

**NAME**

**krb5\_copy\_host\_realm**, **krb5\_free\_host\_realm**, **krb5\_get\_default\_realm**, **krb5\_get\_default\_realms**, **krb5\_get\_host\_realm**, **krb5\_set\_default\_realm** - default and host realm read and manipulation routines

**LIBRARY**

Kerberos 5 Library (libkrb5, -lkrb5)

**SYNOPSIS**

```
#include <krb5.h>
```

*krb5\_error\_code*

```
krb5_copy_host_realm(krb5_context context, const krb5_realm *from, krb5_realm **to);
```

*krb5\_error\_code*

```
krb5_free_host_realm(krb5_context context, krb5_realm *realmlist);
```

*krb5\_error\_code*

```
krb5_get_default_realm(krb5_context context, krb5_realm *realm);
```

*krb5\_error\_code*

```
krb5_get_default_realms(krb5_context context, krb5_realm **realm);
```

*krb5\_error\_code*

```
krb5_get_host_realm(krb5_context context, const char *host, krb5_realm **realms);
```

*krb5\_error\_code*

```
krb5_set_default_realm(krb5_context context, const char *realm);
```

**DESCRIPTION**

**krb5\_copy\_host\_realm**() copies the list of realms from *from* to *to*. *to* should be freed by the caller using *krb5\_free\_host\_realm*.

**krb5\_free\_host\_realm**() frees all memory allocated by *realmlist*.

**krb5\_get\_default\_realm**() returns the first default realm for this host. The realm returned should be freed with **free**().

**krb5\_get\_default\_realms**() returns a NULL terminated list of default realms for this context. Realms returned by **krb5\_get\_default\_realms**() should be freed with **krb5\_free\_host\_realm**().

**krb5\_get\_host\_realm()** returns a NULL terminated list of realms for *host* by looking up the information in the [domain\_realm] in *krb5.conf* or in DNS. If the mapping in [domain\_realm] results in the string *dns\_locate*, DNS is used to lookup the realm.

When using DNS to resolve the domain for the host a.b.c, **krb5\_get\_host\_realm()** looks for a TXT resource record named *\_kerberos.a.b.c*, and if not found, it strips off the first component and tries again (*\_kerberos.b.c*) until it reaches the root.

If there is no configuration or DNS information found, **krb5\_get\_host\_realm()** assumes it can use the domain part of the *host* to form a realm. Caller must free *realmlist* with **krb5\_free\_host\_realm()**.

**krb5\_set\_default\_realm()** sets the default realm for the *context*. If NULL is used as a *realm*, the [libdefaults]default\_realm stanza in *krb5.conf* is used. If there is no such stanza in the configuration file, the **krb5\_get\_host\_realm()** function is used to form a default realm.

#### SEE ALSO

free(3), krb5.conf(5)