

# Установка

# базовых компонентов

GlassFish

Москва — 2020

## Цели документа и область применения

Данный документ описывает процедуру установки базовых системных компонентов, необходимых для развёртывания программного обеспечения.

GlassFish — сервер приложений с открытым исходным кодом. Сервер разрабатывается компанией Oracle и является эталонной реализацией спецификаций Java EE. В сервере GlassFish имеется веб-интерфейс, и это может облегчить работу с ним для новичков. Сервер GlassFish Server Open Source Edition распространяется бесплатно, и его исходный код доступен для скачивания. Также имеется платная версия с круглосуточной поддержкой.

С помощью GlassFish на основе виртуального сервера Vscale можно создать полноценный сервер приложений для Java. Несколько виртуальных серверов Vscale в кластер GlassFish серверов для обеспечения высокой производительности и отказоустойчивости. При этом возможность быстро создавать новые сервера Vscale сделает процесс масштабирования быстрым и не требующих больших трудозатрат.

В этом описании мы приведём инструкцию по установке и первичной настройке GlassFish для OC Ubuntu16.04.

### Требования

- Сервер Ubuntu 16.04;
- Пользователь с root-правами.

#### Шаг 1. Установка OpenJDK

Для начала нам понадобиться установить JDK (Java Development Kit) - комплект программ, включающий компилятор и исполнительную систему Java. OpenJDK устанавливается из официального репозитория:

apt-get install openjdk-8-jdk

Проверяем:

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user@server:~# java -version openjdk version "1.8.0\_91" OpenJDK Runtime Environment (build 1.8.0\_91-8u91-b14-3ubuntu1~16.04.1-b14) OpenJDK 64-Bit Server VM (build 25.91-b14, mixed mode)

### Шаг 2. Установка GlassFish

Скачиваем и распаковываем дистрибутив:

user@server:/opt# wget http://download.java.net/glassfish/4.1.1/release/glassfish-4.1.1.zip user@server:/opt# unzip glassfish-4.1.1.zip

Если не установлен unzip, то выполним:

user@server:/opt# sudo apt-get install unzip

Удаляем дистрибутив:

user@server:/opt# rm glassfish-4.1.1.zip

Проверяем:

user@server:/opt# ls glassfish4

Создадим пользователя glassfish и дадим ему права на необходимые директории

user@server:/opt# useradd glassfish -U -s /bin/false user@server:/opt# chown -R glassfish:glassfish /opt/glassfish4

#### Управление сервером производится через служебную утилиту asadmin

Запускаем домен:

user@server:/opt# /opt/glassfish4/bin/asadmin start-domain Waiting for domain1 to start ...... Successfully started the domain : domain1 domain Location: /opt/glassfish4/glassfish/domains/domain1 Log File: /opt/glassfish4/glassfish/domains/domain1/logs/server.log Admin Port: 4848 Command start-domain executed successfully.

Откроем консоль сервера http://<server ip>:4848/

	ORACLE
	Configuration Error Secure Admin must be enabled to access the DAS remotely.
Created by Oracle with contributions from the GlassFish community	GlassFish <sup>™</sup> Server Open Source Edition Administration Console User Name: Password: Login

Далее устанавливаем пароль администратора и разрешаем вход в консоль. По умолчанию пароль пустой.

user@server:/opt# /opt/glassfish4/bin/asadmin change-admin-password Enter admin user name [default: admin]> Enter the admin password> Enter the new admin password> Enter the new admin password again> Command change-admin-password executed successfully.

user@server:/opt# /opt/glassfish4/bin/asadmin enable-secure-admin Enter admin user name> admin Enter admin password for user "admin"> You must restart all running servers for the change in secure admin to take effect. Command enable-secure-admin executed successfully.

Перезапускаем домен:

user@server:/opt# /opt/glassfish4/bin/asadmin restart-domain Successfully restarted the domain Command restart-domain executed successfully.

Заходим в консоль используя установленый пароль администратора https://<server ip>:4848/:



### Шаг 3. Добавляем в автозапуск

Добавление в автозапуск также осуществляетется через asadmin.

Не забываем указать пользователя, от имени которого будет запускаться сервис, иначе он запустится от root.

user@server:/opt# /opt/glassfish4/bin/asadmin create-service --serviceuser glassfish Found the Linux Service and successfully uninstalled it. The Service was created successfully. Here are the details: Name of the service:domain1 Type of the service:Domain Configuration location of the service:/etc/init.d/GlassFish\_domain1 User account that will run the service: root You have created the service but you need to start it yourself. Here are the most typical Linux commands of interest:

- \* /etc/init.d/GlassFish\_domain1 start
- \* /etc/init.d/GlassFish\_domain1 stop
- \* /etc/init.d/GlassFish\_domain1 restart

For your convenience this message has also been saved to this file:

/opt/glassfish4/glassfish/domains/domain1/PlatformServices.log Command create-service executed successfully.

Добавим LBS-тэг:

nano /etc/init.d/GlassFish\_domain1

Должно получится так:

#!/bin/sh
### BEGIN INIT INFO
# Provides: GlassFish\_domain1
# Required-Start: \$local\_fs \$network
# Required-Stop: \$local\_fs \$network
# Default-Start: 2 3 4 5
# Default-Stop: 0 1 6 S
# Short-Description: Glassfish startscript.
# Description: Starts our Glassfish server.
### END INIT INFO
#

Зарегистрируем сервис:

user@server:/opt# update-rc.d GlassFish\_domain1 defaults

Останавливаем сервис, если он был запущен вручную

user@server:/opt# /opt/glassfish4/bin/asadmin stop-domain Waiting for the domain to stop . Command stop-domain executed successfully.

Проверяем:

user@server:~# service GlassFish\_domain1 start user@server:~# service GlassFish\_domain1 status • GlassFish\_domain1.service - LSB: Jetty startscript. Loaded: loaded (/etc/init.d/GlassFish\_domain1; bad; vendor preset: enabled) Active: **active** (running) since Fri 2016-10-07 17:48:50 MSK; 31min ago Docs: man:systemd-sysv-generator(8) Process: 10500 ExecStart=/etc/init.d/GlassFish\_domain1 start (code=exited, sta CGroup: /system.slice/GlassFish\_domain1.service iam10517 /usr/lib/jvm/java-8-openjdk-amd64/bin/java -cp /opt/glassfish

Oct 07 17:48:50 cs48823 systemd[1]: Starting LSB: Jetty startscript.... Oct 07 17:48:50 cs48823 systemd[1]: Started LSB: Jetty startscript.. Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: Waiting for domain1 to start . Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: Successfully started the domai Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: domain Location: /opt/glassfi Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: Log File: /opt/glassfish4/glas Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: Admin Port: 4848 Oct 07 17:48:58 cs48823 GlassFish\_domain1[10500]: Command start-domain executed Oct 07 18:19:55 cs48823 systemd[1]: Started LSB: Jetty startscript..

#### Шаг 4. Установка приложения

Открываем консоль GlassFish

https://<server ip>:4848/

Applications -> deploy Выбираем war-файл приложения:

Home About			
User: admin Domain: domain1 Serve	r: 95.213.235.245		
GlassFish <sup>™</sup> Server Open Sou	rce Edition		
8			
	5		
Common Tasks	Deploy Applica	tions or Modules	
👩 Domain	Specify the location of the application or module to deploy. An application can be in a packaged file or specified as a directory.		
server (Admin Server)			
- Re Clusters	Location: <ul> <li>Packaged File to Be Uploaded to the Server</li> </ul>		
Standalone Instances	Choose File test.war		
▶ 🕞 Nodes			
Applications	Loca	I Packaged File or Directory That Is Accessible from GlassFish Server	
- 😋 Lifecycle Modules		Drowse Lies Friowse Lowers	
- 📷 Monitoring Data	* * 10/-> 45-		
🔻 🍟 Resources	Type: web Applic	auon	
Concurrent Resources	50 . 20 Marks 04		
Connectors	Context Root:	test	
► 📄 JDBC	*	Paul relative to server's base ORL.	
JMS Resources	Virtual Servere:	lesi	
► 🛄 JNDI	virtual servers.	server	
- JavaMail Sessions			
Resource Adapter Configs	4	Associates an Internet domain name with a physical server.	
▼ ■ Configurations	Status:	Enabled	
default-config		Allows users to access the application.	
server-config	Implicit CDI	Chabled	
- 🞯 Update Tool	Deserve its 100 st	Implicit discovery of CDI beans	
	Precompile JSPs:	Precompiles JSP pages during deployment.	
	Run Verifier:	Verifies the syntax and semantics of the denovment descriptor. Verifier packages must be installed	
	Force Redeploy:	Control the symptotic sector and deployment descriptor. Verifier packages must be installed.	
		Forces redeployment even if this application has already been deployed or already exists.	
	Keep State:	Retains web sessions, SFSB instances, and persistently created EJB timers between redeployments.	
	Deployment Order:		
		A number that determines the loading order of the application at server startup. Lower numbers are loaded first. The	
	Libraries:		
	Description	A comma-separated list of library JAR files. Specify the library JAR files by their relative or absolute paths. Specify	
	Description:		

Меняем контекст и отображаемое имя приложения в случае необходимости. Нажимаем "Ок".

Home About   User: admin Domain: domain1   Server Open Source Edition     Image: Common Tasks     Common Tasks     Applications   Applications can be enterprise or web applications, or various kinds of modules. Restart an a clicking on the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link, this action will apply only to the targets that the application or mode to the reload link. The release to the reload link is action will apply only to the targets that the application or mode to the reload link. The release to the reload link is action will apply only to the targets that the application or mode to the reload link. The release to the reload link is action will apply only to the targets that the application or mode to the reload link. The release to the reload link is action will apply only to the targets the release to the reload link is action.	Logout Heip
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□       server (Admin Server)         □       □	ule is enabled on.
Clusters       Standalone Instances         Standalone Instances       Select Name       Deployment Order       Enabled       Engines       Action         Applications       test       100       ✓       web       Launch   Re         Monitoring Data       Monitoring Data       Select       Se	
Standalone Instances       Select       Name       Deployment Order       Enabled       Engines       Action         ▶ Applications       test       100       ✓       web       Launch   Re         ➡ Lifecycle Modules       ➡ Monitoring Data       ■       ■       ■       ■       ■	
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► A Connectors	
▶ 📄 JDBC	
▶ 🚔 JMS Resources	
▶ 🛄 JNDI	
– 🧮 JavaMail Sessions	
🚽 👸 Resource Adapter Configs	
v 🔐 Configurations	
▶ 🔐 default-config	
▶ 📑 server-config	
- 🚱 Update Tool	

Вот и всё, приложение развёрнуто и доступо по ссылке Launch (http://<server ip>:8080/test).