

README File

Last Updated: 08/03/2020

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Project: VistA Kernel Infrastructure Team
Software: RPC Broker Development Kit (BDK)
Current Version: 1.1
Original Software Release Date: October 1997
Department of Veterans Affairs (VA)
Office of Information and Technology (OIT)
Enterprise Program Management Office (EPMO)
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This file contains any last minute changes, new instructions (not found in the documentation), and additional information to supplement the manuals.

ReadMe file for patch XWB*1.1*72 installation. There are no VistA M Server-side installation components for this patch.

NOTE: This patch supports the following Delphi versions: XE8, 10.0, 10.1, 10.2, 10.3, and 10.4.

These components are only intended for use with the Delphi for Microsoft Win32 version, and not Win64 or .NET.

NOTE: If using FileMan Delphi Components (FMDC) and Kernel Delphi Components (KDC), the Broker Development Kit (BDK) needs to be installed first, then VA FileMan, and then Kernel.

This patch is provided as a zip file. To install it in the normal location, move to the C:\Program Files (X86)\VistA directory. If you are a developer, you can unzip the file in one location as a saved baseline, and make a copy in the directory where you are doing your development. Any updates or changes you make as part of your development should be passed to the VistA Kernel Infrastructure team for review as a possible change to future released versions of the BDK.

1. Back up the existing BDK32 directory by renaming it (e.g., BDK32_P65) in order to maintain the existing files.
2. Unzip the provided zip file, making sure the "use folders" box is

checked, INTO the Vista directory - this will create the BDK32 directory and subdirectories under the Vista directory. These files and subdirectories can be copied into a BDK32_P72 directory to maintain the unmodified files for reference.

3. After installing the zip file, there should be a BDK32 directory with the following subdirectories:

- * BAPI32dll - BAPI32.DLL and sample header files.

- * BAPI32_72 - Source code for BAPI32_72.DLL.

- * Help - Contains help files for developers, updated for this patch.

- * Samples - Contains sample programs compiled with Delphi XE8:

- BrokerEx: Contains BrokerExample.exe (includes CCOW and SSH code) demonstrating Delphi GUI for Vista using 2-factor authentication (2FA).

- BSE: Contains BseSample1.exe for Broker Security Enhancement (BSE).

- * Source - Contains source code and forms for the components.

4. Open Delphi.

5. Enter the library directories making sure that the directories are entered into the Library fields.

6. Open the menu Tools | Options.

7. Select the Library tab [or open the menu Tools | Options and expand the Environment Options and then the Delphi Options and select Library.]

8. Selected platform should be 32-bit Windows.

9. Press the ellipsis (...) at the right of the combo box for Library Path.

10. Either enter the directories in the edit box under the list box or press the Folder at the right of the edit box and navigate to the directories. For the default location, this is:

C:\Program Files (x86)\Vista\BDK32\Source

11. Press Add.
12. After entering the directory, press OK to close the dialogue.

If RPCBroker components already exist in the Delphi version:

1. Select the menu Component | Install Packages.
2. Select the RPCBroker components (one at time).
3. Press Remove to remove them.
4. When finished, press the OK button.

To install the components into Delphi, it is best to compile and build them in your version of the Delphi IDE, so that all of the necessary files are placed in the proper default directories during installation. The location of these default directories can vary depending on the version of operating system you are using. The DesignTime package bundles the RunTime package into components that are used when building applications, so the RunTime package must be compiled before the DesignTime package is compiled and installed.

For your convenience, there are XWB_R* (RunTime) and XWB_D* (Design Time) projects set up for specific versions of Delphi, which may help resolve some access violation errors for run time libraries in some versions. For example:

- * For Delphi 10 (Seattle) you would use the XWB_R10.dproj and the XWB_D10.dproj files.
- * For Delphi XE8 you would use XWB_RXE8.dproj and the XWB_DXE8.dproj files.

To install:

1. Open Delphi and select the menu File | Close All files, then select File | Open, and select the XWB_R*.dpk or the XWB_R*.dproj file from the BDK32\Source directory.

2. For the R or run-time files, right-click on the XWB_R*.bpl file in the Project Manager frame, then click Compile. Select the menu File | Close All (and respond yes if asked to save changes). [The Run-time files should always be compiled first, since the Design-time files are dependent upon them].
3. Select File | Open to select the Design-time XWB_D*.dproj file. Right-click on the XWB_D*.bpl file in the Project Manager frame, then click Build.
4. Right-click on the XWB_D*.bpl file in the Project Manager frame, then click Install to install or update the version of the components. Select File | Close All files (and respond yes if asked to save changes).
5. The components are now installed and ready to use in your applications.

The contents of file "IAMBase.inc," which contains constants (defaults) used for delegated 2-factor authentication (2FA) for Identity and Access Management, has been moved into a new .pas file named IAMConstants.pas. The contents may be edited if implementation is being tested in a non-production environment with different values.

NOTE: The RPC Broker Development Kit uses wcrypt2.pas for certificate processing; however, including the .pas file in the source tree for the BDK would cause problems with developers using wcrypt2.pas in their other projects. The CPRS Team pointed this out, and therefore, wcrypt2.pas is being referenced from the PKI source tree, which was released in patch XU*8.0*639. It is imperative that you include the path in the Delphi Library where your installation of the PKI source tree is located. For instance, if you have your PKI source tree located in C:\Projects\PKI then you should include C:\Projects\PKI in your Delphi Library path; otherwise, the certificate functions will not be found and the BDK will not compile/install. If you do not have patch XU*8.0*639 installed on your development workstation, it may be downloaded from the any of the VA's FTP sites. The address for the servers is: REDACTED.va.gov, and the patch filename is: XU_8_0_P639.ZIP.