

## Features and Benefits of the Kestrel Replacement for HP1000 Computers

*Contributed by Alan Tibbetts*

<b>Kestrel Feature</b>	<b>User Benefit</b>	<b>Notes</b>
100% Software compatible with the HP1000 computer it replaces	<b>Binary Compatibility</b> Existing software runs with no modifications	Porting or redesigning software is extremely expensive and time consuming
Rack-mounted chassis fits in the same space as the HP computer that it replaces	Re-arranging the rack mounting hardware and cabling is minimized	
The Kestrel CPU can be configured to work like any HP1000 CPU model number: A400, A600, A900, etc.	Software updates can be easily tested for all CPU types that an organization owns	The configuration file sets the CPU type at boot-up. A Kestrel/QX can emulate all models of HP1000.
Virtual disc emulations are available for the most popular HP disc subsystems	No need to try to maintain a source of CS-80 or old, slow SCSI discs	An HP1000 virtual disc can be mapped to <b>any</b> host mass storage device
	Kestrel virtual disks can be much larger than the largest CS-80 discs	To make use of larger discs may require a Sysgen
	Simple, fast, easy backup by the "drag & drop" method	No more tape libraries to manage
	You can copy the virtual disk container file to <b>any</b> system reachable by the Host	Off-site backup is trivial this way
The Kestrel control program has a sophisticated mechanism to manage disc and tape container files	You can "mount & dismount" a virtually unlimited number of container files	This can expand storage in a system without requiring a Sysgen
The Kestrel supports the HP VCP program, with enhancements	No changes required to user procedures	
The Kestrel provides its own control panel program	Single-step, breakpoint, and trace capabilities that are missing from VCP	Hardware problems are not as hard to diagnose with this tool

Kestrel Feature	User Benefit	Notes
Every virtual device has a built-in I/O trace capability, like a logic analyzer	Complex problems are much easier to resolve with powerful data gathering tools	Multi-megabyte traces can be analyzed with Perl scripts and other modern tools
Legacy I/O cards are granted trace capability by the Kestrel implementation	Custom, unique I/O cards sometimes have unique problems; this makes it easier to resolve them	
Every CPU type emulated by a Kestrel has the equivalent of the A990 calendar clock available	Automatic setting of the system time on every boot is now available in all RTE systems	Users no longer need to remember to set the time on each boot
Serial ports on the HP1000 (ASIC, BACI, TTY, Muxes) can be mapped to any serial-like device in the host	Telnet sessions can be established to any HP1000 system, even ones that do not support networking	This is an extremely powerful technique to extend the reach of your existing system
	LAN-based, remote serial ports are supported	No more RS-232 cables to run
Virtual printers are provided for several HP printer subsystems	Use inexpensive Windows printers instead of obsolete HP printers	Plain-paper inkjets & lasers lower the cost of printing on the HP1000
	Any Windows print device, including PDF printers, can be mapped to RTE	Lower the cost of printing even further by not doing it at all
	Printers can be remote from the CPU	Print to a printer near you!
The HFCO program is available to RTE-A and RTE-6 users to copy files to/from the host file system	Moving data between an RTE system and the Windows environment is easy and very fast	No more sneaker-net
The RTE file system can be mirrored to the host environment via HFCO	Tools such as source control systems can be used to manage RTE systems	Use your favorite PC editor instead of EDIT/1000, if you prefer
The Kestrel is hosted in a COTS PC system	Fewer worries about obsolescence	
The Kestrel rack-mount systems are industrial duty rated	If your HP could stand it, so can the Kestrel	
A Kestrel uses less power than an A990	Reduced facilities costs	Meet <b>green</b> goals

Kestrel Feature	User Benefit	Notes
The most recent RTE software, Ver 6.210, is available from Strobe Data	Users can, if they wish, upgrade existing systems to the last available HP O/S	The last version is more capable than prior versions and includes HP bug fixes
Some RTE software module upgrades are available from Strobe Data	Even RTE 6.210 was not bug free; Strobe has found and fixed a few defects	
Many RTE utilities unique to Kestrel are provided	Good tools are always good to have	
The Kestrel interface is Windows-centric	Puts a more modern look on the mission critical systems that you depend upon	More familiar to younger staff & "pointy haired bosses"

More information on HP1000 replacement solutions is available from Migration Specialties. Contact us today to virtualize your Kestrel hardware. Upgrade the hardware, keep the software!

**E-mail:** [hp@migrationspecialties.com](mailto:hp@migrationspecialties.com)

**Phone:** 719-784-9196

**Virtual HP1000 Page:** <http://www.migrationspecialties.com/Emulator-HP1000.html>