IBM i
7.4

Connecting to IBM i
IBM i Access Client Solutions - Windows
Application Package: Installation and
setup

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 19.

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Contents

What's new

Read about new or significantly changed information relating to IBM i Access Client Solutions - Windows Application Package for this release.

Windows Application Package is an optional package that is part of IBM i Access Client Solutions. It contains the middleware, database providers, and programming APIs that were previously part of the 7.1 version of the IBM i Access for Windows product.

How to see what's new or changed

To help you see where technical changes have been made, this information uses:

- The » image to mark where new or changed information begins.
- The « image to mark where new or changed information ends.

In PDF files, you might see revision bars (|) in the left margin of new and changed information.

To find other information about what's new or changed this release, see the Memo to Users.

PDF file for Windows Application Package: Installation and setup

You can view and print a PDF file of this information.

To view or download the PDF version of this document, select IBM i Access Client Solutions - Windows Application Package: Installation and setup.

Saving PDF files

To save a PDF on your workstation for viewing or printing:

1. Right-click the PDF link in your browser.
2. Click the option that saves the PDF locally.
3. Navigate to the directory in which you want to save the PDF.
4. Click **Save**.

Getting started with Windows Application Package

Windows Application Package is available as a zip archive file that can be downloaded from the Entitled Software Support web site.

1. Download the `IBM i Access Client Solutions -Win` AP archive file from Entitled Software Support.
2. Extract the contents of the zip archive file.
3. The product `Documentation` directory contains a `readme.txt` file with installation instructions.

See the IBM i Access Client Solutions web site for additional details.

Related information

Entitled Software Support
IBM i Access Client Solutions web site

Setting up Windows

The following list of topics discusses various ways you can install Windows Application Package on Windows.

Preparing an installation image to install on multiple systems

Learn about the various ways you can install an image on a system.

Using command programs

You can automate the installation process by creating a command (`.cmd`) file to run `setup.exe` with predefined parameters. In this situation, users do not need to specify options at the command prompt.

The `.cmd` file can include any of the valid parameters for `setup.exe` that are listed in the "Using command line parameters to change the install behavior" topic.

Related concepts
Using command line parameters to change the installation behavior
A user can install, upgrade or modify the features that are installed by using command line parameters on the setup.exe command.

Methods to tailor an installation package

You can customize the behavior of the installation by specifying command line parameters.

The `setup.ini` file included with the source image lets you predefine command line parameters that will be used by `setup.exe`. This avoids the need for end users to enter the right parameters at a prompt.

Changing the default options for the log files

By default, these log files are created at install time under the temp directory: xe1instlog.txt and xe1instlogmsi.txt. You can use the command line or setup.ini to change the log file names and locations.

The log files contain this information:

xe1instlog.txt
Cumulative log that contains only trace information from the custom actions during the installation. You cannot change the default options or target location for this log file.

xe1instlogmsi.txt
Contains MSI action information and trace information from the custom actions during the install. It logs all information except for verbose output. You can change the default options, target location and file name for this log file from the command line or setup.ini.

You can use setup.ini or command line parameters to change the default options for xe1instlogmsi.txt.

To use command line parameters to change the default options for xe1instlogmsi.txt, enter this command: `setup /v"/l<logging parameters> ` *`log_path\file_name.ext`*`"`

The most common logging parameters are:

- *: Logs status messages, warnings and error messages.
- v: Turns verbose mode on.
- x: Logs additional debugging information.

For example: `setup /v"/l*v C:\MyPath\log.txt"` generates a log file called log.txt under the MyPath folder containing status messages, warnings and error messages and logs verbose information.

Note: The quotation marks enclosing the path need to be escaped with a backslash in order to avoid interfering with the outer quotation marks.

To get the complete list of logging parameters taken by the /l option, enter `msiexec` in the command line.

If the directory path contains spaces, you must use quotation marks. For example: `setup /v"/l*v \"C:\My Path\log.txt\""`

If you do not specify a destination directory, the log is created under the same path from which setup is being launched.

Public properties

Public properties can be used to change the default behavior of the installation, such as changing the default install directory. Public properties can be set at the command line or defined with a transform or in setup.ini.

To set a public property on the command line interface, where PUBLICPROPERTY is one of the public properties listed below, use the following syntax, as appropriate:

- To set a single property specify: `setup /vPUBLICPROPERTY=value`
- To set a single property by instance, specify: `setup /vCWBINSTALLTYPE=Custom`
- To set multiple properties specify: `setup /v"PUBLICPROPERTY1=value PUBLICPROPERTY2=value"`
- To set multiple properties by instance, specify: `setup /v" CWBINSTALLTYPE=Custom CWBPRIMARYLANG=Mri2938 "`

When working with properties, you should only change the public properties listed here. Public property names must be entered exactly as shown.

These public properties are described:

- "CWBINSTALLTYPE" on page 8
- "CWBPRIMARYLANG" on page 9
- "CWBUPGSSLFILES" on page 9
- "ADDLOCAL (Windows Installer property)" on page 9
- "REMOVE (Windows Installer property)" on page 10
- "INSTALLDIR (InstallShield Property)" on page 10
- "TARGETDIR" on page 10

CWBINSTALLTYPE

Purpose:
Sets the setup type of a first time installation.

Scope:
Only valid on a first time installation.

Default:
The default setup type is Typical.

Values:
Typical, Custom

Example
For a complete installation setup type, enter `setup /vCWBINSTALLTYPE=Typical`

Additional Notes:

1. The values are not case-sensitive.
2. The CWBINSTALLTYPE property is ignored if upgrading from a previous release of IBM i Access Client Solutions and in maintenance installations.

CWBPRIMARYLANG

Purpose:
Specifies the default primary language to install.

Scope:
This property is valid in first time, upgrade, and silent installs.

Default:
The default language will be the NLV that matches the system's locale, or what the user chooses for the user interface.

Values:

MRI29*xx*
The language resources for MRI29*xx* are installed onto the system and MRI29*xx* is set as the primary language for IBM i Access Client Solutions. *xx* specifies the language identifier.

Example
```
setup /vCWBPRIMARYLANG=MRI29xx
```

CWBUPGSSLFILES

Purpose:
Allows the user to upgrade the SSL files when migrating from a previous release.

Scope:
Valid for a first time install and an upgrade install (full UI and silent)

Default:
If the configuration files for SSL configuration files are found on the target system, update the files with the latest certificates.

Values:

YES (Default)
The files are upgraded and old certificates are merged with new ones.

NO
New certificates are not added to the old certificates.

Example
To not update the certificates when upgrading of fresh installing, enter: `setup /
vCWBUPGSSLFILES=NO`

Additional Note:
This property allows the customer to upgrade SSL certificates with the latest certificates when upgrading to the latest release. Old certificates are kept and new certificates are added.

ADDLOCAL (Windows Installer property)

Purpose:
List of features that are to be installed locally.

Scope:
Valid for a first time installation, a maintenance installation, or an upgrade.

Default:
None. If the public property is not used, then the selections made during the installation wizard or transform (if provided) determine what is installed.

Values:

ALL
Install all features listed in the Feature table locally.

one or more valid feature names
See "Using command line parameters to change the installation behavior" on page 13 for a list of feature names.

Example

See "Using command line parameters to change the installation behavior" on page 13 for examples.

Additional Notes:

1. The features must be listed in the Feature table.

2. Feature names are not case sensitive.

3. Do not enter ADDLOCAL=ALL into the Property Table, because this generates a locally installed package that cannot be correctly removed.

REMOVE (Windows Installer property)

Purpose:

Specifies features that are to be removed.

Scope:

Valid only when the product is installed.

Default:

None. If this public property is not used, then the selections made in the installation wizard determine any features to remove.

Values:

ALL

Remove all features having an install level greater than 0. Features having an install level of 0 are not removed.

Example

See "Using command line parameters to change the installation behavior" on page 13 for examples.

Additional Notes:

1. The features must be listed in the Feature table. See "Using command line parameters to change the installation behavior" on page 13 for a list of feature names.

2. Feature names are not case sensitive.

INSTALLDIR (InstallShield Property)

Purpose:

Sets the installation directory for IBM i Access Windows Application Package.

Scope:

This is valid only for a first time install.

Default:

If INSTALLDIR is not specified, IBM i Access Windows Application Package will be installed in C:\Program Files\IBM\Client Access.

Values:

Any valid path

Example

To install IBM i Access Client Solutions on the C:\InstallPath directory, enter `setup /vINSTALLDIR=`*`X:\Install_Path`* where *X* is the destination drive letter and *Install_Path* is the target directory.

If the directory path contains spaces, use double quotation marks; one pair for the /v parameter and one pair for the INSTALLDIR property, as in the following example. Note that the interior quotation marks need to be escaped with a backslash: `setup /v"INSTALLDIR=\"C:\Install Path\""`

TARGETDIR

Purpose:

Set the destination directory for an administrative image when performing an administrative installation.

Scope:
   This is valid for an administrative installation.

Default:
   If this property is not set during an administrative installation, Windows Installer sets it to the first connected network drive it finds.

Values:
   A valid path.

Example
   To set the destination directory for an administrative image, enter: `setup /a v/ TARGETDIR=X:\`*`Admin_image`* where *X*: is the destination drive letter and *Admin_image* is the target directory.

   If the directory path contains spaces, use double quotation marks; one pair for the /v parameter and one pair for the TARGETDIR property, as in the following example. Note that the interior quotation marks need to be escaped with a backslash: `setup /a /v"TARGETDIR=\"C:\Admin Image\""`

Defining the level of user interface throughout the installation

The *user interface level* is the level at which the installation user interface will run. The user interface level can be set to these levels: full, reduced, basic, and none (silent). The default level is full user interface.

A full user interface shows the Install Wizard. Users can change installation options. A progress bar is shown. All error and warning messages are shown.

A reduced user interface shows all dialogs except the Wizard dialogs. Users can not change installation options.

A basic user interface shows progress bar and error messages only. Users can not change installation options.

A silent installation (no user interface) does not show any dialogs. There is no indication about installation progress. Users can not change installation options.

The user interface level can be specified in setup.ini or can be set by the user at the command line. To set the user interface level within setup.ini, see Modifying the installation by using setup.ini.

To specify the user interface level at the command line, complete one of the following:

- To start the installation with a full user interface level, type `setup /v/qf`. This is the default and is equivalent to launch setup without the /q option.
- To start the installation with a reduced user interface level, type `setup /v/qr`.
- To start the installation with a basic user interface level, type setup /v/qb.
- To start the installation with no user interface, type `setup /v/qn`.

Important: The /qr, /qb and /qn options do not suppress the Installation Language selection dialog shown at the beginning of the installation. In order to avoid the Installation Language selection dialog, prepend the /s parameter as shown in the following example:

```
setup /s /v/qb
```

Modifying the installation by using setup.ini

You can specify the user interface level, the level of installation logging, and the transforms to use in setup.ini.

To modify setup.ini, follow these steps:

1. Browse to the location of your installation image and open setup.ini
2. Optional: Define the user interface level.
   a) Under the [Startup] section, find this statement: CmdLine=/l* "%temp%\xe1instlogmsi.txt"
   b) Add the /q option to the CmdLine keyname.

- Enter /qr for a reduced user interface.
- Enter /qb for a basic user interface.
- Enter /qn for no user interface (completely silent).

3. Optional: Define the level of installation logging.

   a) Under the [Startup] section, find this statement: CmdLine=/l* "%temp%\xe1instlogmsi.txt"

   b) Change the parameters for the /l option as appropriate.

   - To get a verbose log, change /l* to /l*v.
   - If you do not want the MSI log to be created, delete the /l option and all of its parameters from the CmdLine keyname.
   - To change the default destination of the log file, change the parameter "%temp% \xe1instlogmsi.txt" to the directory and file name you want. Use quotation marks around the path if it contains spaces. For example, /l "c:*my directory**mylog*.txt".

4. Optional: Specify the transforms to be applied.

   All users running from the same image get the same list of transforms that are applied.

   a) Under the [Startup] section, find this statement: CmdLine=/l* "%temp%\xe1instlogmsi.txt"

   b) Add the TRANSFORMS CmdLine keyname. For example,
      TRANSFORMS=transform1.mst,transform2.mst,…

Example

In this example, the log file, xe1instlogmsi.txt, is generated with verbose information and is saved to C:\MyPath. The installation is launched in basic user interface mode, and the transform MyTransform.mst is applied.

```
[Startup]
CmdLine=/l*v "C:\MyPath\xe1instlogmsi.txt" /qb TRANSFORMS=MyTransform.mst
```

Windows Installer Policies

You can control the Windows Installer behavior on your client computers by using System Policies for Windows Installer. This lets you configure some settings, like preventing users from installing or uninstalling Windows Installer-based applications, and letting restricted users run installations with elevated privileges.

There are two types of Windows Installer policies: machine policies and user policies. A brief explanation of some commonly-used policies follows:

User Policies

AlwaysInstallElevated
Set this property to 1 to let your users install with elevated privileges. The machine policy must also be set to 1 for this policy to take effect.

TransformsAtSource
Set this property to 1 to make Windows Installer search for transforms in the installation source instead of storing them in the Application Data folder of a user's profile.

Machine Policies

AlwaysInstallElevated
Set this property to 1 to let your users install with elevated privileges. The user policy must also be set to 1 for this policy to take effect.

DisableMSI
Use this policy to restrict users without administrative credentials from installing or reinstalling Windows Installer applications, or to completely disable the Windows Installer service.

Set DisableMSI to 0 to allow all install operations. Restricted users will not be able to install IBM i Access Client Solutions.

Set DisableMSI to 1 to allow only managed installations and elevated installations.

Set DisableMSI to 2 to completely disable Windows Installer.

DisablePatch
Set this policy to 1 to restrict Windows Installer from applying patches.

TransformsSecure
Set this policy to 1 to tell Windows Installer to cache transforms in a locked location where users do not have write access.

Refer to the MSDN System Policy 🔗 Web page for a complete list of Windows Installer policies.

Related information
MSDN System Policy Web page

Installing Windows Application Package on Windows

Before you begin using Windows Application Package you must install the product on a system running Windows.

1. Download the zip archive file for Windows Application Package. You can acquire Windows Application Package by downloading the package from the Entitled Software Support (ESS) web site. The IBM i Access Client Solutions web site has more information about downloading the product.

2. Extract the contents of the zip archive for Windows Application Package.

For more information, refer to the `readme` document that is in the product's `Documentation` directory.

Related information
IBM i Access Client Solutions web site

Using command line parameters to change the installation behavior

A user can install, upgrade or modify the features that are installed by using command line parameters on the setup.exe command.

- To install, upgrade or add features, enter `setup /vADDLOCAL=`*featurename* where *featurename* is the internal name of the feature. See Table 1 on page 14 for the list of feature names.

- To include more than one feature, separate the features with a comma as shown in this example: `setup /vADDLOCAL=req,odbc`

- To install, upgrade or add all features, enter `setup /vADDLOCAL=ALL`

- To remove features after the install or upgrade, enter `setup /vREMOVE=`*featurename* where *featurename* is the internal name of the feature. See Table 1 on page 14 for the list of feature names.

- To remove the product, enter `setup /vREMOVE=ALL`

- To specify transforms to be applied, enter `Setup /vTRANSFORMS=transform1.mst,transform2.mst,…`

Note: When combining two or more options into the /v parameter or when the value of an option contains spaces you need to enclose them in apostrophes as shown in the following example:

```
setup /v"ADDLOCAL=dir TRANSFORMS=MyTransform.mst"
```

Table 1. Feature names	
Feature	**Internal name of feature**
Required Programs	req
ODBC	odbc
OLE DB Provider	oledb
.NET Data Provider	dotnet
Secure Socket Layer (SSL)	ssl
AFP Printer Driver	afp
Headers, Libraries, and Documentation	hld
Note: The feature's name is not case-sensitive.	

Setting public properties from the command line

To set public properties from the command line, use this command:

```
setup /vPUBLIC_PROPERTIES=value
```

For a list of public properties, see the "Public properties" on page 8 topic.

Controlling the user interface level

For instructions to control the user interface level, see the "Defining the level of user interface throughout the installation" on page 11 topic.

Related tasks

Using command programs

You can automate the installation process by creating a command (.cmd) file to run setup.exe with predefined parameters. In this situation, users do not need to specify options at the command prompt.

Installing Updates

You can obtain updates for Windows Application Package from the same location where you downloaded the product. Just download the product again to receive the latest version.

You can acquire Windows Application Package by downloading it from the Entitled Software Support (ESS) web site.

The IBM i Access Client Solutions web site has more information about downloading the product.

Related information

Entitled Software Support

IBM i Access Client Solutions web site

Installing or removing individual features

Use Add or Remove Programs in the Control Panel to install or remove individual features of Windows Application Package. This is also called a *maintenance install*.

To add or remove Windows Application Package features, follow these steps:

1. Click **Start** > **Control Panel** > **Add or Remove Programs** > **IBM i Access Client Solutions - Windows Application Package** > **Change**.

   Note: On some versions of Microsoft Windows the tool may be named differently in the Control Panel. Use the tool which allows you to add or remove programs or features.

2. Follow the instructions on the screen, selecting **Modify**.

3. Click the feature name and choose one of these, as appropriate:

   - To install a feature, select **This feature will be installed on local hard drive** or **This feature, and all subfeatures, will be installed on local hard drive.**
   - To remove a feature, select **This feature will not be available**.

4. Click **Install** to modify the features that are installed and continue through the Install wizard until it completes.

Uninstalling Windows Application Package from Windows

If you already have Windows Application Package installed, use this information to uninstall it from your system.

To uninstall Windows Application Package, follow these steps:

1. Save information and close running applications.
2. On the desktop, double-click **My Computer**.
3. Select **Control Panel** > **Add/Remove Programs**.

   Note: On some versions of Microsoft Windows the tool may be named differently in the Control Panel. Use the tool which allows you to add or remove programs or features.

4. Select **IBM i Access Client Solutions - Windows Application Package** from the list of installed programs, and click **Remove**.

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