NameFLOW-Paradise

A Directory for Europe...and beyond

The directory: what does it mean?

NameFLOW-Paradise today means: access to contact details of over a million people, thousands of organisations in tens of countries, directly from your desktop.

How did it come about?

NameFLOW-Paradise started five years ago as part of a pan-European networking project for the research community, called PARADISE. Its purpose was to establish an international, standardised, distributed directory to store contact details of researchers, including e-mail addresses, so that members of the community could find information about other organisations and people quickly and easily. Additional data, such as electronic security keys and World Wide Web (WWW) addresses, have been added as the directory has evolved. When the PARADISE project commenced, no such directory existed. Even today, other directory initiatives lack the range, scope, and structure of NameFLOW-Paradise.

The NameFLOW-Paradise service is based on X.500 technology. X.500 makes it possible to search hundreds of locations spread all over the world in one go. In addition to relatively straightforward information such as contact details it can store several other types of data in a distributed manner as well.

How does it work?

NameFLOW-Paradise is a huge collection of local databases which are all linked together. At the lowest level individuals or departments manage a set of entries. Their set of entries is linked to a larger organisational directory, which is linked to a national directory. In most cases the national research networks (DANTE's customers) manage the directory at a national level. DANTE organises the international component on their behalf.

What's going on at the moment?

X.500 has held promise for years. When will it fulfil that promise? A number of things are happening at the moment.

X.500 is an OSI (Open Systems Interconnection) standard, the technical protocols and implementations of which are improved when possible. While so far the service has been based on the 1988 version of the standard (in fact mostly on one particular implementation called QUIPU), the 1993 version is currently being piloted. A substantial number of vendors already have software based on the 1993 version available, but making it work in a large international distributed directory such as NameFLOW-Paradise is a different story. The software is new, tests have been few and of a limited geographic scale.

The 1993 pilot which DANTE and the NameFLOW-Paradise participants are undertaking at the

moment, is of crucial importance for the future of the service. It means that the service would be no longer primarily based on a particular implementation used in the research community, but that it could become the basis for further directory developments in Europe and beyond. There is no international networked directory with a coverage which comes close to that of NameFLOW-Paradise.

Of great importance is the growing acceptance of X.500 in the Internet community. A lightweight Directory Access Protocol (LDAP) has been specially designed to accommodate both 'pure' X.500 and Internet requirements. In April 1996 Netscape, Microsoft, Novell and 40 other companies announced that their products will support LDAP.

The future is relatively bright

An open, multi-vendor service can be the basis for a wider directory which can link up with other directory initiatives, for example emerging directories based on LDAP set up by Internet Service Providers (ISPs), and existing telephone directories.

Bringing directory initiatives together, both national and international, is high on DANTEÕs agenda. The ultimate goal is to create a directory service which integrates existing directories and technologies, to the benefit of the end user.

The technology is here, but the organisational challenges are here as well. There are a number of major issues that have to be resolved in the areas of security, privacy and, very importantly, quality of service to the end user. DANTE, together with its partners, is looking into all of these topics.

Together with the national university networks it is representing, DANTE is playing a major role in taking directories forward in Europe. Another example where the research networking community takes a leading role in the development and implementation of pan-European network services.

Accessing NameFLOW-Paradise

The directory can be accessed at the national level, via telnet, and increasingly via the WWW as well. A listing of all known national publicly accessible Directory Interfaces is available on DANTE's NameFLOW-Paradise WWW pages. (http://www.dante.net/np/pdi.html)

Searching the directory

Initially the only way to find information in the directory was by 'browsing' in it: leafing through the hierarchical structure until the correct point is reached. This is straightforward but time-consuming. The introduction of search engines, e.g. 'Directory Enquiry' (DE), was a big improvement as it allowed power-searching (searching all organisations in a country at the same time) and more user-friendly naming (and using wildcards) in queries.

The next step forward is seen in the development of indexes which will allow much more efficient searches and thereby substantially decreased response times - one of the main concerns of users. It can also facilitate the usage of the directory as Yellow Pages, listing by category rather than name.

Joining NameFLOW-Paradise

NameFLOW-Paradise is a combination of nationally organised directory services and many parties are involved in creating the final 'product'. Organisations that wish to join the directory should contact the national directory manager in their countries. In most cases that will be the national research network, although 'National Directory Forums' have already been established in a number of countries (a collaboration between all the parties interested in the development and management of an integrated national directory service).

DANTE maintains a list of contact persons in all participating countries. An easy way to find out who is the national contact person is to contact DANTE, or to search the list on our WWW server. The location of the contact file: http://www.dante.net/np/contacts.html

DANTE's role

What does DANTE do, exactly? A glance at our WWW server will give the answer (http://www.dante.net/nameflow.html). A few examples: managing the necessary operational services, coordinating development activities and liaising with related organisations. In short: promoting the development and visibility of directories in Europe on behalf of the organisations involved.

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