeAlarm = 3
00020 }
00021
```

7.9 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/EventId.h File Reference

Package interface for the Event Identifier Enumeration.

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

• GNCommon::NNotification

Namespace containing system Alerts.

Enumerations

enum GNCommon::NNotification::TcEventId: Tu32 { Xeldentifier, XeStatus, XeTimestamp, XeData }

7.9.1 Detailed Description

Package interface for the Event Identifier Enumeration.

Definition in file EventId.h.

7.10 EventId.h

```
00005 #pragma once
00007 namespace GNCommon
} 80000
00009
        namespace NNotification
00010
           enum class TcEventId : Tu32
          {
   XeIdentifier,
00013
00014
00015
             XeStatus,
00016
              XeTimestamp,
00017
              XeData
00018
           };
00019
       }
00020 }
00021
```

7.11 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/GroupId.h File Reference

Package interface for the Group Identifier Enumeration.

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

GNCommon::NNotification

Namespace containing system Alerts.

Enumerations

• enum GNCommon::NNotification::TcGroupId : Tu8 { GNCommon::NNotification::TcGroupId::XeNone = 0, GNCommon::NNotification::TcGroupId : Tu8 { GNCommon::NNotification::TcGroupId::XeNone = 0, GNCommon::NNotification::TcGroupId : Tu8 { GNCommon::NNotification::TcGroupId::XeNone = 0, GNCommon::NNotification::TcGroupId : Tu8 { GNC

7.11.1 Detailed Description

Package interface for the Group Identifier Enumeration.

Definition in file Groupld.h.

7.12 Groupld.h

```
00005 #pragma once
00006
00007 namespace GNCommon
00008 {
00009
        namespace NNotification
00010
      enum {
    XeNone = 0,
    XeNetwork = 1
            enum class TcGroupId : Tu8
00012
00013
00014
00015
00016
00017
00018 }
```

7.13 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Identifier.h File Reference

Package interface for the Alert Identifier.

```
#include <Types.h>
#include <Notification\GroupId.h>
#include <Notification\ComponentId.h>
```

Classes

class GNCommon::NNotification::Tcldentifier

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

· GNCommon::NNotification

Namespace containing system Alerts.

7.13.1 Detailed Description

Package interface for the Alert Identifier.

Definition in file Identifier.h.

7.14 Identifier.h

```
00001
00005 #pragma once
00006
00007 #include <Types.h>
00008 #include <Notification\GroupId.h>
00009 #include <Notification\ComponentId.h>
00010
00011 namespace GNCommon
00012 {
00013
                                       namespace NNotification
00014
                                                  class TcIdentifier
00016
00017
00018
                                         public:
                                                                                                               // Public Attributes
                                  public: // Public Attributes

Tu8 vucIndex;

TcGroupId voGroup;

TcComponentId voCompDet;

TcComponentId voCompGen;

public: // Public Methods

TcIdentifier ( void );

TcIdentifier ( const TcIdentifier& aorIdentifier);

~TcIdentifier& operator=( const TcIdentifier& aorIdentifier& pressure ( const TcIdentifier& aorIdentifier& aorIde
00019
00020
00021
00022
00024
00025
00026
00027
00028
                                                            TcIdentifier& operator=( const TcIdentifier& aorIdentifier );
00029
00030
                                                           Tb8 operator == ( const TcIdentifier& aorIdentifier );
00031
                                                             Tb8 operator!=( const TcIdentifier& aorIdentifier );
00032
00033
                              }
00034 }
```

7.15 C:/Projects/BergermeisterHome/Software/Common/inc/Notification/Status.h File Reference

Package interface for the Alert Status.

```
#include <Types.h>
#include <Notification\Criticality.h>
```

Classes

class GNCommon::NNotification::TcStatus

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

GNCommon::NNotification

Namespace containing system Alerts.

7.15.1 Detailed Description

Package interface for the Alert Status.

Definition in file Status.h.

7.16 Status.h

```
00001
00005 #pragma once
00006
00007 #include <Types.h>
00008 #include <Notification\Criticality.h>
00009
00010 namespace GNCommon
00011 {
        namespace NNotification
00012
00013
         ~TcStatus( void );
TcStatus& operator=( const TcStatus& aorStatus );
00031
00032
00033
           Tb8 operator == ( const TcStatus& aorStatus );
00034
             Tb8 operator!=( const TcStatus& aorStatus );
00035
         };
00036
00037 }
```

7.17 C:/Projects/BergermeisterHome/Software/Common/inc/StopWatch.h File Reference

Classes

class GNCommon::GTcStopWatch

Namespaces

GNCommon

Namespace containing Common components and infrastrucutre.

7.17.1 Detailed Description

Package interface for the Stop Watch class interface

Definition in file StopWatch.h.

7.18 StopWatch.h

```
00001
00006 #pragma once
00007
00008 namespace GNCommon
00009 {
00010
         class GTcStopWatch
00011
00012 protected: // Protected Attributes
        static const Ti64 xlMaxQuadPart = 9223372036854775807;
static const Tu64 xulTimeBase = 1000000LL;
00013
00014
00015
            static Tu64 vulFrequency;
00016
         Ti64 vlStart;
Ti64 vlEnd;
Tb8 vbRunning;
00017
00018
00019
00020
00021 public:

00022 GTcStopWatch( void );

00023 GTcStopWatch( const GTcStopWatch& aorStopWatch);
00025
00026
           GTcStopWatch& operator=( const GTcStopWatch& aorStopWatch );
00027
00028
             void MStart ( void );
00029
             Tu64 MStop ( void );
00030
              Tu64 MElapsed( void );
00031
00032
00033 }
00034
```

7.19 C:/Projects/BergermeisterHome/Software/Common/inc/Types.h File Reference

Common Framework namespace, type definitions, and coding style guide Defines the common namespace (GNCommon), common primitive types, and provides the style guide to be used.

Namespaces

• GNCommon

Namespace containing Common components and infrastrucutre.

Typedefs

- typedef bool GNCommon::Tb8
- typedef char GNCommon::Tc8
- typedef signed char GNCommon::Ti8
- typedef unsigned char GNCommon::Tu8
- typedef signed short GNCommon::Ti16
- typedef unsigned short GNCommon::Tu16
- typedef signed long GNCommon::Ti32
- typedef unsigned long GNCommon::Tu32
- typedef signed long long GNCommon::Ti64
- typedef unsigned long long GNCommon::Tu64
- typedef float GNCommon::Tf32
- typedef double GNCommon::Tf64

7.19.1 Detailed Description

Common Framework namespace, type definitions, and coding style guide Defines the common namespace (GNCommon), common primitive types, and provides the style guide to be used.

```
* Style Guide
  (S) cope:
               | Priv | Pub | Global |
                 |-----|----|
* Class Variable | v | V | ---- |
* Stack Variable | k | --- | ---- |

* Argument | a | --- | ---- |

* Typedef | t | T | GT |

* Constant ROM | x | X | GX |

* Method | m | M | GM |
   (T)ype:
    | Prefix |
     Tb8 | b |
     Tc8 | c |
Ti8 | c |
      Tu8 |
    Ti16 | s
     Tu16 | us
     Ti32 | i |
      Tu32 | ui
     Ti64 |
     Tu64 | ul |
     Tf32 | f |
    Tf64 | d |
* (0)perator:
                | Prefix |
    pointer | p |
     reference |
  Naming Convention:
    STOCamelCaseName
      GMFunctionGlobal
```

Definition in file Types.h.

7.20 Types.h

```
00001
00048 #pragma once
00049
00051 namespace GNCommon
00052 {
00053
00054
             typedef
                                                 bool Tb8;
                                                char Tc8;
char Ti8;
char Tu8;
00055
              typedef
           typedef signed
typedef unsigned
00056
00057
                                               short Ti16;
00058
           typedef signed
             typedef unsigned short Tu16;
typedef signed long Ti32;
typedef unsigned long Tu32;
00059
          typedef signed
00060
00061
           typedef signed long long Ti64;
00062
00063
              typedef unsigned long long Tu64;
00064 typedef float Tf32;

00065 typedef double Tf64;

00067 static const Tu32 XuiSizeOfTb8 = sizeof( Tb8 );
00068 static const Tu32 XuiSizeOfTi8 = sizeOf( Ti8 );
00069 static const Tu32 XuiSizeOfTi8 = sizeOf( Tu8 );
00070 static const Tu32 XuiSizeOfTi16 = sizeOf( Tu16 );
00071 static const Tu32 XuiSizeOfTu16 = sizeOf( Tu16 );
00072 static const Tu32 XuiSizeOfTu32 = sizeof( Tu32 );
00073 static const Tu32 XuiSizeOfTu32 = sizeof( Tu32 );
00074 static const Tu32 XuiSizeOfTi64 = sizeof( Ti64 );
00075 static const Tu32 XuiSizeOfTu64 = sizeof( Tu64 );
00076 static const Tu32 XuiSizeOfTf32 = sizeof( Tu64 );
00077 static const Tu32 XuiSizeOfTf64 = sizeof( Tu64 );
00078 }
```

7.21 C:/Projects/BergermeisterHome/Software/Common/src/Notification/Identifier.cpp File Reference

```
#include <Types.h>
#include <Notification\GroupId.h>
#include <Notification\ComponentId.h>
#include <Notification\Identifier.h>
```

7.21.1 Detailed Description

Package implementation for the Alert Identifier

Definition in file Identifier.cpp.

7.22 Identifier.cpp

```
00001
00006 #include <Types.h>
00007 #include <Notification\GroupId.h>
00008 #include <Notification\ComponentId.h>
00009 #include <Notification\Identifier.h>
00010
00011 using namespace GNCommon;
00012 using namespace GNCommon::NNotification;
00013
00027 TcIdentifier::TcIdentifier( void )
00028 {
00029    this->vucIndex = 0;
00030    this->voGroup = TcGroupId::XeNone;
00031    this->voCompDet = TcComponentId::XeNone;
```

```
this->voCompGen = TcComponentId::XeNone;
00033 }
00034
00048 TcIdentifier::TcIdentifier( const TcIdentifier& aorIdentifier)
00049 {
00050
         *this = aorIdentifier;
00051 }
00052
00066 TcIdentifier::~TcIdentifier( void )
00067 {
00068
         // Nothing to Destruct
00069 }
00070
00084 TcIdentifier& TcIdentifier::operator=( const
     TcIdentifier& aorIdentifier )
00085 {
       this->vucIndex = aorIdentifier.vucIndex;
this->voGroup = aorIdentifier.voGroup;
00086
00087
        this->voCompDet = aorIdentifier.voCompDet;
00088
        this->voCompGen = aorIdentifier.voCompGen;
00089
00090
00091
        return( *this );
00092 }
00093
00107 Tb8 TcIdentifier::operator==( const TcIdentifier& aorIdentifier)
00108 {
00109
        Tb8 kbEqual = true; // Assume Equal
00110
        if ( ( this->vucIndex != aorIdentifier.vucIndex ) ||
00111
              ( this->voGroup != aorIdentifier.voGroup ) ||
00112
00113
              ( this->voCompDet != aorIdentifier.voCompDet ) ||
00114
              ( this->voCompGen != aorIdentifier.voCompGen ) )
00115
00116
           kbEqual = false;
00117
00118
00119
        return( kbEqual );
00120 }
00121
00135 Tb8 TcIdentifier::operator!=( const TcIdentifier& aorIdentifier )
00136 {
00137
         return( !( *this == aorIdentifier ) );
00138 }
00139
```

7.23 C:/Projects/BergermeisterHome/Software/Common/src/Notification/Status.cpp File Reference

Package implementation for the Alert Status.

```
#include <Types.h>
#include <Notification\Criticality.h>
#include <Notification\Status.h>
```

7.23.1 Detailed Description

Package implementation for the Alert Status.

Definition in file Status.cpp.

7.24 Status.cpp

```
00001
00005 #include <Types.h>
00006 #include <Notification\Criticality.h>
00007 #include <Notification\Status.h>
```

```
00008
00009 using namespace GNCommon;
00010 using namespace GNCommon::NNotification;
00011
00025 TcStatus::TcStatus( void )
00026 {
00027
        this->vucActive
                            = false;
00028
       this->vucAcknowledged = false;
      this->vucCleared
                           = false;
00029
      this->vucTrigger
00030
                            = false;
                            = 0;
00031
       this->vucSpare1
00032
       this->voCriticality = TcCriticality::XeNone;
00033
       this->vucSpare2
                             = 0;
00034
       this->vucChildren
                            = 0;
00035 }
00036
00050 TcStatus::TcStatus( const TcStatus& aorStatus)
00051 {
00052
        *this = aorStatus;
00053 }
00054
00068 TcStatus::~TcStatus( void )
00069 {
00070
        // Nothing to destruct
00071 }
00072
00073
00087 TcStatus& TcStatus::operator=( const TcStatus& aorStatus )
00088 {
00089
       this->vucActive
                            = aorStatus.vucActive;
00090
       this->vucAcknowledged = aorStatus.vucAcknowledged;
       00091
00092
00093
       this->vucSpare1
                            = aorStatus.vucSpare1;
        this->voCriticality = aorStatus.voCriticality;
00094
       00095
00096
00097
        return( *this );
00098
00099 }
00100
00114 Tb8 TcStatus::operator == ( const TcStatus& aorStatus )
00115 {
00116
        Tb8 kbEqual = true; // Assume Equal
00117
                                  != aorStatus.vucActive
00118
        if ( ( this->vucActive
00119
             ( this->vucAcknowledged != aorStatus.vucAcknowledged ) ||
00120
             ( this->vucCleared != aorStatus.vucCleared ) ||
00121
             ( this->vucTrigger
                                   != aorStatus.vucTrigger
                                                               ) ||
00122
            ( this->vucSpare1
                                   != aorStatus.vucSpare1
                                                               ) ||
             ( this->voCriticality != aorStatus.voCriticality
00123
00124
                                   != aorStatus.vucSpare2
             ( this->vucSpare2
                                                               ) ||
00125
             ( this->vucChildren
                                   != aorStatus.vucChildren
00126
00127
           kbEqual = false;
00128
00129
00130
       return ( kbEqual );
00131 }
00132
00146 Tb8 TcStatus::operator!=( const TcStatus& aorStatus )
00147 {
00148
        return( !( *this == aorStatus ) );
00149 }
00150
```

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