

## **ATX Supported HW and OS environments**

- ATX is supported on the following Linux OS distributions:
  - Red Hat Enterprise Linux 9 / Oracle Linux 9
  - Red Hat Enterprise Linux 8 / Oracle Linix 8
  - SUSE Linux Enterprise Server 15
  - SUSE Linux Enterprise Server 12
  - Ubuntu Server LTS 24.04
  - Ubuntu Server LTS 22.04
- ATX is currently supported on the following platforms
  - All 2-socket and larger HPE platforms, Gen8 or later, that run the above Linux distributions
- ATX release cadence:
  - Recompile-only releases to support major Linux distribution releases (i.e., RHEL 8, SLES 15)
  - Enhancement releases will occur as new customer-valuable features are added



## **Obtaining ATX**

- ATX is available from the HPE My License Portal
   My HPE Software Center -> HPE-ATX
- Download the ATX rpm for the desired Linux distribution
  - For Oracle Linux download the equivalent RHEL rpm installation package.



## **RPM Signature Verification**

- ATX rpm files have been signed with digital private keys only held by HPE
- This ensures that the rpm file has not been manipulated by a third party
- To validate and verify the digital signature of the signed rpm file visit the following HPE Software Depot web page:
  - https://downloads.linux.hpe.com/keys.html
- Follow the instructions for verifying rpm files
- If you choose to not validate and verify the digital signature of ATX rpm files you may see a warning similar to the following when installing:

```
warning: hpe-atx-1.0.4-161.69.rhel9.x86_64.rpm: Header V3 RSA/SHA1 Signature, key ID b1275ea3: NOKEY
```

However, ATX will still install correctly



#### RHEL / SLES / Oracle Linux Installation

- Login as the system administrator (root), download the RPM to a directory on your hard drive and change to that directory. For Oracle Linux use the equivalent RHEL rpm installation package.
- To remove a previously installed ATX package using the rpm command:

```
rpm -e hpe-atx
```

— To install the ATX package using the rpm command:

```
rpm -ivh hpe-atx-<version>.rpm
(for example: rpm -ivh hpe-atx-1.0.4-161.69.rhel9.x86_64.rpm)
```

- To install the ATX package, as well as all required dependent packages, using Linux distribution tools:

```
RHEL: yum install hpe-atx-<version>.rpm
SLES: zypper install hpe-atx-<version>.rpm
```

– To get a list of all dependent files for ATX:

```
rpm -qp --requires hpe-atx-<version>.rpm
```



#### **Ubuntu Installation**

- Login as the system administrator (root), download the RPM to a directory on your hard drive and change to that directory
- To remove a previously installed ATX package using the dpkg command:

```
dpkg -P hpe-atx
```

– To install the ATX package using the dpkg command:

```
dpkg -i hpe-atx-<version>.deb
(for example: dpkg -i hpe-atx-1.0.4-161.69.ubuntu24_amd64.deb)
```

- To install the ATX package, as well as all required dependent packages, using Linux distribution tools:

```
apt-get install hpe-atx-<version>.deb
```

To get a list of all dependent files for ATX:



## Package dependencies

- ATX is dependent on the following commands and libraries:
  - 1) /usr/lib64/libnuma.so.1
    - Repository Package Name:
      - RHEL/Ubuntu: numctl-libs or numactl (changes from release to release)
      - SLES: libnuma1
  - 2) /usr/lib64/libcrypto.so.10
    - Repository Package Name: openss1
  - 3) fuser command
    - Repository Package Name: psmisc
  - 4) glibc library
    - Repository Package Name: glibc
- The ATX rpm/deb file will specify these packages as dependencies
- If the ATX rpm/deb is installed with Linux distribution tools (yum on RHEL, zypper on SLES or apt-get on Ubuntu) the tools will install the required dependent packages.



## **ATX Primary Files Installed**

- ATX command
  - /usr/bin/hpe-atx
- 64-bit ATX library:
  - /usr/lib64/libhpe-atx.so.<maj-vers>.<mid-vers>.<min-vers>
    - current library version is 1.0.4: libhpe-atx.so.1.0.4
- Man page:
  - /usr/share/man/man8/hpe-atx.8.gz

Note: There is no libhpe-atx.so file. Applications should not link against the ATX library. Only the ATX command uses the ATX library.



### **ATX AutoPass License Files Installed**

- Directory: /usr/lib64/hpeovlic-atx/
  - AutoPass Product Description file: 916\_1.0\_HPE-ATX\_1.0.pd
  - AutoPass License file: LicFile.txt
  - AutoPass shared library: lib64/lib0vLicV5Capi64.so
- Note: This directory and its files are intentionally not removed when removing ATX with rpm -e hpe-atx
  - We don't want to remove the current license information in case you are installing a new version of ATX after removing the previous version of ATX.



### **Trial License**

- ATX is shipped with a free 60-day Trial License
- The 60-day Trial License will be automatically installed when the ATX rpm is installed
- To find out how many days are remaining with the trial license use:

hpe-atx --license-status or hpe-atx -s

## **Installing a Permanent License**

- You must obtain and install a permanent license to continue to use ATX beyond the 60-day trial period
- To obtain a permanent license refer to your sales representative or your contract administrator
  - The number of sockets on the system and the system serial number must be provided:
    - cat /sys/devices/virtual/dmi/id/product\_serial
  - Licenses are valid for the life of the system rather (as opposed to time-based licenses)
- Download the permanent license to a cense>.dat file on your system
- After you have obtained the permanent license, follow these steps to install the new license:
  - 1) Ensure that the file /usr/lib64/hpeovlic-atx/LicFile.txt exists.
  - 2) HPE recommends that you back up this file before installing the new permanent license.
  - 3) Install the new permanent license with one of the following commands:

```
hpe-atx -a < license > .dat or hpe-atx --license - add < license > .dat
```

On successful license installation the following message will be displayed:

```
hpe-atx: New license installed
```

For more information, see the hpe-atx(8) manpage.



## **Verifying a Permanent License**

- To verify the permanent license:
  - 1) Run one of the following commands:

```
hpe-atx -s or hpe-atx --license-status

Information about the current license being used will be displayed
```

2) To see a list of all valid licenses installed run one of the following commands:

- For more information, see the hpe-atx(8) manpage.

## **Changing Linux OS Versions or Vendors**

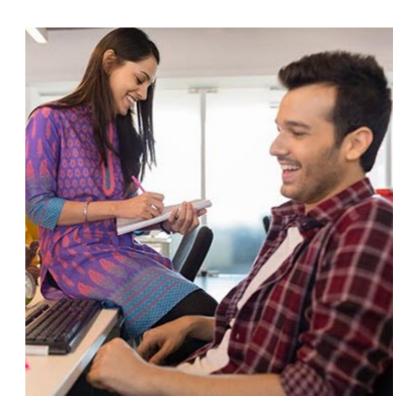
- Save your license key file provided by HPE (the license>.dat file)
- If you plan to upgrade to a new OS version, you can use the same ATX license that you are currently using.
  - For example, if you are upgrading from Red Hat Enterprise Linux 8 to Red Hat Enterprise Linux 9, you can use the same ATX license used with Red Hat Enterprise Linux 8 on Red Hat Enterprise Linux 9.
- You can also use the same ATX license if you are changing OS vendors.
  - For example, if you are changing from Red Hat Enterprise Linux 8 to SUSE Linux Enterprise Server 12, you can use the same ATX license



#### For additional information

#### **Publicly Available Resources**

- HPE-ATX product page:
  - <a href="http://downloads.linux.hpe.com/SDR/project/hpe-atx">http://downloads.linux.hpe.com/SDR/project/hpe-atx</a>
- HPE-ATX download:
  - HPE My License Depot
    - My HPE Software Center -> HPE-ATX
  - HPE Software Delivery Repository
    - http://downloads.linux.hpe.com/SDR/project/hpe-atx/repo.html
- Documentation: Installing HPE-ATX
  - http://downloads.linux.hpe.com//SDR/project/hpe-atx/Installing\_HPE-ATX.pdf
- Documentation: Launching applications with HPE-ATX
  - <a href="http://downloads.linux.hpe.com//SDR/project/hpe-atx/Using">http://downloads.linux.hpe.com//SDR/project/hpe-atx/Using</a> HPE-ATX.pdf
  - http://downloads.linux.hpe.com//SDR/project/hpe-atx/HPE-ATX proof points.pdf
- Demo Videos on the HPE Solution Demonstration Portal
  - https://hpedemoportal.ext.hpe.com/search/HPE-ATX







# Thank you

