Frequently Asked Questions

Version January 17, 2013

Q: I'm using ArcGIS 9.3. Will the code in the book work?

Sorry, no. ArcGIS Desktop for 10.0 introduced the ArcPy site package which completely changed how Python scripting is integrated in the ArcGIS geoprocessing framework. It would be very cumbersome to try to use the code in the chapters and exercises in 9.3. Your best resource for using Python with ArcGIS 9.3 would be the Help files, which are still available here: http://webhelp.esri.com/arcgisdesktop/9.3.

Q: I'm using ArcGIS 10.0 and the book is written for 10.1. Will the code in the book work?

For the most part, yes. ArcGIS for Desktop 10.1 introduced some new functionality, but overall the additions have been modest and are of most interest to advanced users of Python. So almost all the code in the chapters in the exercises will work fine in 10.0. The only real issue will be in Chapter 8 Working with Geometries. 10.1 introduced the data access module (arcpy.da) as part of the ArcPy site package which provides additional functionality and improved performance to work with cursors. The prior cursor functions that were part of 10.0 are still functional in 10.1, but the use of the da module is recommended and therefore adopted in Chapter 8. So in 10.0 code looked like arcpy.SearchCursor(fc) and in 10.1 code looks like arcpy.da.SearchCursor(fc). One of the major differences is that arcpy.SearchCursor is a function, while arcpy.da.SearchCursor is a class of the data access module.

In short, for most chapters the code works fine in 10.0, but for Chapter 8 you may need to rely on the Help files for 10.0, which are still available here: http://help.arcgis.com/en/arcgisdesktop/10.0/help.

Q: I'm already using Python and I'm just getting started with ArcGIS. Which version of Python should I be using?

The chapters and exercises are written to work with ArcGIS 10.1. A typical ArcGIS 10.1 installation includes Python 2.7. So you should be using Python 2.7. However, there is no real difference in the Python syntax between 2.7 and earlier versions with respect to this book so the code should work fine for 2.6. Python 3.x, however, is very different and currently not supported to work with ArcGIS. The code in the book will therefore not work with Python 3.x. I'm expecting Esri to stick with Python 2.x for some time and possibly switch to Python 3.x only with the next major release, i.e. ArcGIS 11, which is quite a few years out.

Q: I'm already using Python 3.x. Can I still use Python scripting for ArcGIS 10.1?

Yes. You can install and run multiple versions of Python on the same computer. If another version of Python is already installed, the ArcGIS 10.1 installation will not override this version, but simply add Python 2.7. The default
Python editor (IDLE) that gets installed will point to Python 2.7 as the version to use. When installing the PythonWin editor that comes with the book, this will recognize the Python 2.7 installation since the editor is version specific. When using another Python editor, make sure it points to Python 2.7 if you want to work with ArcGIS.

Q: I’m an instructor teaching a Python scripting class. Do you have a set of lecture slides to accompany the book?

No, but I’m working on them. I’ve taught classes using the material in the book, but I need some time to tweak the slides to follow the book chapters and ArcGIS 10.1 code more closely. Contact me again a little later in the semester. Hopefully I will have the lecture slides complete by late February or early March.

Q: I think I found an error in the code as printed in a chapter or exercise. What should I do?

First, please double-check to make sure it is likely to be an error. If you feel pretty certain it is an error, please contact me by e-mail and I will look into it. Although all code has been tested extensively by numerous individuals, it is still possible an error has crept into the manuscript during several rounds of editing. If an error is confirmed, it will be added to the official list of errata.

Q: I found an alternative way to code a particular task covered in the book, which I think might be useful to others. Do you accept suggestions?

Definitely. As tasks get more complex there are often several solutions, some more robust or elegant than others. I am keeping a file with suggestions for improving upon the code as currently published as well as providing alternative solutions which are also correct and valid. Once I have a number of suggestions collected, I will make a compilation of these improvements and alternatives available.

Q: When working on one of the challenge exercises, I came up with a solution which is quite different from the solution provided in the book. However, the code seems to run fine. Should I be worried that my solution is somehow not correct?

While some challenge exercises are relatively simple and really have only one solution, for more complex challenges there are definitely several possible solutions. Especially if you have some experience with Python already you may be using more advanced Python code than is covered in the book. All solutions in the book are limited to using only the Python code explained in the book. If you think you have a good solution that differs from the one in the book and are willing to share, feel free to send it my way. I will be making a set of alternative solutions available as I get feedback from users of the book.
Q: When using the book for teaching, the challenge exercises at the end of each exercises are a good place to start for assignments, but the solutions are posted in the book. Do you have any additional exercises that I can use in my classes where students don't have access to the solutions?

Not yet, but I'm developing a set of additional exercises (without solution). Check back in a few months.

Q: Will the book be updated for the next version of ArcGIS, i.e. ArcGIS 10.2 and beyond?

Revising a book is a considerable effort and the basic Python functionality embedded in the current ArcPy site package is not likely to change significantly with the next version of ArcGIS 10. New functionality will be added but I expect this to be somewhat incremental, like the changes going from 10.0 to 10.1. By the time 10.2 is in beta testing I will evaluate how this is going to affect any of the code in the book. Rather than updating the entire book, it is likely I will make a list of changes available for the book to remain current for 10.2, if needed. I don't expect there will be a second edition of the book until Esri moves to using Python 3.x, at which time a lot of the code will need to be revisited.

Q: I read the entire book and completed all the exercises. I'm ready for more advanced tasks. Where should I look for additional resources and learning materials?

I'm developing a document called More Python Scripting for ArcGIS which will become available on my website. Check back later.