

About mod_perl

General information regarding mod_perl of historical interest.

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mod_perl is an Apache Software Foundation (<http://www.apache.org/>) project, licensed under The Apache Software License, an Open Source license.

1 The mod_perl Project Management Committee

1.1 Description

the mod_perl Project Management Committee (PMC) is a group of mod_perl committers who take responsibility for the long-term direction of the project.

Today, the PMC consists of:

- **Adam Prime**
- **Ask Bjørn Hansen**
- **Doug MacEachern**
- **Fred Moyer**
- **Geoffrey Young**
- **Joe Schaefer**
- **Perrin Harkins**
- **Philip M. Gollucci**
- **Philippe Chiasson**
- **Randy Kobes (emeritus)**
- **Steve Hay**
- **Torsten Förtsch**

For more information on the role of the PMC see [How the ASF works](#)

2 mod_perl Contributors

There are thousands of people who have contributed to what mod_perl is today. This file is here to recognize the tremendous efforts of the major contributors to the mod_perl effort.

While Doug MacEachern is behind the majority of mod_perl's design, code and documentation, he and mod_perl never would have made it this far without the help from everyone in the mod_perl community. His heartfelt thanks goes out to all of you!

This list is generated from a set of text files, and the contributors are sorted alphabetically.

Module authors aren't listed here, because keeping track of them would be too much work. For information about module authors, please refer to the Apache/Perl Module list.

2.1 Contributors

Contributor	Activities
Allan Juul	Site design.
Andreas Koenig	Early efforts, bug spotting, modules, documentation
Andrew Ford	mod_perl refcard, Apache::FakeRequest
Ask Bjørn Hansen	Modules, documentation, mailing lists
Bill Moseley	Site search, documentation.
Brian Behlendorf	Sysadmin
Doug Bagley	Bug spotting, modules.
Doug MacEachern	Architect and lead developer
Edmund Mergl	Modules
Eric Bartley	Method handlers, API, AIX fixes and Apache::AuthCookie.
Eric Cholet	Modules, debugging, documentation. Co-authoring Practical mod_perl
Frank Cringle	Documentation
Frank Wiles	Documentation and user help.
Fred Moyer	Documentation and code patches, user help.
Ged W. Haywood	Documentation and user help
Geoffrey Young	modules, documentation, development.
Gerald Richter	Embedperl, mod_perl 2.0 build system abstraction.
Gisle Aas	Original author of mod_perl. API enhancements/docs.
James G. Smith	mod_perl digest, various modules.
Jeffrey Baker	Previous maintainer of NT binary distribution. Apache::Session. Docs.
Jonathan M. Hollin	Site help.
Ken Williams	Modules, mailing list archives.
Lincoln Stein	CGI.pm, Apache::Request. Co-authored the Eagle book.
Mark Imbriaco	Original mailing list. First Apache:: module. Original Win95 build.

Mark Summerfield	documentation review.
Matt Sergeant	AxKit, documentation.
Patrick Kane	Original mod_perl FAQ.
Per Einar Ellefsen	Documentation, site help.
Perrin Harkins	Documentation. Some code patches.
Peter Tillemans	Win32 patches
Philip M. Gollucci	Documentation, modules, mod_perl 2.0 API renaming
Philippe M. Chiasson	mod_perl 2.0 contributions, mod_perl 1.0 maintainer, modules
Ralf S. Engelschall	ePerl, improved mod_perl install process.
Randy Harmon	documentation
Randy Kobes	Win32 maintainer
Richard A. Wells	documentation review
Rob Hartill	Second to run mod_perl in production. Testing.
Salvador Ortiz Garcia	bug fixing, API.
Stas Bekman	Documentation, modules, mod_perl 2.0 contributions, book, articles
Steve Reppucci	documentation review
Thomas Klausner	Original site design. Documentation re-organization.
Torsten Foertsch	Bug fixing, user help.
Vivek Khera	Documentation. Apache::Sandwich
Wesley Darlington	Documentation.

2.2 Information

Name: Allan Juul

E-mail: lambretta (at) inet.uni2.dk

Allan's work on the design of this website has been of great benefit to us all. Not only did he give it good looks, but has also tirelessly worked to make it compliant with HTML and CSS standards, while still getting it to work with all browsers we could find.

Name: Andreas Koenig

E-mail: andreas.koenig (at) anima.de

Lots of bug spotting, fixing and patching since the early days. Andreas introduced the `Apache::Registry` that we all know and love. He put a great deal of time and effort into `CGI.pm` overhaul efforts (aka `CGI::XA` & `CGI::Switch`).

Various contributions to the Apache/Perl API. PAUSE efforts beyond the call of "duty". `Apache::Stage`, `Apache::GzipChain` and `Apache::UploadSrv` modules on CPAN. Andreas was the first to run `mod_perl` on a production site, the Perl Authors Upload Server, aka PAUSE.

Andreas also contributed the "Correct HTTP headers" document.

Name: Andrew Ford
E-mail: A.Ford (at) ford-mason.co.uk
URL: <http://www.refcards.com/>

Andrew has made contributions to the `Apache::FakeRequest` module and is the author of the `mod_perl` refcard.

Picture of Ask Bjørn Hansen **Name:** Ask Bjørn Hansen
E-mail: ask (at) apache.org
URL: <http://www.askbjoernhansen.com/>

Author of the `Apache::DBILogger` and `Apache::UserTrack`, `mod_proxy_add_forward` modules, `mod_perl_method_handlers.pod` along with plenty of help testing cvs snapshots, documentation improvements, `Apache::StatINC` hacking and assisting with the perl.apache.org site. He is also the current maintainer of `Apache::DBI`.

Ask is also the maintainer of the `mod_perl` mailing lists, which is very helpful to the community.

Name: Bill Moseley
E-mail: moseley (at) hank.org

Bill has helped out a lot with this site. He is the creator of the search engine, and has written various sections of the documentation here as well as contributed his wisdom to the design.

Name: Brian Behlendorf
E-mail: brian (at) apache.org
URL: <http://brian.behlendorf.com/>
Comments: Infrastructure, baby!
Occupation: CTO
Location: San Francisco, CA, USA
Organization: Collab.Net <<http://www.collab.net>>

Brian provides system administration support for *perl.apache.org* along with the mailing list and cvs repository.

Name: Doug Bagley
E-mail: doug (at) dejanews.com
URL: <http://www.bagley.org/~doug/>

Doug Bagley has pinpointed some of the nastiest mod_perl bugs while claiming to know nothing about xs. He's also made improvements to the `Apache::SIG` module along with writing the valuable `Apache::SizeLimit` module.

Name: Doug MacEachern
E-mail: dougm (at) apache.org

Doug released mod_perl-0.50 in early 1996 and has been working on mod_perl in one form or another since. He is currently employed by Covalent Technologies who sponsored his work fulltime on the initial design and implementation of mod_perl-2.0. He is now working on other products at Covalent but continues to work on mod_perl in a support role at Covalent and development in his spare time.

Doug has written most of the code and a solid part of the documentation for mod_perl, and has also co-authored Writing Apache modules with Perl and C with Lincoln Stein.

Name: Edmund Mergl
URL: <http://home.bawue.de/~mergl/>

Edmund wrote `Apache::DBI`; probably one of the most popular mod_perl modules.

Name: Eric Bartley
E-mail: bartley (at) pdn.cc.purdue.edu

Eric had a big hand in implementing and testing method handlers. He also contributed to some of the Apache/Perl API, along with making sense of some AIX mysteries for us. And, his `Apache::AuthCookie` module is an inspiration to us all.

Picture of Eric Cholet **Name:** Eric Cholet
E-mail: cholet (at) logilune.com
URL: <http://www.logilune.com/eric/>

Author of `Apache::EmbperlChain` and `Apache::RefererBlock`. Involved with many heroic debugging sessions.

He has also written entire sections of the mod_perl User's guide, and pointed out technical errors in it.

Eric is also co-authoring Practical mod_perl with Stas Bekman, to be published soon by O'Reilly and Associates.

Name: Frank Cringle
E-mail: fdc (at) cliwe.ping.de

Frank was the author of the mod_perl FAQ (now merged into the documentation).

Name: Frank Wiles
E-mail: frank (at) wiles.org
Location: Lawrence, Kansas

Frank helps with documentation patches and helping users on the mailing list. He also maintains Apache::DB, Apache::DProf, Apache::SmallProf, and ModPerl::ParamBuilder.

Name: Fred Moyer
E-mail: fred (at) redhotpenguin.com
Location: San Francisco, California

Fred helps with documentation and code patches, and helping users on the mailing list. He also maintains Apache::Dispatch and has helped with releases for Apache::Reload, Apache::Test, and mod_perl core.

Name: Ged W. Haywood
E-mail: ged (at) www2.jubileegroup.co.uk

For reviewing and fixing the whole guide, providing lots of constructive criticism and helping to reorganize the guide to make it more user friendly.

Ged has also devoted time to help out users having problems on the mailing list.

Picture of Geoffrey Young **Name:** Geoffrey Young
E-mail: geoff (at) modperlcookbook.org
URL: <http://www.modperlcookbook.org/~geoff/>

Geoff has co-authored the mod_perl Developer's Cookbook which seems to be getting good reviews. He has also written a few articles and the occasional Apache module.

Geoff works on mod_perl for Ticketmaster.

Picture of Gerald Richter **Name:** Gerald Richter
E-mail: richter (at) ecos.de
URL: <http://perl.apache.org/embperl/>

Gerald has helped us with various bug spotting and fixing over the years. His Embperl toolkit, specially designed to run under mod_perl, has saved many lives.

He is now working on abstracting the mod_perl 2.0 build system.

Picture of Gisle Aas **Name:** Gisle Aas

E-mail: aas (at) sn.no

URL: <http://gisle.aas.no/>

Gisle wrote an early "proof-of-concept" *mod_perl.c* and *perl_glue.xs* on March 25, 1996 to be exact. While next to none of that code is present in the current mod_perl source, as the embedded model and XS <-> Apache API interface were changed, it was an important inspirational kick start to what mod_perl has become today.

Gisle has also contributed to mod_perl's `Apache::Constants` module, along with API enhancements and documentation.

Name: James G. Smith

E-mail: jsmith (at) cpan.org

James took over the maintainership of the mod_perl mailing list digest from Geoffrey Young, with whom it originated, and is now trying to send it off to the mailing list as often as he can.

He has also contributed a number of modules to the CPAN, such as `Apache::Handlers`, `Module::Use`, and `Uttu`, a web application framework.

Name: Jeffrey Baker

E-mail: jeff (at) godzilla.tamu.edu

Previous maintainer of the mod_perl NT binary distribution and author of the `Apache::Session` module.

For his "guide to mod_perl database performance" and many useful comments on the list that has been reused in the guide's material.

Name: Jonathan M. Hollin

E-mail: netmaster (at) digital-word.com

URL: <http://wypug.digital-word.com/>

Jonathan is using mod_perl to create Shapeshifter, a Content Management System. He has been helping out the mod_perl community through work on the website, especially for the logo contest.

Name: Ken Williams

E-mail: ken (at) forum.swarthmore.edu

URL: <http://mathforum.org/~ken/>

Author of the `Apache::Taco`, `Apache::SSI` and `Apache::Filter` modules. Ken's MathForum also hosts archives of some of the mod_perl mailing lists.

Ken has also reviewed a lot of stuff in the guide. Many snippets from his emails are included in the guide.

Picture of Lincoln Stein **Name:** Lincoln Stein

E-mail: lstein (at) cshl.org

URL: <http://stein.cshl.org/~lstein/>

Everybody knows Lincoln gave us the must-have CGI.pm module; he's put forth considerable effort into porting and optimizing it for mod_perl. Lincoln also wrote the original Apache::Request module, a CGI.pm-like module on top of the Apache API.

As an addition to his great programming efforts, Lincoln has contributed his writing skills by co-authoring Writing Apache Modules with Perl and C, which has for a long time been the ultimate reference to mod_perl programming.

Name: Mark Imbriaco

E-mail: mark.imbriaco (at) pobox.com

For setting up the original mod_perl mail list and administration of that list for two years. Mark was also the first person besides Doug to write an Apache::* module, the first version of Apache::ePerl. He was also the first person to build and run mod_perl under Windows 95!

Name: Mark Summerfield

For reviewing and fixing all the guide's chapters, improving guide's readability and suggesting useful extensions.

Name: Matt Sergeant

E-mail: matt (at) sergeant.org

URL: <http://sergeant.org/>

Matt has written AxKit, the XML application server for mod_perl. He has also contributed the section "Exception Handling for mod_perl" for the perl reference chapter and made many other contributions to the documentation.

Name: Patrick Kane

E-mail: modus (at) pr.es.to

Patrick wrote the original mod_perl FAQ.

Name: Per Einar Ellefsen

E-mail: pereinar (at) oslo.online.no

Location: Oslo, Norway

Per Einar has helped out with this website, for the most part through various documentation patches and additions, reviewing of documents, and maintaining some sections of the site.

He also tries to help out users having problems on the mailing list.

Name: Perrin Harkins
E-mail: perrin (at) elem.com
Location: Brooklyn, New York

Various documentation patches, Apache::SizeLimit patches, articles on templating modules and system architecture.

Name: Peter Tillemans
E-mail: pti (at) pandora.be

Peter helped bring mod_perl up to Win32 speed with various patches including support for `make test`. He also maintained the Windows 95 binary distribution of mod_perl.

Picture of Philip M. Gollucci **Name:** Philip M. Gollucci
E-mail: pgollucci (at) p6m7g8.com
URL: <http://www.p6m7g8.net>

Philip has been using Apache and mod_perl since September of 1998. He has been actively contributing patches and testing things mainly on FreeBSD since January 2005. He also tries vainly to help people on the mailing lists.

In his non-existent free time, Philip maintains a few modules with Stas Bekman. You can view his CPAN directory here. He also maintains several ports of CPAN modules for FreeBSD.

In November 2005, he joined the TicketMaster team.

Picture of Philippe M. Chiasson **Name:** Philippe M. Chiasson
E-mail: gozer (at) ectoplasm.org
URL: <http://gozer.ectoplasm.org/>

Philippe has started working on the mod_perl project in 1998, writing some Apache::* modules on CPAN and eventually started helping out with mod_perl 1.0 & 2.0 development.

In 2005, he joined the ranks of ActiveState's Perl Cult. He now spends a lot more time dealing with Perl itself instead of working on high-traffic websites for TicketMaster. Instead, he is now often busy building and debugging Perl things, including Perl, mod_perl and all of CPAN (yes, all of it, regularly) on a large variety of platforms.

Philippe is also the current maintainer of mod_perl 1.0.

Name: Ralf S. Engelschall
E-mail: rse (at) engelschall.com
URL: http://www.engelschall.com/
Occupation: Cable & Wireless Deutschland GmbH
Location: Munich, Germany
Organization: Private

Ralf, aka "Dr. Cosmetics", has greatly improved the mod_perl configure/build/install process by implementing APACI, DSO and APXS support, along with various documentation enhancements. He has also written the `Apache::ePerl` module to enable mod_perl support for his ePerl embedded Perl solution.

Name: Randy Harmon

For rewriting the mod_perl advocacy chapter.

Picture of Randy Kobes **Name:** Randy Kobes
E-mail: randy (at) theoryx5.uwinnipeg.ca

Randy Kobes has helped with the port of mod_perl on Win32, and maintains binary and ppm packages of mod_perl and related modules for that platform.

Name: Richard A. Wells

For reviewing and correcting a large part of the guide.

Name: Rob Hartill
E-mail: robh (at) imdb.com

Rob was the second to run mod_perl in a production environment, and perhaps the best known mod_perl site, the Internet Movie DataBase. He's also provided various bug fixes, enhancements and mail list support since the early days of mod_perl. Always one step ahead testing mod_perl against Apache cvs snapshots. It was Rob's kicking that made the mod_perl CVS tree come to be.

Name: Salvador Ortiz Garcia
E-mail: sortiz (at) cfe.gob.mx

Salvador has helped bang out bugs and traps with *sfi* enabled mod_perls, along with various bug spotting and stopping since the early days. He has also contributed to the Apache/Perl API.

Picture of Stas Bekman **Name:** Stas Bekman

E-mail: stas (at) stason.org

URL: <http://www.stason.org/>

Stas has started contributing to mod_perl in 1998 by creating the mini mod_perl guide, simply to reduce the rate of broken record questions on the mod_perl list. After a few years, some people still referred to the guide as mini, while it contained more than 600 pages at that time. As of today more than 200 users and developers helped Stas to write, review, improve and polish the guide.

While not working on the documentation and developing mod_perl, at the remaining spare time, Stas has written a few Apache modules available from his CPAN directory and did some work on mod_perl 1.0 series.

In autumn 2001 Ticket Master has kindly sponsored Stas for one year to help with mod_perl. Stas used this time to help with the development of mod_perl 2.0, to lead the creation of the new perl.apache.org site, to advocate mod_perl via articles in popular online zines and conferences, to help with the mod_perl list and as usual to write a lot of documentation, mainly for mod_perl 2.0.

In autumn 2002 Ticket Master has extended the sponsorship for one more year, and the following year has done it again. As Doug MacEachern has shifted his focus on other things at the fall of 2002, Stas took the lead to continue the development of mod_perl 2.0, greatly assisted by Geoffrey Young, Philippe M. Chiason and other developers.

In 2003 Stas had the luxury to be sponsored by Ticket Master for yet another 1.5 years (making it a total of 3.5 years), at the end of which Stas has started the phase out process, opening the opportunity for other developers to take over the lead of the project.

Stas has co-authored Practical mod_perl with Eric Cholet, published by O'Reilly and Associates in May 2003.

And of course, since 1998, when Stas discovered for himself mod_perl, he was finding ways to use it at work, even while doing x86 hardware development and verification at Intel. He is now thinking about mod_perl 3.0's architecture, hopefully to be implemented solely with AND and OR gates, driven by the Perl 6.0 chipset for the best performance. Don't be surprised when you get offered a shiny Bluetooth PCI card with embedded mod_perl when you shop for your new server machine.

Name: Steve Reppucci

Steve did a thorough review of the information in the 1.x user guide. He fixed lots of spelling and grammar errors, and made the guide readable to English speakers :)

Picture of Thomas Klausner **Name:** Thomas Klausner

E-mail: domm (at) zsi.at

Thomas was the winner of the mod_perl site redesign contest, although things have changed a lot since then. He also did a big documentation reshuffling which made it a lot easier for everybody.

Picture of Torsten Foertsch **Name:** Torsten Foertsch
E-mail: torsten.foertsch (at) gmx.net
URL: <http://foertsch.name/>
Occupation: Freelance Programmer
Location: Weimar & Gaiberg (near Heidelberg), Germany

Torsten came to know mod_perl in 1998. For a few years he has used it simply as a tool. His first contribution came in just on the eve of mod_perl 2.0 in 2004. Since then he has fixed many bugs and continues to help users on the mailing list. He also wrote a few CPAN modules around mod_perl(2). Every once in a while Torsten publishes interesting solutions and work-arounds on his site.

Torsten works as a freelance programmer. In fact, he can be hired to provide professional mod_perl support. Although most of his clients are German companies he offers his knowledge worldwide. Torsten's experience in C-programming spans back to the year 1989, his Perl-experience to 1998. He works almost exclusively on Linux.

In his free time Torsten likes to solve Sudoku. He finds this passion involves very much the same skills as debugging programs.

Name: Vivek Khera
E-mail: vivek (at) khera.org
URL: <http://www.khera.org/~vivek/>

Vivek has saved many lives with his mod_perl_tuning.pod document, now merged into the documentation. He has also written the practical `Apache::Sandwich` module.

Name: Wesley Darlington

Contributed a big section of the scenario chapter.

This list was probably incomplete the moment it was created. We have done the best to our ability to make it as complete as possible. However, we aren't gods. So if you have contributed to mod_perl, but aren't listed here, or want to change your information, please contact Per Einar Ellefsen with as much information as you can.

For a list of contributors for which we don't have enough information, make sure to visit this page.

3 Companies sponsoring and supporting mod_perl developers

3.1 Description

Several companies have contributed to mod_perl by sponsoring mod_perl developers and/or allowing their employees to work on mod_perl as a part of their day job.

3.2 Companies

- **Critical Path**

Critical Path (<http://www.cp.net/>) has sponsored Doug MacEachern. (XXX: when?)

- **Covalent Technologies**

Covalent Technologies (<http://www.covalent.net/>) has sponsored Doug MacEachern. (XXX: when/what?)

- **TicketMaster**

From the fall of 2001 till mid-2005 TicketMaster (<http://www.ticketmaster.com/>) has sponsored Stas Bekman to work on the mod_perl 2.0 development, documentation and the new perl.apache.org site (completed in 2002).

3.3 Maintainer

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

- Stas Bekman [<http://stason.org/>]

4 Other contributors to mod_perl

4.1 Description

The other contributions made to mod_perl, that we don't have enough information on.

There are **many** other people who have contributed a great deal to mod_perl in one way or another, this list is derived from the Changes file, activity on the mod_perl list including support, suggestions and new ideas, along with help through private mails or other means.

This list is most likely incomplete. My apologies if that is the case, please send me an email if you have been left out and your contribution will be recognized!

If you do not feel you've made a contribution, remember that your help is always welcome and appreciated. You should consider yourself a contributor to the mod_perl effort even if you are simply using mod_perl!

4.2 The Apache and Perl communities

If there was no Apache, there would be no mod_perl. See the Apache contributors list at <http://httpd.apache.org/contributors/>.

If there was no Perl, there would be no mod_perl. Perl authors are credited in the distribution's *AUTHORS* file.

We owe a great deal of thanks to The Apache Group, Larry Wall and the perl5-porters, along with the communities that support them both.

4.3 Contributors

The contributors that are listed here only come by name, as we don't have enough information about them. These people have mostly submitted small patches to the code or to documentation, which have been very appreciated by the community. Some others have helped through the mailing lists, supporting users.

- **Aaron Johnson**
- **Adam Laurie**
- **Ajay Shah**
- **Alan Beale**
- **Alexander Demenshin**
- **Alexander Farber**
- **Andrea Borgia**
- **Andreas J. Koenig**
- **Andreas Piesk**
- **Andrei A. Voropaev**
- **Andrew Ford**
- **Andrew McNaughton**
- **Anthony D. Ettinger**

- **Artur Zambrzycki**
- **Ask Bjoern Hansen**
- **Barrie Slaymaker**
- **Ben Laurie**
- **Ben Reser**
- **Ben Sugars**
- **Bill Moseley**
- **Boris Zentner**
- **Bowen Dwelle**
- **Brian Millett**
- **Brian Moseley**
- **Bruce Hoylman**
- **Carl Hansen**
- **Chad K. Lewis**
- **Chip Salzenburg**
- **Chris Dean**
- **Chris Nokleberg**
- **Chris Winters**
- **Christof Damian**
- **Christophe Dupre**
- **Christopher Thompson**
- **Cliff Rayman**
- **Craig**
- **Dan Peterson**
- **Daniel Bohling**
- **Daniel Koch**
- **Daniel W. Burke**
- **Darren Chamberlain**
- **Dave Hodgkinson**
- **Dave Rolsky**
- **David Harris**
- **David Hodson**
- **David Huggins-Daines**
- **David Landgren**
- **David Mitchell**
- **DeWitt Clinton**
- **Dean Fitz**
- **Dean Gaudet**
- **Doug Bagley**
- **Doug Kyle**
- **Drew Taylor**
- **Ed Park**
- **Ed Phillips**

- **Edmund Mergl**
- **Edwin Pratomo**
- **Elizabeth Mattijsen**
- **Eric Cholet**
- **Eric Eisenhart**
- **Eric James Negaard**
- **Eric Strovink**
- **Evan A. Zacks**
- **Evert-Jan Couperus**
- **Ewan Edwards**
- **Frank Schoeters**
- **Garr Updegraff**
- **Gary Shea**
- **Ged Haywood**
- **Geoff Crawshaw**
- **Geoffrey Young**
- **Gerald Richter**
- **Gerd Knops**
- **Glenn**
- **Greg Cope**
- **Greg Stark**
- **Gunther Birznieks**
- **Gurusamy Sarathy**
- **Hailei Dai**
- **Henrique Pantarotto**
- **Honza Pazdziora**
- **Howard Jones**
- **Hunter Monroe**
- **Ilya Obshadko**
- **Ime Smits**
- **Iosif Fettich**
- **Issac Goldstand**
- **James Cooper**
- **James Furness**
- **James G Smith**
- **James W Walden**
- **Jan Peter Hecking**
- **Jarkko Hietaniemi**
- **Jason Bodnar**
- **Jason Rhineland**
- **Jauder Ho**
- **Jay J**
- **Jean-Louis Guenego**

- **Jeff Chan**
- **Jeff Hallgren**
- **Jeff Rowe**
- **Jeffrey W. Baker**
- **Jens Heunemann**
- **Jie Gao**
- **Jimmy Oh**
- **Joao Fonseca**
- **Joe Schaefer**
- **Joe Slag**
- **Joel Wagner**
- **John Armstrong**
- **John Deighan**
- **John Detloff**
- **John Hyland**
- **John Milton**
- **John Walker**
- **Jon Drukman**
- **Jon Orwant**
- **Jonathan Peterson**
- **Joonsuk Bae**
- **Joshua Chamas**
- **Karl Olson**
- **Kavitha**
- **Kees Vonk**
- **Ken Williams**
- **Kenny Gatdula**
- **Kevin Murphy**
- **Kevin Swope**
- **Lance Cleveland**
- **Larry Leszczynski**
- **Leslie Mikesell**
- **Liam Howlett**
- **Lincoln Stein**
- **Louis Semprini**
- **Lupe Christoph**
- **Mads Toftum**
- **Marc Lehmann**
- **Marc Slemko**
- **Marcel Grunauer**
- **Mark Constable**
- **Mark Mills**
- **Mark Summerfield**

- **Mark-Jason Dominus**
- **Marko van der Puil**
- **Marshall Dudley**
- **Matt Sergeant**
- **Matthew Darwin**
- **Michael Alan Dorman**
- **Michael Blakeley**
- **Michael Finke**
- **Michael G. Schwern**
- **Michael Hall**
- **Michael Pepler**
- **Michael Rendell**
- **Michael Sanders**
- **Michael Schout**
- **Michael Shields**
- **Michael Turner**
- **Michele Beltrame**
- **Mike Depot**
- **Mike Fletcher**
- **Mike MacKenzie**
- **Mike Miller**
- **Mike Pheasant**
- **Mike Stok**
- **Mike Wertheim**
- **Milan Votava**
- **Nancy Lin**
- **Nathan Torkington**
- **Nathan Vonnahme**
- **Neil Conway**
- **Nick Tonkin**
- **Oleg Bartunov**
- **Owen Scott Medd**
- **Owen Williams**
- **Pascal Eeftinck**
- **Patrick**
- **Paul Buder**
- **Paul Cotter**
- **Paul Phillips**
- **Paul Sutton**
- **Pavel Shmidt**
- **Per Einar Ellefsen**
- **Perrin Harkins**
- **Peter Galbavy**

- **Peter Haworth**
- **Peter J. Schoenster**
- **Peter Levart**
- **Peter Skov**
- **Philip Jacob**
- **Philip M. Gollucci**
- **Philip Newton**
- **Radu Greab**
- **Rafael Garcia-Suarez**
- **Ralf Engelschall**
- **Randal L. Schwartz**
- **Randy Harmon**
- **Randy Kobes**
- **Rauznitz Balazs**
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- **Richard Dice**
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- **Steve Willer**
- **Surat Singh Bhati**

- **Sven Verdoolaege**
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- **Terry West**
- **Thomas Klausner**
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- **Todd Eigenschink**
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- **Ulrich Pfeifer**
- **Vivek Khera**
- **Ward Vandewege**
- **Wesley Darlington**
- **Will Trillich**
- **Yann Kerhervé**
- **Yann Ramin**

4.4 Maintainer

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

- **Per Einar Ellefsen** <per.einar (at) skynet.be>

5 History

5.1 Description

Since `mod_perl`'s inception in 1996, many things have changed, and it's interesting to look at `mod_perl`'s evolution and related events during the time from then to now.

Based on the `mod_perl Changes` file and talks with `mod_perl` developer's, we have here reconstructed the important steps in the development of this successful Open Source project.

5.2 Beginnings

The first version of `mod_perl` was written by Gisle Aas and released on March 25, 1996. The effort was instantly recognized by Doug MacEachern and Andreas Koenig; the former had been working on Perl embedding. They picked up the torch and brought the project we all love to what it has become today, thanks to the help of countless contributors.

An extract from *Changes* (the first one):

```
=item March 25, 1996

Initial version of mod_perl.c and perl_glue.xs
by Gisle Aas <aas (at) oslonett.no>
Thanks for getting this started Gisle!
```

Andreas Koenig tells us about how things happened:

"It was a time when FastCGI was still considered cool. But making FastCGI work required a patched perl, since tied file handles were still in their infancy.

"PHP was also around already, and was an embarrassing witness to Perl's greatest weakness for server-side programming: that embedding Perl was a pain. Although the hooks were there for embedding Perl, they were both undocumented and buggy.

"Doug MacEachern first got involved by addressing these problems. He wrote documentation for embedding Perl (the `perlembed` manpage) and fixed a couple of bugs. Then one day, Gisle Aas posted on `perl5-porters` that he had built Apache with an embedded Perl interpreter as a proof-of-concept. However, Gisle lacked the time for further work.

"That announcement was like a lightning bolt for at least two guys: Doug and me. While Doug shuffled the C code, I wrote the first working *Makefile.PL*, or at least I smoothed the build process to reduce the error rate resulting from silly mistakes during installation. Doug was working on HP-UX and I was using IRIX, so Doug wrote `ExtUtils::Embed` to generate the command line arguments for `gcc` that tie things together for embedded applications.

"Early versions of `mod_perl` needed to be recompiled to add a single CGI application. To get over that, I invented something without a name that mapped filenames to perl package names. When Doug received it, he called it `Apache::Registry`, as noted in *Changes*:

```
=item release 0.75a1 - July 21, 1996
```

```
added Apache::Registry module contributed by
Andreas Koenig <andreas.koenig (at) franz.ww.tu-berlin.de>
```

"From that moment in July 1996, we could count on a number of interested developers on the mailing list to test the nascent `mod_perl`. The *Changes* file mentions a few of them: Salvador Ortiz, Alan Beale, and John Detloff. Rob Hartill of IMDB fame joined us in July. (See contributors for more information.)

In August 1996, time was ripe to let a production server run `mod_perl`, and PAUSE (the Perl Authors Upload Server) was the first such server. We still had to use `$r->print`, and couldn't "use CGI", but we could add and remove scripts without recompiling and we were happy. Being unable to use the popular `CGI.pm` module turned out to be a pain for us, so I wrote a complete `CGI.pm` clone, `CGI::XA` and hoped that Lincoln would pick up the ball once there was a working alternative implementation. Eventually, Lincoln (with the encouragement of Mike Stok) made `CGI.pm` compatible with `mod_perl` starting with `CGI.pm 2.32`, and in March 1997, `CGI::XA` was removed from the `mod_perl` distribution. This was one of the most important entries into the *Changes* file:

```
=item 0.95 - 03/20/97
```

```
*****
*** CGI-XA/* removed from distribution ***
CGI.pm-2.32 is now mod_perl compatible, and
now ships with CGI::Switch and CGI::Apache.
*****
```

Can you feel the relief it was for Doug to write that? I think this was the greatest day of the whole development. One year of very tough work got the reward it deserved.

After that, `mod_perl` started to get attention from an increasing number of users. Doug worked like mad on fixing bugs and inventing one thing after another, just as he still does today. Things started flowing and people sent in patches, so Doug got the impression that the bazaar model was beginning to work. (From Eric Raymond's essay "The Cathedral and the Bazaar," the unofficial manifesto of the Open Source movement.)

I remember one day Doug got a confidential message from a Sun employee. They had made an investigation on "where the web is heading", and they had come to the conclusion that "`mod_perl` will have an impact on the whole Web".

5.3 Up to 1.0

The first public release after Gisle's proof-of-concept happened on May 1, 1996: release 0.50a1 of `mod_perl`, with a long list of changes.

In 0.50a2, an alternative implementation was provided, `mod_perl_fast`, which became the standard in 0.83_10.

Another probably important change was the possibility of using `print` instead of `$r->print`, greatly facilitating output generation:

```
=item release 0.80 - September 06, 1996  
[...]
```

```
we now take advantage of Perl's new IO abstraction so STDIN and  
STDOUT are hooked up to the client.  
Thanks to Sven Verdoolaege <skimo@breughel.ufsia.ac.be> for the  
initial patch
```

With 0.85 came the start of the test suite!

```
=item 0.85  
  
added the start of a mod_perl test suite
```

Another interesting feature was added just before 1.0: stacked handlers!

```
=item 0.95_02  
  
introduced experimental "stacked handlers" mechanism, allowing more  
than one Perl*Handler to be defined and run during each stage of the  
request.  
  
Perl*Handler directives can now define any number of subroutines, e.g.  
  
PerlTransHandler OneTrans TwoTrans RedTrans BlueTrans  
  
with a new method, Apache->push_handlers can add to the stack by  
scripts at runtime
```

And just after that, our beloved `<Perl>` sections!

```
=item 0.95_03  
[...]  
  
added <Perl> config section (see httpd.conf.pl)  
(needs 'perl Makefile.PL PERL_SECTIONS=1')
```

Finally, more than one year after Doug's original 0.50a1, 1.0 was released on July 28 1997:

```
=item 1.00 - 07/28/97
```

It primarily began adapting to the 1.3 series of Apache.

5.4 1.x development

5.4.1 Core

During 1.x development, there has generally been many bug fixes and adaptations to Apache and Perl versions, striving to remain compatible. Some parts stand out as pretty important.

In v1.12, the important APACI-support was added thanks to Ralf S. Engelschall:

```
=item 1.12 - June 14, 1998
```

```
added new (but still optional!) Apache 1.3 support via the new Apache
Autoconf-style Interface (APACI): The option USE_APACI=1 triggers a new
build-environment (from local apaci/) for the APACHE_SRC/src/modules/perl/
which provides a clean way (i.e. without patching anything inside APACHE_SRC,
not even the Configuration file) of configuring mod_perl via a
APACHE_SRC/src/modules/perl/mod_perl.config file. The complete configuration
is enabled by just using the APACI command "configure
--activate-module=src/modules/perl/libperl.a"
[Ralf S. Engelschall <rse@engelschall.com>]
```

And with new versions of Perl come new fixes to mod_perl of course.

```
=item 1.22 - March 22, 2000
```

```
compile fixes for 5.6 + -Duse5005threads
[Lincoln Stein <lstein@cshl.org>]
```

But the most important happenings weren't the bug fixes in the mod_perl core, but all that happened around it. The usage statistics show an incredible boom in mod_perl deployment, which has been accompanied by the release of very interesting applications and frameworks for mod_perl.

5.4.2 Related events

Maybe even more interesting are the things happening around mod_perl, mainly concerning Perl and Apache. The reason is that this impacts as much on mod_perl users as the changes to mod_perl itself; for example, a bug fix in Perl will help a lot to someone writing Perl handlers, and a security fix in Apache is of immense benefit to *anyone* running an Apache server.

Writing Apache Modules with Perl and C (<http://www.modperl.com/>), by Lincoln Stein and Doug MacEachern, for a long time considered the best resource for mod_perl programmers, was published in March 1999 by O'Reilly & Associates. While not the only book on the subject, it is still a must-have for any serious mod_perl programmer.

At ApacheCon in Orlando in 1999, mod_perl officially became an Apache Software Foundation project, and Ask Bjørn Hansen, Eric Cholet and Stas Bekman were voted in as ASF members in addition to Doug MacEachern. Together they formed the mod_perl PMC.

In March 2000, Perl 5.6.0 was released, bringing many new features to Perl and mod_perl programmers the world over.

In October 2000, Take23 (<http://www.take23.org/>) was created as an alternative site for mod_perl, because of the back-and-forth discussions about re-designing the *perl.apache.org* site weren't going anywhere at that time. It collected news and articles about mod_perl and also related issues such as other interesting Apache modules. It wasn't maintained for several years, and somewhere in 2003 it has disappeared.

Also in October 2000, Geoffrey Young got the idea to begin a mod_perl mailing list digest (see <http://marc.theaimsgroup.com/?l=apache-modperl-dev&m=97051473628623&w=2> and <http://marc.theaimsgroup.com/?l=apache-modperl&m=97059662005378&w=2>), which he kept up regularly (weekly, then biweekly) up until late 2001, when James G. Smith took over and has been running it since then.

The *mod_perl Pocket Reference* (<http://www.oreilly.com/catalog/modperlpr/>), by Andrew Ford, was published by O'Reilly and Associates in December 2000. It summarizes the whole mod_perl API as well as configuration directives and some other tips in an easy-to-use format.

In January 2002, the *mod_perl Developer's Cookbook* (<http://www.modperlcookbook.org/>), authored by Geoffrey Young, Paul Lindner and Randy Kobes, was published by Sams Publishing. It presents the mod_perl API by example, teaching a programmer all the facets of mod_perl installation, programming and configuration, and is a valuable resource to everyone.

META:

- mailing list creations
- beginnings of new site
- conferences w/ mod_perl present
- when Doug and Stas funded? Stas: August 2001; end 2002

5.5 The arrival of 2.0

...

5.6 Future directions for mod_perl

mod_perl has clearly shown its strength as an Open Source project and application development platform. mod_perl 2.0 has been a jump forward, but with the arrival of Perl 6 we might expect another new version of mod_perl. If the developers are still interested, that is. There has been started development on mod_parrot (http://svn.perl.org/parrot-modules/mod_parrot), but Perl 6 is far from ready, so we don't really know what will be needed. The future hold great things for us.

I will quote Stas Bekman's commentary in the contributors list:

"He is now thinking about mod_perl 3.0's architecture, hopefully to be implemented solely with AND and OR gates, driven by the Perl 6.0 chipset for the best performance. Don't be surprised when you get offered a shiny Bluetooth mod_perl 3.0 PCI card when you shop for your new server machine."

Who knows?

5.7 See Also

- CFAST: Comprehensive Perl Arcana Society Tapestry, <http://history.perl.org/>
- About the Apache HTTP Server Project, http://httpd.apache.org/ABOUT_APACHE.html
- The *perlhst* manpage, containing records of all perl versions, and the *perl*delta* manpages relating changes in the respective versions.

5.8 Maintainers

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

- Per Einar Ellefsen <pereinar (at) oslo.online.no>

5.9 Authors

- Per Einar Ellefsen <pereinar (at) oslo.online.no>

Only the major authors are listed above. For contributors see the Changes file.

6 Link to us

If you find that mod_perl has helped out your web project and you enjoy coding for mod_perl, please consider linking back to perl.apache.org. As an Open Source project, we don't have funds for advertising, so we have to rely on the word of the mouth and links from our users to gain recognition.

Image	Description	Alternatives
[mod_perl] static logo	<p>File name: <i>mod_perl_logo_static.gif</i> Dimensions: <i>395x85</i> The official logo, by Michael Demers (mike (at) inteo.com)</p> <p>The SVG version shouldn't be used for linking -- it's provided as a way to modify the original image if you have other requirements. You can then use a tool like Batik to convert the SVG to another format for the web.</p>	<ul style="list-style-type: none"> ● Transparent Background (PNG) ● White Background (PNG) ● Black Background (PNG) ● SVG ● Animated SVG
[mod_perl] banner [mod_perl] banner [mod_perl] banner	<p>File name: <i>mike_walker.gif, marie_simpson.gif, ashley.gif</i> Dimensions: <i>468x60</i> Animated banners contributed by mod_perl users: Mike Walker, Marie Simpson and Ashley.</p>	
Powered by [mod_perl] 64x64	<p>File name: <i>button-64x64.gif</i> Dimensions: <i>64x64</i> Square button based on logo.</p>	<ul style="list-style-type: none"> ● PNG ● Without black border
Powered by [mod_perl] 110x30 Powered by [mod_perl] 64x28	<p>File name: <i>button-110x30.gif, button-text-64x28.gif</i> Dimensions: <i>110x30, 64x28</i> Buttons, for easy linking, based on the logo.</p>	<ul style="list-style-type: none"> ● 110x30 button (PNG) ● 64x28 button (PNG) ● 110x30, without black border ● 64x28, without black border
[mod_perl] button	<p>File name: <i>apache-mod_perl.gif</i> Dimensions: <i>90x30</i> mod_perl button by Juergen Specht.</p>	
[mod_perl] button	<p>File name: <i>apache-mod_perl2.gif</i> Dimensions: <i>127x35</i> mod_perl button by Tyler Rorabaugh.</p>	
[Powered by mod_perl] button	<p>File name: <i>button-88x31.png</i> Dimensions: <i>88x31</i> Powered by mod_perl button by David Wheeler, based on mod_perl_logo_static.</p>	<ul style="list-style-type: none"> ● Photoshop original

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```
<p>
<a href="http://perl.apache.org/">

</a>
</p>
```

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Many other logos and buttons have been created for mod_perl. If you are interested in some of them, you may download an archive containing them all.

7 How to pronounce mod_perl

7.1 Description

Do you think that "mod_perl" is a strange name and wondering about how to pronounce it?

7.2 "mod_perl"

Over the years there have been many people complaining about "mod_perl" being an unsuitable name for this product and it's hard to "sell it" to their bosses. However, the name has a long tradition and is here to stay.

The "mod_" part comes from the prefix all Apache modules have: mod_rewrite, mod_dir, etc. If you look at the DSO filenames you'll see that they are all like "mod_XXX.so". This is also the case for mod_perl.

As for the "perl" part, the origin is pretty obvious.

The name is straight to the point and clearly describes what the application does. Those who have requested a change of name have never obtained it, often for the simple reason that "If you can't sell mod_perl to your boss based on its technical merits, the name is the least of your worries".

7.3 Pronunciation

One issue still remains: how are we supposed to pronounce this name?

In phonetic (AHD, see <http://www.dictionary.com/help/ahd4/pronkey.html>), mod_perl looks like:

môd·pûrl

The underscore marks a slight pause between the "mod" and "perl" parts.

Below we have collected recordings of mod_perl developers around the globe pronouncing mod_perl.

Name	WAV	MP3	Ogg	Vorbis
Per Einar Ellefsen	Listen	Listen	Listen	Listen

=cut

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