

# JIOWA

EFFICIENCY SIMPLICITY FLEXIBILITY RELIABILITY

## JIOWA Test Data Generation

A simple tool to create tons of realistic personalized data  
for test environments

### Tutorial

Robert Mencl

Independent Consultant / [www.mencl.de](http://www.mencl.de)

Jörg Vollmer

Independent Consultant / [www.joerg-vollmer.de](http://www.joerg-vollmer.de)

JIOWA Business Solutions GmbH

Bettinastraße 30

D-60325 Frankfurt am Main

Germany



# Simple Example

---

# Simple Example

# Simple Example: Usage

## Usage:

```
// Compute a random person with an age between 20 and 30:  
// (gender, first name, last name, birth date, address)  
Person person = PersonRandomizer.getInstance().getRandom(20, 30);  
  
// Output:  
System.out.println(person);
```



Output

## Output:

```
Person[FEMALE: Norita Schwenzer (* January 13, 1986)  
  Address[Weiherstraße 369, Postcode: 85964 Dinslaken, Nordrhein-Westfalen, DE]]
```



# Statistics

---

# Statistics

# Statistics

## Number of possible combinations:

- $\approx$  100 million different female & male name combinations,
- more than  $4 \cdot 10^{13}$  different name and city/street combinations,
- many cities from all US states and all German states (Bundesländer) in test data,
- countless name & address combinations for US and German addresses.



## More Examples

---

# More Examples

# More Examples

## More possibilities on random data:

```
// Compute a random birth date between 30 and 70 years of age:  
Birthdate birthdate = BirthdateRandomizer.getInstance().getRandom(30, 70);  
  
// Compute a random address (country, city, state, post code, street name, house no.)  
Address address = AddressRandomizer.getInstance().getRandom();  
  
// Compute a random city (country, city)  
City city = CityRandomizer.getInstance().getRandom();
```

*All data from above is already contained in a single instance of class Person*

More information in the Java Documentation: [www.jiowa.de/jiowa-testdatagen/doc/api](http://www.jiowa.de/jiowa-testdatagen/doc/api)



## Distribution

---

# Distribution



# Distribution

## Distribution of Jiowa TestDataGen:

- Consists of a pre-configured Maven project (slightly optimized for Eclipse):
  - Distribution: [jiowa-testdatagen\\_1.1\\_example\\_mvn.zip](#)
  - Contains a test data generation example which can be taken as prototype for your own project.
  - This distribution is based on the [JIOWA Code Generation Framework](#) which includes a powerful [template engine](#). It can be used to write your own templates (Java, C++, SQL scripts, etc.) for test data generation and fill them with random data ...
    - ▣▶ Tutorial: [http://de.slideshare.net/Robert\\_Menc1/jiowa-code-generator-framework](http://de.slideshare.net/Robert_Menc1/jiowa-code-generator-framework)

*You can just import it into your IDE as Maven project!*



# License

---

# License

# License

JIOWA Test Data Generation is licensed under the *JIOWA Backlinking License v1.0:*

- Free for commercial and non-commercial use ...
  - if you set a public link from your website(s) to [www.jiowa.de](http://www.jiowa.de) stating that you are using the JIOWA Test Data Generation Tool (if you don't own a website you can also set a backlink from your favourite social media account),
  - and you leave all our copyright/license notices inside the distribution.
  - Example link text:  
[We are using the JIOWA Test Data Generation Tool!](#)
- That's all! Don't you think this is a fair agreement?
- Full license text: [www.jiowa.de/license.html](http://www.jiowa.de/license.html)
- Get it here... [www.jiowa.de/download.html](http://www.jiowa.de/download.html) Have fun! :-)

# JIOWA Test Data Generation Tool

**Questions ?**  
**Feedback ?**

[testdatagen@jiowa.de](mailto:testdatagen@jiowa.de)

Java Doc: [www.jiowa.de/jiowa-testdatagen/doc/api/](http://www.jiowa.de/jiowa-testdatagen/doc/api/)

Slideshare: [www.slideshare.net/Robert\\_Menc1/jiowa-test-data-generation/](http://www.slideshare.net/Robert_Menc1/jiowa-test-data-generation/)