

**Hewlett Packard
Enterprise**

Application Tuner Express:

Installing ATX

August 2017

ATX Supported HW and OS environments

- ATX is supported on the following Linux OS distributions:
 - Red Hat Enterprise Linux 6.5 and all follow-on 6.x releases
 - Red Hat Enterprise Linux 7.0 and all follow-on 7.x releases
 - SUSE Linux Enterprise Server 11 SP3 and all follow-on 11 SPx releases
 - SUSE Linux Enterprise Server 12 and all follow-on 12 SPx releases
- ATX is currently supported on the following platforms
 - All 2-socket and larger HPE platforms, Gen8 or later, that run the above Linux distributions
- Release cadence:
 - Recompile-only releases to support major Linux distribution releases (i.e., RHEL 8, SLES 13)
 - Enhancement releases will occur as new customer-valuable features are added

Obtaining ATX

- ATX is available from the HPE Software Depot
 - <http://www.hpe.com/info/softwaredepot>
- Search for ATX in the search box
 - <https://h20392.www2.hpe.com/portal/swdepot/displayProductInfo.do?productNumber=HPE-ATX>
- Download the ATX rpm for the desired Linux distribution

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:
 - **HPE GPG or RPM Signature Verification (HPLinuxCodeSigning)**
 - <https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=HPLinuxCodeSigning>
- 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-1.0.0-51.31.rhel6.x86_64.rpm: Header V3 RSA/SHA1 Signature, key ID  
b1275ea3: NOKEY
```

However, ATX will still install correctly

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 `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-1.0.0-50.39.rhel7.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
```

Package dependencies

– ATX is dependent on the following commands and libraries:

1) `/usr/lib64/libnuma.so.1`

– Repository Package Name:

– RHEL: `numctl-libs` or `numactl` (changes from release to release)

– SLES: `libnuma1`

2) `fuser` command

– Repository Package Name: `psmisc`

3) `glibc` library

– Repository Package Name: `glibc`

– The ATX rpm file will specify these packages as dependencies

– If the ATX rpm is installed with Linux distribution tools (`yum` on RHEL or `zypper` on SLES) 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 1.0.1: `libhpe-atx.so.1.0.1`
- 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/libOvLicV5Capi64.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 only 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
 - Licenses are valid for the life of the system rather (as opposed to time-based licenses)
- Download the permanent license to a `<license>.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:

```
hpe-atx -S or hpe-atx --license-status-all
```

– 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 6 to Red Hat Enterprise Linux 7, you can use the same ATX license used with Red Hat Enterprise Linux 6 on Red Hat Enterprise Linux 7.
- 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 6 to SUSE Linux Enterprise Server 12, you can use the same ATX license

For additional information

Publicly Available Resources

– **HPE Software Depot** (<http://www.hpe.com/info/softwaredepot>)

HPE-ATX product download page

- <https://h20392.www2.hpe.com/portal/swdepot/displayProductInfo.do?productNumber=HPE-ATX>

Slides: Installing HPE-ATX (Module 2)

- <http://h20195.www2.hpe.com/V2/GetPDF.aspx/c04951159.pdf>

Slides: Launching applications with HPE-ATX (Module 3)

- <http://h20195.www2.hpe.com/V2/GetPDF.aspx/c04951158.pdf>

– **HPE Solution Demonstration Portal** (<https://vrp.glob.itcs.hpe.com/sdp/default.aspx>)

Demo: HPE Automatic Tuner Express (HPE-ATX) (8P Superdome X)

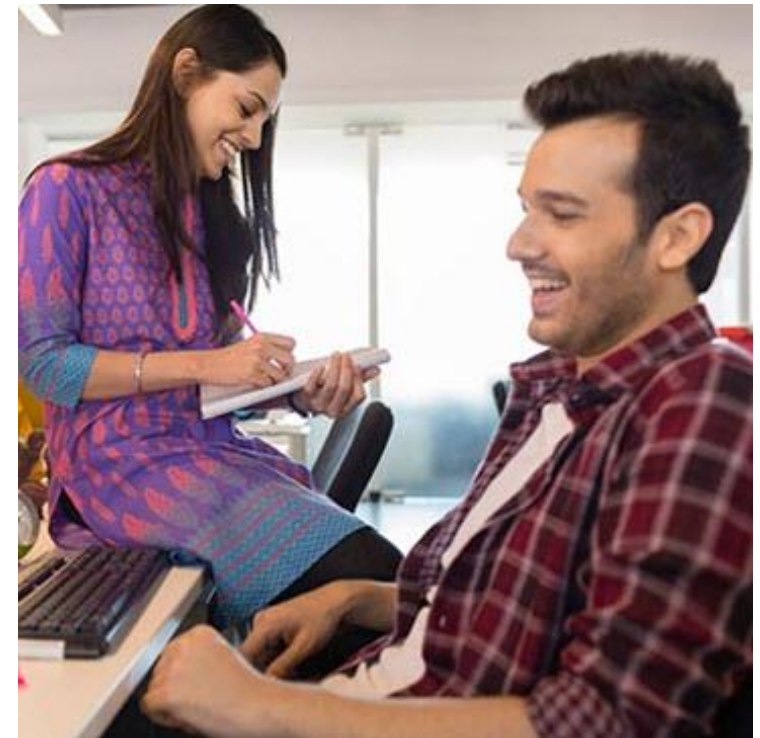
- <https://vrp.glob.itcs.hpe.com/SDP/Content/ContentDetails.aspx?ID=4774>

Demo: HPE Integrity MC990 X OLTP perf improvement with HPE-ATX (8P MC990 X)

- <https://vrp.glob.itcs.hpe.com/SDP/Content/ContentDetails.aspx?ID=5067>

Demo: Database consolidation perf enhancement with HPE-ATX (16P Superdome X)

- <https://vrp.glob.itcs.hpe.com/SDP/Content/ContentDetails.aspx?ID=5080>





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Thank you