

IUCLID 5

Guidance and support

Installation Guide

Standalone Version

Manual Method
Windows - PostgreSQL / Oracle



June 2009

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A wealth of additional information on the European Union is available on the Internet.

It can be accessed at the addresses:

<http://iuclid.echa.europa.eu>.

<http://echa.europa.eu>.

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Introduction

The purpose of this document is to describe how to install manually, a single standalone version of the IUCLID 5 software onto a computer running Microsoft® Windows® (hereafter referred to as Windows). The installation is performed by ensuring that prerequisite software is installed, copying files to the computer and, if necessary, making some configuration changes that are explained in this document. If the instructions in this document are followed exactly, no prior specialist knowledge is required of either the IUCLID 5 software, or the software components required to run it.

The standalone installation of IUCLID 5 should be carried out manually if you want to use a database and version of Java other than those supplied in the IUCLID 5 setup kit. For example, the database Oracle rather than PostgreSQL and/or Java 6 rather than 5.

1. Hardware requirements

The following requirements are provided as only a guide.

- At least 1 GB of mother board RAM (2 GB for Windows Vista®)
- Pentium Core 2 duo or equivalent

An installation of IUCLID 5 will most likely run on a lower specified machine but the performance might not be satisfactory. The requirements depend in part on the version of Windows.

2. Software requirements

The software prerequisites for the installation are as follows:

- Windows with knowledge of the administrator password.

It is recommended to carry out the installation from a standard type of Windows user account, rather than an administrator. You will be prompted to enter the administrator password where necessary.

- Java - J2SE Runtime Environment 1.6 update 13 or higher
- Database - PostgreSQL 8.2 or higher, or Oracle 10g. IUCLID 5 works with either. You do not need both.
- The IUCLID 5 manual workstation installation package, version 5.1.1, can be downloaded without charge from the IUCLID 5 web site.
- Once you have completed the installation of IUCLID 5, you should test it by starting and configuring it. The configuration requires access to at least a legal entity file (LEOX). The creation of a LEOX is described on the IUCLID 5 web site where the installation software is published. In addition, it is recommended to upload a set of reference substances and the EC inventory. These are also available from the web site at which the IUCLID 5 software is published.

Chapter 1. Installation

1.1. Installation check-list - example

What follows is a check list of an example of the sequence of actions required to make a fresh installation of IUCLID 5, Java and the PostgreSQL database. It contains all that an experienced Windows administrator needs to know to perform such an installation. More detailed instructions are given later in this document. To use an Oracle database, the procedure is similar.

1. Install the latest JRE for your version of Windows from Sun, available without charge within the limits of the license, from the site www.java.com.
2. Install the latest PostgreSQL for your version of Windows, available without charge within the limits of the license, from www.postgresql.org/download. If a user "postgres" does not exist already, the wizard will create one and ask you to give it a password. Remember the password for subsequent steps.
3. Create a database named "iuclid5". A convenient way to do this is using the graphical admin tool "pgAdmin III" that comes with PostgreSQL.
4. Create an installation directory for IUCLID 5 somewhere convenient, for example C:\Program Files\IUCLID5.
5. Copy into the installation directory, all the contents of the directory named "workstation" supplied in the zipped archive of the IUCLID 5 download. Do not unzip any of the plugin files.
6. Edit the supplied IUCLID 5 settings file, "workstation.properties" so that it contains the password for the Windows user that connects to the database, e.g.:

```
hibernate.connection.username=postgres
```

```
hibernate.connection.password=<password>
```

7. Start IUCLID 5 by running the executable file "run.bat" from the installation directory. If IUCLID 5 does not run first time, check that PostgreSQL is running as a service and that there is a user named "postgres".
8. Follow the instructions to configure IUCLID 5. If you need detailed help, see the help pages that can be accessed from the link "?" at the bottom left of the page of the configuration wizard.
9. If the installation has been a success, create any links to run.bat you might require, for example a shortcut from the Desktop. There is an icon in the installation folder that you can use with a shortcut.

1.2. Installation Procedure

If you already have a previous version of IUCLID 5 installed, go directly to section 5 that describes how to perform an update.

The installation of third party software is described by the respective publishers. Please refer to their web sites for full instructions.

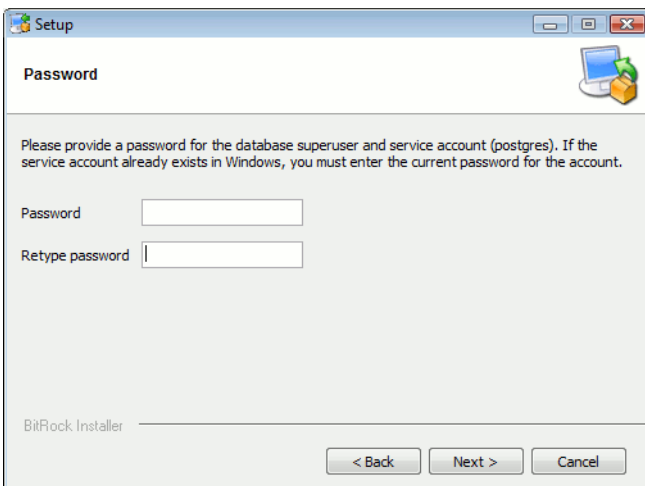
1.2.1. Installation of Java

If Java (JRE) 1.5.0_14 or higher is not already installed on the computer, download the latest version from the Sun site at www.java.com and install it. If a high enough version of Java is already installed on your computer and you do not want to upgrade, you can use your existing Java installation.

1.2.2. Installation and Configuration of PostgreSQL

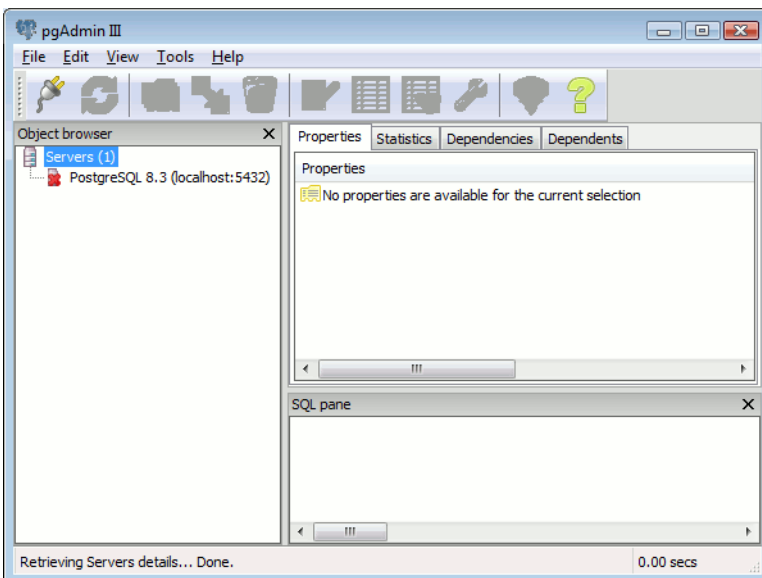
If PostgreSQL 8.2 or higher is not already installed on the computer, download the latest version from the site www.postgresql.org/download and install it. If version 8.2 or higher of PostgreSQL is already running as a service with a user "postgres", the only actions required are to create the database "iuclid5" and find out the password for the user "postgres" which you will need later. The default fresh installation of PostgreSQL 8.3.5.1 automatically starts PostgreSQL as a service, creates the user "postgres" if necessary and supplies administration tools (e.g. pgAdmin III) that can be used to create the database. If the installer creates the user "postgres", you will have to create a password for it, as shown in the figure below, and enter it later into the configuration file for IUCLID 5.

Figure 1.1. Using the PostgreSQL installer to create the password for user "postgres"



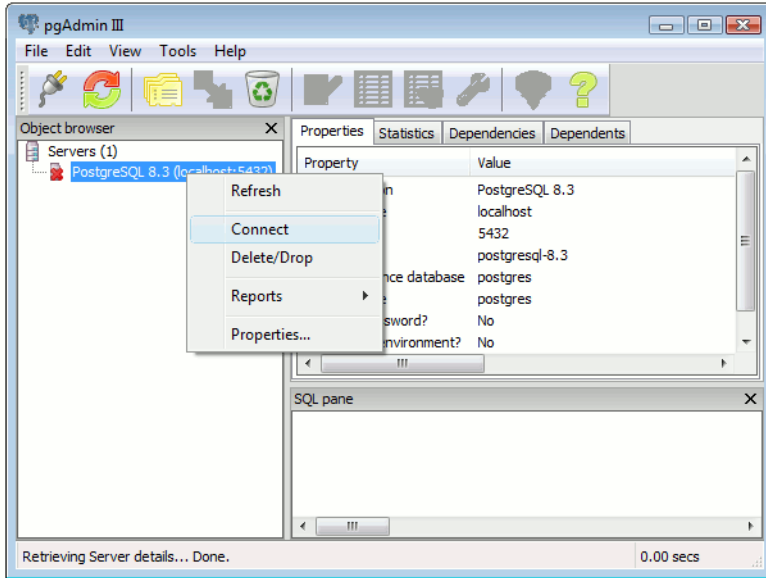
The program "pgAdmin III" can be used to create the database as follows. Start pgAdmin III from the menu Start / All Programs / PostgreSQL 8.3. After the splash screen has appeared and you have closed the pop-up window that shows usage tips, the following screen is shown.

Figure 1.2. pgAdmin III interface on first opening



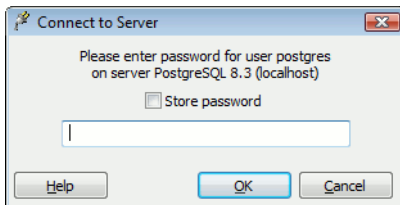
Right-click the text "PostgreSQL 8.3(localhost:5432)" that is under the word "Servers" highlighted in blue in the figure above. Select "connect" as shown below.

Figure 1.3. Connect pgAdmin III to PostgreSQL as user 'postgres'



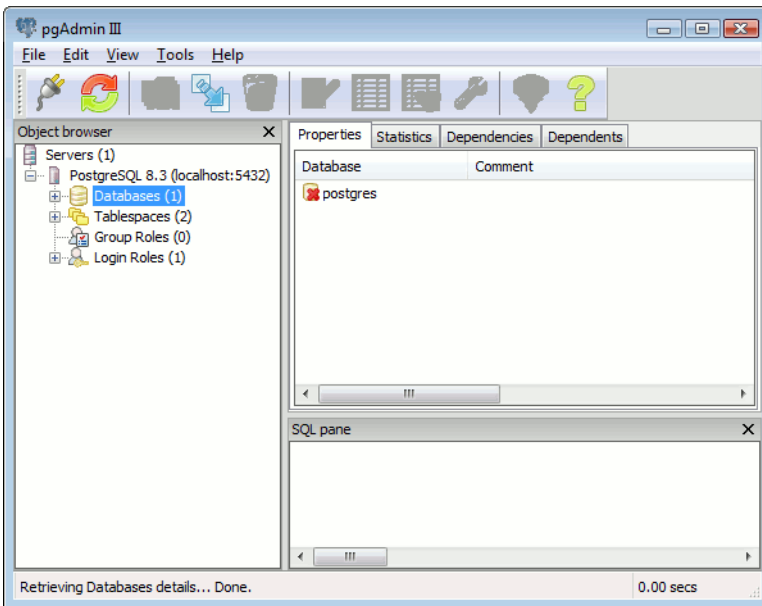
Enter the password for user 'postgres' then click "OK".

Figure 1.4. Authenticate user 'postgres'



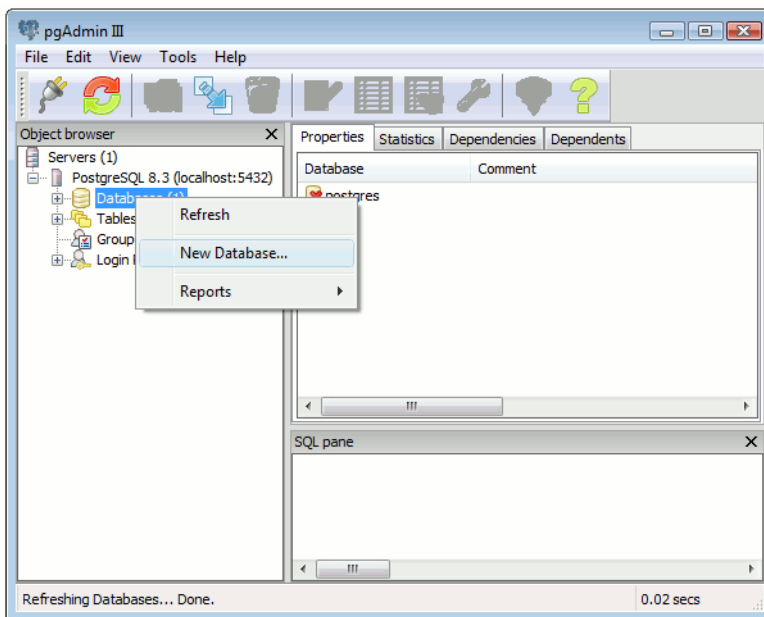
Expand the tree for "PostgreSQL 8.3(localhost:5432)" by clicking the plus sign that has just appeared next to it, as shown in the figure below.

Figure 1.5. Request a new database in pgAdmin III



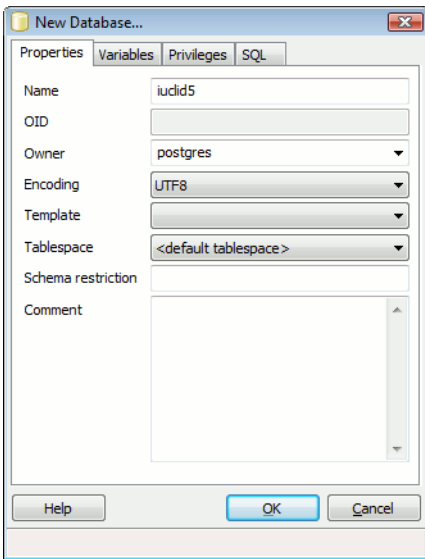
Request a new database by right-clicking the text "Databases" and selecting "New Database..." as shown in the figure below.

Figure 1.6. Request a new database in pgAdmin III



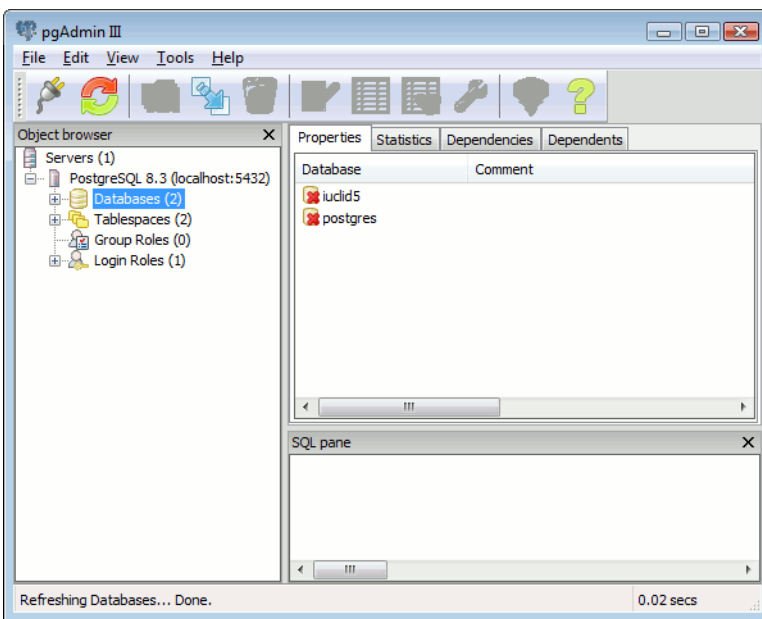
Enter the details you require. Normally these are only name=iuclid5 and owner=postgres. The encoding should be UTF8. Click "OK".

Figure 1.7. Enter the details of IUCLID 5's database into pgAdmin III



As you can see from the figure below, there is now a new database named "iuclid5".

Figure 1.8. List of databases in pgAdmin III



You can now close "pgAdmin III" and move directly to the installation of IUCLID 5.

1.2.3. Installation and Configuration of Oracle

The installation and configuration of an Oracle database are out of the scope of this document. The parameters that must be defined for IUCLID 5 are shown below, in an extract from the settings file for IUCLID 5. This file, named "workstation.properties", can be found in the installation directory of IUCLID 5 as described later in this document:

```
# Settings for using ORACLE 10g #
```

```
hibernate.connection.username=<username>
hibernate.connection.password=<password>
hibernate.connection.driver_class=oracle.jdbc.driver.OracleDriver
hibernate.connection.url=jdbc:oracle:thin:@localhost:1521:iuclid5
hibernate.hbm2ddl.auto=validate
hibernate.dialect=eu.eca.iuclid.server.system.persistence.ExtendedOracle9Dialect
hibernate.jdbc.use_streams_for_binary=false
```

1.2.4. Installation of IUCLID 5

Unzip the archive that contains the software for the manual installation of IUCLID 5. Do not unzip or change the relative location of any of the plugin archives. Create an installation directory for IUCLID 5 somewhere convenient (for example "C:\ Program Files \ IUCLID5"). Copy the directory "workstation" and all its contents into the installation directory. Use your favourite text editor to edit the file "workstation.properties" so that it conforms to your system. If you experience difficulties in saving changes to the properties file, try explicitly granting write access for it to standard local users. This can be done by right-clicking the file, selecting "properties / security", highlighting your user group or user name, then ticking the box "allow" for "write". You will need to supply an administrator password. The "write" permission can be revoked after your IUCLID 5 has been successfully configured.

If you are using PostgreSQL with only default values, the changes required for the properties file can be as simple as adding the password for the user "postgres", as follows:

```
hibernate.connection.password=<password for the user that connects to the database, e.g. postgres>
```

For the parameters that relate to a type of database that is not being used, place a "#" symbol at the start of each line. The default configuration file delivered with the installation is shown below:

```
# $Id: workstation.properties,v 1.5 2007/05/10 09:10:04 hallerp Exp $
# Default workstation properties overriding hardcoded defaults in application
# application.type=workstation scavenger.frequency=60 session.timeout=7600
# # Settings for using PostgreSQL#
hibernate.connection.username=postgres
hibernate.connection.password={RWNNoYXRyYWluaW5nMg==}
hibernate.connection.driver_class=org.postgresql.Driver
hibernate.connection.url=jdbc:postgresql://localhost:5433/iuclid5
hibernate.hbm2ddl.auto=validate
hibernate.dialect=org.hibernate.dialect.PostgreSQLDialect
hibernate.jdbc.use_streams_for_binary=false

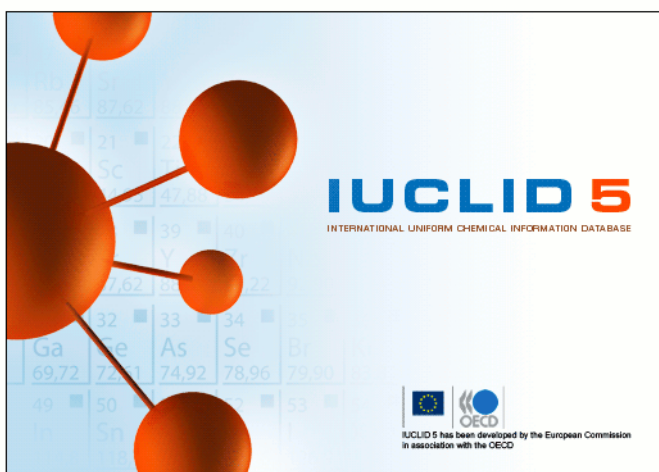
# # Settings for using ORACLE 10g #
#hibernate.connection.username=iuclid5a
```

```
#hibernate.connection.password={aXVjbG1kNWE=}
#hibernate.connection.driver_class=oracle.jdbc.driver.OracleDriver
#hibernate.connection.url=jdbc:oracle:thin:@localhost:1521:iuclid5
#hibernate.hbm2ddl.auto=validate
#hibernate.dialect=eu.eca.iuclid.server.system.persistence.ExtendedOracle9Dialect
#hibernate.jdbc.use_streams_for_binary=false
```

1.2.5. Running IUCLID 5 for the first time

Launch IUCLID 5 by running the executable file "run.bat" that is supplied in the installation directory. When IUCLID 5 launches, it displays a splash screen with a progress bar at the bottom, as shown below.

Figure 1.9. IUCLID 5 splash screen



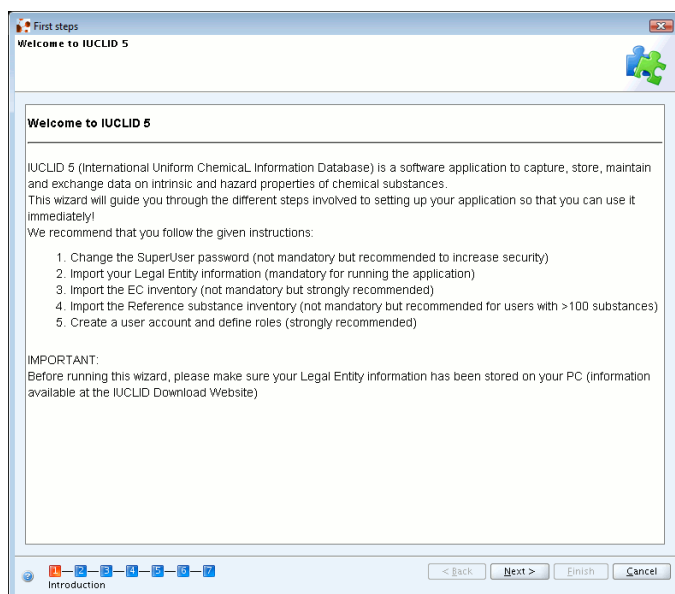
When IUCLID 5 is run for the first time for a particular instance of its database, IUCLID 5's database structure is created. On running IUCLID 5 for the first time, log in as the user "SuperUser" with password "root", as shown below. This password is intended as a single-use password that you should change during the setup process.

Figure 1.10. Log in to IUCLID 5



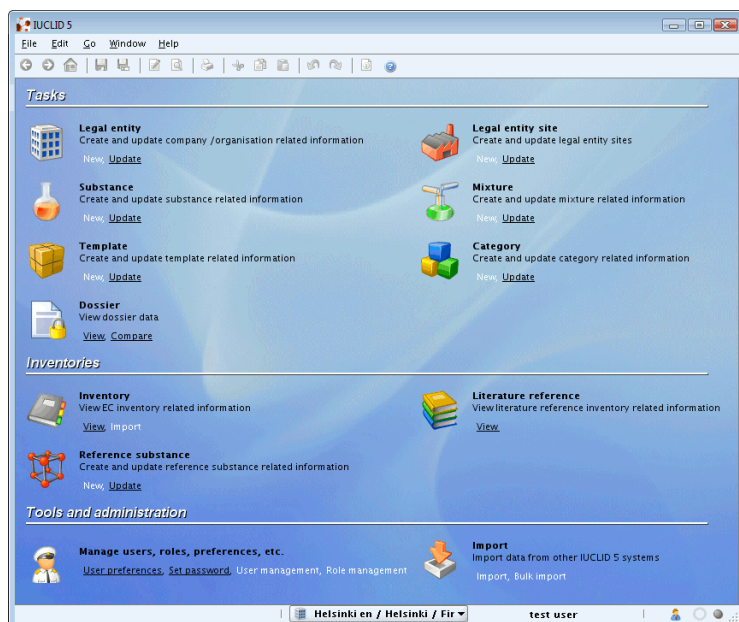
If the installation has been a success, you will see the following screen. At the bottom left of the wizard screen there is a question mark icon, just next to the orange number 1. The icon is a link to IUCLID 5's help which contains detailed instructions on how to finish the configuration process.

Figure 1.11. Setup wizard for IUCLID 5



Follow the 7 steps of the wizard then log out and in again. You will need at least a LEOX file to complete the configuration. A LEOX file can be created on and downloaded from the IUCLID web site. The window that lists background tasks can be safely closed when the tasks are finished by clicking "hide". If you see the screen as below you have successfully installed and run IUCLID 5.

Figure 1.12. Task (Home) page of IUCLID 5's interface



A convenient way of launching IUCLID 5 is to make a link to "run.bat" such as a shortcut from the Windows Desktop. There is an icon in the installation directory that can be used with the shortcut.

Chapter 2. Upgrade

Carry out the following sequence:

1. Log in to IUCLID 5 as "SuperUser".
2. Make a back-up of the data using IUCLID 5's built-in backup feature. This can be found from the "Tasks" page, as shown in the figure above, under the menu "file / administrative tools / back-up". Save the data to a safe location. If you need more detailed assistance, use IUCLID 5's help system by clicking the question mark icon at the bottom left of the "backup" wizard.
3. Shut down IUCLID 5.
4. Make a backup of the database. If you are using PostgreSQL, the tool "pgAdmin III" can be used. This will enable you to restore the original state of your system if required.
5. Delete the database (drop it).
6. Create the new database as described in section 3.2 of this document.
7. Replace the contents of the old "workstation" directory with the latest version of IUCLID 5 and edit the properties file.
8. Start IUCLID 5 and configure it as described in section 4 of this document. This automatically rebuilds the database structure.
9. Use IUCLID 5's "restore" feature to restore the data from the previous version. This can be found from the "Tasks" page, as shown in the figure above, under the menu "file / administrative tools / restore". Select the location to which the data was saved in step 1 of this upgrade procedure. If you need more detailed assistance, use IUCLID 5's help system by clicking on the question mark icon at the bottom left of the "restore" wizard.

This method ensures that no data is corrupted due to any incompatible changes that might have been made to the structure of the database in the upgraded version. After an upgrade, check that the settings and data of the previous version are accessible. There is no need to change anything relating to the PostgreSQL service.

