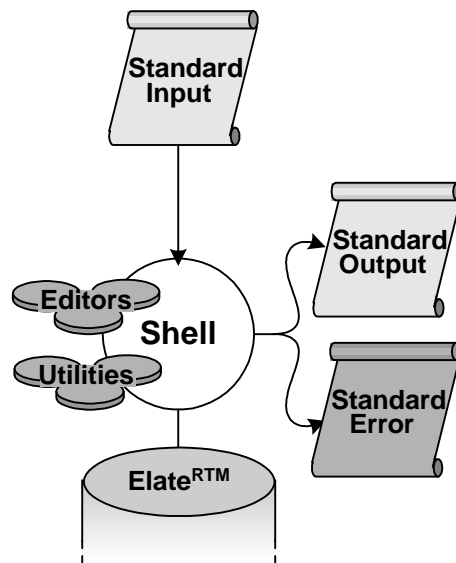# Shell Fact Sheet

Introduction to the Shell

Elate[RTM] includes a wide range of utilities for users and programmers. The most vital of these utilities is, of course, the Elate shell, which provides an interface between the user and the Elate operating system.

The Elate shell is a scripting command language interpreter which provides an interface to the underlying operating system by reading and executing user commands.

The Elate shell has a similar feel to standard UNIX shells. It, however, has a much smaller footprint than a zsh shell, despite offering a comparable level of functionality. Shell interaction is fully configurable, and the writing of shell scripts is also supported.

By default, the shell reads comands from standard input if there are no command line arguments. These commands are dealt with by the command processor, which calls upon services provided by the Elate kernel when required. The results of most commands are displayed to standard output, which, unless a file has been specified, is the screen.

For editing files two editors are supplied, in addition to the Shell Line Editor which the shell uses as its command line editor.

Properties of the Shell

- **Small size**
  - Much smaller than equivalent UNIX zsh shell

- **Portable**
  - Written in Virtual Processor code

- **Posix Support**
  - Elate provides many of the standard Posix command line utilities

- **Scripting Language**
  - Flexible and powerful
  - Support for shell variables

- **Editors**
  - ed - the original UNIX editor
  - JOVE - compact and provides subset of EMACS functionality

Capabilities of the Shell

- **Multitasking**
  - Command can be run in subshell as separate process
  - Possible to 'background' process

- **Redirecting**
  - Can redirect both standard input and standard output
  - Redirection to file or process

- **Shell Line Editor**
  - Keymapping totally configurable
  - Emacs and DOS keymappings available

- **Filename Generation**
  - Can display list of files matching specified pattern ('globbing')
  - Globbing characters used in conjunction with the standard shell functions

- **Exceptions**
  - Avoids necessity for special casing
  - Only commands within the shell can cause exceptions

- **Reconfigurable Interaction**
  - Shell can be configured to be interactive or non-interactive

For more information contact:
    Tao Group
    62/63 Suttons Business Park
    Earley
    READING
    RG6 1AZ   Tel: +44 118 901 2999
    United Kingdom   Fax: +44 118 901 2963