Perl for OpenVMS Installation Guide and Release Notes

April 2004

Perl Version 5.6.1 ECO 3 for OpenVMS
CPQ-AXPVMS-PERL561_UPDATE-V0300--4.PCSI-DCX-AXPEXE

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

Contents

Software Prerequisites

Perl for OpenVMS **Version 5.6.1 ECO 3** requires OpenVMS Alpha Version 7.2-2 or higher.
Perl for OpenVMS **Version 5.6.1** requires OpenVMS Alpha Version 7.2-1 or higher.

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

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

Documentation

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

For a list of what has changed in the ECO 3 kit, see the PERL561_UPDATE3.RELEASE_NOTES file in the Perl for OpenVMS kit. To view the file before you install the Perl kit, enter the following command:

```
$ PRODUCT EXTRACT RELEASE_NOTES PERL561_UPDATE
```

See the CSWS_PERL for Secure Web Server for OpenVMS Installation Guide and Release Notes for information about running CSWS_PERL with Perl and the 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
```

For PERLDOC help, enter the following command:

```
$ PERLDOC -h
```

Downloading the Kit

Download the Perl for OpenVMS Alpha self-extracting file.

» Perl Version 5.6.1 ECO 3 for OpenVMS Alpha
» Perl Version 5.6.1 for OpenVMS Alpha

When you save the file, confirm that the file extension of the saved file is .PCSI-DCX-AXPEXE. If the file extension is truncated, set the file extension to .PCSI-DCX-AXPEXE.

See the Software Patch Kits page for the latest patch kit for Perl Version 5.6.1.

Important: A "hot fix" saveset is available for Perl Version 5.5-3A2. (Perl Version 5.5-3A2 was released on June 1, 2001). If you previously downloaded and are using Perl Version 5.5-3A2, HP recommends that you download and restore the backup saveset. Instructions are included in the PERL_README.TXT file.

Download the Perl Version 5.5-3A2 "hot fix" saveset.

» Perl Version 5.5-3A2 for OpenVMS Alpha saveset
» Perl Version 5.5-3A2 "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 self-extracting file, enter one of the following commands, depending on the file you downloaded:

```
$ RUN CPQ-AXPVMS-PERL561_UPDATE-V0300--4.PCSI-DCX-AXPEXE
$ RUN CPQ-AXPVMS-PERL-V0506-1-1.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-PERL561_UPDATE-V0300--4.PCSI or 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 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 Secure Web Server unless you follow the steps below. This occurs because the CSWS_PERL for 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 kit, enter the following command where *DISK$DKA0:[APACHE_KITS]* is an example of a disk and directory name.

```
$ PRODUCT INSTALL PERL561_UPDATE/DEST=DISK$DKA0:[000000]
```

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

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

```
$ PRODUCT INSTALL PERL561_UPDATE DEST=DISK$DKA0:[000000]

    The following product has been selected:
    CPQ AXPVMS PERL561_UPDATE V3.0          Patch (maintenance update)

    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 PERL561_UPDATE V3.0: Update for Perl V5.6-1.

            Hewlett Packard Company.
```

```
* This product does not have any configuration options.

Execution phase starting ...

The following product will be installed to destination:
        CPQ AXPVMS PERL561_UPDATE V3.0          DISK$DKA0:[000000]

Portion done: 0%...10%...20%...70%...90%...100%

The following product has been installed:
CPQ AXPVMS PERL561_UPDATE V3.0          Patch (maintenance update)

CPQ AXPVMS PERL561_UPDATE V3.0: Update for Perl V5.6-1.

        Post-installation tasks are required.

If you are running the Secure Web Server (CSWS) with Perl support,
you must stop and restart the Apache server software to complete
the installation:

        $ @SYS$STARTUP:APACHE$SHUTDOWN
        $ @SYS$STARTUP:APACHE$STARTUP
```

Post-installation Tasks

1. Define the PERL_ROOT logical

    In order for the 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 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, the Secure Web Server for OpenVMS
    requires 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
    ```

    The Secure Web Server is now able to locate this installation of Perl.

3. Define the foreign command

   Perl can also be used in a standalone mode without the Secure Web Server. 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. To
do so, 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 in Perl Version 5.5-3A3 and Perl Version 5.6.1: SUBSYSTEM
  attribute added to a rights identifier

  Perl Version 5.5-3A3 and Perl Version 5.6.1 correct a bug that occurred when you
  ran Perl from an account with the SUBSYSTEM attribute added to a rights identifier
  granted to that account. This bug put Perl into "taint" mode, but the method of doing
  so had some coding errors, which have been corrected.

- Problem corrected in Perl Version 5.5-3A3: Long environment variables caused
  process to exit from a buffer overflow

  Perl Version 5.5-3A3 corrects a problem that occurred in Perl Version 5.5-3A2,
  whereby long environment variables caused the process to exit from a buffer
  overflow. (The Perl Version 5.5-3A2 hot fix saveset also corrects this problem.) This
  problem does not occur in Perl Version 5.6.1.

- Problem corrected in Perl Version 5.5-3A2: 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 Version 5.5-3A2 and higher for OpenVMS.
Environment variables can now contain up to 32,385 characters. If you have a
version of Perl earlier than Version 5.5-3A2 installed, install the latest version, then
reinstall CSWS_PERL to correct this problem.

- Tracking versions of Perl and CSWS_PERL

   The CSWS_PERL and Perl kits are tightly connected. Future versions of Perl or
   CSWS_PERL may not interact correctly across version numbers. Perl for OpenVMS
   Version 5.6.1 ECO 3 works with CSWS_PERL Version 2.0. Perl for OpenVMS
   Version 5.6.1 works with CSWS_PERL Version 1.1. Perl Version 5.5-3A3 works with
   CSWS_PERL Versions 1.0-1 and 1.0.

- Multiple versions of Perl

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

- Perl example syntax

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

- Perl-status location

   Through the 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. The Perl for OpenVMS kit does not
   contain that package. However, it can be obtained from CPAN via the web at:
   http://www.perl.com.