

What Else Can Go Wrong?



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Overview



Integrating with other systems

- Unique environments

Deploying changes

Memory management

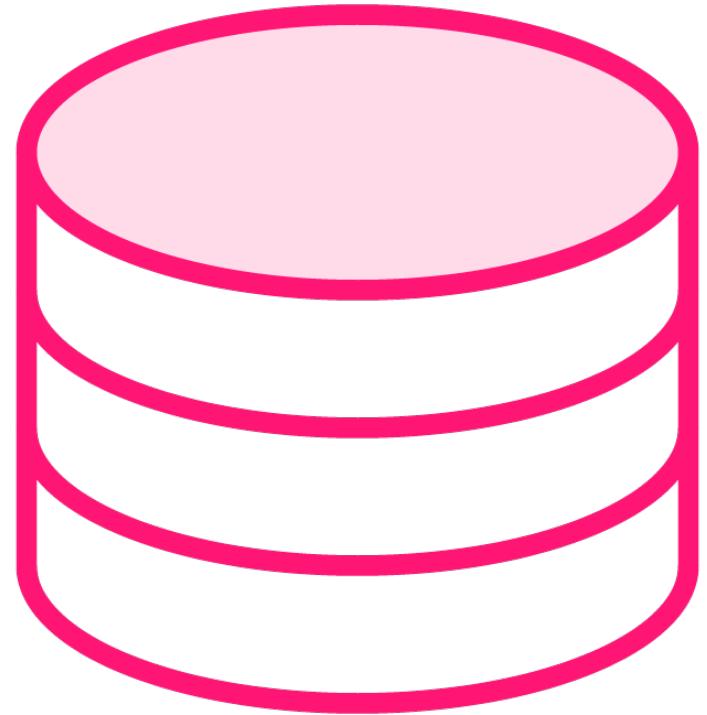
- Garbage collection
 - What is it?
 - How to fix?

Not going to cover HOW to fix everything

- Learn to recognize problem



System Integration



Database

- Customer data
- Shipping carriers

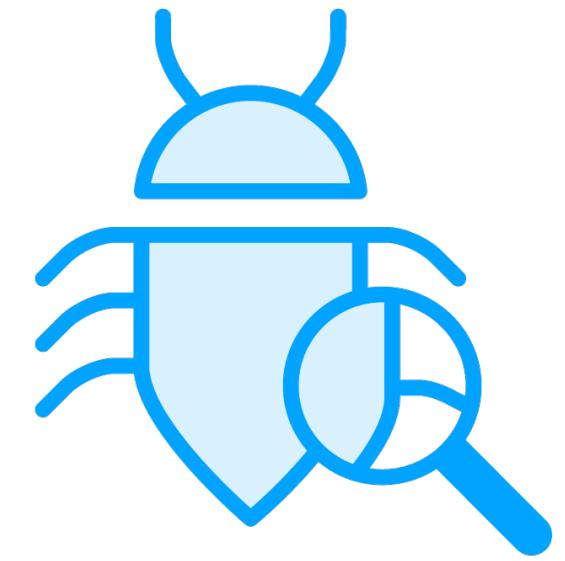
Look up information

- Order processing
- Reporting
- Inventory management

Interact with database to read / write data



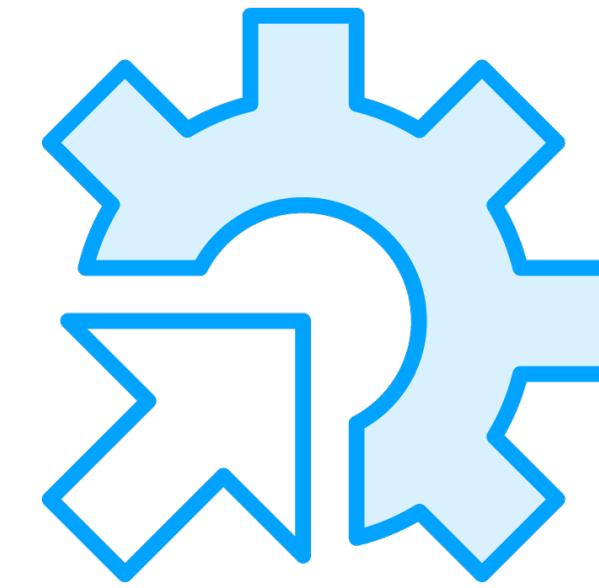
Environments



Development
Masked values



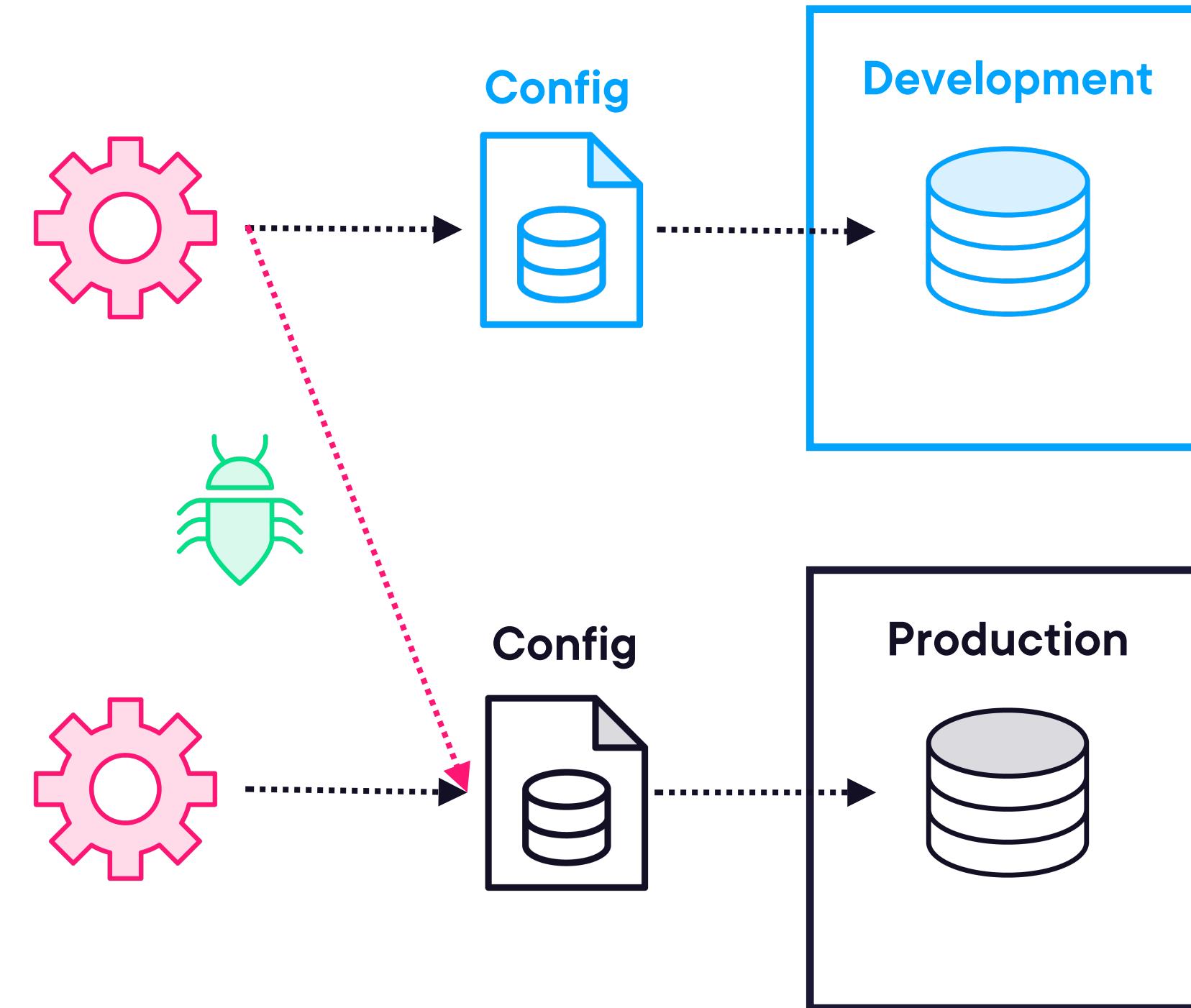
Testing



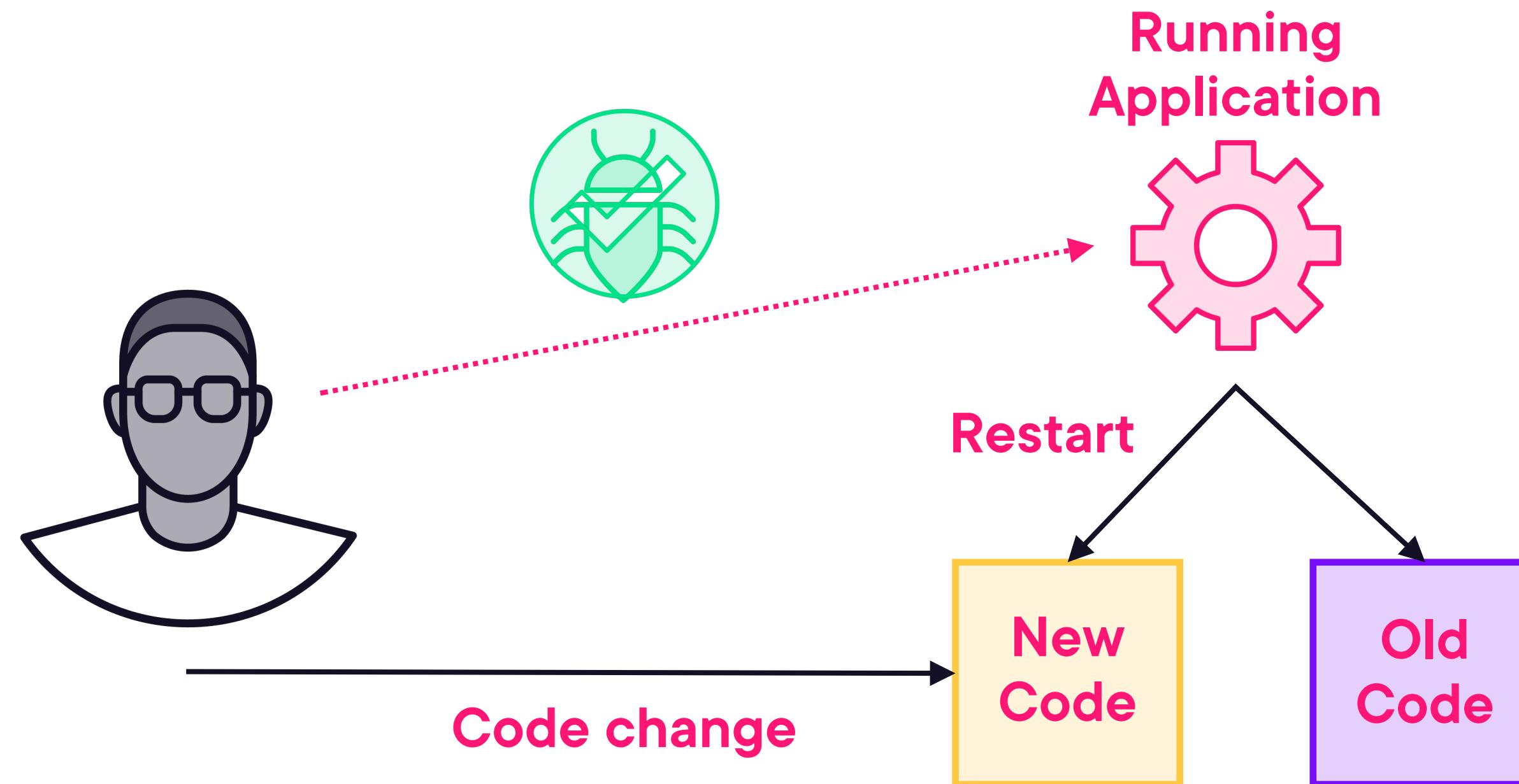
Production
Real values



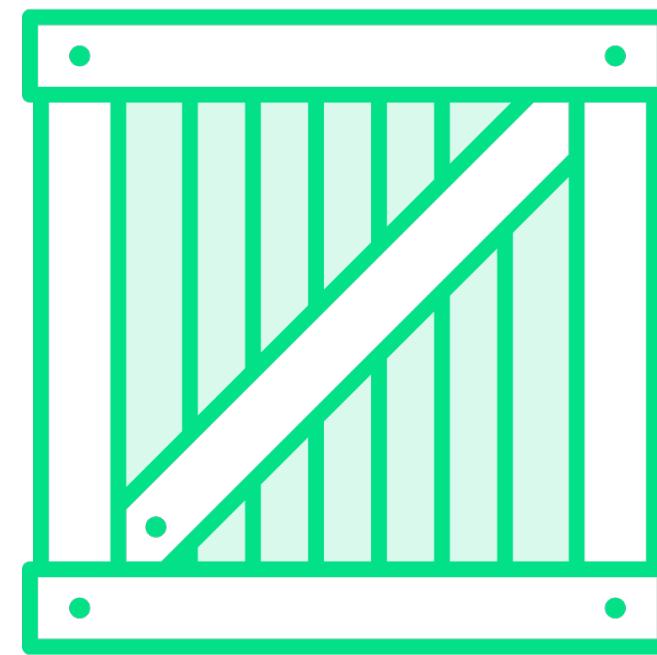
Environment Configuration



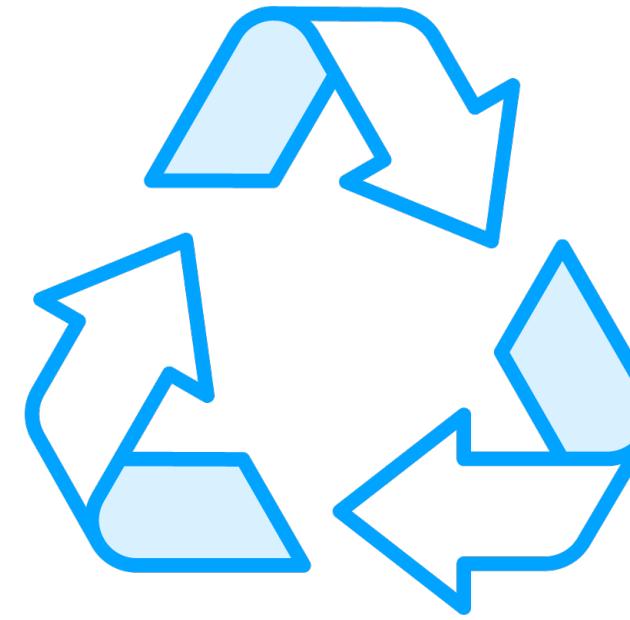
Deploying Code Changes



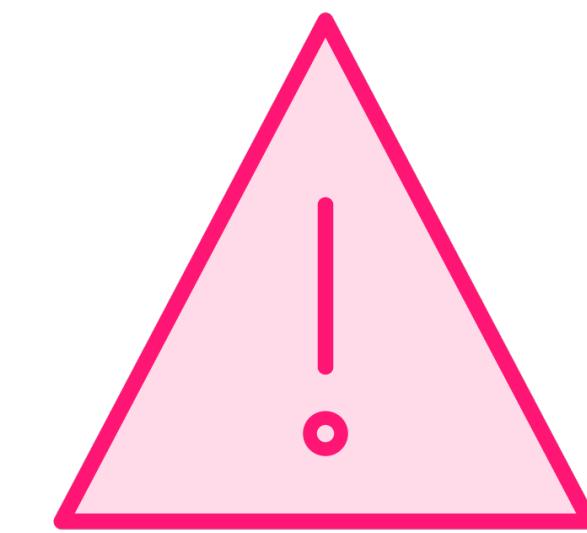
Memory Management



Heap
Memory available for Java execution



Garbage Collection
Clearing unused items from the heap



OutOfMemoryError
No more heap space available



Common Causes of Memory Problems

Heap Size

Bigger heap

More memory

Memory Leak

Objects that can't be
garbage collected

Memory profiling
tools

Slow Garbage Collector

More processing
power

Physical hardware
settings (eco mode)





Stop the World Garbage Collection

**Program execution is suspended while
Garbage Collection completes.**

Delay or longer response time

Happens at different times - not consistent



More Information

[Java Performance with JMeter](#)



Summary



What else can go wrong?

- Database integration
- Managing multiple environments
- Deploying new code
- Memory management
 - Long garbage collections
 - Difficult to replicate



Up Next:

Increasing Productivity with an IDE

