



## GigaSpaces XAP 10.1.1 WAN Gateway Training

### Using WAN Gateway and Core Features of GigaSpaces XAP and OpenSpaces

Enter the WAN Gateway world of data replication with GigaSpaces XAP and its built-in development framework OpenSpaces.

This training is designed to provide you with the knowledge required to architect, design and configure high throughput, low latency Wide Area Gateway using GigaSpaces XAP WAN Gateway

You will be introduced to WAN challenges, configuration, troubleshooting, conflict resolution, monitoring, tuning consideration and additional important aspects of XAP WAN gateway

#### AUDIENCE

Developers  
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

WAN Introduction  
Basic 2 Sites configuration  
Site Bootstrapping  
Replication Filtering  
Conflict Resolution  
Advanced Features  
Tuning Considerations  
Final Lab  
Summary

## HARDWARE AND SOFTWARE REQUIREMENTS

### Computer Requirements

- Courseware should be preinstalled on trainees' machines prior to class start time.
- RAM: minimum 6 GB of RAM required for exercises and platform to operate, 8 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, 8.1 64 bit
- Linux
- Mac OS X

### Additional Software Requirements

- PDF Reader
- Zip software
- Web Browsers: Mozilla, Chrome. (MS Internet explorer is not supported)

### 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.

## WAN GATEWAY

### Lesson 1: WAN Introduction

Duration: 30 minutes hour

- What is WAN?
- Use cases
- Main Features
- Lab Session

### Lesson 2: Basic 2 Sites configuration

Duration: 1 hour

- WAN Gateway Terminology Replication Targets
- Replication process
- Gateway PU
- Master to Master Configuration
- Replicating Updates 2/3 sites
- Bootstrap Copy Stage
- Administration using Web UI
- Lab Session

### Lesson 3: Site Bootstrapping

Duration: 30 minutes

- Bootstrapping Process
- Bootstrapping Requirements
- Bootstrapping Configuration
- Lab Session

### Lesson 4: Replication Filtering

Duration: 30 minutes

- Replication Filter
- Replication filter configuration
- Replication Filter Examples
- Lab Session

### Lesson 5: Conflict Resolution

Duration: 40 minutes

- Conflict Resolution
- Conflict Resolution Configuration
- Conflict Resolution Examples
- Lab Session

### Lesson 6: WAN Gateway Advanced Features

Duration: 30 minutes (If time permits)

- Additional Topologies
- Indirect Delegation
- The Process of Adding or Removing Sites
- Gateway and Distributed Transactions
- Intercepting Replication Events
- Limitations

### Lesson 7: WAN Gateway Tuning Considerations

Duration: 20 minutes (If time permits)

- Configuring Space Gateway Targets
- Gateway Lookup Mechanism
- Communication Filter and SSL
- WAN over a firewall