



希盟泰克全生命周期管理平台 (SimuPLM)

安装部署手册

成都希盟泰克科技发展有限公司

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1 平台基础环境

平台基础环境是平台运行的载体，主要包括 `jdk`，数据库，`tomcat`，`redis`，`es` 等，
`Java` 是一门面向对象编程语言，不仅吸收了 `C++` 语言的各种优点，还摒弃了 `C++` 里难以理解的多继承、指针等概念，因此 `Java` 语言具有功能强大和简单易用两个特征。`Java` 语言作为静态面向对象编程语言的代表，极好地实现了面向对象理论，允许程序员以优雅的思维方式进行复杂的编程。

`Java` 具有简单性、面向对象、分布式、健壮性、安全性、平台独立与可移植性、多线程、动态性等特点。`Java` 可以编写桌面应用程序、`Web` 应用程序、分布式系统和嵌入式系统应用程序等。

`JDK` 是 `Java` 语言的软件开发工具包，主要用于移动设备、嵌入式设备上的 `java` 应用程序。`JDK` 是整个 `java` 开发的核心，它包含了 `JAVA` 的运行环境(`JVM+Java` 系统类库)和 `JAVA` 工具。

`JDK`(`Java Development Kit`) 是 `Java` 语言的软件开发工具包(`SDK`)。

`SE`(`JavaSE`)，`standard edition`，标准版，是我们通常用的一个版本，从 `JDK 5.0` 开始，改名为 `Java SE`。

`EE`(`JavaEE`)，`enterprise edition`，企业版，使用这种 `JDK` 开发 `J2EE` 应用程序，从 `JDK 5.0` 开始，改名为 `Java EE`。从 2018 年 2 月 26 日开始，`J2EE` 改名为 `Jakarta EE`。

`ME`(`J2ME`)，`micro edition`，主要用于移动设备、嵌入式设备上的 `java` 应用程序，从 `JDK 5.0` 开始，改名为 `Java ME`。

没有 `JDK` 的话，无法编译 `Java` 程序（指 `java` 源码.`java` 文件），如果想只运行 `Java` 程序（指 `class` 或 `jar` 或其它归档文件），要确保已安装相应的 `JRE`。

1.1 服务器环境配置要求

1.1.1 操作系统平台

系统服务器支持多种操作系统。其中包括 `win2008 Server R2`、`win2012 Server R2`、`win2016 Server`、`centos7.4`、`NeoKylin 7_B20`、`EulerOS release 2.0` 操作系统。

应用服务器操作系统	操作系统位数	CPU	JDK版本
win2008 Server R2	64	Intel Xeon	ufjdk1.8.0_45
win2012 Server R2	64	Intel Xeon	ufjdk1.8.0_45
win2016 Server	64	Intel Xeon	ufjdk1.8.0_45
centos7.4	64	Intel Xeon	ufjdk1.8.0_45

注意：操作系统请选择带GUI的标准版，没有明确指定的安装平台不推荐使用。

1.1.2 硬件配置推荐

简明硬件建议表，本表所写关键硬件要求以Intel Xeon E5为标准计算：

U8C系统注册用户数量	0-150		150-300		300-450		450-600		>600	
配置	应用服务器	数据库服务器	应用服务器	数据库服务器	应用服务器	数据库服务器	应用服务器	数据库服务器	应用服务器	数据库服务器
CPU物理核数	4	4	4	4	8	8	8	8	①	①
内存容量(G)	8	8	8	16	16	16	16	32	①	①

1.1.3 数据库支持状况

数据库类型	Windows	Linux	NeoKylin	EulerOS
MySQL5.5及以上	Y	Y	Y	Y
ORACLE Enterprise Edition11及以上	Y	Y	N	N
达梦7（DM7）	Y	Y	Y	N
SQL Server 2012 及以上	Y	Y	N	N

1.2 客户端配置要求

1.2.1 客户端硬件配置要求

配置	建议配置
CPU	双核(或更高)
内存	4GB(或更高)
硬盘(剩余空间)	10GB(或更高)
打印机	操作系统所能适配的打印机
显示适配器	支持主流分辨率, 1280*768 800 1024 1366*768 1440*900 1600*900 1680*1050

1.2.2 客户端软件配置要求

产品支持的浏览器有 IE、Firefox、Chrome、UClient 等；Windows 操作系统包括：Windows

7, Windows Server 2008, Windows 10 Windows Server2012；MAC OS 操作系统包括：MAC10.11.6, MAC10.12.6。

1.3 网络相关要求

1.3.1 网络配置推荐表

网络配置项	建议网络配置
各服务器之间	千兆以太网（Gigabit Ethernet）
客户端和应用服务器之间	服务器出口带宽： $5\text{Mbps} + (\text{并发客户端数} / 5) \times 1.0 \text{ Mbps}$ 网络延时： $< 100\text{ms}$ 丢包率： $< 2 \%$ 一个客户端到服务器之间带宽需要保证：5.0M或以上

1.3.2 网络其他配置要求

用户通过防火墙访问PML cloud服务器时，需要注意在防火墙上开放相应端口。用户可以使用单机应用或集群模式灵活配置环境，需要保证相关端口不被其他应用占用。

在数据库服务器和应用服务器上不要安装或启用DHCP、DNS、PROXY、WINS和防火墙等服务。请将防火墙功能停止，保证数据库服务器和应用服务器，应用服务器和应用服务器间高速网络通信，强烈推荐应用服务器、数据库服务器、web服务器间使用千兆网络进行连接，不建议安装或设置跨网关或跨防火墙通信。

应用服务器的网卡正确设置很重要。通常情况下，要保证网卡驱动、物理连线、地址、网关、路由等被正确配置。如果环境中网卡被启用而未连接物理网线，可能会影响PML cloud系统网络操作性能，在此建议禁用不使用的网卡。

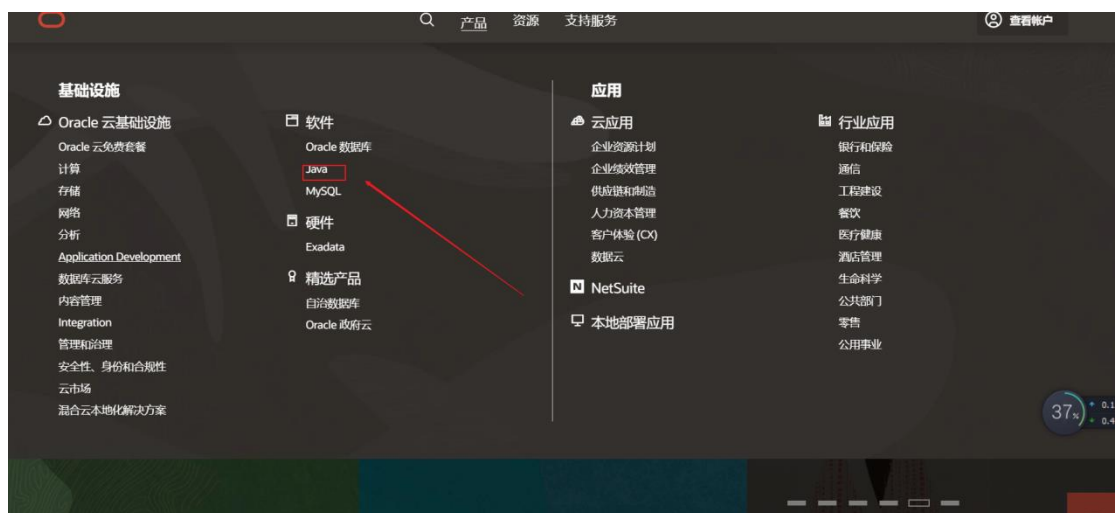
1.4 运行时环境

Jdk 推荐版本：1.8.0_45 及以上

Jdk 下载



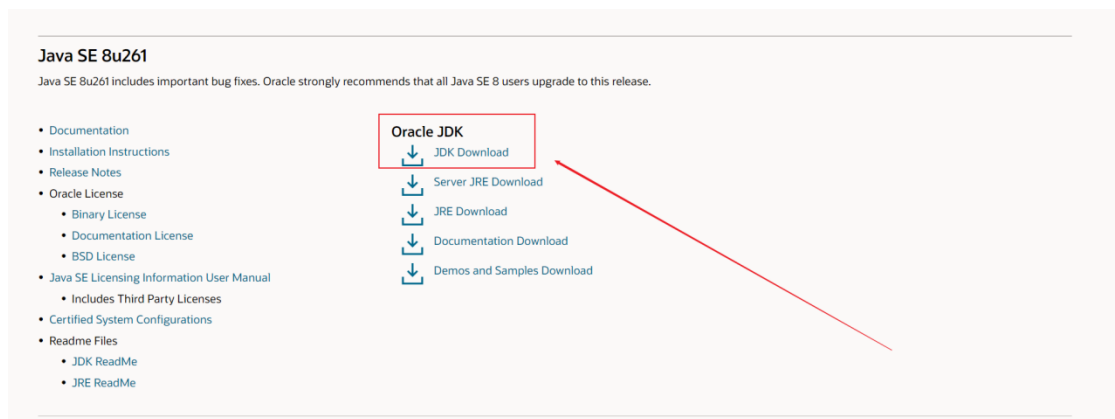
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选择 java se 8， JDK Download



在 Java SE Development Kit 8u261 下

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Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	73.4 MB	jdk-8u261-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	70.3 MB	jdk-8u261-linux-arm64-vfp-hflt.tar.gz
Linux x86 RPM Package	121.92 MB	jdk-8u261-linux-i586.rpm
Linux x86 Compressed Archive	136.81 MB	jdk-8u261-linux-i586.tar.gz
Linux x64 RPM Package	121.53 MB	jdk-8u261-linux-x64.rpm
Linux x64 Compressed Archive	136.48 MB	jdk-8u261-linux-x64.tar.gz

选择 windows X64 的 exe 进行下载

macOS x64	203.94 MB	jdk-8u261-macosx-x64.dmg
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Solaris SPARC 64-bit	88.72 MB	jdk-8u261-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	134.23 MB	jdk-8u261-solaris-x64.tar.Z
Solaris x64	92.47 MB	jdk-8u261-solaris-x64.tar.gz
Windows x86	154.52 MB	jdk-8u261-windows-i586.exe
Windows x64	166.28 MB	jdk-8u261-windows-x64.exe

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创建完用户，即可下载，也可通过 jdk.java.net 进行下载，下载完把压缩包解压放置到你想要放置的位置，接下来配置环境变量

jdk.java.net

GA Releases

JDK 14
JMC 7

Early-Access Releases

JDK 16
JDK 15
Lanai
Loom
Metropolis
Panama
Valhalla

Reference Implementations

Java SE 15
Java SE 14
Java SE 13
Java SE 12
Java SE 11
Java SE 10
Java SE 9
Java SE 8
Java SE 7

Feedback

Report a bug

Archive

Java Platform, Standard Edition 8 Reference Implementations

The official Reference Implementations for Java SE 8 (JSR 337) are based solely upon open-source code available from the JDK 8 Project in the OpenJDK Community. This Reference Implementation applies to JSR 337 Maintenance Release 3 (Feb 2020). Reference Implementation for Maintenance Release 1 (Mar 2015) and Maintenance Release 2 (Mar 2019) contains RIs for these releases. Binaries are provided for both the Linux x64 and Windows i586 platforms and Compact Profiles for Linux i586.

These binaries are for reference use only!

These binaries are provided for use by implementers of the Java SE 8 Platform Specification and are for reference purposes only. These Reference Implementations have been approved through the Java Community Process. Binaries for development and production will be available from Oracle and in most popular Linux distributions.

RI Binaries (build 1.8.0_41-b04) under the GNU General Public License version 2

- Oracle Linux 7.6 x64 Java Development Kit (md5) 167 MB
- Windows 10 i586 Java Development Kit (md5) 92 MB
- Oracle Linux 7.6 i586 Java Runtime Environment for Compact Profiles
 - Compact Profile 1 (md5) 15 MB
 - Compact Profile 2 (md5) 18 MB
 - Compact Profile 3 (md5) 20 MB
 - Full JRE (md5) 40 MB

RI Source Code

The source code of the RI binaries is available under the GPLv2 in a single zip file (md5) 123 MB.

International use restrictions

Due to limited intellectual property protection and enforcement in certain countries, the JDK source code may only be distributed to an authorized list of countries. You will not be able to access the source code if you are downloading from a country that is not on this list. We are continuously reviewing this list for addition of other countries.

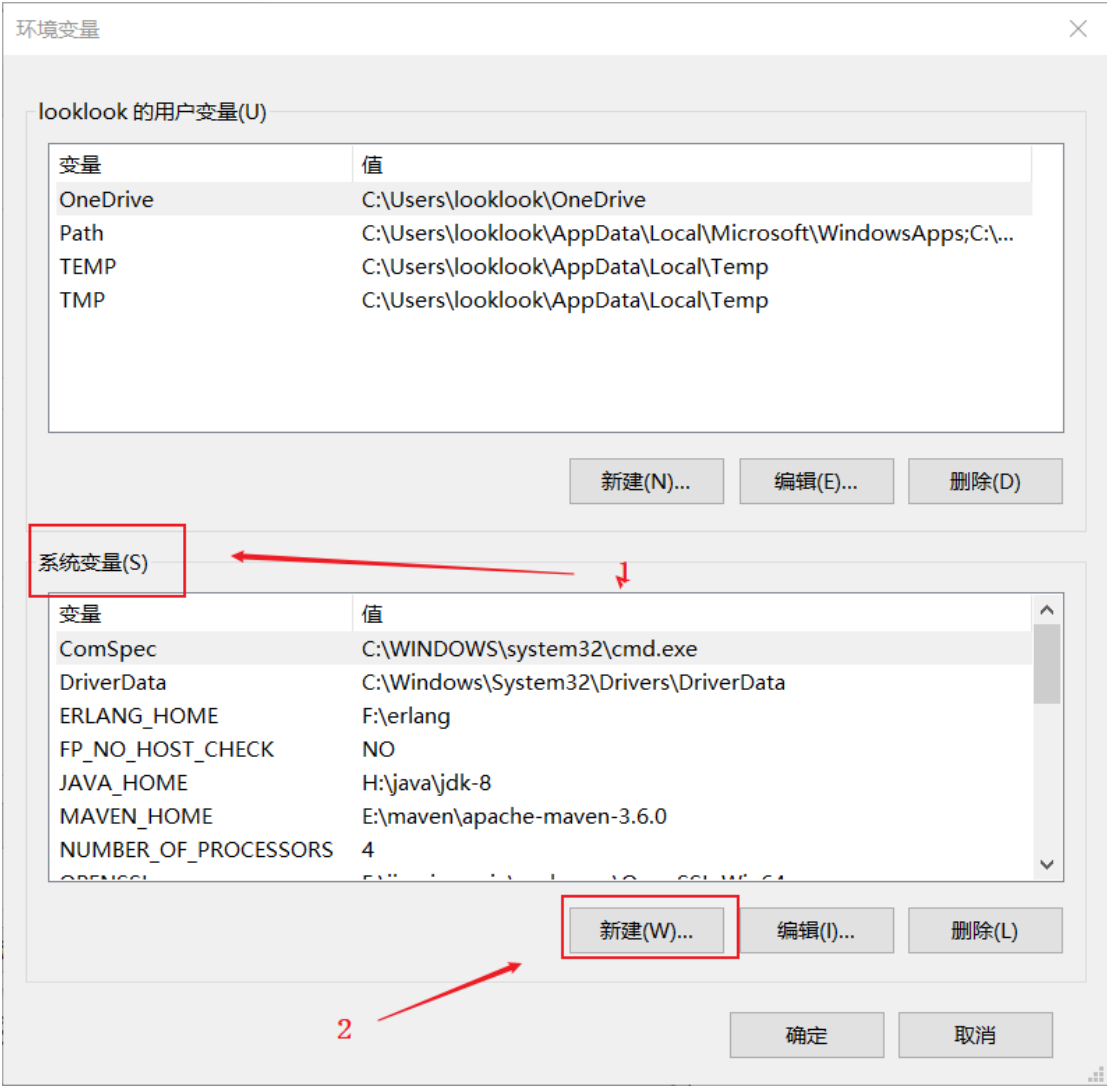
计算机（或我的电脑），右击鼠标，属性



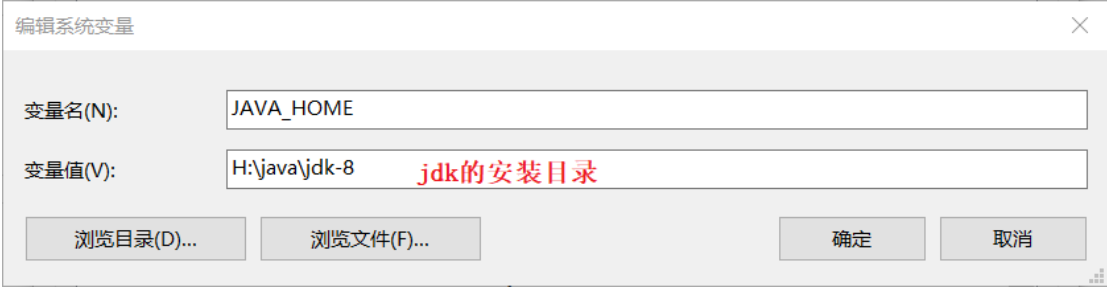
点击 高级系统设置， 高级 标签



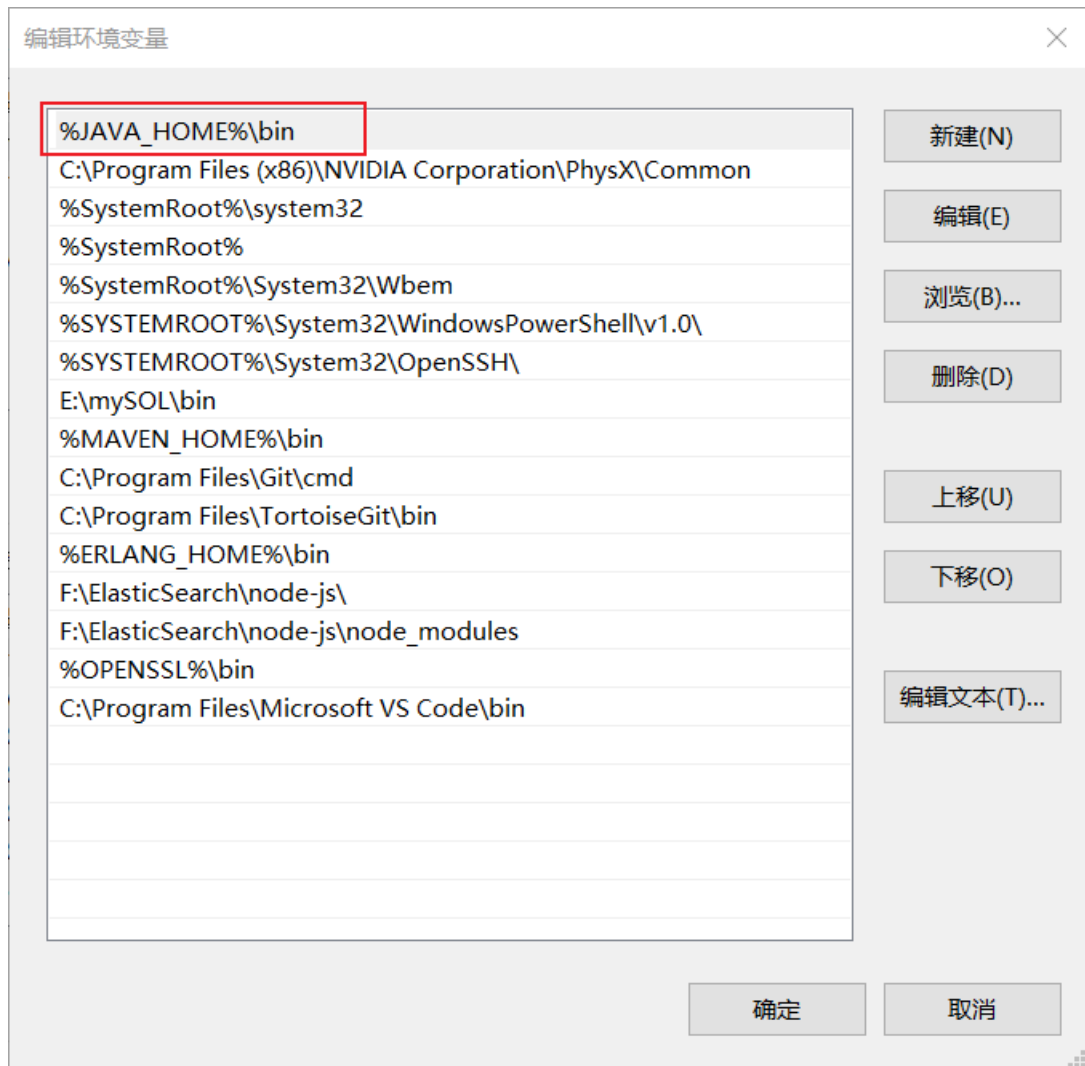
系统变量，新建



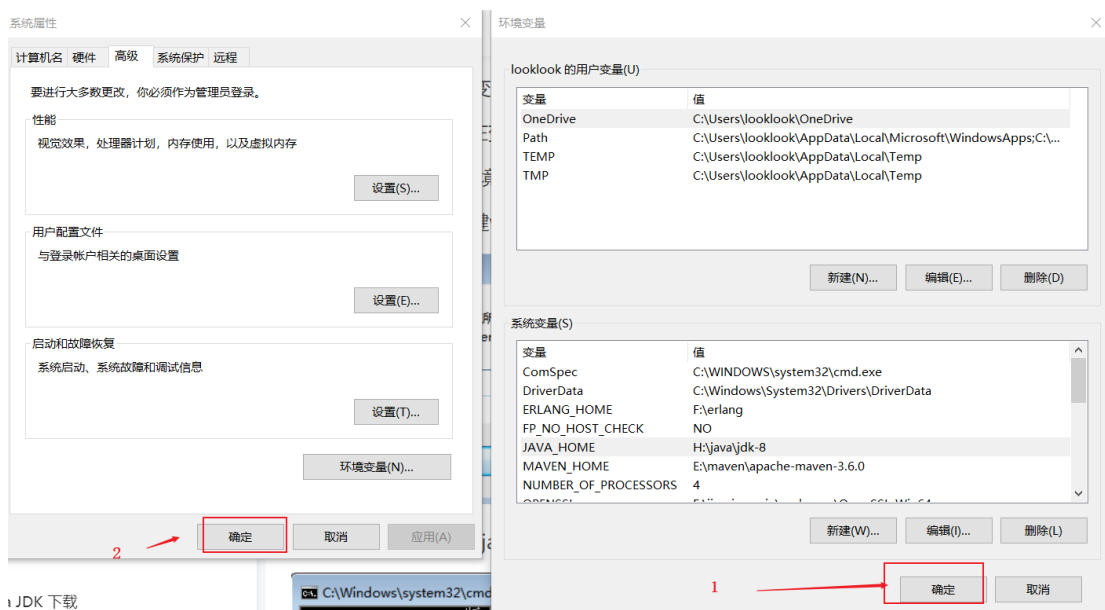
输入如下的值

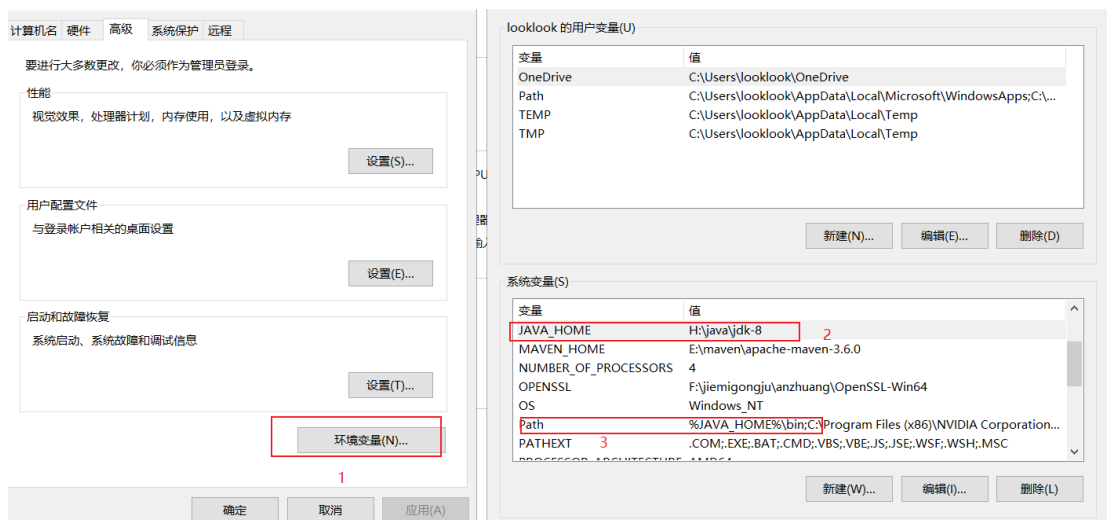


找到 Path 变量，点击 编辑 按钮，新建一个%JAVA_HOME%\bin

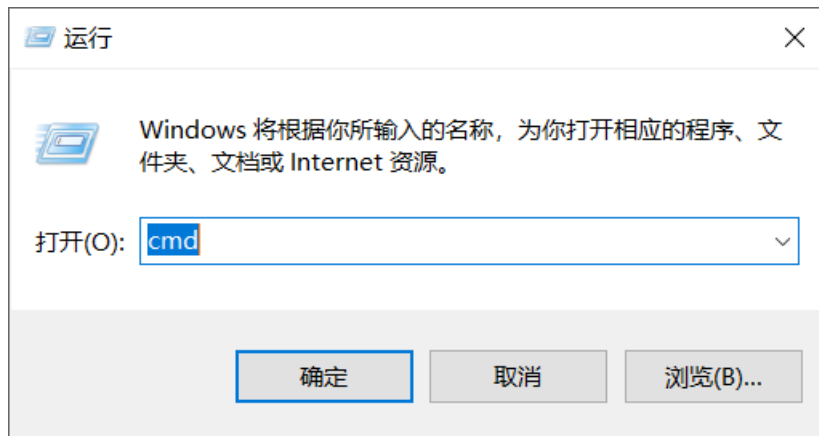


点击确定，环境变量配置完毕。





打开运行（快捷键 **win+R**），输入 **cmd**，回车



在命令行中输入 **java -version** 回车，出现下图，表示环境配置成功

```
Microsoft Windows [版本 10.0.19041.450]
(c) 2020 Microsoft Corporation. 保留所有权利。

C:\Users\looklook>java -version
java version "1.8.0_60"
Java(TM) SE Runtime Environment (build 1.8.0_60-b27)
Java HotSpot(TM) 64-Bit Server VM (build 25.60-b23, mixed mode)

C:\Users\looklook>
```

1.5 数据库设置、建立

1.5.1 数据库安装

本平台支持的数据库: Mysql、SQL Server、Oracle、DB2 等
示例安装与配置: Mysql 推荐版本: 5.5.58 及以上

MySQL Community Downloads

- MySQL Yum Repository
- MySQL APT Repository
- MySQL SUSE Repository
- MySQL Community Server**
- MySQL Cluster
- MySQL Router
- MySQL Shell
- MySQL Workbench
- MySQL Installer for Windows
- MySQL for Excel
- MySQL for Visual Studio
- MySQL Notifier

- C API (libmysqlclient)
- Connector/C++
- Connector/J
- Connector/NET
- Connector/Node.js
- Connector/ODBC
- Connector/Python
- MySQL Native Driver for PHP
- MySQL Benchmark Tool
- Time zone description tables
- Download Archives

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选择版本及服务器的版本

General Availability (GA) ReleasesArchives

MySQL Community Server 5.7.31

Select Version:
5.7.31

版本

Looking for the latest GA version?

Select Operating System:
Microsoft Windows

安装的服务器版本

Select OS Version:
All

Recommended Download:

MySQL Installer
for Windows

All MySQL Products. For All Windows Platforms.
In One Package.

Starting with MySQL 5.6 the MySQL Installer package replaces the standalone MSI packages.

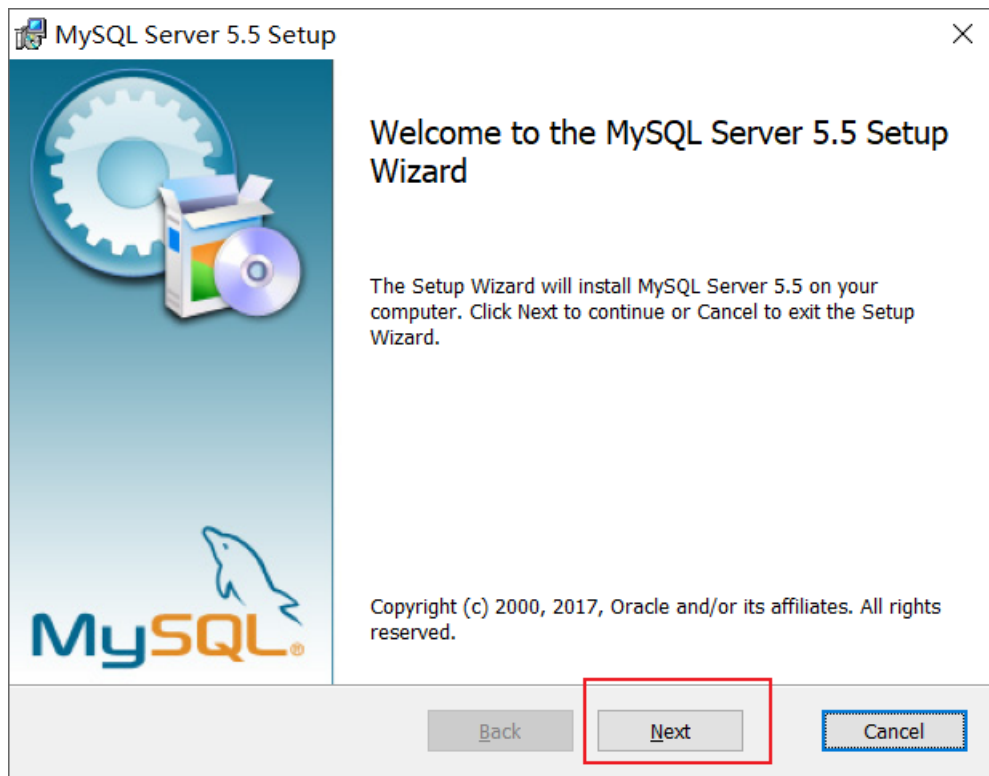
Windows (x86, 32 & 64-bit), MySQL Installer MSI

Go to Download Page >

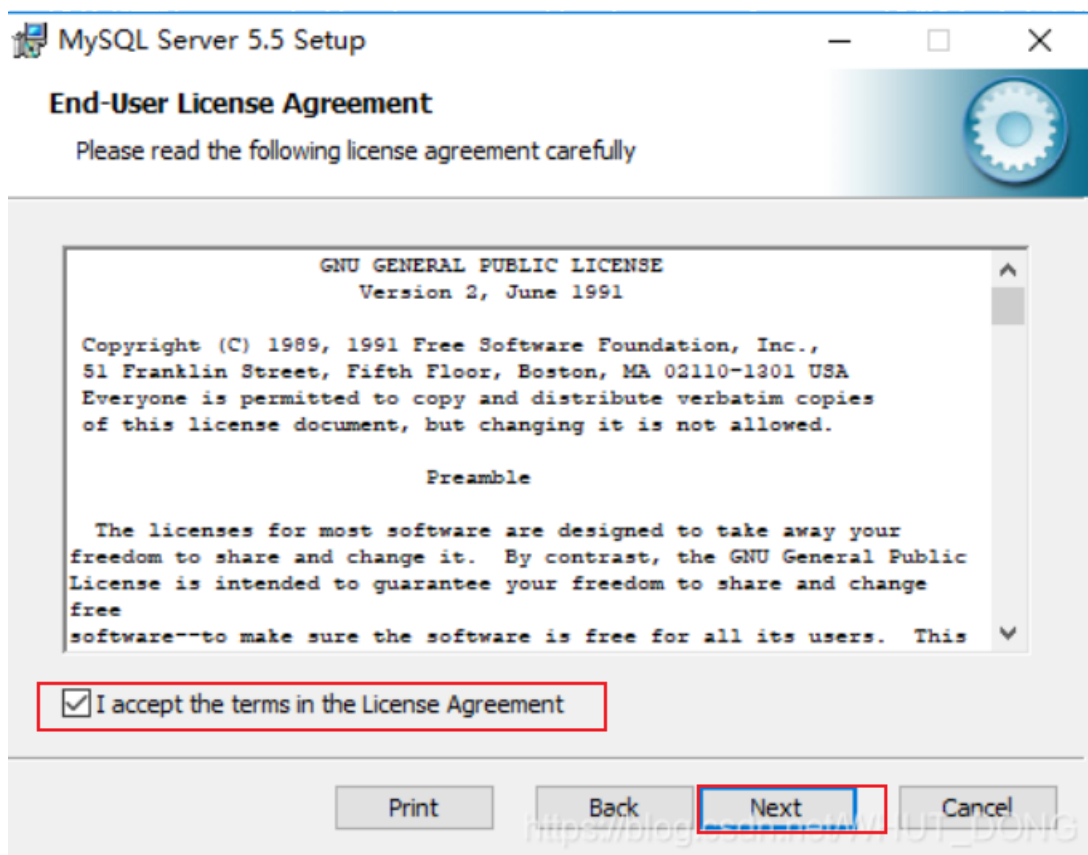
Other Downloads:

双击安装包 mysql-5.5.58-winx64.msi

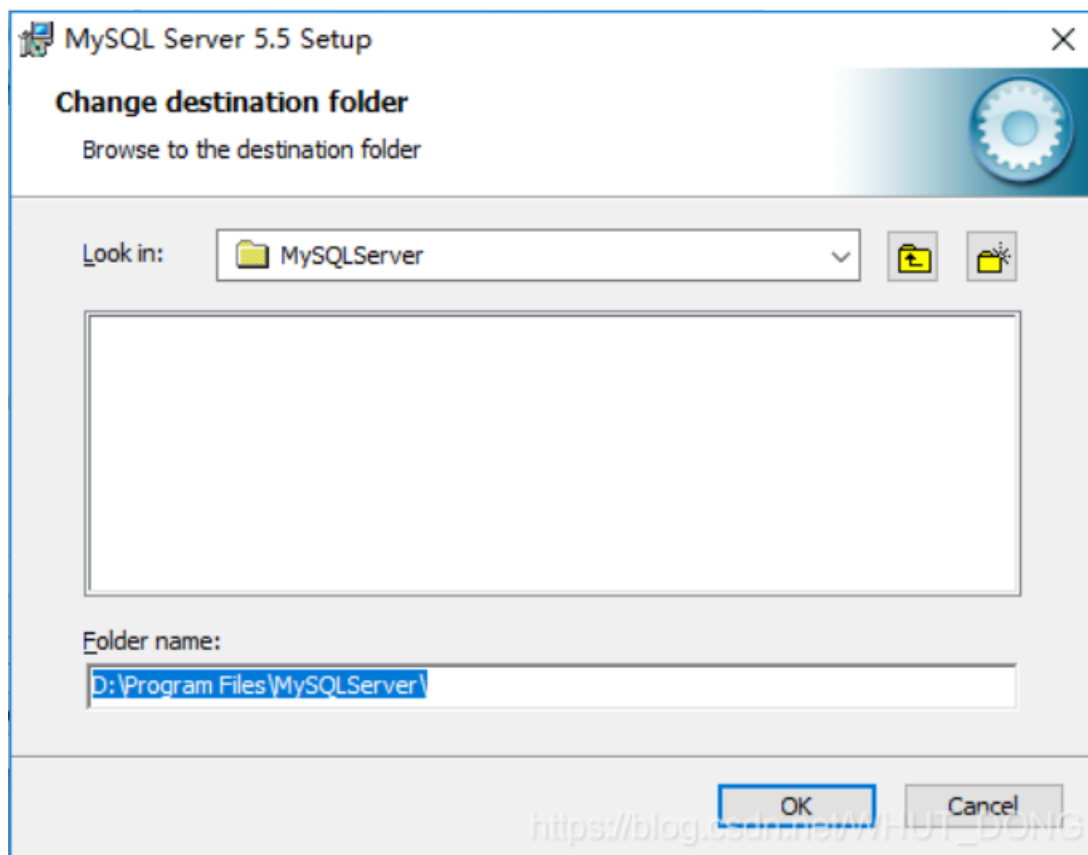
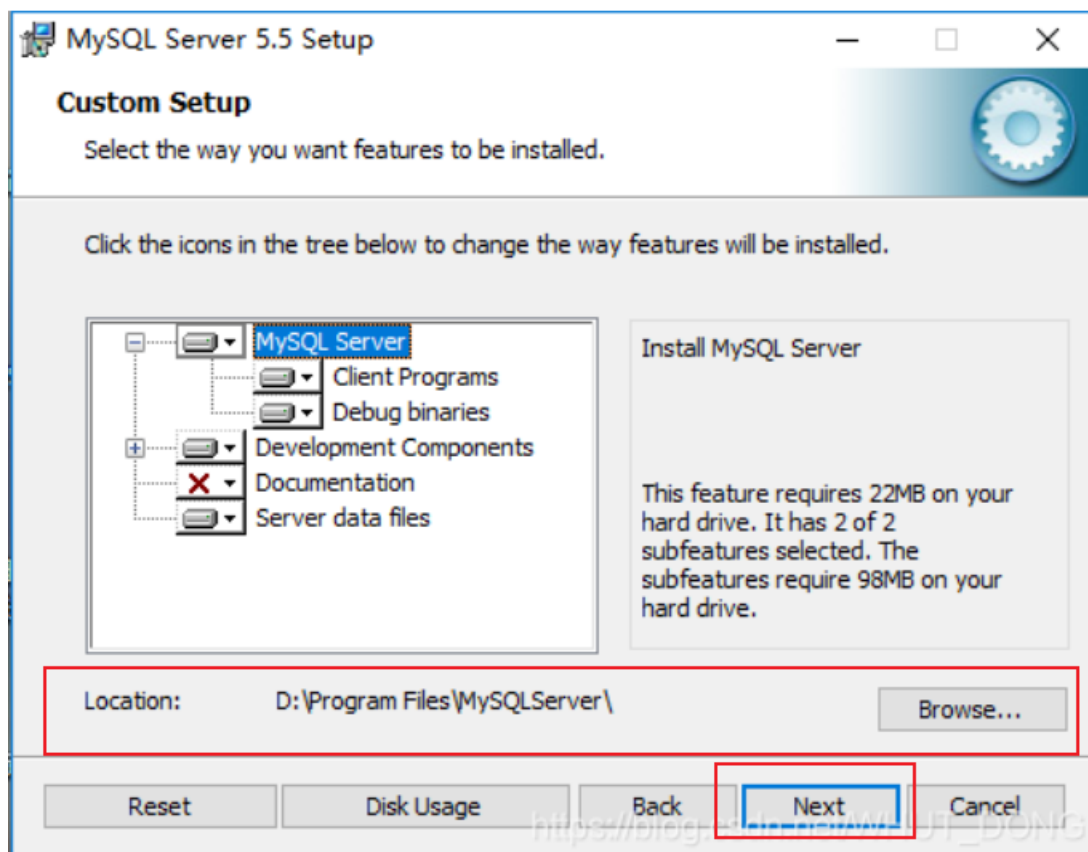
第 14 页 共 67



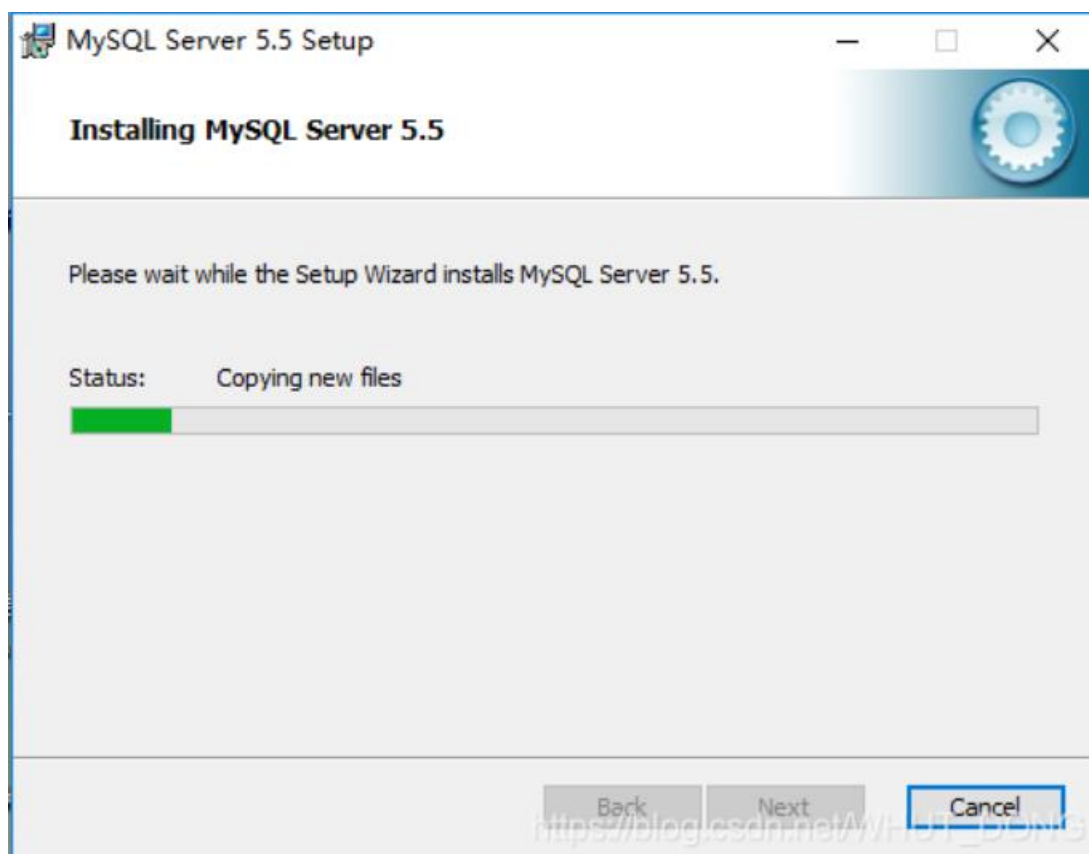
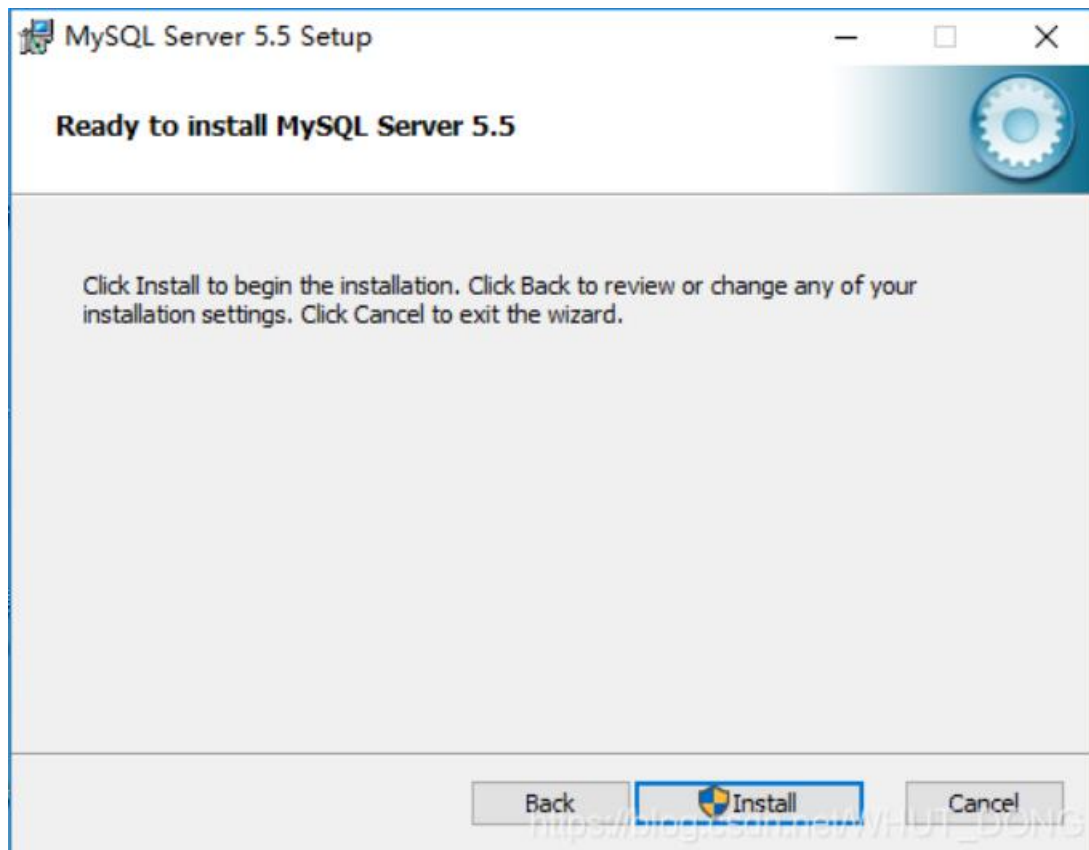
点击 Next,勾选 I accept the terms in the License Agreement,然后点击 Next

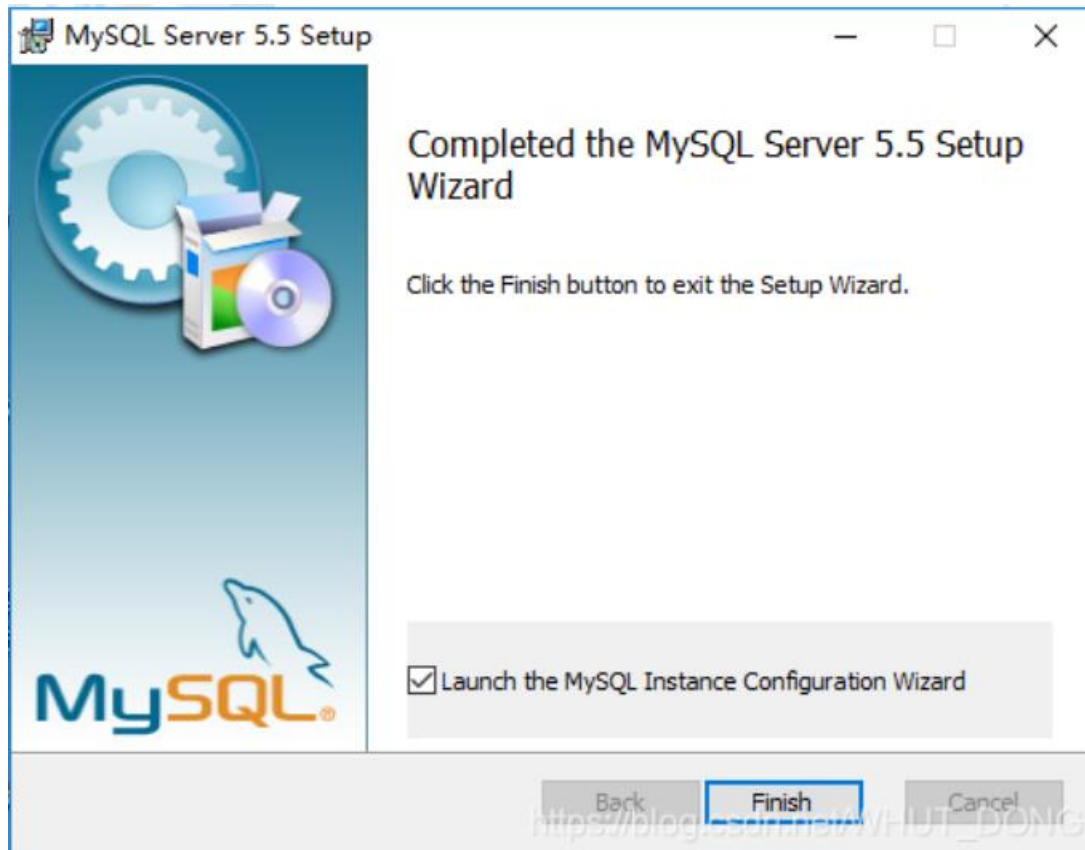


选择自定义 Custom, 点击 Browse 修改安装位置, 然后点击 Next

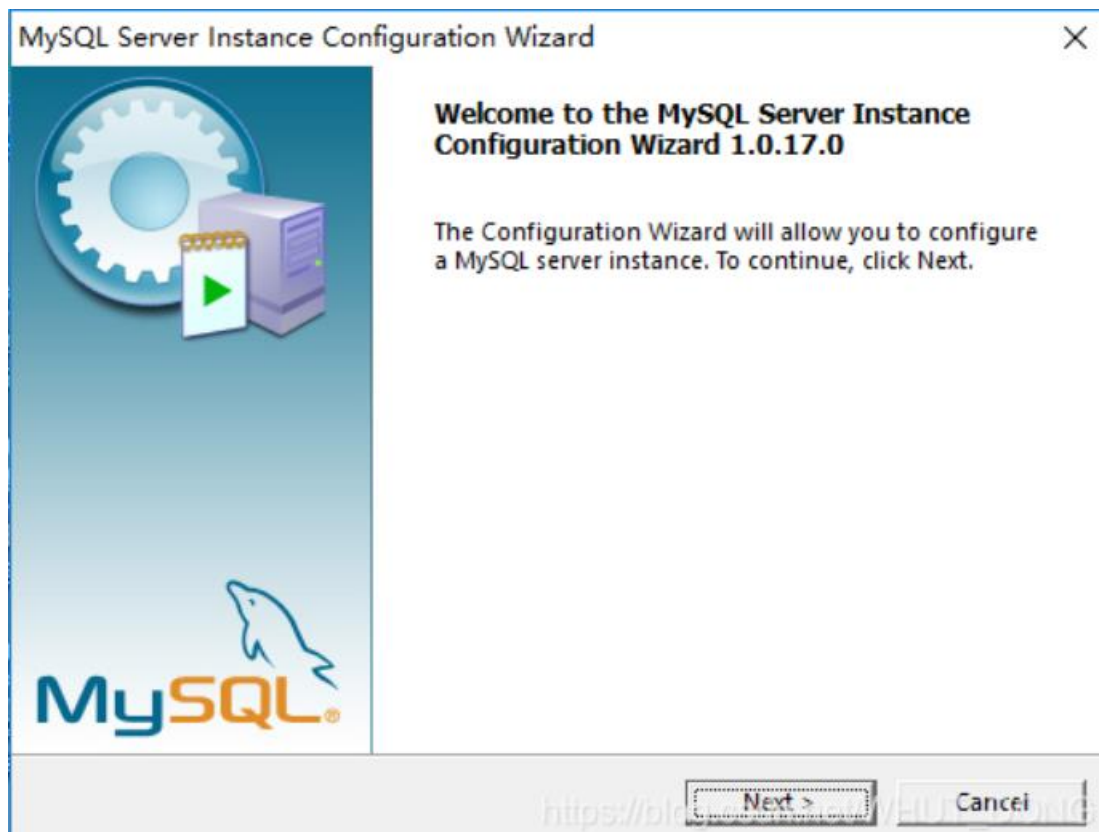


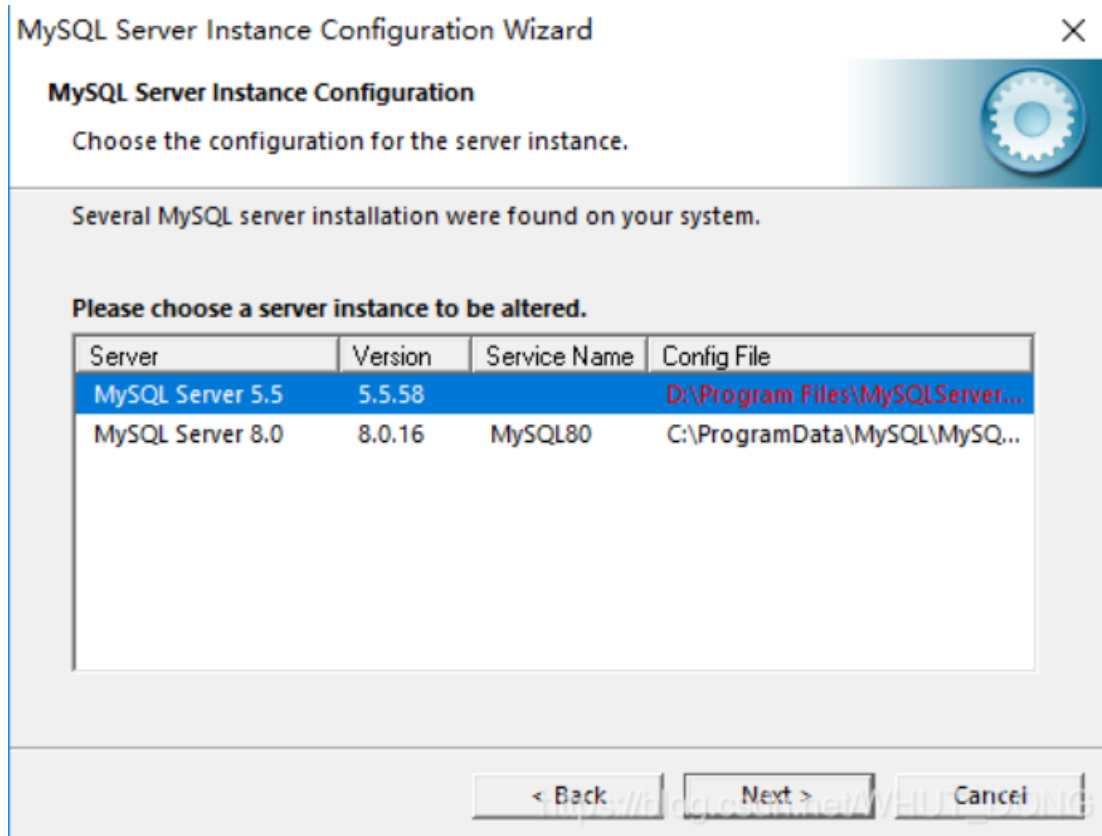
点击 Install 安装 MySQL,点击 Finish



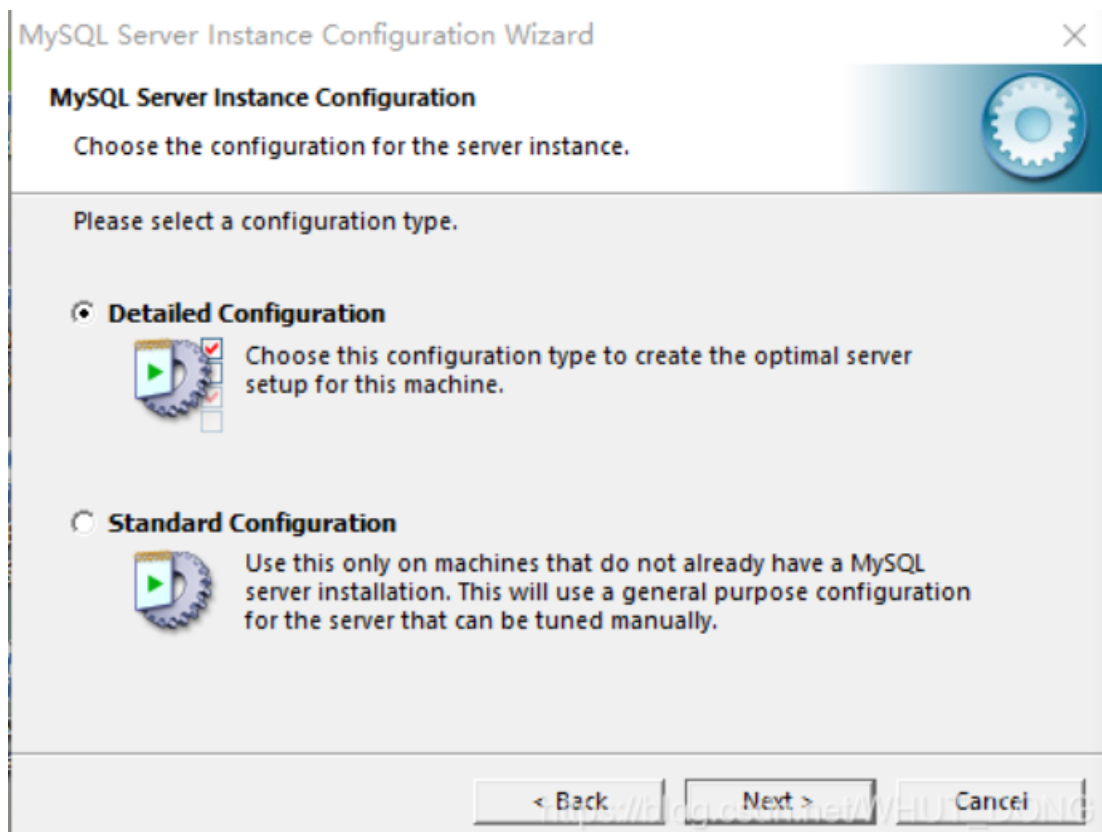


点击 Next,然后选择 MySQL Server 5.5 那一项,继续点击 Next

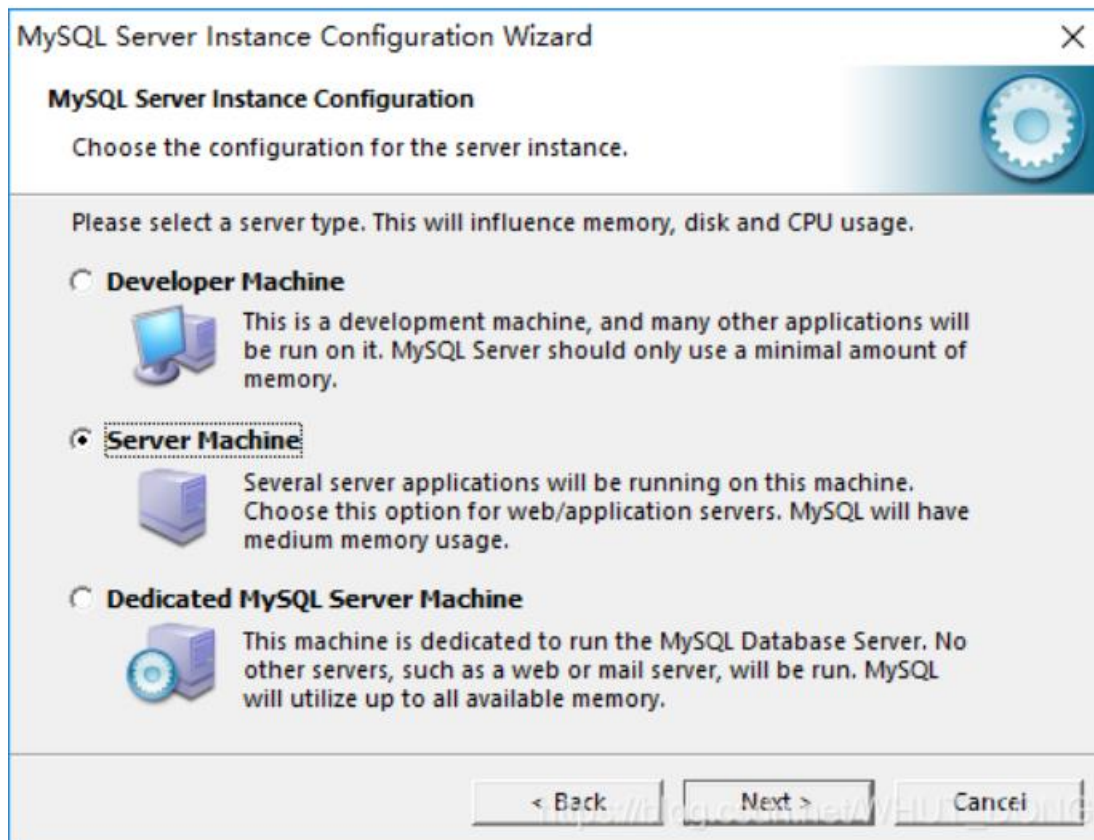




选择 Detailed Configuration, 点击 Next



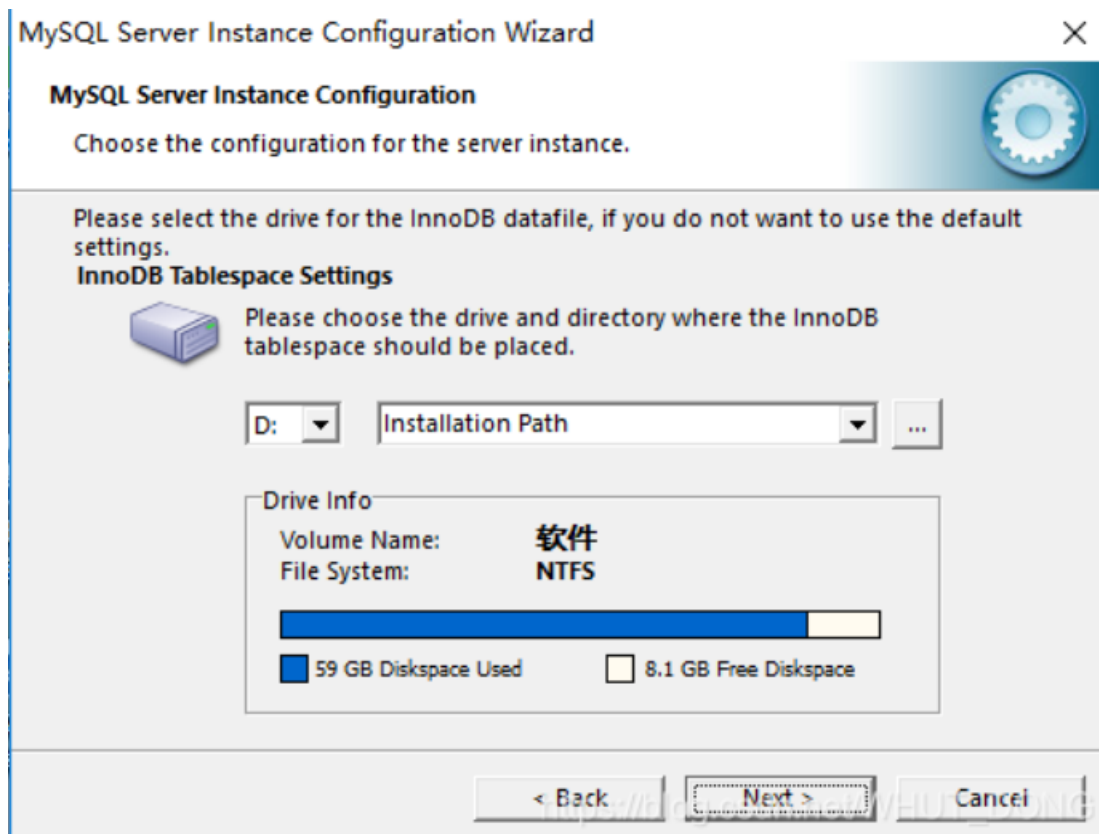
选择 Server Machine, 点击 Next



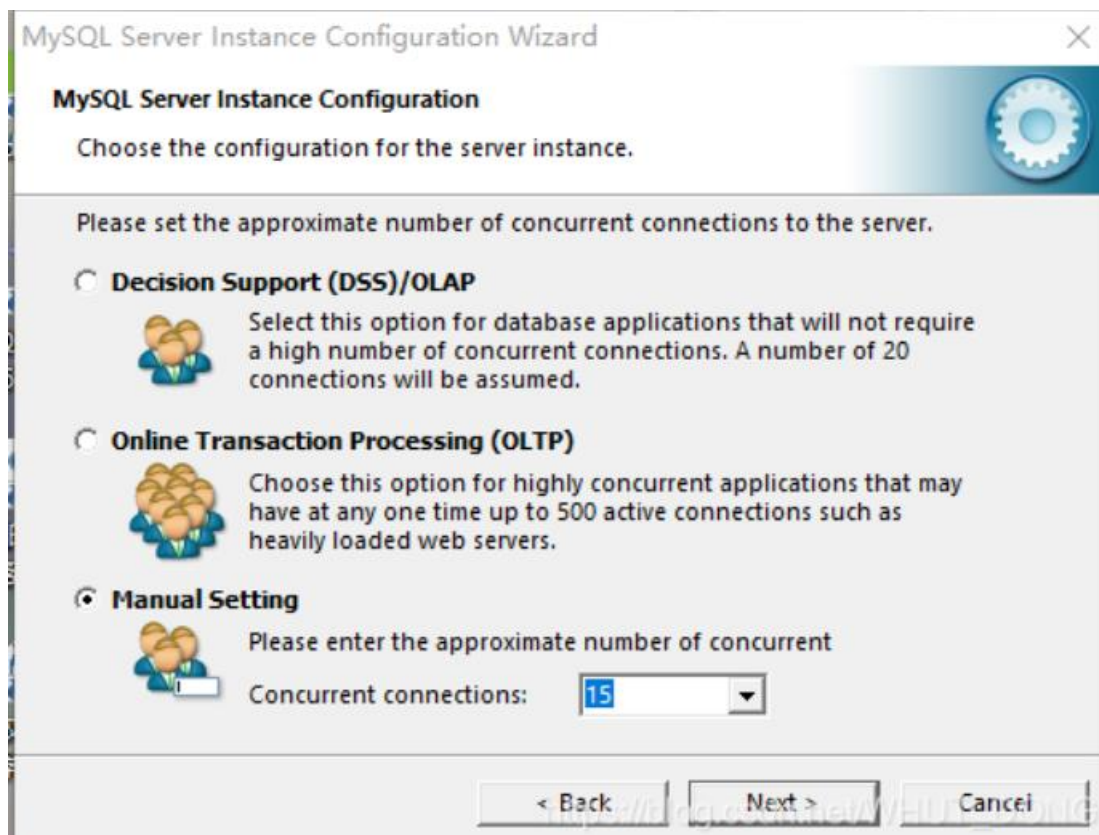
选择 Multifunctional Database, 点击 Next



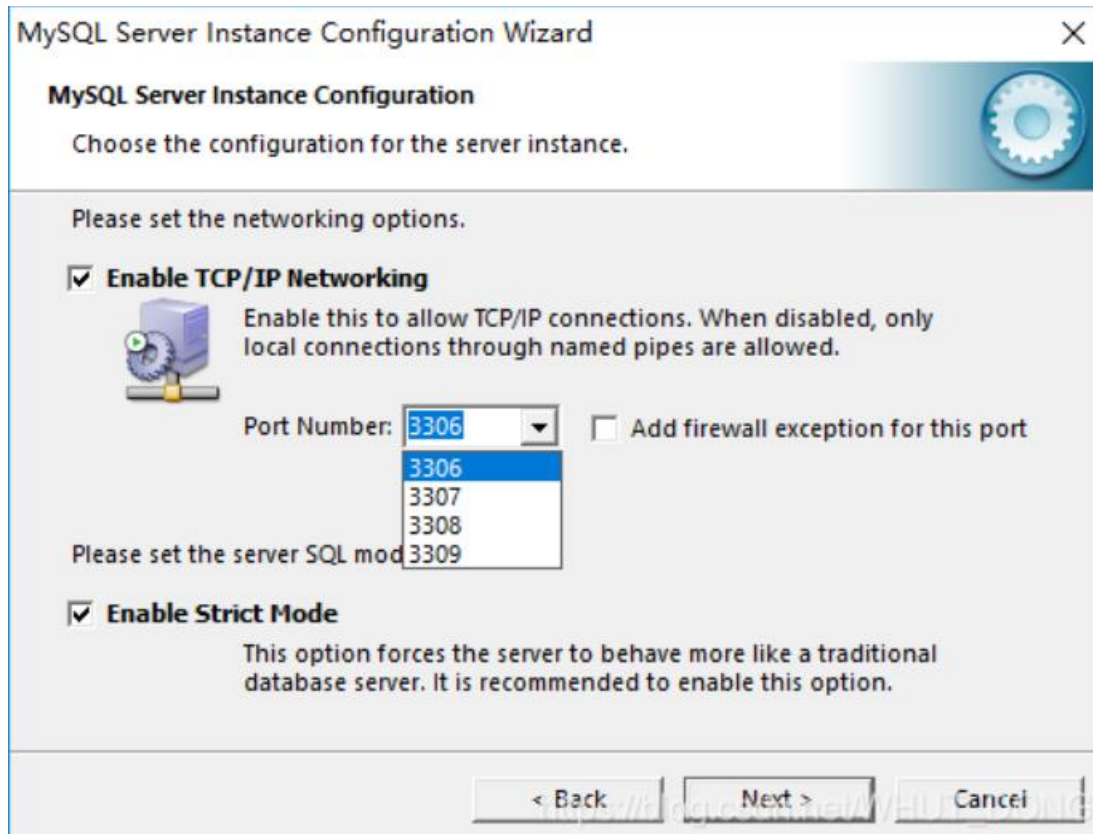
点击 Next



选择 Manual Setting, Concurrent connections 默认选择 15



端口默认选择 3306,如果该端口被其他数据库占用,可以选择其他端口,然后点击 Next



选择 Manual Selected Default Character Set / Collation, Character Set 选 utf8, 然后点击 Next



点击 Next



输入数据库密码，确认密码。点击 Next

MySQL Server Instance Configuration Wizard

MySQL Server Instance Configuration

Choose the configuration for the server instance.

Please set the security options.

☒ **Modify Security Settings**

 New root password: Enter the root password.

Confirm: Retype the password.

☐ Enable root access from remote machines

☐ Create An Anonymous Account

 This option will create an anonymous account on this server. Please note that this can lead to an insecure system.

< Back Next > Cancel

点击 Execute

MySQL Server Instance Configuration Wizard

MySQL Server Instance Configuration

Choose the configuration for the server instance.

Ready to execute ...

☐ Prepare configuration

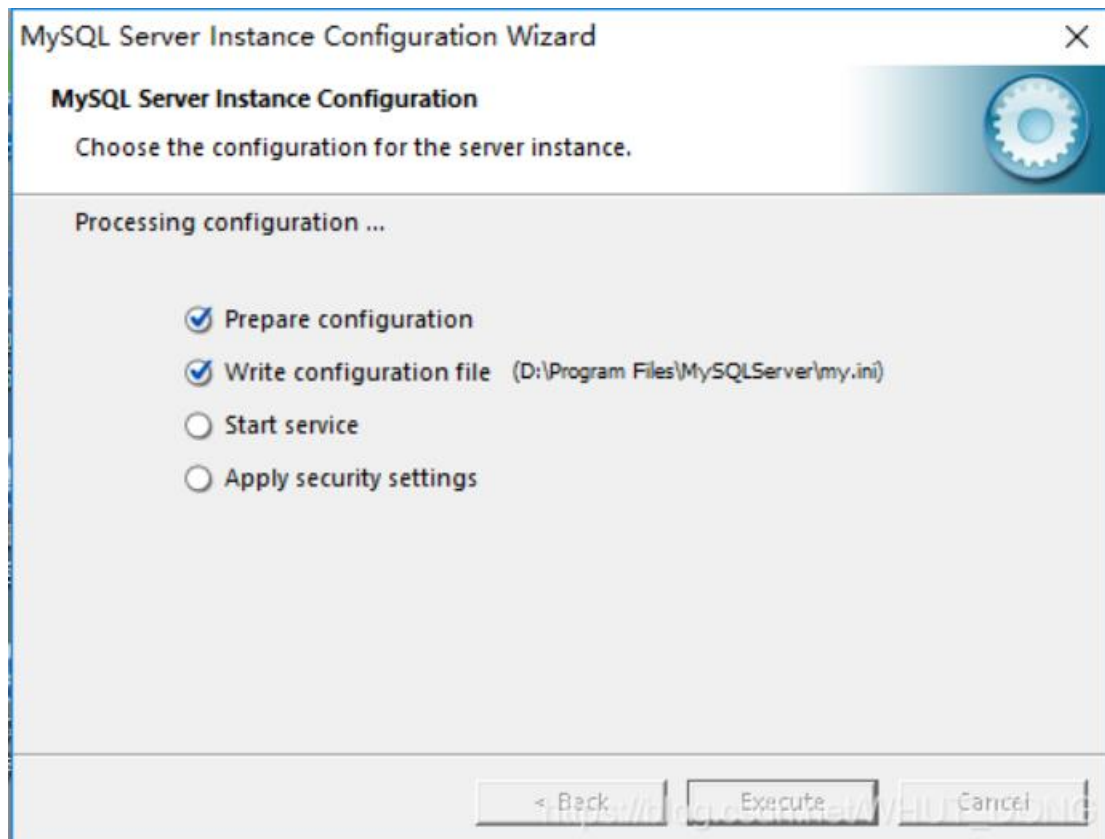
☐ Write configuration file

☐ Start service

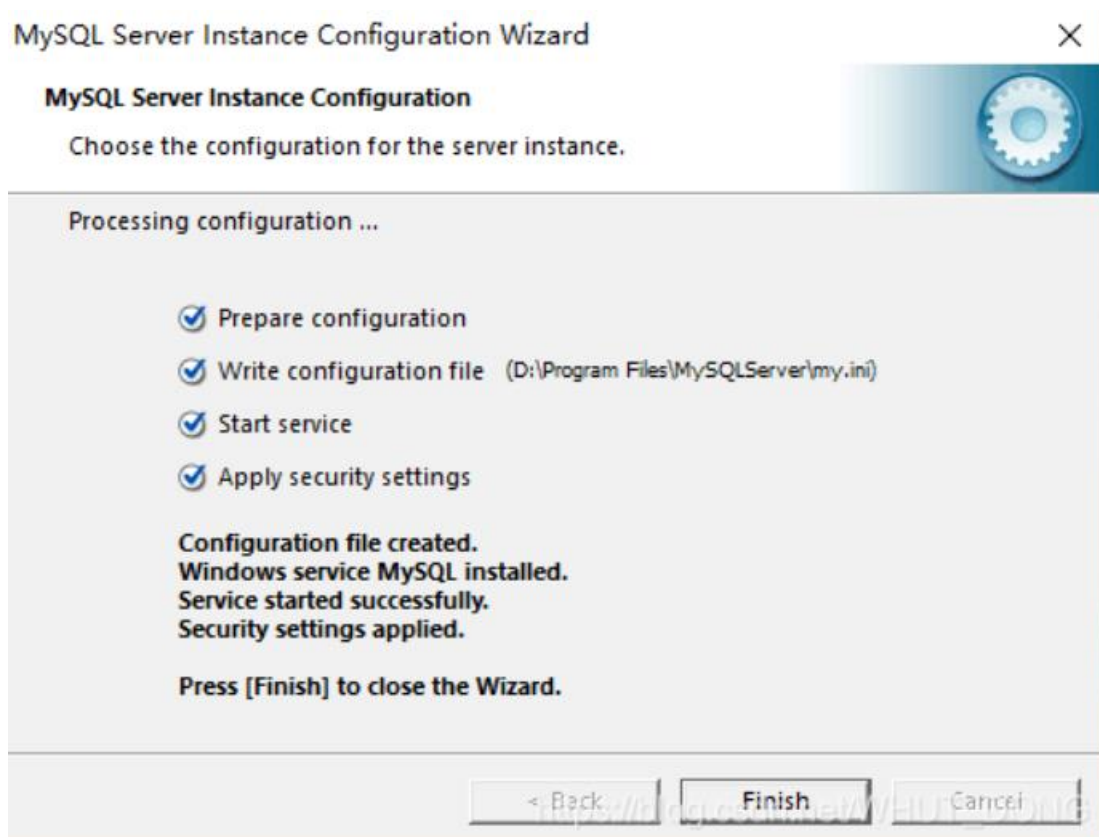
☐ Apply security settings

Please press [Execute] to start the configuration.

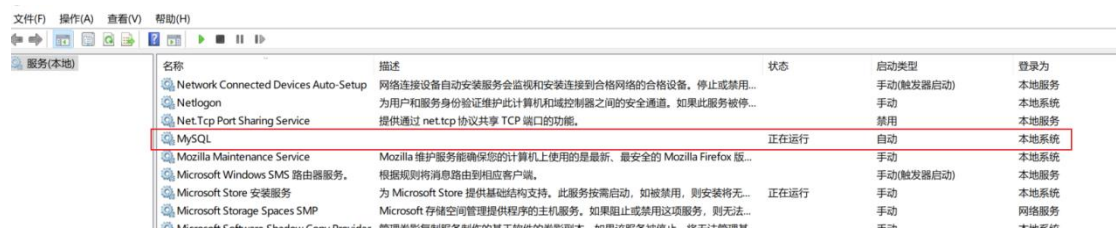
< Back Execute Cancel



点击 Finish,即安装成功



安装完毕,在服务中能查看到 mysql 处于启动状态



1.5.2 数据库字符集设置

SQL Server 2012 排序规则：实例和数据库均需要设置为 Chinese_PRC_CI_AS。

SQL Server 2016 排序规则：实例和数据库均需要设置为 Chinese_PRC_CI_AS。

ORACLE 11.2.0.4.0 字符集：需要设置数据库字符集为 ZHS16GBK。

ORACLE 12.1.0.1.0 字符集：需要设置数据库字符集为 ZHS16GBK。

DM7 字符集：需要设置数据库字符集为 GB18030。

1.5.3 建立标准数据库结构及用户

系统支持 SQL Server 2012、SQL Server 2014、SQL Server 2016、ORACLE 11gR2、ORACLE 12c、DM7、GaussDB 数据库。在使用不同的数据库时，需要按要求建立相关表空间或文件组，才能正常完成 PML cloud 管理软件安装。

在 SQL Server 中创建数据库、文件组及 PMLcloud 数据库用户：
PMLcloud 在使用 SQL Server 数据库时要求：建立 NNC_DATA01、NNC_DATA02、NNC_DATA03、NNC_INDEX01、NNC_INDEX02、NNC_INDEX03 六个文件组,对六个文件组的数据文件名称、位置、个数没有限制。但要保证每个文件组中都有数据文件。在具体使用中需要根据实际情况修改数据文件存储的位置和大小，达到磁盘最大读写效率。下列脚本为例：创建 PMLcloud 产品的数据库为 PMLCLOUD。

-- 创建数据库

USE master;

go

IF DB_ID (N'PMLCLOUD') IS NOT NULL

DROP DATABASE [PMLCLOUD];

go

CREATE DATABASE [PMLCLOUD]

go

ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_DATA01]

go

ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_DATA02]

go

ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_DATA03]

go

```

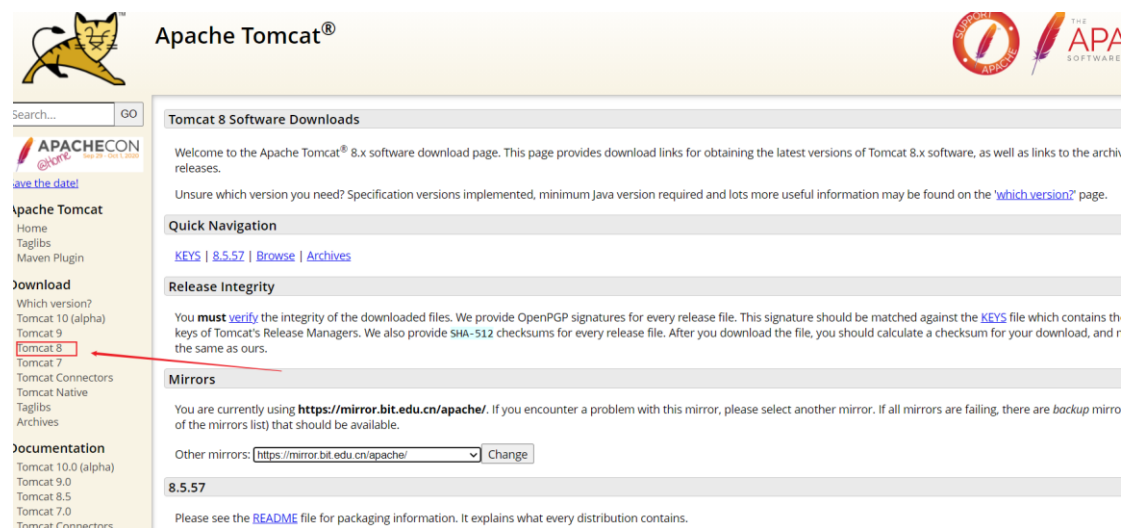
ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_INDEX01]
go
ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_INDEX02]
go
ALTER DATABASE [PMLCLOUD] ADD FILEGROUP [NNC_INDEX03]
go
ALTER DATABASE [PMLCLOUD] ADD FILE(NAME = N'nnc_data01', FILENAME =
N'D:\Microsoft SQL Server\MSSQL$SQL1\data\nnc_data01_Data.NDF' , SIZE = 500,
FILEGROWTH = 200) TO FILEGROUP [NNC_DATA01]
go
ALTER DATABASE [PMLCLOUD] ADD FILE(NAME = N'nnc_data02', FILENAME =
N'D:\Microsoft SQL Server\MSSQL$SQL1\data\nnc_data02_Data.NDF' , SIZE = 500,
FILEGROWTH = 200) TO FILEGROUP [NNC_DATA02]
go
ALTER DATABASE [PMLCLOUD] ADD FILE(NAME = N'nnc_data03', FILENAME =
N'D:\Microsoft SQL Server\MSSQL$SQL1\data\nnc_data03_Data.NDF' , SIZE = 500,
FILEGROWTH = 200) TO FILEGROUP [NNC_DATA03]
go
ALTER DATABASE [PMLCLOUD] ADD FILE(NAME = N'nnc_index01', FILENAME =
N'D:\Microsoft SQL Server\MSSQL$SQL1\data\nnc_index01_Data.NDF' , SIZE = 200,
FILEGROWTH = 100) TO FILEGROUP [NNC_INDEX01]

```

1.6 应用服务安装

本平台支持的 web 服务器：Tomcat、Jboss、WebSphere 等

示例 web 服务器的安装与部署：Tomcat 推荐版本: 8.0.33 及以上



The screenshot shows the Apache Tomcat 8 Software Downloads page. The sidebar on the left contains a search bar, the Apache Tomcat logo, and a list of navigation links: Home, Taglibs, Maven Plugin, Download, Which version?, Tomcat 10 (alpha), Tomcat 9, Tomcat 8 (highlighted with a red arrow), Tomcat 7, Tomcat Connectors, Tomcat Native, Taglibs, Archives, and Documentation. The main content area is titled 'Tomcat 8 Software Downloads' and includes a welcome message, quick navigation links (KEYS, 8.5.57, Browse, Archives), release integrity information, and a list of mirrors. A red arrow points to the 'Tomcat 8' link in the sidebar.

选择 zip(pgp,sha2,sha512)进行下载，下载 zip 的好处就是不用安装，直接下载解压就可以使用了。

search...GO


ave the date!

Apache Tomcat

Home
Taglibs
Maven Plugin

download

Which version?
Tomcat 10 (alpha)
Tomcat 9
Tomcat 8
Tomcat 7
Tomcat Connectors
Tomcat Native
Taglibs
Archives

documentation

Tomcat 10.0 (alpha)
Tomcat 9.0
Tomcat 8.5
Tomcat 7.0
Tomcat Connectors
Tomcat Native
Wiki
Migration Guide
Presentations

Tomcat 8 Software Downloads

Welcome to the Apache Tomcat® 8.x software download page. This page provides download links for obtaining the latest versions of Tomcat 8.x software, as well as link releases.
Unsure which version you need? Specification versions implemented, minimum Java version required and lots more useful information may be found on the 'which ver

Quick Navigation

KEYS | 8.5.57 | Browse | Archives | 选择其他版本

Release Integrity

You must [verify](#) the integrity of the downloaded files. We provide OpenPGP signatures for every release file. This signature should be matched against the [KEYS](#) file which keys of Tomcat's Release Managers. We also provide [SHA-512](#) checksums for every release file. After you download the file, you should calculate a checksum for your download the same as ours.

Mirrors

You are currently using <https://mirror.bit.edu.cn/apache/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are other mirrors (of the mirrors list) that should be available.
Other mirrors:

8.5.57

Please see the [README](#) file for packaging information. It explains what every distribution contains.

Binary Distributions

- Core:
 - [zip \(pgp, sha512\)](#)

 [Parent Directory](#)

	v8.0.0-RC1/	2013-08-05 17:51	-
	v8.0.0-RC10/	2013-12-26 23:48	-
	v8.0.0-RC3/	2013-09-23 20:46	-
	v8.0.0-RC5/	2013-10-20 14:12	-
	v8.0.1/	2014-02-02 14:56	-
	v8.0.11/	2014-08-22 09:15	-
	v8.0.12/	2014-09-03 09:37	-
	v8.0.14/	2014-09-29 11:24	-
	v8.0.15/	2014-11-07 07:27	-
	v8.0.17/	2015-01-15 13:39	-
	v8.0.18/	2015-01-26 13:41	-
	v8.0.20/	2015-02-20 08:52	-
	v8.0.21/	2015-03-26 21:24	-
	v8.0.22/	2015-05-05 07:53	-
	v8.0.23/	2015-08-19 00:09	-
	v8.0.24/	2015-08-19 00:09	-
	v8.0.26/	2015-08-21 18:14	-
	v8.0.27/	2015-10-01 10:17	-
	v8.0.28/	2015-10-14 16:25	-
	v8.0.29/	2015-11-24 11:12	-
	v8.0.3/	2014-02-11 09:37	-
	v8.0.30/	2015-12-06 17:53	-
	v8.0.32/	2016-02-08 11:58	-
	v8.0.33/	2016-03-24 17:28	-
	v8.0.35/	2016-05-16 11:33	-
	v8.0.36/	2016-06-13 15:53	-

第 29 页 共 67

Index of /dist/tomcat/tomcat-8/v8.0.33

Name	Last modified	Size	Description
 Parent Directory		-	
 bin/	2016-03-24 17:29	-	
 src/	2016-03-24 17:28	-	
 KEYS	2016-03-18 20:54	34K	
 RELEASE-NOTES	2016-03-18 20:54	6.7K	

Apache Tomcat 8.0.33

Useful references:

- [Release notes](#), with important information about known issues
- [Changelog](#)

NOTE: The tar files in this distribution use GNU tar extensions, and must be untarred with a GNU compatible version of tar. The version of tar on Solaris 8 Tomcat 8.0 requires Java SE 7 or later. Read the [RELEASE-NOTES](#) and the [RUNNING.txt](#) file in the distribution for more details.

Packaging Details (or "What Should I Download?")

bin/

[apache-tomcat-\[version\].zip](#) or [.tar.gz](#)

Base distribution. These distributions do not include the Windows service wrapper nor the compiled APR/native library for Windows.

[apache-tomcat-\[version\].exe](#)

32-bit/64-bit Windows installer for Tomcat. Please note that while this distribution includes the vast majority of the base distribution, some of the commar distribution is intended for those users planning to launch Tomcat through the Windows shortcuts or services.

[apache-tomcat-\[version\]-windows-x86.zip](#)

32-bit Windows specific distribution that includes the Windows service wrapper and the compiled APR/native library for use with 32-bit JVMs on both 32 a

[apache-tomcat-\[version\]-windows-x64.zip](#)

	apache-tomcat-8.0.33.zip		
	apache-tomcat-8.0.33-fulldocs.tar.gz	2016-03-18 20:54	5.6M
	apache-tomcat-8.0.33-fulldocs.tar.gz.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33-fulldocs.tar.gz.md5	2016-03-18 20:54	70
	apache-tomcat-8.0.33-fulldocs.tar.gz.sha1	2016-03-18 20:54	78
	apache-tomcat-8.0.33-windows-x64.zip	2016-03-18 20:54	10M
	apache-tomcat-8.0.33-windows-x64.zip.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33-windows-x64.zip.md5	2016-03-18 20:54	70
	apache-tomcat-8.0.33-windows-x64.zip.sha1	2016-03-18 20:54	78
	apache-tomcat-8.0.33-windows-x86.zip	2016-03-18 20:54	10M
	apache-tomcat-8.0.33-windows-x86.zip.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33-windows-x86.zip.md5	2016-03-18 20:54	70
	apache-tomcat-8.0.33-windows-x86.zip.sha1	2016-03-18 20:54	78
	apache-tomcat-8.0.33.exe	2016-03-18 20:54	9.2M
	apache-tomcat-8.0.33.exe.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33.exe.md5	2016-03-18 20:54	58
	apache-tomcat-8.0.33.exe.sha1	2016-03-18 20:54	66
	apache-tomcat-8.0.33.tar.gz	2016-03-18 20:54	8.8M
	apache-tomcat-8.0.33.tar.gz.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33.tar.gz.md5	2016-03-18 20:54	61
	apache-tomcat-8.0.33.tar.gz.sha1	2016-03-18 20:54	69
	apache-tomcat-8.0.33.zip	2016-03-18 20:54	9.4M
	apache-tomcat-8.0.33.zip.asc	2016-03-18 20:54	836
	apache-tomcat-8.0.33.zip.md5	2016-03-18 20:54	58
	apache-tomcat-8.0.33.zip.sha1	2016-03-18 20:54	66

Apache Tomcat 8.0.33

下载完成之后，解压到您想要放置的位置，进入 bin 目录

> 此电脑 > 视频 (A:) > apache-tomcat-8.5.24 > bin

名称	修改日期	类型	大小
catalina.sh	2019/7/7 18:34	Shell Script	23 KB
catalina-tasks.xml	2019/7/7 18:34	XML 文档	2 KB
commons-daemon.jar	2019/7/7 18:34	Executable Jar File	25 KB
commons-daemon-native.tar.gz	2019/7/7 18:34	WinRAR 压缩文件	203 KB
configtest.bat	2019/7/7 18:34	Windows 批处理...	2 KB
configtest.sh	2019/7/7 18:34	Shell Script	2 KB
daemon.sh	2019/7/7 18:34	Shell Script	9 KB
digest.bat	2019/7/7 18:34	Windows 批处理...	3 KB
digest.sh	2019/7/7 18:34	Shell Script	2 KB
dubbo-governance.log	2020/9/3 9:47	文本文档	4,643 KB
hs_err_pid16664.log	2019/7/7 18:34	文本文档	31 KB
hs_err_pid17252.log	2019/7/7 18:34	文本文档	34 KB
hs_err_pid18940.log	2019/7/7 18:34	文本文档	9 KB
replay_pid16664.log	2019/7/7 18:34	文本文档	226 KB
replay_pid17252.log	2019/7/7 18:34	文本文档	374 KB
service.bat	2019/7/7 18:34	Windows 批处理...	8 KB
setclasspath.bat	2019/7/7 18:34	Windows 批处理...	4 KB
setclasspath.sh	2019/7/7 18:34	Shell Script	4 KB
shutdown.bat	2019/7/7 18:34	Windows 批处理...	2 KB
shutdown.sh	2019/7/7 18:34	Shell Script	2 KB
startup.bat	2019/7/7 18:34	Windows 批处理...	2 KB
startup.sh	2019/7/7 18:34	Shell Script	2 KB
tcnative-1.dll	2019/7/7 18:34	应用程序扩展	2,077 KB
tomcat8.exe	2019/7/7 18:34	应用程序	112 KB
tomcat8w.exe	2019/7/7 18:34	应用程序	116 KB
tomcat-juli.jar	2019/7/7 18:34	Executable Jar File	48 KB

当出现如图的信息,则启动成功

```
er.lifecycleEvent Loaded APR based Apache Tomcat Native library [1.2.16] using A
PR version [1.6.3].
03-Sep-2020 09:57:28.705 信息 [main] org.apache.catalina.core.AprLifecycleListen
er.lifecycleEvent APR capabilities: IPv6 [true], sendfile [true], accept filters
[false], random [true].
03-Sep-2020 09:57:28.706 信息 [main] org.apache.catalina.core.AprLifecycleListen
er.lifecycleEvent APR/OpenSSL configuration: useAprConnector [false], useOpenSSL
[true]
03-Sep-2020 09:57:29.652 信息 [main] org.apache.catalina.core.AprLifecycleListen
er.initializeSSL OpenSSL successfully initialized [OpenSSL 1.0.2m 2 Nov 2017]
03-Sep-2020 09:57:29.895 信息 [main] org.apache.coyote.AbstractProtocol.init Ini
tializing ProtocolHandler ["http-nio-8080"]
03-Sep-2020 09:57:30.025 信息 [main] org.apache.tomcat.util.net.NioSelectorPool.
getSharedSelector Using a shared selector for servlet write/read
03-Sep-2020 09:57:30.040 信息 [main] org.apache.catalina.startup.Catalina.load I
nitialization processed in 2123 ms
03-Sep-2020 09:57:30.096 信息 [main] org.apache.catalina.core.StandardService.st
artInternal Starting service [Catalina]
03-Sep-2020 09:57:30.097 信息 [main] org.apache.catalina.core.StandardEngine.sta
rtInternal Starting Servlet Engine: Apache Tomcat/8.5.24
03-Sep-2020 09:57:30.113 信息 [main] org.apache.coyote.AbstractProtocol.start St
arting ProtocolHandler ["http-nio-8080"]
03-Sep-2020 09:57:30.131 信息 [main] org.apache.catalina.startup.Catalina.start
Server startup in 90 ms
```

1.7 缓存服务器配置

Redis 推荐版本: 2.8.9 及以上

on 20 May 2014	2.6.14_msopentech	8d76962 zip tar.gz
on 20 May 2014	msopentech_2.8.4	8d76962 zip tar.gz
on 5 May 2014	3.0.0-beta3	b7a6a6c zip tar.gz
on 22 Apr 2014	2.8.9	2637570 zip tar.gz
on 25 Mar 2014	2.8.8	d2e59c2 zip tar.gz
on 11 Mar 2014	3.0.0-beta2	e0ef510 zip tar.gz
on 5 Mar 2014	2.8.7	464fef9 zip tar.gz
on 13 Feb 2014	2.8.6	1d4d9e7 zip tar.gz
	3.0.0-beta1	

把 zip 文件进行解压，进入文件夹，输入 cmd

此电脑 > ranjian (E:) > redis > windows-64 > redis-2.8.9 cmd

名称	修改日期	类型	大小
dump.rdb	2019/8/27 0:09	RDB 文件	1 KB
redis.windows.conf	2020/9/10 16:24	CONF 文件	28 KB
redis-benchmark.exe	2014/6/16 15:55	应用程序	368 KB
redis-check-aof.exe	2014/6/16 15:55	应用程序	284 KB
redis-check-dump.exe	2014/6/16 15:55	应用程序	295 KB
redis-cli.exe	2014/6/16 15:55	应用程序	404 KB
redis-server.exe	2014/6/16 15:55	应用程序	1,120 KB
stdout	2018/7/10 19:23	文件	0 KB

进入命令行，输入命令 `redis-server.exe redis.windows.conf`

```
C:\Windows\System32\cmd.exe
Microsoft Windows [版本 10.0.19041.508]
(c) 2020 Microsoft Corporation. 保留所有权利。
E:\redis\windows-64\redis-2.8.9>
```

如出现下图的信息则启动成功

```
E:\redis\windows-64\redis-2.8.9>redis-server.exe redis.windows.conf

Redis 2.8.9 (00000000/0) 64 bit
Running in stand alone mode
Port: 6379
PID: 29176

http://redis.io

[29176] 03 Sep 10:10:41.357 # Server started, Redis version 2.8.9
[29176] 03 Sep 10:10:41.358 * DB loaded from disk: 0.000 seconds
[29176] 03 Sep 10:10:41.359 * The server is now ready to accept connections on port 6379
```

1.8 搜索引擎部署配置

ES 推荐版本: 5.6.8 及以上, ES 运行环境依赖于 java, 所以必须先安装配置 java

Download Elasticsearch

Want it hosted? Deploy on Elastic Cloud. [Get Started »](#)

Version: 7.9.1

Release date: September 04, 2020

License: [Elastic License](#)

Downloads: [WINDOWS](#) [sha](#) [asc](#) [MACOS](#) [sha](#) [asc](#)
[LINUX X86_64](#) [sha](#) [asc](#) [LINUX AARCH64](#) [sha](#) [asc](#)
[DEB X86_64](#) [sha](#) [asc](#) [DEB AARCH64](#) [sha](#) [asc](#)
[RPM X86_64](#) [sha](#) [asc](#) [RPM AARCH64](#) [sha](#) [asc](#)
[MSI \(BETA\)](#) [sha](#) [asc](#)

选择新需要的版本

Containers: Run with [Docker](#)

Notes: Running on Kubernetes? Try [Elastic Cloud on Kubernetes](#) or the Elasticsearch [Helm Chart](#).

This default distribution is governed by the Elastic License, and includes the [full set of free features](#).

View the detailed release notes [here](#).

Not the version you're looking for? View [past releases](#).

The pure Apache 2.0 licensed distribution is available [here](#).

The distribution that's not bundled with a JDK is available [here](#).

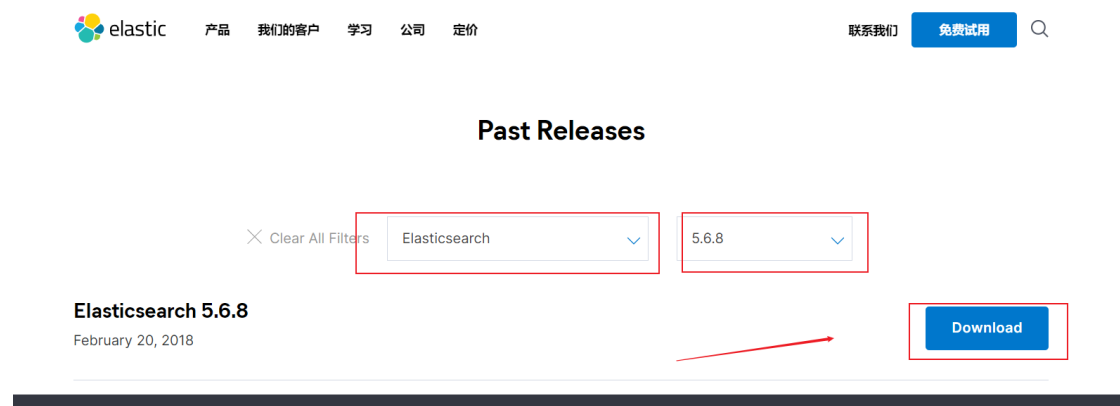
Information about third party dependencies and links to any source code we are obligated to provide are available on [this page](#).

Machine Learning is not yet enabled for aarch64 packages.

Installation steps

New around here? View our [getting started page](#) to get acquainted with the Elastic Stack.

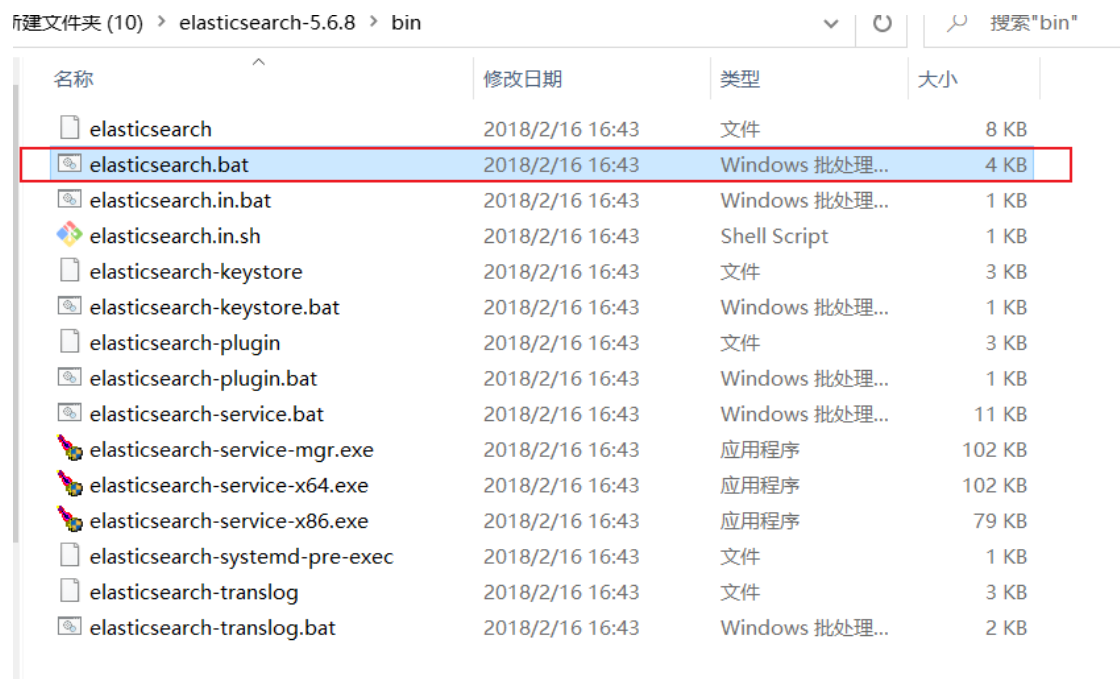
进行下载



下载 zip



下载完成进行解压，将 es 放置到你的你想要放置的位置,进入 bin 目录,如图



点击出现如图所示则说明启动成功

```
Elasticsearch 5.6.8
[2020-09-03T10:18:44,400][INFO ][o.e.p.PluginsService] [783ae92] loaded module [reindex]
[2020-09-03T10:18:44,403][INFO ][o.e.p.PluginsService] [783ae92] loaded module [transport-netty3]
[2020-09-03T10:18:44,407][INFO ][o.e.p.PluginsService] [783ae92] loaded module [transport-netty4]
[2020-09-03T10:18:54,417][INFO ][o.e.d.DiscoveryModule] [783ae92] using discovery type [zen]
[2020-09-03T10:18:55,162][INFO ][o.e.n.Node] [783ae92] initialized
[2020-09-03T10:18:55,163][INFO ][o.e.n.Node] [783ae92] starting
[2020-09-03T10:19:03,351][INFO ][o.e.t.TransportService] [783ae92] publish_address {10.10.3.3:9300}, bound_addresses {:::9300}
[2020-09-03T10:19:09,981][INFO ][o.e.b.BootstrapChecks] [783ae92] bound or publishing to a non-loopback address, enforcing bootstrap checks
[2020-09-03T10:19:13,069][INFO ][o.e.c.s.ClusterService] [783ae92] new_master {783ae92} {783ae927TT6oz0LbboQAKA} {WWMQPD1FTTr-g3ly8UihT6w} {10.10.3.3:9300}, reason: zen-disco-elected-as-master ([0] nodes joined)
[2020-09-03T10:19:13,269][INFO ][o.e.g.GatewayService] [783ae92] recovered [0] indices into cluster state
[2020-09-03T10:19:16,609][INFO ][o.e.h.n.Netty4HttpServerTransport] [783ae92] publish_address {10.10.3.3:9200}, bound_addresses {:::9200}
[2020-09-03T10:19:16,609][INFO ][o.e.n.Node] [783ae92] started
```

可以通过浏览器,访问 localhost:9200 出现如图所示信息则 es 启动成功

```
{
  name: "783ae92",
  cluster_name: "elasticsearch",
  cluster_uuid: "JG3vi9eCQvSl95JtkH4YBw",
  version: {
    number: "5.6.8",
    build_hash: "688ecce",
    build_date: "2018-02-16T16:46:30.010Z",
    build_snapshot: false,
    lucene_version: "6.6.1"
  },
  tagline: "You Know, for Search"
}
```

2 专用服务安装配置

通过专用服务的平台,帮助你们提供所在地的服务,给你们提供便捷、全面的信息,使用你们自己的服务器,您需要将您服务器的 mac 地址发给我们,给您进行授权,然后通过各个服务的启动命令进行相应服务的启动

2.1 专用服务中心服务

Eureka 是 Netflix 开发的服务发现框架，本身是一个基于 REST 的服务，主要用于定位运行在 AWS 域中的中间层服务，以达到负载均衡和中间层服务故障转移的目的。SpringCloud 将它集成在其子项目 spring-cloud-netflix 中，以实现 SpringCloud 的服务发现功能。

Eureka 包含两个组件：Eureka Server 和 Eureka Client。

Eureka Server 提供服务注册服务，各个节点启动后，会在 Eureka Server 中进行注册，这样 EurekaServer 中的服务注册表中将会存储所有可用服务节点的信息，服务节点的信息可以在界面中直观的看到。

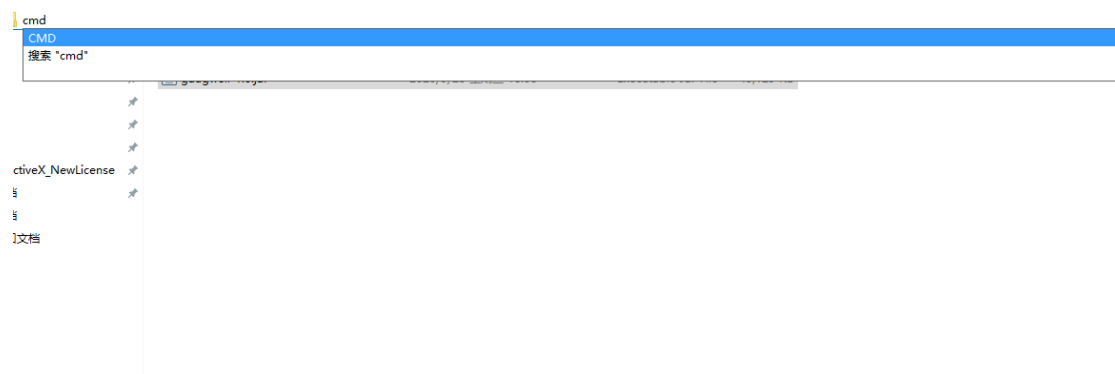
Eureka Client 是一个 java 客户端，用于简化与 Eureka Server 的交互，客户端同时也就是一个内置的、使用轮询(round-robin)负载算法的负载均衡器。

在应用启动后，将会向 Eureka Server 发送心跳,默认周期为 30 秒，如果 Eureka Server 在多个心跳周期内没有接收到某个节点的心跳，Eureka Server 将会从服务注册表中把这个服务节点移除(默认 90 秒)。

Eureka Server 之间通过复制的方式完成数据的同步，Eureka 还提供了客户端缓存机制，即使所有的 Eureka Server 都挂掉，客户端依然可以利用缓存中的信息消费其他服务的 API。综上，Eureka 通过心跳检查、客户端缓存等机制，确保了系统的高可用性、灵活性和可伸缩性。把 maven 的构建的 jar 包放到你想要放置的位置，如图



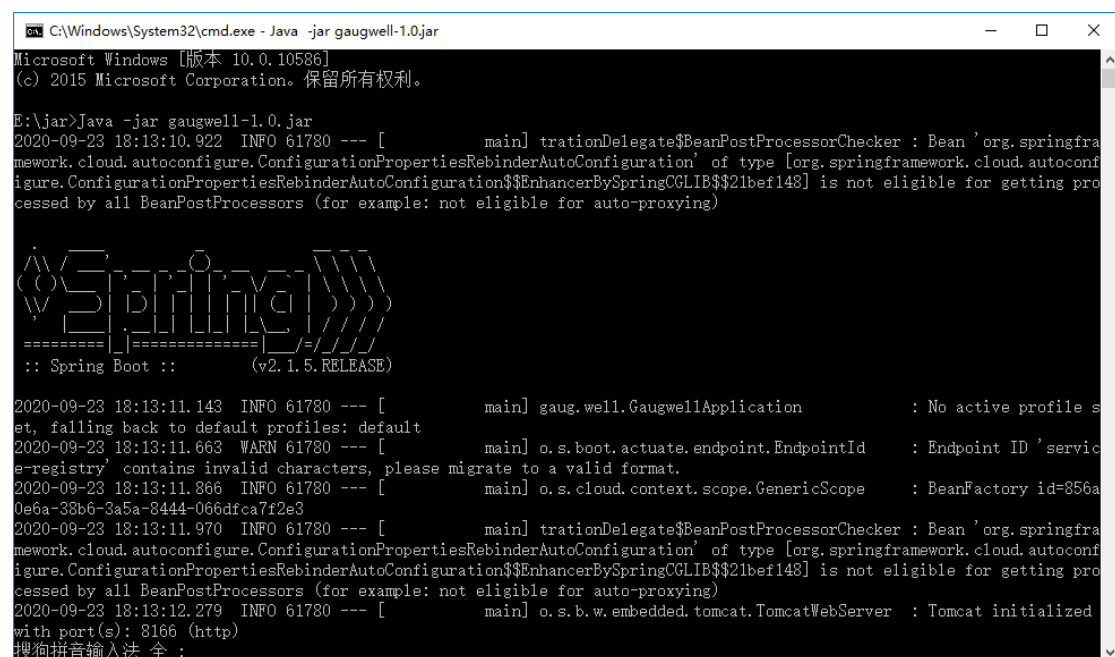
在位置栏输入 cmd



直接进入 eureka 所在 jar 包目录的 dos 命令窗口



然后直接输入 `Java -jar gaugwell-1.0.jar` 敲击回车, 在 dos 窗口中出现如下图则表示在运行中



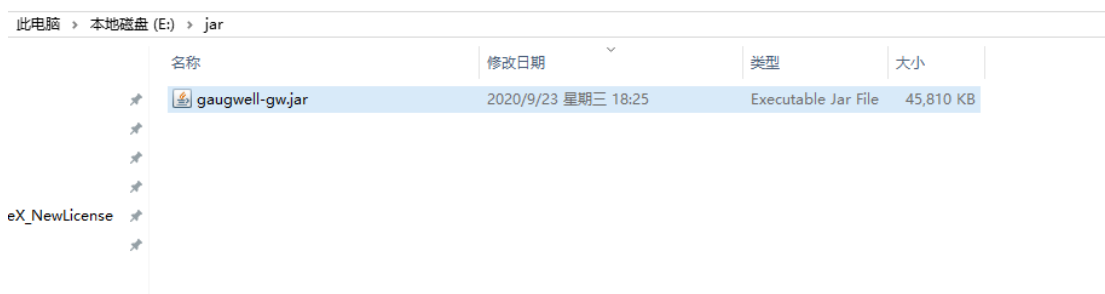
出现下图所示则说明 `eureka` 启动成功

```
C:\Windows\System32\cmd.exe - Java -jar gaugwell-1.0.jar
context
2020-09-23 18:13:14.474 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Got 1 instances from
m neighboring DS node
2020-09-23 18:13:14.476 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Renew threshold is:
1
2020-09-23 18:13:14.477 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Changing status to
UP
2020-09-23 18:13:14.486 INFO 61780 --- [ Thread-11] e.s.EurekaServerInitializerConfiguration : Started Eureka Serv
er
2020-09-23 18:13:14.499 INFO 61780 --- [ main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on p
ort(s): 8166 (http) with context path ''
2020-09-23 18:13:14.501 INFO 61780 --- [ main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 81
66
2020-09-23 18:13:14.504 INFO 61780 --- [ main] gaug.well.GaugwellApplication : Started GaugwellApp
lication in 4.123 seconds (JVM running for 4.433)
2020-09-23 18:14:14.479 INFO 61780 --- [a-EvictionTimer] c.n.e.registry.AbstractInstanceRegistry : Running the evict t
ask with compensationTime 0ms
2020-09-23 18:15:14.479 INFO 61780 --- [a-EvictionTimer] c.n.e.registry.AbstractInstanceRegistry : Running the evict t
ask with compensationTime 0ms
```

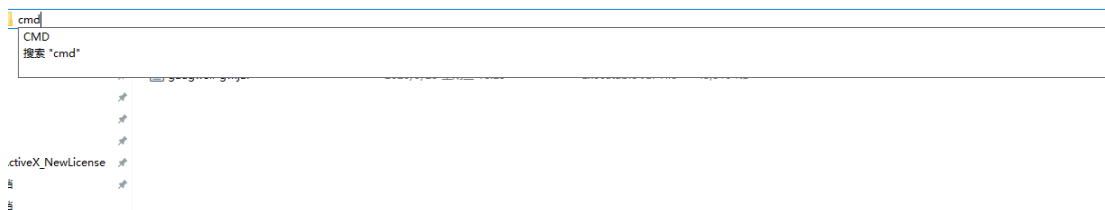
2.2 专用负载均衡服务

网关(Gateway)又称网间连接器、协议转换器。网关在网络层以上实现网络互连，是复杂的网络互连设备，仅用于两个高层协议不同的网络互连。网关既可以用于广域网互连，也可以用于局域网互连。网关是一种充当转换重任的计算机系统或设备。使用在不同的通信协议、数据格式或语言，甚至体系结构完全不同的两种系统之间，网关是一个翻译器。与网桥只是简单地传达信息不同，网关对收到的信息要重新打包，以适应目的系统的需求。同层--应用层。

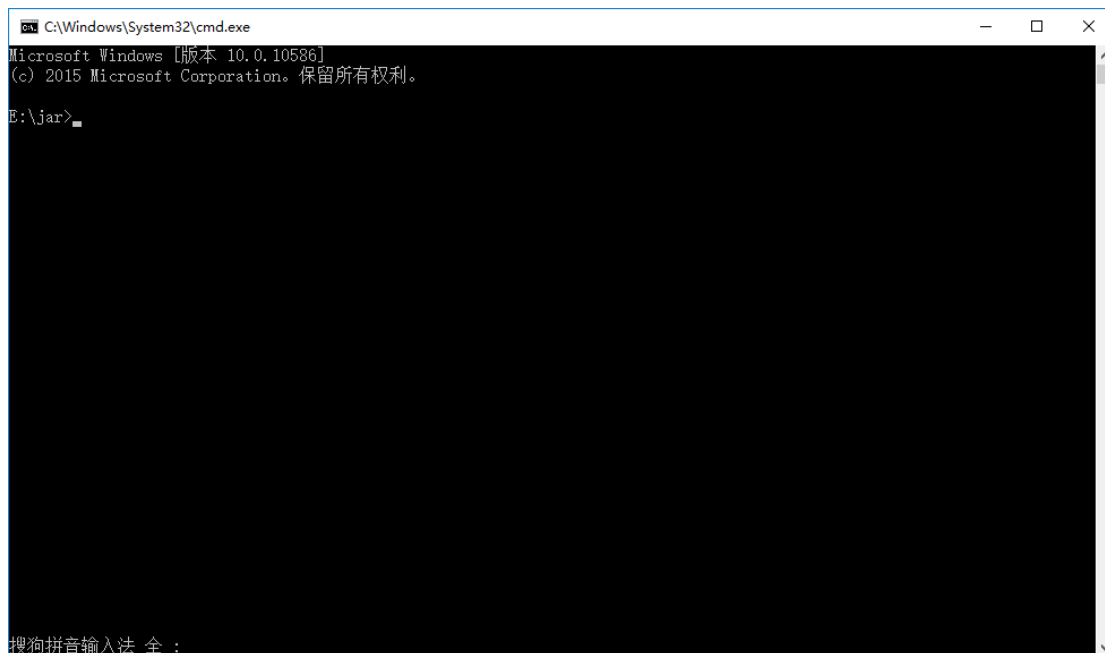
把 maven 的构建的 jar 包放到你想要放置的位置，如图



输入 cmd 进入,该 jar 包所在目录的 dos 命令行窗口



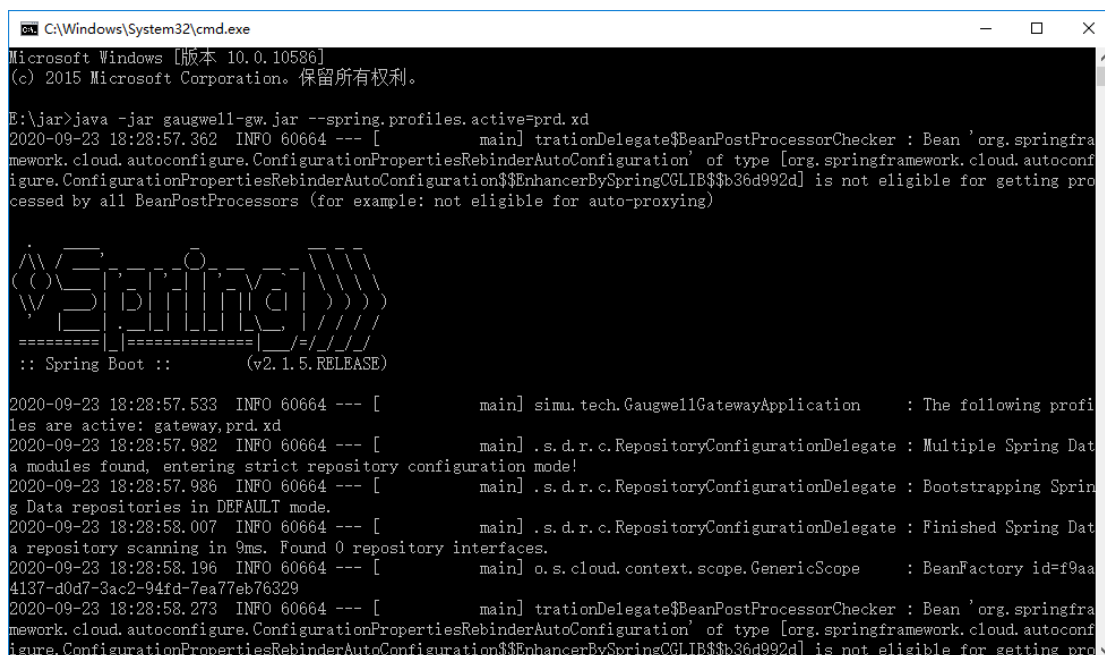
出现如图所示的 dos 窗口



在 dos 命令行中输入

java -jar gaugwell-gw.jar --spring.profiles.active=prdx

出现如下的界面则表示启动成功



2.3 专用知识中心服务

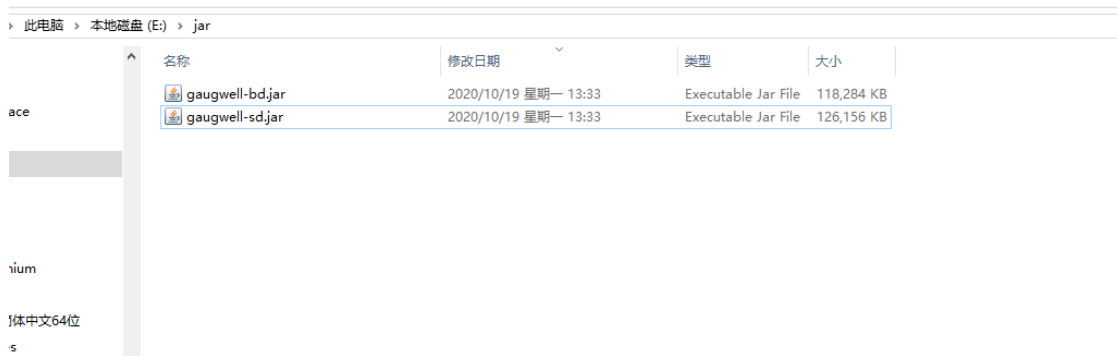
文档是软件开发使用和维护中的必备资料。

软件文档或者源代码文档是指与软件系统及其软件工程过程有关联的文本实体。文档的类型包括软件需求文档，设计文档，测试文档，用户手册等。其中的需求文档，设计文档和测试

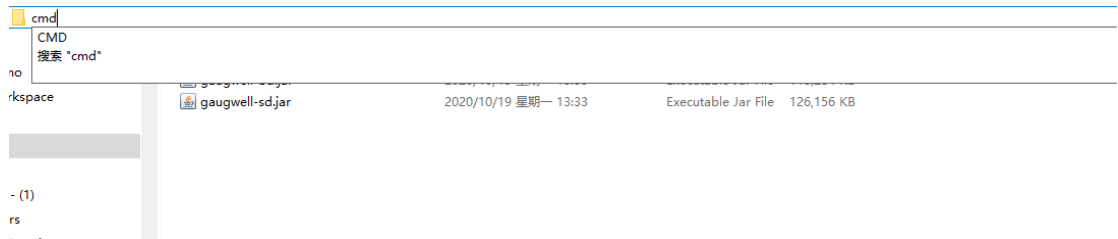
文档一般是在软件开发过程中由开发者写就的,而用户手册等非过程类文档是由专门的非技术类写作人员写就的。

文档能提高软件开发的效率,保证软件的质量,而且在软件的使用过程中有指导、帮助、解惑的作用,尤其在维护工作中,文档是不可或缺的资料。

把 maven 的构建的 jar 包放到你想要放置的位置, 如图



在该 jar 包所在目录输入 cmd

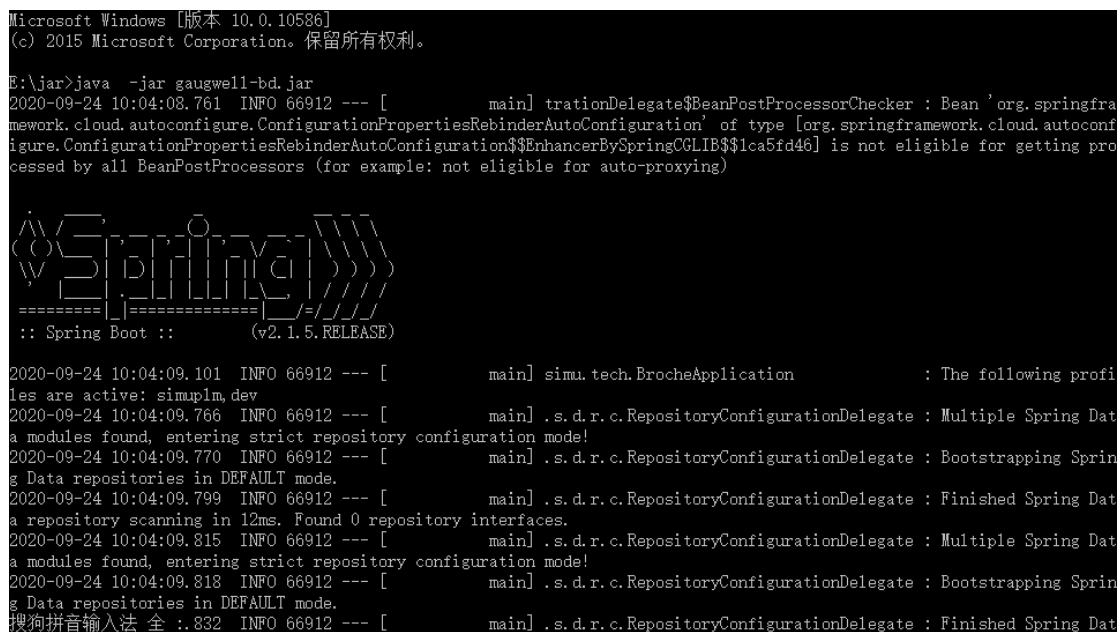


进入该 jar 包所在 dos 命令行窗口,输入启动命令

`java -jar gaugwell-sd.jar --spring.profiles.active=prxd`

`java -jar gaugwell-bd.jar --spring.profiles.active=prxd`

出现如下的启动界面




```
2020-09-24 10:05:52.210 INFO 65060 --- [main] com.netflix.discovery.DiscoveryClient : Saw local status change event StatusChangeEvent [timestamp=1600913152210, current=UP, previous=STARTING]
2020-09-24 10:05:52.214 INFO 65060 --- [main] o.s.s.quartz.SchedulerFactoryBean : Starting Quartz Scheduler now
2020-09-24 10:05:52.214 INFO 65060 --- [infoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_DOKU-SERVIR/SC-201806261210:doku-servir:52389: registering service...
2020-09-24 10:05:52.216 INFO 65060 --- [main] org.quartz.core.QuartzScheduler : Scheduler quartzScheduler_$_NON_CLUSTERED started.
2020-09-24 10:05:52.271 INFO 65060 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 52389 (http) with context path ''
2020-09-24 10:05:52.272 INFO 65060 --- [infoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_DOKU-SERVIR/SC-201806261210:doku-servir:52389 - registration status: 204
2020-09-24 10:05:52.274 INFO 65060 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 52389
2020-09-24 10:05:52.280 INFO 65060 --- [main] simu.tech.ServirApplication : Started ServirApplication in 9.752 seconds (JVM running for 10.189)
```

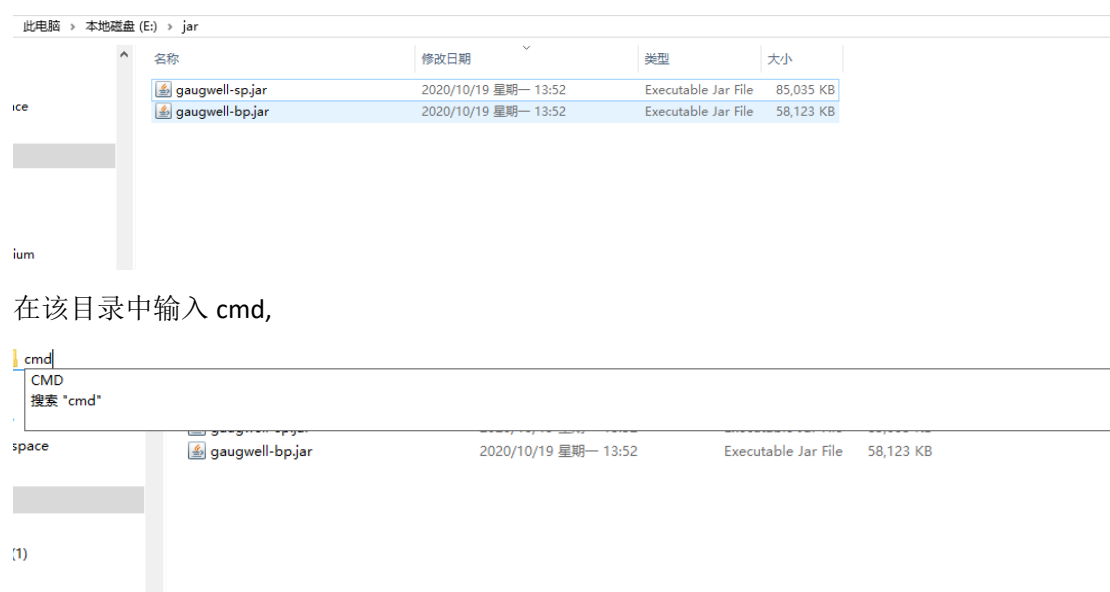
则表示该服务启动成功。

2.4 专用基础中心服务

组织架构(Organizational Structure)是指，一个组织整体的结构。是在企业管理要求、管控定位、管理模式及业务特征等多因素影响下，在企业内部组织资源、搭建流程、开展业务、落实管理的基本要素。

《企业内部控制应用指引第 1 号——组织架构》指出，组织架构是指企业按照国家有关法律法规、股东（大）会决议、企业章程，结合本企业实际，明确董事会、监事会、经理层和企业内部各层级机构设置、职责权限、人员编制、工作程序和相关要求的制度安排。

把 maven 的构建的 jar 包放到你想要放置的位置，如图



在该目录中输入 cmd,

进入 dos 命令行窗口

```
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>

搜狗拼音输入法 全：
```

在 dos 命令行中输入

```
java -jar gaugwell-so.jar --spring.profiles.active=prdx
```

```
java -jar gaugwell-bo.jar --spring.profiles.active=prdx
```

出现如下的界面则表示该服务启动成功

```
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>java -jar gaugwell-bo.jar
2020-09-24 10:14:06.787 INFO 66620 --- [          main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$1ca5fd46] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

  ____ _
 / ___ \| | | |
/ /___ \| |_| |
 \___)___|___|_|
  =====
:: Spring Boot ::      (v2.1.5.RELEASE)

2020-09-24 10:14:07.066 INFO 66620 --- [          main] simu.tech.BrocheApplication : The following profiles are active: simplm, dev
2020-09-24 10:14:07.721 INFO 66620 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:14:07.725 INFO 66620 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:14:07.752 INFO 66620 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 12ms. Found 0 repository interfaces.
2020-09-24 10:14:07.992 INFO 66620 --- [          main] o.s.cloud.context.scope.GenericScope : BeanFactory id=0ff4597d-57e7-38e6-8743-6adf3e6c4e5d
2020-09-24 10:14:08.012 INFO 66620 --- [          main] trationDelegate$BeanPostProcessorChecker : Bean 'simu.tech.feign.AccessUrlFeign' of type [org.springframework.cloud.openfeign.FeignClientFactoryBean] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
```

```

ange event StatusChangeEvent [timestamp=1600913651315, current=UP, previous=STARTING]
2020-09-24 10:14:11.318 INFO 66620 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FON
D-BROCHE/SC-201806261210:fond-broche:34556: registering service...
2020-09-24 10:14:11.318 INFO 66620 --- [main] d.s.w.p.DocumentationPluginsBootstrapper : Context refreshed
2020-09-24 10:14:11.338 INFO 66620 --- [main] d.s.w.p.DocumentationPluginsBootstrapper : Found 1 custom docu
mentation plugin(s)
2020-09-24 10:14:11.346 INFO 66620 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FON
D-BROCHE/SC-201806261210:fond-broche:34556 - registration status: 204
2020-09-24 10:14:11.368 INFO 66620 --- [main] s.d.s.w.s.ApiListingReferenceScanner : Scanning for api li
sting references
2020-09-24 10:14:11.675 INFO 66620 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on p
ort(s): 34556 (http) with context path ''
2020-09-24 10:14:11.676 INFO 66620 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 34
556
2020-09-24 10:14:11.678 INFO 66620 --- [main] simu.tech.BrocheApplication : Started BrocheAppli
cation in 5.459 seconds (JVM running for 5.78)

```

搜狗拼音输入法 全 :

```

C:\Windows\System32\cmd.exe - java -jar gaugwell-sojar
cessed by all BeanPostProcessors (for example: not eligible for auto-proxying)

=====
:: Spring Boot ::      (v2.1.5.RELEASE)

2020-09-24 10:19:07.208 INFO 53768 --- [main] simu.tech.ServirApplication : The following profil
es are active: simuplm,dev
2020-09-24 10:19:07.813 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Dat
a modules found, entering strict repository configuration mode!
2020-09-24 10:19:07.816 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Sprin
g Data repositories in DEFAULT mode.
2020-09-24 10:19:07.842 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Dat
a repository scanning in 15ms. Found 0 repository interfaces.
2020-09-24 10:19:08.160 INFO 53768 --- [main] o.s.c.cloud.context.scope.GenericScope : BeanFactory id=b952
18f0-b9a4-3f6a-bc97-32a222b76caa
2020-09-24 10:19:08.322 INFO 53768 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springfra
mework.transaction.annotation.ProxyTransactionManagementConfiguration' of type [org.springframework.transaction.annotati
on.ProxyTransactionManagementConfiguration$$EnhancerBySpringCGLIB$$fd6674d6] is not eligible for getting processed by al
l BeanPostProcessors (for example: not eligible for auto-proxying)
2020-09-24 10:19:08.536 INFO 53768 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springfra
mework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfi
gure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$198077d3] is not eligible for getting pro
cessed by all BeanPostProcessors (for example: not eligible for auto-proxying)
2020-09-24 10:19:08.803 INFO 53768 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized
搜狗拼音输入法 全 : (http)

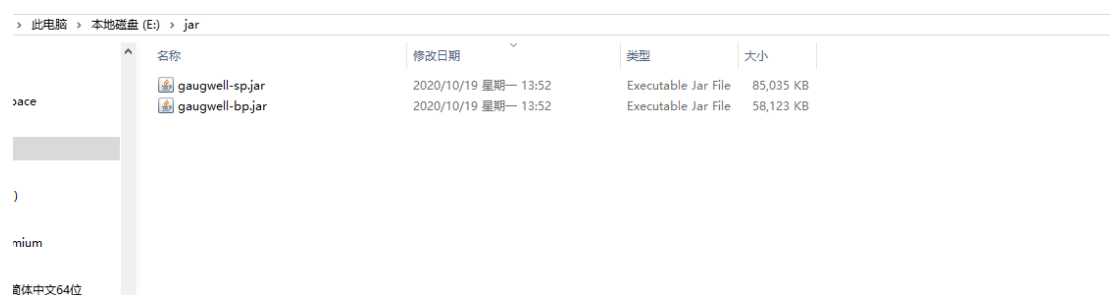
```

```
2020-09-24 10:19:12.245 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : The response status is 200
2020-09-24 10:19:12.250 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Starting heartbeat
2020-09-24 10:19:12.255 INFO 53768 --- [main] c.n.discovery.InstanceInfoReplicator : InstanceInfoReplicator onDemand update allowed rate per min is 4
2020-09-24 10:19:12.260 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Discovery Client initialized at timestamp 1600913952259 with initial instances count: 10
2020-09-24 10:19:12.265 INFO 53768 --- [main] o.s.c.n.e.s.EurekaServiceRegistry : Registering application FOND-SERVIR with eureka with status UP
2020-09-24 10:19:12.267 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Saw local status change event StatusChangeEvent [timestamp=1600913952267, current=UP, previous=STARTING]
2020-09-24 10:19:12.273 INFO 53768 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FOND-SERVIR/SC-201806261210:fond-servir:44534: registering service...
2020-09-24 10:19:12.309 INFO 53768 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FOND-SERVIR/SC-201806261210:fond-servir:44534 - registration status: 204
2020-09-24 10:19:12.320 INFO 53768 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 44534 (http) with context path ''
2020-09-24 10:19:12.323 INFO 53768 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 44534
2020-09-24 10:19:12.328 INFO 53768 --- [main] Siml.tech.ServirApplication : Started ServirApplication in 5.927 seconds (JVM running for 6.325)
```

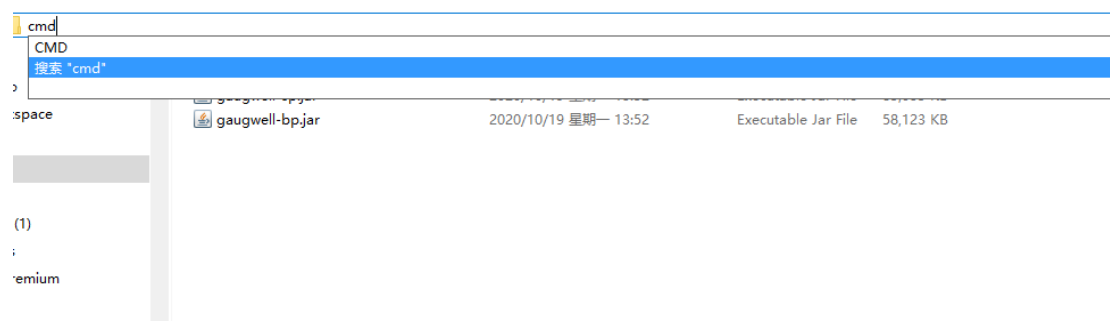
搜狗拼音输入法 全：

2.5 专用数据中心服务

软件就是将用户需求转换为计算机语言的一种工具，
所谓的需求就是用户从业务实践中提炼的具体要求，
你要是精通用户的业务，就能够充分理解用户的需求，帮助用户提升，
把 maven 的构建的 jar 包放到你想要放置的位置，如图



在该 jar 包所在路径输入 cmd,如图



进入该目录下的 dos 命令行窗口


```
eration named: getAllTypeUsingGET_1
2020-09-24 10:28:19.927 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getAllTypeOrAttrUsingGET_1
2020-09-24 10:28:19.930 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getFormTypeUsingGET_1
2020-09-24 10:28:19.934 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getSearchFormTypeUsingGET_1
2020-09-24 10:28:19.937 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: testUsingGET_1
2020-09-24 10:28:19.973 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getGcByIdUsingGET_1
2020-09-24 10:28:19.976 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getGcByZftoidUsingGET_1
2020-09-24 10:28:19.979 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique op
eration named: getProjectByPgIdUsingGET_1
2020-09-24 10:28:20.047 INFO 6500 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on po
rt(s): 24556 (http) with context path ''
2020-09-24 10:28:20.048 INFO 6500 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 245
56
2020-09-24 10:28:20.050 INFO 6500 --- [main] simu.tech.BrocheApplication : Started BrocheAppl
ication in 6.23 seconds (JVM running for 6.538)
```

搜狗拼音输入法 全 :

在该 jar 包所在的路径位置上输入 cmd,进入 dos 命令行,然后输入如下的启动命令
java -jar gaugwell-bp.jar --spring.profiles.active=prxd
出现 dos 窗口出现如下的界面则表示该服务启动成功

```
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>java -jar gaugwell-bp.jar
2020-09-24 10:32:51.305 INFO 63096 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springfra
mework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$f47aa6f2] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

:: Spring Boot :: (v2.1.5.RELEASE)

2020-09-24 10:32:51.541 INFO 63096 --- [main] simu.tech.BrocheApplication : The following profi
les are active: dev
2020-09-24 10:32:52.338 INFO 63096 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Dat
a modules found, entering strict repository configuration mode!
2020-09-24 10:32:52.341 INFO 63096 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Sprin
g Data repositories in DEFAULT mode.
2020-09-24 10:32:52.366 INFO 63096 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Dat
a repository scanning in 14ms. Found 0 repository interfaces.
2020-09-24 10:32:52.631 INFO 63096 --- [main] o.s.cloud.context.scope.GenericScope : BeanFactory id=f019
5566-b903-39d3-3f74-aa0a33b2a485
2020-09-24 10:32:52.651 INFO 63096 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'simu.tech.fei
gn.CodeInfoFeign' of type [org.springframework.cloud.openfeign.FeignClientFactoryBean] is not eligible for getting proce
搜狗拼音输入法 全 :tProcessors (for example: not eligible for auto-proxying)
```

```
2020-09-24 10:32:56.829 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getSearchFormTypeUsingGET_1
2020-09-24 10:32:56.832 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: testUsingGET_1
2020-09-24 10:32:56.859 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getGcByIdUsingGET_1
2020-09-24 10:32:56.861 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getGcByZftoidUsingGET_1
2020-09-24 10:32:56.865 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getProjectByPgIdUsingGET_1
2020-09-24 10:32:56.936 INFO 63096 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on p
ort(s): 24556 (http) with context path ''
2020-09-24 10:32:56.937 INFO 63096 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 24
556
2020-09-24 10:32:56.941 INFO 63096 --- [main] simu.tech.BrocheApplication : Started BrocheAppl
ication in 6.209 seconds (JVM running for 6.53)
```

搜狗拼音输入法 全：

2.6 专用项目管理服务

```
2020-09-24 10:32:56.829 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getSearchFormTypeUsingGET_1
2020-09-24 10:32:56.832 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: testUsingGET_1
2020-09-24 10:32:56.859 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getGcByIdUsingGET_1
2020-09-24 10:32:56.861 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getGcByZftoidUsingGET_1
2020-09-24 10:32:56.865 INFO 63096 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique o
peration named: getProjectByPgIdUsingGET_1
2020-09-24 10:32:56.936 INFO 63096 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on p
ort(s): 24556 (http) with context path ''
2020-09-24 10:32:56.937 INFO 63096 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 24
556
2020-09-24 10:32:56.941 INFO 63096 --- [main] simu.tech.BrocheApplication : Started BrocheAppl
ication in 6.209 seconds (JVM running for 6.53)
```

搜狗拼音输入法 全：

2.7 专用业务流程服务

把 maven 的构建的 jar 包放到你想要放置的位置，然后启动流程服务

工作流(Workflow)，就是通过计算机对业务流程自动化执行管理。它主要解决的是“使在多个参与者之间按照某种预定义的规则自动进行传递文档、信息或任务的过程，从而实现某个预期的业务目标，或者促使此目标的实现”。

Alfresco 软件在 2010 年 5 月 17 日宣布 Activiti 业务流程管理（BPM）开源项目的正式启动，其首席架构师由业务流程管理 BPM 的专家 Tom Baeyens 担任，Tom Baeyens 就是原来 jbpmm 的架构师，而 jbpmm 是一个非常有名的工作流引擎，当然 activiti 也是一个工作流引擎。

Activiti 是一个工作流引擎，activiti 可以将业务系统中复杂的业务流程抽取出来，使用专门的建模语言（BPMN2.0）进行定义，业务系统按照预先定义的流程进行执行，实现了业务系统的业务流程由 activiti 进行管理，减少业务系统由于流程变更进行系统升级改造的工作量，从而提高系统的健壮性，同时也减少了系统开发维护成本。

BPMN（Business Process Model And Notation）- 业务流程模型和符号 是由 BPMI（Business Process Management Initiative）开发的一套标准的业务流程建模符号，使用 BPMN 提供的符号可以创建业务流程。2004 年 5 月发布了 BPMN1.0 规范。BPMI 于 2005 年 9 月并入 OMG（The Object Management Group 对象管理组织）组织。OMG 于 2011 年 1 月发布 BPMN2.0 的最终版本。

BPMN 是目前被各 BPM 厂商广泛接受的 BPM 标准。Activiti 就是使用 BPMN 2.0 进行流程建模、流程执行管理，它包括很多的建模符号，比如：



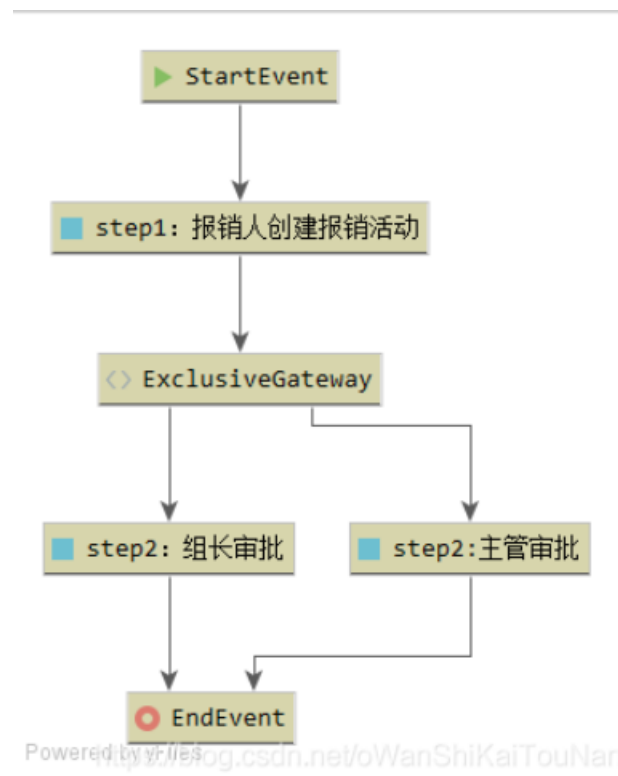
Event 用一个圆圈表示，它是流程中运行过程中发生的事情。

活动用圆角矩形表示，一个流程由一个活动或多个活动组成

一个 bpmn 图形的例子：



这是一个流程设计模板你可以设计更多的适合您工作需要的模板,然后把你需要进行流程的事件进行开始操作,并且可以看到流程的执行情况



3 云核心服务安装配置

云服务是基于互联网的相关服务的增加、使用和交互模式，通常涉及通过互联网来提供动态易扩展且经常是虚拟化的资源。云是网络、互联网的一种比喻说法。过去在图中往往用云来表示电信网，后来也用来表示互联网和底层基础设施的抽象。云服务指通过网络以按需、易扩展的方式获得所需服务。这种服务可以是 IT 和软件、互联网相关，也可能是其他服务。它意味着计算能力也可作为一种商品通过互联网进行流通。如需要提供此服务请联系我们。

3.1 云服务中心服务

Eureka 是 Netflix 开发的服务发现框架，本身是一个基于 REST 的服务，主要用于定位运行在 AWS 域中的中间层服务，以达到负载均衡和中间层服务故障转移的目的。SpringCloud 将它集成在其子项目 spring-cloud-netflix 中，以实现 SpringCloud 的服务发现功能。

Eureka 包含两个组件：Eureka Server 和 Eureka Client。

Eureka Server 提供服务注册服务，各个节点启动后，会在 Eureka Server 中进行注册，这样 EurekaServer 中的服务注册表中将会存储所有可用服务节点的信息，服务节点的信息可以在界面中直观的看到。

Eureka Client 是一个 java 客户端，用于简化与 Eureka Server 的交互，客户端同时也就是一个内置的、使用轮询(round-robin)负载算法的负载均衡器。

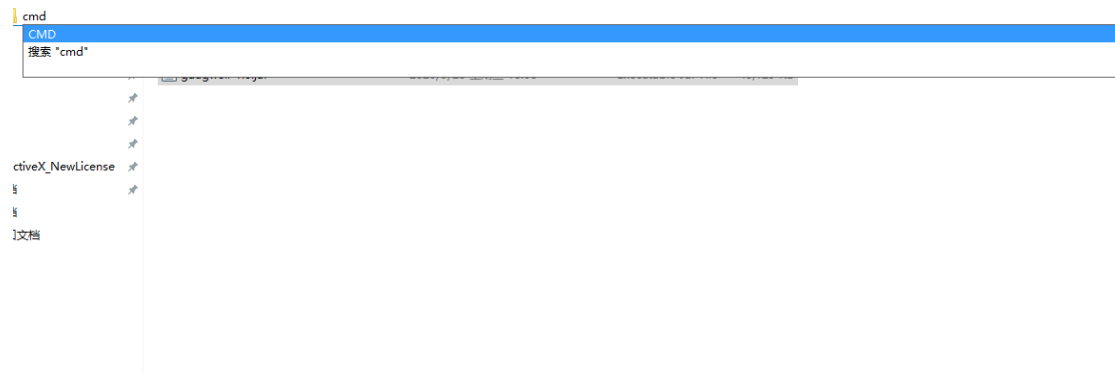
在应用启动后，将会向 Eureka Server 发送心跳,默认周期为 30 秒，如果 Eureka Server 在多个心跳周期内没有接收到某个节点的心跳，Eureka Server 将会从服务注册表中把这个服务节点移除(默认 90 秒)。

Eureka Server 之间通过复制的方式完成数据的同步，Eureka 还提供了客户端缓存机制，即使所有的 Eureka Server 都挂掉,客户端依然可以利用缓存中的信息消费其他服务的 API。综上，Eureka 通过心跳检查、客户端缓存等机制，确保了系统的高可用性、灵活性和可伸缩性。

把 maven 的构建的 jar 包放到你想要放置的位置，如图



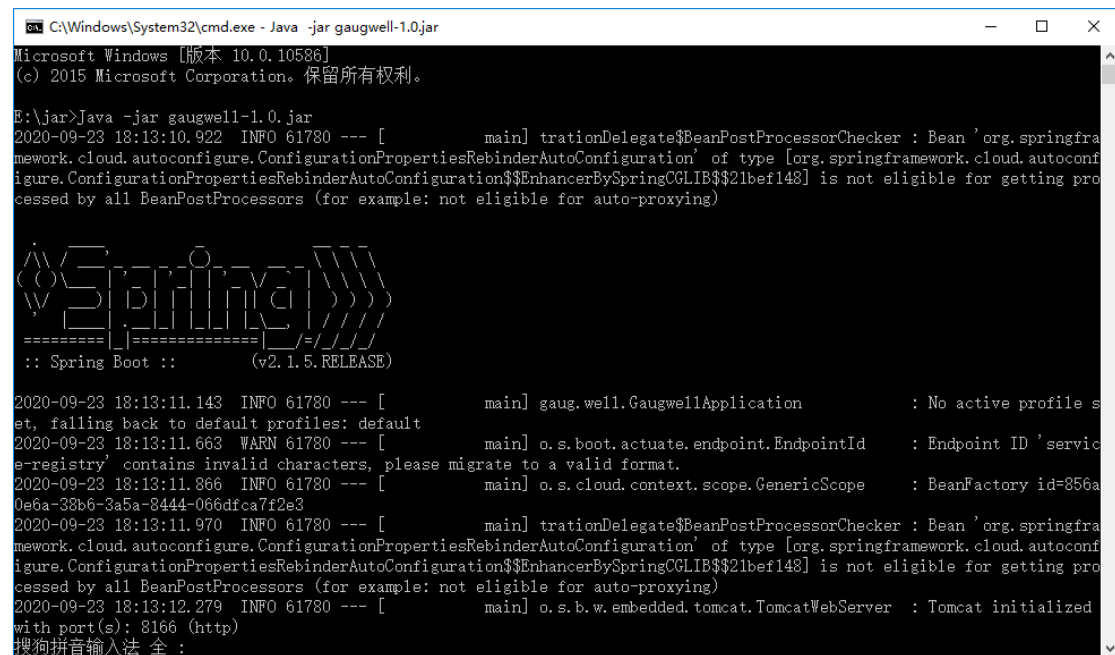
在位置栏输入 cmd



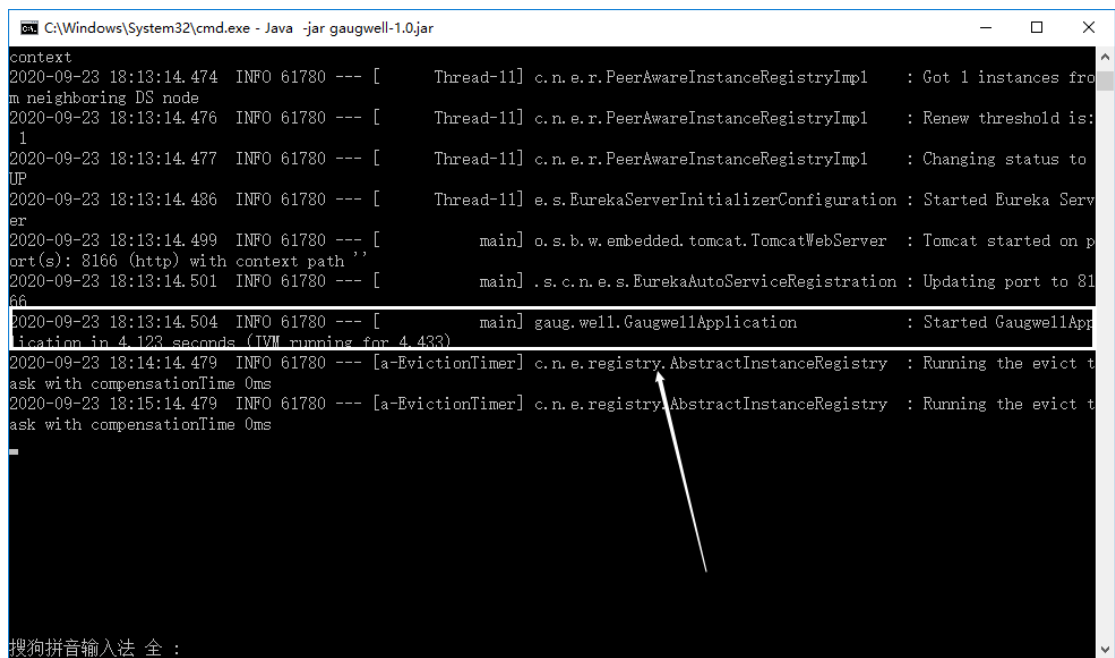
直接进入 eureka 所在 jar 包目录的 dos 命令窗口



然后直接输入 Java -jar gaugwell-1.0.jar 敲击回车, 在 dos 窗口中出现如下图则表示在运行中



出现下图所示则说明 eureka 启动成功

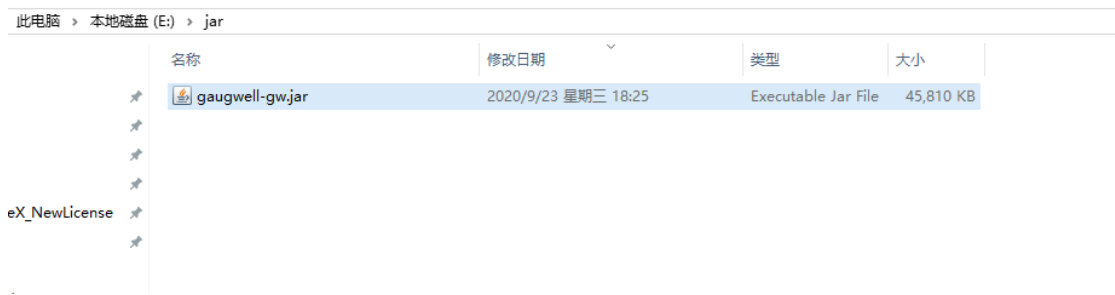


```
C:\Windows\System32\cmd.exe - Java -jar gaugwell-1.0.jar
context
2020-09-23 18:13:14.474 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Got 1 instances from
m neighboring DS node
2020-09-23 18:13:14.476 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Renew threshold is:
1
2020-09-23 18:13:14.477 INFO 61780 --- [ Thread-11] c.n.e.r.PeerAwareInstanceRegistryImpl : Changing status to
UP
2020-09-23 18:13:14.486 INFO 61780 --- [ Thread-11] e.s.EurekaServerInitializerConfiguration : Started Eureka Serv
er
2020-09-23 18:13:14.499 INFO 61780 --- [ main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on p
ort(s): 8166 (http) with context path ''
2020-09-23 18:13:14.501 INFO 61780 --- [ main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 81
66
2020-09-23 18:13:14.504 INFO 61780 --- [ main] gaug.well.GaugwellApplication : Started GaugwellApp
lication in 4.123 seconds (JVM running for 4.433)
2020-09-23 18:14:14.479 INFO 61780 --- [a-EvictionTimer] c.n.e.registry.AbstractInstanceRegistry : Running the evict t
ask with compensationTime 0ms
2020-09-23 18:15:14.479 INFO 61780 --- [a-EvictionTimer] c.n.e.registry.AbstractInstanceRegistry : Running the evict t
ask with compensationTime 0ms
```

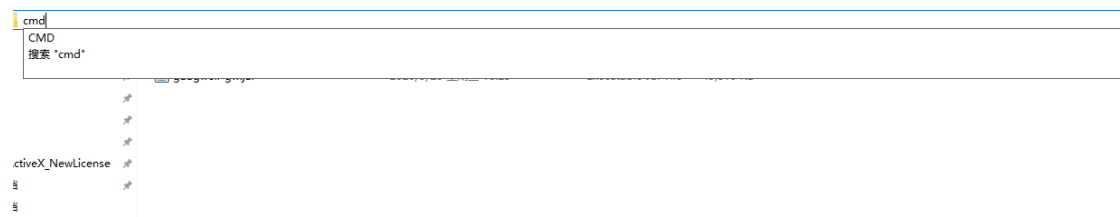
3.2 云负载均衡服务

网关(Gateway)又称网间连接器、协议转换器。网关在网络层以上实现网络互连，是复杂的网络互连设备，仅用于两个高层协议不同的网络互连。网关既可以用于广域网互连，也可以用于局域网互连。网关是一种充当转换重任的计算机系统或设备。使用在不同的通信协议、数据格式或语言，甚至体系结构完全不同的两种系统之间，网关是一个翻译器。与网桥只是简单地传达信息不同，网关对收到的信息要重新打包，以适应目的系统的需求。同层--应用层。

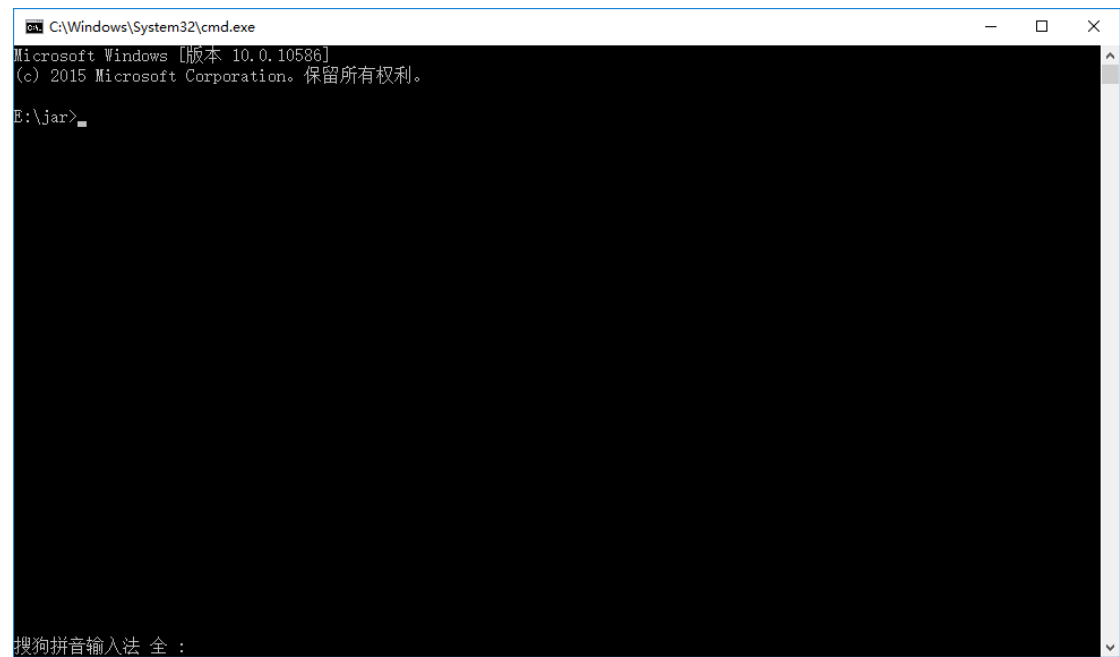
把 maven 的构建的 jar 包放到你想要放置的位置，如图



输入 cmd 进入,该 jar 包所在目录的 dos 命令行窗口



出现如图所示的 dos 窗口



在 dos 命令行中输入

`java -jar gaugwell-gw.jar --spring.profiles.active=prdx`

出现如下的界面则表示启动成功

```
C:\Windows\System32\cmd.exe
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>java -jar gaugwell-gw.jar --spring.profiles.active=prd.xd
2020-09-23 18:28:57.362 INFO 60664 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$b36d992d] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

:: Spring Boot :: (v2.1.5.RELEASE)

2020-09-23 18:28:57.533 INFO 60664 --- [main] simu.tech.GaugwellGatewayApplication : The following profiles are active: gateway,prd.xd
2020-09-23 18:28:57.982 INFO 60664 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-23 18:28:57.986 INFO 60664 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-23 18:28:58.007 INFO 60664 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 9ms. Found 0 repository interfaces.
2020-09-23 18:28:58.196 INFO 60664 --- [main] o.s.c.cloud.context.scope.GenericScope : BeanFactory id=f9aa4137-d0d7-3ac2-94fd-7ea77eb76329
2020-09-23 18:28:58.273 INFO 60664 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$b36d992d] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
```

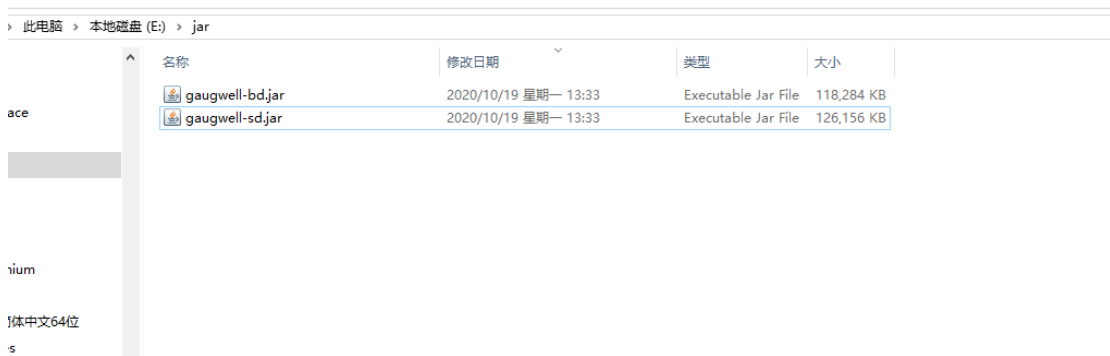
3.3 云知识中心服务

文档是软件开发使用和维护中的必备资料。

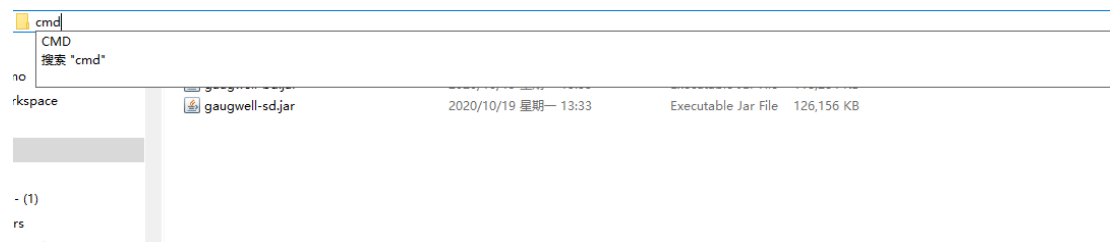
软件文档或者源代码文档是指与软件系统及其软件工程过程有关联的文本实体。文档的类型包括软件需求文档，设计文档，测试文档，用户手册等。其中的需求文档，设计文档和测试文档一般是在软件开发过程中由开发者写就的，而用户手册等非过程类文档是由专门的非技术类写作人员写就的。

文档能提高软件开发的效率，保证软件的质量，而且在软件的使用过程中有指导、帮助、解惑的作用，尤其在维护工作中，文档是不可或缺的资料。

把 maven 的构建的 jar 包放到你想要放置的位置，如图



在该 jar 包所在目录输入 cmd



进入该 jar 包所在 dos 命令行窗口,输入启动命令

```
java -jar gaugwell-sd.jar --spring.profiles.active=prdx
```

```
java -jar gaugwell-bd.jar --spring.profiles.active=prdx
```

出现如下的启动界面

```
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>java -jar gaugwell-bd.jar
2020-09-24 10:04:08.761 INFO 66912 --- [           main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$1ca5fd46] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

=====
:: Spring Boot ::      (v2.1.5.RELEASE)

2020-09-24 10:04:09.101 INFO 66912 --- [           main] simu.tech.BrocheApplication : The following profiles are active: simplm, dev
2020-09-24 10:04:09.766 INFO 66912 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:04:09.770 INFO 66912 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:04:09.799 INFO 66912 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 12ms. Found 0 repository interfaces.
2020-09-24 10:04:09.815 INFO 66912 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:04:09.818 INFO 66912 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:04:14.177 INFO 66912 --- [           main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: deleteFilesUsingDELETE_1
2020-09-24 10:04:14.306 INFO 66912 --- [           main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: uploadFileBybatchIdUsingPOST_1
2020-09-24 10:04:14.332 INFO 66912 --- [           main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: reviseFileUsingPOST_1
2020-09-24 10:04:14.350 INFO 66912 --- [           main] o.s.s.quartz.SchedulerFactoryBean : Starting Quartz Scheduler now
2020-09-24 10:04:14.351 INFO 66912 --- [           main] org.quartz.core.QuartzScheduler : Scheduler quartzScheduler_$NON_CLUSTERED started.
2020-09-24 10:04:14.375 INFO 66912 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 48568 (http) with context path ''
2020-09-24 10:04:14.378 INFO 66912 --- [           main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 48568
2020-09-24 10:04:14.380 INFO 66912 --- [           main] simu.tech.BrocheApplication : Started BrocheApplication in 6.214 seconds (JVM running for 6.561)
```

```
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\jar>java -jar gaugwell-sd.jar
2020-09-24 10:05:43.291 INFO 65060 --- [          main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$5b20bc5e] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

   ____
  / ___/
 / /   /
/ /___/
/____/

:: Spring Boot ::                (v2.1.5.RELEASE)

2020-09-24 10:05:43.519 INFO 65060 --- [          main] simu.tech.ServirApplication : The following profiles are active: simplm, dev
2020-09-24 10:05:44.344 INFO 65060 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:05:44.349 INFO 65060 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:05:44.497 INFO 65060 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 141ms. Found 1 repository interfaces.
2020-09-24 10:05:44.512 INFO 65060 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:05:44.515 INFO 65060 --- [          main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:05:44.532 INFO 65060 --- [          main] .RepositoryConfigurationExtensionSupport : Spring Data Redis -

2020-09-24 10:05:52.210 INFO 65060 --- [          main] com.netflix.discovery.DiscoveryClient : Saw local status change event StatusChangeEvent [timestamp=1600913152210, current=UP, previous=STARTING]
2020-09-24 10:05:52.214 INFO 65060 --- [          main] o.s.s.quartz.SchedulerFactoryBean : Starting Quartz Scheduler now
2020-09-24 10:05:52.214 INFO 65060 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_DOKU-SERVIR/SC-201806261210:doku-servir:52389: registering service...
2020-09-24 10:05:52.216 INFO 65060 --- [          main] org.quartz.core.QuartzScheduler : Scheduler quartzScheduler_$_NON_CLUSTERED started.
2020-09-24 10:05:52.271 INFO 65060 --- [          main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 52389 (http) with context path ''
2020-09-24 10:05:52.272 INFO 65060 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_DOKU-SERVIR/SC-201806261210:doku-servir:52389 - registration status: 204
2020-09-24 10:05:52.274 INFO 65060 --- [          main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 52389
2020-09-24 10:05:52.280 INFO 65060 --- [          main] simu.tech.ServirApplication : Started ServirApplication in 9.752 seconds (JVM running for 10.189)
```

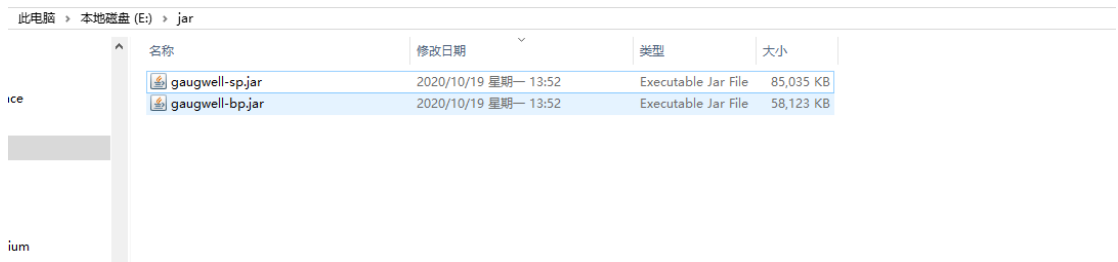
则表示该服务启动成功。

3.4 云基础中心服务

组织架构(Organizational Structure)是指，一个组织整体的结构。是在企业管理要求、管控定位、管理模式及业务特征等多因素影响下，在企业内部组织资源、搭建流程、开展业务、落实管理的基本要素。

《企业内部控制应用指引第1号——组织架构》指出，组织架构是指企业按照国家有关法律法规、股东（大）会决议、企业章程，结合本企业实际，明确董事会、监事会、经理层和企业内部各层级机构设置、职责权限、人员编制、工作程序和相关要求的制度安排。

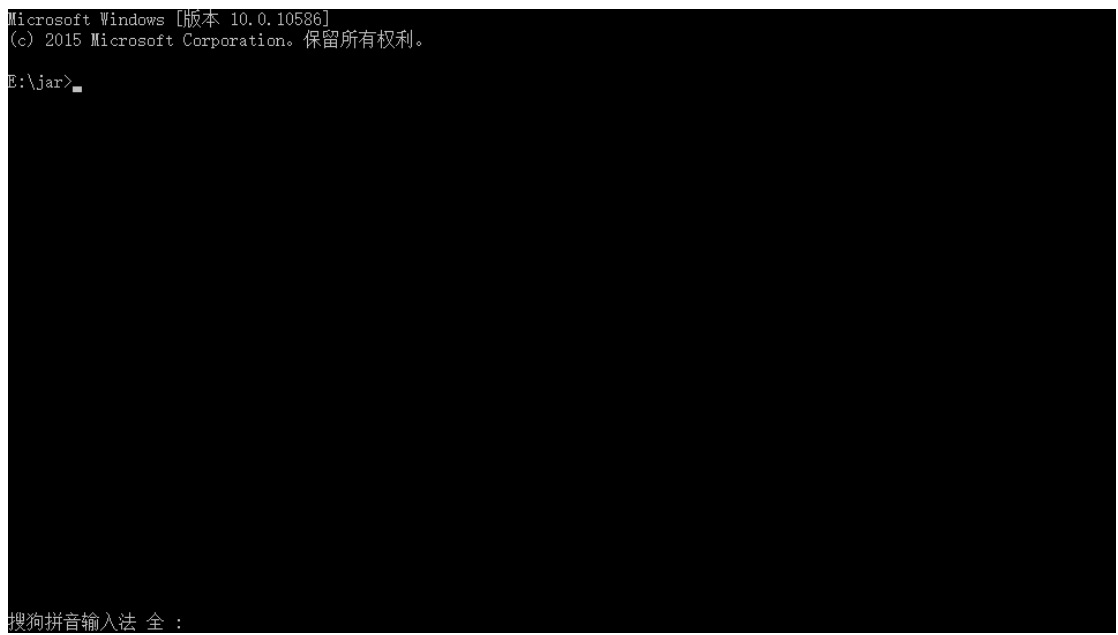
把 maven 的构建的 jar 包放到你想要放置的位置，如图



在该目录中输入 cmd,



进入 dos 命令行窗口



在 dos 命令行中输入

```
java -jar gaugwell-so.jar --spring.profiles.active=prdx  
java -jar gaugwell-bo.jar --spring.profiles.active=prdx
```

出现如下的界面则表示该服务启动成功


```
C:\Windows\System32\cmd.exe - java -jar gaugwell-sojar
cessed by all BeanPostProcessors (for example: not eligible for auto-proxying)

=====
:: Spring Boot :: (v2.1.5.RELEASE)

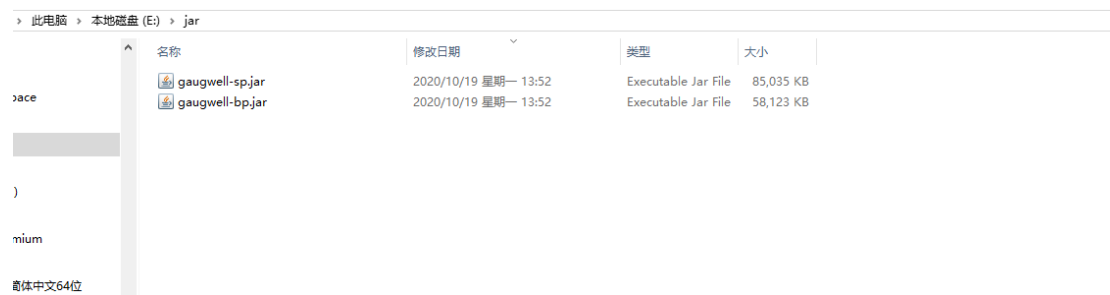
2020-09-24 10:19:07.208 INFO 53768 --- [main] simu.tech.ServirApplication : The following profiles are active: simuplm, dev
2020-09-24 10:19:07.813 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:19:07.816 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:19:07.842 INFO 53768 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 15ms. Found 0 repository interfaces.
2020-09-24 10:19:08.160 INFO 53768 --- [main] o.s.cloud.context.scope.GenericScope : BeanFactory id=b95218f0-b9a4-3f6a-bc97-32a222b76caa
2020-09-24 10:19:08.322 INFO 53768 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.transaction.annotation.ProxyTransactionManagementConfiguration' of type [org.springframework.transaction.annotation.ProxyTransactionManagementConfiguration$$EnhancerBySpringCGLIB$$fd6674d6] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
2020-09-24 10:19:08.536 INFO 53768 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$198077d3] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
2020-09-24 10:19:08.803 INFO 53768 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized

搜狗拼音输入法 全 : (http)

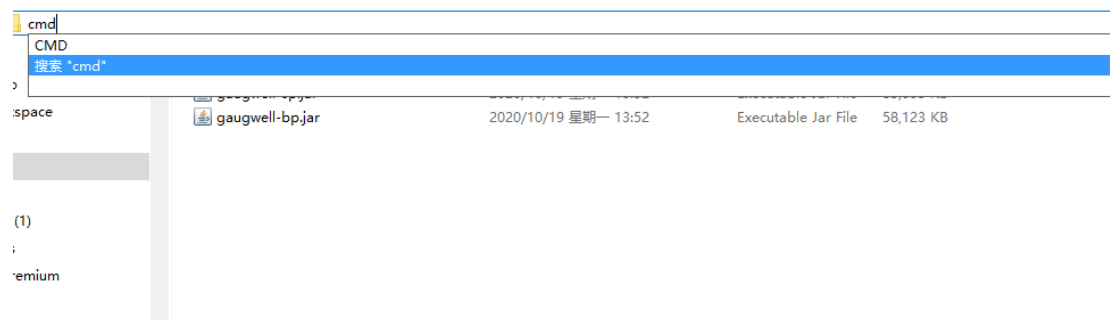
2020-09-24 10:19:12.245 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : The response status is 200
2020-09-24 10:19:12.250 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Starting heartbeat executor: renew interval is: 30
2020-09-24 10:19:12.255 INFO 53768 --- [main] c.n.discovery.InstanceInfoReplicator : InstanceInfoReplicator onDemand update allowed rate per min is 4
2020-09-24 10:19:12.260 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Discovery Client initialized at timestamp 1600913952259 with initial instances count: 10
2020-09-24 10:19:12.265 INFO 53768 --- [main] o.s.c.n.e.s.EurekaServiceRegistry : Registering application FOND-SERVIR with eureka with status UP
2020-09-24 10:19:12.267 INFO 53768 --- [main] com.netflix.discovery.DiscoveryClient : Saw local status change event StatusChangeEvent [timestamp=1600913952267, current=UP, previous=STARTING]
2020-09-24 10:19:12.273 INFO 53768 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FOND-SERVIR/SC-201806261210:fond-servir:44534: registering service...
2020-09-24 10:19:12.309 INFO 53768 --- [nfoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_FOND-SERVIR/SC-201806261210:fond-servir:44534 - registration status: 204
2020-09-24 10:19:12.320 INFO 53768 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 44534 (http) with context path ''
2020-09-24 10:19:12.323 INFO 53768 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 44534
2020-09-24 10:19:12.328 INFO 53768 --- [main] simu.tech.ServirApplication : Started ServirApplication in 5.927 seconds (JVM running for 6.325)
```

3.5 云数据中心服务

软件就是将用户需求转换为计算机语言的一种工具，所谓的需求就是用户从业务实践中提炼的具体要求，你要是精通用户的业务，就能够充分理解用户的需求，帮助用户提升，把 maven 的构建的 jar 包放到你想要放置的位置，如图



在该 jar 包所在路径输入 cmd,如图



进入该目录下的 dos 命令行窗口



输入如下的启动命令

```
java -jar gaugwell-sp.jar --spring.profiles.active=prdx
```

当 dos 命令行出现如下的界面,则表示该服务启动成功

```
C:\Windows\System32\cmd.exe - java -jar gaugwell-bp.jar
Microsoft Windows [版本 10.0.10586]
(c) 2015 Microsoft Corporation. 保留所有权利。

E:\>java -jar gaugwell-bp.jar
2020-09-24 10:28:14.407 INFO 6500 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration' of type [org.springframework.cloud.autoconfigure.ConfigurationPropertiesRebinderAutoConfiguration$$EnhancerBySpringCGLIB$$be908dae] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

:: Spring Boot :: (v2.1.5.RELEASE)

2020-09-24 10:28:14.654 INFO 6500 --- [main] simu.tech.BrocheApplication : The following profiles are active: dev
2020-09-24 10:28:15.481 INFO 6500 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode!
2020-09-24 10:28:15.485 INFO 6500 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFAULT mode.
2020-09-24 10:28:15.511 INFO 6500 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 13ms. Found 0 repository interfaces.
2020-09-24 10:28:15.788 INFO 6500 --- [main] o.s.c.cloud.context.scope.GenericScope : BeanFactory id=f0195566-b903-39d3-8f74-aa0a33b2a485
2020-09-24 10:28:15.815 INFO 6500 --- [main] trationDelegate$BeanPostProcessorChecker : Bean 'simu.tech.feign.CodeInfoFeign' of type [org.springframework.cloud.openfeign.FeignClientFactoryBean] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)

2020-09-24 10:28:19.927 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getAllTypeUsingGET_1
2020-09-24 10:28:19.930 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getAllTypeOrAttrUsingGET_1
2020-09-24 10:28:19.934 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getFormTypeUsingGET_1
2020-09-24 10:28:19.937 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getSearchFormTypeUsingGET_1
2020-09-24 10:28:19.973 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: testUsingGET_1
2020-09-24 10:28:19.976 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getGcByIdUsingGET_1
2020-09-24 10:28:19.979 INFO 6500 --- [main] .d.s.w.r.o.CachingOperationNameGenerator : Generating unique operation named: getGcByZftoidUsingGET_1
2020-09-24 10:28:20.047 INFO 6500 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 24556 (http) with context path ''
2020-09-24 10:28:20.048 INFO 6500 --- [main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating port to 24556
2020-09-24 10:28:20.050 INFO 6500 --- [main] simu.tech.BrocheApplication : Started BrocheApplication in 6.23 seconds (JVM running for 6.538s)
```

在该 jar 包所在的路径位置上输入 cmd,进入 dos 命令行,然后输入如下的启动命令
java -jar gaugwell-bp.jar --spring.profiles.active=prxd
出现 dos 窗口出现如下的界面则表示该服务启动成功



Event 用一个圆圈表示，它是流程中运行过程中发生的事情。

活动用圆角矩形表示，一个流程由一个活动或多个活动组成

一个 bpmn 图形的例子：



这是一个流程设计模板你可以设计更多的适合您工作需要的模板,然后把你需要进行流程的事件进行开始操作,并且可以看到流程的执行情况

