

NetInfo MessageSet

The *NetInfo* messageset contains a set of messages used to pass information between the layers of the network stack. The reason this information is carried in messages, rather than through shared-library calls is that one or other endpoint of the message is an optional module, or a class or modules (for example an ethernet interface driver).

Message Definition

NETADDRESS

```
typedef struct
{
    uchar          mac[6]           MAC-layer address
    int            events_generated flag for this driver
}ROME_T_NETADDRESS;
```

The *NETADDRESS* message is sent to a interface driver to request its low-level MAC address (usually by the Ethernet ARP process), which is returned in the *mac* field. The *events_generated* field is set to *TRUE* if the driver generates events for this interface (for example PCMCIA card removal events). The message should be sent through a *FILE* interface, as the *dest_context* field in the message may be used by the driver to identify which of a number of interfaces is being requested

NIS_MATCH

```
typedef struct
{
    char          *domain          NIS domain name
    char          *map             NIS map name
    char          *key             key in map
    char          *result          output buffer pointer
    int           rlen             length of returned data
}ROME_T_NIS_MATCH;
```

The *NIS_MATCH* message requests an NIS map lookup. The receiving process issues a lookup request for *key* in *map* in the NIS domain *domain*. If the *domain* is *NULL* or zero-length, the default configured domain is used. The result is returned in the *result* buffer and *rlen* is set to the number of valid bytes in the result. It is assumed that the supplied buffer is large enough to hold the data.

The *NIS* module further describes this processing, and the configuration of the NIS client. The *nis_match* routine in that module is the usual API for this message.

RESOLVE

```
typedef struct
{
    char          *name          domain name
    uint         ipaddr        returned IP address
}ROME_T_RESOLVE;
```

The *RESOLVE* message requests a name-to-IP address mapping from the Domain Name Service. The *name* parameter should point to a machine name (either fully-qualified or a simple name within the local domain). The result is returned in the *ipaddr* field in the reply (if the replied *errno* is 0). The *dns_resolve* routine in the *DNS* module is the usual API for this message.