



IBM® DB2® for Linux®, UNIX®, and Windows®

# Best practices

## DB2 V10.1 silent installation and uninstallation

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## **Executive summary**

The purpose of this paper is to provide a general understanding of DB2 silent installation and uninstallation, fix pack installation and uninstallation, and release upgrades as part of an application that you develop as an IBM Business Partner or client. You can use a response file to install an identical configuration across every workstation on your network or to install multiple configurations of a DB2 database product. You can then distribute this file to every workstation where you want the product to be installed. The concepts that are described in this paper also cover applications that support multitenancy.

## Introduction

This document addresses IBM Business Partners and clients planning on deep-embedding DB2 software within their solutions. Deep embedding means that no database administrator is involved and that all administration is done programmatically. This paper describes the processes of DB2 silent installation and uninstallation, silent fix pack installation and uninstallation, and silent upgrades to later DB2 versions and releases.

You can use DB2 silent installation and uninstallation to install and uninstall DB2 products or components without any user interaction, unlike when you use the DB2 Setup wizard. Silent installation is useful for large-scale deployments of DB2 product editions. As an IBM Business Partner or IBM client, you can also use silent installation or uninstallation to embed the DB2 installation and uninstallation processes inside the procedures for your solutions.

Although DB2 silent installation and uninstallation, silent fix pack installation and uninstallation, and silent upgrades to later DB2 versions and releases are available for all supported operating systems, this document covers the processes on Windows 32-bit and 64-bit operating systems only.

The first section of this document provides a short introduction to DB2 silent installation. The second section covers the uninstallation process. The third section describes a fix pack update. The fourth section provides a detailed description of a version and release upgrade. The final section provides examples of simple and complex DB2 installation and uninstallation.

## DB2 silent installation

DB2 silent installation is also known as response file installation or unattended installation. You can use a silent installation to perform the following actions:

- Install a DB2 product on a new DB2 copy
- Install a new DB2 product on an existing DB2 copy
- Install DB2 features or components on an installed DB2 product in an existing DB2 copy
- Upgrade a DB2 product in a DB2 copy to a later version, release, or fix pack level

You need an installation response file to perform a silent installation. An installation response file is an English-only text file that contains setup and configuration keywords, including for the DB2 product, features, and components to be installed. The following sections describe in more detail how to perform a silent installation on a Windows operating system.

### *Generating a DB2 installation response file*

The best way to generate an installation response file depends on whether you want to replicate an existing configuration on your system:

- To create a new configuration, customize the sample response file that is provided in the `DB2_image_path\db2\Windows\samples` directory in the DB2 installation image. The following section shows a sample installation response file and how to customize it.



By customizing a copy of the sample response file rather than the sample response file itself, you have the original sample response file as a reference in case of any issues.

- Alternatively, you can create an installation response file by typing information into an empty file.

To replicate an existing configuration, issue the response file generator command, `db2rspgn`, to create an installation response file. For more information, see “db2rspgn - Response file generator command” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0007509.html>).

### *Structure of a DB2 installation response file*

In an installation response file, you specify keyword-value pairs for different installation settings in the following format: `KEYWORD = VALUE`. The settings refer to the DB2 copy, the instances, or the databases that are part of your installation. Every keyword-value pair must be on a separate line and have one or more predefined values.

The sample installation response file for the DB2 Express-C Version 10.1 software is as follows:

```
** Sample response file for silent installation of DB2 Express C
** All keywords that are enabled (i.e., not preceded by *) are mandatory
** and must be specified in order for the installation to continue.
** All other keywords are optional. If optional keywords are not specified,
** the installation will proceed using default values.

** General Options:
PROD                =          EXPRESS_C
*FILE               =          C:\Program Files\IBM\SQLLIB
LIC_AGREEMENT      =          ACCEPT | DECLINE
INSTALL_TYPE       =          TYPICAL | COMPACT | CUSTOM
REBOOT             =          YES | NO

** Copy Creation Settings:
DB2_COPY_NAME      =          DB2COPY1          ** char(64)
DEFAULT_COPY       =          YES
*KILL_PROCESSES    =          YES | NO
DB2INSTDEF        =          YES

** Instance Creation Settings:
INSTANCE           =          <iPrefix>          ** char(8)      e.g. DB2_INST
<iPrefix>.NAME     =          DB2                ** the instance name
<iPrefix>.USERNAME =          ** char(30)
*<iPrefix>.DOMAIN  =          ** char(14)
<iPrefix>.PASSWORD =          ** char(14)
*<iPrefix>.SVCENAME =          db2c_DB2          ** BLANK or char(14)
*<iPrefix>.PORT_NUMBER =          50000          ** 1024 - 65535

DEFAULT_INSTANCE = <iPrefix>

** Database Creation Settings:
*DATABASE          =          <dbPrefix>          ** char(8)
*<dbPrefix>.DATABASE_NAME =          ** the database name
*<dbPrefix>.INSTANCE =          <iPrefix>          ** one value of INSTANCE
keyword
*<dbPrefix>.LOCATION =          LOCAL | REMOTE
*<dbPrefix>.USERNAME =          ** char(30)
*<dbPrefix>.DOMAIN  =          ** char(14)
*<dbPrefix>.PASSWORD =          ** char(8)
*<dbPrefix>.PATH    =          ** the database directory**

Administration Server Creation Settings:
*CREATE_DAS        =          YES | NO
```

To activate an item in the installation response file:

1. Remove the asterisk (\*) to the left of the keyword.
2. If necessary, specify a new setting, such as by choosing one of the options that are separated by the vertical bar (|). Or, replace the current setting to the right of the equal sign (=) with the new setting.

### ***Important DB2 response file keywords***

This subsection explains some of the important keyword-value pairs. For a full list of installation response file keywords, see “Response file keywords” in the DB2 Information Center

(<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/r0007505.html>).

## General keywords

The `LIC_AGREEMENT` keyword indicates whether you read and agreed to the conditions in the license agreement file in the `DB2_image_path\db2\licence` directory in the DB2 installation image. For a successful installation, set the value of this keyword to `ACCEPT`.

The `INSTALL_TYPE` keyword specifies the installation type. If you specify a `TYPICAL` or a `COMPACT` installation type, do not enable any of the `COMP` keywords that follow, because the installer selects all the appropriate components for you. The installer ignores all `COMP` keywords unless you specify `CUSTOM` for the installation type. If you select the `CUSTOM` installation type, ensure that you enable all the `COMP` keywords that are required for your database environment.

The `REBOOT` keyword specifies whether to restart the system when the installation is completed.

## DB2 copy creation keywords

The copy name is a unique identifier that refers to a set of DB2 product editions that are installed in the same location on your system. You can run multiple DB2 copies independently for different functions or applications on the same computer.

The `DB2_COPY_NAME` keyword defines a new copy name for the DB2 product that you are installing. Ensure that you define a copy name that is not already in use on the system. The default copy name is `DB2COPY1`.



A copy name is limited to 64 characters. You cannot change it after the installation.

In addition, you can specify a DB2 copy as the default copy on your system. The default DB2 copy is used by applications that you do not explicitly enable to use a different copy. To specify a copy as the default copy, set the `DEFAULT_COPY` keyword to `YES`. The default value of this keyword is `NO`, unless no other DB2 copies are installed.

## DB2 instance creation keywords

To associate settings with a DB2 instance, define a unique prefix by setting the `<iprefix>` value. The unique prefix applies to all the following keywords that refer to the instance in the installation response file. Set the prefix by using the `INSTANCE` keyword. The default prefix value in a sample installation response file is `DB2`.

To define the name of a DB2 instance, use the `<iprefix>.NAME` keyword. The default instance name is `DB2`. Ensure that the instance name is not already used by an instance on the system.

A silent installation either creates users or verifies an existing user's credentials. To verify the user's credentials, the DB2 instance requires a user name, which you define by using the `<iprefix>.USERNAME` keyword, and a password, which you define by using the `<iprefix>.PASSWORD` keyword. You need to define the `<iprefix>.USERNAME` and `<iprefix>.PASSWORD` keywords only for DB2 server products.

If you want to run multiple DB2 instances concurrently, each instance needs a unique service name and port number. To define a unique service name, use the `<iPrefix>.SVCENAME` keyword, which has a default value of `db2c_DB2`. To define a unique port number, use the `<iPrefix>.PORT_NUMBER` keyword, which has a default value of 50000.



To view reserved port numbers on your Windows system, check the services file in the `C:\WINDOWS\system32\drivers\etc` directory.

If you do not specify a service name and port number, DB2 software sets a unique service name and port number for each instance that you defined in the installation response file.

Finally, if you want to create more than one DB2 instance, define a default instance by setting the `DEFAULT_INSTANCE` keyword to the `<iPrefix>` value of the selected instance.



To determine the current default DB2 instance, use the `set db2 operating system` command. This command lists the DB2 operating system parameter `DB2INSTANCE = <default_instance_name>`.

## DB2 database creation keywords

In one response file, you can specify database creation settings for several databases and associate them with an instance.

To associate settings with a DB2 database, define a unique prefix by setting the `<dbPrefix>` value. The unique prefix applies to all the following keywords that refer to this database. Set the unique prefix value by using the `DATABASE` keyword. The default prefix value in the sample installation response file is `databas1`.

Define the name of the database by using the `<dbPrefix>.DATABASE_NAME` keyword. Associate the database with an instance by setting the `<dbPrefix>.INSTANCE` keyword to an `<iPrefix>` value.

Define the `<dbprefix>.LOCATION` keyword to specify where the database is stored. You can specify either the local system, by using the `LOCAL` value, or a remote system, by using the `REMOTE` value. By default, the database is stored in the directory of the instance that is associated with the database. To prevent errors, always specify full paths that are surrounded by double quotation marks.

Specify a different database path by using the `<dbprefix>.PATH` keyword. Finally, create a database user in the installation response file by assigning the appropriate values to the `<dbPrefix>.USERNAME`, `<dbPrefix>.DOMAIN`, and `<dbPrefix>.PASSWORD` keywords.



To prevent errors, always specify full paths surrounded by double quotes.

## DB2 database administration server creation keywords

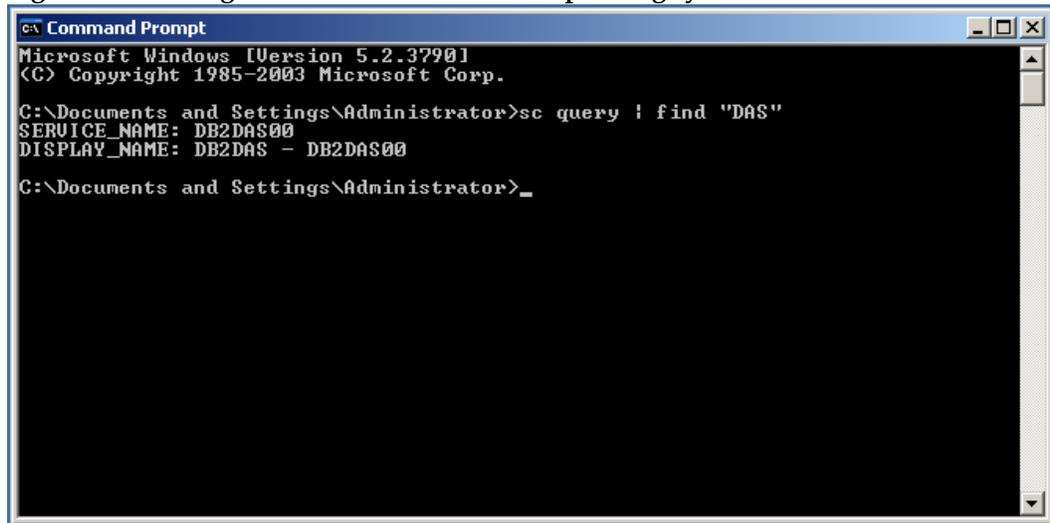
The DB2 administration server (DAS), which you can optionally install, assists with tasks on DB2 database instances. You need a DAS to perform remote administration or to use

tools such as the Configuration Assistant, the Control Center, and the Development Center.

A single DAS is used for all DB2 copies on your system. If a DAS exists on your system, set the `CREATE_DAS` keyword to `NO`; if a DAS exists and you set the `CREATE_DAS` keyword to `YES`, the installation fails. If you want to install a DAS and are certain that a DAS is not already installed, set the `CREATE_DAS` keyword to `YES`.

To verify your DAS installation, at a Windows command prompt, issue `sc query | find "DAS"`. If a DAS is already running on your system, the query returns the service name and the display name of the DAS, as seen in Figure 1.

**Figure 1. Checking for a DAS on a Windows operating system**



```
Command Prompt
Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\Administrator>sc query | find "DAS"
SERVICE_NAME: DB2DAS00
DISPLAY_NAME: DB2DAS - DB2DAS00

C:\Documents and Settings\Administrator>_
```

### *DB2 silent installation prerequisites*

Before you start a silent installation, verify the following items:

- Your system meets all memory, hardware, and software requirements to install your DB2 product edition.
- Your user account has the required permissions to perform a silent installation. For example, this could mean that the user account must belong to the Administrators group on the system where you will perform the installation.
- To install a DB2 product on an existing DB2 copy, you must stop all DB2 processes that are associated with that DB2 copy. Otherwise, the installation will not start when you run the DB2 setup command. You can stop a DB2 process manually or with a response file. To stop a DB2 process with a response file installation, in the response file, set the `KILL_PROCESSES` keyword to `YES` (the default is `NO`). Use caution when you stop DB2 processes because the termination of a DB2 process can cause loss of data. If you use the response file `KILL_PROCESSES` keyword, before the installation proceeds, the DB2 processes are stopped.

If you are not using the KILL\_PROCESSES keyword, stop the DB2 processes by performing the following steps.

1. At a Windows command prompt, list the names of all running DB2 processes on your system by issuing the following command:

```
sc query | find "DB2"
```

2. Identify all DB2 services that are associated with the DB2 copy that is affected by the silent installation and issue the following command:

```
sc stop service_name
```

where *service\_name* is a single DB2 service that you want to stop.

For more information, see "Installation requirements for DB2 database products" in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/r0025127.html>).

## ***Performing a DB2 silent installation***

You must perform installation and uninstallation under the Windows Administrator account. Ensure that you open the Windows command window as "Administrator." To perform a silent installation for a DB2 Version 10.1 or later product on a Windows operating system:

1. If you are installing a DB2 product within an existing DB2 copy, stop all DB2 processes that are associated with that DB2 copy. Stop the DB2 processes in a controlled way; otherwise, all DB2 processes are forced to stop during the silent installation, which might result in a loss of data. For more information, see [General keywords](#).
2. Customize a copy of the sample response file that is provided in the `DB2_image_path\db2\Windows\samples` directory in the DB2 installation image. For example, to install a DB2 Express-C product edition, make a copy of the `db2expc.rsp` installation response file, and customize it. Specify all keyword-value pairs that are necessary to install your DB2 product edition. For more information, see [Important DB2 response file keywords](#).
3. To perform the silent installation, go to the `DB2_image_path` directory in your DB2 installation image, and issue the following command:

```
setup.exe -u "DB2_image_path\db2\Windows\samples\response_file_name"
```

where *response\_file\_name* is the name of the file that you customized in step 2.

## Validating a DB2 silent installation

To validate the result of a silent installation, issue the `db2val` command. This command validates your installation by verifying the core functionality of your DB2 copy, checking the consistency of your instances, and checking the state of installation files, instance setup, and local database connections.

To issue the `db2val` command, your username needs to be part of the DB2ADMNS group. The Windows Administrator account is usually not part of the DB2ADMNS group and has no permission to issue the `db2val` command. For more information, see “Adding your user ID to the DB2ADMNS and DB2USERS user groups (Windows)” in the DB2 Information Center

(<http://pic.dhe.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.dbconn.doc/doc/t0057286.html>).

The `db2val` command creates its output files in the `C:\Documents and Settings\user\My Documents\DB2LOG` directory. For more information, see “`db2val` - DB2 copy validation tool command” in the DB2 Information Center

(<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0053565.html>).

If an installation problem occurs, issue the `install` command, specifying the `-l <path\msg_file>` option, to create a log file for problem investigation. For information about error codes that might be in the installation log file, see “Response file error codes (Windows)” in the DB2 Information Center

(<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/r0010028.html>).

Table 1 shows the structure of a DB2 installation on the system:

**Table 1. Directory structure of a DB2 installation**

DB2 object	Location
DAS directory	Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1  Windows Vista and later: C:\ProgramData\IBM\DB2\DB2COPY1
SQLDBCON database configuration file	C:\DB2\NODE0000\SQL00001
Database directory that contains files for the following items: <ul style="list-style-type: none"><li>• Buffer pool information</li></ul>	C:\DB2\NODE0000\SQL00001

DB2 object	Location
<ul style="list-style-type: none"> <li>• History information</li> <li>• Log control</li> <li>• Storage path information</li> <li>• Table space information</li> </ul>	
db2system database manager configuration file	<p>Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1\DB2</p> <p>Windows Vista and later: C:\ProgramData\IBM\DB2\DB2COPY1\DB2</p>
DB2 commands	C:\Program Files\IBM\SQLLIB\BIN
DB2 error messages file db2diag log files	<p>Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1\DB2</p> <p>Windows Vista and later operating systems: C:\ProgramData\IBM\DB2\DB2COPY1\DB2</p>
DB2 installation path	C:\Program Files\IBM\SQLLIB
Directory for event monitor data	C:\ProgramData\IBM\DB2\DB2COPY1\DB2\events
Directory for transaction log files	C:\DB2\NODE0000\SQL00001\LOGSTREAM0000
Installation log file	<p>Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\Administrator\My Documents\DB2LOG</p> <p>Windows Vista and later: C:\Users\USER_NAME\Documents\DB2LOG</p>
Instance directory for instance DB2	<p>Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1\DB2</p> <p>Windows Vista and later: C:\ProgramData\IBM\DB2\DB2COPY1\DB2</p>
Local database directory for instance DB2	C:\DB2\NODE0000\SQLDBDIR

DB2 object	Location
Local database directory for the SAMPLE database	C:\DB2\NODE0000\SAMPLE
db2nodes.cfg partitioned database environment file	Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1\DB2  Windows Vista and later: C:\ProgramData\IBM\DB2\DB2COPY1\DB2  For DB2 Express-C, partitioned instances are not supported.
System database directory	Windows XP, Windows 2003, Windows Server 2008, and Windows Server 2012: C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY1\DB2\SQLDBDIR  Windows Vista and later: C:\ProgramData\IBM\DB2\DB2COPY1\DB2\SQLDBDIR

## DB2 silent uninstallation

DB2 silent uninstallation is also known as response file uninstallation or unattended uninstallation.

Use a silent uninstallation to uninstall one or more DB2 product editions, features, or languages from your system without any user interaction. To perform a silent uninstallation, you use an uninstallation response file.

### *Generating a DB2 uninstallation response file*

To generate an uninstallation response file, you can customize the `db2un.rsp` sample response file that is provided in your DB2 copy installation directory, `DB2_installation_path\install`. The default installation directory path is `C:\Program Files\IBM\SQLLIB`.



Always customize a copy of the sample response file so that you have the original sample response file as a reference in case of any issues.

Alternatively, you can create an uninstallation response file by typing information into an empty file.

### *Structure of a DB2 uninstallation response file*

Just as in an installation response file, in an uninstallation file you specify keyword-value pairs for different installation settings in the following format: `KEYWORD = VALUE`. The settings refer to the DB2 copy, the instances, or the databases that are part of your installation. Every keyword-value pair must be on a separate line and have one or more

predefined values. A sample uninstallation response file that contains important keyword-value pairs is as follows:

```

** Sample response file for silent uninstallation.
** All keywords that are enabled (i.e., not preceded by *) are mandatory
** and must be specified in order for the installation to continue.
** All other keywords are optional. If optional keywords are not specified,
** the uninstallation will proceed using default values.
** DB2 Product edition(s) to uninstall:

*REMOVE_PROD          =          ALL
*REMOVE_PROD          =          EXPRESS_C

** Copy Creation Settings:
DB2_COPY_NAME         =          DB2COPY1          ** char(64)
DEFAULT_COPY          =          YES
*KILL_PROCESSES       =          YES | NO
DB2INSTDEF            =          YES
...

** Language(s) to uninstall:
*REMOVE_LANG          =          ALL
*REMOVE_LANG          =          AR
...

```

To activate an item in a sample uninstallation response file:

1. Remove the asterisk (\*) to the left of the keyword.
2. If necessary, specify a new setting, such as by choosing one of the options that are separated by the vertical bar (|). Or, replace the current setting to the right of the equal sign (=) with the new setting.

### ***Important DB2 uninstallation response file keywords***

Only a few keywords in the uninstallation response file are mandatory for uninstalling DB2 product editions, features, or languages from your system. This subsection explains these important keyword-value pairs. For a full list of uninstallation response file keywords, see “Response file keywords” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/r0007505.html>).

To specify the DB2 product to uninstall from a DB2 copy, use the `REMOVE_PROD` keyword. For example, to uninstall all DB2 product editions from a DB2 copy, specify `REMOVE_PROD = ALL`. In contrast, to uninstall a DB2 Express-C product edition, specify `REMOVE_PROD = EXPRESS_C`.

To uninstall a specific DB2 component, use the `REMOVE_COMP` keyword. For example, to uninstall the Control Center from a DB2 product edition, use the keyword-value pair `REMOVE_COMP = CONTROL_CENTER`.

To uninstall a language that is supported by a DB2 product edition, use the `REMOVE_LANG` keyword. For example, the `REMOVE_LANG = DE` entry removes the support for German.

### ***DB2 silent uninstallation restrictions***

Before you start a silent uninstallation, consider the following restrictions:

- You cannot remove a DB2 product if that product is required by an add-on product. For example, consider if both DB2 Enterprise Server Edition and Query Patroller are installed, you cannot uninstall DB2 Enterprise Server Edition because Query Patroller requires DB2 Enterprise Server Edition.
- You cannot remove a DB2 feature if that feature is required by another feature.
- You cannot uninstall the English language from a DB2 copy.
- If you use the installation response file to remove a DB2 product edition, the response file cannot also contain the keywords to remove a feature or a language. That is, you cannot combine the `REMOVE_PROD` keyword with the `REMOVE_COMP` or `REMOVE_LANG` keyword.
- If two or more DB2 copies exist on your system and you must uninstall one of them, you cannot uninstall the default copy. You can use the `db2swtch` command to change the default of a DB2 copy. Additionally, if the DAS is installed in the DB2 copy that you want to remove, you must move the DAS to the installation directory of the DB2 copy that you are not removing. To move the DAS from one installation location to another, use the `dasupdt` command. For more information, see the “`db2swtch - Switch default DB2 copy and database client interface copy command`” (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0023375.html>) and the “`dasupdt - Update DAS command`” (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0011816.html>) in the [DB2 Information Center](#).

Alternatively, you can switch a default DB2 copy by using the Default DB2 and Database Client Interface Selection Wizard. Click **Start > All Programs > IBM DB2 > DB2\_copy\_name > Set-up Tool > Default DB2 and IBM Database Client Interface Selection Wizard**.

### *DB2 silent uninstallation prerequisites*

To uninstall a DB2 product edition, you need a Windows user account with sufficient authority. This means that the user account must belong to the Administrators group on the system where you are performing the uninstallation. For more information, see “Prerequisites for a DB2 database server installation (Windows)” in the DB2 Information Center (<http://pic.dhe.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/c0059824.html>).

Also, you must drop all database manager instances. Repeat the following steps for every instance:

1. Disconnect all connections to the instance.
2. Drop all databases that are managed by the instance.
3. Stop the instance.
4. Drop the instance.

For more information, see “Dropping instances” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.dboj.doc/doc/t0005081.html>).

Before you uninstall your DB2 product in a clustered environment, issue `db2mscs` on the same server on which you issued `db2mscs` to create the failover infrastructure. For more information, see “db2mscs - Set up Windows failover utility command” in the DB2 Information Center (<http://pic.dhe.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0002078.html>).

## *Performing a DB2 silent uninstallation*

Before you begin, be aware that if multiple DB2 product editions exist within a DB2 copy, a response file uninstallation of one DB2 product does not affect the components that are shared by other DB2 product editions. For example, consider a DB2 copy that contains the following DB2 product editions: DB2 Enterprise Server Edition, DB2 Workgroup Server Edition, and DB2 Personal Edition. Several components are shared among the three product editions; however, uninstalling DB2 Enterprise Server Edition removes only the components that are not shared.

In addition, if a DB2 feature is installed with multiple product editions in the same DB2 copy, a response file uninstallation of the feature removes the feature from all the product editions in the DB2 copy.



If you want to uninstall **all** of the DB2 copies on your system, you can issue the `db2unins` command with the `-f` parameter from the DB2 installation image.

For more information, see “db2unins - Uninstall DB2 database products, features, or languages command” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.cmd.doc/doc/r0023371.html>)

To perform a silent uninstallation of a DB2 Version 10.1 or later product on a Windows operating system:

1. If multiple DB2 copies are installed on your system, take these steps:

- a. If the DB2 copy that contains the DB2 product that you want to uninstall is the default DB2 copy, switch the default DB2 copy to one of the other DB2 copies on your system by using the `db2swtch` command.
  - b. Switch to the DB2 copy that contains the DB2 product that you want to uninstall by using the `db2swtch` command.
2. If the DAS is running in the DB2 copy that contains the DB2 product that you want to remove, stop the DAS.

For more information, see “Starting and stopping the DB2 administration server (DAS)” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.admin.gui.doc/doc/t0005170.html>)

3. Customize a copy of the `db2un.rsp` sample uninstallation response file in the `DB2_installation_path\install` directory of your DB2 copy. To customize a copy, remove the single asterisk (\*) to the left of the `REMOVE_PROD` keyword whose value specifies the DB2 product that you want to uninstall. For more information on keywords, see [Important DB2 uninstallation response file keywords](#).
4. In the `DB2_installation_path\BIN` directory, issue the following command:

```
db2unins -u "DB2_installation_path\install\response_file_name"
```

where `response_file_name` is the name of the response file that you customized in step 3.

For troubleshooting purposes, consider running the `db2unins` command with the `-l path` parameter, where `path` specifies the logging directory path, including the log file name. In addition, consider running the `db2unins` command with the `-t file` parameter to generate a trace file that contains detailed information about the uninstallation process.

5. If you stopped the DAS and other DB2 product editions are installed on your system, restart the DAS after the silent uninstallation is completed.

## *Validating a DB2 silent uninstallation*

To validate the uninstallation, check the log or trace file for any messages that confirm that the uninstallation was successful. By default, the `db2un-TimeStamp.log` uninstallation log file is stored in the `C:\Documents and Settings\user\My Documents\DB2LOG` directory.

If you included the `-l path` parameter and the `-t file` parameter when you ran the `db2unins` command, check the log or trace file for any messages that confirm the successful completion.

If the response file uninstallation was not successful, error codes might be written in the uninstallation log file. For an explanation of these error codes, see “Response file error codes (Windows)” in the DB2 Information Center (<http://publib.boulder.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/r0010028.html>).

## *Next steps after DB2 silent uninstallation*

After a successful uninstallation, some directories of your DB2 product might remain on your system. You can attach them in the next DB2 product upgrade or installation by using the `CATALOG DATABASE` command. If they are not needed, remove these directories manually.

## **DB2 silent fix pack update**

For optimal operation, keep your DB2 database environment at the latest fix pack level. You can perform a silent fix pack installation using a response file.



In general, DB2 Express-C is not updated via fix pack. The DB2 Express-C download image always contains a full installation image. If there are several DB2 Express-C updates within a release they always contain the latest DB2 fix pack that is available at the time that they are released.

## *Important DB2 fix pack update response file keywords*

There are some important keyword-value pairs that are necessary for silent fix pack updates.

- The `LIC_AGREEMENT` keyword indicates whether you read and agreed to the conditions in the license agreement file in the `DB2_image_path\db2\licence` directory in the DB2 installation image. For a successful installation, you must set the value of this keyword to `ACCEPT`.
- The `FILE` keyword determines which DB2 copy is updated.

- Set the `KILL_PROCESSES` keyword to `YES` (the default is `NO`), or use the `setup -f` command to stop active DB2 processes of a DB2 copy before the installation proceeds.
- The `PROD` keyword specifies which product you are installing.
- Indicate the base installation copy name by specifying the copy name in the `DB2_COPY_NAME` keyword.
- The `REBOOT` keyword specifies whether or not to restart the system after the fix pack installation is complete.
- Indicate the name of the default instance copy to update by specifying the keyword `DEFAULT_INSTANCE` and indicate the default name by specifying the `NAME` keyword.
- Define a user name and user password by specifying the `NAME` keywords and `PASSWORD` keywords.

### ***DB2 fix pack update prerequisites***

Before you initiate a silent fix pack update, verify the following items:

- Your system meets the memory, hardware, and software requirements to update your DB2 product edition.
- The user account must belong to the Administrators group on the system where you will perform the fix pack update.
- The required space is available to install the fix pack in the DB2 copy that you are updating. The space that is required is equal to the space that is required for the DB2 Version 10.1 for Linux, UNIX, and Windows general availability (GA) installation. For more information about this topic, see “Checking fix pack prerequisites” in the DB2 Information Center (<http://pic.dhe.ibm.com/infocenter/db2luw/v10r1/topic/com.ibm.db2.luw.qb.server.doc/doc/t0024976.html>).

### ***Performing the DB2 silent fix pack update***

To perform a fix pack update:

1. Customize the `db2exp.c.rsp` sample installation response file in the `C:\temp\EXPC\image\db2\Windows\samples` directory by specifying keyword-value pairs.

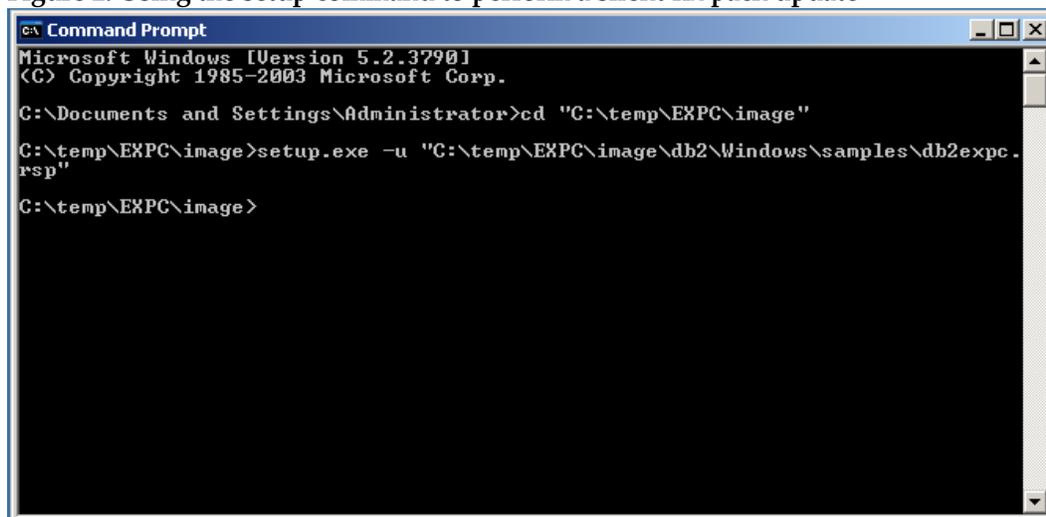
Using Express-C as an example, the resulting installation response file is as follows:

```
** General Options:
PROD = EXPRESS_C
LIC_AGREEMENT = ACCEPT
FILE = C:\Program Files\IBM\SQLLIB
DB2_COPY_NAME = DB2COPY1 ** char(64)
DEFAULT_COPY = YES
DB2INSTDEF = DB2
KILL_PROCESSES = YES

** Instance Creation Settings:
INSTANCE = DB2
DB2.NAME = DB2
DB2.USERNAME = db2admin
DB2.PASSWORD = password
```

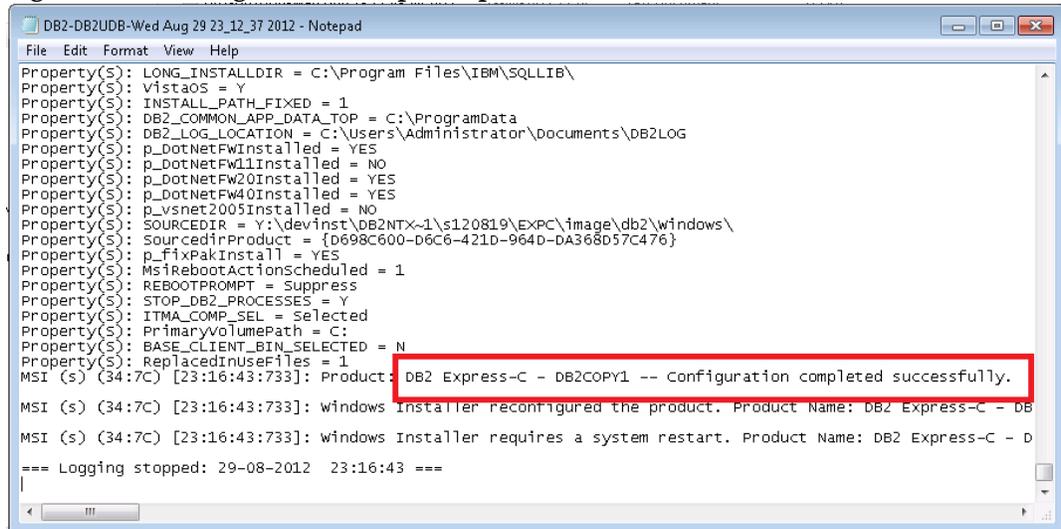
2. At a Windows command prompt, go to the C:\temp\EXPC\image directory of the fix pack installation image, and perform the silent fix pack update by issuing `setup -u`. Use the `-u` parameter to specify the full path to the `db2expc.rsp` customized response file, as shown in the example in Figure 2:

**Figure 2. Using the setup command to perform a silent fix pack update**



3. Check the installation log file in the C:\Documents and Settings\Administrator\My Documents\DB2LOG directory for a message that confirms that the fix pack update operation was completed successfully, as shown in Figure 3:

Figure 3. Validating the DB2 fix pack update



```
Property(S): LONG_INSTALLDIR = C:\Program Files\IBM\SQLLIB\  
Property(S): VistaOS = Y  
Property(S): INSTALL_PATH_FIXED = 1  
Property(S): DB2_COMMON_APP_DATA_TOP = C:\ProgramData  
Property(S): DB2_LOG_LOCATION = C:\Users\Administrator\Documents\DB2LOG  
Property(S): p_DotNetFWInstalled = YES  
Property(S): p_DotNetFW11Installed = NO  
Property(S): p_DotNetFW20Installed = YES  
Property(S): p_DotNetFW40Installed = YES  
Property(S): p_vsnet2005Installed = NO  
Property(S): SOURCEDIR = Y:\devinst\DB2NTX-1\s120819\EXPC\image\db2\windows\  
Property(S): SourcedirProduct = {D698C600-D6C6-421D-964D-DA368D57C476}  
Property(S): p_FixPakInstall = YES  
Property(S): MSIRebootActionsScheduled = 1  
Property(S): REBOOTPROMPT = Suppress  
Property(S): STOP_DB2_PROCESSES = Y  
Property(S): ITMA_COMP_SEL = Selected  
Property(S): PrimaryVolumePath = C:  
Property(S): BASE_CLIENT_BIN_SELECTED = N  
Property(S): ReplacedInUseFiles = 1  
MSI (s) [23:16:43:733]: Product: DB2 Express-C - DB2COPY1 -- Configuration completed successfully.  
MSI (s) [34:7C] [23:16:43:733]: windows installer reconfigured the product. Product Name: DB2 Express-C - DB  
MSI (s) [34:7C] [23:16:43:733]: windows installer requires a system restart. Product Name: DB2 Express-C - D  
=== Logging stopped: 29-08-2012 23:16:43 ===
```

4. Verify that the level of DB2 Express-C was updated to the latest fix pack level:
  - a. At a Windows command prompt, open a DB2 command window by issuing the `db2cmd` command.
  - b. Go to the `C:\Program Files\IBM\SQLLIB\BIN` directory and issue `db2val`.
5. Check the output for a message that confirms that the operation was completed successfully.

After a successful fix pack update, the levels shown by the `db2level` command changes in the Windows system.

## DB2 silent release upgrade

You can upgrade an installed DB2 product to the latest release by using a silent installation. The following procedure is for upgrading DB2 Express-C.

### *Important DB2 release upgrade response file keywords*

There are some important keyword-value pairs that are necessary for DB2 release upgrades, just as there are with a fix pack update.

- The `LIC_AGREEMENT` keyword indicates whether you read and agreed to the conditions in the license agreement file in the `DB2_image_path\db2\licence` directory in the DB2 installation image. For a successful installation, you must set the value of this keyword to `ACCEPT`.
- The `FILE` keyword determines which DB2 copy is updated.

- Set the `KILL_PROCESSES` keyword to `YES` (the default is `NO`), or use the `setup -f` command to stop active DB2 processes of a DB2 copy before the installation proceeds.
- The `PROD` keyword specifies which product you are installing.
- Indicate the base installation copy name by specifying the copy name in the `DB2_COPY_NAME` keyword.
- The `REBOOT` keyword specifies whether or not to restart the system after the fix pack installation is complete.
- Indicate the name of the default instance copy to update by specifying the keyword `DEFAULT_INSTANCE` and indicate the default name by specifying the `NAME` keyword.
- Define a user name and user password by specifying the `NAME` keywords and `PASSWORD` keyword.

## *Performing a DB2 silent release upgrade*

1. Customize the `db2exp.c.rsp` sample installation response file in the `C:\temp\EXPC\image\db2\Windows\samples` directory by specifying keyword-value pairs.

Using Express-C as an example, the resulting installation response file is as follows:

```

** General Options:
PROD                =          EXPRESS_C
LIC_AGREEMENT      =          ACCEPT
FILE               =          C:\Program Files\IBM\SQLLIB
DB2_COPY_NAME     =          DB2COPY1
DEFAULT_COPY      =          YES
DB2INSTDEF        =          DB2
REBOOT            =          YES
KILL_PROCESSES    =          YES
UPGRADE_PRIOR_VERSIONS =      TRUE

** Instance Creation Settings:
DEFAULT_INSTANCE  =          DB2
INSTANCE         =          DB2
DB2.NAME         =          DB2
DB2.USERNAME     =          db2admin
DB2.PASSWORD     =          password
DEFAULT_COPY     =          YES

```

2. At a Windows command prompt, go to the `C:\temp\EXPC\image` directory of the image that you are upgrading, and issue the `setup -u` command. Use the `-u` parameter to specify the full path to the `db2exp.c.rsp` customized response file, as in the following example:

```
setup -u db2exp.c.rsp
```

3. Check the installation log file in the `C:\Documents and Settings\Administrator\My Documents\DB2LOG` directory for a message that confirms that the upgrade operation was completed successfully.
4. Verify that the DB2 Express-C product was upgraded to the latest release:
  - a. At a Windows command prompt, open a DB2 command window by issuing the `db2cmd` command.
  - b. Go to the `C:\Program Files\IBM\SQLLIB\BIN` directory and issue `db2val`. For example, to validate the instance `TEST1` and the database `DATA1`, run the following command:

```
db2val -i TEST1 -b DATA1
```

To validate all the instances for the DB2 copy, run the following command:

```
db2val -a
```

To validate only the DB2 installation files, run the following command:

```
db2val -o
```

5. Check the output for a message that confirms that the validation operation was completed successfully.

## DB2 silent installation and uninstallation scenarios

This section demonstrates a silent installation and uninstallation of the DB2 Express-C Version 10.1 product edition on a Windows operating system by using three different scenarios.

The following conditions apply to all three scenarios:

- The system meets all hardware and software requirements.
- The silent installation and uninstallation are performed under an administrator account with the required permissions.
- The DB2 installation image for the DB2 Express-C product is stored in the `C:\temp\EXPC\image` directory.

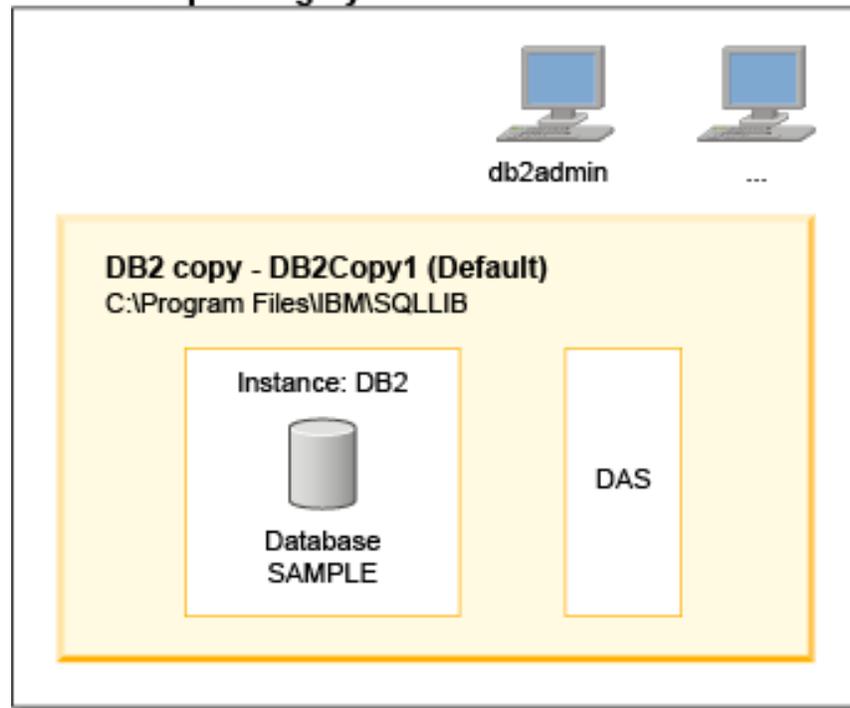
## Scenario one: Simple DB2 silent installation and uninstallation

In this scenario, customized sample installation and uninstallation response files are used to install and uninstall the DB2 Express-C Version 10.1 product on a Windows operating system.

### Overview

Figure 4 illustrates the simple installation and uninstallation scenario:

Figure 4. Simple installation and uninstallation scenario  
**Windows Operating System**



In this scenario, a single DB2 copy that is named DB2COPY1 is installed on the system. This copy has a single instance that is named DB2, which manages a single database that is named SAMPLE. (The SAMPLE database is a user-defined sample database, not the default DB2 SAMPLE database.) A DAS is part of the DB2COPY1 installation. Default values are used for all DB2 objects that are created during installation. A db2admin user account exists for the instance.

### Customizing the response file

To create the configuration that is shown in [Figure 4](#) customize a copy of the `db2exp.c.rsp` sample installation response file in the `C:\temp\EXPC\image\db2\Windows\samples` directory by specifying keyword-value pairs as follows:

- Select the DB2 Express-C product by specifying `PROD = EXPRESS_C`.

- Accept the license agreement by specifying `LIC_AGREEMENT = ACCEPT`.
- Choose the typical installation type by specifying `INSTALL_TYPE = TYPICAL`.
- Reboot the system after installation by specifying `REBOOT = YES`.
- Create a default instance by specifying `DEFAULT_INSTANCE = DB2`.
- Indicate that the default instance name is DB2 by specifying `NAME = DB2`
- Define a user name and user password for instance DB2 by specifying `NAME = db2admin` and `PASSWORD = password`.
- Create a local database that is named SAMPLE by specifying `LOCATION = LOCAL` and `DATABASE_NAME = SAMPLE`.
- Associate the SAMPLE database with instance DB2 by specifying `INSTANCE = DB2`.
- Create a DAS by specifying `CREATE = YES`.

The resulting installation response file is as follows:

```

** General Options:
PROD = EXPRESS_C
LIC_AGREEMENT = ACCEPT
INSTALL_TYPE = TYPICAL
REBOOT = YES
DB2_COPY_NAME = DB2COPY1 ** char(64)
DEFAULT_COPY = YES
*KILL_PROCESSES = YES | NO
DB2INSTDEF = YES

** Instance Creation Settings:
INSTANCE = DB2
DB2.NAME = DB2
DB2.USERNAME = db2admin
DB2.PASSWORD = password
DB2.AUTOSTART = YES
DEFAULT_INSTANCE = DB2

** Database Creation Settings:
DATABASE = databas1
databas1.DATABASE_NAME = SAMPLE
databas1.INSTANCE = DB2
databas1.LOCATION = LOCAL

** Administration Server Creation Settings:
CREATE_DAS = YES

```

## Performing the DB2 silent installation

To create the configuration that is shown in [Figure 4](#):

1. At a Windows command prompt, go to the `C:\temp\EXPC\image` directory of the installation image, and issue `setup -u`. Use the `-u` parameter to specify the full path to the customized `db2exprc.rsp` response file.
2. Check the installation log file in the `C:\Users\Administrator\Documents\DB2LOG` directory for a message that confirms that the installation operation was completed successfully.
3. To verify the core functionality of your DB2 copy:
  - a. Open a DB2 command window with the `db2cmd` command.
  - b. In the `C:\Program Files\IBM\SQLLIB\BIN` directory, issue `db2val`. To validate the instance `TEST1` and the database `DATA1`, run the following command:

```
db2val -i TEST1 -b DATA1
```
  - c. Check the output for a message that confirms that the validation operation was completed successfully.

### Results

After a successful installation, the configuration that is shown in [Figure 4](#) exists on the Windows system.

## Performing the DB2 silent uninstallation

To remove the DB2 installation that is shown in [Figure 4](#) from the Windows system:

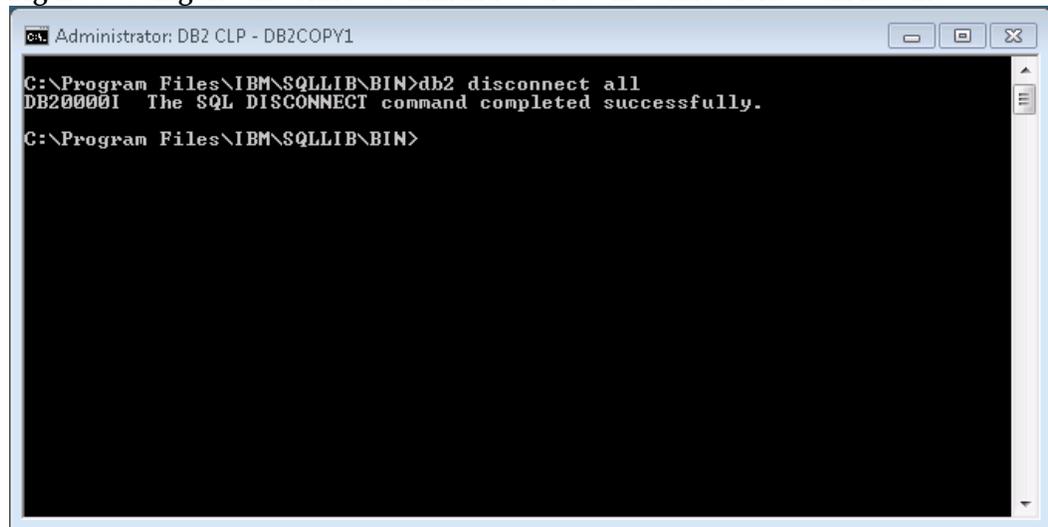
1. Open a DB2 command window in one of the following ways:
  - At a Windows command prompt, issue `db2cmd`. By default, the environment of the DB2 command window is set for the default DB2 copy `DB2COPY1`.
  - Click **Start > Programs > IBM DB2 > DB2COPY1 > Command Window**.



The title of a DB2 command window contains the name of the DB2 copy to which the environment of the DB2 command window is currently set.

2. Close all connections to instance DB2 by going to the DB2 command directory, `C:\Program Files\IBM\SQLLIB\BIN`, and issuing the `disconnect` command, as shown in [Figure 5](#):

Figure 5. Using the disconnect command to close all connections to an instance

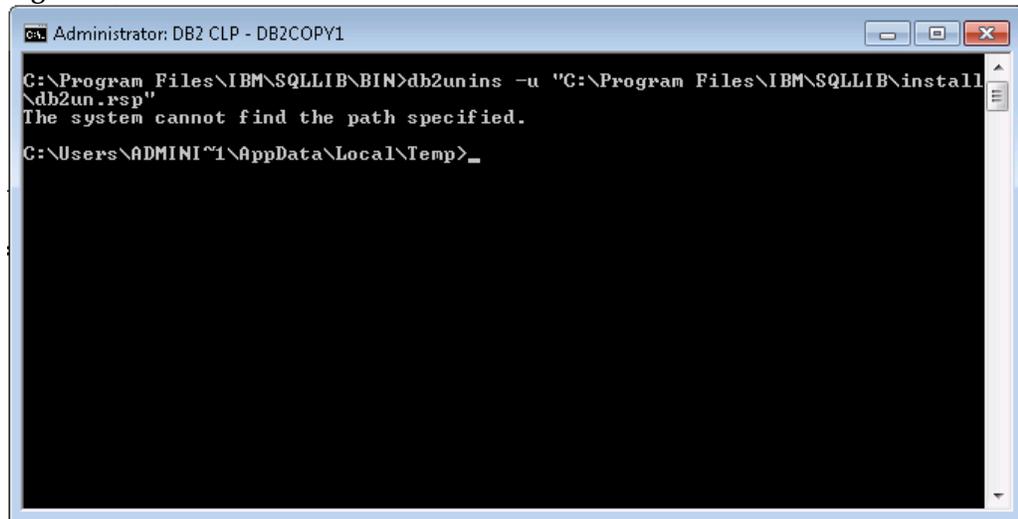


```
Administrator: DB2 CLP - DB2COPY1
C:\Program Files\IBM\SQLLIB\BIN>db2 disconnect all
DB2000001 The SQL DISCONNECT command completed successfully.
C:\Program Files\IBM\SQLLIB\BIN>
```

3. Drop the SAMPLE database by issuing `DROP DATABASE database_name`.
4. Stop the instance DB2 by issuing `db2stop force`.
5. Drop the instance DB2 from DB2 copy DB2COPY1 by issuing `db2idrop`.
6. Terminate the DAS by issuing `db2admin stop`.
7. Customize a copy of the `db2un.rsp` response file in the installation directory, `C:\Program Files\IBM\SQLLIB\install`, by specifying keyword-value pairs as follows:
  - a) Select the DB2 Express-C product by specifying `REMOVE_PROD = EXPRESS_C`.
  - b) Reboot the system after uninstallation by specifying `REBOOT = YES`.
  - c) Remove the DAS by specifying `REMOVE_DAS = YES`.
  - d) Remove user groups that were created during installation by specifying `REMOVE_INSTALL_CREATED_USERS_GROUPS = YES`.
8. To start the silent uninstallation, issue the `db2unins -u`. The `-u` parameter specifies the full path to the `db2un.rsp` customized response file.

Because the installation directory of DB2 copy DB2COPY1 was removed, you receive an error message after the completion of the silent uninstallation. Further, the current path is switched to a temporary directory, as can be seen in [Figure 6](#):

Figure 6. DB2 command window after successful uninstallation



```
Administrator: DB2 CLP - DB2COPY1
C:\Program Files\IBM\SQLLIB\BIN>db2unins -u "C:\Program Files\IBM\SQLLIB\install\
db2un.rsp"
The system cannot find the path specified.
C:\Users\ADMINI~1\AppData\Local\Temp>
```

9. Check the uninstallation log file in the `C:\Users\Administrator\Documents\DB2LOG` directory for a message that confirms that the uninstallation operation was completed successfully.

## Results

Results of a successful uninstallation are as follows:

- The `C:\Program Files\IBM\SQLLIB` and `C:\DB2` directories are removed because they are empty. The directories contain no databases (the only database, SAMPLE, was dropped in step 3) or other user data. Otherwise, the DB2 uninstallation process does not touch any user data.
- The `C:\ProgramData\IBM\DB2\DB2COPY1` and `C:\Users\Administrator\Documents\DB2LOG` directories still exist on the system.
- The Windows registry contains no entries for the DB2 installation.
- The entry for the DB2 installation is removed from the Windows **Start** menu.
- The accounts for the user (db2admin) and the groups (DB2ADMNS and DB2USERS) are removed.

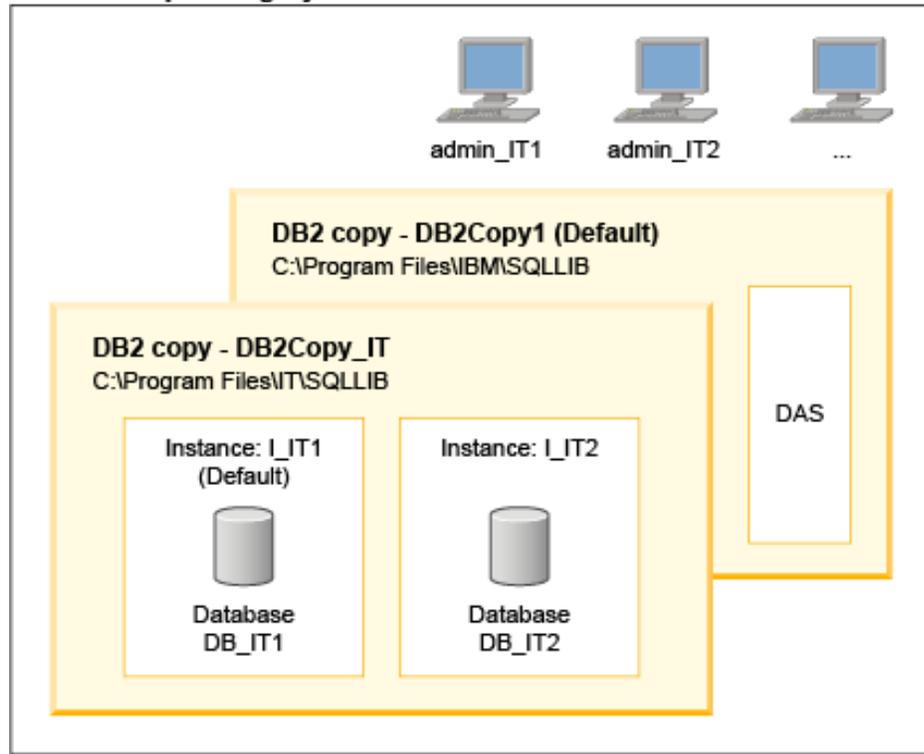
## *Scenario two: Intermediate DB2 silent installation and uninstallation*

The following scenario details installing and then uninstalling the DB2 V10.1 Express-C product in a new DB2 copy when another DB2 copy exists.

## Overview

Figure 7 illustrates the configuration of the installation and uninstallation scenario.

**Figure 7. The intermediate installation and uninstallation scenario  
Windows Operating System**



Initially, a single default DB2 copy, DB2COPY1, exists in the default installation directory, `C:\Program Files\IBM\SQLLIB`. A DAS is also part of this installation. In addition, a DB2 Express-C product is installed in a second DB2 copy, DB2COPY\_IT, in the `C:\Program Files\IT\SQLLIB` directory.

Two instances, I\_IT1 and I\_IT2, are created under DB2COPY\_IT. The I\_IT1 instance manages a single database that is named DB\_IT1, and the I\_IT2 instance manages a single database that is named DB\_IT. The admin\_IT1 Windows user account is specified to create instance I\_IT1, and the admin\_IT2 user account is specified to create instance I\_IT2.

## Customizing the Response File

To create the configuration that is shown in [Figure 7](#) customize a copy of the `db2exp.c.rsp` sample installation response file in the `C:\temp\EXPC\image\db2\Windows\samples` directory by specifying keyword-value pairs as follows:

- Set a specific directory for the installation of the DB2 Express-C product by specifying `FILE = C:\Program Files\IT\SQLLIB`.
- Create a DB2 copy with the name `DB2COPY_IT` by specifying `DB2_COPY_NAME = DB2COPY_IT`.
- Because `DB2COPY1` remains the default copy, make `DB2COPY_IT` the non-default copy by specifying `DEFAULT_COPY=NO`.
- Create two instances with the names `I_IT1` and `I_IT2` by specifying `i1.NAME = I_IT1` and `i2.NAME = I_IT2`.
- Make instance `I_IT1` the default instance of DB2 copy `DB2COPY_IT` by specifying `DEFAULT_INSTANCE = i1`.
- Define a unique service name and a unique port for both instances by specifying `i1.SVCENAME = db2c_i_IT1`, `i1.PORT_NUMBER = 55100`, `i2.SVCENAME = db2c_i_IT2`, and `i2.PORT_NUMBER = 55200`.
- Create two databases named `DB_IT1` and `DB_IT2` by specifying `db1.DATABASE_NAME = DB_IT1` and `db2.DATABASE_NAME = DB_IT2`.
- Associate database `DB_IT1` with instance `I_IT1` by specifying `db1.INSTANCE=i1`, and associate database `DB_IT2` with instance `I_IT2` by specifying `db2.INSTANCE=i2`.
- Because a DAS exists in the system, indicate that you do not want to create one by specifying `CREATE_DAS=NO`.

The resulting installation response file is as follows:

```
** General Options:
PROD                =      EXPRESS_C
FILE                =      C:\Program Files\IT\SQLLIB
LIC_AGREEMENT      =      ACCEPT
INSTALL_TYPE       =      TYPICAL
REBOOT             =      YES

** Copy Creation Settings:
DB2_COPY_NAME      =      DB2COPY_IT
DEFAULT_COPY       =      NO

** Instance Creation Settings:
INSTANCE           =      i1
i1.NAME            =      I_IT1
i1.USERNAME        =      admin_IT1
i1.PASSWORD        =      password
i1.SVCENAME        =      db2c_i_IT1
i1.PORT_NUMBER     =      50100

INSTANCE           =      i2
i2.NAME            =      I_IT2
i2.USERNAME        =      admin_IT2
i2.PASSWORD        =      password
i2.SVCENAME        =      db2c_i_IT2
i2.PORT_NUMBER     =      50200

DEFAULT_INSTANCE   =      i1

** Database Creation Settings:
DATABASE           =      db1
db1.DATABASE_NAME  =      DB_IT1
db1.INSTANCES      =      i1
db1.LOCATION        =      LOCAL
DATABASE           =      db2
db2.DATABASE_NAME  =      DB_IT2
db2.INSTANCES      =      i2
db2.LOCATION        =      LOCAL

** Administration Server Creation Settings:
CREATE_DAS         =      NO
```

## Performing the DB2 silent installation

To add DB2 copy DB2COPY\_IT to the system by using an installation response file:

1. At a Windows command prompt, go to the `C:\temp\EXPC\image` directory of the installation image, and issue `setup -u`. Use the `-u` parameter to specify the full path to the customized `db2expc.rsp` response file.
2. Check the installation log file in the `C:\Users\Administrator\Documents\DB2LOG` directory for a message that confirms that the installation operation was completed successfully.

3. Verify the core functionality of DB2 copy DB2COPY\_IT:
  - a. Open a DB2 command
  - b. In the C:\Program Files\IT\SQLLIB\BIN directory, issue the following command:

```
db2val -o -l c:\db2val.log
```
  - c. Check the output for a message that confirms that the validation operation was completed successfully.

## Results

After a successful installation, the configuration that is shown in [Figure 7](#) exists on the Windows system. DB2COPY1 and DB2COPY\_IT exist in the appropriate directories, as shown in [Table 1](#).

## Performing the DB2 silent uninstallation

Before you uninstall the DB2 copy DB2COPY\_IT from the system, you must drop the default instance I\_IT1 and the instance I\_IT2.

To drop the default instance I\_IT1:

1. Open a DB2 command window with the db2cmd command.
2. By default, the environment of the DB2 command window is set for the default DB2 copy DB2COPY1.
3. Set the environment of the DB2 command window for DB2 copy DB2COPY\_IT by going to the C:\Program Files\IT\SQLLIB\BIN directory and typing db2envar.bat.
4. Open another DB2 command window and issue db2cmd, as shown in Figure 8. [Figure 9](#) shows the result: the environment of the DB2 command window is set for the default instance I\_IT1 under DB2 copy DB2COPY\_.

Figure 8. The db2cmd command - opening a new DB2 command window

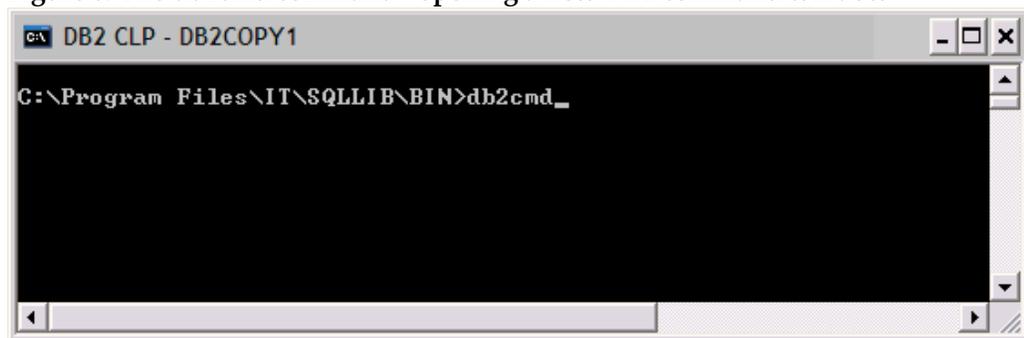
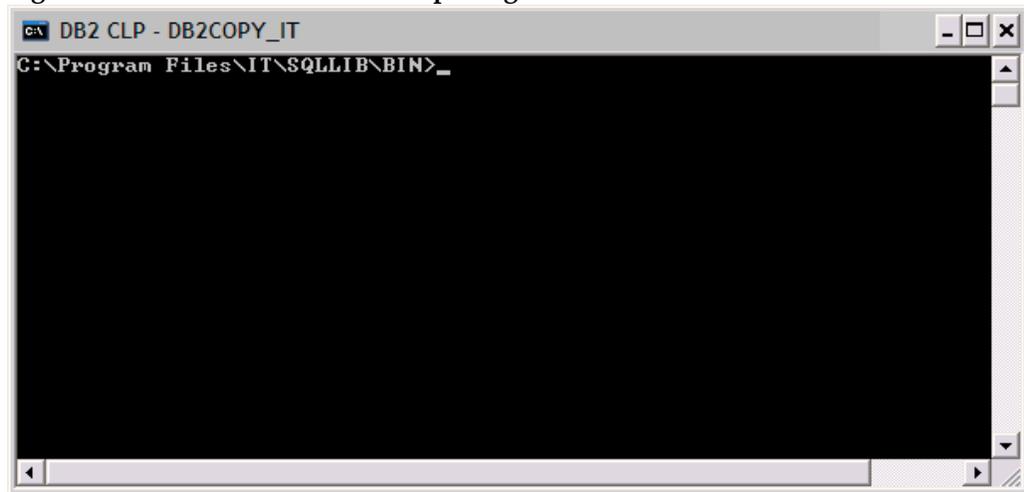


Figure 9. The db2cmd command - opening a new DB2 command window

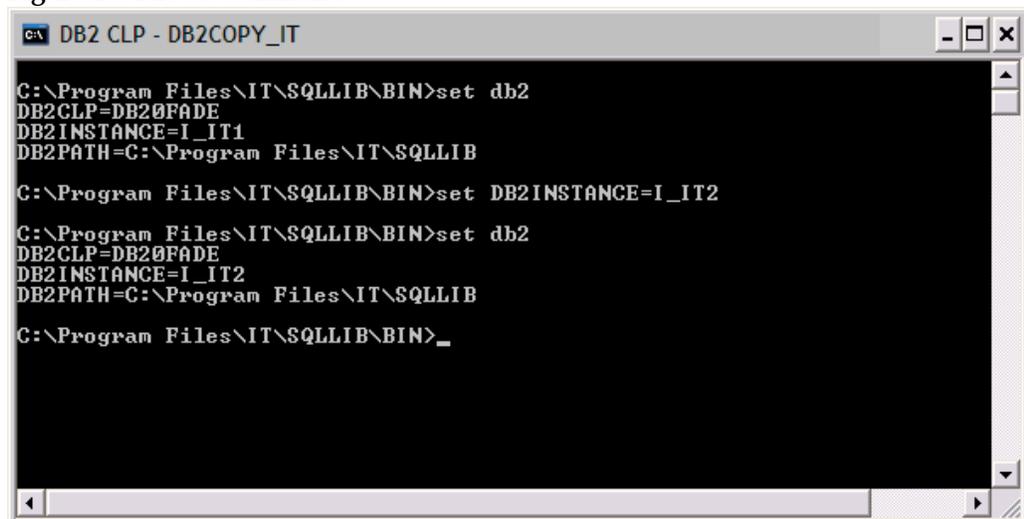


5. Set the value of the `DB2INSTANCE` environment variable to `I_IT1` by issuing the set command: `set DB2INSTANCE = I_IT1`.
6. Drop all connections to instance `I_IT1`.
7. Drop the `DB_IT1` database.
8. Drop instance `I_IT1` from DB2 copy `DB2COPY_IT`.

To drop the instance `I_IT2`:

1. Set the value of the `DB2INSTANCE` environment variable to `I_IT2` by issuing the set command, as shown in [Figure 10](#):

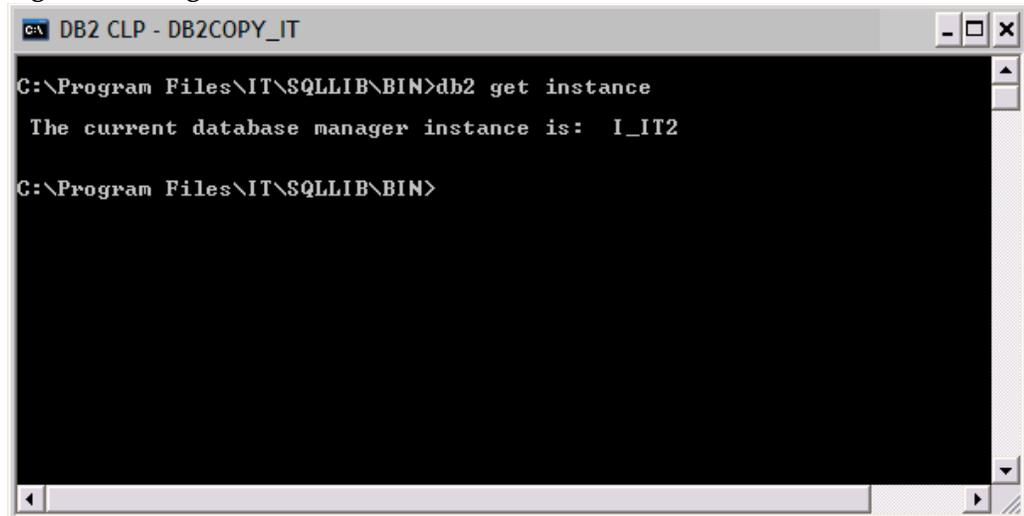
Figure 10. The set command





The `db2 get instance` command returns the name of the instance for which the environment of the DB2 command window is currently set. Figure 11 shows that the command returns the instance name `I_IT2`:

**Figure 11. The get instance command**



```
C:\Program Files\IT\SQLLIB\BIN>db2 get instance
The current database manager instance is: I_IT2
C:\Program Files\IT\SQLLIB\BIN>
```

2. Drop all connections to instance `I_IT2`.
3. Drop the `DB_IT2` database.
4. Stop instance `I_IT2`.
5. Drop instance `I_IT2` from DB2 copy `DB2COPY_IT`.

To remove the DB2 copy DB2COPY\_IT from the system:

1. Customize a copy of the `db2un.rsp` response file in the `C:\Program Files\IT\SQLLIB\install` installation directory by removing the asterisk (\*) to the left of the keyword-value pair `REMOVE_PROD = EXPRESS_C`.
2. To start the uninstallation, in the `C:\ProgramFiles\IT\SQLLIB\BIN` directory, issue `db2unins -u`. The `-u` parameter specifies the full path to the `db2un.rsp` customized response file.
3. Check the uninstallation log file in the `C:\Documents and Settings\Administrator\My Documents\DB2LOG` directory for a message that confirms that the uninstallation operation was completed successfully.

## Results

Results of a successful uninstallation are as follows:



- The `C:\Program Files\IT\SQLLIB`, `C:\I_IT1`, and `_IT2` directories are removed from the system. The `C:\I_IT1` and `C:\I_IT2` directories are removed because they are empty. These directories contain no databases (databases `DB_IT1` and `DB_IT2` were dropped) or other user data. Otherwise, the DB2 uninstallation process does not touch any data in these directories.
- The `C:\Documents and Settings\All Users\Application Data\IBM\DB2\DB2COPY_IT` directory still exists on the system.
- The `DB2COPY_IT` uninstallation log file in the `C:\Documents and Settings\Administrator\My Documents\DB2LOG` directory still exists.
- The entry for DB2 copy `DB2COPY_IT` is removed from the Windows **Start** menu.
- The account for user `db2admin` and the groups `DB2ADMNS` and `DB2USERS` are removed.
- The installation of DB2 copy `DB2COPY1` still exists on the system and is running.

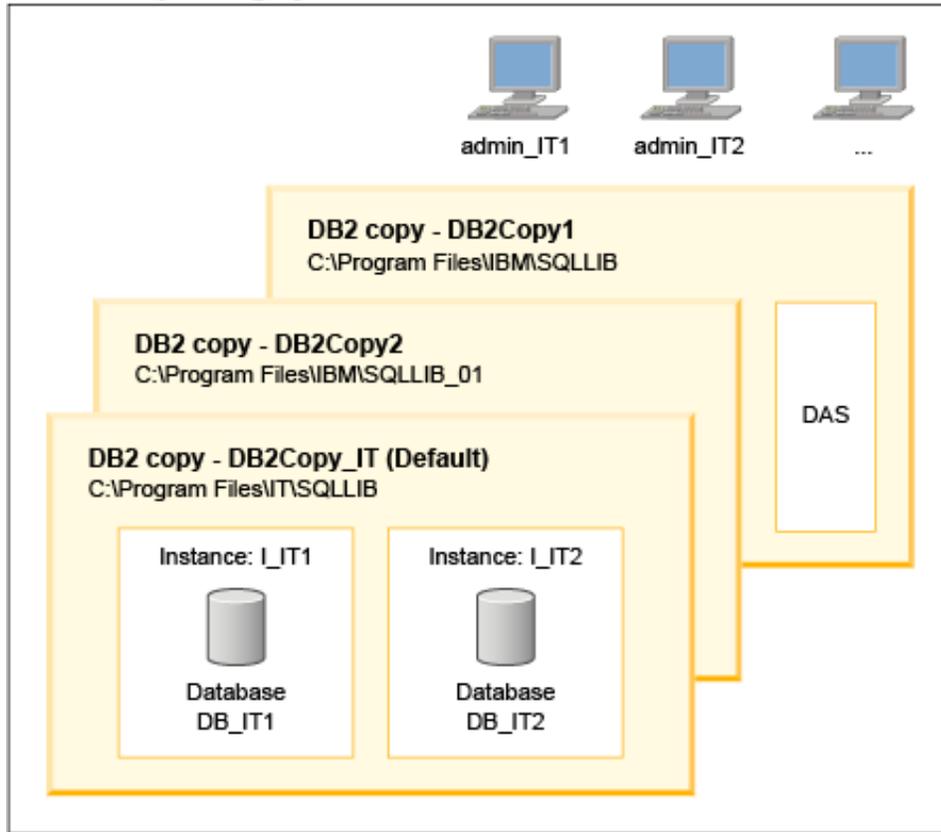
## *Scenario three: Complex DB2 silent installation and uninstallation*

In this scenario, a sample response file is customized and used to install and uninstall a DB2 Express-C product on a new default DB2 copy on a Windows operating system on which two other DB2 copies exist.

## Overall DB2 installation overview

Figure 12 illustrates the configuration of the installation and uninstallation scenario:

**Figure 12. Complex installation and uninstallation scenario  
Windows Operating System**



Initially, two DB2 copies, DB2COPY1 and DB2COPY2, exist on the system. The default DB2 copy is DB2COPY1. A DAS is part of the installation of DB2COPY1. The DB2 silent installation feature is used to add a third DB2 copy, DB2COPY\_IT, to the system.

The default DB2 copy is switched from DB2COPY1 to DB2COPY\_IT. The configuration of DB2 copy DB2COPY\_IT is similar to the configuration that is used in the previous complex scenario.

Afterward, an uninstallation response file is used to remove the default DB2 copy DB2COPY\_IT from the system.

## Customizing the response file

To create the configuration that is shown in figure 12:

1. Customize a copy of the `db2expc.rsp` sample installation response file in the `C:\temp\EXPC\image\db2\Windows\samples` directory according to the [Customizing the response file](#) in the simple installation scenario, other than setting the `DB2_COPY_NAME` keyword to `DB2COPY_IT`. This switches the default DB2 copy from `DB2COPY1` to `DB2COPY_IT` during the silent installation process.

The resulting installation response file is as follows:

```
** Sample response file for silent installation of DB2 Express C
** General Options:
PROD                =          EXPRESS_C
FILE                =          C:\Program Files\IT\SQLLIB
LIC_AGREEMENT      =          ACCEPT
INSTALL_TYPE       =          TYPICAL
KILL_PROCESSES     =          YES

** Copy Creation Settings:
DB2_COPY_NAME      =          DB2COPY_IT
DEFAULT_COPY       =          YES

** Instance Creation Settings:
INSTANCE           =          i1
i1.NAME            =          I_IT1
i1.USERNAME        =          admin_IT1
i1.PASSWORD        =          password
i1.SVCENAME        =          db2c_i_IT1
i1.PORT_NUMBER     =          50100

INSTANCE           =          i2
i2.NAME            =          I_IT2
i2.USERNAME        =          admin_IT2
i2.PASSWORD        =          password
i2.SVCENAME        =          db2c_i_IT2
i2.PORT_NUMBER     =          50200

DEFAULT_INSTANCE   =          i1

** Database Creation Settings:
DATABASE           =          db1
db1.DATABASE_NAME =          DB_IT1
db1.INSTANCE       =          i1
db1.LOCATION       =          LOCAL
DATABASE           =          db2
db2.DATABASE_NAME =          DB_IT2
db2.INSTANCE       =          i2
db2.LOCATION       =          LOCAL

** Administration Server Creation Settings:
CREATE_DAS         =          NO
```

## Performing the DB2 silent installation

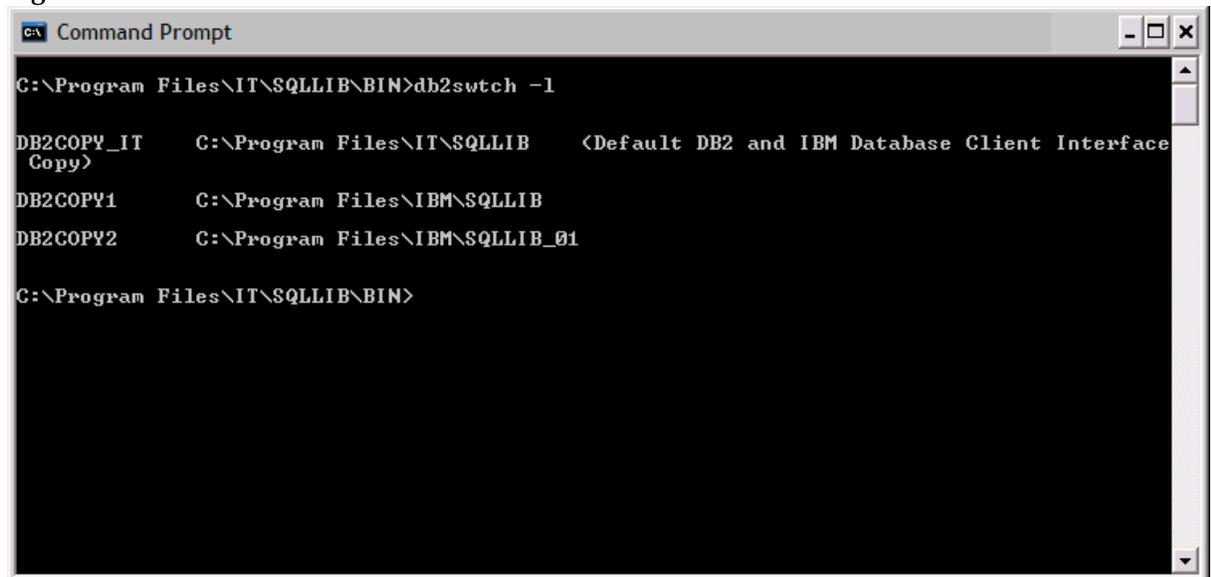
To add DB2 copy `DB2COPY_IT` to the system as the default DB2 copy:

1. At a Windows command prompt, go to the `C:\temp\EXPC\image` directory of the installation image and issue `setup -u`. The `-u` parameter specifies the full path to the `db2expc.rsp` customized response file.

```
setup -u db2expc.rsp
```

2. Check the installation log file in the C:\Documents and Settings\Administrator\My Documents\DB2LOG directory for a message that confirms that the installation operation was completed successfully.
3. Verify the core functionality of your DB2 copy:
  - a. Open a DB2 command window with the db2cmd command..
  - b. In the C:\Program Files\IT\SQLLIB\BIN directory, issue db2val. Check the output for a message that confirms that the validation operation was completed successfully.
4. The db2swtch -l command displays a list of installed DB2 copies on your system and indicates the default DB2 copy. After a successful installation, use this command to verify that DB2COPY\_IT is set as default DB2 copy on the system, as seen in Figure 11:

**Figure 13. The db2swtch command**



```
Command Prompt
C:\Program Files\IT\SQLLIB\BIN>db2swtch -l

DB2COPY_IT      C:\Program Files\IT\SQLLIB      <Default DB2 and IBM Database Client Interface
Copy>
DB2COPY1       C:\Program Files\IBM\SQLLIB
DB2COPY2       C:\Program Files\IBM\SQLLIB_01

C:\Program Files\IT\SQLLIB\BIN>
```

## Results

After a successful installation, the configuration that is shown in [Figure 12](#) exists on the system. DB2 objects exist for DB2COPY1, DB2COPY2, and DB2COPY\_IT in the appropriate directories on the system, as shown in [Table 1](#).

## Performing the DB2 silent uninstallation

In this scenario, it is assumed that the DAS was started on DB2COPY1.

To remove the DB2 copy DB2COPY\_IT from the system:

1. Open a DB2 command window for default instance I\_IT1 under default DB2 copy DB2COPY\_IT by issuing the `db2cmd` command.
2. Switch the default DB2 copy from DB2COPY\_IT to DB2COPY1 by going to the `C:\Program Files\IT\SQLLIB\BIN` directory and issuing `db2swtch`. Use the `-d` parameter to specify the new default copy name.
3. Drop default instance I\_IT1.
4. Set the value of the DB2INSTANCE environment variable to I\_IT2 by issuing the `set` command, as shown in [Figure 10](#).
5. Drop instance I\_IT2.
6. Customize a copy of the `db2un.rsp` response file.
7. Issue `db2unins`.
8. Check the uninstallation log file in the `C:\Documents and Settings\Administrator\My Documents\DB2LOG` directory for a message that confirms that the uninstallation operation was completed successfully.

### Results

Results of a successful uninstallation are as follows:



- The `C:\Program Files\IT\SQLLIB`, `C:\I_IT1`, and `C:\I_IT2` directories are removed from the system. The `C:\I_IT1` and `C:\I_IT2` directories are removed because they are empty. The directories contain no databases (the databases `DB_IT1` and `DB_IT2` were dropped) or user data. Otherwise, the DB2 uninstallation process does not touch any data in these directories.
- The `C:\Documents and Settings\All Users\ApplicationData\IBM\DB2\DB2COPY_IT` directory and the uninstallation log file of DB2COPY\_IT in the `C:\Documents and Settings\Administrator\My Documents\DB2LOG` directory still exist on the system.
- All entries for DB2 copy DB2COPY\_IT are removed from the Windows registry.
- The entry for DB2 copy DB2COPY\_IT is removed from the Windows **Start** menu.
- The user accounts `admin_IT1` and `admin_IT2`, created during silent installation, are removed from the system.

- DB2 copies DB2COPY1 and DB2COPY2 still exist on the system and are running.
- DB2COPY1 is the new default DB2 copy of the overall DB2 installation.
- The DAS is running under DB2 copy DB2COPY1.

## Conclusion

DB2 silent installation is the recommended technique for deploying a DB2 database as part an embedded installation. DB2 silent installation, uninstallation, updates, and upgrades provide IBM Business Partners and clients with a fast and easy way to deploy their applications with DB2 databases.

DB2 silent installation eliminates any need for database management system knowledge on the part of the users of the application. Essentially, during the installation of the application, the DB2 database is installed without user interaction with preconfigured settings. There is no installation monitoring, no administration, and no tuning or maintenance on the part of the users.

## Further reading

- Information Management best practices:  
<http://www.ibm.com/developerworks/data/bestpractices/>
- DB2 for Linux, UNIX, and Windows best practices:  
<http://www.ibm.com/developerworks/data/bestpractices/db2luw/>

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