SOMobjects Base Toolkit

Installation/Configuration Guide

Instructions for installation and configuration of the SOMobjects Base Toolkit

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SOMobjects Base Toolkit Installation/Configuration Guide

This document contains installation/configuration instructions for the SOMobjects Base Toolkit for both the AIX and OS/2 operating systems. Please refer to the appropriate section to correspond with your system:

Installation/Configuration Instructions for RISC System/6000

Installation Guide

This document describes how to install the IBM SOMobjects Base Toolkit on an IBM RISC System/6000 workstation. This product requires the IBM AIX Base Operating System, Version 3 Release 2 or higher, be already installed on the workstation. For more detailed information on installing software on a RISC System/6000 workstation, see the publication *IBM AIX Version 3.2 for RISC System/6000 Installation Guide*. (The chapter entitled "Optional Software Installation" is particularly relevant.)

How the Product is Packaged: Your Installation Options

The SOMobjects Base Toolkit consists of the following separately installable options:

- SOM Compiler
  (som.somc)
- SOM Run–time Kernel
  (som.somk)
- SOMobjects Interface Repository Framework
  (som.somi)
- SOMobjects Utility Classes, which includes
  the Utility Metaclasses and the
  Event Manager Framework
  (som.somu)
- Distributed SOM (DSOM) Framework
  (som.somd)

Any of these options can be separately installed, provided that the following prerequisites are satisfied:

- The SOM Run-time Kernel is required by all other product options.
- The Utility Classes require the Interface Repository Framework.
- Distributed SOM (DSOM) requires the Utility Classes.

Hardware Requirements for SOMobjects

The amount of space required to store the files installed by each product option is shown below. (The space shown for som.somc also includes the space required for the header files generated by the scripts provided. These scripts are described in the README file.)

som.somc	4788K	
som.somk	380K	
som.somi	728K	
som.somu	1408K	
som.somd	732K	
all options	**8036K**	**(8 Megabytes)**

The minimum total memory that a workstation needs in order to get acceptable performance from the SOMobjects Base Toolkit is 10 Megabytes. Part of this memory is assumed to be in use (by AIXWindows, a clock display, and other applications that are typically running continuously). Actual performance will be affected by the number of applications running and their memory requirements.

Software Requirements for SOMobjects

In addition to the prerequisites given above, the Event Manager Framework (included in the som.somu option) requires the Transmission Control Protocol/Internet Protocol software (TCP/IP), Version 3, Release 2 or higher. (The som.somu option can be installed without having installed TCP/IP, however, so that other components of that option can be used without TCP/IP.) TCP/IP is not provided in the SOMobjects Base Toolkit; it is provided by AIX's Base Operating System Network Facilities (BOSNET). Although the Event Manager Framework requires TCP/IP software, it does not require a network adaptor card.

How to Install SOMobjects

The SOMobjects Base Toolkit is installed from diskette using the **installp** AIX installation software, optionally using the System Management Interface Tool (SMIT). SMIT provides a menu–driven environment for the installation process. For more information on SMIT, see the publication *IBM AIX Version 3 for RISC System/6000: Commands Reference Volume 3.* For more information on **installp**, see the publication *IBM AIX Version 3.2 for RISC System/6000 Installation Guide*, the chapter entitled "Optional Software Installation."

To install the SOMobjects Base Toolkit, perform the following steps:

1. Login as root.
2. If you have not installed SOMobjects before from an install image (using **installp** or SMIT), ensure that the */usr/lpp/som* directory does not exist. (SOMobjects code previously installed by **installp** or SMIT should not be removed manually. If desired, it can be removed using **installp** or SMIT. See "Rejecting SOMobjects," below.) If it does exist (if, for instance, you previously created a */usr/lpp/som* directory to house beta test code), then remove the */usr/lpp/som* directory and all its subdirectories and files (with *rm –rf /usr/lpp/som*), after first moving any personal files you wish to save into another directory.
3. If the AIX Base Operating System (Version 3, Release 2 or higher) is not already installed on the RISC System/6000, install it. (See the *IBM AIX Version 3.2 for RISC System/6000 Installation Guide* for more information.)
4. If you will be using the Event Manager Framework and TCP/IP is not already installed on the workstation, install it. (See the *IBM AIX Version 3.2 for RISC System/6000 Installation Guide* for information on installing TCP/IP.)
5. Insert the first diskette into the diskette drive.
6. To install onto a standard workstation using SMIT, enter the following command on an AIX command line:

   `smit –C startup` (or **`smit startup`** if not running AIXwindows)

   This command invokes the System Management Interface Tool (SMIT), which provides a menu–driven interface to the **installp** install software.

   To install SOMobjects using **installp** directly (not using SMIT), enter the command

   `installp –a som`

   and skip to step (8).

   To install into a Shared Product Object Tree [SPOT] on a diskless–client server when the SPOT is not the server's */usr* file system, enter the command

   `smit –C diskless` (or **`smit diskless`** if not running AIXWindows)
7. If using SMIT, follow the directions and answer the prompts in the SMIT install menus, selecting the product options (described above) that you wish to install (the instructions below correspond to AIX 3.2 and 3.3; SMIT menu details may vary for newer versions of AIX):

a. From the first menu (System Startup Menu), select “Software Products” or “Install/Maintain Software.” (Different selections will appear depending on how SMIT was invoked.)

b. From the next menu (Software Products), select “Install/Update Software.”

c. From the next menu (Install/Update Software), select “Install Software Without Updates”. If installing onto a SPOT of a diskless–client server when the SPOT is not the server’s */usr* file system (if you invoked SMIT using the **`smit [-C] diskless`** command), you must now press F4 to generate a list of SPOTs, move the cursor to the desired SPOT, and press Enter.

d. From the next menu (Install Software Without Updates), press F4 to generate a list of installation–device file names. Move the cursor to highlight the diskette drive into which you inserted the first diskette, and press Enter.

e. To install all of the options available in the SOMobjects Base Toolkit, skip to the next step. To manually select some of the options, move the cursor to the field for “SOFTWARE to install” and press F4 to see the list of the available options. (These options are described above under “How the Product is Packaged: Your Installation Options.”) Use the PageUp/PageDown keys or the arrow keys to find the options you want to select. When an option you want to select is highlighted, press F7 to select it. The > symbol will appear next to each item that you have selected. (To deselect an item, move the cursor to highlight that item and press F7.) After selecting all the options you want to install, press Enter.

f. The system automatically enters default values for the remaining entry fields in the “Install Software Without Updates” menu. To change any of the default settings, move the cursor to the field and use the Tab key to toggle “yes” or “no.” Note: It is suggested that you change the default for “Automatically install PREREQUISITE software” from “No” to “Yes.” (For a detailed explanation of the entry fields and their default values, see the *IBM AIX Version 3.2 for RISC System/6000 Installation Guide*, the chapter entitled “Optional Software Installation,” the section entitled “Installation Procedure.”) When you are satisfied with all the settings shown on the menu, press Enter.

g. From the next menu (ARE YOU SURE?), press Enter to begin installing the selected options, or press F3 to return to step (e) above.

8. The system will prompt you to insert the next diskette when it is needed, with a message such as “Mount volume 2 on /dev/fd0. Press the Enter key to continue.” After all files have been restored, but before the files are checked for validity by **installp**, there will be a few minutes’ delay while the restored files are uncompressed. (Total installation time will be roughly ten to fifteen minutes when installing all options.) When installation is complete, the “Command:” status indicator in the upper left corner of the SMIT screen will change from “running” to either “OK” or “failed.”

9. The SMIT screen will be positioned to the top of the list of messages generated during installation. Use the Home, End, PageUp, PageDown, and arrow keys to move through the message list. (For an explanation of the messages generated by **installp**, see the *IBM AIX Version 3.2 for RISC System/6000 Installation Guide*, the chapter entitled “Optional Software Installation,” the section entitled “Error Messages and Output from the Installp Command.”)

   If the messages indicate a problem with installing a particular option, you only need to reinstall the option that failed or is missing from the “Installp Summary” report. Options that were successfully installed need not be reinstalled. To perform installation again, press F10 to exit SMIT and return to step (5) above. If the installation was interrupted for any reason (such as by a power failure), you may need to use the **installp** cleanup procedure (available from the SMIT “Clean Up After a Failed Installation” menu) before continuing. (See the *IBM AIX Version 3.2 for RISC System/6000 Installation Guide*, the chapter entitled “Recovery Procedures,” the section entitled “Cleanup Procedure for Failed Optional Software Installations.”)

Following a successful installation, the selected options will be installed in the */usr/lpp/som* directory. The following subdirectories will be created:

- bin — contains executable programs
- lib — contains library files
- include — contains header files

  Note: Some headers files for the *include* directory must be generated, using a script provided by the SOMobjects Toolkit, prior to developing SOM–based applications. For more information, see the README file in */usr/lpp/som* after installation is complete.
- msg — contains message catalogs
- etc — contains miscellaneous files, including the default Interface Repository file (som.ir)
- tmp — used by the SOM Compiler for temporary files

10. When installation is complete, press F10 to exit SMIT.
11. Remove the diskette from the drive.
12. Before using the SOMobjects Base Toolkit, read the README file in */usr/lpp/som* and follow the instructions therein.

Rejecting SOMobjects

After installing SOMobjects, it is possible to later reject (remove) it from the system as long as it has been applied but not committed. (When installing software using SMIT or **installp**, the default is *not* to automatically commit.) To reject SOMobjects using SMIT, enter the command

`smit –C` (or simply **`smit`** if not running AIXwindows)

From the "System Management" menu, proceed to the "Installation and Maintenance" menu, then select the menu appropriate for your system (for standard workstations, select "Standard Installation and Maintenance.") Next, select "Software Installation and Maintenance" and then select "Remove Applied Software Products." Press F4 to see a list of software products currently on the system, and select the "som" options to be rejected. Press Return when all selections are made, to return to the "Remove Applied Software Products" menu. Use the down arrow key to move to the "Automatically Remove Dependent Software?" line, and press the Tab key to toggle this to "Yes". Press Return to reject the selected options.

To reject SOMobjects from the command line, use the command

```
installp –gr som
```

To reject only selected options of the product, specify the option name instead of "som". For example, to remove the sample programs from the system, use the command

```
installp –gr som.somx
```

If the SOMobjects Toolkit has been applied *and committed*, it is not possible to reject it from the system. It is possible, however, to reinstall the product, by using the command

```
installp –aF som
```

The newly installed product, if applied but not committed, can then be rejected as described above.

Some of the files provided by the SOMobjects Base Toolkit are also provided by the SOMobjects Workstation Enabler and the SOMobjects Workgroup Enabler products. All of the three SOMobjects products install files into */usr/lpp/som* subdirectories. To prevent file loss, the installation process for each of these products will not replace an existing file in */usr/lpp/som* unless the replacing file is from a newer product than the existing file. A consequence of this special installation process is that if the SOMobjects Base Toolkit is rejected from the system, some of the files installed in */usr/lpp/som* will not be automatically removed. After rejecting the product from the system, any remaining files can be manually removed if desired, after ensuring that they are not used by some other product, although this is not recommended.

Service and Technical Support for SOMobjects

Note: Customers in European, Middle Eastern, and African Countries should refer to the separate Service Statement included with the product for service and technical support instructions for this product.

Customers in Canada and Asia Pacific Countries should refer to the Service Statement in the License Information Booklet for service and technical support instructions for this product.

You Must Register for Service

Defect service for this product is available through September 30, 1995, or six months after the general availability of a subsequent version of the product (or a product designated as a replacement product), whichever occurs earlier.

Register by providing your company name, address, phone number, contact person's name, phone and FAX numbers (include area code). This information can be sent via electronic mail as follows:

- IBM OS2BBS to userid: **WZ00178**

or

- Internet Commercial: **somreg@austin.ibm.com**

or

- CompuServe: **GO IBMSOM**
  and then browse the News Flash for further registration information.

Within two working days of receipt of your registration, a service ID or password will be issued to you, allowing access to the defect forum and technical support forum.

Defect Support

Defect service for this product is available through September 30, 1995, or six months after the general availability of a subsequent version of the product (or a product designated as a replacement product), whichever occurs earlier.

Defect service is provided by the IBM SOMobjects Development personnel via the following Electronic Support Services:

- IBM OS/2 Bulletin Board System
  via IBM TalkLink Electronic Conferencing Service
- Internet Commercial Electronic Network
- CompuServe

The IBM SOMobjects Development personnel will monitor these Electronic Support Services between 8 a.m. and 7 p.m. CST, Monday through Friday, except holidays. Acknowledgement of receipt of Defect Report will be within 24 hours for SOMobjects RUNTIME defects and 72 hours for SOMobjects TOOLKIT defects, provided that the Defect Report is received by the SOMobjects Technical Support personnel during the time period of 8 a.m. to 7 p.m. CST, Monday through Friday.

Technical Support

Technical support service for this product is available for ninety (90) days after receipt of your service registration by SOMobjects Development personnel or until expiration of defect support, whichever occurs first.

Technical support service is provided by the IBM SOMobjects Development personnel via the following Electronic Support Services:

- IBM OS/2 Bulletin Board System
  via IBM TalkLink Electronic Conferencing Service
- Internet Commercial Electronic Network
- CompuServe

The IBM SOMobjects Development personnel will monitor these Electronic Support Services between 8 a.m. and 7 p.m. CST, Monday through Friday, except holidays. Questions will be answered in the order in which they are received. Extension of the technical support beyond the expiration date will be offered on a fee basis. Information regarding this offering will be provided on the service bulletin boards.

IBM OS/2 Bulletin Board System via TalkLink

The OS/2 Bulletin Board System (BBS) is implemented on the IBMLink facility. The OS/2 BBS is provided to all Workstation Technical Coordinators (WTSC) in corporate IBMLink accounts and all members of the OS/2 Developer's Assistance Program (DAP) who have access to IBMLink. You may contact your Technical Coordinator, if one has been identified by your company. If your company does not currently utilize IBMLink, you can subscribe to TalkLink by calling 1–800–547–1283 (USA).

How to use the IBM OS/2 Bulletin Board System (OS2BBS) via TalkLink for service and support for SOMobjects:

- To obtain **technical support** for non-defect "how-to" questions and answers:
  - Logon to IBM OS2BBS system from IBMLink Main Menu screen
  - Select "OS/2 Questions and Answer Bulletin Boards"
  - Select "SOMHOWTO" CFORUM
- To submit a suspected **defect report**:
  - Logon to IBM OS2BBS system from IBMLink Main Menu screen
  - Select "OS/2 Questions and Answer Bulletin Boards"
  - Select "SOMTKBUG" – if the suspected defect is with the SOM Toolkit
  - Select "SOMRTBUG" – if the suspected defect is with the SOM Runtime

Note: When submitting a suspected defect report, please provide the following information:

- Your Company name and address.
- Your name, phone and FAX numbers.
- The hardware platform – (PS/2 Model ____, or RS/6000 Model ____).
- Operating System and level – (OS/2 Version ____, or AIX Version ____).
- System configuration (memory, communication protocol, etc.).
- SOMobjects Version _____.
- Complete description of the problem.

Internet Commercial Electronic Network

How to use Internet for service and support for SOMobjects:

- To obtain **technical support**, for non-defect "how-to" questions and answers:
  - Via USENET Newsgroup at: **comp.unix.aix**
    Note: Include the word "SOM" in the subject line.
- To submit a suspected **defect report**:
  - Send EMAIL to: **sombug@austin.ibm.com**

Note: When submitting a suspected defect report, please provide the following information:

- – Your Company name and address.
- – Your name, phone and FAX numbers.
- – The hardware platform (PS/2 Model ____, or RS/6000 Model ____).
- – Operating System and level (OS/2 Version ____, or AIX Version ____).
- – System configuration (memory, communication protocol, etc.).
- – SOMobjects Version _____.
- – Complete description of the problem.

CompuServe

How to use CompuServe for service and support for SOMobjects:

- From any CompuServe prompt, enter: **GO IBMSOM**

Note: When submitting a suspected defect report, please provide the following information:

- – Your Company name and address.
- – Your name, phone and FAX numbers.
- – The hardware platform (PS/2 Model ____, or RS/6000 Model ____).
- – Operating System and level (OS/2 Version ____, or AIX Version ____).
- – System configuration (memory, communication protocol, etc.).
- – SOMobjects Version _____.
- – Complete description of the problem.

If you are not currently a member of CompuServe, you can subscribe by calling (USA) 1–800–524–3388 and asking for Representative 239.

Installation/Configuration Instructions for OS/2

Installation Guide

This document describes how to install the IBM SOMobjects Base Toolkit on a personal computer running OS/2. This product requires installation of IBM OS/2 2.0 or higher.

How the Product is Packaged: Your Installation Options

The SOMobjects Base Toolkit consists of the following separately installable components. (The number in parentheses after the component name is the amount of disk space required to install it. To install the complete toolkit, you will need approximately 6200K — 4600K for the components themselves and 1600K for the header files that you will generate after installation. See the README file in the SOMobjects base directory for post–installation instructions.)

- **SOM Compiler** (~2400K)
  SOM Compiler creates C and C++ usage and implementation bindings from IDL (and OIDL) interface descriptions.
- **SOM Run–time Kernel** (~400K)
  The SOM Kernel implements the SOM API.
- **Interface Repository Framework** (~650K)
  Interface Repository is a database that is generated by the SOM Compiler from IDL. The Interface Repository Framework is used to acquire object interface information dynamically.
- **Utility Classes** (~500K)
  Utility Classes provides metaclasses and classes for event management, and communications.
- **Distributed SOM–DSOM** (~600K)
  Distributed SOM (DSOM) enables applications to access objects across address spaces. That is, applications can access objects in other processes within a workstation.

Any of these components can be separately installed, provided the following requirements are satisfied:

- The SOM Run–time Kernel is required by all components.
- The Utility Classes require the Interface Repository Framework.
- Distributed SOM (DSOM) requires the Utility Classes.

Software Requirements for SOMobjects

In addition to the constraints given above, the following product options of the SOMobjects Base Toolkit have additional software requirement:

- Distributed SOM (DSOM), if used with the Event Manager (in Utility Classes), requires the Transmission Control Protocol/Internet Protocol software (TCP/IP), Version 1.2.1 with CSD UN34109.

TCP/IP is not provided in the SOMobjects Base Toolkit package; it must be purchased and installed separately.

Installing the Toolkit

The SOMobjects Base Toolkit is installed from diskettes. To install the toolkit, perform the following steps:

1. If OS/2 (2.0 or 2.1) is not already installed on the machine, install it.
2. If you will be using Distributed SOM (DSOM) in conjunction with the Event Manager, and TCP/IP is not already installed, install it.

3. Insert the first diskette into the diskette drive.
4. Enter the following command on an OS/2 command line: **`a:install.`**
   This command invokes an installation utility having a standard PM interface.
5. In the main installation window, you will see a text window titled "SOMobjects Base Toolkit Installation" that contains information to help you continue with installation.
6. After reading the text in the window, click on the *Continue* button (or on your keyboard, press *Enter* with the *Continue* button highlighted). This causes a dialogue box to appear that asks if CONFIG.SYS should be updated and if existing files should be overwritten. The default is to update CONFIG.SYS and not to overwrite existing files. You normally should update CONFIG.SYS. This causes the appropriate paths and environment variables to be set (your old CONFIG.SYS will be saved in CONFIG.BAK). The *Overwrite* box is normally left unchecked. When you have made your choices, click on the *OK* Button.
7. The next screen asks you which components to install and where to install them. At the top of the screen is the list of components. Click once on each component you wish installed. If you are using a keyboard, use the up and down arrow keys to move the cursor to the desired component; the *space bar* is used to select a component. Again, any component can be separately installed, provided that the following prerequisites are satisfied:
   a. The SOM Run–time Kernel is required by all components.
   b. The Utility Classes require the Interface Repository Framework.
   c. Distributed SOM (DSOM) requires the Utility Classes.
8. After making your component selections, you can select a "base directory" in which to install the components. The default pathname for the base directory to be used by the toolkit is displayed. You can change the default, "`C:\SOM`", to any <*drive*>:<*path*> you wish.
9. When you have selected the components to install and chosen an appropriate base directory, click on the *Install* button. This will begin the automatic install process. If there is insufficient space on the selected drive, you will get a warning message. You should clear sufficient space on the drive or select another drive before continuing.

The installation time will vary from machine to machine, but it should not take more than 20 minutes to install *all* of the Toolkit's components.

The selected components will be installed in the base directory and the following subdirectories:

- `bin` — contains executable programs
- `lib` — contains library files
- `include` — contains IDL files and some header files

  Note: Most header files for the *include* directory must be generated *after* installation. This is accomplished by executing one of three scripts provided by the SOMobjects Base Toolkit. After running the installation utility, reboot the machine, read the `README` file in the base directory, and then run the script that meets your needs.
- `msg` — contains message catalogs
- `etc` — contains miscellaneous files, including the default Interface Repository file (som.ir)
- `tmp` — used by the SOM Compiler for temporary files

10. Before using the SOMobjects Base Toolkit, <u>read the `README` file</u> in the base directory for important post–installation instructions and information.

Installation updates

You can use the installation diskettes to add toolkit components (that were not initially installed), delete toolkit components, or even remove the toolkit altogether. To perform any of these actions, insert the first diskette and enter “a:install”. When the installation/maintainence program is used to delete the toolkit, it will undo any changes it made to your CONFIG.SYS file when you installed the toolkit.

Miscellaneous

Some of the files (dlls, mostly) provided by the SOMobjects Base Toolkit are also provided by the SOMobjects Workstation Enabler and the SOMobjects Workgroup Enabler products. To prevent file loss and to ensure that the most up–to–date files are used, the install utility will not overwrite “new” files with “old”. That is, it will prevent you from installing “old” Workgroup Enabler over “new” Toolkit dlls. If you really wish to do this, you can assign the different products different base directories (C:\SOMTK and C:\SOMWG, for example) and determine yourself which dlls are used (by placing the LIB subdirectory of the preferred product first in the LIBPATH).

Service and Technical Support for SOMobjects

This service and technical support information applies for:

- **SOMobjects Base Toolkit, Version 2.0**
- **SOMobjects Developer Toolkit, Version 2.0**
- **SOMobjects Workstation Enabler, Version 2.0**
- **SOMobjects Workgroup Enabler, Version 2.0**

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You Must Register for Service

Defect service for this product is available through September 30, 1995, or six months after the general availability of a subsequent version of the product (or a product designated as a replacement product), whichever occurs earlier.

Register by providing your company name, address, phone number, contact person's name, phone and FAX numbers (include area code). This information can be sent via electronic mail as follows:

- IBM OS2BBS to userid: **WZ00178**

or

- Internet Commercial: **somreg@austin.ibm.com**

or

- CompuServe: **GO IBMSOM**
  and then browse the News Flash for further registration information.

Within two working days of receipt of your registration, a service ID or password will be issued to you, allowing access to the defect forum and technical support forum.

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Defect service is provided by the IBM SOMobjects Development personnel via the following Electronic Support Services:

- IBM OS/2 Bulletin Board System
  via IBM TalkLink Electronic Conferencing Service
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The IBM SOMobjects Development personnel will monitor these Electronic Support Services between 8 a.m. and 7 p.m. CST, Monday through Friday, except holidays. Acknowledgement of receipt of Defect Report will be within 24 hours for SOMobjects RUNTIME defects and 72 hours for SOMobjects TOOLKIT defects, provided that the Defect Report is received by the SOMobjects Technical Support personnel during the time period of 8 a.m. to 7 p.m. CST, Monday through Friday.

Technical Support

Technical support service for this product is available for ninety (90) days after receipt of your service registration by SOMobjects Development personnel or until expiration of defect support, whichever occurs first.

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  via IBM TalkLink Electronic Conferencing Service
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IBM OS/2 Bulletin Board System via TalkLink

The OS/2 Bulletin Board System (BBS) is implemented on the IBMLink facility. The OS/2 BBS is provided to all Workstation Technical Coordinators (WTSC) in corporate IBMLink accounts and all members of the OS/2 Developer's Assistance Program (DAP) who have access to IBMLink. You may contact your Technical Coordinator, if one has been identified by your company. If your company does not currently utilize IBMLink, you can subscribe to TalkLink by calling 1–800–547–1283 (USA).

How to use the IBM OS/2 Bulletin Board System (OS2BBS) via TalkLink for service and support for SOMobjects:

- To obtain **technical support** for non-defect "how-to" questions and answers:
  - Logon to IBM OS2BBS system from IBMLink Main Menu screen
  - Select "OS/2 Questions and Answer Bulletin Boards"
  - Select "SOMHOWTO" CFORUM
- To submit a suspected **defect report**:
  - Logon to IBM OS2BBS system from IBMLink Main Menu screen
  - Select "OS/2 Questions and Answer Bulletin Boards"
  - Select "SOMTKBUG" – if the suspected defect is with the SOM Toolkit
  - Select "SOMRTBUG" – if the suspected defect is with the SOM Runtime

Note: When submitting a suspected defect report, please provide the following information:

- Your Company name and address.
- Your name, phone and FAX numbers.
- The hardware platform – (PS/2 Model ____, or RS/6000 Model ____).
- Operating System and level – (OS/2 Version ____, or AIX Version ____).
- System configuration (memory, communication protocol, etc.).
- SOMobjects Version _____.
- Complete description of the problem.

Internet Commercial Electronic Network

How to use Internet for service and support for SOMobjects:

- To obtain **technical support**, for non-defect "how-to" questions and answers:
  - Via USENET Newsgroup at: **comp.unix.aix**
    Note: Include the word "SOM" in the subject line.
- To submit a suspected **defect report**:
  - Send EMAIL to: **sombug@austin.ibm.com**

Note: When submitting a suspected defect report, please provide the following information:

- Your Company name and address.
- Your name, phone and FAX numbers.
- The hardware platform (PS/2 Model ____, or RS/6000 Model ____).
- Operating System and level (OS/2 Version ____, or AIX Version ____).
- System configuration (memory, communication protocol, etc.).
- SOMobjects Version _____.
- Complete description of the problem.

CompuServe

How to use CompuServe for service and support for SOMobjects:

- From any CompuServe prompt, enter: **GO IBMSOM**

Note: When submitting a suspected defect report, please provide the following information:

- Your Company name and address.
- Your name, phone and FAX numbers.
- The hardware platform (PS/2 Model ____, or RS/6000 Model ____).
- Operating System and level (OS/2 Version ____, or AIX Version ____).
- System configuration (memory, communication protocol, etc.).
- SOMobjects Version _____.
- Complete description of the problem.

If you are not currently a member of CompuServe, you can subscribe by calling (USA) 1–800–524–3388 and asking for Representative 239.