



## FastTracker Fact Sheet: Directory Integration Facility

### *Purpose*

For smaller companies, the **FastTracker Policy Manager** application is perfectly adequate for defining company organizations/groups, the employees within them, and the applicable Internet policies. But for companies where FastTracker monitors a large number of employees, the **FastTracker Directory Integration Facility (FT/DIF)** simplifies this task. FT/DIF captures information about an organization from the company's network directory. It supports LDAP-compliant directories, such as Microsoft's *Active Directory*, or Novell's *eDirectory*.

FT/DIF is Windows-based software that a company's administrator runs on an as-needed basis to track updates to the directory contents. FT/DIF extracts "organization chart" data out of the customer's network directory and securely transmits it to FastTracker's reporting server. The customer organizational structure will then be reflected in the FastTracker database, where it is used for Internet policy management and reporting. This will save larger customers a lot of work manually setting up FastTracker group/user information.

In most cases, FT/DIF can be run without special directory authority, as the data it collects is usually marked as publicly-accessible within the corporate network; information that can be queried and retrieved anonymously.

### *Templates for Organizational Mapping*

Various network software vendors implement their LDAP directories somewhat differently, and individual network administrators organize them in different ways. To handle this, FT/DIF provides a set of selectable templates to provide mapping between directory data and the organizational data which FastTracker uses. The administrator can then tailor the information captured to fit the way the directory has been constructed, so that FastTracker will appropriately reflect the true organization of the company.

For example, although directory systems provide the ability to organize directories into hierarchies, using "Organizational Unit" objects, many network administrators create a framework that is tailored more to the needs of network management than one that reflects the true structure of an organization. Therefore, a template can be selected in which the organizational structure is described in terms of other directory attributes, such as "Division" and/or "Department".

Similarly, different directory products store the same information in different attributes. For example, the Microsoft *Active Directory* uses a special attribute to store the user's login name, which is the key value used by FastTracker to identify the user. Novell's *eDirectory*, on the other hand, places this information in the "Common Name" portion of the directory entry. FT/DIF recognizes this difference and collects the information from the appropriate attribute.

FT/DIF integrates with LDAP directories without requiring changes in the structure or usage of the existing directory, but instead adapts itself to the directory. The template-based design makes this possible.

Templates provided with the current version of FT/DIF are as follows:

**For Microsoft Active Directory:**

*MS: Distinguished Name* With this template, the higher-level components of the LDAP “distinguished name” of the user are extracted from the directory and used to define organizational structure. The user’s login name is taken from the samAccountName attribute, in keeping with the Microsoft convention.

*MS: Division/Department* With this template, the MS Active Directory attributes labeled Division and Department are extracted and used to form the organizational hierarchy of the users.

**For Novell eDirectory:**

*Standard Novell Template* This template is similar to the Distinguished Name template used for Microsoft Active Directory, except that the user’s login name is taken from the “cn=” (common name) attribute of the distinguished name.

**NOTE:** Many commonly-used commercial human resource database products, such as PeopleSoft and SAP’s R3 include functionality providing for integration of the HR database with network directories. If you have such a system, using such functions will simplify maintenance and updating of the appropriate network directory attributes, as well as ensuring a higher level of consistency and uniformity.

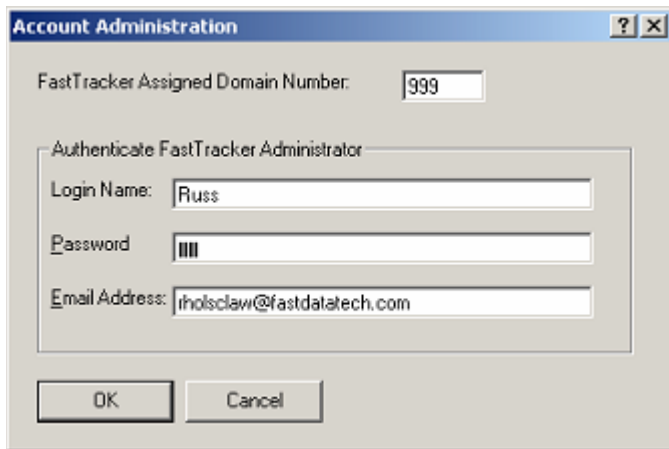
## ***Executing FT/DIF***

You run FT/DIF separately for each FastTracker domain that has been assigned by Fast Data Technology to your organization. Many organizations will use a single domain. For each domain, FastTracker Support personnel will initially assign a domain number, will create a “root” group definition in FastTracker, and will set up a FastTracker administrator definition for the root group. Before running FT/DIF, you should know the domain number and the root group administrator’s FastTracker ID and password.

You initiate FT/DIF by running **ftdifget.exe**, the data-collection program supplied to you by Fast Data Technology. The program must be run from within your own network, so as to gain access to information from your own network directory.

## ***Account Settings Dialog***

On starting the program the first time, you will be prompted for identifying credentials. These will be validated before any updates can be done



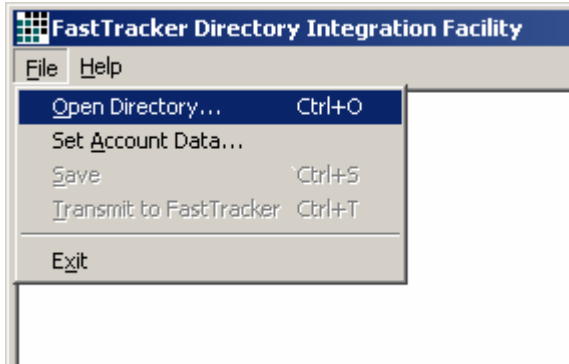
The screenshot shows a dialog box titled "Account Administration" with a standard Windows window border. It contains the following fields and controls:

- "FastTracker Assigned Domain Number:" with a text box containing "999".
- A section titled "Authenticate FastTracker Administrator" containing:
  - "Login Name:" with a text box containing "Russ".
  - "Password:" with a text box containing three vertical bars (masked).
  - "Email Address:" with a text box containing "rholsclaw@fastdatatech.com".
- "OK" and "Cancel" buttons at the bottom.

If you wish to change this account data at some later point, select File > Set Account Data...

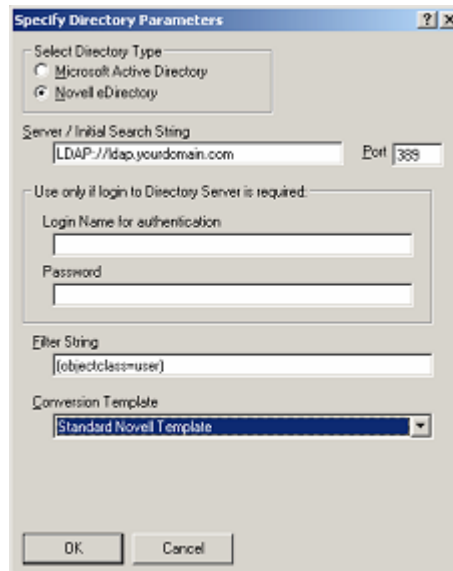
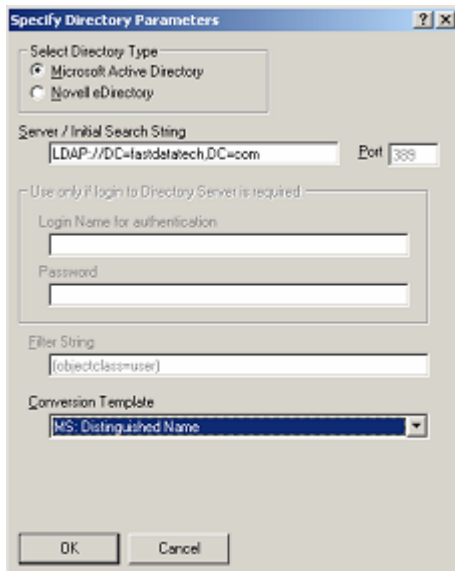
## Open Directory Dialog Box

To open view your directory information, select File > Open Directory...



You are initially prompted for the directory type and its network server location, and for a selection of a “conversion template” for translating this data for FastTracker use.

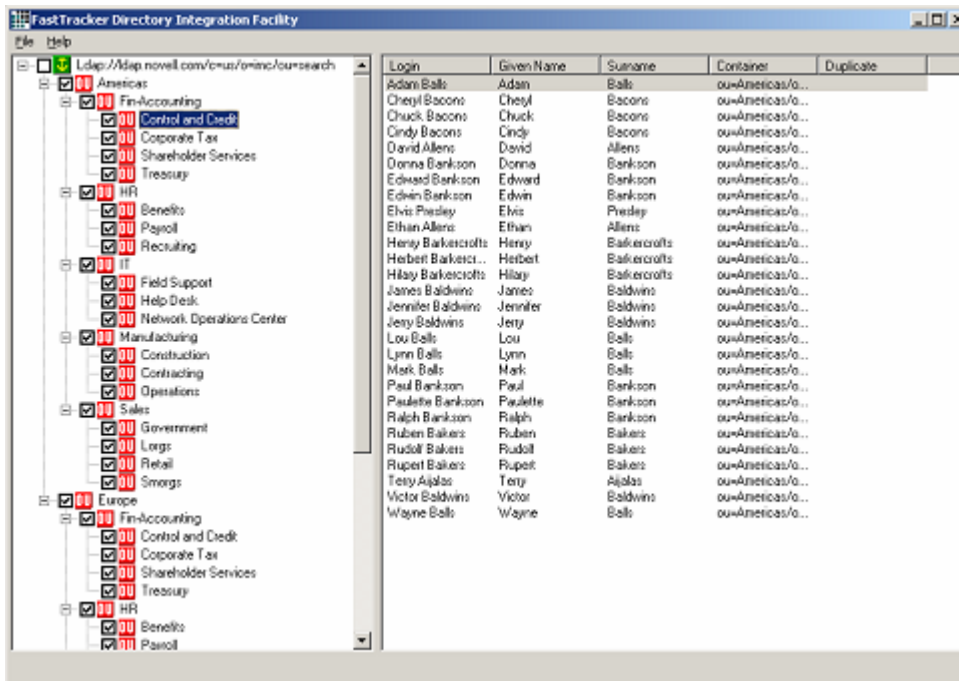
- If *Active Directory* is selected, a default server location and search string are automatically filled in.
- The following fields only apply to *eDirectory*:
  - Port -- for LDAP server (389 is the default)
  - Login Name and Password -- for directory server authentication
  - Filter String -- to selectively narrow the scope of the data collected



## Main Directory Display

Clicking 'OK' on the 'Specify Directory Parameters' screen will produce a display similar to the following. The hierarchy of your customer organization is shown, as extracted from the directory. The extracted data includes:

- User ID's (Login names) in the company
- First and Last Name of each user
- Data placing that user in the organizational hierarchy



The screenshot shows the 'FastTracker Directory Integration Facility' window. On the left, there is a tree view of the organizational hierarchy under the LDAP path 'Ldap://ldap.novell.com/c/us/ominc/oursearch'. The hierarchy includes 'Americas' and 'Europe', each with sub-organizations like 'Fin-Accounting', 'HR', 'IT', 'Sales', and 'Government'. On the right, a table displays the extracted user data.

Login	Given Name	Surname	Container	Duplicate
Adam Balls	Adam	Balls	ou=Americas/o...	
Cheryl Bacons	Cheryl	Bacons	ou=Americas/o...	
Chuck Bacons	Chuck	Bacons	ou=Americas/o...	
Cindy Bacons	Cindy	Bacons	ou=Americas/o...	
David Allens	David	Allens	ou=Americas/o...	
Donna Bankson	Donna	Bankson	ou=Americas/o...	
Edward Bankson	Edward	Bankson	ou=Americas/o...	
Edwin Bankson	Edwin	Bankson	ou=Americas/o...	
Ethv Pwdsley	Ethv	Pwdsley	ou=Americas/o...	
Ethan Allens	Ethan	Allens	ou=Americas/o...	
Henry Barkscrofts	Henry	Barkscrofts	ou=Americas/o...	
Herbert Barkscrofts	Herbert	Barkscrofts	ou=Americas/o...	
Hilary Barkscrofts	Hilary	Barkscrofts	ou=Americas/o...	
James Baldwins	James	Baldwins	ou=Americas/o...	
Jennifer Baldwins	Jennifer	Baldwins	ou=Americas/o...	
Jerry Baldwins	Jerry	Baldwins	ou=Americas/o...	
Lou Balls	Lou	Balls	ou=Americas/o...	
Lynn Balls	Lynn	Balls	ou=Americas/o...	
Mark Balls	Mark	Balls	ou=Americas/o...	
Paul Bankson	Paul	Bankson	ou=Americas/o...	
Paulette Bankson	Paulette	Bankson	ou=Americas/o...	
Ralph Bankson	Ralph	Bankson	ou=Americas/o...	
Ruben Bakers	Ruben	Bakers	ou=Americas/o...	
Rudolf Bakers	Rudolf	Bakers	ou=Americas/o...	
Rupert Bakers	Rupert	Bakers	ou=Americas/o...	
Terry Aajalas	Terry	Aajalas	ou=Americas/o...	
Victor Baldwins	Victor	Baldwins	ou=Americas/o...	
Wayne Balls	Wayne	Balls	ou=Americas/o...	

The abbreviation **OU** that you see here is the standard LDAP term for "Organizational Unit". Similarly, the symbol **O** appears for "Organization", **C** for "Company", **L** for "Locality", and **DC** for "Domain component", as these abbreviations appear in standard LDAP attributes which are followed in an LDAP distinguished name by an "=" sign. For other tags, or for values not preceded by a field tag, a diamond icon on a brown background is shown. The display is similar to the one you get from Windows Explorer when you look at the files on your hard disk. In this case, however, we're displaying information about the people in an organization, as contained in the LDAP directory.

When you click the name of a group on the left side of the display, the employees for that group are displayed on the right side. If a duplicate 'Login' is found in your LDAP database, the **Duplicate** column will be marked. FastTracker cannot distinguish among duplicate Login names, so only the organization data and full name associated with the first instance encountered will be transferred to the FastTracker database. You must resolve this duplication problem in your LDAP database to avoid this. If you do not, all web activity by users using the same login name will be tracked as that of a single user.

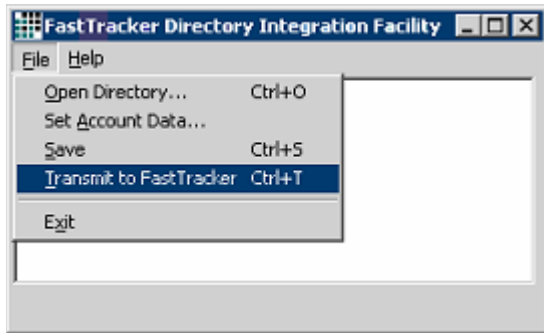
Each group name having a check mark will be included as part of the name hierarchy registered to FastTracker. Sometimes, there will be “layers” of the hierarchy defined in LDAP that exist only for network administration purposes. Using this FT/DIF screen, you can “clean up” the structure by removing the check marks next to any such layers. FT/DIF will automatically “uncheck” any layers that have no directly associated employees and no “sibling” members. This automatic layer removal will probably suffice for most purposes, but you may remove others.

**Note 1:** Removing a check mark does NOT remove employees, just “layers” in the organizational hierarchy to be defined to FastTracker. If employees are directly associated with a group that is unchecked, then for FastTracker purposes the employees will be considered to belong to the next higher group in the hierarchy.

**Note 2:** FastTracker billing is based upon the number of users who actually perform web-browsing activity, not upon the total number of Login names defined to the FastTracker database. Therefore special “user” names used for administrative and other purposes will not be counted as users being tracked unless those ID’s are actually used in conjunction with web browsing.

## *Save and Transmit*

After you have reviewed the collected data, you may **Save** it and **Transmit** it to FastTracker. Changes may be saved without doing an immediate transmission; the next time you open FT/DIF, your data will be displayed as you last saved it. Your latest changes must be saved before transmission is allowed. The transmission is via Internet File Transfer Protocol, and destination parameters are automatically provided.



Upon receiving the transmission, FastTracker will automatically define a group within the FastTracker database for each group that had a check mark next to it, and will create user records within those groups for each associated employee. This will usually occur within a few minutes of transmission. You will be notified of completion via an automatic email, at the email address you provided in your account data. Emails will be sent as well for any exceptions/problems encountered during our processing.

## *FastTracker Policy Manager*

Using the FastTracker Policy Manager application (requires login at <https://admin.fastdatatech.com/operations/>), you can define administrators with the authority to view and/or modify information about each group. An administrator has authority for his group and for all subgroups beneath it in the hierarchy. While FT/DIF defines the group/user structure, the Policy Manager must be used to set any unique Internet filtering policies that apply to individual groups. For more information about managing policies, see <http://www.fastdatatech.com/documentation/using-policy-manager.pdf> or click on the HELP option when using Policy Manager.

The Policy Manager can also be used to supplement the group/user structure definitions that FT/DIF created for you. For example, you may choose to define additional groups with special Internet policy rules, and then move users into those groups.

## **Limitations**

- Once you have “manually” placed a user into a group that was not defined using FT/DIF, a subsequent transmission from FT/DIF will not override the manual group placement; that user will be left in that group. You would need to move the user back into an FT/DIF-defined group before FT/DIF could place the user.
- Groups that are currently defined via FT/DIF cannot be removed.