

# How to Automatically Scale Your Web Application

**Q. What type of SLAs is included in XAP? Hosting SLA, persistence SLA, electronic SLA, other? Are these SLAs contractual?**

**A.** The SLA is the application SLA, which was designed to automate a manual deployment process; not a business SLA per se. For example deploy the application on 10 servers with X amount of memory where primary and backup located on different machines. Read more on the [admin API](#) and the [processing unit SLA](#).

**Q. Is the load balancer demonstrated here the apache mod\_proxy based load balancer?**

**A.** Yes. The load balancer agent is external to the load balancer itself and can interact with other load balancers, in the same way. [Read more](#).

**Q. What grid service manager is used by XAP? Is the grid container WSRF-based Globus Toolkit?**

**A.** The grid service manager is a container of containers; it is not based on WSRF or Globus. It is a light weight container that adds the SLA capabilities to existing containers such as Spring, Jetty etc. The grid service manager is responsible for deploying services and maintaining them, based on SLAs.

**Q. Groovy is very hard wiring code and does not follow the standard J2EE... it will not show up the source code in .java files. pl comment.**

**A.** If you're not fond of Groovy you can always use plain Java with Spring. The new administration and monitoring API supports both.

**Q. Is the Monitoring tab new in version 7?**

**A.** Yes. In 7.0 we revamped the UI, which also includes an improved version of XAP's monitoring capability.

**Q. How long would the dynamic provision take on EC2?**

**A.** It usually takes a couple of minutes, sometimes even faster.

**Q. How does XAP supports scaling down, for example during non-peak load times?**

**A.** The same way it supports scaling up. You monitor the system for a certain performance indicator, and based on its values, you can trim down the number of instances of a certain application.

**Q. How is a web session state managed/synchronized across all scaled up/down instances, using XAP spaces?**

**A.** You can use the Space (our in memory data grid) to back your http session. You can do it in two modes; embedded-replicated (in which case all session data is present on all containers), or master-local mode, in which case you have a remote space and a local first level cache at the web application. In a scale up scenario, data will be replicated to the new instance either through replication (in embedded replicated mode) or through lazy fetching from the master space upon read (in master-local mode). You can read more about it in the following [tutorial](#). Note that this tutorial is relevant for GigaSpaces XAP version 6.6, and shortly a matching version for 7.0 will be published; read our [Early Access documentation](#).

**Q. Have you benchmarked GigaSpaces XAP against SAP J2E server (portal or web Application server)?**

**A.** No, we haven't benchmarked XAP against SAP J2E just yet. We might do this in the future, should there be significant market demand. See the [J2E benchmark results](#) as well as others.

**Q. Where do we configure the XAP SLAs?**

**A.** Currently, through the processing unit XML configuration file. New in 7.0: through an Admin API that will enable you to write your programmatic SLA. Check out the [admin API](#).

**Q. Is your presentation applicable only to Java Apps?**

**A.** You can deploy java, .Net and C++ apps using GigaSpaces, however this demonstration is indeed targeted to Java applications (any type) that are Spring-based; i.e. use, at the least, Spring bootstrapping mechanisms.

**Q. Is there a product for Microsoft web applications?**

**A.** Yes, GigaSpaces XAP is also available for .Net users, however, due to lack of standards in the Microsoft world, automatic scaling of the web tier is not as well supported as for JEE web apps. Currently, there is a technology preview feature in version 6.6 that implements HttpSession support over the space (our in memory data grid) for IIS. Read more on our [.Net support](#).

**Q. When using GigaSpaces XAP, is my application being hosted on the GigaSpaces platform?**

**A.** Yes, GigaSpaces XAP is a middleware platform in a sense similar to other application servers, like JBoss or WebLogic. However, you can also run your application in a non-managed mode and simply use the GigaSpaces APIs (obviously, this way, you will lose some of the benefits of the platform).

**Q. Is there a version of the product which can run on our infrastructure?**

**A.** GigaSpaces is a downloadable middleware that can run on any environment on which Java runs, Feel free to [download](#) the evaluation version, free of charge. Also, a good starting point would be our online [documentation portal](#).

**Q. What machines are you running your WebSphere on?**

**A.** We don't run WebSphere since GigaSpaces XAP implements most of the functionality you would need from WebSphere; such as messaging, remoting, web application support and data access.

**Q. Does XAP contain extra servers, which users can use on demand?**

**A.** GigaSpaces does not have a dedicated hosting environment available for its users and XAP does not contain servers for user's applications utilization. GigaSpaces is an ISV that provides a middleware platform that is available for download as an installable package, or as part of an Amazon EC2 image. Nevertheless, when using our Cloud Framework for XAP (currently available on Amazon EC2), you can allocate additional servers on demand.

**Q. How do you scale the SQL server databases dynamically?**

**A.** We don't; we actually take off the load by ensuring that the bulk of transactions is running in-memory in a distributed environment. Read more about [XAP's Concepts](#) and [how persistency can be achieved on the Cloud](#).

**Looking for More? Get Started Now!**

Visit our website at [www.gigaspaces.com](http://www.gigaspaces.com), and:

- View [the recording](#) of this and other on-demand webinars
- See how easy it is to [scale your Java EE app](#) using GigaSpaces XAP
- Check out what GigaSpaces XAP [users are saying](#)
- Read our [documentation](#) about GigaSpaces XAP autoscaling capabilities and the specific example demonstrated in the webinar
- Take a peek and learn more about GigaSpaces XAP 7.0; read our [Early Access Documentation](#).

**About GigaSpaces**

GigaSpaces Technologies is a leading provider of a new generation of application platforms for Java and .Net environments that offer an alternative to traditional application-servers. The company's eXtreme Application Platform (XAP) allows businesses and developers to predictably scale systems under any peak demand, guarantee performance under any data processing load, and seamlessly leverage the economies-of-scale offered by virtual computing environments such as clouds and grids. XAP leverages open-source and standard development frameworks to speed new application development and simplify migration of existing systems from traditional middleware and application server technologies to new virtual computing architectures.

GigaSpaces customers include six of the world's top 10 investment banks, world-leading exchanges, market data providers, hedge funds, retail banks, leading international and US telecommunications and mobile carriers, global Web-commerce companies, five of the world's top online gaming companies, and leading Internet media organizations.

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