Stingray

PERFORCE

DATASHEET

Stingray Upgrade Services

Make GUI Development Easier

Increase Security, Efficiency, and Performance

Upgrading your critical applications to new releases of Stingray can be challenging. Often you need an upgraded version of Visual Studio or even an operating system version update. Successful upgrades require application, development environment, and architectural expertise to port code to new compiler requirements, make the most of new features, verify application performance, and resolve issues. Without extensive upgrade experience, it can be difficult to establish effective strategies and accurate schedules, especially with larger applications.

Stay focused on building value for your business – and keep your Stingray applications up to date by engaging Stingray Upgrade Services.

Why Stingray Upgrade Services?

With Stingray Upgrade Services, your project is managed by a migration expert with extensive experience in Stingray upgrades. These upgrades involve applications with thousands to millions of lines of code. This personalized experience helps you:

- **Save Time.** Skip learning curves and focus on valuable customer-driven development by utilizing experienced Stingray engineers and proven best practices.
- **Stay Secure.** Keep your application up to date with the latest security fixes and enhancements.
- **Increase Performance and Stability.** Realize the maximum gains in application performance and stability enhancements.
- **Cut Risk.** Minimize unexpected cost and resource issues, downtime, and other business disruptions.

Why Upgrade?

It is critical to update your applications' use of build technologies and third-party libraries. New releases:

- Include security patches, which protect against breaches.
- Enable you to move up to newer versions of Visual Studio and Windows to maintain compatibility.
- Can increase application performance, improving user experience.
- Include new features and enhancements that boost development efficiency, code quality, and improve stability of your application.

What's the Process?

Working closely with your team, our engineers help establish the right strategy for your business, applications, and teams. They then use a multi-phase process that includes analysis, upgrading, and testing.

ANALYSIS

Initially, our consultant will review your existing code and architecture using manual and automated processes to:

- Identify key application requirements and map them to required changes.

- Pinpoint potential incompatibility and configuration issues up front so they don't cause production issues.
- Identify and replace incompatible legacy code, deprecated interfaces, and/or extensions.

At the conclusion of the analysis phase, our consultant will provide a comprehensive plan that includes timelines, needed code changes, any recommendations for architecture and code optimizations, and the testing strategy.

UPGRADING

During the application upgrade process our consultant will upgrade your application to the latest version of Stingray, making sure it properly works with any new interfaces and functionality. In addition, our consultants use a hands-on, mentoring approach during migration, so your developers:

- Learn to use the new Stingray APIs, library features, and UI components.
- Understand any new compiler requirements in new versions of Visual Studio.
- Know coding methodologies to optimize efficiency and support new types of features.

TESTING

To help ensure your applications run seamlessly in production, our consultant will test changes as they are made during the upgrade process. They will leverage any existing test suites that are part of the application and new proven manual and automated processes. Using a short, incremental upgrade and testing approach will make it easier to pinpoint errors immediately rather than waiting until the migration is complete—saving time and reducing the risk of production issues.

Upgrading from Older Versions of Stingray

Each new Stingray release brings new functionality, security updates, changes to the API, and Visual Studio updates. It is important to keep your application updated in order to leverage all the Stingray advancements.

When updating, Stingray developers often have to deal with changes to the Stingray Foundation Library, Stingray Designer file format, Stingray API, and Windows 10 SDK. There are Visual Studio security and compiler advancements to deal with too. Each of these updates all impact the process of smoothly updating to the latest versions of Stingray. Let Stingray Upgrade Services and its expert engineers use their experience to identify the problem areas and assemble a successful upgrade plan.

Upgrading from Older Versions of Visual Studio

Each new release of Visual Studio and its C++ compiler brings advancements in how it builds Stingray based applications. Many of the advancements result in new warnings and, occasionally, compilation issues across your codebase. It can be a challenge to understand code changes and their effect on functionality of the application.

Some examples of what needs to be dealt with during Visual Studio updates include:

- **C++ standards conformance**
  Each new compiler version continues to increase the compliance checking on the C++ language. Conformance issues result in warnings and compilation errors.
- **Compatibility with C++17**
  Explicit changes for C++17 ripple across your code with warnings such as 'register' is no longer a support storage class, deprecation of functions, and other types of compatibility issues.

Understand Your Options

Contact us to learn about your upgrade options, including how you can boost security, save time, and increase performance by engaging Stingray Upgrade Services. Book a free assessment at perforce.com/contact-us.