

Java in Azure



Azure is windows

- Windows Server 2008 R2
- Runs java.exe
- What more do you need?

How

- Create start script
- Bundle with java and application
- Upload to Azure

GlassFish example

- Get an Azure account
- Download Visual Studio and stuff
- Put GlassFish + Java in Azure storage
- Create Azure project
- Make start script
- Config ports
- Publish

 New Project... |  New Web Site...

 Open Project... |  Open Web Site...

Recent Projects

 GlassFishService

Get Started | Latest News

New Windows Azure Project

.NET Framework 4 roles:

- Visual Basic
- Visual C#
-  **ASP.NET Web Role**
Service with a web user interface
-  **ASP.NET MVC 2 Web Role**
Service with a web user interface using AS...
-  **WCF Service Web Role**
Web role for WCF services
-  **Worker Role**
Background processing service
-  **CGI Web Role**
Web role that hosts a FastCGI application

Windows Azure solution:

-  **WorkerRole1**
Worker Role

OK Cancel

Learn to build cool,
to the cloud by using
oper Learning Center, or

Close page after project load

Show page on startup

```
using System;
using System.Collections.Generic;
using System.Diagnostics;
using System.Linq;
using System.Net;
using System.Threading;
using Microsoft.WindowsAzure;
using Microsoft.WindowsAzure.Diagnostics;
using Microsoft.WindowsAzure.ServiceRuntime;
using Microsoft.WindowsAzure.StorageClient;

namespace WorkerRole1
{
    public class WorkerRole : RoleEntryPoint
    {
        public override void Run()
        {
            // This is a sample worker implementation. Replace with your logic.
            Trace.WriteLine("WorkerRole1 entry point called", "Information");

            while (true)
            {
                Thread.Sleep(10000);
                Trace.WriteLine("Working", "Information");
            }
        }

        public override bool OnStart()
        {
            // Set the maximum number of concurrent connections
            ServicePointManager.DefaultConnectionLimit = 12;

            // For information on handling configuration changes
            // see the MSDN topic at http://go.microsoft.com/fwlink/?LinkId=166357.

            return base.OnStart();
        }
    }
}
```

```
# Launch Java and GlassFish
```

```
.\jdk\bin\java -jar .\glassfish3\glassfish\modules\admin-cli.jar start-domain --verbose
```

Launch.ps1*

```
function unzip ($zip, $destination) {
    Add-Type -Path ((Get-Location).Path + '\lib\ICSharpCode.SharpZipLib.dll')
    $fs = New-Object ICSharpCode.SharpZipLib.Zip.FastZip
    $fs.ExtractZip($zip, $destination, '')
}

function download_from_storage ($container, $blob, $connection, $destination) {
    Add-Type -Path ((Get-Location).Path + '\Microsoft.WindowsAzure.StorageClient.dll')
    $storageAccount = [Microsoft.WindowsAzure.CloudStorageAccount]::Parse($connection)
    $blobClient = New-Object Microsoft.WindowsAzure.StorageClient.CloudBlobClient($storageAccount.BlobEndpoint, $storageAccount)
    $remoteBlob = $blobClient.GetBlobReference($container + '/' + $blob)
    $remoteBlob.DownloadToFile($destination + "\" + $blob)
}

$connection_string = 'DefaultEndpointsProtocol=http;AccountName=jfokus2011storage;AccountKey=jsAQ0LX7KIXpa2HDNvjKTnW3L0wmZAR...'

# JRE
$jre = 'jdk-1.6.0_23.zip'
download_from_storage 'java' $jre $connection_string (Get-Location).Path
unzip ((Get-Location).Path + "\" + $jre) (Get-Location).Path

# GlassFish
$glassfish = 'glassfish-3.1-web-b41.zip'
download_from_storage 'apps' $glassfish $connection_string (Get-Location).Path
unzip ((Get-Location).Path + "\" + $glassfish) (Get-Location).Path

# Launch Java and GlassFish
.\jdk\bin\java -jar .\glassfish3\glassfish\modules\admin-cli.jar start-domain --verbose
```

Run.cmd X Launch.ps1 WorkerRole.cs

```
powershell -executionpolicy unrestricted -file .\Launch.ps1
```

```
<?xml version="1.0" encoding="utf-8"?>
<ServiceDefinition name="GlassFishAzure" xmlns="http://schemas.microsoft.com/ServiceHosting/2008/10/ServiceDefinition">
  <WorkerRole name="GlassFishWorkerRole">
    <Imports>
      <Import moduleName="Diagnostics" />
    </Imports>
    <Startup>
      <Task commandLine="Run.cmd" executionContext="limited" taskType="background" />
    </Startup>
    <Endpoints>
      <InputEndpoint name="Http_Listener_1" protocol="tcp" port="8080" localPort="8080"/>
      <InputEndpoint name="Http_Listener_2" protocol="tcp" port="8181" localPort="8181"/>
      <InputEndpoint name="Http_Listener_3" protocol="tcp" port="4848" localPort="4848"/>
      <InputEndpoint name="JMX_Connector_Port" protocol="tcp" port="8686" localPort="8686"/>
      <InputEndpoint name="Remote_Debug_Port" protocol="tcp" port="9009" localPort="9009"/>
    </Endpoints>
  </WorkerRole>
</ServiceDefinition>
```

Windows Azure Platform

[Billing](#) | [Diversifyer](#) [Diversify](#) | [Sign](#)

New Production Deployment
 New Staging Deployment
 Upgrade
 Configure
 Delete
 Start
 Stop
 Swap VIP
 Configure OS
 Reboot
 Reimage
 Enable
 Configure
 Connect

New Deployments Instances Remote Access

- Deployment Health
- Groups
- Deployment Certificates
- Services (1)**
- Accounts (1)
- Management
- Services, Storage & CDN
- Bus, Access Control
- Network

Choose Columns

Name	Type	Status	Environment
Windows Azure Pass (V1609FB)	Subscription	Active	
diversifyHostedService	Hosted Service	Created	
Certificates			
diversifyAzure	Deployment	Ready	Staging
WebRole	Role	Ready	Staging
WebRole_IN_0	Instance	Ready	Staging
GlassFishAzure - 2011-02	Deployment	Initializing...	Production
GlassFishWorkerRole	Role	Initializing...	Production
GlassFishWorkerRole	Instance	Creating host...	Production

Properties

Abort count
0

Environment
Staging

Name
WebRole_IN_0

Start result
Success

Start time
1/21/2011 12:53:16 PM UTC

Size
Small

Status
Ready

GlassFish Server 3.1

Your server is now running

To replace this page, overwrite the file `index.html` in the document root folder of this server. The document root folder for this server is the `docroot` subdirectory of this server's domain directory.

To manage a server on the **local host** with the **default administration port**, go to the [Administration Console](#).

Get Oracle GlassFish Server with Premier Support

For production deployments, consider Oracle GlassFish Server with [Oracle Premier Support for Software](#). Premier Support helps lower the total cost and risk of owning your Oracle solutions, improve the return from your IT investment, and optimize the business value of your IT solutions. Benefits of Premier Support include product updates and enhancements, global reach, lifetime support, ecosystem support, and proactive, automated support.

Install and update additional software components

Use the [Update Tool](#) to install and update additional technologies and frameworks such as:

- OSGi HTTP Service
- Generic Resource Adapter for JMS
- OSGi Administration Console

If you are using the web profile, you can also use Update Tool to obtain technologies that are included by default in the full platform, such as:

- Enterprise Java Beans
- [Metro](#)
- [Jersey](#)

To improve the user experience and optimize offerings to users, Oracle collects data about [GlassFish Server usage](#) that is transmitted by the Update Tool installer as part of the automatic update processes. No personally identifiable information is collected by this process.

Join the GlassFish community

Visit the [GlassFish Community](#) page for information about how to join the GlassFish community. The GlassFish community is developing an open source, production-quality, enterprise-class application server that implements the newest features of the Java™ Platform, Enterprise Edition (Java EE) platform and related enterprise technologies.

Learn more about GlassFish Server

For more information about GlassFish Server, samples, documentation, and additional resources, see [as-install/docs/about.html](#), where *as-install* is the GlassFish Server installation directory.