Perl for OpenVMS Alpha

Installation Guide and Release Notes

January 25, 2002

Perl for OpenVMS Version 5.6.1
CPQ-AXPVMS-PERL-V0506-1-1.PCSI-DCX-AXPEXE

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Software Prerequisites

The **Perl for OpenVMS** kit requires the following software:

- OpenVMS Alpha Version 7.2-1 or higher

Perl runs with the *Compaq Secure Web Server for OpenVMS Alpha* via CSWS_PERL. You can also use Perl in a standalone mode through the command line.

You do not need to install *Compaq Secure Web Server for OpenVMS* nor CSWS_PERL to use Perl.

Documentation

For more information about Perl, see The Source for Perl and Perl Mongers.

See the CSWS_PERL for Compaq Secure Web Server for OpenVMS Alpha Installation Guide and Release Notes for information about running CSWS_PERL with Perl and *Compaq Secure Web Server for OpenVMS*.

Perl packages sometimes contain documentation information within the package. If the installed package includes documentation, you can view it by defining the following foreign command:

```
$ PERLDOC :== $PERL_ROOT:[000000]PERL.EXE -
             PERL_ROOT:[LIB.POD]PERLDOC.COM -t
```

Downloading the Kit

Download the Perl for OpenVMS Alpha self-extracting file.

Perl V5.6.1 for OpenVMS Alpha
Perl V5.5-3A2 for OpenVMS Alpha

Make sure the file type of the saved file is .PCSI-DCX-AXPEXE.

Important: A new "hot fix" saveset is available for Perl V5.5-3A2. If you are downloading Perl V5.5-3A2 or have previously downloaded and are using Perl V5.5-3A2, Compaq recommends that you download and restore the backup saveset. Instructions are included in the PERL_README.TXT file.

Download the Perl V5.5-3A2 "hot fix" saveset.

Perl V5.5-3A2 for OpenVMS Alpha saveset
Perl V5.5-3A2 "hot fix" README file

After the saveset has been downloaded and transferred to your OpenVMS system, set the RMS file attributes of the saveset file as follows:

```
$ SET FILE/ATTRIB=(lrl:32256,mrs:32256,rfm:fix)PERL_0505-3A2-1.BCK
```

Then follow the instructions in the PERL_README.TXT file.

Expanding the Kit

To expand the Perl for OpenVMS Alpha self-extracting file, enter one of the following commands, depending on the file you downloaded:

```
$ RUN CPQ-AXPVMS-PERL-V0506-1-1.PCSI-DCX-AXPEXE
$ RUN CPQ-AXPVMS-PERL-V0505-3A2-1.PCSI-DCX-AXPEXE
```

The system displays information about the file compression version, and help information about the command syntax.

At the `Decompress into (file specification):` prompt, press return. The system expands the file and names the decompressed file CPQ-AXPVMS-PERL-V0506-1-1.PCSI. Do not rename this file.

Upgrading Perl from an Earlier Version

You can install a new Perl for OpenVMS kit over an existing version of Perl. Restart the *Compaq Secure Web Server* for the new Perl kit to take affect.

Important

If you install a new Perl kit to a different location from an earlier Perl kit using the /DESTINATION qualifier on the PRODUCT INSTALL command line, the new Perl kit will not work with the *Compaq Secure Web Server* unless you follow the steps below. This occurs because the CSWS_PERL for Compaq Secure Web Server kit (also known as MOD_PERL) adds extensions to Perl. Those extensions, and any user-added extensions, remain in the original location.

If you want to install a new Perl kit to a different location, follow these steps:

1. Save your CSWS_PERL configuration file
   (APACHE$COMMON:[CONF]MOD_PERL.CONF)
2. Make sure the PERL_ROOT logical name is pointing to the old Perl location
3. Remove CSWS_PERL
4. Install the new Perl kit to the new location
5. Point the PERL_ROOT logical name to the new Perl location
6. Re-install CSWS_PERL
7. Re-install any user-installed Perl extensions
8. Restore your CSWS_PERL configuration file

Installing Perl for OpenVMS

To install the Perl for OpenVMS Alpha kit, enter the following command where
DISK$DKA0:[APACHE_KITS] is an example of a disk and directory name.

```
$ PRODUCT INSTALL PERL/DESTINATION=DISK$DKA0:[000000]
```

Note: Perl is not dependent on the *Compaq Secure Web Server for OpenVMS* installation and
can reside anywhere on the system. Compaq Secure Web Server uses the PERL_ROOT logical
to locate Perl.

For a description of the features you can request with the PRODUCT INSTALL command when
starting an installation such as running the IVP, purging files, and configuring the installation, see
the *POLYCENTER Software Installation Utility User's Guide*.

As the installation procedure progresses, the system displays the following information.

```
The following product has been selected:
    CPQ AXPVMS PERL V5.6.1              Layered Product

Do you want to continue? [YES]

Configuration phase starting ...

You will be asked to choose options, if any, for each selected product
and for any products that may be installed to satisfy software
dependency requirements.

CPQ AXPVMS PERL V5.6.1

    Compaq Computer Corporation.

* This product does not have any configuration options.

Execution phase starting ...

The following product will be installed to destination:
    CPQ AXPVMS PERL V5.6.1              DKB100:[000000.]

Portion done: 0%..10%..20%..30%..40%..50%..60%..70%..80%..90%..100%

The following product has been installed:
    CPQ AXPVMS PERL V5.6.1              Layered Product

CPQ AXPVMS PERL V5.6.1

Post-installation tasks are required for Perl for OpenVMS.
```

```
    The release notes give detailed directions. This information
    is a brief checklist.

    Perl for OpenVMS can run standalone, however, this kit is a
    special build that supports the Compaq Secure Web Server.
    To enable  this kit for use by the web server,
    the following logicals must be visible.

    PERL_ROOT - A rooted logical pointing to the top level
          directory of this Perl installation.

    PERLSHR - Pointing to the Perl shared image for this
          installation.


    To run perl scripts in a standalone fashion, define a foreign
    command to run the main Perl executable.

      PERL := $PERL_ROOT:[000000]PERL.EXE

    Also, help can be obtained from some of the Perl modules (if
    the author provided it).  Help can be extracted by defining
    another foreign command.

    PERLDOC := $PERL_ROOT:[000000]PERL.EXE -
            PERL_ROOT:[LIB.POD]PERLDOC.COM -t
```

Post-Installation Tasks

1. Define the PERL_ROOT logical

   In order for the *Compaq Secure Web Server for OpenVMS* software to use Perl (via
   CSWS_PERL), Perl must be made available to the server processes. Two logicals are
   required to locate this kit for the *Compaq Secure Web Server*. If no other versions of Perl
   are being used on this system, it is recommended that these logicals be defined
   systemwide. Otherwise, the logicals must be defined as either /GROUP or /JOB by the
   main server process.

   The PERL_ROOT logical locates the top level directory of the Perl installation. It is rooted
   and must be a concealed logical.

   For example:

   ```
   $ DEFINE/SYSTEM/EXEC/TRANSLATION=CONCEALED -
   _$ PERL_ROOT DKB100:[.PERL5_006_01.]
   ```

2. Define the PERLSHR logical

   Once the top level directory is defined, *Compaq Secure Web Server for OpenVMS* needs
   access to the shareable image in this kit (PERLSHR.EXE). By default, OpenVMS looks in
   SYS$SHARE, but since this kit can be installed anywhere, this logical is necessary.

   For example:

   ```
   $ DEFINE/SYSTEM/EXEC PERLSHR -
   _$ PERL_ROOT:[000000]PERLSHR.EXE
   ```

Compaq Secure Web Server for OpenVMS is now able to locate this installation of Perl.

3. Define the foreign command

   Perl can also be used in a standalone mode without *Compaq Secure Web Server for OpenVMS*. To use Perl in this manner, define a foreign command to the Perl main image.

   For example:

   ```
   $ PERL :== $PERL_ROOT:[000000]PERL.EXE
   ```

   Perl scripts can then be executed from the command line by using this verb and the Perl script name as the parameter. Use the command "Perl -h" to see other options.

Removing Perl for OpenVMS

You can remove the Perl for OpenVMS kit by using the POLYCENTER Software Installation utility. Enter the following command:

```
$ PRODUCT REMOVE PERL
```

This command removes all files and directories created by this installation. Note that if you install Perl packages to extend the capabilities of Perl or create additional files in the installation area, PCSI will not have knowledge of these files and will not delete them. This will cause the directory structure to remain because the directories will not be completely empty. Some manual intervention may be needed to completely remove the kit.

Release Notes

This section contains notes on the current release of Perl for OpenVMS.

- Problem corrected: Environment variables exceeding 255 characters

  CSWS_PERL uses logical names to contain environment variables used by Perl scripts. Previously, if the equivalence string for any logical name exceeded 255 characters, CSWS_PERL terminated with the following error in APACHE$ROOT:[LOGS]ERROR_LOG:

  ```
  Fatal VMS error (status=340) at ROOT$:[PERL5_006_01]VMS.C;2
  ```

  This error was most likely to occur if your browser transmits an HTTP_ACCEPT string that exceeds 255 characters.

  This error has been corrected in Perl V5.5-3A2 and higher for OpenVMS. Environment variables can now contain up to 32,385 characters. If you have a version of Perl earlier than V5.5-3A2 installed, install the latest version, then reinstall CSWS_PERL to correct this problem.

- Tracking versions of Perl and CSWS_PERL

The Perl and CSWS_PERL kits are tightly connected. Future versions of Perl or CSWS_PERL may not interact correctly across version numbers. This release of Perl works with CSWS_PERL V1.1.

o Multiple versions of Perl

You can run this kit of Perl on the same system with other versions of Perl that you have downloaded from the open source Perl distribution site. If you choose to do this, be careful that the *Compaq Secure Web Server* software "sees" this version of Perl. Otherwise, your web based scripts will not operate correctly. The way *Compaq Secure Web Server* "sees" Perl is through logical names. See Post-Installation Tasks for information about how to set these logical names.

o Perl example syntax

Some examples found in Perl manuals do not show the same syntax as that required by this version of Perl. Compaq recommends that you use the PERLDOC feature to display the help text (if available) to find the correct syntax.

o Perl-status location

Through *Compaq Secure Web Server*, the "perl-status" location gives useful information about Perl and CSWS_PERL. Part of that wealth of information requires the `Devel::Symdump` Perl package to be installed. This kit does not contain that package. It can be obtained from CPAN via the web at: http://www.perl.com.