



Intel® Acceleration Stack 1.3.1.2 Patch Release Notes

Intel® FPGA Programmable Acceleration Card N3000-N

Version: **2.0**

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1.0 Intel Acceleration Stack 1.3.1.2 Patch Release Notes

This document provides information about Intel® Acceleration Stack v1.3.1 Patch N3000-1-3-1-2 for the Intel® FPGA Programmable Acceleration Card (PAC) N3000-N.

1.1 Related Documents

Table 1-1. Related Documents

Document	Part Number
Intel Acceleration Stack for Intel Xeon CPU with FPGAs Version 1.3.1 Release Notes: Intel FPGA Programmable Acceleration Card N3000-N	RN-1234

1.2 Prerequisites

Installed Intel Acceleration Software Stack for N3000 PAC v1.3.1, Patch N3000-1-3-1-1

1.3 Patch Features

PACSign Tool support to newer OpenSSL library, includes security updates.

1.4 Patch Installation

Before installing the patch package, ensure that you have downloaded the `update2_n3000_patch_1.3.1.2.tar.gz` from Intel® FPGA PAC N3000 Acceleration Stacks v1.3.1 Downloads page, Updates section

1.4.1 Patch Installation for CentOS 7.x

1. Confirm the current version of Intel Acceleration Stack for N3000-N PACSign by executing the following command:

```
rpm -qa | grep opae
```

2. The current version should reflect the following RPMs with e17 or e18 before the x86_64.

```
opae.admin-1.0.3-2.noarch  
opae-tools-extra-1.3.7-5.x86_64  
opae-devel-1.3.7-5.x86_64  
opae-intel-fpga-driver-2.0.1-11.x86_64  
opae-tools-1.3.7-5.x86_64  
opae.pac_sign-1.0.4-4.x86_64  
opae-libs-1.3.7-5.x86_64
```

3. Remove opae_pac_sign

```
sudo yum remove opae.pac_sign-1.0.4-4.*.x86_64
```

4. Confirm the removal of above RPMs from OPAE Software Stack. The following command should return above RPMs, except for the one removed.

```
rpm -qa | grep opae
```

5. Remove OpenSSL

```
sudo yum remove openssl
```

6. Install OpenSSL version 1.1.1

Download openssl code from following link:

<https://www.openssl.org/source/old/1.1.1/openssl-1.1.1k.tar.gz>

Extract openssl-1.1.1k.tar.gz and build the library:

```
tar -xvzf openssl-1.1.1k.tar.gz  
cd openssl-1.1.1k  
./config --prefix=/usr --libdir=lib64  
make  
sudo make install
```

7. Extract patch from zip tar ball file, n3000_patch_1.3.1.2.tar.gz.

```
tar xvf n3000_patch_1.3.1.2.tar.gz
```

8. Change directory to where the new RPMs are stored.

```
cd n3000_patch_1.3.1.2
```

9. Change directory to CentOS7.x subfolder

```
cd CentOS7.x
```

10. Install updated opae.pac_sign

```
sudo yum localinstall pacsign-1.0.7-1.el7.noarch.rpm
```

11. Confirm correct OPAE version installation

```
rpm -qa | grep pacsign
```

12. New version should reflect the following

```
pacsign-1.0.7-1.el7.noarch
```

1.4.2 Patch Installation for RHEL 8.x

1. Confirm the current version of Intel Acceleration Stack for N3000-N PACSign by executing the following command:

```
rpm -qa | grep opae
```

2. The current version should reflect the following

```
opae.pac_sign-1.0.4-4.el8.x86_64  
opae-tools-extra-1.3.7-5.el8.x86_64  
opae-devel-1.3.7-5.el8.x86_64  
opae-tools-1.3.7-5.el8.x86_64  
opae-libs-1.3.7-5.el8.x86_64  
opae.admin-1.0.3-2.el8.noarch  
opae-intel-fpga-driver-2.0.1-10.x86_64
```

3. Remove opae-pac_sign

```
sudo yum remove opae.pac_sign-1.0.4-4.*.x86_64
```

4. Confirm the removal of above RPMs from OPAE Software Stack. The following command should return above RPMs, except for the one removed.

```
rpm -qa | grep opae
```

5. Extract patch from zip tar ball file, n3000_patch_1.3.1.2.tar.gz.

```
tar xvf n3000_patch_1.3.1.2.tar.gz
```

6. Change directory to where the new RPMs are stored.

```
cd n3000_patch_1.3.1.2
```

7. Change directory to RHEL8.x subfolder

```
cd RHEL8.x
```

8. Install updated opae.pac_sign

```
sudo yum localinstall pacsign-1.0.7-1.el8.noarch.rpm
```

9. Confirm correct OPAE version installation

```
rpm -qa | grep pacsign
```

10. New version should reflect the following

```
pacsign-1.0.7-1.el8.noarch
```


2.0 Document Revision History

Date	Changes
2021.06.21	Initial release.
2022.10.21	Patch N3000-1-3-1-2 release