

DATASHEET

## Visualization for C++ Upgrade Services

### Increase Security, Efficiency, and Performance

Upgrading your critical applications to new releases of Views can be challenging. Oftentimes, you may need to upgrade the version of your compiler and possibly even port your application to a whole new operation system. Successful upgrades require application, development environment, and architectural expertise to successfully port code to updated Views APIs, make the most of new features, verify and tune application performance, and resolve issues. Without extensive upgrade experience, it can also be difficult to establish effective strategies and accurate schedules, especially with larger applications. Stay focused on building value for your business—and keep your Views applications up to date by engaging Views Upgrade Services.

### Why Views Upgrade Services?

When you utilize Views Upgrade Services, your project is managed by a Views migration expert with extensive experience in Views upgrades so you can:

#### SAVE TIME

Skip learning curves and get back to valuable customer driven feature development by utilizing experienced Views 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.

#### EFFICIENT MIGRATIONS AND PORTS

Conduct migrations from older OSs such as Solaris, UNIX, and older versions of Windows to new versions of Linux and Windows.

#### CUT RISK

Minimize unexpected cost, 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 on Windows and newer compilers on other platforms.
- Can increase application performance, improving user experience.
- Include new features and enhancements that improve code quality, boost development efficiency, and improve the 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, your 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 and/or extensions.

At the end of the analysis phase, your 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 your consultant will upgrade your application to the latest version of Views, 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 Views APIs, library features, and UI components.
- Understand any new compiler requirements in new versions of Visual Studio and other compilers.
- Know coding methodologies to optimize efficiency and support new types of features.

## TESTING

To help ensure your applications run seamlessly in production, your 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. Using a short, incremental upgrade and testing approach makes it easier to pinpoint errors immediately rather than waiting until the migration is complete, which saves time and reduces the risk of production issues.

## Upgrading from Older Versions of Views

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

Updates to Views modules, file format changes, Views API, Visual Studio, compiler requirements, and Windows and other OS make the update process challenging. Let Views Upgrade Services and its expert engineers use their experience to identify the problem areas and assemble a successful upgrade plan.

## Upgrading from Older OS and Compiler Versions

Many customers are faced with having to update their applications to run on new and even different OS versions and use newer compilers in order to maintain their applications and resolve security risks. This upgrade process can be involved as platform differences and changes in compiler technologies are resolved. It can be a challenge understanding what code changes are needed and ensuring that any changed code does not alter functionality of the application. Some examples of what needs to be dealt with during migrations and upgrades 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.

### OS MIGRATIONS AND PORTS

Porting your application from one OS to another can bring in a level of complexity and slew technical issues. For example, porting from Solaris to Windows will surface problems with different windowing systems, file system structures and even system level calls will all impact the porting efforts of your Views application.

## Understand Your Options

Contact us to learn about your upgrade and migration options to boost security, save time, and increase performance by engaging Views Upgrade Services. Book a free assessment at [perforce.com/contact-us](https://perforce.com/contact-us).