Q: Where is the Installation Guide for SYBASE?

A: There is none. The documentation is incomplete and sometimes incorrect. Following are instructions for getting started with SYBASE. SYBASE is rewriting their guide for the next release.

Getting Started with SYBASE
NeXT Release 1.0

First, you need to get oriented. Following is a list of files and directories which contain useful information that you should read. You need to be familiar with the NeXT interface. You also need to know how to log onto the system as root. You will have to use several UNIX commands. These are explicitly given and should be typed into a Shell or Terminal window.

- **/usr/sybase**
  This is SYBASE's home directory. It contains all of the SYBASE-specific information except for the documentation.

- **/usr/sybase/ReleaseNote4.0.nr**
  This is a release note that is SYBASE-specific for their 4.0 release on all platforms. You will want to read this if you are familiar with earlier versions of SYBASE because it explains differences between the current and previous releases. See the note under *Printing the Documentation* below before you print or read it.

- **/usr/sybase/sample/dblibrary/README**
  Description of the examples and how to compile and run them.

- **/NextLibrary/Documentation/NeXT/RelNotes/SybaseNotes.wn**
  This is the closest thing to an installation guide. The installation notes are in the *Getting Started* section on page 6 of **SybaseNotes.wn** — not the section entitled *Operation* as it states on page 2. Unfortunately these notes are buggy. The information below will clarify the operations.

- **/NextLibrary/Documentations/Sybase**
  This contains all of the documentation that is normally printed. We recommend adding this directory as a target of Digital Librarian for reference (See the User Manual for more information about adding targets to Digital Librarian.)

- **/NextLibrary/Documentation/Sybase/README.wn**

This describes how you print and read SYBASE's documentation, but has some errors. See the note under *Printing the Documentation* below.

- **/NextLibrary/Documentation/Sybase/SAG**
  This is the System Administrator's (sa) Guide. If you are installing SYBASE, you are probably going to be the sa. So you should read at least the first two chapters of this guide. See *Printing the Documentation,* below, before you print or read it.

Printing the Documentation

Most of the documentation is in nroff format. This means that you cannot read the file with an editor until you format it. The **README.wn** file describes this process. But there are two problems with it. The first is that none of the pictures exist and so the formatter dies when it finds a reference to a picture within the text. The second is that there is a step missing in the process, so tables aren't formatted properly.

You must login as root to fix the first problem. Then edit the following files and remove all lines starting with ".Sc":

/NextLibrary/Documentation/Sybase/COMREF/comref.c
/NextLibrary/Documentation/Sybase/COMREF/comref.t
/NextLibrary/Documentation/Sybase/SAG/sag2
/NextLibrary/Documentation/Sybase/SAG/sag3
/NextLibrary/Documentation/Sybase/SAG/sag7
/NextLibrary/Documentation/Sybase/SQLUG/sql01
/NextLibrary/Documentation/Sybase/SQLUG/sql05
/NextLibrary/Documentation/Sybase/SQLUG/sql13
/NextLibrary/Documentation/Sybase/SQLUG/sql14

If you do not do this, you will only get the first part of each of these files when you format them.

The line in the **README.wn** file:

```
nroff -t -msyb -rT1 filename
```

should instead read:

```
tbl filename | nroff -t -msyb -rT1
```

or for printing:

```
tbl filename | ptroff -msyb -rT1
```

There is no Table of Contents for this documentation. The next release of the SYBASE software will contain the fixes mentioned here, the Table of Contents, and a script for printing all or part of the documentation.

Fix the SYBASE login

The user sybase on the system has a password of *, which means that no one can login as sybase until the password is changed. Also, the files within the **/usr/sybase** directory are not writable by the sybase user. Finally, the library that contains the dblib routines needs to be ranlib'd so that you can link it into a program. Here's where we fix all those things.

Log in as root. Then type in a Shell:

```
# chown -R sybase /usr/sybase
# ranlib -t /usr/sybase/lib/libsybdb.a
```

Now, still as root, launch /NextAdmin/UserManager. Once it has launched, choose the View command in the Main menu. Now choose "long". This changes the style of the data in the UserManager window. Select *sybase* from the scrolling list of user names on the right. Now type a new password in the password field and press the Modify button. This changes the password for sybase so you can login. Remember the password! See the NeXT booklet entitled *Networking and System Administration Guide* for specific details about using UserManager.

Create the Master DB (as root)

Now you are ready to start creating databases. These instructions are based on the inaccurate ones in **/NextLibrary/Documentation/RelNotes/Sybase.wn,** starting on page 6. You should follow along there, as these instructions are based on them. First you will realize that the file **/NextLibrary/Documentation/Sybase/ReleaseNote4.0.nr** does not exist. It is really **/usr/sybase/ReleaseNote4.0.nr**. Also, the scripts **showserver** and **stopserver** are in **/usr/sybase/Install**. Finally, these notes are based on using the default database on the local machine. See **/NextLibrary/Documentation/RelNotes/Sybase.wn** for specifics about changing either the name of the database or the server machine.

You must be logged in as root. Execute the following in a Shell:

```
# cd /usr/sybase/scripts
# source SetVars
# csh CreateMaster [size]
```

Note that **SetVars** prints a message which has at least 3 typos in it. You can ignore the message, because if you are following directions you have done the correct thing.

The default size for **CreateMaster** is 10,000. You can create it with a different size — it needs to be at least 5,000, though 6,000 is a preferable minimum size. This command spews out a lot of status information. Don't worry about status lines of the form *(# rows affects),* this is output from the installation of the demo databases. **CreateMaster** creates the master database in **/usr/sybase/database/d_master** and installs the demo databases and does a few other system administration tasks. Read the **CreateMaster** script to see what gets setup.

In the instructions, it says to kill the server. This is not necessary. (And you are not told how to do it, anyway.) You have finished installing SYBASE and it is running.

Note that the SYBASE server will be running on your machine until you kill it or power down. When you power up your machine you have to restart the server. You need to be root to do this. Here is how:

```
# source /usr/sybase/scripts/SetVars
# /usr/sybase/bin/dataserver -d/usr/sybase/database/d_master &
```

If you are going to be using SYBASE often, you should add the following lines to the file **/etc/rc.local** instead. This starts the server on the default database each time the machine is booted. It keeps the error log in **/usr/sybase/database/errorlog**.

```
 if [ -f /usr/sybase/database/d_master ]; then
      (echo -n ' sybase') > /dev/console
      (cd /usr/sybase/database;\
      /usr/sybase/bin/dataserver -d/usr/sybase/database/d_master >
/dev/console) &
fi
```

You might also want to add the line

```
source /usr/sybase/scripts/SetVars
```

into **~/sybase/.cshrc** and your own **~/.cshrc** file so that you always have the environment variables set correctly.

Playing with isql and the examples (as sybase)

Use **isql** to test the server installation. To do this you need to login as sybase. Make sure your environment variables are set correctly. See the last paragraph above. Follow the instructions on page 14 of **/NextLibrary/Documentation/NeXT/RelNotes/SybaseNotes.wn** to test the database.

Launch Shell and Edit. Now the task is to configure the master database so that the examples will work.

In a shell (or a Shell window), tell the master server that there is a new user and the user is *sybase* with a password of *server_password* and privileges to create a database, as follows:

```
isql -Usa -P
1> sp_addlogin sybase, server_password
2> go
New login created.
(return status = 0)
3> grant create database to sybase
4> go
1> quit
```

If you have a problem with the grant command, you might try the following:

```
1> grant all to public
2> go
```

You can modify or add the password for *sa* (System Administrator). Look up *sp_password* in the Sybase Documentation using Librarian. The entry for **COMREF/SPROCS/sp_password.nr** contains more information about this command. The first time you use this command a password will be added:

```
isql -Usa -P
1> sp_password null, NewPassword
2> go
```

In a Shell, move to the location of the examples and open the makefiles. They will have to be modified.

```
cd /usr/sybase/sample/dblibrary
open makefile*
```

Now, change the first line in each of the three makefiles from:

```
ROOT  =  $(SYBASE)/rel4.0/release
```

to:

```
ROOT  =  $(SYBASE)
```

and save them.

Now you build the examples:

```
make
```

Or individual ones (note that this is wrong in **/usr/sybase/sample/dblibrary/README**):

```
make exam1
```

To try them out:

```
exam1
exam2
etc.
```

If you have get the following error for example 1:

```
Msg 4002, Level 14, State 1

           Login failed
DB-Library: Login incorrect.
```

it is because you have not added the sybase user correctly to the master server database.

Note that example 6 creates a table in whatever is your current database. You probably don't want this to be the master database; so use the SQL command *sp_defaultdb* from isql before running this example. (You probably want to switch your current database to *test,* which is created by example 3.)

Example 8 will not compile because there is a missing file.

This guide is a work in progress. Please report any errors or problems that you have, so that we can improve this document. Send mail to bug_next@NeXT.com or use your normal reporting mechanism.