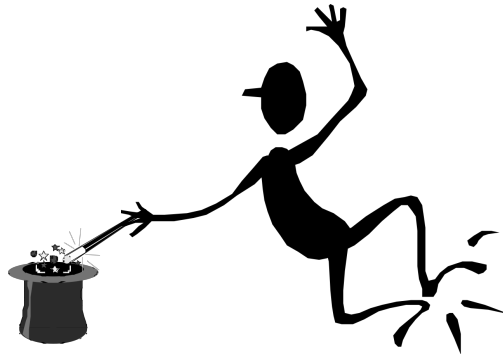


Navigation and Ancillary Information Facility

Getting and Installing the SPICE Toolkit



October 2007



Summary

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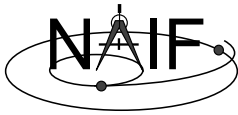
- **All instances of the SPICE Toolkit are available 24x7 from the NAIF anonymous ftp server**
 - FORTRAN, C, IDL, MATLAB
 - All supported platform/OS/compiler combinations
- **No password or identification is needed**
- **You may select a complete “package” or individual application/utility executables**
 - No need to select both!
- **If you select a package:**
 - first get and read the README instructions
 - use the installation script provided by NAIF (if there is one)
 - get and read the Toolkit description document (dscripnt.txt)



Don't Port It Yourself

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- **Get the package for one of the environments supported by NAIF that has been built and tested for you.**
 - We highly recommend you NOT try to port any instance of the Toolkit to some other environment without consulting with NAIF first.
 - » There are both portability issues and compiler optimization issues that must be carefully dealt with.



ftp - 1

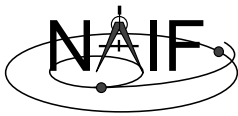
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```
prompt> ftp naif.jpl.nasa.gov

Connected to naif.jpl.nasa.gov
220 Welcome to the NAIF FTP service.

Name (your.sight:your_name): anonymous
331 Please specify the password
Password: your@e.mail.address
230-
230- =====
230- |                               Jet Propulsion Laboratory           |
230- |               * * *   W A R N I N G   * * *                       |
230- |                               Property of the                     |
230- |                               UNITED STATES GOVERNMENT            |
230- |=====|
230-
230 Login successful. Have fun.
Remote system type is UNIX.
Using binary mode to transfer files.

ftp> cd pub/naif/toolkit/<FORTRAN or C or IDL or MATLAB>
250 CWD command successful.
ftp> dir
```

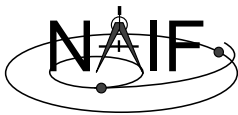


ftp - 2

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FORTRAN	C	IDL	MATLAB
<pre>ftp> dir Mac_OSX_Absoft Mac_OSX_IFORT Mac_OSX_g77 PC_Cygwin PC_Linux PC_Windows_Digital PC_Windows_IFORT PC_Windows_Lahey Sun_Solaris</pre>	<pre>ftp> dir Mac_OSX_Apple_C Mac_OSX_Intel_C PC_Cygwin_C PC_Linux_C PC_Linux_C_64bit PC_Windows_Visual_C Sun_Solaris_C Sun_Solaris_GCC Sun_Solaris_GCC_64bit</pre>	<pre>ftp> dir Mac_OSX_Apple_C Mac_OSX_Intel_C PC_Linux_C PC_Windows_Visual_C Sun_Solaris_C Sun_Solaris_GCC</pre>	<pre>ftp> dir Mac_OSX_Apple_C Mac_OSX_Intel_C PC_Linux_C PC_Windows_Visual_C</pre>

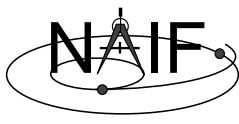
The environments available at the time you download the Toolkit may differ from those shown here.



Copying the Toolkit and Installation

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```
ftp> cd <environment>/packages
ftp> binary
200 Type set to I
ftp> get toolkit.tar.Z
      ( or toolkit.exe
        or cspice.tar.Z
        or cspice.exe
        or icy.tar.Z
        or icy.exe
        or mice.tar.Z
        or mice.exe )
. . .
ftp> ascii
200 Type set to A
ftp> get importSpice.csh
      ( not available for Windows environment )
ftp> get README
ftp> get dscripnt.txt
ftp> get whats.new
ftp> quit
```



Copying the Toolkit and Installation

Navigation and Ancillary Information Facility

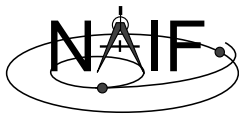
```
• Follow the directions given in the README. Normally this consists
of the following (n/a for PC Windows):

prompt> chmod u+x importSpice.csh
prompt> ./importSpice.csh
prompt> rm toolkit.tar

• You now have the expanded toolkit (or cspice or icy or mice) root directory.

• For PC Windows, execute the toolkit.exe application (or cspice or icy or
mice) to expand the archive.

> toolkit
```



Configuring Your Computer

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- For some programming environments there are required additional steps to prepare for programming using SPICE.
- For some programming environments there are recommended additional steps to make program development easier.
- Read the “Setting Up Computer” tutorial and the “README” file found in the Toolkit download directory for more information!



Check It Out

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- **Try the executables**
 - Use *tobin* to convert the SPICE transfer format SPK and CK files supplied with the Toolkit to local binary.
 - » *cook_01.tsp*, *cook_02.tsp*, *cook_01.tc*, and *cook_02.tc* are found in the *../data* directory
 - Use *brief*, *ckbrief* or *spacit* to summarize the converted kernels.
- **Problems may occur if operating systems or compiler versions are out of sync**
 - Rebuild the Toolkit using the script “*makeall.csh*” (or “*makeall.bat*”) located in the “top level” directory (toolkit or cspice or icy or mice).
- **In the rare circumstance that things still don’t work, contact your System Administrator or NAIF.**