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Rocky Enterprise Linux 9.2 Manual Pages on command 'XauGetBestAuthByAddr.3'

$ man XauGetBestAuthByAddr.3

Xau(3) Library Functions Manual Xau(3)

NAME

Xau library: XauFileName, XauReadAuth, XauLockAuth, XauUnlockAuth, XauWriteAuth, XauDis?

poseAuth, XauGetAuthByAddr, XauGetBestAuthByAddr - X authority database routines

SYNOPSIS

```
#include <X11/Xauth.h>

typedef struct xauth {

    unsigned short  family;

    unsigned short  address_length;

    char    *address;

    unsigned short  number_length;

    char    *number;

    unsigned short  name_length;

    char    *name;

    unsigned short  data_length;

    char    *data;

} Xauth;

char *XauFileName (void);

Xauth *XauReadAuth (FILE *auth_file);

int XauWriteAuth (FILE *auth_file, Xauth *auth);

Xauth *XauGetAuthByAddr (unsigned short family, unsigned short

    address_length, const char *address, unsigned short

    number_length, const char *number, unsigned short
```

```
        name_length, const char *name);
    Xauth *XauGetBestAuthByAddr (unsigned short family, unsigned short
        address_length, const char *address, unsigned short
        number_length, const char *number, int types_length,
        char **types, const int *type_lengths);
    int XauLockAuth (const char *file_name, int retries, int
        timeout, long dead);
    int XauUnlockAuth (const char *file_name);
    int XauDisposeAuth (Xauth *auth);
```

DESCRIPTION

XauFileName generates the default authorization file name by first checking the XAUTHORITY environment variable if set, else it returns $HOME/.Xauthority. This name is statically allocated and should not be freed.

XauReadAuth reads the next entry from auth_file. The entry is not statically allocated and should be freed by calling XauDisposeAuth.

XauWriteAuth writes an authorization entry to auth_file. It returns 1 on success, 0 on failure.

XauGetAuthByAddr searches for an entry which matches the given network address/display number pair. The entry is not statically allocated and should be freed by calling XauDisposeAuth.

XauGetBestAuthByAddr is similar to XauGetAuthByAddr, except that a list of acceptable authentication methods is specified. Xau will choose the file entry which matches the earliest entry in this list (e.g., the most secure authentication method). The types argument is an array of strings, one string for each authentication method. types_length specifies how many elements are in the types array. types_lengths is an array of integers representing the length of each string.

XauLockAuth does the work necessary to synchronously update an authorization file. First it makes two file names, one with ``-c'' appended to file_name, the other with ``-l'' appended. If the ``-c'' file already exists and is more than dead seconds old, XauLockAuth removes it and the associated ``-l'' file. To prevent possible synchronization troubles with NFS, a dead value of zero forces the files to be removed. XauLockAuth makes retries attempts to create and link the file names, pausing timeout seconds between each attempt. XauLockAuth returns a collection of values depending on the results:

LOCK_ERROR

A system error occurred, either a file_name which is too long, or an unexpected failure from a system call. errno may prove useful.

LOCK_TIMEOUT

retries attempts failed

LOCK_SUCCESS

The lock succeeded.

XauUnlockAuth undoes the work of XauLockAuth by unlinking both the ``-c'' and ``-l'' file names.

XauDisposeAuth frees storage allocated to hold an authorization entry.

SEE ALSO

xauth(1), xdm(1)

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