

## [Help](#)

```
#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2008+2) //The "#els
#else
/*****
/*                                highdim_vector.h
*****/
/*                                */
/* type VECTOR                    */
/*                                */
/* Copyright (C) 1992-1995 Tomas Skalicky. All rights reserved. */
/*                                */
/*****
/*                                */
/*      ANY USE OF THIS CODE CONSTITUTES ACCEPTANCE OF THE TERMS */
/*                                OF THE COPYRIGHT NOTICE (SEE FILE COPYRGHT.H) */
/*                                */
/*****

#ifndef HIGHDIM_VECTOR_H
#define HIGHDIM_VECTOR_H

#include <stdlib.h>

#include "
href../../../../../common/math/highdim_solver/laspack/lastypes_h_src.pdflastypes.h"
#include "
href../../../../../common/math/highdim_solver/laspack/elcmp_h_src.pdfelcmp.h"
#include "
href../../../../../common/math/highdim_solver/laspack/copyright_h_src.pdfcopyright.h"

typedef struct
{
    char *Name;
    size_t Dim;
    InstanceType Instance;
    int LockLevel;
    double Multipl;
    Boolean OwnData;
    double *Cmp;
} Vector;
```

```

void V_Constr(Vector *V, char *Name, size_t Dim, InstanceType Instance,
              Boolean OwnData);
void V_Destr(Vector *V);
void V_SetName(Vector *V, char *Name);
char *V_GetName(Vector *V);
size_t V_GetDim(Vector *V);
void V_SetCmp(Vector *V, size_t Ind, double Val);
void V_SetAllCmp(Vector *V, double Val);
void V_SetRndCmp(Vector *V);
double V_GetCmp(Vector *V, size_t Ind);
void V_AddCmp(Vector *V, size_t Ind, double Val);

/* macros for fast access */
#define V__SetCmp(PtrV, Ind, Val)      (PtrV)->Cmp[Ind] = (Val)
#define V__GetCmp(PtrV, Ind)          (PtrV)->Cmp[Ind]
#define V__AddCmp(PtrV, Ind, Val)      (PtrV)->Cmp[Ind] += (Val)

void V_Lock(Vector *V);
void V_Unlock(Vector *V);

#endif /* HIGHDIM_VECTOR_H */

#endif //PremiaCurrentVersion

```