1   Apache/Perl Modules

1.1 Description

On CPAN you will be able to find a number of Perl modules created to run under mod_perl. We will give a presentation of them here and ways to get at these modules.

Apache/Perl modules are somewhat different from the many others found on CPAN (http://www.cpan.org/). Most Perl modules are "building blocks"; developers use them to build applications or even more building blocks. It just so happens that Apache/Perl modules are encapsulated inside a namespace and *.pm* file. However, this does not make them all building blocks, many are just like Apache modules written in C: you install them, edit the server configuration files and you're done.

Before you start a new module, consider this: Apache/Perl modules are useless outside of mod_perl and Apache. Do your best to design such that your `Apache::*` module will make good use of the building blocks found on CPAN, putting together new building blocks where appropriate and simply glue them together with the Apache API, keeping the `Apache::*` modules very small.

These modules will also serve as good examples, showing you where modules can step in during a stage of a request with `Perl*Handler` callbacks. You'll also see how and when to use the Apache API methods.

1.2 The Module List

Like other CPAN modules, the Apache/Perl modules are listed on the Perl module list, under the *World Wide Web* category: http://www.cpan.org/modules/00modlist.long.html#ID15_WorldWideW . Browse down the page to find the `Apache::` modules, organized by their role in the request cycle.

1.3 Where Are The Modules Kept?

Modules listed with the **APML** as is contact are part of the mod_perl distribution package. Other modules can be found on CPAN in the http://www.cpan.org/modules/by-module/Apache/ directory. If they have not made it to CPAN yet, they might be found in the mod_perl *contrib* directory at http://apache.org/dist/perl/contrib/. Otherwise, feel free to ask the contact author or the list how you can go about getting your hands on a copy. The modules listed with **MPB** as the author were present in the *Writing Apache Modules with Perl and C* book by Lincoln Stein and Doug MacEachern. If you can't find these modules on CPAN, look for them at http://modperl.com:9000/book/source/.

1.4 Playing Your Part

Apache and Perl are world-wide collaborative efforts; naturally, the Apache/Perl integration project is the same. You've started on the right foot simply by reading this document, thanks! Please make sure you've read the main Perl module list at http://www.cpan.org/modules/00modlist.long.html, all that is said there is relevant here!

If you wish to share your module(s) in the Perl way, by putting them on CPAN, send a request to modules@perl.org to get set up with a PAUSE user id and directory. See http://www.cpan.org/modules/04pause.html for more details.

HINT: For a nice set of template files try this:

```
% h2xs -AX -n Apache::YourPackageName
```

1.4.1 Module Naming Conventions

Like for normal Perl modules on CPAN, the Apache:: namespace conventionally used for mod_perl modules needs to keep a certain organization. This is why you should choose a multi-level name for your module, categorizing it into a namespace that you feel fits your module. There should be a very good reason for a module to not have a nested name (ie. living directly under Apache::), that should only be the case for the core API modules and older modules which may keep their names.

Here are some examples of namespaces that you may want to use:

```
Apache::App       Applications: any module serving content with a
                  point-and-click interface *

Apache::Auth      Modules related to general user authentication/authorization

Apache::Authen    Modules solely related to authentication

Apache::Authz     Solely related to authorization

Apache::Access    Only access control

Apache::Config    Configuration-related things

Apache::Devel     Development-related modules (debug/devel help)

Apache::Filter    Filtering modules
  ::Output        Output filters (1.0 style Filter/OutputChain or 2.0 style)
  ::Input         Input filters

Apache::Framework  Modules providing application frameworks (templating
                   and/or publication frameworks) *

Apache::Log       Logging modules

Apache::Method    Method handlers (PATCH/PUT and the like)

Apache::MIME      MIME-type modules

Apache::Monitor   Monitoring modules

Apache::Persistent  Modules providing for persistency in connections

Apache::Proxy     Proxies

Apache::RPC       RPC/SOAP modules
```

```
Apache::Trans      URI Translation handlers

Apache::Util       General-utility modules, usually not handlers but
                   providing an API to use in your code
```

`*`: If you are writing a small application or templating module, contained in one module, you can use these namespaces. However, if you are planning a substantial framework with many inter-related modules, you should probably go with a top-level namespace outside of `Apache::`.

For an illustration of how this would look for the older modules, you can look at this example categorization.

Note: *Of course* none of these categories are cast in stone: you should feel free to choose the module name that suits your module best instead of trying to follow these general indications. If in doubt, just ask around at the mod_perl list; you are sure to get some assistance in naming your module! Furthermore, you should look at the way it's done on CPAN, and apply it under the `Apache::` namespace.

1.5 Porting CPAN modules to mod_perl 2.0 Status

If you want to port your or someone else's module to mod_perl 2.0, please refer to the these documents: porting Perl modules to mod_perl 2.0 and mod_perl 1.0 compatibility reference.

1.5.1 Ported 3rd-party Modules

The following modules have already been ported to mod_perl 2.0 and are available from CPAN. If you know of other modules that have been ported but not listed here, please contact the modperl list, so we can update this information:

```
Module Name                        Required Dist Package
------------------------------------------------------
Apache::ASP                        Apache-ASP-2.55
Apache::DBILogin                   Apache-DBILogin-2.03
Apache::AuthCookie                 Apache-AuthCookie-3.05
Apache::AuthExpire                 Apache-AuthExpire-0.38
Apache::AuthNetLDAP                Apache-AuthNetLDAP-0.25
Apache::AuthPerLDAP                Apache-AuthPerLDAP-2.01
Apache::AuthenNTLM                 Apache-AuthenNTLM-2.04
Apache::AuthenPasswd               Apache-AuthenPasswd-0.12
Apache::AuthenSmb                  Apache-AuthenSmb-0.70
Apache::AuthenURL                  Apache-AuthenURL-2.02
Apache::AuthzNetLDAP               Apache-AuthzNetLDAP-0.07
Apache::AuthzPasswd                Apache-AuthzPasswd-0.11
Apache::Clean                      Apache-Clean-2.00_4
Apache::DB                         Apache-DB-0.10
Apache::DProf                      Apache-DB-0.10
Apache::GeoIP                      Apache-GeoIP-1.215
Apache::PAR                        Apache-PAR-0.30
Apache::Peek                       Apache-Peek-1.03
Apache::Scoreboard                 Apache-Scoreboard-2.01
Apache::SessionManager             Apache-SessionManager 1.00
Apache::SmallProf                  Apache-DB-0.10
```

```
Apache::Syntax::Highlight::Perl    Apache-Syntax-Highlight-Perl-1.00
Apache::VMonitor                   Apache-VMonitor-2.0
CGI                                CGI.pm-3.10
CGI::Cookie                        CGI.pm-3.10 (comes in the CGI dist)
Apache::Request                    Apache2-Request (comes in libapreq2 dist)
```

1.6 Porting in Process

The following modules are in the process of being ported to mod_perl 2.0. Please contact the porter if you wish to help the porting.

If you have started the porting, in order to avoid duplicated efforts please contact the modperl list, and let us know what module you are porting. This information should also help others to help you to do the porting and testing.

```
Module                     Porters
--------------------------------
Apache::Language           Philippe M. Chiasson <gozer AT cpan.org>
Apache::AutoIndex          Philippe M. Chiasson <gozer AT cpan.org>
Apache::Icon               Philippe M. Chiasson <gozer AT cpan.org>
Apache::Template           Geoffrey Young <geoff AT modperlcookbook.org>
Apache::AuthzNIS
```

1.7 mod_perl 2.0 Specific Modules

The following modules have gone beyond the porting stage and are specifically designed for mod_perl 2.0 and the new features and functionality it brings. Each is available from CPAN. If you know of other modules that have been written for the 2.0 API but not listed here, please contact the modperl list, so we can update this information:

```
Module                            Maintainers
-------------------------------------------------
Apache::AuthenHook                Geoffrey Young <geoff AT modperlcookbook.org>
Apache::IncludeHook               Geoffrey Young <geoff AT modperlcookbook.org>
Apache2::DebugFilter              Philip M. Gollucci <pgollucci AT p6m7g8.com>
Apache2::Filter::HTTPHeadersFixup  Philip M. Gollucci <pgollucci AT p6m7g8.com>
```

1.8 Maintainers

The maintainer is the person you should contact with updates, corrections and patches.

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1.9 Authors

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