IBM® Db2® Web Query for i™
5733WQX
Install Instructions – Version 2.4.0
(Updated 12/13/2022)

This document provides instructions for installation and setup of Db2 Web Query for i, 5733WQX, version 2.4.0. It is recommended that the steps be completed in the order listed. All steps should be performed under the sign-on of a system administrator with *SECADM and *ALLOBJ authority, unless stated otherwise.

1. Install the prerequisite products, options, and PTFs

Review the prerequisite products and required fix levels at Release Levels and Prerequisites. Verify that all prerequisites are installed for your version of IBM i.

2. Restore the Web Query licensed program

The IBM i standard and keyed media set includes the Db2 Web Query product 5733WQX. The product is shipped on two discs. The base product and all the options, except Developer Workbench, are shipped on the first disc. Developer Workbench is shipped on the second disc.

If your Web Query discs are older than release 2.4.0, you can order a new copy or download the image from Entitled Software Support (ESS) at https://www.ibm.com/servers/eserver/ess/landing/index.html. The 2.4.0 discs are identified by the following labels:

To install the base product and features, use the Restore Licensed Program (RSTLICPGM) command. Minimally, you must install the base product, one edition, and the Developer User options. Example commands are shown below. Substitute OPT01 with your device. For each restore command, read the license agreement and press F14 to accept it.

RSTLICPGM LICPGM(5733WQX) DEV(OPT01) – **Base product**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(1) – **Express Edition**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(2) – **Standard Edition**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(4) – **Developer Users**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(5) – **Developer Workbench Users**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(6) – **Runtime Enablement Groups**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(7) – **JD Edwards Adapter**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(8) – **DataMigrator for i**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(9) – **Scheduler Edition**
RSTLICPGM LICPGM(5733WQX) DEV(OPT01) OPTION(10) – **Runtime User Edition**

3. Set a CCSID and LOCALE for the QWQADMIN profile

The Web Query administrative profile QWQADMIN is created when the base product is installed.
It is important that the CCSID for the QWQADMIN profile matches the CCSID of the data for which Web Query will run reports. To set the CCSID, use the CHGUSRPRF command. The below example sets the CCSID for English:

```
CHGUSRPRF USRPRF(QWQADMIN) CCSID(37)
```

Web Query uses the Qshell interpreter (QSH) to run scripts. For the scripts to run correctly, the Web Query environment must be configured with a matching CCSID and LOCALE. The locale determines information about the language and country or region, including how QSH should sort and classify characters when running the scripts. To set the locale for Web Query, use the CHGUSRPRF command to change the LOCALE value in the QWQADMIN profile. The below example sets the LOCALE to English for the United States.

```
CHGUSRPRF USRPRF(QWQADMIN) LOCALE('/QSYS.LIB/EN_US.LOCALE')
```

Refer to National language support (NLS) considerations - IBM Documentation for more details and a list of CCSIDs and LOCALEs.

4. Add license keys

Every Web Query version/release/modification (VRM) requires a unique set of keys. And for every VRM, there is a 70-day trial period before license keys are required. The base product and each feature have a separate trial period, though they may overlap.

You may want to delay adding license keys and come back to this step later, to take advantage of the trial period. During the trial, unlimited users can be registered to Web Query.

To add license keys, use the Add License Key Information (ADDLICKEY) command.

5. Secure the environment

Transport Layer Security (TLS) is a security protocol for browsers and web servers. It adds security to communications by encrypting the data over the connection. It is strongly recommended that you configure Web Query to use Hypertext Transfer Protocol Secure (HTTPS) with TLS. Without this security, passwords and sensitive data may be compromised.

To avoid such exposure, Web Query will fail to start if the HTTP server, WQLIB85, is not TLS enabled. Instructions to enable TLS for the HTTP server, the Developer Workbench client, and the Spreadsheet Client add-in are in the TLS Enablement guide on the Web Query wiki.

Though it's not recommended, a system administrator can override the TLS enforcement after Web Query fails to start by updating the TLS_OVERRIDE setting in the Web Query configuration file QWQREPOS/QWQCONFIG. Possible values are:

- *OFF: Fail to start if TLS is disabled (Default)
- *ON: Allow to start if TLS is disabled

Below is an example SQL statement to configure the override.

```
UPDATE QWQREPOS/QWQCONFIG set VAL='ON' where PARM='TLS_OVERRIDE'
```

6. Start DB2 Web Query

To start Web Query, select option 1 on the Work with Web Query (WRKWEBQRY) panel or use the Start Web Query (STRWEBQRY) command.

To later end Web Query, use the WRKWEBQRY or End Web Query (ENDWEBQRY) command, or use the End Subsystem (ENDSBS) command for the Web Query subsystem. When ending the subsystem, do not use the default DELAY(*NOLIMIT) parameter. Instead, specify the number of seconds to delay for a controlled end or specify OPTION(*IMMED). Below are example commands:

```
ENDSBS SBS(QWEBQRY21) DELAY(60)
ENDSBS SBS(QWEBQRY21) OPTION(*IMMED)
```

7. Add licensed users

System security administrators with *SECADM authority can add licensed users to Web Query and can optionally assign them as Web Query administrators. To do so, use the Register Web Query User (REGWQUSR) command.

Web Query administrators can add other licensed users via either the REGWQUSR command or the Web Query Security Center. Note, however, that only a system security administrator can assign a user as a Web Query administrator.

To access Security Center, log in to Web Query at https://<*your_system*>:12331/webquery. On the Db2 Web Query for i Hub, click the Management Center icon, then click Security Center. For more information, refer to Administering Db2 Web Query in the Product Manual.

8. Install the Developer Workbench client (optional)

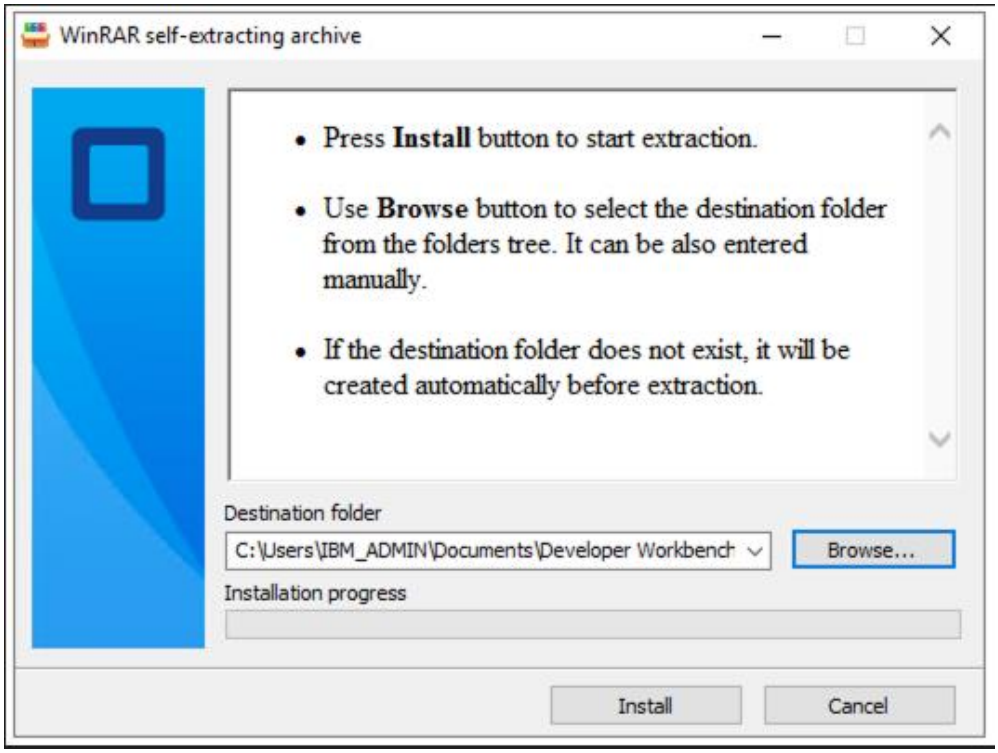
If you installed option 5, Developer Workbench Users, then the licensed users of this option must download and install the Developer Workbench client on their workstation. When upgrading from a previous level of Web Query, it is important to refresh the client on the workstation because the release and fix level of the Developer Workbench client must match that of the Web Query base product it connects to.

To install the client, follow these steps.

A. Download the Developer Workbench installation files in binary from the IFS directory `/qibm/proddata/qwebqry/DeveloperWorkbench` to a folder on the Windows PC. The files names are:

```
WQDevWork240.sfx.part1.exe
WQDevWork240.sfx.part2.rar
WQDevWork240.sfx.part3.rar
WQDevWork240.sfx.part4.rar
WQDevWork240.sfx.part5.rar
```

B. Run WQDevWork240.sfx.part1.exe.
The Developer Workbench Package Install dialog box displays, as shown in the following image.



Note: Clicking Install will create a new WQDevWork240.exe file in the same folder where you started the wizard. Optionally, you can change the destination folder for the new file.

C. Click *Install*. The WQDevWork240.exe file will be created in the Destination folder. The WQDevWork240.exe will then automatically run, and the Developer Workbench installation wizard will start.

The installation and setup of Web Query is now complete, and you are ready to get started with its robust analytics capabilities. Refer to the Deployment Guide and Best Practices for getting started tips. You can also refer to the Web Query website at https://ibm.biz/db2wq-wiki for links to videos, service levels, feature articles, and other getting started information. Details on configuring the product's features can be found in the Product Manual.

APPENDIX A: NLS Configuration

To configure Web Query for national language support (NLS), you must have Web Query administrator privileges. Follow the instructions in this appendix if you wish to configure Web Query for:

- A non-English language
- NLS settings, such as the default currency symbol or default numeric formatting

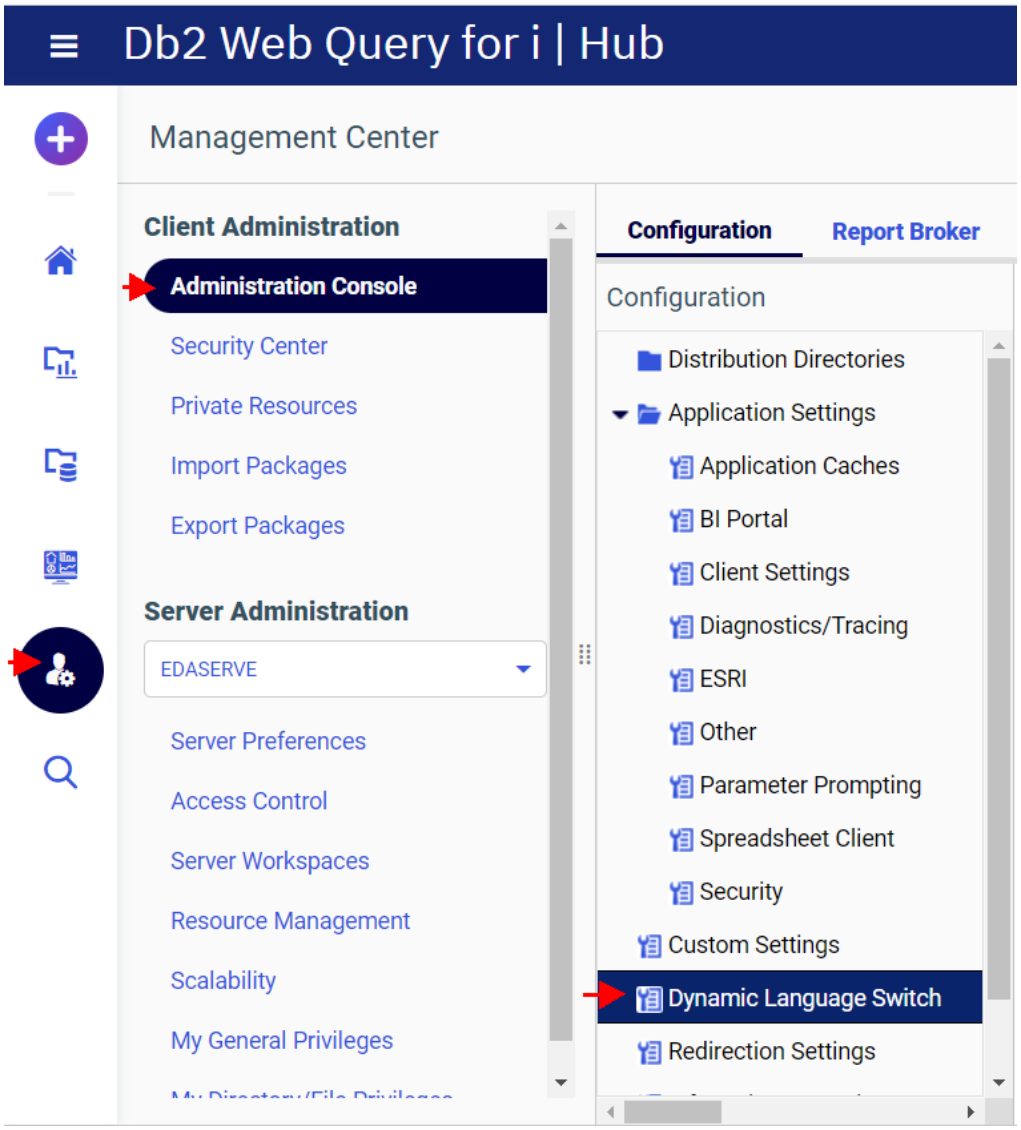
The Web Query user interface currently supports the following languages:

Arabic-2954
Brazilian-Portuguese-2980
Chinese-Simplified-2989
Chinese-Traditional-2987
Czech-2975
Danish-2926
Dutch-2923
Dutch-Belgium-2963
English-2924
English DBCS-2984
English Uppercase DBCS-2938
Finnish-2925
French-2928
French-Belgium-2966
French-MNCS-2940
French Canadian-2981
German-2929
German-MNCS-2939
Hungarian-2976
Italian-2932
Italian-MNCS-2942
Japanese-Upper/Lower-2930
Japanese-DBCS-2962
Korean-2986
Norwegian-2933
Polish-2978
Portuguese-2922
Portuguese-MNCS-2996
Russian-2979
Spanish-2931
Swedish-2937
Turkish-2956

Post installation steps for NLS configuration

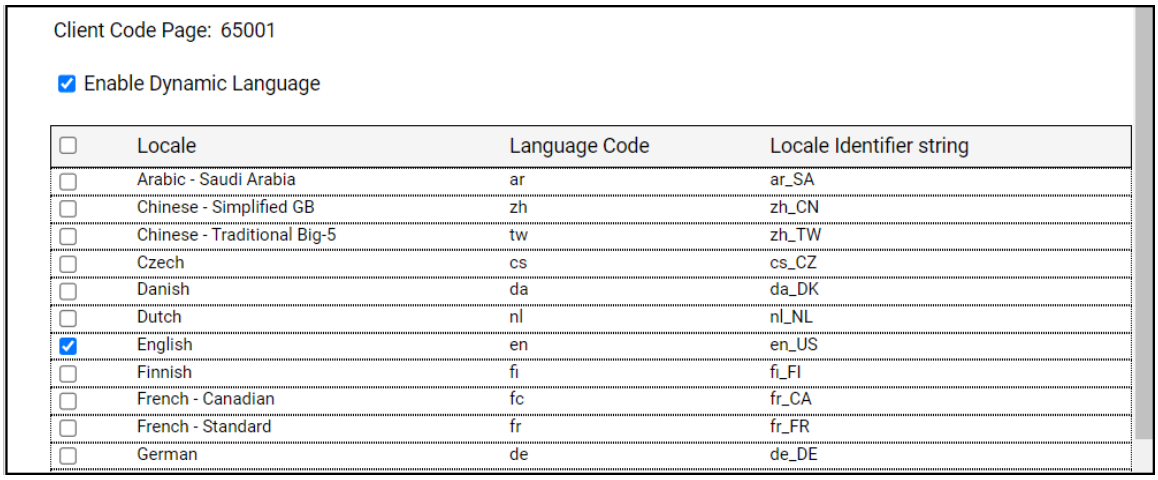
Step 1: Enable the Dynamic Language Switch

Login to Web Query at https://<your_system>:12331/webquery. On the Db2 Web Query for i Hub, click the Management Center icon, click Administration Console, and click Dynamic Language Switch.



The Dynamic Language Switch determines which languages a user can choose from on the Web Query login page. The user can choose in what language they want to see the text in the Web Query user interfaces.

To enable the Dynamic Language Switch, check the Enable Dynamic Language box. Doing so activates the check boxes for the languages. The default English language is automatically enabled. Click the check box for any additional language(s) you want to appear for the user selection. Note that once you select a language, only those languages that share the same character encoding can be enabled. For example, Asian languages can only be enabled with English. European languages can be enabled with each other and English.



Click Save. You must restart Web Query for the changes to take effect.

Step 2: Set the default numeric formatting

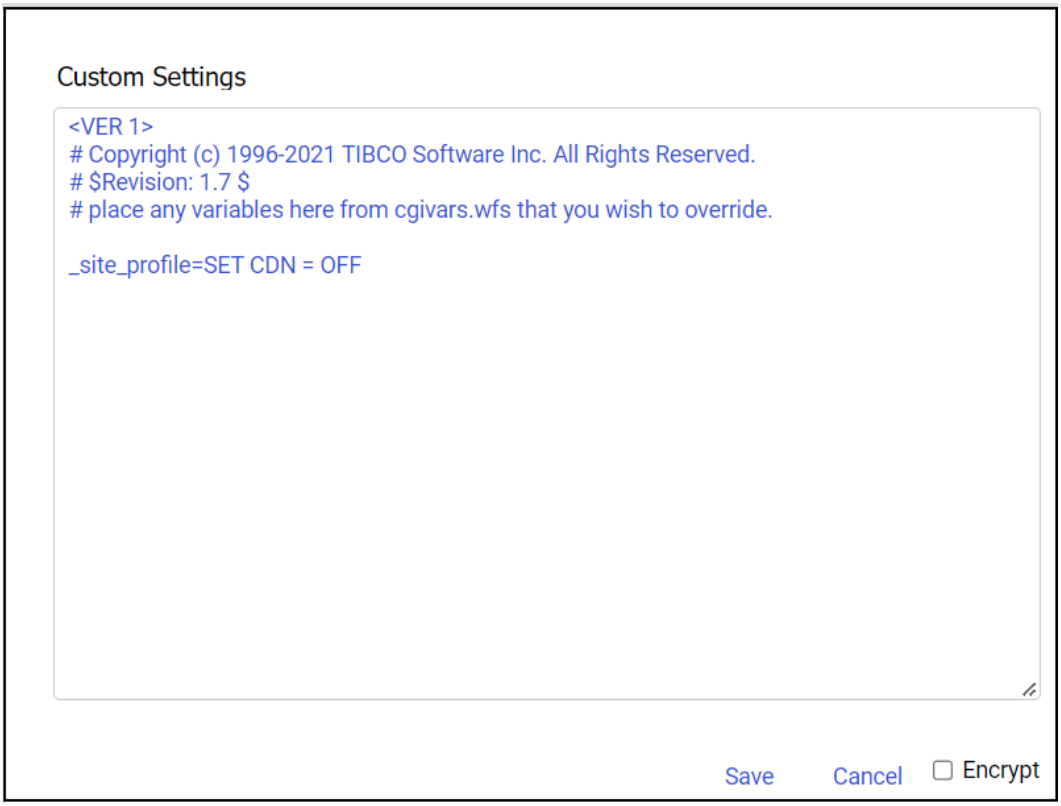
If you wish to change the default numeric formatting, on the Db2 Web Query for I Hub, click the Management Center icon, click Administration Console, and click Custom Settings. By setting the value for Continental Decimal Notation (CDN), you can adjust the default behavior for numeric data.

SET CDN= [ON | OFF | SPACE | QUOTE | QUOTEP]

The values are described as follows:

`ON` enables CDN. For example, the number 3,045,000.76 is represented as 3.045.000,76.
`OFF` disables CDN. For example, the number 3,045,000.76 is represented as 3,045,000.76. OFF is the default value.
`SPACE` separates groups of three significant digits with a space instead of a comma and marks a decimal position with a comma instead of a period. For example, the number 3,045,000.76 is represented as 3 045 000,76.
`QUOTE` separates groups of three significant digits with a single quotation mark instead of a comma and marks a decimal position with a comma instead of a period. For example, the number 3,045,000.76 is represented as 3'045'000,76.
`QUOTEP` separates groups of three significant digits with a single quotation mark instead of a comma and marks a decimal position with a period. For example, the number 3,045,000.76 is represented as 3'045'000.76.

Example syntax is shown in the below image.



You must end Web Query and restart it for the change to take effect.

Note that if the display format of a Web Query report is Excel 2000 or later, CDN is controlled by the settings on an end user's computer. That is, numbers in report output are formatted according to the convention of the locale (location) set in regional or browser language options.

Step 3: Set the default currency

If you wish to change the default currency, edit the file nlscfg.err in directory /qibm/userdata/qwebqry/ibi/srv77/wfs/etc. The file is created the first time that Web Query is started. Add the three-letter code for the currency symbol you want to use. For example, to specify the Euro, add the following statement:

```
CURRENCY = EUR
```

The code values are:

EUR (Euro)
USD (United States dollar)
GBP (Pound sterling)
JPY (Japanese yen)
NIS (Israeli new shekel)

You must end Web Query and restart it for the change to take effect.

Step 4: Enable visual data support

For Hebrew bi-directional language support, enable Visual data support by editing the file cgivars.wfs in directory /qibm/userdata/qwebqry/base80/client/wfc/etc. Change the WFTRANSINOUT setting to add the path com.srl.exits.WFExit. Note that it is case sensitive. Following is example syntax:

```
WFTRANSINOUT      =com.srl.exits.WFExit
```

Save and close the file.

Step 5: Set the Arabic CCSID for Qshell

If you are using the Arabic language with CCSID 420, follow these steps to specify an alternative CCSID for running Web Query scripts. Qshell does not support CCSID 420.

1. Enter the command:
   `wrklnk '/qibm/userdata/qwebqry/WQLIB85/conf/i5OSStartup.properties'`
2. Select option 2=Edit.
3. Add this line: `engine.job.ccsid=425`
4. Press F3 to save the changes.

APPENDIX B: Code page mapping table

The table below contains a mapping from the IBM i CCSID to the Web Query Reporting Server codepage. The client codepage is 65001 Unicode (UTF-8) for use with any Reporting Server codepage.

IBM i CCSID	Reporting Server codepage	Language ID
1140 or 037	37	
1141 or 273	273	DEU
1142 or 277	277	DAN or NOR
1143 or 278	278	FIN
1144 or 280	280	ITA
1145 or 284	284	ESP
1146 or 285	285	ENG
1147 or 297	297	FRA
420	420	ARA
424	424	HEB
1148 or 500	500	DES
838	838	THA
870	870	HUN, PLK, ROM, CSY, SKY or HRV
875	875	ELL
933	933	KOR
935	935	CHS
937	937	CHT
1025	1025	RUS
1026	1026	TRK
1047	1047	
1112	1112	LVA or LTU
930 or 5026	930	JPN
939 or 5035	939	JPN
Any	Any	Any