

Centralized Management for The Geometer's Sketchpad 5 (GSP5)

For users of Apple Remote Desktop (ARD)

Getting Ready to use Sketchpad

You have two tasks to perform before students and faculty can use GSP5:

- 1) "Install" – Ensure the software is in place on your Macs.
- 2) "Register" – Ensure your GSP software license is registered and activated on all of your Macs.

Apple Remote Desktop (www.apple.com/remotedesktop/), also known as ARD, makes it easy to centrally manage both of these tasks for networked computers across your lab, building, or even across multiple buildings. We'll highlight the process by referring to the Administrator's Guide (currently found online at images.apple.com/remotedesktop/pdf/AdministratorsGuide20061116.pdf). If you're not already familiar with using Apple Remote Desktop for distributing software, we recommend you take a few minutes to view the tutorial at www.apple.com/remotedesktop/tutorials/softwaredistribution.html provided by Apple, which provides a context for the instructions below.

Step 1 – Install

There are two different approaches to installing GSP5 onto client computers via Apple Remote Desktop. The first approach is most suitable to single-lab installations where there is a limited number of computers that are all connected to the network and turned on. The second is better suited to school-wide or district-wide implementations that might also include 1:1 laptop implementations. When you can't ensure all computers are on the network and turned on, you'll need to let ARD's Task Server capabilities manage the rollout of GSP5 for you.

- 1) Key Curriculum Press provides GSP5 as an Apple disk image (known as a .dmg file). This is the easiest form for manual installation, one computer at a time. You can use the Copy Files command to copy the entire .dmg file and open it on all the client computers (as shown in the third demo of the Apple tutorial movie mentioned above). If so, you need to use ARD to issue a single Unix command to all the client computers that would copy the files from the opened .dmg file to the Applications folder. Then you need to issue a second Unix command to close and dispose of the .dmg files (thus saving space and cleaning up the desktops on all the computers).
- 2) The other approach is to use Apple's PackageMaker (included free with ARD) to construct a .pkg file from the contents of the GSP5 .dmg file. You can then use the second scenario in the ARD tutorial movie to let ARD's Task Server manage the automatic installation of copies of GSP5 as the computers are turned on (or brought back from home in the case of 1:1 laptop initiatives). The instructions for PackageMaker can be found with your copy of ARD, or at

developer.apple.com/DOCUMENTATION/DeveloperTools/Conceptual/PackageMakerUserGuide/PackageMaker_UserGuide.pdf.

For the first option, you can review the section **Copying Files** starting on page 108 of the ARD Administrator's Guide. For the second option, you'll need to review the 28-page PackageMaker guide and the section **Installing Software on Offline Computers** starting on page 104 of the ARD Administrator's Guide.

Step 2- Register

If you launch an unregistered copy of GSP5, it asks you to either:

- Enter your License Name and Authorization Code.
- Go to the Key Curriculum Press online store to buy a license.
- Run in Preview mode (limited functionality which also shuts down after 20 minutes use).

This makes sense for individual teachers or students buying their own copy, but isn't convenient for an administrator who manages many computers. Fortunately, you can issue Unix commands to GSP5 that will allow you to register and activate your license. As with the decision on how to Install the software to your computers, you have a related choice in how to use ARD to issue the commands to all your computers.

- 1) If you have chosen to use the Copy Files approach to install the software and have already used ARD to copy the .dmg file to each computer and to issue a Unix command to copy the files from the opened .dmg file to the Applications folder on each computer, then you merely need to issue an additional Unix command to register GSP5. The syntax for this is the following (use the values provided on your invoice or order confirmation for LicenseName and AuthorizationCode).

```
Sketchpad_Executable -license register -name "LicenseName" -code AuthorizationCode
```

Sketchpad_Executable refers to the complete path (location) and name of the inner executable contained within the Sketchpad application bundle. The location and name of Sketchpad_Executable is (assuming you haven't changed the name or location of the folder for Sketchpad)

```
/Applications/Sketchpad/GSP5.app/Contents/MacOS/GSP5_ReI_KCPT_31_105
```

where **/Applications/Sketchpad** is the default location of the Sketchpad application bundle and **GSP5.app/Contents/MacOS/GSP5_ReI_KCPT_31_105** is the location of the inner executable within the bundle.

- 2) If you have chosen to use Apple's PackageMaker to create a .pkg file that can be distributed and installed via ARD's Task Server, you can still issue the Unix command above one or more times as more and more computers finish installation. However, you can also add the Unix command into the package as a "postinstall" step before you install the package. The

advantage of adding the registration command is that by combining the Install and Register steps within the package, you can use ARD and its Task Server to automate the complete GSP installation to all your computers.

Note: It is important that you protect not only the LicenseName and AuthorizationCode, but also any package that embeds them. Providing any of these items to an unauthorized user is tantamount to violating your license agreement for GSP5.

Deregistering Sketchpad

There are three common reasons to do this:

- 1) Your institution bought a 1-year license and you wish to replace your current licenses with new licenses.
- 2) You are decommissioning computers (either to replace them or sell them as surplus/salvage) and wish to ensure that Sketchpad isn't being used in a non-compliant manner.
- 3) Some 1:1 laptop initiatives deliver the computers to students when they graduate minus any software that wasn't provided as part of the initiative. If you wish to leave Sketchpad on the laptops in evaluation mode (and let students decide if they subsequently want to buy their own copy) all you need to do is deregister the software to remain compliant with your own license.

This is very simple to do with a variant of the Unix command used to register GSP:

```
Sketchpad_Executable -license deregister -name "LicenseName" -code AuthorizationCode
```

We require the LicenseName and AuthorizationCode as before to limit accidental deregistration by a student or teacher. This will reduce the need for you to make "house calls" for computers on which GSP5 "mysteriously" stops working.

As with registration, issuing Unix commands to a set of client computers managed by ARD is described in the section **Executing a Single UNIX Command** starting on page 148 of the ARD Administrator's Guide. You can issue the deregister command to any or all of the client computers as you desire.

Deleting Sketchpad

Strictly speaking, this is outside the scope of this document. There is nothing different about using ARD to delete Sketchpad than using ARD to delete any other files from the client computers. See the section **Using Report Windows to Work with Computers** starting on page 128 of the ARD Administrator's Guide.