



GigaSpaces XAP Java 10.1.1 Persistency Training

Using Core Features of GigaSpaces XAP and OpenSpaces

Explore persistency of your IMDG in various methods and techniques including SQL/NOSQL database persistency and initial load

This training is designed to provide you with the knowledge required to architect, design and configure high throughput, low latency persistency for your XAP space applications.

You will be introduced to persistency challenges, tuning, configuration, troubleshooting, mirror server, initial load, NOSQL persistency and SQL persistency

AUDIENCE

Developers
Administrators
Project Managers
SI Architects

KNOWLEDGE REQUIREMENTS

XAP core training or XAP Admin training
Java working knowledge
Eclipse IDE knowledge is a plus

LENGTH

1 Day

BONUS

Plenty of hands-on lab sessions based on the BillBuddy applications

SYLLABUS

Course Introduction
BillBuddy Application
Persistency Introduction
Asynchronous Persistency – Space Classes
Initial Load – Space Classes
NOSQL – Space Documents
Custom Persistency
Tuning And Troubleshooting
Summary

HARDWARE AND SOFTWARE REQUIREMENTS

Computer Requirements

- Courseware should be preinstalled on trainees' machines prior to class start time.
- RAM: minimum 4 GB of RAM required for exercises and platform to operate, 6 GB and up recommended.
- Disk Space: At least 6 GB of free disk space
- Wireless/wired Internet connection (recommended)
- User with sufficient privileges for creating environment variables and execute processes
- Linux/Mac OS - Trainees should have a user with Administrator privileges (to edit system files for environment variables)
- Windows OS - Trainees should have write/Execute on root folder of HDD(C:)

Supported Operating Systems

- Windows 7, 8 (64 bit)
- Linux (64 bit)

Additional Software Requirements

- PDF Reader
- Zip software
- Web Browsers: Mozilla, Chrome. (MS Internet explorer is not supported)
- For Linux only: download and install beforehand MySQL database (version 5.1.X , we prefer 5.1.61 or 5.1.73 that training sand box was tested with) and MongoDB (version 2.6.6)

classroom HW requirements

- Projector 1024*768 minimum resolution
- White Board
- Erasable Markers
- Desktops or Laptops (see HW Requirements)
- Internet connectivity for all participants
- Electricity outlets for all computers/monitors and other equipment.
- At least 3 electricity outlets next to instructor location.

XAP JAVA PERSISTENCY

Lesson 1: Course Introduction

Duration: 20 minutes hour

- Goals
- Agenda
- Lab Session

Lesson 2: BillBuddy Application

Duration: 30 minutes

- BillBuddy application presentation
- Lab Session

Lesson 3: Persistency Introduction

Duration: 30 minutes

- Why Persistency?
- Persistency Introduction

Lesson 4: Asynchronous Persistency - Space Classes

Duration: 40 minutes

- Mirror Service Configuration
- Monitoring
- Lab

Lesson 5: Initial Load - Space Classes

Duration: 30 minutes

- Initial Load Configuration
- Custom Queries
- Lab Session

Lesson 6: NOSQL – Space Documents

Duration: 60 minutes (If time permits)

- NOSQL DB Support
- NOSQL - Mongo DB Persistency configuration
- Mongo DB Introduction
- Lab Session

Lesson 7: Custom Persistency

Duration: 60 minutes (If time permits)

- Custom Persistency Basics
- Space Data Source
- Space Synchronization Endpoint
- Lab Session

Lesson 8: Tuning and Troubleshooting

Duration: 30 minutes

- Hibernate Space Persistency properties
- Initial Load Tuning
- Handling Mirror Exceptions
- Mirror Behavior with Distributed Transactions
- Troubleshooting

Lesson 9: Summary

Duration: 10 minutes (If time permits)

- Summary
- Q&A