Maintaining Files and Objects Referenced in ToolTalk Messages 6

ToolTalk messages can reference files of interest or ToolTalk objects. The ToolTalk service maintains information about files and objects, and needs to be informed of changes to these files or objects.

The ToolTalk service provides wrapped shell commands to move, copy, and remove files. These commands inform the ToolTalk service of any changes.

6.1 ToolTalk-Enhanced Shell Commands

The ToolTalk-enhanced shell commands described in Table 6-1 first invoke the standard shell commands with which they are associated (for example, `ttmv` invokes `mv`) and then update the ToolTalk service with the file changes. It is necessary to use the ToolTalk-enhanced shell commands when working with files that contain ToolTalk objects.

Table 6-1 ToolTalk-Enhanced Shell Commands

Command	Definition	Syntax
ttcp	Copies files that contain objects.	`ttcp` *source-file destination-file*
ttmv	Renames files that contain objects.	`ttmv` *old new*
ttrm	Removes files that contain objects.	`ttrm` *file*
ttrmdir	Removes empty directories that are associated with ToolTalk objects. You also use this command to create an object spec for a directory; for example, if a directory is mentioned in a file-scoped message. When an object spec is created, the path name of a file or directory is supplied.	`ttrmdir` *directory*
tttar	Archives and de-archives files that contain ToolTalk objects.	`tttar c|t|x` *pathname1 pathname2*

You can cause the ToolTalk-enhanced shell commands to be executed when the standard shell commands are invoked. To do this, alias the ToolTalk-enhanced shell commands in the shell startup file so that the enhanced commands appear as standard shell commands.

```
# ToolTalk-aware shell commands in .cshrc
alias mv       ttmv
alias cp       ttcp
alias rm       ttrm
alias rmdir    ttrmdir
alias tar      tttar
```

6.2 Maintaining and Updating ToolTalk Databases

Information about files and objects in the ToolTalk databases can become outdated if the ToolTalk-enhanced shell commands are not used to copy, move, and remove them. For example, you can remove a file *old_file* that contains ToolTalk objects from the file system with the standard `rm` command. However, because the standard shell command does not inform the ToolTalk service that *old_file* has been removed, the information about the file and the individual objects remains in the ToolTalk database.

To remove the file and object information from the ToolTalk database, use the command:

```
ttrm -L old_file
```

6.3 Displaying, Checking, and Repairing Databases

Use the ToolTalk database utility `ttdbck` to display, check, or repair ToolTalk databases. You also use the `ttdbck` utility for operations such as:

- Removing all ToolTalk objects of a given otype; for example, an otype that has been de-installed
- Moving specific ToolTalk objects from one file to another
- Searching for all ToolTalk object that reference nonexistent files

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Note – ToolTalk databases are typically accessible only to root; therefore, the `ttdbck` utility is normally run as root.

6