

PERFORCE

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STINGRAY STUDIO 2021.1 RELEASE NOTES

Stingray® Studio

# Introduction

## In this Document

These release notes contain a summary of new features and enhancements, late-breaking product issues, migration from earlier releases, and bug fixes.

For change logs or other information on previous releases, please contact Technical Support.

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**NOTE >>** Rogue Wave products may contain undocumented interfaces. These interfaces are not supported for general use and may be changed or removed from release to release.

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**NOTE >>** The version of this document in the product distribution is a snapshot at the time the product distribution was created. Additional information may be added after that time because of issues found during distribution testing or after the product is released. To be sure you have the most up-to-date information, see the version of this document on the Perforce web site: <https://help.perforce.com/stingray/>

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# ○ New Features

## Updated Platform Support

Please see Platforms and System Requirements at <https://help.perforce.com/stingray>.

In this version, support was added for current updates of **Windows 10** and **Visual Studio 2015, 2017 and 2019**, in 32 or 64 bits.

Testing was done on Windows up to version 21H1 (10.0.19043), Visual Studio up to version 2019 (16.10.3) and .NET Framework version 4.7.2

# ○ Bug Fixes and Enhancements

## Common

- [SRSTUDIO-717]: Replaced unsafe CRT functions such as wcsncpy with safe CRT functions
- [SRSTUDIO-1782]: Improve the use of ATLASERT and ASSERT statements to prevent warning C4100 without using #pragma warning (disable)
- [SRSTUDIO-3957]: Scope of #pragma warning (disable: 4018 4146 4244)
- [SRSTUDIO-8577]: Fixed digital signature for installer and additional shipped executables
- [SRSTUDIO-8703]: Fixed installer to ensure detection of VS 2019
- [SRSTUDIO-8707]: Fixed project information in samples
- [SRSTUDIO-8777]: Updated Installation Guide
- [SRSTUDIO-8778]: Updated vc.bat

## Chart

- [SRSTUDIO-6530]: Buffer overflow in SRGraphTitle::ComputeLineBreaks

## Grid

- ❑ [SRSTUDIO-1555]: Fixed memory leaks detected by customers using Veracode
- ❑ [SRSTUDIO-3554]: Fixed incorrect use of delete causing memory leaks
- ❑ [SRSTUDIO-8545]: Fixed warning for macro GRID\_IMPLEMENT\_REGISTER reported by Coverity tool
- ❑ [SRSTUDIO-8569]: Fixed buffer overrun with a long facename of a font
- ❑ [SRSTUDIO-8656]: Fixed regression in class CGXCheckBoxEx
- ❑ [SRSTUDIO-8657]: Fixed sporadical crash caused by find-replace in Grid
- ❑ [SRSTUDIO-8663]: Fixed crash happening in the sample GridApp when using MBCS as Character Set
- ❑ [SRSTUDIO-8675]: Fixed possible crashes due to small buffer sizes

## Toolkit

- ❑ [SRSTUDIO-3718]: Fixed a pointer truncation
- ❑ [SRSTUDIO-7543]: Implemented use of the latest version 4.2.0 of 3rd-party TIFF library
- ❑ [SRSTUDIO-8568]: Fixed memory leaks caused by incorrect deletion of arrays
- ❑ [SRSTUDIO-8682]: Removed incorrect #pragma warning (disable: 4067)
- ❑ [SRSTUDIO-8763]: Ported Stingray graphics sample to the new LibTIFF library

## Foundation

- ❑ [SRSTUDIO-8704]: Fixed build error C2666 caused by VS 2019 update 16.9.4

## Stingray Assistant

- ❑ [SRSTUDIO-8770]: Fixed an Assistant crash while trying to open .sln files when the required VS is not installed on host machine.

# ○ Common Changes

## Installer Keys

32-bit only installer keys are no longer provided. You must use the 32/64-bit keys, which allow you to build Stingray Libraries either with 32-bit or 64-bit.

## Build Wizards

Shortcuts to Build Wizards have been removed from the Start menu. Wizards are still accessible from the Stingray Assistant. In most cases you do not need to use Wizards. Wizards may still be useful for adding a few rarely used features which were not included into the default build or for custom naming libraries.

# ○ Known Issues

## Project Files

### Targeted to Windows SDK

We ship .vcxproj files ported to Visual Studio 2017 targeted to Windows SDK 10.0.17763.0 with following line of code:

```
<WindowsTargetPlatformVersion>10.0.17763.0</WindowsTargetPlatformVersion
```

If you are targeting the Windows 8.1 SDK, this line is not needed and should be removed.

For Visual Studio 2019, we use a new option to target to the latest installed version of the SDK:

```
<WindowsTargetPlatformVersion>10.0</WindowsTargetPlatformVersion>
```

You can re-target C++ projects to another version of the Windows SDK using the Windows SDK setting in Stingray Assistant or by manually editing the `.vcproj` file and changing the code line above to match the Windows 10 SDK version you would like to target.

For projects which are not makefile-based, you can re-target the Windows SDK version on the project's property pages (**Configuration Properties | General | Windows SDK Version**) or use the "Retarget Projects" option in Visual Studio IDE. Please be aware these options do not work for makefile-based projects used for main Stingray components.

## Targeted to .NET Framework

Stingray projects which use .NET are targeted to .NET Framework 4.7.2.

To set this targeting in shipped MFC samples or other similar projects used with C++\CLI, you need to add the following line of code in the `<PropertyGroup Label="Globals">` of the `*vcxproj` file:

```
<TargetFrameworkVersion>v4.7.2</TargetFrameworkVersion>
```

## Libraries Build Random Error

Sometimes, when you start building a solution for Stingray libraries, the following is displayed in the build log:

```
--- Build started: Project: RWUXTheme, Configuration: Stingray Lib MFC DLL Unicode Release (au) x64 ---  
Error: The operation could not be completed. Unspecified error
```

Usually, it is enough to close and re-open the solution to overcome this error.

## "Run as Administrator" is needed for Build

To build Stingray components, you should start Visual Studio with the "Run as administrator" option. If you first start Stingray Studio Assistant in administrator mode, launching Visual Studio from Assistant will also launch Visual Studio in administrator mode.

## Parallel Projects Build May Cause Errors

To avoid possible Stingray build errors in Visual Studio, go to **Tools->Options->Projects And Solutions->Build and Run**, and set "maximum number of parallel project builds" to 1.

## Grid Build with ExcelReadWrite Option

Grid make file was modified to ignore ExcelReadWrite files when building with Unicode. In the Grid Build Wizard this option was set checked by default. We strongly recommend you do not run build wizards for Grid and other components until you're sure it is needed for your custom purpose.

# Limitations

## Installation

### General Installation Issues

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**NOTE >>** Each Stingray Studio release is a replacement for, not an upgrade to, the previous version. Always perform an installation into a new area, and not into the same install directory as a previous version

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- Documentation location changed  
User Guides are no longer installed into the Docs folder, but instead are provided online. These guides are accessible from the *Documentation* shortcut installed in the Start menu or from the Stingray Assistant tool.

# Build

## C++\CLI Issues

With use of the latest C++ language standards, there are some limitations on build with `/clr` compiler option (C++\CLI). This limitation impacts FoundationEx.NET, Grid for .NET and managed build configuration for all other Stingray components.

- **Visual Studio 2017:** *for each version of C++ language standard, setting the `/clr` option works fine without option `/permissive-`, but build with the `/permissive-` compiler option requires to set an additional option `/Zc:twoPhase-`*
- **Visual Studio 2019:** *build with the `/clr` option is not available for `c++latest` (Command Line error D8016 : '`/clr`' and '`/std:c++latest`' command-line options are incompatible); for other versions of C++ language standard, it works fine without option `/permissive-`, but build with the `/permissive-` requires additional option `/Zc:twoPhase-`*

## Stingray Studio Assistant

### Missing links

There are no links in Stingray Studio Assistant to navigate to GridExcelHelper and Grid for .NET:

- `<InstallDir>\Src\ GridExcelHelper*.sln`
- `<InstallDir>\Samples\Grid\Excel\ExcelReadWrite_CLI\1stGridS1_*.sln`
- `<InstallDir>\Objective Grid for Microsoft .NET\GridControl*.sln`
- `<InstallDir>\Objective Grid for Microsoft .NET\Samples\Samples*.sln`
- `<InstallDir>\Objective Grid for Microsoft .NET\Tutorials\Tutorials*.sln`

## Vc.bat

Running `vc.bat` commands a few times may cause error: "The input line is too long. The syntax of the command is incorrect".

This error is not related to our scripts but is caused by vcvarsall.bat. It repetitively adds the same paths to the PATH variable until the above error is thrown. You can read more about this issue here:

<https://stackoverflow.com/questions/16821784/input-line-is-too-long-error-in-bat-file>

## Grid for .NET Build Errors

### With Visual Studio 2019

On start of building a solution for GridControl, an error is displayed in the build log:

```
fatal error C1001: Internal compiler error.
```

```
(compiler file 'msc1.cpp', line 1591)
```

This is a bug in the latest updates of Visual Studio 2019, Microsoft is investigating this issue.

### With Visual Studio 2017

If a project is set to x64 platform, the form is not displayed in the Grid Designer and this error appears: "The variable 'gridControl1' is either undeclared or was never assigned". It is not a regression in Stingray code: old versions work in the same way. As a workaround, please use Designer set to Win32 or use Windows Studio 2015.

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