# Getting Started

This section contains information about system requirements, installation, known issues, and support.

* **System Requirements**
* **Installation Instructions**
* [**Using CodeXL From a Remote Station**](#_Using_CodeXL_From)
* **Known Issues**
* **Support**

## System Requirements

Operating Systems

* Microsoft Windows 7-64 bit
* Microsoft Windows 8.1-64 bit
* Microsoft Windows 10 64-bit
* Linux 64-bit (Red Hat, Ubuntu, SUSE)

For detailed system requirements see the CodeXL Release Notes in the CodeXL installation folder or on the Documentation section of the [CodeXL web page](http://developer.amd.com/tools-and-sdks/opencl-zone/codexl/).

CodeXL Visual Studio Extension

* [Optional] Microsoft Visual Studio 2010 (Standard/Professional/Team System Edition)
* [Optional] Microsoft Visual Studio 2012 (Professional/Premium/Ultimate Edition)
* [Optional] Microsoft Visual Studio 2013 (Professional/Premium/Ultimate Edition)
* [Optional] Microsoft Visual Studio 2015 (Professional/Premium/Ultimate Edition)

Profiling OpenCL™ Applications

* [GPU device] AMD Catalyst driver with OpenCL™ GPU support
* [GPU device] AMD Radeon™ HD 5000 series or newer
* AMD APP SDK ([requirements](http://developer.amd.com/tools-and-sdks/heterogeneous-computing/amd-accelerated-parallel-processing-app-sdk/system-requirements-driver-compatibility/))

Power Profiling

* Kaveri, Mullins, Temash or Carrizo APU

For detailed system requirements see the CodeXL Release Notes in the CodeXL installation folder or on the Documentation section of the [CodeXL web page](http://developer.amd.com/tools-and-sdks/opencl-zone/codexl/).

## Installation Instructions

1. Ensure you have the required components specified in the [**System Requirements**](#_topic_SystemRequirements).
2. Install CodeXL using one of the following methods:

**Windows**

Run CodeXL\_Win\_x.x.x.exe

**Linux – plain tar**

Extract CodeXL tarball using: tar -xvzf CodeXL\_Linux\_x86\_64\_x.x.x.tar.gz

On Linux systems, the CodeXL Debian and RPM packages perform the driver installation automatically.

However, if you’ve downloaded the CodeXL tar archive, you have to install the Power Profiler’s Linux driver manually. This includes a simple step of running **<codexl-install-dir>/****AMDTPwrProfDriverInstall.run** with su credentials.

Example:

sudo ./AMDTPwrProfDriverInstall.run

**Red Hat Linux (including CentOS, Fedora)**

Install the CodeXL RPM package using: rpm -Uvh CodeXL\_Linux.x.x.x-0.x86\_64.rpm

**Ubuntu and other Debian based Linux distributions**

Install the CodeXL Debian package using:

sudo dpkg -i codexl\_x.x.x\_64.deb

followed by

sudo apt-get -f install

Confirm Installation

Assuming you used the default install location, confirm the CodeXL binaries installation with the following steps.

Windows

* The C:\Program Files (C:\Program Files (x86) on 64-bit machines) folder should have a new sub-folder named “CodeXL” (the full path of the CodeXL folder should be: C:\Program Files\CodeXL, or C:\Program Files (x86)\CodeXL on 64-bit machines)
* A CodeXL shortcut has been created (unless you chose not to have shortcut).
* The Control Panel shows CodeXLin the list of installed Programs.

Linux using tarball

1. Navigate to *<CodeXL Directory>*
2. Launch CodeXL using ./CodeXL.   
   A GUI appears.

Linux RPM / Debian

1. Navigate to /opt/AMD/CodeXL\_*X.Y-ZZZZ*/
2. Launch CodeXL using ./CodeXL.   
   A GUI appears.

Confirm Visual Studio Extension

For Windows, to confirm that the Visual Studio Extension has been installed successfully:

1. Start Microsoft Visual Studio.
2. Click on Help > About Microsoft Visual Studio from the Visual Studio main menu bar.
3. Under Installed products:, find CodeXL x.x.

## Using CodeXL From a Remote Station

CodeXL can be used remotely using the following methods:

1. Desktop sharing
2. CodeXL Remote Agent

These methods are detailed below.

Desktop Sharing

Run CodeXL graphic client application on the target platform via desktop sharing such as Windows Remote Desktop, VNC, SSH and X forwardng, etc.

Limitations:

1. OpenGL applications that are run for debugging/profiling may not recognize the shared desktop as supporting their GL requirements. If this happens run CodeXL locally on the target platform without desktop sharing or use the CodeXL Remote Agent (see below).
2. When CodeXL is run remotely using Linux SSH access, CodeXL requires X streaming such as provided by applications like Xming, etc.

CodeXL Remote Agent

Run the CodeXL Remote Agent on the target platform, and run the CodeXL graphic client application on a local station. For more details see [**Remote GPU Profiling, Power Profiling and GPU Debugging**](#_Remote_GPU_Profiling,_2).

## Known Issues

Check known issues in the CodeXL Release Notes that are found in CodeXL installation directory, and at the [CodeXL Forum](https://github.com/GPUOpen-Tools/CodeXL/issues).

## Support

* [CodeXL Project in github](https://github.com/GPUOpen-Tools/CodeXL/issues)
* [OpenCL Zone](http://developer.amd.com/tools-and-sdks/opencl-zone/" \t "_blank)
* [AMD Accelerated Parallel Processing OpenCL Programming Guide](http://developer.amd.com/tools-and-sdks/opencl-zone/amd-accelerated-parallel-processing-app-sdk/documentation/" \t "_blank)

Report a specific problem or request help for CodeXL on the [CodeXL Forum](https://github.com/GPUOpen-Tools/CodeXL/issues).