The Qt Company Introduces Qt 5.12, the Latest Version of its Framework for the Creation of Fast, High-Quality Applications and User Interfaces

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Qt 5.12 Offers Long-Term Support and Higher Performance and Quality Than Ever Before

Espoo, Finland – December 6, 2018 – The Qt Company today introduced Qt 5.12, the latest version of its cross-platform software development framework that enables developers to design and build fast, high-quality applications, user interfaces and embedded devices. In addition to long-term support (LTS), Qt 5.12 offers higher performance and quality than ever before, resulting in a comprehensive software development framework with libraries and tools that accelerate design and development for faster time-to-market. Qt's technology is currently in use by a million developers across the world and eight of the top 10 Fortune 500 companies.

With Gartner, Inc. forecasting that more than 20 billion connected things will be in use worldwide by 2020, the Internet of Things (IoT) and Industrial Internet of Things (IIoT) have become two of the most fertile areas of market opportunity for businesses of all types and sizes. Meanwhile, customers have come to expect their IoT and IIoT applications and devices to offer highly graphically rich user interfaces (UIs), as well as a greater emphasis on design, performance and timely product delivery. This combination of market growth and end-user demand presents a significant opportunity for the global community of software developers creating UIs for IoT and IIoT applications and devices. With Qt 5.12, these developers can leverage a cross-platform development framework that enables them to design, develop and deploy fast, high-quality and fully supported UIs and applications for any operating system for any device, embedded system, desktop and mobile application.

"Due to the ever-changing market demands created by the instant connectivity of the IoT, design and performance have become two of the most important attributes of today's apps and devices," said **Lars Knoll**, CTO, The Qt Company. "This is also true of apps and devices outside of the IoT and IIoT, so developers need a highly robust development framework that enables them to quickly and easily design and build branded UIs for the apps and devices. With Qt 5.12, we have placed performance and quality design squarely in the spotlight. As a result, developers can leverage a comprehensive set of tools that help ensure their UIs are visually appealing and lightning fast – and can be delivered to their customers faster than ever before."

Qt provides a centralized, cross-platform framework and unified ecosystem that enables developers to write their source code once and run it anywhere on one device. The new features and capabilities in Qt 5.12 have been designed to enable the quick and easy development of UIs, applications and embedded devices for a wide range of industries, including the automotive, medical device, automation, home entertainment, and IoT/IIoT sectors. Qt's framework also supports the development of the back-end elements and business logic of apps and devices, including network connectivity and Bluetooth location services.

Following are details on the primary features offered by Qt 5.12:

• **Long-Term Support (LTS)**: Qt 5.12 is long-term supported, which will result in a highly stable development timeline that will deliver a high degree of continuous user support. Qt 5.12 will be supported for three years, after which users can purchase extended support. Furthermore, as an LTS release, Qt 5.12 will receive multiple patch-level releases that provide bug fixes, improvements and security updates.

• **High Performance**: Qt 5.12 continues Qt's ongoing commitment to improved performance and reduced memory consumption, which were major areas of focus in Qt 5.9 (the previous LTS version of Qt). Qt 5.12 features a wide range of enhancements to Qt's graphical functionalities, especially in terms of running Qt 3D and Qt Quick on embedded hardware. Additionally, Qt 5.12 provides robust support for asset conditioning, including support for pre-generated distance field caches of fonts, which provides faster startup times, especially with complex and non-Latin fonts. Finally, the QML engine has also received multiple improvements and enhancements: QML application startup time has been reduced by 52 percent compared to Qt 5.9 LTS, and QML memory usage has been cut down by 80 percent compared to Qt 5.6 LTS.

• **TableView**: Qt 5.12 offers the availability of TableView in the Qt Quick module. TableView is similar to the existing ListView, but with additional support for the display of multiple columns. TableView was developed with performance in mind, and with architecture that allows the efficient handling of large tables.

• **Input Handling**: With Qt 5.12, the new Input Handlers becomes a fully supported feature (previously known as Pointer Handlers, a new approach for mouse, touch and gesture event handling). The new functionalities aim to provide versatility, especially in multi-touch and multi-monitor applications, and enable many different input mechanisms in Qt applications – for example, based on hand gestures detected by a camera or a proximity sensor.

• **Full Support for Python, Remote Objects and WebGL Streaming Plugin**: Qt 5.12 delivers an update to Qt for Python, initially released with Qt 5.11 as a technology preview. Qt for Python is a fully supported feature of Qt 5.12, and users can get started quickly and easily with Qt for Python via the PyPI (Python Package Index). Qt for Python opens up Qt to a a huge user base. Python is one of the fastest growing development languages. Everything you can do in C++ with Qt, you can now do with Python instead. In addition to Python, Qt Remote Objects and Qt WebGL Streaming Plugin are fully supported with Qt 5.12.

• **Designer & Developer Tools**: Qt Design Studio 1.0 leverages a pre-release of Qt 5.12 and will support the final version of Qt 5.12 when available. Qt Creator 4.8 is planned to be released together with Qt 5.12, offering a rich set of new functionalities (such as support for multiple new programming languages and multiple simultaneous debugger sessions). As always, Qt Creator 4.8 will also work with earlier versions of

Qt. Additionally, in December, Qt will release Qt 3D Studio 2.2, which is directly based on Qt 5.12 and takes advantage of the numerous 3D-related improvements of Qt 5.12.

Qt 5.12 will be available on December 6, 2018. For more information, please visit the Qt 5.12 release page.

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About The Qt Company
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