



Database Quality in Production

Relational Databases Basics



TRAINING
CENTER



Ideas to consider

Quality assurance never ends

Early experiments bring more benefits

Experiments should be realistic

Monitoring adds much to experiments

Automation allows to save effort

Infrastructure influences database quality

It will be broken, surely

Ideas to consider: quality assurance never ends

Most projects evolve for years

Technology changes

Infrastructure changes

You can't just "check and forget"

Ideas to consider: early experiments bring more benefits

The sooner you find a bug, the cheaper it is to fix

Emulate real-life scenarios from the very beginning

Fault prevention, not fault detection

Ideas to consider: experiments should be realistic

Do you **really** think...

... there will only be five users in your system?

... all 100'000'000 news will have the same datetime?

... all catalog items will have the same price?

...

Ideas to consider: monitoring adds much to experiments

Use built-in monitoring tools

Use DevOps monitoring tools

Gather much data, analyze it

Know, what's happening

Ideas to consider: automation allows to save effort

System preparation for the test run

Test data generation

Database cleanup and configuration

Performance testing

Reporting

...

Ideas to consider: infrastructure influences database quality

Read “what’s new” documents

Use staging servers

Use monitoring

Use DevOps tools

Make backups!

...

Ideas to consider: it will be broken, surely

Yes, it **will** be broken one day, so...

Are you ready?

Do you have emergency plan?

Do you know the consequences?

Have you emulated the scenario?

...

This is DevTestOps task for real, so...

See Testing tools and techniques

See DevOps tools and techniques

...

Further education...

<epam>

Software Testing Introduction

One of the most effective and efficient EPAM RD
trainings since 2006



TRAINING
CENTER

— <epam> —



Database Quality in Production

Relational Databases Basics



TRAINING
CENTER

