



IGEL Remote Manager

Installation Guide



Important Information

- **Copyright**

This publication is protected under international copyright laws, with all rights reserved. No part of this manual, including the products and software described in it, may be reproduced, manipulated, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of IGEL Technology GmbH.

- **Disclaimer**

The information in this document is subject to change without notice. IGEL Technology GmbH makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Further, IGEL Technology GmbH reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of IGEL Technology GmbH to notify any person of such revision or changes.

- **Trademark Recognition**

IGEL is a registered trademark of IGEL GmbH.

SAPdb is a trademark of SAP AG.

Windows, Windows 95, Windows NT, Windows 2000, Windows XP and Windows 2003 are either registered trademarks or trademarks of Microsoft Corporation .

Java is a registered trademark of Sun Microsystems, Inc.

All other products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owner's benefit.

Specifications and information contained in this manual are furnished for informational use only, and are subject to change at any time without notice, and should not be construed as a commitment by IGEL Technology GmbH.

IGEL Technology GmbH assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual, including the products and software described in it.

Copyright © 2003 IGEL Technology GmbH. All Rights Reserved.

Table of Contents

1. INTRODUCTION	4
2. DEFINITIONS	4
3. PREREQUISITES	4
4. INSTALLATION ON LINUX SYSTEMS	5
4.1 Linux: Installation of SAPdb	5
4.2 Linux: Installation of IGEL RemoteManager	6
5. INSTALLATION ON WINDOWS SYSTEMS	8
5.1 Windows: Installation of SAPdb	8
5.2 Windows: Installation of IGEL RemoteManager	8
6. UNINSTALLATION	9
6.1 Linux and Windows: Uninstallation of IGEL RemoteManager	9
6.2 Uninstallation of SAPdb	10
6.2.1 Linux: Uninstallation of SAPdb	10
6.2.2 Windows: Uninstallation of SAPdb	10
7. CERTIFICATES	11
8. TROUBLESHOOTING	12
8.1 Linux: Errors while installing SAPdb	12
8.2. Linux/Windows: Uninstalling SAPdb manually	12
9. The Client-only packages	13

1 Introduction

This document will assist in installing (or uninstalling) the IGEL Remote Manager on your system.

It covers both, the Linux and the Windows versions.

2 Definitions

The program suite „IGEL Remote Manager“ (hereinafter referred to as IRM) consists of the following parts:

- IGEL Remote Manager Server (IRM Server)
- IGEL Remote Manager Console (IRM Console)

IRM needs SAPdb to run (SAPdb is the free Enterprise Open Source Database).

In the installation program, the term „**Console**“ means the graphical user interface (GUI) uses to drive the Remote Manager server. The console can be installed on a different computer than the RM server itself.

The term „**Server**“ used in the setup program means the IRM Server

3 Prerequisites

To install IRM, your computer must meet the following system requirements:

IRM Server and Console:

- Operating system: Windows 2000/XP/2003 or Linux** (see below)
- At least a 1 GHz processor recommended
- At least 256MB required, with 512 preferred
- At least 500MB of free disk space
- No version of SAPdb already installed on the system

Console only:

- Operating system: Windows 9x/ME/NT/2000/XP/2003 or any common Linux distribution.
- At least 128MB RAM recommended
- At least 50MB of free disk space

** : IRM has been successfully tested on the following Linux distributions:

- Debian GNU/Linux 3.0 (woody)
- Mandrake 8.1
- Mandrake 9.0
- Mandrake 9.1
- SuSE 7.3
- SuSE 8.1
- SuSE 8.2
- RedHat 8.0
- RedHat 9.0
- TurboLinux 7.0

4 Installation on Linux Systems

To install IRM on a Linux system, you need the following packages:

- setup_sapdb_linux_1.00.100.bin
 - setup_igelrm_linux_1.00.100.bin
- (or subsequent newer releases)

Also, you must be logged in as „root“.

Open an xterm window (like xterm, console, gnome-terminal etc) and chdir to the directory where the packages reside.

First, check if both packages are executable. If not, use „chmod a+x setup*.bin“ to make them executable. The installation consists of two steps, the installation of SAPdb and the installation of the IRM Server and Console.

4.1 Linux: Installation of SAPdb

IRM uses SAPdb to store its data. We provide our own SAPdb package together with the IRM. You may not have another version of SAPdb running on the computer the Remote Manager will be installed on.

Because SAPdb provides a very basic setup tool, we created a package in order to ease up the installation for you.

You can cancel the setup at any stage (until the final summary screen) by pressing ESC twice - in this case, no changes will be made to your system.

Start the installation by typing `./setup_sapdb_1.00.100.bin`.

The package is a self-extracting .tar.gz-archive that uncompresses itself into /tmp, launches the installer and removes itself from /tmp after the installation.

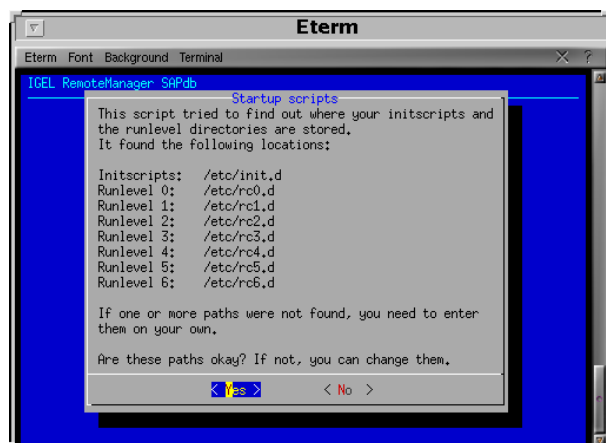
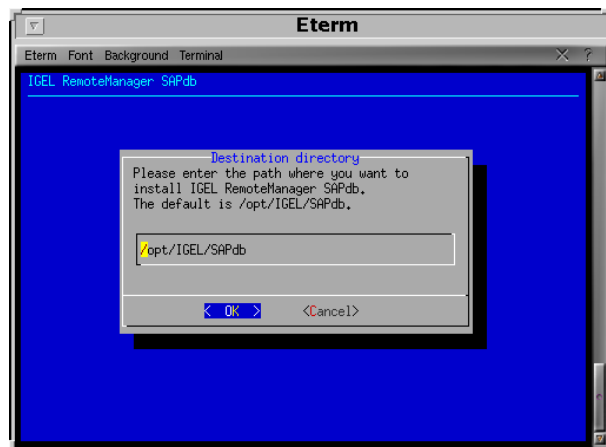
You may also uncompress it to a specific location and launch setup.sh manually (have a look at the `--help` option).

At first, the setup prompts for the installation path for the SAPdb.
(the default is `/opt/IGEL/SAPdb`.)

Enter the desired path or simply hit Enter to go with the default (recommended).

Note: It is recommended to install IRM SAPdb into a directory which resides on an ext2 filesystem. We found that SAPdb is noticeably slower on a reiserfs partition.

The next setup step looks for your init- and runlevel scripts. This only works, if your system has a System V-like init system (which most Linux distributions have). If one of the paths is not found, the setup program will prompt for it. If all scripts were found, you can continue by hitting Enter. You may also manipulate the paths by selecting “No”, but this is usually not necessary and also not recommended.



Next, set the runlevel you want the IRM Server to be launched in. If you want it (and thus also SAPdb) to start every boot up, just leave all runlevels checked.

In case you want to start it by hand, deselect all runlevels (by using the cursor up/down keys to navigate and space to (de)select).

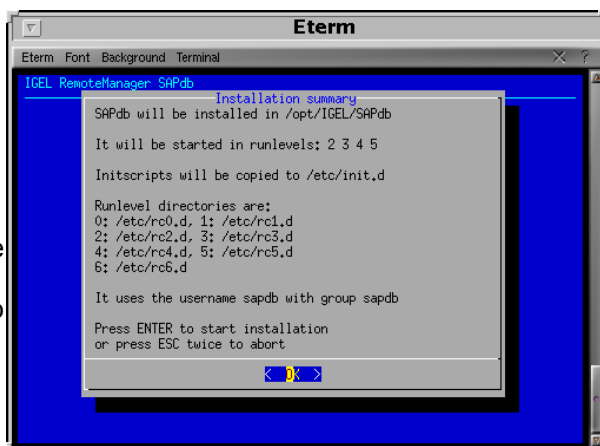
If one or more runlevel paths were not found or you chose to change any, these paths are requested now.



Now, the setup continues and asks which UNIX username and group should SAPdb use. You may use the default values unless you want to use a specific user (or group). This user will be used by SAPdb to access its data files, so it runs safely inside the UNIX security system.

The last setup screen before the actual installation of SAPdb shows a summary of all parameters that will be used.

If you wish to change anything, press ESC twice to exit and simply restart the setup program.



If you continue, the installer of SAPdb will be started. (This may take a little while.)

If it encounters an error, no other changes to your system will be made.

If SAPdb's installer succeeds, the installation of this package is complete.

4.2 Linux: Installation of IGEL Remote Manager

After having installed SAPdb, you now can proceed installing the IRM. You do not need to reboot your system or start SAPdb manually.

The installation program of the IRM Server is an X11 application, so you need to be able to display X11 applications.

Start this package with `./setup_igelrm_1.00.100.bin`.

It's an InstallShield-package that decompresses itself to `/tmp`, launches its Java engine, runs the installer and removes itself from `/tmp` afterwards.

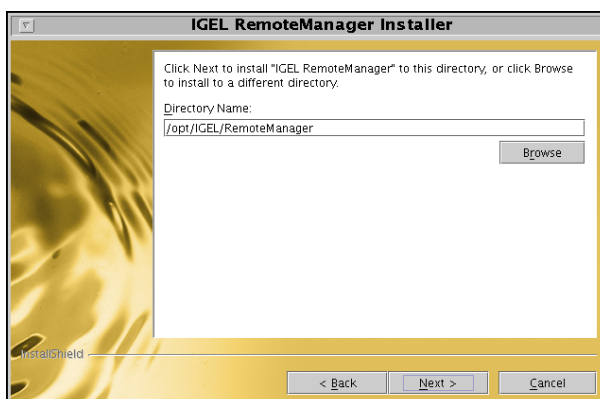
At first, the IRM license agreement will be displayed.

If you do not agree with the terms of the license, the installer will terminate and you may not use IRM.

If you agree with the license, click Next to be prompted for the path where to install the software.

The default path is `/opt/IGEL/RemoteManager`, which will work almost anywhere, but may as well be changed manually.

Note: Inside the installer, you can use shortcut keys to access most buttons or input boxes; just press Alt and the underlined letter (e.g. Alt+N for Next).



Next, you have the possibility to choose between full or Console only installation. Please remember, if you wish to install the Console only, you must have an IRM Server on another computer in your network and you need the proper certificate (cacerts) for the client. If you select „Console only“, the installer will ask for that certificate (use „Browse“ to locate the previously generated file).

Note: Without having the correct certificate, you will not be able to connect to an IRM Server! (see section 6. „Certificates“)

If you select „Default“, you will be asked to define following passwords:

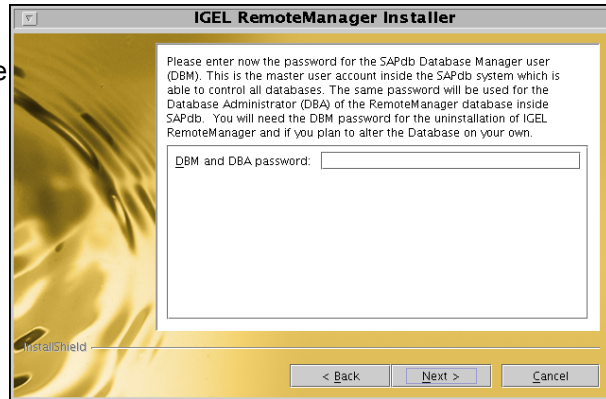
The DBM/DBA password.

This will be used as master password for the SAPdb Database System.

Using this password, the IRM database will be created.

(This password will also be requested when trying to uninstall IRM!)

Note: Be aware that if someone else knows this password and is familiar with SAPdb, (s)he can delete your complete database!



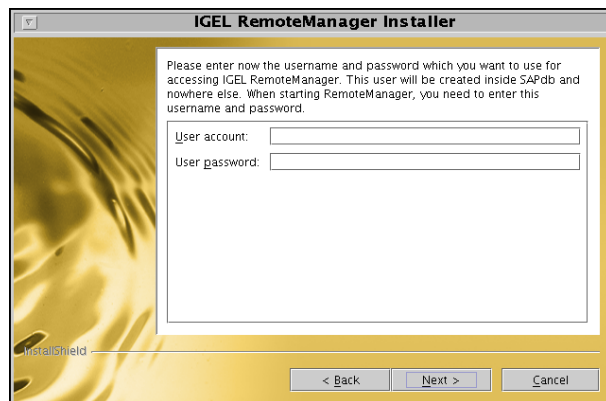
The IRM username and password.

The account you enter here will be used to login to IRM as well as accessing SAPdb.

The installer will create a user account for this username/password inside the SAPdb system, allowing limited access to SAPdb.

Next, the installer shows a summary of your installation options.

Note: Up to this point, you can still cancel the setup, without having any changes made to your system!



By clicking Next, the installation starts. The time this will take depends on you system. (If your computer is 700 MHz or below, it can take up to 20 minutes.)

When the installer has finished, log files are in the installation root directory and can be used to troubleshoot installation problems.

They will also be needed, if you contact our support team in case of an improper installation of IRM.

5 Installation on Windows Systems

The installation on Windows systems is very similar to the Linux installation.

The main difference is the way, SAPdb is installed.

For Windows computers, we made both installers (SAPdb and Remote Manager) InstallShield packages.

You need the following files:

- setup_sapdb_1.00.100.exe

- setup_igelrm_1.00.100.exe

(or subsequent newer releases)

Note: Both installers create entries in Windows' „Add/Remove Software“ control panel as well as a start menu group „IGEL Remote Manager“ with links to the uninstallers.

Additionally, an icon for launching IRM is created on the desktop and inside the „IGEL Remote Manager“ start menu group.

5.1 Windows: Installation of SAPdb

To install SAPdb on a Windows system, simply run setup_sapdb_1.00.100.exe.

Note: SAPdb can only be installed on Windows 2000/XP/2003

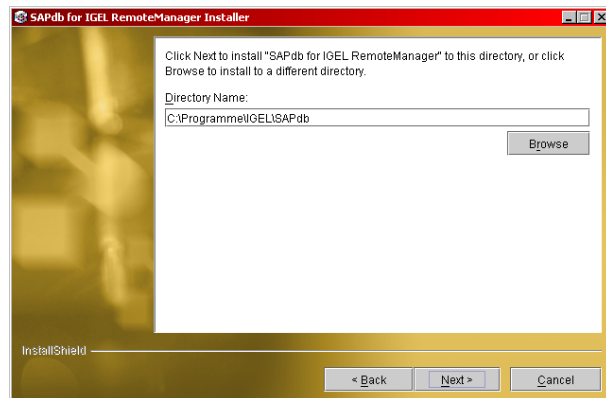
After accepting the license agreement, you will be prompted where to install SAPdb.

Before starting the actual installation, you will see a summary.

Here you may quit the installer without your system being touched.

If you proceed, the installer will copy the SAPdb installer files to the selected path, launch SAPdb's own installation routine and remove the temporary installer files after the installation.

After the installer finishes, you need to reboot your computer to proceed with the installation of the IRM itself.

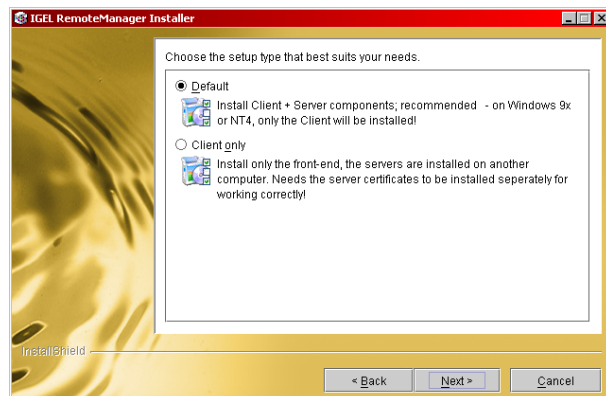


5.2 Windows: Installation of IGEL Remote Manager

The way to install IRM on Windows systems is almost the same as on Linux, so only the differences will be explained in detail here.

The installation is started by running setup_igelrm_1.00.100.exe.

Simply follow the setup pages and in doubt have a look to chapter 4.2.



6 Uninstallation

To uninstall IRM, close all open Remote Manager windows first.
Next, launch the uninstaller of IRM.

6.1 Linux and Windows: Uninstallation of IGEL Remote Manager

On Windows systems:

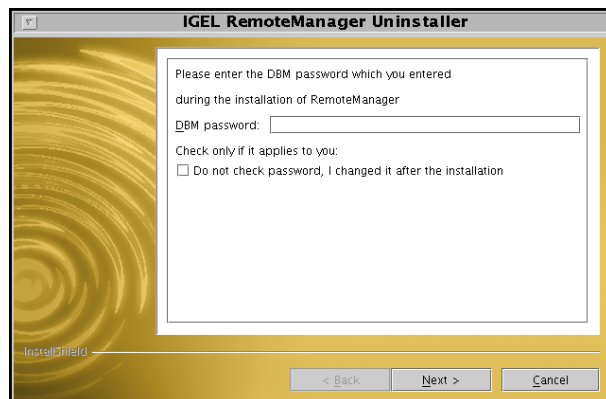
Use the link in the „IGEL Remote Manager“ program group of the „Start“-Menu or run `uninstaller.exe` from the `_uninst` subdirectory of the Remote Manager installation directory.
(Example: `C:\Program Files\IGEL\RemoteManager_uninst\uninstaller.exe`)

On Linux systems:

Run `uninstaller.bin` from the `_uninst` subdirectory of Remote Manager's installation directory.
(Example: `/opt/IGEL/RemoteManager/_uninst/uninstaller.bin`)

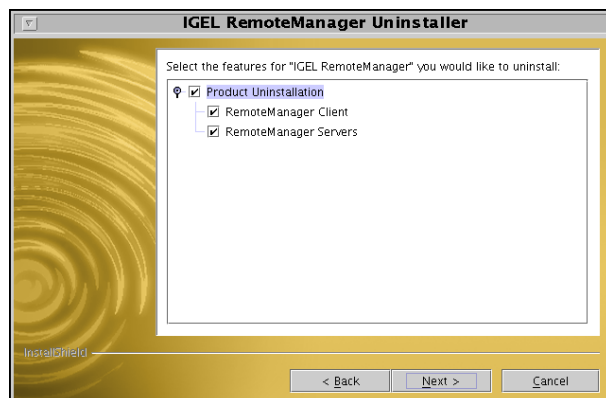
First, you will be prompted for the DBM password you entered during installation of IRM.

Note: Trying to uninstall IRM without knowing the master password will be denied.



Next, you can choose which parts of your installation you like to remove. You may remove the Console only, the Server only, or both.

You can quit without touching your installation on this summary page. If you proceed here, the uninstaller starts removing IRM.



6.2 Uninstallation of SAPdb

Before uninstalling SAPdb, first remove IRM!
(As long as you still have records in the database, SAPdb cannot be uninstalled.)

6.2.1 Linux: Uninstallation of SAPdb

Run `uninstall.sh` from the `_uninst` subdirectory of SAPdb's installation directory.

(e.g.: `/opt/IGEL/Remote Manager/_uninst/uninstall.sh`)

It is a text mode uninstaller; just answer the questions with „y“ or „n“.

```

Eterm
Eterm Font Background Terminal
vmlinux:/opt/IGEL/SAPdb/_uninst# dir
total 8
-rwxr-xr-x 1 root root 2219 Jun 23 06:39 uninstall.sh
-rw-r--r-- 1 root root 1725 Jun 23 06:39 uninstall_functions.sh
vmlinux:/opt/IGEL/SAPdb/_uninst# ./uninstall.sh

IGEL RemoteManager SAPdb Uninstaller
(c) 2k3 IGEL Technology GmbH

This program allows you to remove IGEL RemoteManagers SAPdb
from your system.

The setup program saved the following parameters:

SAPdb is installed in      : /opt/IGEL/SAPdb
SAPdb is started in runlevels: 2 3 4 5

Do you really want to uninstall SAPdb? [yn] █

```

If SAPdb's own uninstaller fails (shows an error message instead of the messages - see below to the right), do not answer the question, if you want to remove initscripts and runlevel links with "y".

```

Eterm
Eterm Font Background Terminal
SAPdb is installed in      : /opt/IGEL/SAPdb
SAPdb is started in runlevels: 2 3 4 5

Do you really want to uninstall SAPdb? [yn] y

Starting SAPdb uninstallation...

uninstall following package(s):

ODBC           /opt/IGEL/SAPdb/indep 7.4.03.17 32 bit
Database Kernel /opt/IGEL/SAPdb/depend 7.4.03.17 32 bit
Server Utilities /opt/IGEL/SAPdb/indep 7.4.03.17 32 bit
Base           /opt/IGEL/SAPdb/indep 7.4.03.17 32 bit

start uninstallation now (y/n)?y
unregister Database Kernel 7.4.03.17
12721 XSERVER XSERVER stopped
done

SAPdb's own installer ended.
You can now continue if no error occurred.
Do you want to continue and remove the initscripts and runlevel links? [yn] █

```

After the uninstallation script terminates, there may be some logfiles or data files that still reside in SAPdb's and IRM's directory.

If no error occurred during uninstallation, and you do not want to save these files, you can safely remove.

6.2.2 Windows: Uninstallation of SAPdb

Use the link in the IGEL program group of the start menu or run `uninstaller.exe` from the `_uninst` subdirectory of SAPdb's installation directory.

(Example: `C:\Program Files\IGEL\SAPdb*_uninst\uninstaller.exe`)

The Windows uninstaller of SAPdb is again a graphical version (InstallShield uninstaller).

Just follow the wizard to remove SAPdb.

No further input is required.

7 Certificates

IRM uses SSL-certificates for the communication between its modules (the IRM Server and the Thin Clients).

These certificates are:

- irm_keystore (in the subdirectory rmguiserver)
- server.crt and server.pem (in the subdirectory rmtcserver)
- cacerts (in the subdirectory rmclient)

If you plan to reinstall IRM on another computer, install it there and copy these files to the installation directory on the new computer.

The deinstallation utility does not delete the certificates.

(If you really don't need them anymore, you have to delete them manually.)

The cacerts file is important if you plan to install more than one IRM Console.

You may install the Console on several remote computers while running only a single IRM Server.

To enable communication between the IRM Server and the computer(s) where the Console resides, copy the cacerts file to a floppy disk (or a USB stick, or...) and during installation of IRM, choose the „Console only“ option. When prompted, select your copied cacerts file.

When launching the IRM Console on your workstation, enter the host name of the IRM Server and the username/password combination that you entered during the installation of the server.

8 Troubleshooting

8.1 Linux: Errors while installing SAPdb

If the setup tool of SAPdb reports the error: "install registry path ... dont exist cannot create install registry file", you probably have one of the following problems:

1. Another version of SAPdb is already installed
- or
2. A previous version of SAPdb was not properly removed

To solve that problem, you have the following options:

- If you used a version of SAPdb which was installed using your distributions package managing system (rpm / deb), remove all sapdb-related packages (using YaST, kpackage, aptitude etc).

Be sure that all config files are removed correctly as well.

- If you are sure that no other version is installed but you still get one of the errors above, remove the directory /usr/spool/sql and /var/spool/sql manually. SAPdb uses this path to store its own software registry files which seem to contain wrong information in this case.

```

Eterm
Eterm Font Background Terminal

Installation of SAP DB Software
*****

starting installation Fr, Jun 27, 2003 at 01:51:33
operating system: Linux I386 2.2.20 idepci GLIBC 2.2.5
callers working directory: /home/christian/SAPdbInst/SAPdb

install registry path "/opt/IGEL/SAPdb/data/config/install" dont exist
cannot create install registry file
installation exited abnormally at Fr, Jun 27, 2003 at 01:51:33
The SAPdb setup program exited with an error.

The installation Failed...

Cannot continue, exiting.

Bye!
vmlinux:/home/christian/SAPdbInst#
  
```

```

Eterm
Eterm Font Background Terminal

vmlinux:/# cd /usr/spool/sql/
vmlinux:/usr/spool/sql# dir
total 32
drwxrwxr-x 2 sapdb sapdb 4096 Jun 25 02:28 config
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 dbspeed
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 diag
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 fifo
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:49 ini
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 ipc
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 pid
drwxrwxr-x 2 sapdb sapdb 4096 Jun 27 01:48 ppid
vmlinux:/usr/spool/sql# cd ..
vmlinux:/usr/spool# rm -R sql/
vmlinux:/usr/spool#
  
```

8.2 Linux/Windows: Uninstalling SAPdb manually

If the uninstaller fails for some reason (see log files after uninstallation in SAPdb's directory), and the uninstaller does not help you, you can try to uninstall SAPdb manually:

Linux:

Open an xterm window (like xterm, konsole, gnome-terminal etc) and change into SAPdb's indep/bin directory (e.g. `cd /opt/IGEL/SAPdb/indep/bin`).

Here, run following commands:

```

./dbmcli -u dbm,[dbmpassword] -d RMDB db_offline
./dbmcli -u dbm,[dbmpassword] -d RMDB db_drop
./sdbuninst -all
  
```

Note: Please enter your dbm password (see installation of Remote Manager) instead of [dbmpassword], e.g. `-u dbm,secret`.

Windows:

Open a command line window (DOS prompt) and go to SAPdb's indep/bin directory (e.g. `cd „Program Files\IGEL\SAPdb\indep\bin“`).

Here, run following commands:

```

dbmcli -u dbm,[dbmpassword] -d RMDB db_offline
dbmcli -u dbm,[dbmpassword] -d RMDB db_drop
sdbuninst -all
  
```

Note: Please enter your dbm password (see installation of Remote Manager) instead of [dbmpassword], e.g. `-u dbm,secret`.

9 The Console-only packages

The IRM Console also runs on the following platforms:

- Linux (i386) (glibc 2.2 and up)
- Solaris (SPARC)
- Solaris (i386)
- AIX
- HP/UX 11
- MacOS X
- Windows 9x/ME/NT/2000/XP/2003

You must have a cacerts file for the IRM Server to connect to; the installer will ask for it.

After the installation, you can run the IRM Console from its installation directory.

There you will find a file called RemoteManager.bin or similar (depending on your platform).

(On Windows, a Start Menu group called „IGEL Remote Manager“ will be created, which contains the Remote Manager Console icon.)

To uninstall the IRM Console, go to the directory _uninst below its installation directory and either run „uninstaller.bin“ (Linux), type `java -jar uninstaller.jar` (Solaris/i386) or under Windows, you can use corresponding Start Menu entry.