

DEVICE DRIVER DEVELOPMENT FOR SCANNERS AND PRINTERS

The Client is a leading manufacturer of printers and other computer peripherals for home and office use. Newgen has been involved in device driver development for Scanners and Printers.

CHALLENGE

Extreme competition mandated that device driver development part be outsourced for on-time, within budget execution of project. The most important challenge was identifying the partner that had in-depth understanding of platform functionality both at hardware and software levels. Quality deliveries were a critical aspect since most drivers execute in kernel mode. Even drivers executing in user mode can crash system if device being controlled is erroneously programmed.

SOLUTION

- ⊗ Developed a Unified Twain scanner driver for a range of scanners. Device drivers also developed for printers.
- ⊗ Architecture allowed for addition of new capabilities of scanners.
- ⊗ Kernel-level programming and debugging.
- ⊗ Support for all Windows Operating systems, starting from Windows 95 was provided.
- ⊗ For scanners, entire user interface handling is written in Visual C++
- ⊗ The user interface has enhanced capabilities of the device by providing certain software-supported capabilities which are not supported by the device but have been implemented through image processing software routines.

BENEFITS

- ⊗ Reduced time-to-market for products
- ⊗ Newgen's strong domain knowledge in imaging technology
- ⊗ Quality deliveries owing to mature and comprehensive software testing process

TECHNOLOGIES

- ⊗ TWAIN Standard
- ⊗ C, C++, VC++
- ⊗ Various Scanners / Printers

PROJECT TEAM

- ⊗ 7 person team
- ⊗ Duration - 2 years.

SOFTWARE ENGINEERING SERVICES AT NEWGEN

Newgen is a specialized provider of Software Engineering Outsourcing services. Over the last decade, Newgen has provided services to leading global packaged software product and enterprise software product companies.

Services provided include:

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