


User manual Last updated: 24-08-2007	Pentaho Data Integration	 pentaho™ open source business intelligence
	Kitchen 2.5.1	



Kitchen version 2.5.1

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Table of contents

1. Kitchen.....	3
1.1. What is Kitchen?.....	3
1.2. Installation.....	3
1.3. Launching Kitchen.....	3
1.4. Command line options.....	4
1.5. Path.....	8
1.6. Run a job from file.....	8
1.7. Run a job from Repository.....	9
1.8. Redirecting output.....	9
1.9. Return codes.....	9
2. Scheduling.....	10
2.1. Schedule a job on windows.....	10
2.2. Schedule a job on Unix.....	10
3. License.....	12
3.1. Short version.....	12
3.2. Complete text.....	12

1. KITCHEN

1.1. What is Kitchen?

Kitchen is a program that can execute jobs designed by Chef in XML or in a database repository. Usually jobs are scheduled in batch mode to be run automatically at regular intervals.

1.2. Installation

The first step is the installation of Sun Microsystems Java Runtime Environment version 1.4 or higher. You can download a JRE for free at <http://www.java.com/>.

After this, you can simply unzip the zip-file: Kettle-2.5.0.zip in a directory of your choice. In the Kettle directory where you unzipped the file, you will find a number of files. Under Unix-like environments (Solaris, Linux, OSX, ...) you will need to make the shell scripts executable. Execute these commands to make all shell scripts in the Kettle directory executable:

```
cd Kettle
chmod +x *.sh
```

1.3. Launching Kitchen

To launch Kitchen on the different platforms these are the scripts that are provided:

- ✓ Kitchen.bat: run Kitchen on the Windows platform.
- ✓ kitchen.sh: run Kitchen on Unix platforms and Mac OSX

Kitchen can be run on any platform that has a version of the Java Runtime Environment version 1.4 or higher.

1.4. Command line options

These are the command line options that you can use.

IMPORTANT NOTES:

- *On Windows system, the use of the minus (“-”) in the options causes problems as well as the equal sign (“=”). Because of this, from version 2.2.2 on, you can also use this format or any combination of /,- and ;, =*
- *Fields in italic represent the values that the options use.*
- *It’s important that if spaces are present in the option values, you use quotes or double quotes to keep them together. Take a look at the examples below for more info.*

```
/option:value
```

Below are the valid options.

1. Display version information

```
-version
```

This option displays the version of the Kettle core library (kettle.jar).
The build version number and build date are shown as well.

2. Launch XML File

```
-file=filename
```

This option runs the job defined in the XML file. (.kjb : Kettle Job)

3. Set the logging file

```
-logfile=Logging Filename
```


Specifies the log file. The default is the standard output.

4. Set the logging level

```
-level=Logging Level
```

The level option sets the log level for the job that’s being run.
These are the possible values:

- ✓ Error: Only show errors
- ✓ Nothing: Don’t show any output
- ✓ Minimal: Only use minimal logging

User manual Last updated: 24-08-2007	Pentaho Data Integration	
	Kitchen 2.5.1	

- ✓ Basic: This is the default basic logging level
- ✓ Detailed: Give detailed logging output
- ✓ Debug: For debugging purposes, very detailed output.
- ✓ Rowlevel: Logging at a row level, this can generate a lot of data.

5. Choose a repository

```
-rep=Repository name
```

Connect to the repository with name “*Repository name*”.

You also need to specify the options `-user`, `-pass`, `-dir` and `-job`.

You can also specify this option in the form of environment variable KETTLE_REPOSITORY.

6. Set the repository user name

```
-user=Username
```

This is the username with which you want to connect to the repository.

You can also specify this option in the form of environment variable KETTLE_USER.

7. Set the repository password

```
-pass=Password
```

The password to use to connect to the repository

You can also specify this option in the form of environment variable KETTLE_PASSWORD.

8. Select the repository job to run

```
-job=Job Name
```

Use this option to select the job to run from the repository. Please also select the directory with the “`-dir`” option.

9. List the directories in the repository

```
-listdir=Y
```

Print a listing of all the sub-directories in the repository directory specified with the option “`-dir`”.

10. Set the repository directory

```
-dir=directory
```

Specifies the directory in the repository to use. Repository directories are specified like this:

The root directory: /

A subdirectory: /production/Dimensions/

From version 2.2.2 on, a / (slash) is used to separate directories on all platforms.

11. List the repository jobs

```
-listjobs=Y
```

Show a list of all the jobs in the repository directory specified with the option “-dir”.

12. List the available repositories

```
-listrep=Y
```

Print a listing of all the defined repositories.

13. Don't log in to the repository

```
-norep=Y
```

If you have set environment variables KETTLE_REPOSITORY, KETTLE_USER, KETTLE_PASSWORD, you can prevent Kitchen from logging into the repository. For example if you want to launch a job from an XML file.

1.5. Path

Please make sure that you are positioned in the Kettle directory before running the samples below. If you put these scripts into a batch file or shell script, simply do a change directory to the installation directory:

If Kettle was installed on windows on the D:\ drive

```
D:  
cd \Kettle
```

If Kettle was installed in the /product directory on a Unix system:

```
cd /product/Kettle/
```

1.6. Run a job from file

This example runs a job from file on a windows platform:

```
kitchen.bat /file:D:\Jobs\updateWarehouse.kjb /level:Basic
```

This example runs a job from file on a Linux box:

```
kitchen.sh -file=/PRD/updateWarehouse.kjb -level=Minimal
```


1.7. Run a job from Repository

This example runs a job from the repository on a windows platform:
 (Enter on a single line without returns...)

```
kitchen.bat
  /rep:"Production Repository"
  /job:"Update dimensions"
  /dir:/Dimensions/
  /user:matt
  /pass:somepassword123
  /level:Basic
```

1.8. Redirecting output

If you don't want the output of the file to appear on the screen but rather be put into a log file, you can use redirection.

This example adds the Kitchen output to an ever-growing log file:

```
kitchen.sh -file="/PRD/updateWarehouse.kjb" -level=Minimal >> /LOG/trans.log
```

This example writes the Kitchen output to a file that gets overwritten every time:

```
kitchen.bat /file:C:\PRD\runAll.kjb /level:Basic > C:\LOG\tans.log
```

1.9. Return codes

Kitchen returns an error code based on how the execution went :

0	The job ran without a problem.
1	Errors occurred during processing
2	An unexpected error occurred during loading / running of the job
7	The job couldn't be loaded from XML or the Repository
8	Error loading steps or plugins (error in loading one of the plugins mostly)
9	Command line usage printing

2. SCHEDULING

2.1. Schedule a job on windows

The best way to go at it is to test the command first at the dos prompt.

Then you can use the windows scheduler to launch this command.

Windows versions since Windows 2000 have a GUI for doing this accessible through the control panel. However it's also possible to use the command line to do this:

```
at 23:30 /every:Monday,Wednesday,Friday "D:\updateWarehouse.bat"
```

To see a list of the scheduled commands simply type:

```
at
```

2.2. Schedule a job on Unix

First create a shell script that runs all the jobs you need. Then you can schedule this script to run.

On Unix like systems the easiest way to schedule a command is by using the "cron table".

You can do this by entering the following command:

```
crontab -e
```

Then you can enter the time at which the command needs to be run as well as the command on a single line in the text file that is presented.

The first options are:

- ✓ Minute: The minute of the hour, 0-59
- ✓ Hour: The hour of the day, 0-23
- ✓ Month day: The day of the month, 1-31
- ✓ Month: The month of the year, 1-12
- ✓ Weekday: The day of the week, 0-6, 0=Sunday

You can specify more than 1 number for each of these values by separating 2 number with a hyphen (-). This means an inclusive number range. If you separate the number by commas (,), it means distinct values. If you use * instead of a number, it means: every possible hour, minute, day, month or weekday.

So, if you want to update the dimensions every hour, at 15 and 45 minutes past the hour during the weekdays, you might enter these lines in a crontab:

```
#  
# Launches the update of the dimensions in the warehouse  
#  
15,45 * * * 1-5 /PROD/update_dimensions.sh  
#
```

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User manual Last updated: 24-08-2007	Pentaho Data Integration	
	Kitchen 2.5.1	

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User manual Last updated: 24-08-2007	Pentaho Data Integration Kitchen 2.5.1	
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<p>User manual Last updated: 24-08-2007</p>	<p>Pentaho Data Integration Kitchen 2.5.1</p>	
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To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>
```

```
This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.
```

```
This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.
```

```
You should have received a copy of the GNU Lesser General Public
License along with this library; if not, write to the Free Software
Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA
```

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
library `Frob' (a library for tweaking knobs) written by James Random Hacker.
```

```
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
```

That's all there is to it!