MUI/NListtree_mcc.h

COLLABORATORS

	TITLE : MUI/NListtree_mcc.h		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		January 23, 2025	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

MUI/NListtree_mcc.h

1.1   MUI/NListtree_mcc.h

```
MUI/NListtree_mcc.h
```

```
Structures
```

```
MUI_NListtree_TestPos_Result    MUI_NListtree_TreeNode
MUIP_NListtree_Close            MUIP_NListtree_CloseMessage
MUIP_NListtree_CompareMessage   MUIP_NListtree_ConstructMessage
MUIP_NListtree_Copy             MUIP_NListtree_DestructMessage
MUIP_NListtree_DisplayMessage   MUIP_NListtree_Exchange
MUIP_NListtree_FindName         MUIP_NListtree_FindNameMessage
MUIP_NListtree_GetEntry         MUIP_NListtree_GetNr
MUIP_NListtree_Insert           MUIP_NListtree_Move
MUIP_NListtree_MultiTest        MUIP_NListtree_MultiTestMessage
MUIP_NListtree_NextSelected     MUIP_NListtree_Open
MUIP_NListtree_OpenMessage      MUIP_NListtree_Redraw
MUIP_NListtree_Remove           MUIP_NListtree_Rename
MUIP_NListtree_Select           MUIP_NListtree_Sort
MUIP_NListtree_TestPos
```

```
#defines
```

```
MUIA_NListtree_Active
MUIA_NListtree_ActiveList
MUIA_NListtree_AutoVisible
MUIA_NListtree_CloseHook
MUIA_NListtree_CompareHook
MUIA_NListtree_ConstructHook
MUIA_NListtree_DestructHook
MUIA_NListtree_DisplayHook
MUIA_NListtree_DoubleClick
MUIA_NListtree_DragDropSort
MUIA_NListtree_DupNodeName
MUIA_NListtree_EmptyNodes
MUIA_NListtree_FindNameHook
MUIA_NListtree_Format
MUIA_NListtree_MultiSelect
```

```
MUIA_NListtree_MultiTestHook
MUIA_NListtree_OpenHook
MUIA_NListtree_Quiet
MUIA_NListtree_Title
MUIA_NListtree_TreeColumn
MUIC_NListtree
MUIM_NListtree_Close
MUIM_NListtree_Copy
MUIM_NListtree_Exchange
MUIM_NListtree_FindName
MUIM_NListtree_GetEntry
MUIM_NListtree_GetNr
MUIM_NListtree_Insert
MUIM_NListtree_Move
MUIM_NListtree_MultiTest
MUIM_NListtree_NextSelected
MUIM_NListtree_Open
MUIM_NListtree_Redraw
MUIM_NListtree_Remove
MUIM_NListtree_Rename
MUIM_NListtree_Select
MUIM_NListtree_Sort
MUIM_NListtree_TestPos
MUIV_NListtree_Active_First
MUIV_NListtree_Active_FirstVisible
MUIV_NListtree_Active_LastVisible
MUIV_NListtree_Active_Off
MUIV_NListtree_Active_Parent
MUIV_NListtree_ActiveList_Off
MUIV_NListtree_AutoVisible_Expand
MUIV_NListtree_AutoVisible_FirstOpen
MUIV_NListtree_AutoVisible_Normal
MUIV_NListtree_AutoVisible_Off
MUIV_NListtree_Close_ListNode_Active
MUIV_NListtree_Close_ListNode_Parent
MUIV_NListtree_Close_ListNode_Root
MUIV_NListtree_Close_TreeNode_Active
MUIV_NListtree_Close_TreeNode_All
MUIV_NListtree_Close_TreeNode_Head
MUIV_NListtree_Close_TreeNode_Tail
MUIV_NListtree_CompareHook_Head
MUIV_NListtree_CompareHook_LeavesBottom
MUIV_NListtree_CompareHook_LeavesMixed
MUIV_NListtree_CompareHook_LeavesTop
MUIV_NListtree_CompareHook_Tail
MUIV_NListtree_ConstructHook_Flag_AutoCreate
MUIV_NListtree_ConstructHook_String
MUIV_NListtree_Copy_DestListNode_Active
MUIV_NListtree_Copy_DestListNode_Root
MUIV_NListtree_Copy_DestTreeNode_Active
MUIV_NListtree_Copy_DestTreeNode_Head
MUIV_NListtree_Copy_DestTreeNode_Sorted
MUIV_NListtree_Copy_DestTreeNode_Tail
MUIV_NListtree_Copy_Flag_KeepStructure
MUIV_NListtree_Copy_SourceListNode_Active
MUIV_NListtree_Copy_SourceListNode_Root
MUIV_NListtree_Copy_SourceTreeNode_Active
```

```
MUIV_NListtree_Copy_SourceTreeNode_Head
MUIV_NListtree_Copy_SourceTreeNode_Tail
MUIV_NListtree_DestructHook_String
MUIV_NListtree_DisplayHook_Default
MUIV_NListtree_DoubleClick_All
MUIV_NListtree_DoubleClick_Off
MUIV_NListtree_DoubleClick_Tree
MUIV_NListtree_Exchange_ListNode1_Active
MUIV_NListtree_Exchange_ListNode1_Root
MUIV_NListtree_Exchange_ListNode2_Active
MUIV_NListtree_Exchange_ListNode2_Root
MUIV_NListtree_Exchange_TreeNode1_Active
MUIV_NListtree_Exchange_TreeNode1_Head
MUIV_NListtree_Exchange_TreeNode1_Tail
MUIV_NListtree_Exchange_TreeNode2_Active
MUIV_NListtree_Exchange_TreeNode2_Down
MUIV_NListtree_Exchange_TreeNode2_Head
MUIV_NListtree_Exchange_TreeNode2_Tail
MUIV_NListtree_Exchange_TreeNode2_Up
MUIV_NListtree_FindName_Flag_Activate
MUIV_NListtree_FindName_Flag_FindPart
MUIV_NListtree_FindName_Flag_SameLevel
MUIV_NListtree_FindName_Flag_Visible
MUIV_NListtree_FindName_ListNode_Active
MUIV_NListtree_FindName_ListNode_Root
MUIV_NListtree_FindNameHook_CaseInsensitive
MUIV_NListtree_FindNameHook_CaseSensitive
MUIV_NListtree_FindNameHook_Part
MUIV_NListtree_FindNameHook_PartCaseInsensitive
MUIV_NListtree_GetEntry_Flag_SameLevel
MUIV_NListtree_GetEntry_Flag_Visible
MUIV_NListtree_GetEntry_ListNode_Active
MUIV_NListtree_GetEntry_ListNode_Root
MUIV_NListtree_GetEntry_Position_Active
MUIV_NListtree_GetEntry_Position_Head
MUIV_NListtree_GetEntry_Position_Next
MUIV_NListtree_GetEntry_Position_Parent
MUIV_NListtree_GetEntry_Position_Previous
MUIV_NListtree_GetEntry_Position_Tail
MUIV_NListtree_GetEntry_TreeNode_Active
MUIV_NListtree_GetNr_Flag_CountAll
MUIV_NListtree_GetNr_Flag_CountLevel
MUIV_NListtree_GetNr_Flag_CountList
MUIV_NListtree_GetNr_Flag_ListEmpty
MUIV_NListtree_GetNr_TreeNode_Active
MUIV_NListtree_Insert_Flag_Active
MUIV_NListtree_Insert_Flag_NextNode
MUIV_NListtree_Insert_ListNode_Active
MUIV_NListtree_Insert_ListNode_LastInserted
MUIV_NListtree_Insert_ListNode_Root
MUIV_NListtree_Insert_PrevNode_Active
MUIV_NListtree_Insert_PrevNode_Head
MUIV_NListtree_Insert_PrevNode_Sorted
MUIV_NListtree_Insert_PrevNode_Tail
MUIV_NListtree_Move_Flag_KeepStructure
MUIV_NListtree_Move_NewListNode_Active
MUIV_NListtree_Move_NewListNode_Root
```

```
MUIV_NListtree_Move_NewTreeNode_Active
MUIV_NListtree_Move_NewTreeNode_Head
MUIV_NListtree_Move_NewTreeNode_Sorted
MUIV_NListtree_Move_NewTreeNode_Tail
MUIV_NListtree_Move_OldListNode_Active
MUIV_NListtree_Move_OldListNode_Root
MUIV_NListtree_Move_OldTreeNode_Active
MUIV_NListtree_Move_OldTreeNode_Head
MUIV_NListtree_Move_OldTreeNode_Tail
MUIV_NListtree_MultiSelect_Always
MUIV_NListtree_MultiSelect_Default
MUIV_NListtree_MultiSelect_Flag_AutoSelectChilds
MUIV_NListtree_MultiSelect_None
MUIV_NListtree_MultiSelect_Shifted
MUIV_NListtree_NextSelected_End
MUIV_NListtree_NextSelected_Start
MUIV_NListtree_Open_ListNode_Active
MUIV_NListtree_Open_ListNode_Parent
MUIV_NListtree_Open_ListNode_Root
MUIV_NListtree_Open_TreeNode_Active
MUIV_NListtree_Open_TreeNode_All
MUIV_NListtree_Open_TreeNode_Head
MUIV_NListtree_Open_TreeNode_Tail
MUIV_NListtree_Redraw_Active
MUIV_NListtree_Redraw_All
MUIV_NListtree_Redraw_Flag_Nr
MUIV_NListtree_Remove_ListNode_Active
MUIV_NListtree_Remove_ListNode_Root
MUIV_NListtree_Remove_TreeNode_Active
MUIV_NListtree_Remove_TreeNode_All
MUIV_NListtree_Remove_TreeNode_Head
MUIV_NListtree_Remove_TreeNode_Tail
MUIV_NListtree_Rename_Flag_NoRefresh
MUIV_NListtree_Rename_Flag_User
MUIV_NListtree_Rename_TreeNode_Active
MUIV_NListtree_Select_Active
MUIV_NListtree_Select_All
MUIV_NListtree_Select_Ask
MUIV_NListtree_Select_Flag_Force
MUIV_NListtree_Select_Off
MUIV_NListtree_Select_On
MUIV_NListtree_Select_Toggle
MUIV_NListtree_Select_Visible
MUIV_NListtree_Sort_Flag_RecursiveAll
MUIV_NListtree_Sort_Flag_RecursiveOpen
MUIV_NListtree_Sort_ListNode_Active
MUIV_NListtree_Sort_ListNode_Root
MUIV_NListtree_Sort_TreeNode_Active
MUIV_NListtree_TestPos_Result_Above
MUIV_NListtree_TestPos_Result_Below
MUIV_NListtree_TestPos_Result_None
MUIV_NListtree_TestPos_Result_Onto
MUIV_NListtree_TestPos_Result_Sorted
NListtreeObject
TNF_FROZEN
TNF_LIST
TNF_NOSIGN
```

```
TNF_OPEN
TNF_SELECTED
tpr_Flags
```

1.2 MUI/NListtree_mcc.h

```
/*
**
**      MCC_NListtree (c)1999-2000 by Carsten Scholling
**
**      Class of the Magic User Interface.
**
**      NListtree_mcc_private.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 // *** [. ↵
   SG]
#define MUIA_NListtree_ActiveList                      0xfec81202 // *** [.. ↵
   G]
#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 // *** [ ↵
   ISG]
#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 ←
    .]


/*** 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_ConstructHook_String               -1
#define MUIV_NListtree_ConstructHook_Flag_AutoCreate      (1<<15)

#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_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_FindNameHook_CaseSensitive         0
#define MUIV_NListtree_FindNameHook_CaseInsensitive       -1
#define MUIV_NListtree_FindNameHook_Part                  -2
#define MUIV_NListtree_FindNameHook_PartCaseInsensitive   -3
```

```
#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_MultiSelect_None                 0
#define MUIV_NListtree_MultiSelect_Default              1
#define MUIV_NListtree_MultiSelect_Shifted              2
#define MUIV_NListtree_MultiSelect_Always               3

#define MUIV_NListtree_MultiSelect_Flag_AutoSelectChilds    (1<<15)
```

```
/*** 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



/*** Method structs ***/

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


struct MUIP_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_FindName {
    ULONG   MethodID;
    struct  MUI_NListtree_TreeNode *ListNode;
    STRPTR  Name;
    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;
};


/*** 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_FindPart                   (1<<12)


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


#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_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_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)


/*** 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;
};


struct MUIP_NListtree_FindNameMessage
{
    ULONG   HookID;
    STRPTR  Name;
    STRPTR  NodeName;
    APTR    UserData;
    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 */
```