How ETER orks   Fig.1

   METER installs itself into your system software during startup. It uses less than a tick (1/60th of a second) every 5-15 seconds to collect its data, when your Mac is not busy with other tasks. It saves its collected data during idle times (30+ seconds since your last mouse or key action), or when you shut down your Macintosh.

   METER's use of system resources is summarised in the Message line on the main display. It tells you the percentage of your Mac's processing time spent in METER's routines; the RAM used by METER's code and data; and its data file size. (The grey line under the Message text serves as a 'thermometer' to display the progress of file operations. Only very large selections or data-collection over a network will take more than a second or two.)

   You should have at least 100-200K of RAM free when you launch the METER control panel. If you plan to view many weeks' or months' worth of records, more free RAM may be needed.

   Data is stored in a file called 'METER Data' in your Preferences folder. The file grows quickly to 10-40K, but later its growth slows as daily records are archived into weeks, weeks into months, months into years. As with all software, you need to make regular datafile backups to ensure that your information is safe. Since METER cannot be guaranteed to work with new operating system versions, we also suggest that you export data to a word-processor, spreadsheet, database, or other text-handling program before you upgrade your system.

 The Owner can determine how often METER awakes, archives data, or performs other tasks.

General oncepts   Fig.2

   All METER records describe a time period, a project, a software type, a name, and some usage data.

   Projects can represent people, clients, categories, whatever you want. Each project will accumulate records of software and document use, of tasks performed, of charges accumulated. You can create as many projects as you like, but only one project is 'active' and generating records at any time. You can change your current project at any time using the METER enu. You can also move work records between different projects (see Viewing ata).

   Software can be anything you use on your computer, in most cases application programs. Again, your accumulated records will all carry the unique stamp of the software program that was active and foremost when the record was created. Sometimes this is relevant to the record, such as with documents, and sometimes less so, such as with client service charges. METER refers to software by its four-letter signature (e.g. SimpleText = 'ttxt'), its icon, and sometimes its name.

   The example shown above is a record of a document that was in use from 7:53 - 8:57 pm, for project "S&C". It was a HyperCard document called "METER Clips".

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Data ypes   Fig.3

The palette of icons along the top right of the window represent METER's record types (except for 'Prefs' and 'Help'). Clicking in the palette opens METER's various displays.

• Apps, or Applications, are processes recognised by the operating system, including a few drivers and extensions. METER watches key and mouse activity to record the time you spend working in an application, how long the app is the active (front) program, and how much time it demands from the central processing unit (CPU).

• Docs, or Documents, are actually document windows. METER records how long you actively work on a document, and how long the document window is open and frontmost. To set which applications' windows you want to record, use the Documents dialog.

• Tasks describe the work you have done. Again, METER records how long you actively work on the task, and how long the task is "open". The same task may be performed in different projects, and you can optionally set a task-specific billing rate that differs from a project's general rate. To define a new task or switch to an existing one, use the Tasks dialog.

• Earn records are created when you bill projects for your time or services according to:
    - hourly rates   (based on user/front time spent in apps/docs)
    - periodic fees   (subscription-type charges)
    - flat price   (one-time, maximum charge)
    - item charges   (includes name, price, & quantity)
   Hourly charges are pro-rated: that is, a project that you bill $60/hour will show $2 owing for 2 minutes' time, or $120 for 2 hours. Periodic fees are calculated on a minimum-charge basis: a project that you bill $60/day will show $60 owing whether you worked 2 minutes or 2 hours that day. To create a billing item or to adjust billing options, use the Charges dialog.

• Share records represent shareware fee requests, for you to pay (or not) as you choose. (See Club hare.) Like Earn records, Share records can be hourly rates, periodic fees, a flat price, or item charges. Shareware programs may use METER's Charges dialog to propose payment schemes or service charges. You can shut out such requests or alter their terms as you wish.

• Notes — NOT AVAILABLE IN DEMO