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# \* \* Void Pointers \* \*

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Bugsquashing Session @ MBI

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**common deals with void pointers**

- Applications in casting
- Passing of arguments to functions

## Dereferencing; *vptr = (type \*) &var*

```
#include <stdio.h>
int main()
{
    void *void_ptr;
    int wert = 10;

    void_ptr=(int *)&wert;
    *(int *)void_ptr = 100;

    printf("%d\n",wert); /* 100 */
    return 0;
}
```

## Casting; *\*(type \*)vptr = value*

"zero-out" memory function, meaning to turn off all of the bits in the memory, setting each byte to the value 0

```
void memzero(void *ptr, size_t len)
{
    for(; len>0; len--)
    {
        *(char *)ptr = 0;
    }
}
```

void \*ptr, no additional information about size is given.  
char 1Byte, int 4 Byte; double 8 Byte; void „0“ Byte

```
void *data = malloc(sliceSize); mitkParRecFileReader
```

```
int compare_ind(arg1, arg2) const void *arg1, *arg2;  
ipSegmentationCombineRegion.c
```

```
mitk::Image::ImageDataItemPointer mitk::Image::GetSliceData(int s, int t, int n,  
void *data, ImportMemoryManagementType importMemoryManagement);  
mitkImage.cpp
```

```
void *voidPoints = p->GetVoidPointer(0);  
void *voidNormals = 0;  
void *voidTCoords = 0;  
mitkVtKOpenGLOcclusionMapper.cxx
```

## mitkDaVinciStream.cpp

```
void *dst;
```

```
void *src;
```

```
// Save Most Recent Data to Memory
```

```
dst = (void *) &(m_ApiPacketData[ce_id].timestamp);
```

```
src = (void *) &(m_InPacket.body.stream.timestamp);
```



- SparkNotes Editors. “SparkNote on Why Use Pointers?.” SparkNotes.com. SparkNotes LLC. n.d.. Web. 16 Dec. 2010.
- [http://pronix.linuxdelta.de/C/standard\\_C/c\\_programmierung\\_15\\_3.shtml](http://pronix.linuxdelta.de/C/standard_C/c_programmierung_15_3.shtml)