

Adaptive Filtering Software: Installation Guide

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Supported Platforms

This document describes installing Adaptive Filtering Software on your computer. These instructions are written mostly as applied to a machine running some UNIX-like operating system, such as Linux, Solaris, MacOS 10.*, or similar. Microsoft Windows users need to adjust some commands as appropriate for their operating system.

To compile the source code, we mostly use GCC 3.* compilers. GCC 2.* can be used as well, and probably a number of other compilers, but small changes to some header files may be required. To check if you have a GCC compiler on your system, and what version it is, type

```
g++ --version
```

If GCC is not available on your system, it can be obtained from gcc.gnu.org.

Currently, we have successfully compiled Adaptive Filtering Software on the following platforms with the following compilers:

- Linux 2.4.2-2 (Red Hat 7.1), with GCC 2.96
- Linux 2.4.2-2 (Red Hat 7.1), with GCC 3.3.2
- Linux 2.4.20-4GB (SuSE Linux 8.2) with GCC 3.3.1 (mms-02.rutgers.edu)
- SunOS 5.8 (a.k.a Solaris 8) with GCC 2.95.3 (aplab.rutgers.edu).
- An earlier version of this software has been compiled on MacOS 10.2.5 with a GCC 3.* compiler as well, but I don't currently have access to that machine to re-test.

Downloading Source Code

Adaptive Filtering Software. Download the file `filter.zip` from the specified location or from your CD, and unpack it with

```
unzip filter.zip
```

on a Linux/UNIX platform, or a similar program for your operating system. This will create directory named `filter`. All paths given below will be given relative to that directory, unless otherwise specified.

Lemur. To build and use Adaptive Filtering Software, you need to obtain Lemur Toolkit from CMU first. Download, patch, and build Lemur on your system, and set the necessary environment variables, following the instructions in [Appendix 1](#) to this Guide.

Compiling

The source code is ready for the GCC 3.* compiler. **If you use GCC 2.* (e.g., 2.95),** you need to replace one header file, as follows:

```
cd include
cp stl.2.hpp stl.hpp
```

Using other compilers may require other changes to that header file, as well as changes to the variable **CPP** in **src/Makefile**.

To compile the program, simply go into the **src** subdirectory, and type **make**. Check the error messages, if any. You may need to adjust some variables in the Makefile in accordance with the peculiarities of your computer system.

As the result of the successful compilation, the main executable **src/AdaptFilter** will be created. This finishes the build process.