

# Notes on installing ITU BR Space Applications V9.X

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## Introduction

As of BR IFIC 2926, as described in Annex 2 of [CR/464](#), ITU BR Space Applications V9.X software is installed in the standard locations for Windows-compatible software.

## Whitelisting Requirements

While in the past there may have been a need for network administrators to whitelist the install directory of BR Space Applications (C:\BR\_SOFT), this should no longer be necessary. However, whitelisting some legacy unsigned DLLs may be required.

All ITU-produced executables and DLLs in the ITU BR Space Applications V9.X package have been digitally signed using the ITU's software signing certificate issued by Sectigo RSA Code Signing CA. Most third-party software components have been signed using the appropriate certificates.

In 2022, the ITU BR Space Applications still rely on some legacy components that were produced by Microsoft or acquired from third parties before digital code signing became commonplace. The lists of these unsigned DLLs are provided in [Annex 1](#) and [Annex 2](#) of the present document. This list will become shorter as the ITU advances in modernizing BR Space Applications software.

## Installer Command Line Parameters

The ITU BR Space Applications installer (Installer-v9.X-9.X.y.z.exe) supports the following command line parameters:

Parameter Value	Description
/?	Displays the help message
/silent	Installer will run in silent mode
<i>/appname</i> =[install repair uninstall update]  <i>appname</i> can be any of: spacecap spacepub spacecom brsis gims sam gibc sps ap7capture	Fine-grained control of the action to be applied to each major component of ITU BR Space Applications
/extract3rdpsetups	Extracts third party setups (i.e. Transfinite and Agenium) required by some SAS applications (GIBC) Notes: - In silent mode the installer cannot and will not run these 3rd party setups, they must be installed separately. - The files are placed in the directory that contains the installer executable. - The online version of the installer does not contain these files, it downloads them.

## Silent Installation

For easier deployment through means such as Software Center, the ITU BR Space Applications V9.X installer supports a silent installation mode, as follows:

```
Installer-v9.X-9.X.y.z.exe /silent /appname=action ...
```

### Launching the Installer from the command line or from a script

It should be noted that running the installer executable actually starts the installer in a separate process. For this reason, execution of the installer returns immediately (not when installation is complete), and the error level reflects the result of the creation of the child process, not the return code of the installer. In order to wait for the installer to finish you may use the start command with the wait option (or some other means), for example:

```
start /wait Installer-v9.X-9.X.y.z.exe /silent /sam=install
```

The return code can be easily obtained from the environment variable **errorlevel**, its value will be 0 on success and a non-zero value in case of failure.

NOTE: The ITU BR Space Applications installer includes two third-party examination packages, from Transfinite and Agenium, for EPFD examination calculations. These packages have separate installers and do not support the silent mode.

```
Agenium\setup.exe
```

```
Transfinite\setup.exe
```

## BR Space Reference Database

The ITU BR Space Applications V9.X require an up-to-date version of the BR Space Reference database to function properly.

When first installed by the ITU BR Space Applications installer, the reference database is located under C:\ProgramData\ITU\BR\_Space\_v9.X\RefDb (or the directory corresponding to ProgramData on non-English versions of Windows).

It is essential for the reference database to be kept up to date. To that effect, as of BR IFIC (Space) publication 2927, a separate setup executable will be made available, to replace the above-mentioned database with the most up-to-date version. It is strongly recommended to put in place a procedure to install the BR Space Reference database that comes with each new BR IFIC (Space) publication.

## Troubleshooting Installation Issues

In case of installation issues, please retrieve the log file from the

C:\Program Files (x86)\Itu\BR\_Space\_v9.X

folder, and send it with a description of the issue to [brsas@itu.int](mailto:brsas@itu.int)

## Known Issues

## Annex 1 Unsigned DLLs Produced by Microsoft

File Name	Version(s)	Description
dao360.dll	03.60.9756.0	
ieframe.dll	11.00.9600.19130 (winblue_ltsb_escrow.1 80823-1003)	
microsoft.exchange.webservices.netstandard.dll	1.1.3	
msado25.tlb	6.1.7601.17857	
msadox28.tlb	6.1.7600.16385	
MSBIND.DLL	6.00.8862	
MSBIND.DLL	6.01.9782	
mscal.ocx	8.0.0.5007	
MSRDO20.DLL	6.00.8862	
MSRDO20.DLL	6.01.9782	
msrdo32.dll	1.0.3329	
msvbvm60.dll	6.00.8964	
Msvcirt.dll	6.10.8637.0	
msvcp60.dll	6.00.8972.0	
msvcp60.dll	6.02.3104.0	
msvcp80.dll	8.00.50727.762	
msvcr80.dll	8.00.50727.762	
msvcrt.dll	7.0.7601.17744	
msxml.dll	8.00.7002.0	
oleaut32.dll	2.40.4275	
oledb32.dll	6.1.7601.17514	
OLEPRO32.DLL	2.40	
scrrun.dll	5.8.7601.18283	
stdole2.tlb	6.1.7600.16385	
VB5DB.DLL	6.00.8169	
xolehlp.dll	03.01.00.4414	

## Annex 2 Unsigned DLLs from Other Third Parties

File Name	Version	Source	Description
<b>c1flexgridprinter.dll</b>	1.1.1.0	ComponentOne LLC	ComponentOne C1FlexGridPrinter
<b>cximage.dll</b>	7.0.1.3	Pizzolato Davide - www.xdp.it	
<b>dformd.dll</b>	6.1	Compaq Computer Corporation	Compaq Visual Fortran RTL (thread-safe)
<b>dfortt.dll</b>	6.1		Compaq Visual Fortran RTL
<b>gif89.dll</b>	1, 0, 0, 1		Gif89 Module
<b>iconv.dll</b>	1.9		LGPLed libiconv for Windows NT/2000/XP and Windows 95/98/ME
<b>ingres.client.dll</b>	2.1.1100.74	Actian Corporation	Ingres .NET Data Provider
<b>interop.adodb.dll</b>	6.1.0.0		Assembly imported from type library 'ADODB'.
<b>interop.adox.dll</b>	2.8.0.0		Assembly imported from type library 'ADOX'.
<b>interop.scripting.dll</b>	1.0.0.0		Assembly imported from type library 'Scripting'.
<b>libxml2.dll</b>	October 2, 2010	<a href="https://www.zlatkovic.com/projects/libxml/index.html">https://www.zlatkovic.com/projects/libxml/index.html</a>	XML processor written by Daniel Veillard for the GNOME project (see <a href="https://en.wikipedia.org/wiki/Libxml2">https://en.wikipedia.org/wiki/Libxml2</a> ).
<b>newtonsoft.json.bson.dll</b>	1.0.1.20722	Newtonsoft	Json.NET BSON .NET Standard 1.3
<b>renci.sshnet.dll</b>	2020.0.1	Renci	SSH.NET
<b>sqlite.interop.dll</b>	1.0.112.1	Robert Simpson, et al.	System.Data.SQLite Interop Assembly
<b>sshnet.security.cryptography.dll</b>	1.3.0	Renci	SshNet.Security.Cryptography for .NET Standard
<b>system.data.sqlite.linq.dll</b>	1.0.113.0	<a href="https://system.data.sqlite.org/">https://system.data.sqlite.org/</a>	System.Data.SQLite for LINQ
<b>tdbg7.ocx</b>	7.0.0288	ComponentOne LLC	True DBGrid Data Bound Grid
<b>tdbgpp7.dll</b>	7.0.24.7	ComponentOne LLC	True DBGrid Pro 7.0 Print Module
<b>todg6.ocx</b>	6.0.0204	ComponentOne LLC	True DBGrid Data Bound Grid
<b>todg7.ocx</b>	7.0.0288	ComponentOne LLC	True OLE DBGrid Data Bound Grid
<b>todgub7.dll</b>	7.0.0.12	ComponentOne LLC	OLE DB Data Source for unbound mode
<b>unity.abstractions.dll</b>	5.11.6.0	Unity Open Source Project	
<b>unity.abstractions.dll</b>	5.11.7.0	Unity Open Source Project	
<b>unity.container.dll</b>	5.11.8.0	Unity Open Source Project	
<b>unity.container.dll</b>	5.11.11.0	Unity Open Source Project	
<b>unity.interception.dll</b>	5.11.1.0	Unity Open Source Project	
<b>xadb7.ocx</b>	7, 0, 0, 4	ComponentOne LLC	XArrayDB ActiveX Object
<b>zipup.dll</b>	1.00.0003	Stan Schultes	ZipUp component
<b>zipup23.dll</b>	2.3	Info-ZIP	Info-ZIP's Zip dll
<b>zlib1.dll</b>	1.2.5	<a href="http://www.zlib.net/">http://www.zlib.net/</a>	zlib data compression library