

MUI/NListtree_mcc.h

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	TITLE : MUI/NListtree_mcc.h		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY		August 25, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

MUI/NListtree_mcc.h

1.1 MUI/NListtree_mcc.h

MUI/NListtree_mcc.h

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```
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```

```
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TNF_FROZEN
TNF_LIST
TNF_NOSIGN
TNF_OPEN
TNF_SELECTED
tpr_Flags
```

1.2 MUI/NListtree_mcc.h

```
/*h
Class:      MCC_NListtree
```

```
Copyright:  (c)1999-2000 by Carsten Scholling
Author:      Carsten Scholling
Contact:     cs@@aphaso.de
Contents:    Registered class of the Magic User Interface.
h*/
```

```
/** Include stuff */
```

```
#ifndef NLISTTREE_MCC_H
#define NLISTTREE_MCC_H

#ifndef LIBRARIES_MUI_H
#include "libraries/mui.h"
#endif
```

```
/** MUI Defines */
```

```
#define MUIC_NListtree  "NListtree.mcc"
#define NListtreeObject MUI_NewObject(MUIC_NListtree
```

```
/** Attributes */
```

```
#define MUIA_NListtree_Active           0xfec81201  // *** [. ↵
    SGN]
#define MUIA_NListtree_ActiveList      0xfec81202  // *** [.. ↵
    GN]
#define MUIA_NListtree_CloseHook       0xfec81203  // *** [IS ↵
    ..]
#define MUIA_NListtree_ConstructHook   0xfec81204  // *** [IS ↵
    ..]
#define MUIA_NListtree_DestructHook    0xfec81205  // *** [IS ↵
    ..]
#define MUIA_NListtree_DisplayHook     0xfec81206  // *** [IS ↵
    ..]
#define MUIA_NListtree_DoubleClick     0xfec81207  // *** [ ↵
    ISGN]
#define MUIA_NListtree_DragDropSort    0xfec81208  // *** [IS ↵
    ..]
#define MUIA_NListtree_DupNodeName     0xfec81209  // *** [IS ↵
    ..]
#define MUIA_NListtree_EmptyNodes      0xfec8120a  // *** [IS ↵
    ..]
#define MUIA_NListtree_Format          0xfec8120b  // *** [IS ↵
    ..]
#define MUIA_NListtree_OpenHook        0xfec8120c  // *** [IS ↵
    ..]
#define MUIA_NListtree_Quiet           0xfec8120d  // *** [.S ↵
    ..]
#define MUIA_NListtree_CompareHook     0xfec8120e  // *** [IS ↵
    ..]
```

```

#define MUIA_NListtree_Title 0xfec8120f // *** [IS ←
    ..]
#define MUIA_NListtree_TreeColumn 0xfec81210 // *** [ ←
    ISG.]
#define MUIA_NListtree_AutoVisible 0xfec81211 // *** [ ←
    ISG.]
#define MUIA_NListtree_FindNameHook 0xfec81212 // *** [IS ←
    ..]
#define MUIA_NListtree_MultiSelect 0xfec81213 // *** [I ←
    ...]
#define MUIA_NListtree_MultiTestHook 0xfec81214 // *** [IS ←
    ..]
#define MUIA_NListtree_CopyToClipHook 0xfec81217 // *** [IS ←
    ..]
#define MUIA_NListtree_DropType 0xfec81218 // *** [.. ←
    G.]
#define MUIA_NListtree_DropTarget 0xfec81219 // *** [.. ←
    G.]
#define MUIA_NListtree_DropTargetPos 0xfec8121a // *** [.. ←
    G.]
#define MUIA_NListtree_FindUserDataHook 0xfec8121b // *** [IS ←
    ..]
#define MUIA_NListtree_ShowTree 0xfec8121c // *** [ ←
    ISG.]
#define MUIA_NListtree_SelectChange 0xfec8121d // *** [ ←
    ISGN]

/*** Special attribute values ***/

#define MUIV_NListtree_Active_Off 0
#define MUIV_NListtree_Active_Parent -2
#define MUIV_NListtree_Active_First -3
#define MUIV_NListtree_Active_FirstVisible -4
#define MUIV_NListtree_Active_LastVisible -5

#define MUIV_NListtree_ActiveList_Off 0

#define MUIV_NListtree_AutoVisible_Off 0
#define MUIV_NListtree_AutoVisible_Normal 1
#define MUIV_NListtree_AutoVisible_FirstOpen 2
#define MUIV_NListtree_AutoVisible_Expand 3

#define MUIV_NListtree_CompareHook_Head 0
#define MUIV_NListtree_CompareHook_Tail -1
#define MUIV_NListtree_CompareHook_LeavesTop -2
#define MUIV_NListtree_CompareHook_LeavesMixed -3
#define MUIV_NListtree_CompareHook_LeavesBottom -4

#define MUIV_NListtree_ConstructHook_String -1
#define MUIV_NListtree_ConstructHook_Flag_AutoCreate (1<<15)

#define MUIV_NListtree_CopyToClipHook_Default 0

#define MUIV_NListtree_DestructHook_String -1

#define MUIV_NListtree_DisplayHook_Default -1

```

```

#define MUIV_NListtree_DoubleClick_Off -1
#define MUIV_NListtree_DoubleClick_All -2
#define MUIV_NListtree_DoubleClick_Tree -3
#define MUIV_NListtree_DoubleClick_NoTrigger -4

#define MUIV_NListtree_DropType_None 0
#define MUIV_NListtree_DropType_Above 1
#define MUIV_NListtree_DropType_Below 2
#define MUIV_NListtree_DropType_onto 3
#define MUIV_NListtree_DropType_Sorted 4

#define MUIV_NListtree_FindNameHook_CaseSensitive 0
#define MUIV_NListtree_FindNameHook_CaseInsensitive -1
#define MUIV_NListtree_FindNameHook_Part -2
#define MUIV_NListtree_FindNameHook_PartCaseInsensitive -3
#define MUIV_NListtree_FindNameHook_PointerCompare -4

#define MUIV_NListtree_FindUserDataHook_CaseSensitive 0
#define MUIV_NListtree_FindUserDataHook_CaseInsensitive -1
#define MUIV_NListtree_FindUserDataHook_Part -2
#define MUIV_NListtree_FindUserDataHook_PartCaseInsensitive -3
#define MUIV_NListtree_FindUserDataHook_PointerCompare -4

#define MUIV_NListtree_MultiSelect_None 0
#define MUIV_NListtree_MultiSelect_Default 1
#define MUIV_NListtree_MultiSelect_Shifted 2
#define MUIV_NListtree_MultiSelect_Always 3

#define MUIV_NListtree_ShowTree_Toggle -1

/** Structures & Flags */

struct MUI_NListtree_TreeNode {
    struct MinNode tn_Node; // *** To make it a node.
    STRPTR tn_Name; // *** Simple name field.
    UWORD tn_Flags; // *** Used for the flags below.
    APTR tn_User; // *** Free for user data.
};

#define TNF_OPEN (1<<0)
#define TNF_LIST (1<<1)
#define TNF_FROZEN (1<<2)
#define TNF_NOSIGN (1<<3)
#define TNF_SELECTED (1<<4)

struct MUI_NListtree_TestPos_Result {
    struct MUI_NListtree_TreeNode *tpr_TreeNode;
    UWORD tpr_Type;
    LONG tpr_ListEntry;
    UWORD tpr_ListFlags;
    WORD tpr_Column;

```

```

};

#define tpr_Flags tpr_Type      /* OBSOLETE */

/** Methods */

#define MUIM_NListtree_Open      0xfec81101
#define MUIM_NListtree_Close    0xfec81102
#define MUIM_NListtree_Insert   0xfec81103
#define MUIM_NListtree_Remove   0xfec81104
#define MUIM_NListtree_Exchange 0xfec81105
#define MUIM_NListtree_Move     0xfec81106
#define MUIM_NListtree_Rename   0xfec81107
#define MUIM_NListtree_FindName 0xfec81108
#define MUIM_NListtree_GetEntry 0xfec81109
#define MUIM_NListtree_GetNr    0xfec8110a
#define MUIM_NListtree_Sort     0xfec8110b
#define MUIM_NListtree_TestPos  0xfec8110c
#define MUIM_NListtree_Redraw   0xfec8110d
#define MUIM_NListtree_NextSelected 0xfec81110
#define MUIM_NListtree_MultiTest 0xfec81111
#define MUIM_NListtree_Select   0xfec81112
#define MUIM_NListtree_Copy     0xfec81113
#define MUIM_NListtree_InsertStruct 0xfec81114 // *** ←
    Insert a struct (like a path) into the list.
#define MUIM_NListtree_Active    0xfec81115 // *** ←
    Method which gives the active node/number.
#define MUIM_NListtree_DoubleClick 0xfec81116 // *** ←
    Occurs on every double click.
#define MUIM_NListtree_PrevSelected 0xfec81118 // *** ←
    Like reverse NextSelected.
#define MUIM_NListtree_CopyToClip 0xfec81119 // *** ←
    Copy an entry or part to the clipboard.
#define MUIM_NListtree_FindUserData 0xfec8111a // *** ←
    Find a node upon user data.
#define MUIM_NListtree_Clear     0xfec8111b // *** ←
    Clear complete tree.

/** Method structs */

struct MUIM_NListtree_Open {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    struct MUI_NListtree_TreeNode *TreeNode;
    ULONG Flags;
};

struct MUIM_NListtree_Close {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    struct MUI_NListtree_TreeNode *TreeNode;
    ULONG Flags;
};

```

```
struct MUIP_NListtree_Insert {
    ULONG    MethodID;
    STRPTR   Name;
    APTR      User;
    struct MUI_NListtree_TreeNode *ListNode;
    struct MUI_NListtree_TreeNode *PrevNode;
    ULONG    Flags;
};

struct MUIP_NListtree_Remove {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    struct MUI_NListtree_TreeNode *TreeNode;
    ULONG Flags;
};

struct MUIP_NListtree_Clear {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    ULONG Flags;
};

struct MUIP_NListtree_FindName {
    ULONG    MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    STRPTR   Name;
    ULONG    Flags;
};

struct MUIP_NListtree_FindUserData {
    ULONG    MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    APTR      User;
    ULONG    Flags;
};

struct MUIP_NListtree_GetEntry {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *Node;
    LONG   Position;
    ULONG  Flags;
};

struct MUIP_NListtree_GetNr {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_Move {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *OldListNode;
    struct MUI_NListtree_TreeNode *OldTreeNode;
    struct MUI_NListtree_TreeNode *NewListNode;
    struct MUI_NListtree_TreeNode *NewTreeNode;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_Exchange {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode1;
    struct MUI_NListtree_TreeNode *TreeNode1;
    struct MUI_NListtree_TreeNode *ListNode2;
    struct MUI_NListtree_TreeNode *TreeNode2;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_Rename {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    STRPTR NewName;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_Sort {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *ListNode;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_TestPos {
    ULONG MethodID;
    LONG X;
    LONG Y;
    APTR Result;
};
```

```
struct MUIP_NListtree_Redraw {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_Select {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG SelType,
        SelFlags,
        *State;
};
```

```
};

struct MUIP_NListtree_NextSelected {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode **TreeNode;
};

struct MUIP_NListtree_MultiTest {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG SelType,
        SelFlags,
        CurrType;
};

struct MUIP_NListtree_Copy {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *SourceListNode;
    struct MUI_NListtree_TreeNode *SourceTreeNode;
    struct MUI_NListtree_TreeNode *DestListNode;
    struct MUI_NListtree_TreeNode *DestTreeNode;
    ULONG Flags;
};

struct MUIP_NListtree_InsertStruct {
    ULONG MethodID;
    STRPTR Name;
    APTR User;
    STRPTR Delimiter;
    ULONG Flags;
};

struct MUIP_NListtree_Active {
    ULONG MethodID;
    LONG Pos;
    struct MUI_NListtree_TreeNode *ActiveNode;
};

struct MUIP_NListtree_DoubleClick {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG Entry;
    LONG Column;
};

struct MUIP_NListtree_PrevSelected {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode **TreeNode;
};
```

```

struct MUIP_NListtree_CopyToClip {
    ULONG MethodID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG Pos;
    LONG Unit;
};

/** Special method values **/

#define MUIV_NListtree_Close_ListNode_Root 0
#define MUIV_NListtree_Close_ListNode_Parent -1
#define MUIV_NListtree_Close_ListNode_Active -2

#define MUIV_NListtree_Close_TreeNode_Head 0
#define MUIV_NListtree_Close_TreeNode_Tail -1
#define MUIV_NListtree_Close_TreeNode_Active -2
#define MUIV_NListtree_Close_TreeNode_All -3

#define MUIV_NListtree_Exchange_ListNode1_Root 0
#define MUIV_NListtree_Exchange_ListNode1_Active -2

#define MUIV_NListtree_Exchange_TreeNode1_Head 0
#define MUIV_NListtree_Exchange_TreeNode1_Tail -1
#define MUIV_NListtree_Exchange_TreeNode1_Active -2

#define MUIV_NListtree_Exchange_ListNode2_Root 0
#define MUIV_NListtree_Exchange_ListNode2_Active -2

#define MUIV_NListtree_Exchange_TreeNode2_Head 0
#define MUIV_NListtree_Exchange_TreeNode2_Tail -1
#define MUIV_NListtree_Exchange_TreeNode2_Active -2
#define MUIV_NListtree_Exchange_TreeNode2_Up -5
#define MUIV_NListtree_Exchange_TreeNode2_Down -6

#define MUIV_NListtree_FindName_ListNode_Root 0
#define MUIV_NListtree_FindName_ListNode_Active -2

#define MUIV_NListtree_FindName_Flag_SameLevel (1<<15)
#define MUIV_NListtree_FindName_Flag_Visible (1<<14)
#define MUIV_NListtree_FindName_Flag_Activate (1<<13)
#define MUIV_NListtree_FindName_Flag_Selected (1<<11)
#define MUIV_NListtree_FindName_Flag_StartNode (1<<10)
#define MUIV_NListtree_FindName_Flag_Reverse (1<<9)

#define MUIV_NListtree_FindUserData_ListNode_Root 0
#define MUIV_NListtree_FindUserData_ListNode_Active -2

#define MUIV_NListtree_FindUserData_Flag_SameLevel (1<<15)
#define MUIV_NListtree_FindUserData_Flag_Visible (1<<14)
#define MUIV_NListtree_FindUserData_Flag_Activate (1<<13)

```

```
#define MUIV_NListtree_FindUserData_Flag_Selected (1<<11)
#define MUIV_NListtree_FindUserData_Flag_StartNode (1<<10)
#define MUIV_NListtree_FindUserData_Flag_Reverse (1<<9)

#define MUIV_NListtree_GetEntry_ListNode_Root 0
#define MUIV_NListtree_GetEntry_ListNode_Active -2
#define MUIV_NListtree_GetEntry_TreeNode_Active -3

#define MUIV_NListtree_GetEntry_Position_Head 0
#define MUIV_NListtree_GetEntry_Position_Tail -1
#define MUIV_NListtree_GetEntry_Position_Active -2
#define MUIV_NListtree_GetEntry_Position_Next -3
#define MUIV_NListtree_GetEntry_Position_Previous -4
#define MUIV_NListtree_GetEntry_Position_Parent -5

#define MUIV_NListtree_GetEntry_Flag_SameLevel (1<<15)
#define MUIV_NListtree_GetEntry_Flag_Visible (1<<14)

#define MUIV_NListtree_GetNr_TreeNode_Active -2

#define MUIV_NListtree_GetNr_Flag_CountAll (1<<15)
#define MUIV_NListtree_GetNr_Flag_CountLevel (1<<14)
#define MUIV_NListtree_GetNr_Flag_CountList (1<<13)
#define MUIV_NListtree_GetNr_Flag_ListEmpty (1<<12)

#define MUIV_NListtree_Insert_ListNode_Root 0
#define MUIV_NListtree_Insert_ListNode_Active -2
#define MUIV_NListtree_Insert_ListNode_LastInserted -3
#define MUIV_NListtree_Insert_ListNode_ActiveFallback -4

#define MUIV_NListtree_Insert_PrevNode_Head 0
#define MUIV_NListtree_Insert_PrevNode_Tail -1
#define MUIV_NListtree_Insert_PrevNode_Active -2
#define MUIV_NListtree_Insert_PrevNode_Sorted -4

#define MUIV_NListtree_Insert_Flag_Active (1<<13)
#define MUIV_NListtree_Insert_Flag_NextNode (1<<12)

#define MUIV_NListtree_Move_OldListNode_Root 0
#define MUIV_NListtree_Move_OldListNode_Active -2

#define MUIV_NListtree_Move_OldTreeNode_Head 0
#define MUIV_NListtree_Move_OldTreeNode_Tail -1
#define MUIV_NListtree_Move_OldTreeNode_Active -2

#define MUIV_NListtree_Move_NewListNode_Root 0
#define MUIV_NListtree_Move_NewListNode_Active -2

#define MUIV_NListtree_Move_NewTreeNode_Head 0
#define MUIV_NListtree_Move_NewTreeNode_Tail -1
#define MUIV_NListtree_Move_NewTreeNode_Active -2
#define MUIV_NListtree_Move_NewTreeNode_Sorted -4
```

```
#define MUIV_NListtree_Move_Flag_KeepStructure (1<<13)

#define MUIV_NListtree_Open_ListNode_Root 0
#define MUIV_NListtree_Open_ListNode_Parent -1
#define MUIV_NListtree_Open_ListNode_Active -2
#define MUIV_NListtree_Open_TreeNode_Head 0
#define MUIV_NListtree_Open_TreeNode_Tail -1
#define MUIV_NListtree_Open_TreeNode_Active -2
#define MUIV_NListtree_Open_TreeNode_All -3

#define MUIV_NListtree_Remove_ListNode_Root 0
#define MUIV_NListtree_Remove_ListNode_Active -2
#define MUIV_NListtree_Remove_TreeNode_Head 0
#define MUIV_NListtree_Remove_TreeNode_Tail -1
#define MUIV_NListtree_Remove_TreeNode_Active -2
#define MUIV_NListtree_Remove_TreeNode_All -3
#define MUIV_NListtree_Remove_TreeNode_Selected -4

#define MUIV_NListtree_Remove_Flag_NoActive (1<<13)

#define MUIV_NListtree_Rename_TreeNode_Active -2

#define MUIV_NListtree_Rename_Flag_User (1<<8)
#define MUIV_NListtree_Rename_Flag_NoRefresh (1<<9)

#define MUIV_NListtree_Sort_ListNode_Root 0
#define MUIV_NListtree_Sort_ListNode_Active -2
#define MUIV_NListtree_Sort_TreeNode_Active -3

#define MUIV_NListtree_Sort_Flag_RecursiveOpen (1<<13)
#define MUIV_NListtree_Sort_Flag_RecursiveAll (1<<12)

#define MUIV_NListtree_TestPos_Result_None 0
#define MUIV_NListtree_TestPos_Result_Above 1
#define MUIV_NListtree_TestPos_Result_Below 2
#define MUIV_NListtree_TestPos_Result_Onto 3
#define MUIV_NListtree_TestPos_Result_Sorted 4

#define MUIV_NListtree_Redraw_Active -1
#define MUIV_NListtree_Redraw_All -2

#define MUIV_NListtree_Redraw_Flag_Nr (1<<15)

#define MUIV_NListtree_Select_Active -1
#define MUIV_NListtree_Select_All -2
#define MUIV_NListtree_Select_Visible -3

#define MUIV_NListtree_Select_Off 0
#define MUIV_NListtree_Select_On 1
```

```
#define MUIV_NListtree_Select_Toggle                2
#define MUIV_NListtree_Select_Ask                  3

#define MUIV_NListtree_Select_Flag_Force            (1<<15)

#define MUIV_NListtree_NextSelected_Start           -1
#define MUIV_NListtree_NextSelected_End            -1

#define MUIV_NListtree_Copy_SourceListNode_Root     0
#define MUIV_NListtree_Copy_SourceListNode_Active  -2

#define MUIV_NListtree_Copy_SourceTreeNode_Head     0
#define MUIV_NListtree_Copy_SourceTreeNode_Tail    -1
#define MUIV_NListtree_Copy_SourceTreeNode_Active  -2

#define MUIV_NListtree_Copy_DestListNode_Root       0
#define MUIV_NListtree_Copy_DestListNode_Active    -2

#define MUIV_NListtree_Copy_DestTreeNode_Head       0
#define MUIV_NListtree_Copy_DestTreeNode_Tail      -1
#define MUIV_NListtree_Copy_DestTreeNode_Active    -2
#define MUIV_NListtree_Copy_DestTreeNode_Sorted    -4

#define MUIV_NListtree_Copy_Flag_KeepStructure      (1<<13)

#define MUIV_NListtree_PrevSelected_Start           -1
#define MUIV_NListtree_PrevSelected_End            -1

#define MUIV_NListtree_CopyToClip_Active            -1

/** Hook message structs */

struct MUIP_NListtree_CloseMessage
{
    ULONG HookID;
    struct MUI_NListtree_TreeNode *TreeNode;
};

struct MUIP_NListtree_CompareMessage
{
    ULONG HookID;
    struct MUI_NListtree_TreeNode *TreeNode1;
    struct MUI_NListtree_TreeNode *TreeNode2;
    LONG SortType;
};

struct MUIP_NListtree_ConstructMessage
{
    ULONG HookID;
    STRPTR Name;
};
```

```
    APTR UserData;
    APTR MemPool;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_DestructMessage
{
    ULONG HookID;
    STRPTR Name;
    APTR UserData;
    APTR MemPool;
    ULONG Flags;
};
```

```
struct MUIP_NListtree_DisplayMessage
{
    ULONG    HookID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG     EntryPos;
    STRPTR   *Array;
    STRPTR   *Preparse;
};
```

```
struct MUIP_NListtree_CopyToClipMessage
{
    ULONG    HookID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG     Pos;
    LONG     Unit;
};
```

```
struct MUIP_NListtree_FindNameMessage
{
    ULONG    HookID;
    STRPTR   Name;
    STRPTR   NodeName;
    APTR     UserData;
    ULONG    Flags;
};
```

```
struct MUIP_NListtree_FindUserDataMessage
{
    ULONG    HookID;
    APTR     User;
    APTR     UserData;
    STRPTR   NodeName;
    ULONG    Flags;
};
```

```
struct MUIP_NListtree_OpenMessage
{
```

```
        ULONG HookID;
        struct MUI_NListtree_TreeNode *TreeNode;
};

struct MUIP_NListtree_MultiTestMessage
{
    ULONG HookID;
    struct MUI_NListtree_TreeNode *TreeNode;
    LONG    SelType,
           SelFlags,
           CurrType;
};

#endif /* NLISTTREE_MCC_H */
```