ASNA

Release Notes
ASNA Visual RPG® (AVR)
Version: 15.0.92.0
Release date: 2020-06-17

Important notices

If you are upgrading from an earlier version of AVR, you may be effected by the changes to the ASNA Runtime (see **ASNA Runtime Changes** below).

If you have updated to Visual Studio 15.6.x+, the Web Project Templates for C# and Visual Basic are in a new location. Use the menu options **Language > Web > Previous Versions** to get to these templates.

The **Empty Print File Definition** item template is not functional at this time. We are working to correct the issue.

AVR 15.0 works best with .NET Framework 4.5.

AVR® 15.0 works with Microsoft® Visual Studio 2017® Version 15.3 and up. Starting with VS 2017, Microsoft has discontinued the Integrated/Isolated shells. For many ASNA customers, Microsoft's Action Pack is a good way to purchase Visual Studio.

If you intend to install Visual Studio 2017's local help, don't miss the note about that in the **DataGate Studio and Visual Studio 2017** and **Local Help Support** sections below.

What's new for Visual RPG 15.x

Secure Socket Layer integration: DataGate now features SSL protection, making solid security options much easier to implement. If both DataGate Client and DataGate server 15.0 are installed, SSL will be used by default. (See DataGate SLL Integration).

Jagged Arrays: Support for declaration of jagged arrays (arrays of arrays) has been added.

%DEC/%DECH change: %DEC/%DECH now validate that the digits and decimals arguments are consistent and within the size limits for fixed decimal

numbers. **THIS IS A POTENTIAL BREAKING CHANGE.** Compiler errors will occur in old code if invalid parameters values were used previously.

Software Requirements

AVR 15.0 and DataGate Studio 15.0 require Visual Studio 2017; AVR 15.0 also requires some Windows SDK components. There are two ways of installing the necessary support on the developer machine:

1. Microsoft Visual Studio 2017® Version 15.3 and up. A licensed copy of Visual Studio Professional or Enterprise.

The following Visual Studio Workloads must be installed:

1. .NET Desktop Development
2. ASP.NET and web development.

Additionally, the following is also required:

1. .NET Framework 4.5 - ASNA Visual RPG requires the .NET Framework 4.5 for correct operation. Earlier versions are optional.
2. Windows Installer 4.5 or newer - In general, you will have to install this Installer from Microsoft if you are running a version of Windows older than Windows 7. To obtain the Installer visit the Windows Installer 4.5 Redistributable page.

Windows optional update KB3118401 is required for correct operation of version 15.0. See https://support.microsoft.com/en-us/kb/3118401 for more detail.

Installation Notes

Installing Microsoft's latest service packs, high priority and optional software updates for Windows, and the .NET Framework is highly recommended.

The support for targeting the .NET Framework 4.5 is separate from the support for 4.0. The installation always installs the support for the .NET Framework 4.5. If the 4.0 ASNA components are present at the time of installation, they will automatically be upgraded as necessary. If they are not present, but the .NET Framework 4.0. is, you will have the option to install 4.0 support in the setup wizard.

> Please note: AVR for .NET 15.x does not support side-by-side installations with other AVR for .NET versions. There can only be one version of AVR for .NET installed on a single machine. We recommend using Windows Virtual Machines if you need to support more than one version of AVR for .NET.
>
> AVR for .NET does coexist with AVR Classic 5.0 or 5.1.

Silent Installation Process

AVR now supports silent installations. See the Installation section of the Readme file for more detail.

DataGate Studio and Visual Studio 2017

Windows Deployment and DataGate WebPak include DataGate Studio. DataGate Studio requires Visual Studio 2017. If you don't want to install DataGate Studio, disable this component in the installation wizard.

Caution: If Visual Studio is being installed along with Visual RPG, either do not install Visual Studio's Help files or wait until they have finished downloading and installing before installing the Visual RPG Help files. Visual Studio's Help files are quite extensive and can take several hours to download and install even with an excellent connection and Windows Machine; attempting to install Visual RPG Help files while this process is ongoing will cause the install to fail.

Also, ensure Visual Studio is not running at the time of Visual RPG installation, as this can cause conflicts.

Local Help Support

Visual Studio 2017 treats local (offline) as an optional component. As such installing it requires some additional steps:

When installing Visual Studio 2017:

1. Under the Individual Components tab.
2. On the Code Tools section.
3. Enable the Help Viewer component.

To verify the Help Viewer is installed, look at the top of the Help Menu in Visual Studio. The following three options should be visible at the top of the menu:

1. View Help
2. Add and Remove Help Content
3. Set Help Preferences

ASNA Runtime Changes

The version 15.0 of the ASNA family of .NET products introduces two changes in some ASNA DLLs.

1. ASNA.VisualRPG.Runtime.DLL expands into three new DLLs

The first change is that ASNA.VisualRPG.Runtime.DLL expands into three new DLLS: * ASNA.Runtime.DLL * ASNA.Runtime.Support.DLL * ASNA.Runtime.Monarch.DLL

This increased granularity was made to better match library improvements and DLL changes to the various ASNA products that use them. The details of this three-way split are shown below in Figure 1.

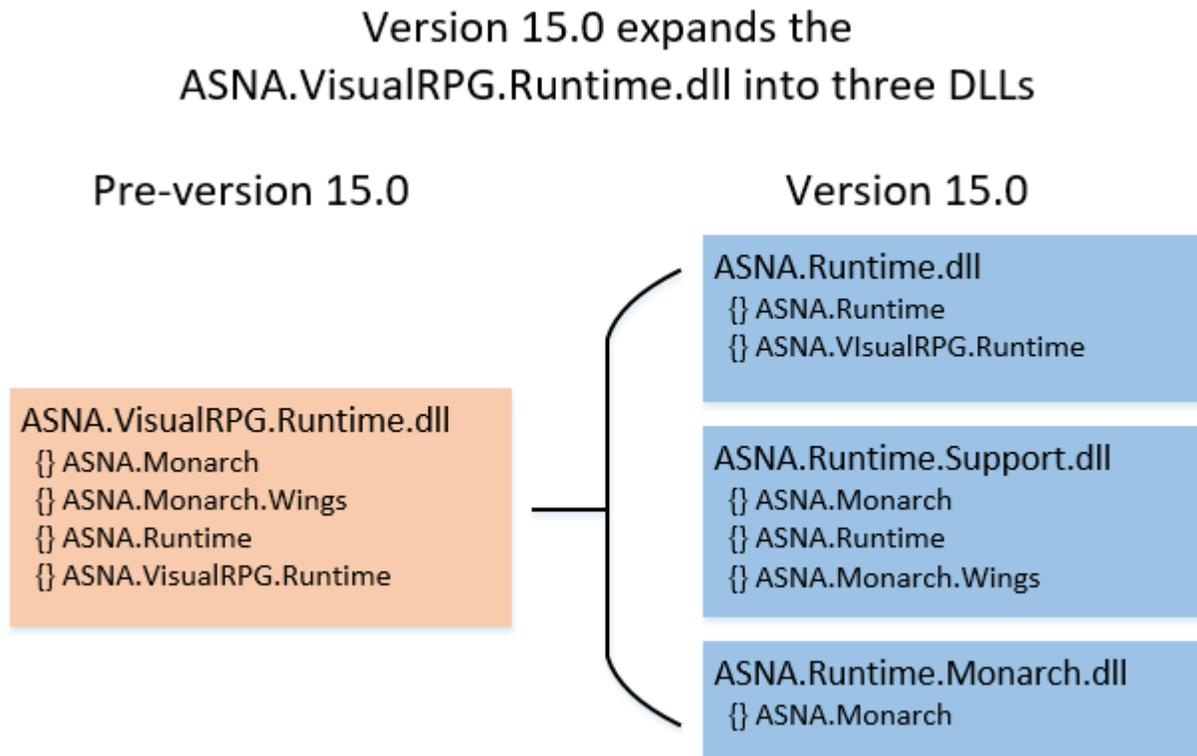## Version 15.0 expands the ASNA.VisualRPG.Runtime.dll into three DLLs

Figure 1. Version 15.0's new DLL structure

In Figure 1 above the namespaces each DLL provides is shown prefixed with {}. You can see that although ASNA.VisualRPG.Runtime.dll has been split into three DLLs the same namespaces are provided in the new DLLs. The version 15.x DLLs also provided a few new additional namespaces beyond what's shown in Figure 1.

> To maintain backwards compatibility of version 15.0 with previous versions we ship an ASNA.VisualRPG.Runtime.dll library which forwards requests for any of the four original namespaces that where in that DLL to the corresponding new DLL. We will stop shipping the ASNA.VisualRPG.Runtime.dll with the next major version of ASNA .NET products. This forwarding version of this DLL will be available as a separate download.

2. ASNA.VisualRPG.Common.Sgml.dll has been deprecated.

The second change is that ASNA.VisualRPG.Common.Sgml.dll has been deprecated and its code has been moved to ASNA.Runtime.dll . This change mostly affects customers using Mobile RPG and Wings.

Changes you need to make because of these DLL changes

> There are *no* coding changes you need to make in your projects because of these changes. The only changes you need to make is adding and/or deleting references. For new 15.x projects the correct project references will already exist.

- For **all project types**:
  - Remove references to `ASNA.VisualRPG.Common.Sgml.dll`

In addition to removing that reference:

- For **Visual RPG Windows and Web projects**:

  - Remove the reference to `ASNA.VisualRPG.Runtime.dll`
  - Add a reference to `ASNA.Runtime.dll`

- For **Wings** and **MobileRPG** projects:

  - Remove the reference to `ASNA.VisualRPG.Runtime.dll`
  - Add a reference to `ASNA.Runtime.dll`
  - Add a reference to `ASNA.Runtime.JobSupport.dll`

- For **Monarch** projects:

  - Remove the reference to `ASNA.VisualRPG.Runtime.dll`
  - Add a reference to `ASNA.Runtime.dll`
  - Add a reference to `ASNA.Runtime.JobSupport.dll`
  - Add a reference to `ASNA.Runtime.Monarch.dll`

For more details on the runtime changes click here <u>here</u>.

DataGate for Windows and DataGate for SQL Server new License Code

The installation packages on this download page include the DataGate 15.0 server used for DataGate for Windows and DataGate for SQL Server. A new license is required to run DataGate 15.0, so if you are planning on installing one of these packages on a machine that is currently running an earlier version, whether a server or a developer's machine, please do one of the following:

1. Obtain a new license for DataGate (either for SQL Server or for Windows) from ASNA and apply it right after you have installed the package,
2. Or, in the installation Wizard, unselect the option to install the ASNA DataGate Server 15.0 on the machine to avoid installing DataGate 15.0 and continue running with the earlier version,
3. Or, after installing DataGate 15.0, stop the earlier DataGate Server service in the Services applet for Windows and start the DataGate Server 14 service.

Upgrade Assistant

Upgrade Assistant 15.0 has the following requirements:

- **AVR Classic** 5.1
- At least one of the following: **ASNA Visual RPG 15.0**, **ASNA DataGate WebPak 15.0** or **ASNA Windows Deployment 15.0**

Users who wish to convert OLE print files using Upgrade Assistant will also need an installation of one of the following: AVR, WebPak, Deployment, Wings, DataGate for SQL Server, DataGate Studio, or DataGate Component Suite.

Examples

Examples are a separate installation (although the .zip file is included here for convenience). See the included Readme file for more information.

Supported Windows versions

AVR 15.0 has been tested on the following operating systems:

- **Windows 8.x Pro** 32 and 64 bits
- **Windows 10** 32 and 64 bits
- **Windows Server 2012** 64 bits
- **Windows Server 2012 R2** 64 bits
- **Windows Server 2016** 64 Bits

AVR is not supported for any version of Windows not listed above.

Caution: If Visual Studio is being installed along with Visual RPG, either do not install Visual Studio's Help files, or wait until they have finished downloading and installing before installing the Visual RPG Help files. Visual Studio's Help files are quite extensive and can take over an hour to download and install even with an excellent connection and Windows machine; attempting to install Visual RPG Help files while this process is ongoing will cause the install to fail.

Also, ensure Visual Studio is not running at the time of Visual RPG installation, as this can cause conflicts.

ASNA Product Components Contained in AVR for .NET Installation

This installation is a package of several ASNA product components, each with their own versions. Key product versions are available from Visual Studio **Help>About Visual RPG** and **Help>About DataGate Studio**. A List of ASNA components currently installed on your machine can be found in the Windows Control Panel at Control Panel>Programs>Programs and Features.

Note - If this software is downloaded via Microsoft Internet Explorer or Edge you may receive a message stating that this file "is not commonly downloaded" when attempting to install it. In this event click the **View Downloads** button, select the ASNA product to install from that list, and confirm that you'd like to install it.

Similarly, attempting to install the software directly through Microsoft Windows may cause a "Windows protected your PC" message to appear. In this event click the small **More Info** prompt on the left, and click **Run Anyway** on the following window.

Changes Since Version: 15.0.89.0

Clients - DataGate

- Case 20700. Keys with zoned data may result in invalid access in Spanish PCs.

Clients - Runtime

- Case 20714. AVR app fails with null object instance error.