



INTRODUCING Qt®

The Cross-Platform C++ Development Framework



OVERVIEW

- 1. About Trolltech**
- 2. Introducing Qt**
- 3. Why Qt?**
- 4. Qt Editions and Licensing**

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Section One

ABOUT TROLLTECH®





About Trolltech COMPANY INFORMATION

- **Public company, founded in 1994**
- **Offices:**
 - Oslo, Norway (HQ)
 - Palo Alto, California
 - Brisbane, Australia
 - Beijing, China
 - Munich, Berlin, Germany
- **More than 10 years of uninterrupted sales growth**



About Trolltech

PRODUCT LINES: Qt & Qtopia

- **Qt** sets the standard for high performance, cross-platform software development. Qt includes a modular C++ class library and tools for cross-platform development.
- **Qtopia** is unrivalled as the application platform for efficiently building virtually any type of Linux-based device.



About Trolltech

ADDITIONAL TROLLTECH PRODUCTS

- **Qt Solutions**
 - A growing collection of special-purpose Qt add-ons
- **Teambuilder**
 - A distributed C/C++ compilation system on Linux/Unix, delivering radical speed-up of large builds

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Section Two

INTRODUCING Qt





Introducing Qt

THE CROSS-PLATFORM C++ DEVELOPMENT FRAMEWORK

- **Qt is a comprehensive, cross-platform C++ application development framework, which includes:**
 - An extensive C++ class library of over 400 classes
 - GUI, Database, Core, XML, Networking, Open GL, Multithreading, and more
 - Advanced cross-platform development tools for:
 - GUI layout and forms design
 - Internationalization
 - Documentation



Introducing Qt THE Qt LIBRARIES

- The Qt class library encompasses all the functions needed to build robust, high-end applications
- Separated into several **modules**, Qt's intuitive API includes:
 - Core Classes
 - GUI Classes
 - SQL Database Classes
 - XML Classes
 - Networking Classes
 - OpenGL[®] 3D Graphics Classes
 - And more...



Introducing Qt

Qt DEVELOPMENT TOOLS

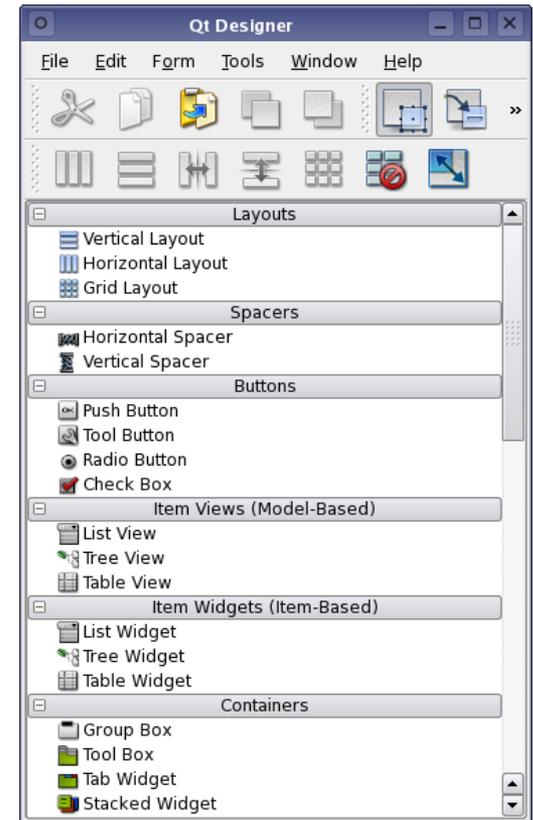
- **Qt Designer**
 - A powerful, drag-and-drop GUI layout and design tool
- **Qt Linguist**
 - A set of tools that enable quick, painless professional translation of Qt applications
- **Qt Assistant**
 - A customizable, redistributable help file and documentation reader
- **qmake**
 - A cross-platform makefile generator



Introducing Qt Qt DESIGNER



- **Qt Designer** is a powerful, drag-and-drop GUI layout and forms builder
- **Features**
 - Supports forms and dialog creation with instant preview
 - Integrates with Qt layout system
 - Extensive collection of standard widgets
 - Support for custom widgets and dialogs
 - Seamless integration with Microsoft® Visual Studio .NET
- **Benefits**
 - Greatly speeds the interface design process
 - Enables native look and feel across all supported platforms
 - Developers work within the environment of their choice, leveraging existing skills



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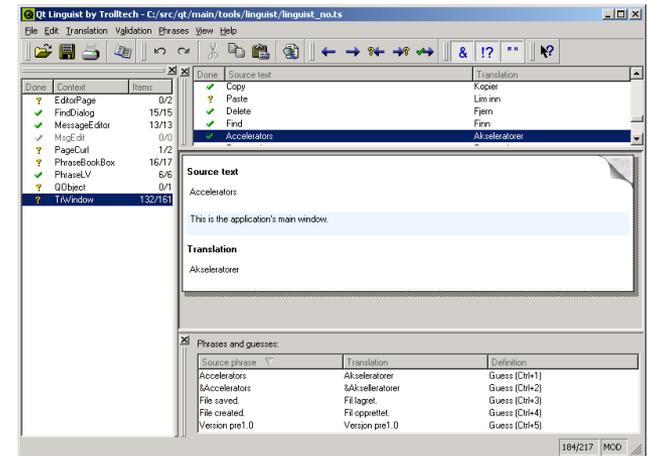
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Introducing Qt Qt LINGUIST



- **Qt Linguist** is a set of tools that smooth the internationalization workflow
- **Features**
 - Collects all UI text and presents it to a human translator in a simple window
 - Support for all languages, including CJK
 - Simultaneous support for multiple languages and writing systems from within a single application binary
- **Benefits**
 - Greatly speeds the translation/localization process
 - Works with Qt's language-aware layout engine for a clean, consistent interface no matter the language
 - Easily target international markets

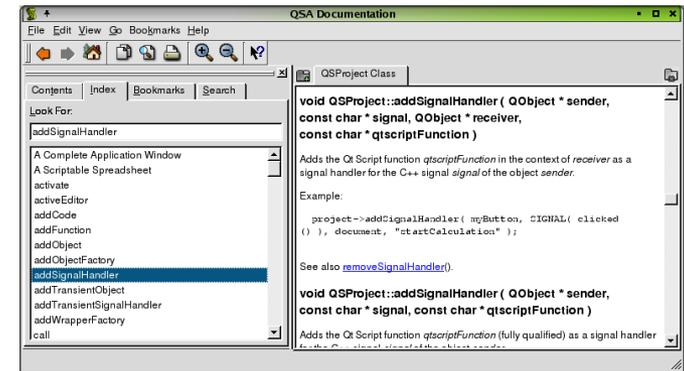




Introducing Qt Qt ASSISTANT



- **Qt Assistant** is a fully customizable, redistributable help file/documentation browser
- **Features**
 - Simple, web-browser-like navigation, bookmarking and linking of documentation files
 - Support for rich text HTML
 - Full text and keyword lookup
 - Can be customized and shipped with Qt applications
- **Benefits**
 - No longer have to build a help system from scratch
 - Leverage existing HTML skills
 - Deliver documentation in an easily searchable and navigable format to your end users





Introducing Qt qmake

- **A cross-platform application build tool**
- **Features**
 - Reads project source, generates dependency tree, generates platform specific project and makefiles
 - Integrates with Visual Studio and Xcode
- **Benefits**
 - Takes the pain out of cross-platform builds
 - Eliminates the need for manual makefile construction



Introducing Qt

CROSS-PLATFORM DEVELOPMENT WITH Qt

- **Qt is the leading framework for cross-platform application development**
- **With Qt, development teams can create **native** applications for all major operating systems**
 - The Qt API and tools are identical across all supported operating systems
 - Targeting a new platform demands little more than a simple recompile of a single source code-base
- **Qt enables development teams to natively target:**
 - Windows® 98 through Vista™
 - Mac OS® X
 - Linux
 - Solaris, HP-UX, IRIX, AIX, BSD, Tru64 UNIX

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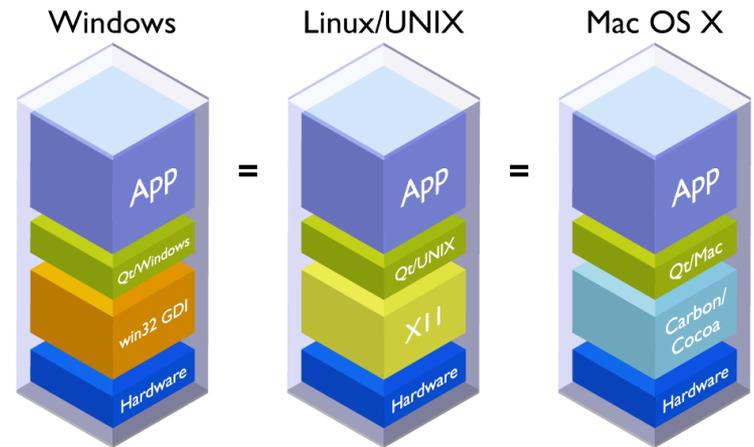
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Introducing Qt

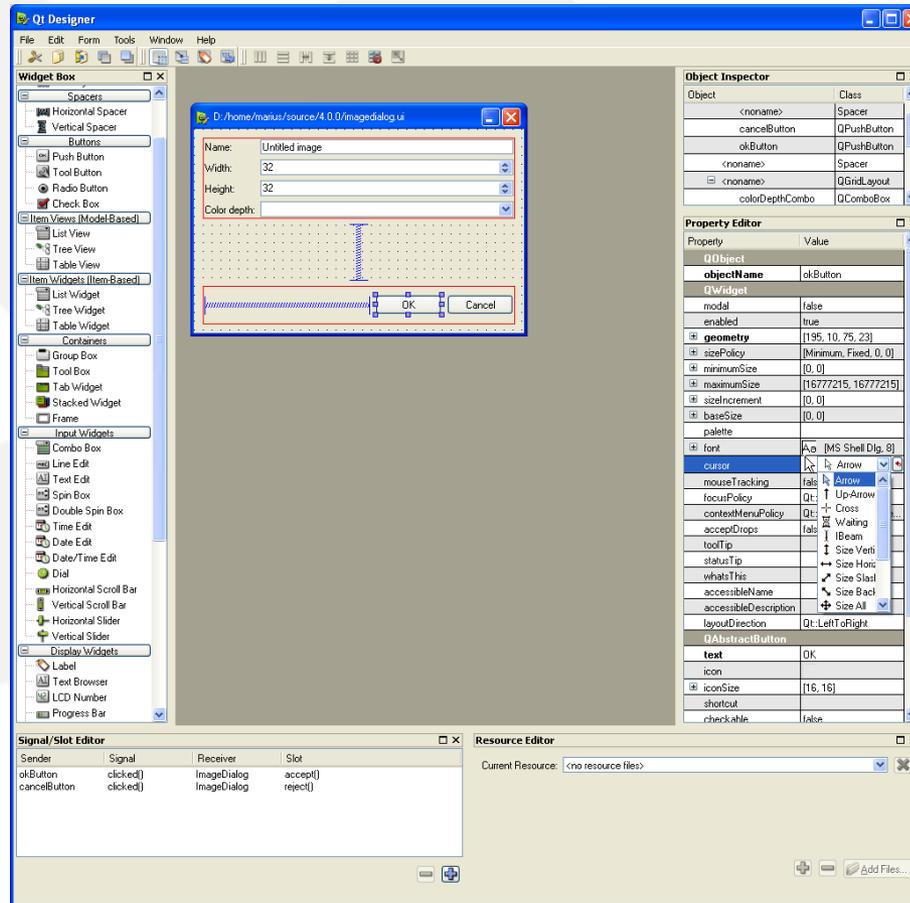
HOW Qt PROVIDES NATIVE LOOK AND FEEL

- The Qt API is uniform across platforms
- Qt interfaces with platform specific APIs “under the hood”.
- **Benefits:**
 - Only one API to learn
 - High performance, memory-efficient, compiled applications
 - Native look and feel





Introducing Qt NATIVE LOOK ON WINDOWS



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Introducing Qt NATIVE LOOK ON MAC[®] OS X

Signal/Slot Editor

Sender	Signal	Receiver	Slot
okButton	clicked()	ImageDialog	accept()
cancelButton	clicked()	ImageDialog	reject()

Property Editor

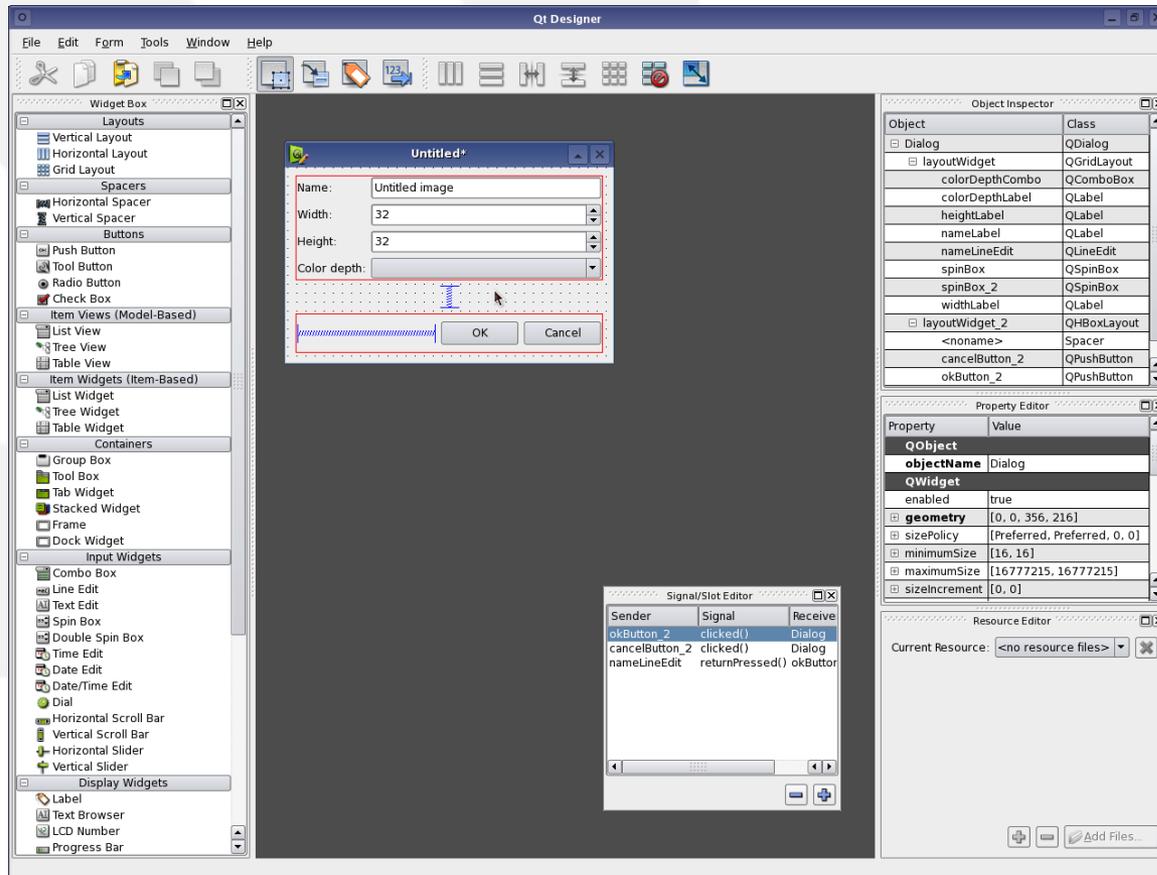
Property	Value
QObject	
objectName	ImageDialog
QWidget	
enabled	true
▶ geometry	[0, 0, 373, 234]
▶ sizePolicy	[Preferred, Preferred, ...
▶ minimumSize	[16, 16]
▶ maximumSize	[16777215, 16777215]
▶ sizeIncrement	[0, 0]
▶ baseSize	[0, 0]
palette	
▶ font	Aa [Lucida Grande, 13]
cursor	Arrow
mouseTracking	false
focusPolicy	Qt::NoFocus
contextMenuPolicy	Qt::DefaultContextM...
acceptDrops	false
windowTitle	Create Image
windowIcon	
windowIconText	
windowModified	false
toolTip	
statusTip	
whatsThis	
accessibleName	
accessibleDescription	
layoutDirection	Qt::LeftToRight
QDialog	
sizeGripEnabled	false
modal	false

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Introducing Qt NATIVE LOOK ON LINUX



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Introducing Qt

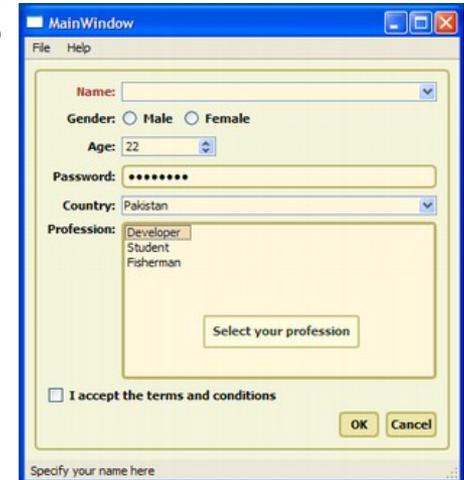
CODE ONCE, DEPLOY ANYWHERE

- **With Qt, development teams can:**
 - Target multiple platforms from a single source
 - Shorter development time – faster time to market
 - Reduced maintenance expense
 - Avoid OS-subgroups in development organization
 - Enjoy true platform independence
 - Target a new platform in weeks, not months
 - Rapidly respond to evolving market requirements
 - Remain insulated from platform changes
 - Qt is actively maintained and developed to support all new mainstream OS variants
 - Focus development efforts instead on value-adding innovation



Introducing Qt NEW IN 4.2: WIDGET STYLESHEETS

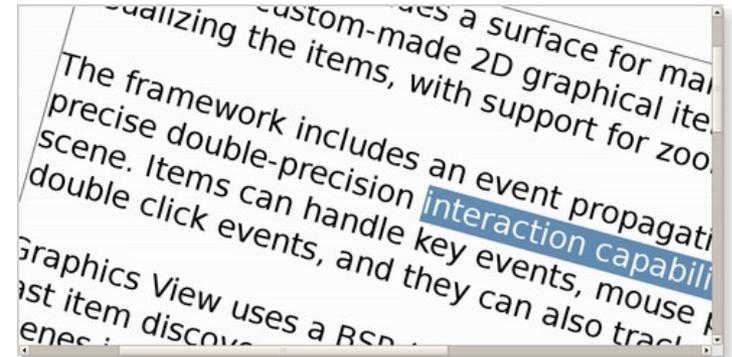
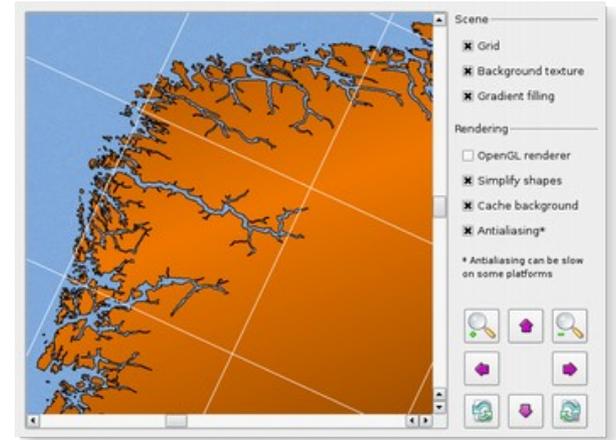
- **Rapid UI styling through simple CSS syntax**
 - Complex styles can be defined in a few lines of Cascading Style Sheet (CSS)-like code
 - Define styles in a fraction of the time and code traditionally needed
 - Style to the right created in 50 lines





Introducing Qt NEW IN 4.2: GRAPHICS VIEW

- **Powerful 2D graphics canvas**
 - Handles millions of objects
 - Support for collision detection, optimized level-of-detail rendering, affine item transformations
 - Enhanced control for animations and drag and drop features





Section Three

WHY Qt?





Why Qt?

THE Qt COMPETITIVE ADVANTAGE

- **Qt delivers real, lasting competitive advantage**
 - Qt increases the productivity of developers by making C++ programming faster, easier and more intuitive
 - Qt development tools eliminate common bottlenecks in the development process:
 - GUI Design & Layout - Qt Designer
 - Translation/Localization - Qt Linguist
 - Documentation - Qt Assistant
 - Cross-platform build system - qmake



Why Qt?

THE Qt COMPETITIVE ADVANTAGE

- Qt delivers true platform freedom – targeting a new platform is measured in days or weeks, not months or years
- One source code base means less maintenance time and expense – multiplying results of development efforts
- Full access to complete source code on all platforms enables development teams to adapt and extend Qt to meet their unique needs, expediting the development process.

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Why Qt?

VISUAL STUDIO .NET INTEGRATION

Optimized for



- **Qt 4 is seamlessly integrated with Microsoft® Visual Studio .NET**
 - Qt now enables Windows developers to leverage their skills to target multiple operating systems from a familiar environment
 - Qt's integration with Visual Studio includes:
 - Code completion and syntax highlighting, boosting developer productivity using the intuitive Qt API
 - Powerful GUI layout system and forms design using integrated Qt Designer
 - Qt documentation integrated with Visual Studio online help
 - Templates for the most common Qt application types

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Why Qt? **DUAL LICENSING**

- **Qt offers all the benefits of Open Source...**
 - Extensive QA from a large, active developer community
 - Complete code transparency – including on Windows
 - See “under the hood” – customize Qt to fit the unique needs of development teams
- **...in a commercially-supported framework.**
 - Customer-acclaimed professional support
 - Dedicated Qt development team
 - Growing ecosystem of 3rd party tools, components & services
 - 4500 companies actively developing commercial applications with Qt

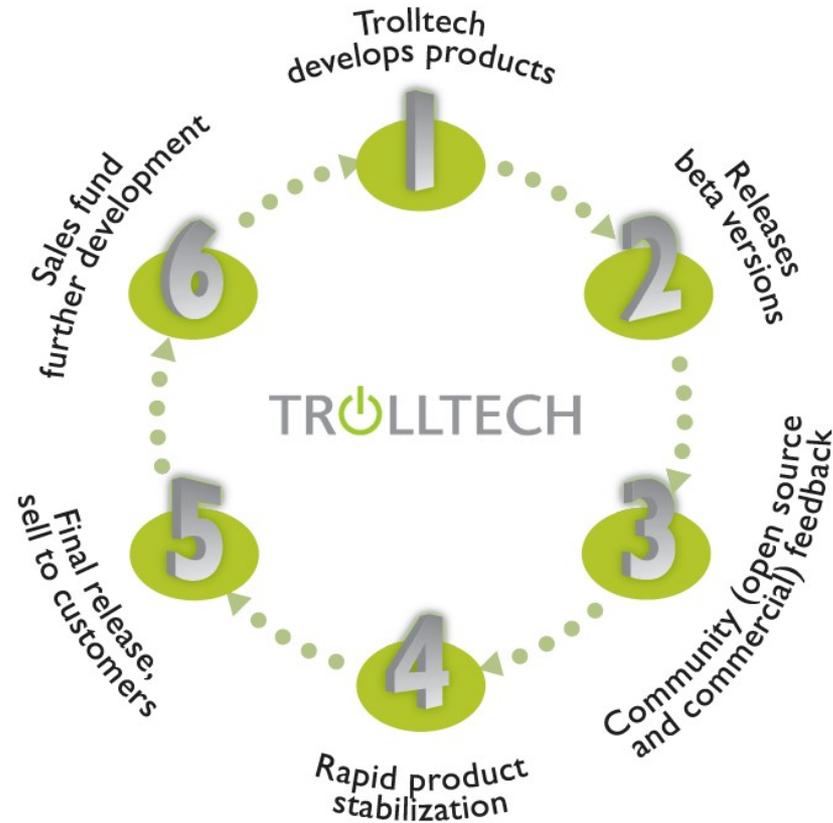
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Why Qt?

DUAL LICENSING: THE VIRTUOUS CYCLE



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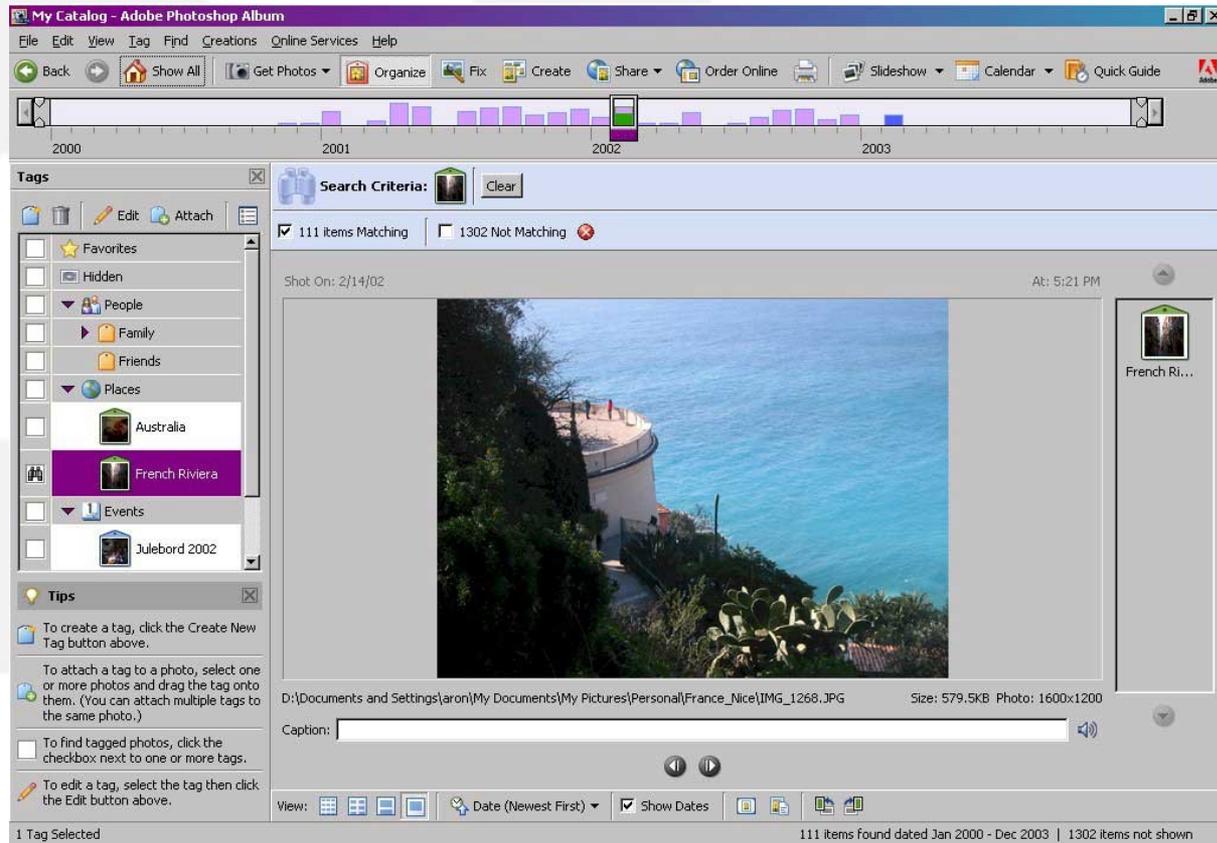
WHY Qt? THE Qt ECOSYSTEM

- **Partners**
 - Add-on providers
 - Services providers
 - Local resellers
- **Large User Community**
 - Web forums, mailing lists
 - Thousands of Qt developers worldwide – commercial and open source
 - Expanding and evolving Qt talent pool



WHY Qt?

ADOBE PHOTOSHOP® ELEMENTS



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Why Qt? GOOGLE EARTH



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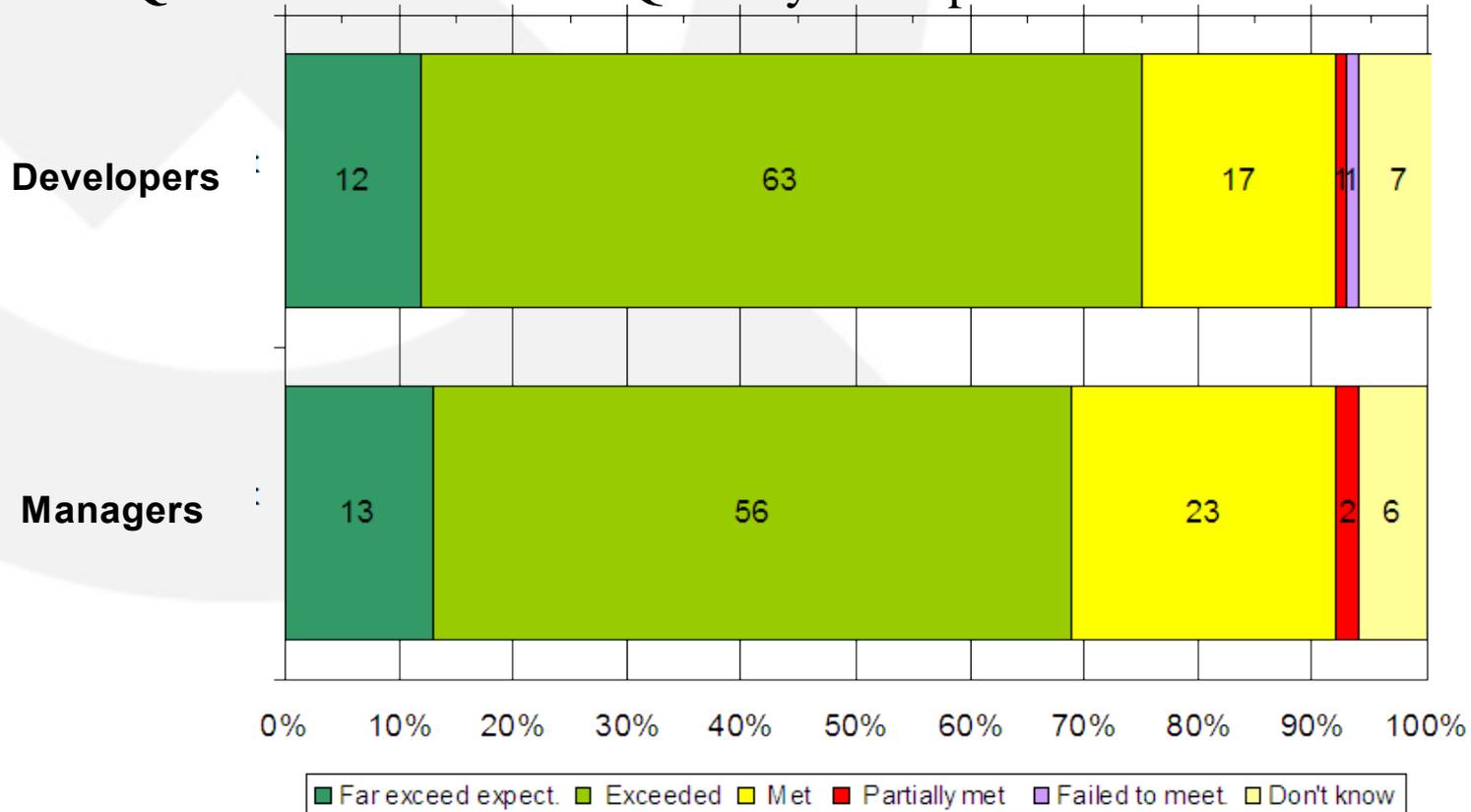
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WHY Qt?

WHAT OUR CUSTOMERS THINK*

Q: To what extent has Qt met your expectations?



* Source: 2006 Trolltech Customer Survey

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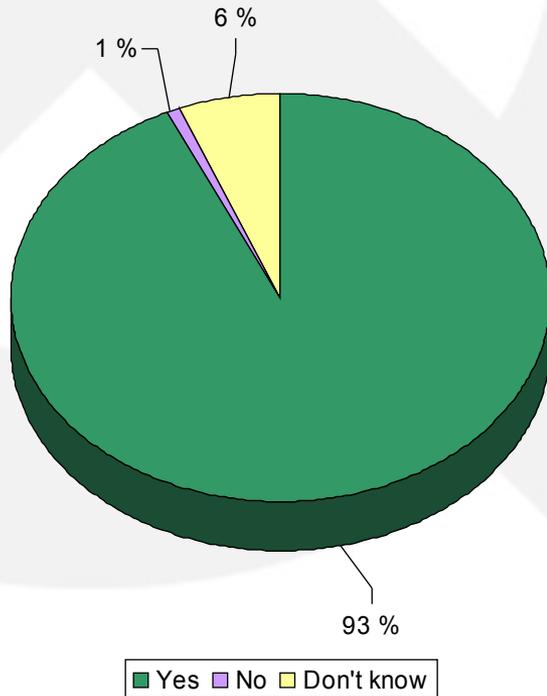
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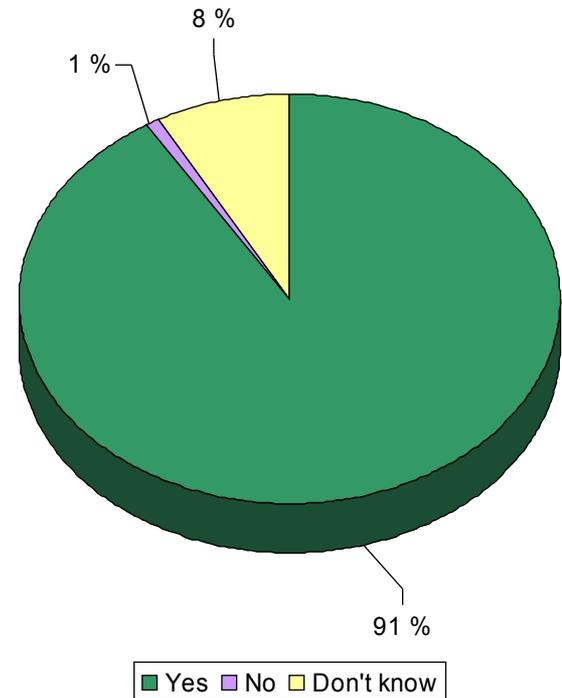
WHY Qt?

WHAT OUR CUSTOMERS THINK*

Q: Would you recommend Qt to others?



Developers



Managers

* Source: 2006 Qt Customer Survey

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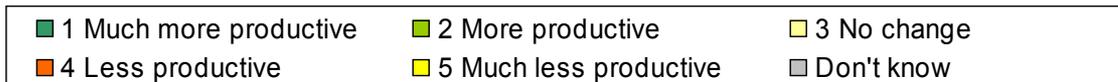
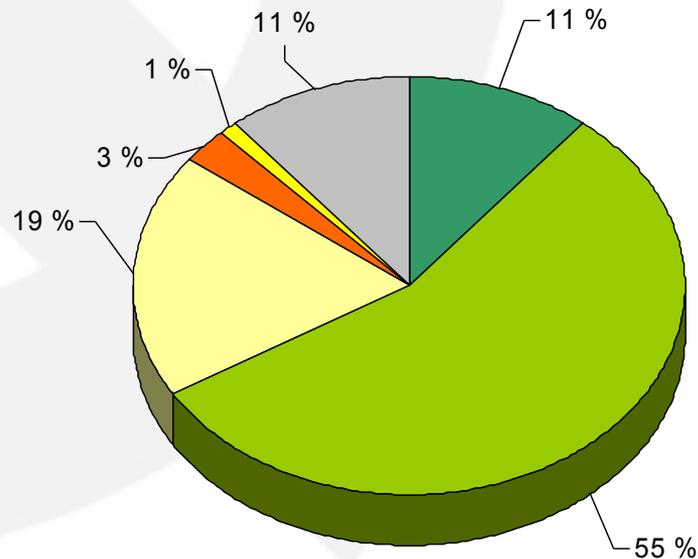
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WHY Qt?

WHAT OUR CUSTOMERS THINK*

Q: Have your developers become more productive as a result of using Qt?



• Source: 383 Managers, 2006 Qt Customer Survey

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Section Four

EDITIONS & LICENSING





Editions & Licensing

Qt EDITIONS

- **Qt is available in three editions, each optimized for a unique purpose:**
 - Qt Console Edition
 - Qt Desktop Light Edition
 - Qt Desktop Edition



Editions & Licensing **Qt CONSOLE EDITION**

- **An edition of Qt optimized for the development of GUI-independent back-end and server applications**
- **The Qt Console Edition includes:**
 - Qt Core classes
 - Database module
 - Network module
 - XML module



Editions & Licensing

Qt DESKTOP LIGHT EDITION

- **An edition of Qt that provides all the features and capabilities required for cross-platform GUI application development**
- **The Qt Desktop Light Edition includes:**
 - Qt Core classes
 - Qt GUI module
 - Qt Designer
 - Qt3Support module
 - Microsoft® Visual Studio integration (Qt/Windows)



Editions & Licensing

Qt DESKTOP EDITION

- **A comprehensive edition of Qt that provides full access to the entire range of Qt features**
- **The Qt Desktop Edition includes:**
 - Qt Core module
 - Qt GUI module
 - Qt Designer
 - OpenGL® 3D Graphics module
 - Database module
 - Network module
 - XML module
 - Qt3Support module
 - Microsoft® Visual Studio .NET integration

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THANK YOU!

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