

**07a33da8-0**

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COLLABORATORS

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# Chapter 1

# 07a33da8-0

## 1.1 AFGadget

```
*****

Gadtet C++ Object

Intuition Gadget Wrapper

AFrame Version 1.0
Gadget Object Version 1.0

(c) 1995,1996 Jeffry A Worth
                Deryk B Robosson

*****
```

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## 1.2 Gadget Object Information

AFGadget/Object Information

The Gadget Object was written to provide a C++ Object Class interface for the Intuition Gadget. Gadget Management with this class makes things much easier for the programmer. ↩

## 1.3 AFGadget

AFGadget/AFGadget

NAME AFGadget ()

DESCRIPTION

Default class constructor. Adds the gadget from the gadget list and window assigned to. Modify this only if you wish each class to have the modifications

INPUTS

none

RESULT

none

BUGS

none known

SEE ALSO

~AFGadget

## 1.4 ~AFGadget

AFGadget/~AFGadget

NAME ~AFGadget ()

DESCRIPTION

Default class destructor. Removes the gadget from the gadget list and window assigned to. Modify this only if you wish each class to have the modifications

INPUTS

none

RESULT

none

BUGS  
none known

SEE ALSO  
AFGadget

## 1.5 Create

AFGadget/Create

NAME Create()

```
void = Create(AFWindow* pwindow, ARect *rect, ULONG id)
```

DESCRIPTION

Creates a gadget in pwindow with size and coordinates rect with GadID of id

INPUTS

pwindow - pointer to window to receive the status bar  
rect - ARect struct which shows size and position of gadget  
id - gadget id

RESULT

none

BUGS

none known

SEE ALSO  
AFWindow  
ARect

## 1.6 FillGadgetStruct

AFGadget/FillGadgetStruct

NAME FillGadgetStruct()

```
void = FillGadgetStruct(LPGadget psgadget)
```

DESCRIPTION

Fills the gadget struct when AFGadget::Create is called with default values. This function is used internally only

INPUTS

psgadget - pointer to the gadget struct to be filled

RESULT

none

BUGS

none known

---

SEE ALSO  
LPGadget

## 1.7 AddGadget

AFGadget/AddGadget

NAME AddGadget ()

void = AddGadget ()

DESCRIPTION

Adds the gadget to the gadget list

NOTE

This function is used internally only

INPUTS

none

RESULT

none

BUGS

none known

SEE ALSO

RemoveGadget

## 1.8 RemoveGadget

AFGadget/RemoveGadget

NAME RemoveGadget ()

void = RemoveGadget ()

DESCRIPTION

Removes the gadget from the gadget list

NOTE

This function is used internally only

INPUTS

none

RESULT

none

BUGS

none known

---



SEE ALSO  
AddGadget

## 1.9 OnGadgetDown

AFGadget/OnGadgetDown

NAME OnGadgetDown()  
  
void = OnGadgetDown(LPIntuiMessage)

DESCRIPTION  
This function calls the gadgets OnGadgetDown function. You may override this function for your own purposes.

INPUTS  
none

RESULT  
none

BUGS  
none known

SEE ALSO  
OnGadgetUp

## 1.10 OnGadgetUp

AFGadget/OnGadgetUp

NAME OnGadgetUp()  
  
void = OnGadgetUp(LPIntuiMessage)

DESCRIPTION  
This function calls the gadgets OnGadgetUp function. You may override this function for your own purposes.

INPUTS  
none

RESULT  
none

BUGS  
none known

SEE ALSO  
OnGadgetDown

---



```

#define AFGADGET_OWNERSTRUCT 0x80000000

////////////////////////////////////
// Gadget Class

class AFGadget : public AFObject
{
public:
    AFGadget();
    ~AFGadget();

    virtual void DestroyObject();
    virtual char *ObjectType() { return "Gadget"; };

    virtual void Create(AFWindow* pwindow, AFRect *rect, ULONG id);
    virtual void Create(AFWindow* pwindow, LPGadget psgadget);
    virtual void FillGadgetStruct(LPGadget psgadget);
    virtual void AddGadget();
    virtual void RemoveGadget();

    // Events
    virtual void OnGadgetDown(LPIntuiMessage) { return; };
    virtual void OnGadgetUp(LPIntuiMessage) { return; };
    virtual void OnPaint() { return; };

    LPGadget m_pgadget;
    AFWindow *m_pwindow;
    ULONG m_flags;
};

////////////////////////////////////
#endif // __GADGET_HPP__

```

## 1.14 Source

```

////////////////////////////////////
// gadget.cpp
//
// Jeffry A Worth
// Nov 9, 1995
////////////////////////////////////

////////////////////////////////////
// INCLUDES
#include "aframe:include/gadget.hpp"

////////////////////////////////////
//

AFGadget::AFGadget()
{
    m_pgadget = NULL;
    m_flags = NULL;
}

```

```

AFGadget::~~AFGadget()
{
    // When the Window object is destroyed, all AFGadgets get their DestroyObject
    // method called. To remove the CGadget from the window without destroying
    // the window, the user must call the DestroyObject method.
}

void AFGadget::DestroyObject()
{
    if(m_pgadget && (!(m_flags & AFGADGET_OWNERSTRUCT)) ) {
        RemoveGadget();
        delete m_pgadget;
        m_pgadget = NULL;
        m_flags = NULL;
    }
}

void AFGadget::Create(AFWindow* pwindow, AFRect *rect, ULONG id)
{
    m_pwindow = pwindow;
    m_pgadget = new struct Gadget;
    m_pgadget->NextGadget = NULL;
    m_pgadget->LeftEdge = rect->TopLeft()->m_x;
    m_pgadget->TopEdge = rect->TopLeft()->m_y;
    m_pgadget->Width = rect->Width();
    m_pgadget->Height = rect->Height();
    m_pgadget->GadgetID = id;
    FillGadgetStruct(m_pgadget);
    m_pgadget->UserData = this;

    // Gadget Tracking - Not implemented yet!
    //m_pwindow->m_pgadgets = new AFNode(m_pgadget,m_pwindow->m_pgadgets);

    AddGadget();
    return;
}

void AFGadget::Create(AFWindow* pwindow, LPGadget psgadget)
{
    // Set up OWNERSTRUCT Gadget
    m_pgadget = psgadget;
    m_pwindow = pwindow;
    m_flags |= AFGADGET_OWNERSTRUCT;
    psgadget->UserData = this;

    // Gadget Tracking - Not implemented yet!
    // m_pwindow->m_pgadgets = new CNode(m_pgadget,m_pwindow->m_pgadgets);

    AddGadget();
}

void AFGadget::FillGadgetStruct(LPGadget psgadget)
{
    psgadget->Flags = GFLG_GADGHCOMP;
    psgadget->Activation = GACT_RELVERIFY | GACT_IMMEDIATE;
    psgadget->GadgetType = GTYP_BOOLGADGET;
    psgadget->GadgetRender = NULL;
}

```

---

```

    psgadget->SelectRender = NULL;
    psgadget->GadgetText = NULL;
    psgadget->MutualExclude = NULL;
    psgadget->SpecialInfo = NULL;
    return;
}

void AFGadget::AddGadget ()
{
    ::AddGadget (m_pwindow->m_pWindow,m_pgadget,-1);
}

void AFGadget::RemoveGadget ()
{
    ::RemoveGadget (m_pwindow->m_pWindow,m_pgadget);
}

```

## 1.15 History

\*\*\*HISTORY\*\*\*

```

*****
Gadget Object v1.0

Created November 10, 1995
Release November 11, 1995

- Created all function class objects.
*****

```

## 1.16 Distribution

### Distribution

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## 1.17 m\_pgadget

AFGadget/m\_pgadget

#### MEMBER TYPE

LPGadget

#### DESCRIPTION

Used to maintain a pointer to the gadget object

#### SEE ALSO

LPGadget

## 1.18 m\_pwindow

AFGadget/m\_pwindow

#### MEMBER TYPE

AFWindow

#### DESCRIPTION

Used to maintain a pointer to the parent window in which the gadget object resides

#### SEE ALSO

AFWindow

---

## 1.19 m\_flags

AFGadget/m\_flags

MEMBER TYPE

ULONG

DESCRIPTION

Contains the flags for each gadget class object

SEE ALSO

---