Section 4.2.9 gives details of the image processing stars. These are not part of Ptiny Ptolemy. Section 4.4.3 details the compile SDF target. This is not part of the demonstration version.

Chapter 5 “DE Domain”

Section 8.4.3 mentions the multimed demo. This demo is not part of Ptiny Ptolemy.

Appendix A “Installation and Troubleshooting”

Section A.4 contains some solutions to problems that only apply to the full Ptolemy version.

Appendix D “Glossary”

Domains which are not a part of Ptiny Ptolemy are mentioned in the glossary.

Chapter 1. Introduction

1.1 Introduction

This demonstration version of Ptolemy, affectionately known as Ptiny Ptolemy, is a much reduced version of the full Ptolemy System. Ptiny Ptolemy was created to give users a sense of the power and flexibility of Ptolemy in a much smaller package. This demonstration version is ideal for new users with limited disk space who want to try Ptolemy before installing the entire system. Ptiny Ptolemy was also developed for the classroom. All of the laboratory exercises for teaching Signal Processing fundamentals with Ptolemy[1] will run on Ptiny Ptolemy.

In order to create this reduced version of Ptolemy, much of the functionality of the full version of Ptolemy was removed. The main reduction is in the domains. In Ptolemy, each domain is different model of computation. Ptiny Ptolemy contains only two domains: Synchronous Dataflow (SDF) and Discrete Event (DE). The full version of Ptolemy, on the other hand, contains over a dozen different domains including code generation domains. In addition, Ptiny contains the stars and demos for the SDF and DE domains only. Again, the full version of Ptolemy contains many more demos. The demonstration version also only contains the basic SDF and DE targets[2].

There are currently two different interfaces to Ptolemy, a textual interface and graphical user interface. To save space, Ptiny only contains the graphical user interface.

All of the image processing demonstration programs and stars and all of the multimedia demonstrations have been removed. If you are interested in using Ptolemy to do image processing, you should use the full version of Ptolemy.

The dynamic linking of new stars is not possible with Ptiny Ptolemy. Since Ptolemy source is not included with Ptiny Ptolemy, it is also not possible to rebuilt the system. Ptiny Ptolemy is designed to demonstrate some of the capabilities of Ptolemy. If you wish to add to the system, you should do your enhancement work on the full version of Ptolemy. Despite all of these reductions, there is still tremendous amount of functionality left in Ptiny Ptolemy.

Just as Ptiny Ptolemy is a trimmed version of the full Ptolemy system, this Mini Almagest is a trimmed version of the full four volume set of the Almagest, the Ptolemy manual. As it would not be practical to write an entirely new documentation set just for the demonstration version, this Mini Almagest contains relevant chapters from the full Almagest. As a result, some of the subsections in this manual refer to items that are not part of the demonstration version of Ptolemy. These subsections are detailed below.

Chapter 2 “An Overview of Ptolemy”
Section 2.3 states that the documentation is organized in four volumes. This Mini Almagest is only one volume long, not four.

Chapter 4 “SDF Domain”

1. These exercises are at the end of the SDF and DE chapters.
2. Ptolemy terms such as *domain* and *target* are defined on the Ptolemy glossary.