SCEE Developer Support

Overview of services provided

Sony Computer Entertainment Europe

Developer Support Group

Version: 3.1 - 24 June 1997

1.   Developer Support

Developer Support provide an extensive range of services to the hundreds of Licensed PlayStation™ Developers throughout the SCEE region, as well as liaising with Developers in other territories who wish to be published within the SCEE market.

Our commitment encompasses the full lifecycle of games creation - from advice and guidance to prospective developers to last minute "Hot-line" support for titles being submitted for release.

1.1.   Who Can Receive Support?

All of the services provided by SCEE Developer support are available to licensed developers (i.e. LDA signatories) who have licensed a PlayStation™ "development kit" either directly from SCEE, or via a third party (after notifying SCEE).

(In addition, we can also provide support to Playstation™ developers from other territories, with the proviso that they are also local signatories of an SCEE LDA, in addition to an additional "support" agreement.)

1.2.   What Services Are Available?

Developer Support is steadily working to increase the level of services available to Playstation™ Developers:

Key services include:

- 24-hour Web site & FAX access, allowing Licensed Developers access to the latest tools and documentation, in addition to specialist advice. Web site accounts are available for <u>each</u> developer site - the initial account being created upon the licensing for the first "development kit".

- Specialist Documentation and sample code written in-house.

- Annual "PlayStation™ Developer Conferences" (although this may be replaced by a RoadShow for '97).

- Liaison with PlayStation™ R&D (in Japan) and other suppliers, to provide a single point of contact for all issues related to development.

- A product co-ordination group, to manage SCEE developer Hardware *and S*oftware stock levels, creating an efficient and secure ordering service, and providing speedy replacement of damaged or faulty systems to ensure that development can continue.

- Quarterly Newsletters. (Started September '95).

- E-mail access: *dev_support@interactive.sony.com*. (Started November '95).

- Regular "FAX-shots" of important new information. (Started November '95).

- Creation of monthly "cover-mounted" Demo Discs for the "Official PlayStation™" Magazines to help developers advertise new titles throughout Europe. (Started December '95). Contact SCEE's Richard Milner for details.

- Creation of a new "Tools & Technologies" team, tasked with creating new tools for the 3rd party developer community. (Started January '96).

- Dedicated "Hot-line" for newly licensed developers, and for titles nearing completion (*+44 (0)171 447 1680*). (Started January '96).

- Distribution of new libraries, sample code etc. on CD-ROM (Since February '96).

- Distribution of locally developed Alias/Wavefront plugins (Since February '96).

- Dedicated Third Party Lab, providing developers access to a new "Program Analyser" to fine tune their titles at Sony's offices.

- A "Web Site" targeted at new potential PlayStation™ developers (available Q1CY97)

2.   The Development Environment

2.1.   Development System (Programmer Tools)

2.1.1. PC Hardware

The majority of PlayStation™ development is centred around a standard PC. The recommended minimum is a 488/66 with 16Mb RAM, CD-ROM Drive and a half a gigabyte of local disk space (with a great deal more disk space, either local or accessible via a network, depending on the complexity of your game).

We recommend that you choose a PC with a high quality motherboard and chip-set, to prevent obscure hardware problems from blighting your development schedule. The table lists PCs which we have tested:**Error! Not a valid link.**The PC should have room for at least one ISA and one full length PCI board. You also require a television or colour monitor (ideally cable of displaying both PAL and NTSC) with RCA/Phono or SCART inputs.

Our hardware tools are all both "CE" approved - and thus can be used throughout the EC. Please check with us if your country has additional electrical certification requirements.

At the moment our software tools are predominantly DOS/Windows based, but we are moving towards Windows '95 support.

2.1.2. The PlayStation™ Development Environment

The basis of the development environment is the **PlayStation™ Development Board Set (DTL-H2500).** This is a full length PCI card that uses two slots at the rear of the PC to accommodate the controller, TV Monitor and link cable I/O sockets.

The DTL-H2500 acts exactly like a standard consumer PlayStation (either PAL or NTSC), but in addition provides the 8Mb main memory, high speed debugging capabilities and additional features such as the ability to read/write to files on the PC that are essential for core development.

In addition to the DTL-H2500, you will need to include in your order a **Controller Box (DTL-H2080)** adapter, and purchase from your local PlayStation stockist standard consumer Controllers, Memory cards etc.

In addition, you will probably wish to accurately emulate the PlayStation CD drive with a **CD-ROM Emulator Board (DTL-H2020).** This is an ISA Card which requires the purchase of an additional dedicated SCSI AV hard disk. (Any good, recent disk should be acceptable - e.g., Micropolis and Fireball drives).

In the latter stages of development (if not before), you also need to start writing PlayStation format CD-ROMS. You'll need a **CD Write Once Drive (Sony CDW-900E** or **CDU-9211S** - the former can be daisy chained together to allow multiple parallel writes). The burner is connected to your PC via a SCSI interface an Adaptec AH-154x range of ISA SCSI card, and requires **CD Write Once Generator** (DTL-S2035) software (which must run under Windows 3.11).

Test PlayStation™ CD-ROM "Gold" discs with either a **PlayStation™ CD-ROM Drive (DTL-H2510)** - an internal full-drive sized unit for your PC that works with the DTL-H2500 - and/or one or more Debugging Stations. There are three types Debugging Stations: **Japanese NTSC (DTL-H1100), US NTSC (DTL-H1101)** or **UK PAL (DTL-H1102)**, which are identical to commercially available machines but allow gold discs to be run.

You can use standard write-once Gold discs for development, but SCEE supply a range of **Write Once Mastering Discs** for creating high quality masters that must be used for submission to QA and Approvals.

(We recommend that you order these Mastering Discs at least a week in advance of your submission date - and order twice what you anticipate to allow for last minute changes.)

For development of games that support connected PlayStation's playing together, you can also buy either a standard **Link Cable (SCP-H1040)** to connect Debugging Stations together (from your local PlayStation stockist), or a **Link Cable for DTL-H2500 (DTL-H2060)** that will allow two Development Board Sets to be linked.

2.1.3. Software

The Development Board Set comes with the complete range of development software and libraries required. Use the CD-ROM distributed with your development system as the basis for your development, but review the WEB SITE to download any updates to the libraries and tools - in particular **H2500.ZIP** for up to date support for the DTL-H2500.

2.1.4. Documentation

SCEE provide a full set of documentation in PDF (Adobe Acrobat) format with the DTL-H2500 and additional manuals for the CD Emulator (hard copy), CD-ROM Generator (hard copy), Sound Artist Tool and Graphic Artist Tool (hard copy). As with all things appertaining to PlayStation™ development, we recommend that you examine the Web site for new versions.

Documentation tends to change frequently, which is why we prefer the electronic versions - however hard copies can be printed out at your site using the Acrobat Reader software provided with the manuals.

2.2.   Sound and Graphic Artist Tools

In addition to the Development System, SCEE provides a range of tools that assist you in creating the sound and graphic effects that match the power of the PlayStation.

The **Graphic Artist Tool (DTL-K2)** consists of a range of PC based and software hardware (running on a PC to the same specification as the DTL-H2000), that is designed to run independently of the Development System. One of the most useful programs is the Materials Editor. This application uses the Graphics Artist board to view an RSD 3D object and apply .TIM textures to selected polygons of the object.

The **Sound Artist Tool (DTL-K3)** provides hardware and software tools to independently perform sound data conversions from popular formats such as SMF and AIFF to the SEQ PlayStation™ format and to emulate the sound capabilities of the PlayStation™. At the time of writing these tools are only supported for the Apple Macintosh (Recommended: a 68040/PowerPC with 16Mb memory and 100Mb hard disk with 1 Nubus slot) and an NTSC Television. A PCI version is expected by the end of '96.

Unlike the Development System, described above, you do not *have to* use Sony proprietary Sound and Graphic Artist Tools to develop PlayStation™ games, you can use any tool that you prefer. (There are some DOS sound utilities available from the Web site for those who don't use PlayStation™ Sound Artist Tools).

Later in '97 the **DTL-H1500** will be introduced, allowing artists to develop directly with a debug station from their workstations via the network.

2.3.   Hardware Problems

All hardware tools provided by SCEE are covered by a warranty agreement to ensure that if they develop a hardware problem, you can continue development.

Simply fill in the appropriate Fault Report to help us pinpoint the problem (available on the Web site as FAULTREP.ZIP), and FAX it through to our Production Co-ordination team.

Once they have verified your fault, they will contact you *by telephone and request that* the faulty unit to be sent by courier (which should be returned with all its corresponding parts) and exchange it for a loaned unit. Please ensure that the any reference to Sony on the packaging is removed (to reduce theft)

3.   Assistance Throughout the Lifecycle of a Title

3.1. New Developers

New developers are provided with an individual account on the Developer Support Web site, and sent a Welcome Pack, newsletters, and information on their account, and important technical information to help get them started.

3.2. Assistance during Development

The Developer Support Web site is SCEE's primary means of communicating technical information to Developers. News postings range from the latest library releases to information on changes in PlayStation game console technology. SCEE recommends logging in at least once a week.

Licensees are encouraged to post questions via private email to our "Developer Support" address. Questions and comments can also be posted publicly in several different newsgroup areas, organised by various topics relating to PlayStation™ game console technology.

In addition to the Web site, developers may also E-mail Developer Support (*dev_support@interactive.sony.com*) or send us faxes (+44 (0)171 390 4324).

Finally, a "hot-line" telephone support is available for new developers and those in the run up to product submission.

Support includes aid with "difficult" areas of development, by example code, and by reviewing elements of the developers own code to confirm library problems. I'm afraid we cannot provide detailed help on subjects such as the setting up the 3D environment of your game for which there are many reference books.

3.3. Assistance during Product Submission

SCEE Developer Support makes available the Quality Assurance standards developed for all of the PlayStation territories, and helps arbitrate on behalf of Developers to help resolve issues with both bugs and problems with the final steps of final product creation.

Developer Support also works with SCEE Account Managers to help smooth the submission process in territories other than SCEE, by liaising with internal testing and approvals departments.

3.4. Assistance during Title Rollout

An important part of the sales of any product is related to effective marketing of new games.

Developer Support includes a "Demo Disc" team, that can work with Developers to create "demo" versions of completed games, and make them available to Official PlayStation™ Magazines in the form of cover-mounted discs produced by the "Demo Disc" team on a monthly basis.

The availability of playable "sample" programs of games available directly to consumers is new to the games console market, and has led directly to increased sales for titles advertised in this fashion.

Please review the demo discs standards on the CD, and contact SCEE's Richard Milner for more details on this subject.

4.   New Software Tools

Software tools are distributed to users either during full upgrades (via floppy disc or CD-ROM) or incrementally via the Web site.

CD-ROM based upgrades of tools, utilities, sample code and documentation are provided on a quarterly basis, synchronised with the availability of new PlayStation™ libraries.