



## SIXNET IPm Application Development Kit (IADK)

### Installation

The SIXNET IPm Application Development Kit (IADK) is an i386 cross powerpc-linux GCC toolchain. This lets you build programs for IPm stations on a much faster and more powerful Linux desktop.

The IADK has been compiled on both a standard i386 Red Hat 7.0 installation and a standard i386 Windows installation. It should be compatible with Red Hat 7.0 and higher, Red Hat 6.2 has an older version of glibc. If you have updated glibc in Red Hat 6.2 you may be able to use the IADK, but this is unsupported.

If you need to run the IADK on an unsupported version of Linux/Unix, the source files and build instructions can be provided upon request.

There are currently two versions of the SIXNET IADK: sxiadk.tar.gz (Red Hat 7.0 version) and sxwiniadk.tar.gz (Windows version). These files along with samples and a remote debugger for Linux are provided on the SIXNET CD-ROM or web site. The library file is provided only after the purchase of the IPm Advanced license (option group 4) of the I/O Tool Kit. These files must be extracted to /opt/sixnet for the tools to run. See below for instructions.

### Installing the Linux IADK

This installation guide assumes you're using Red Hat 7.0 (or newer) running bash. You need your root password (or ask your system administrator to create /opt/sixnet and give you read/write/execute permission).

Step 1: Make the directory /opt/sixnet (and give ownership to the desired user and group):

```
su -- switch to root mkdir -p /opt/sixnet --make the directory and its parent, /opt chown
user:group /opt/sixnet -- give 'user' and 'group' ownership of the directory exit -- give up root
control
```

Step 2: Download from the web or copy from the CD the files sxiadk.tar.gz, sxlib.tar.gz and sxsamples.tar.gz to the /opt/sixnet directory. Extract the files sxiadk.tar.gz, sxlib.tar.gz and sxsamples.tar.gz to /opt/sixnet using the following commands.

```
cd /opt/sixnet tar xzf sxiadk.tar.gz tar xzf sxlib.tar.gz tar xzf
sxsamples.tar.gz
```

**Note:** you should now have an /opt/sixnet subdirectory with the cross-compiler, libraries and sample programs inside.

Step 3: Add /opt/sixnet/bin to PATH:

In BASH this means adding the following line to ~/.bash\_profile along with all the other PATH statements:

```
PATH=/opt/sixnet/bin:$PATH
```

Use your favorite text editor (vi, emacs, pico). Alternately, as root you could edit /etc/profile to make this path global for all users. But it is probably better to do it for each user individually.



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## SIXNET IPm Application Development Kit (IADK)

### Installing the Windows IADK

This installation guide assumes you're using some version of Windows. You may need Administrator privileges to install software (ask your system administrator to give you the necessary permission).

Step 1: Acquire and install MSYS which can be downloaded from <http://www.mingw.org>.

- Run the MSYS-1.0.9-2003.02.17-1.exe or newer setup program.
- Select the installation directory (we recommend C:\msys\1.0) when you see the Select Destination Directory window.
- When the command line window (SH) shows up, type 'y' to continue with the post install process.
- The next prompt will ask you if you have MinGW installed. Type 'n'.
- Hit 'Enter' until finished.

Step 2: Acquire and install MinGW which can be downloaded from <http://www.mingw.org>.

- Run the MinGW-2.0.0-3.exe or newer setup program.
- Select the installation directory (we recommend C:\msys\1.0\MinGW) when you see the Select Destination Directory window.
- Continue until finished.

Step 3: Download from the web or copy from the CD the file, sxwiniadk.tar.gz, to your C:\msys\1.0 directory.

Step 4: Run MSYS by double clicking on its icon.

Step 5: Extract the file sxwiniadk.tar.gz, using the following commands.

```
cd / tar xzf sxwiniadk.tar.gz
```

Step 6: Download from the web or copy from the CD the files, sxlib.tar.gz and sxsamples.tar.gz to your C:\msys\1.0\opt\sixnet directory.

Step 7: Extract the files sxlib.tar.gz and sxsamples.tar.gz using the following commands.

```
cd /opt/sixnet tar xzf sxlib.tar.gz
```

```
tar xzf sxsamples.tar.gz
```

**Note:** you should now have an /opt/sixnet subdirectory with the cross-compiler, libraries and sample programs inside.

Step 8: Set the PATH environment variable. If '/opt/sixnet/bin' is missing from the path, set it now.

```
export PATH=/opt/sixnet/bin:${PATH}
```



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