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# FactoryTalk ProductionCentre培训

基础介绍 – Shop Operations Server

ISPB (信息软件部门)

2016年9月18日



PUBLIC INFORMATION

 Allen-Bradley • Rockwell Software

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Automation**

- **课程名字：**

FTPC基本培训 – Shop Operations Server

- **课程描述：**

本课程介绍FactoryTalk ProductionCentre的Shop Operations Server服务配置

- **目标受众：**

业务用户，项目经理，开发人员

- **培训目标：**完成该课程之后，学员将能够

- 了解Shop Operations Server
- 掌握Shop Operations Server服务配置





- **课堂纪律：**
  - 关闭手机铃声，设置为静音模式
  - 举手提问、发言



Shop Operations Server介绍

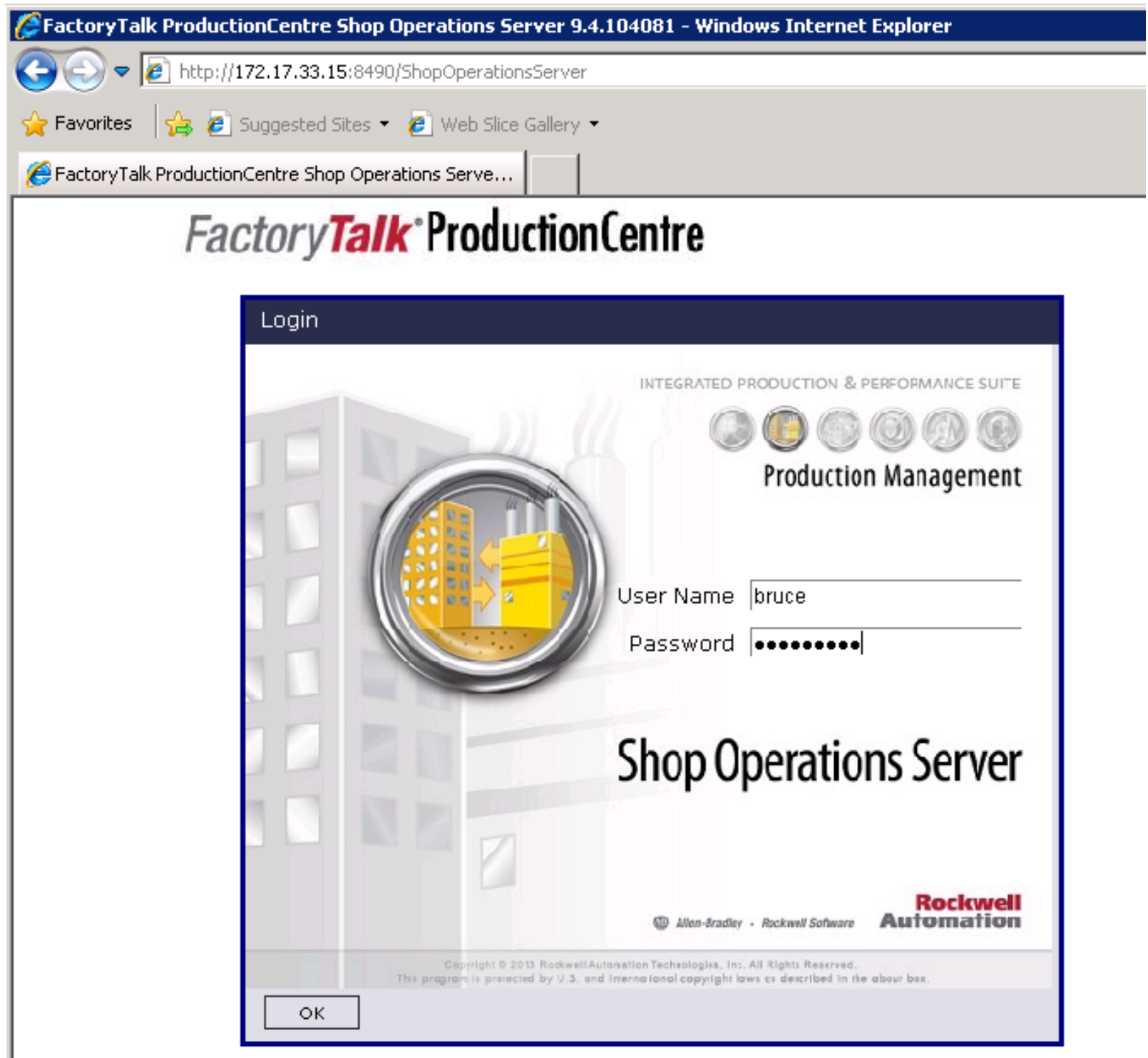
Shop Operations Server配置

QA

# Shop Operations Server介绍

- Shop Operations Server

一个Java后台运行服务，执行业务逻辑处理或提供外围系统接口服务



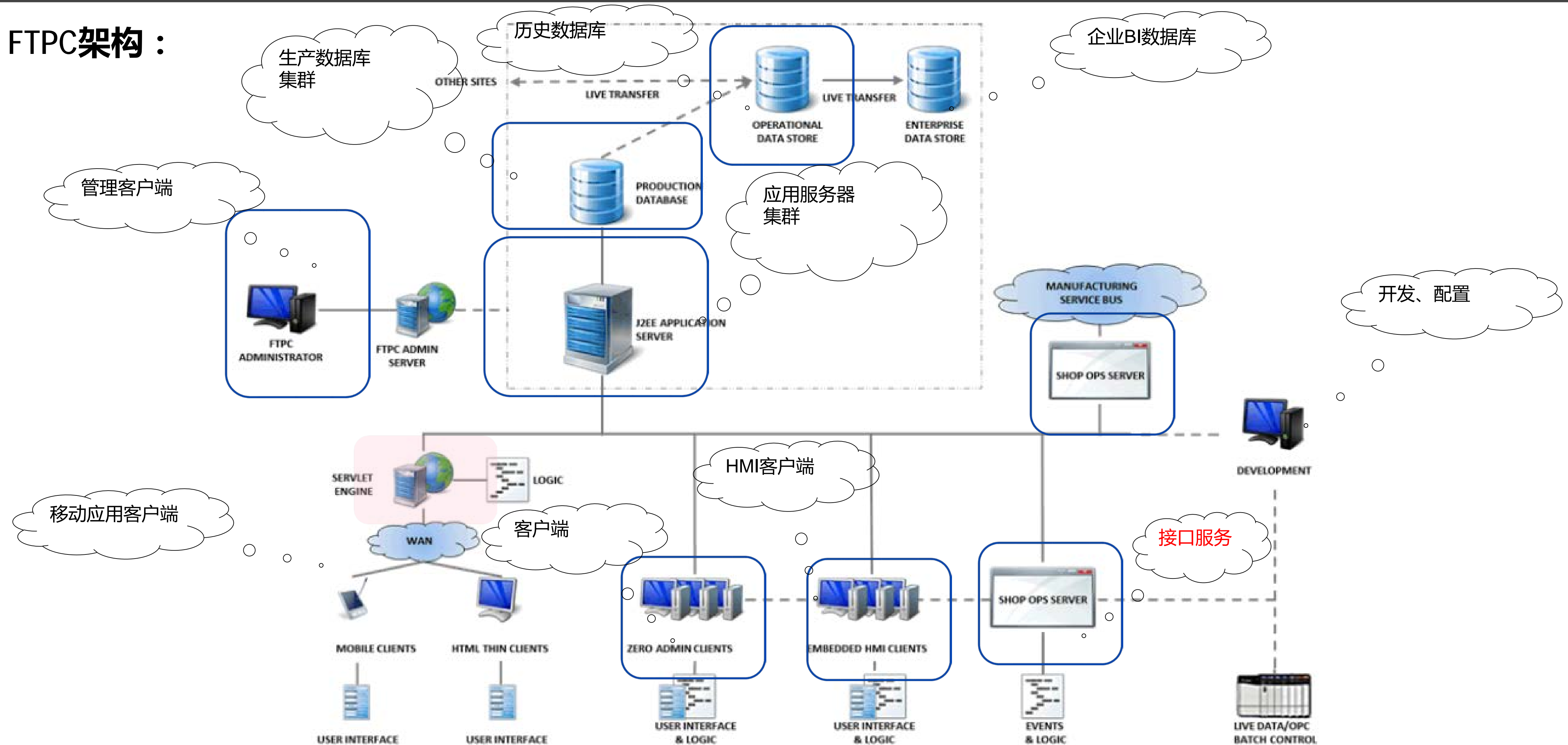
FactoryTalk® ProductionCentre					Logoff
Events					
<div><input checked="" type="checkbox"/> View Event Status</div> <div><a href="#">View Event History</a></div> <div><a href="#">View Event Chart</a></div>					
Source	Event	Total Processed	Average Processing Time (sec)	Maximum Processing Time (sec)	
EIG_InboundEvent_AS_Logistics	afterStart	1	0.028	0.028	
EIG_InboundEvent_AS_Logistics	beforeStart	1	0.231	0.231	
HeartbeatSender	fired	12,072	0.003	0.032	
EIG_InboundEvent_AS_Logistics	functions	1	0.023	0.023	
ASInboundActivityLogistics	onError	0	0	0	
ASInboundActivityAppSuite	onError	0	0	0	
ASInboundActivityAppSuite	onRunning	1	0	0	
ASInboundActivityLogistics	onRunning	1	0	0	
<div><input checked="" type="checkbox"/> Events Summary</div> <div><a href="#">Queue Time</a></div> <div><a href="#">Function Thread</a></div> <div><a href="#">Current Event</a></div> <div><a href="#">Manage Event</a></div> <div><a href="#">Refresh</a></div> <div><a href="#">Reload</a></div>					

Services					
File Action View Help					
<div>Services (Local)</div> <div>Services (Local)</div>					
<div><b>Diagnostic Policy Service</b></div> <div><a href="#">Stop the service</a></div> <div><a href="#">Restart the service</a></div> <div>Description: The Diagnostic Policy Service enables problem detection, troubleshooting and resolution for Windows components. If this service is stopped, diagnostics will no longer function.</div>					
Name	Description	Status	Startup Type	Log On As	
Shell Hardware Detection	Provides notifications for AutoPlay hardware ev...	Started	Automatic	Local System	
ShopOperationsServer(Application-8260)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(BDC-8290)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(BIW-8280)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(callbutton-8300)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(Logistics_SOS-8340)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(OrderDispatch-8240)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(PDAWebService-8250)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(Report-User-8440)	Rockwell Shop Operations Server for FTVP USER...		Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(Stamping-8270)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
ShopOperationsServer(VINMark-8310)	Rockwell Shop Operations Server for processing...	Started	Automatic	mes_support@cjl-r-m.local	
Smart Card	Manages access to smart cards read by this co...		Manual	Local Service	

# Shop Operations Server介绍

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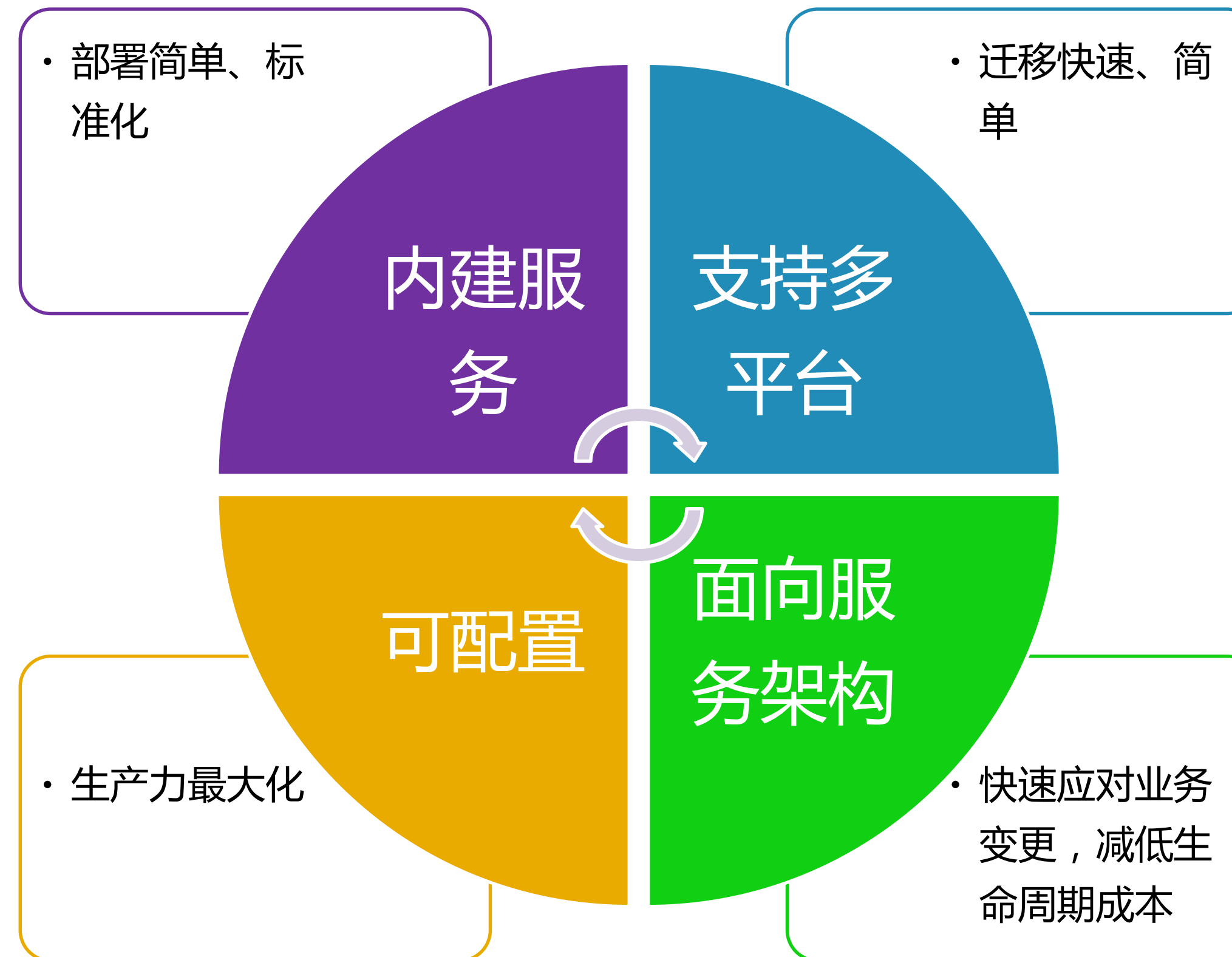
## ■ FTPC架构：





# Shop Operations Server介绍

## ▪ Shop Operations Server特性及价值：



Shop Operations Server介绍

Shop Operations Server配置

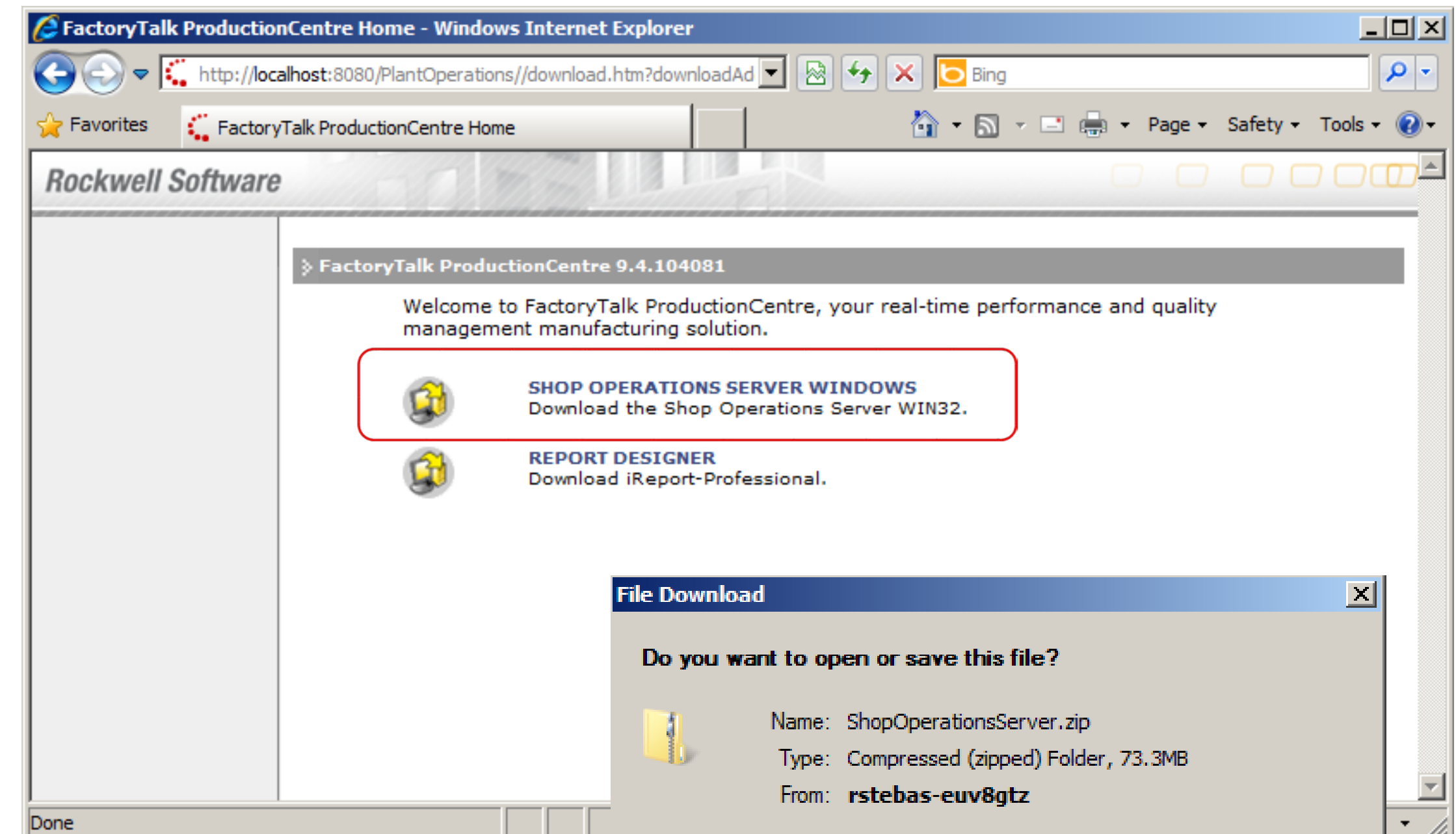
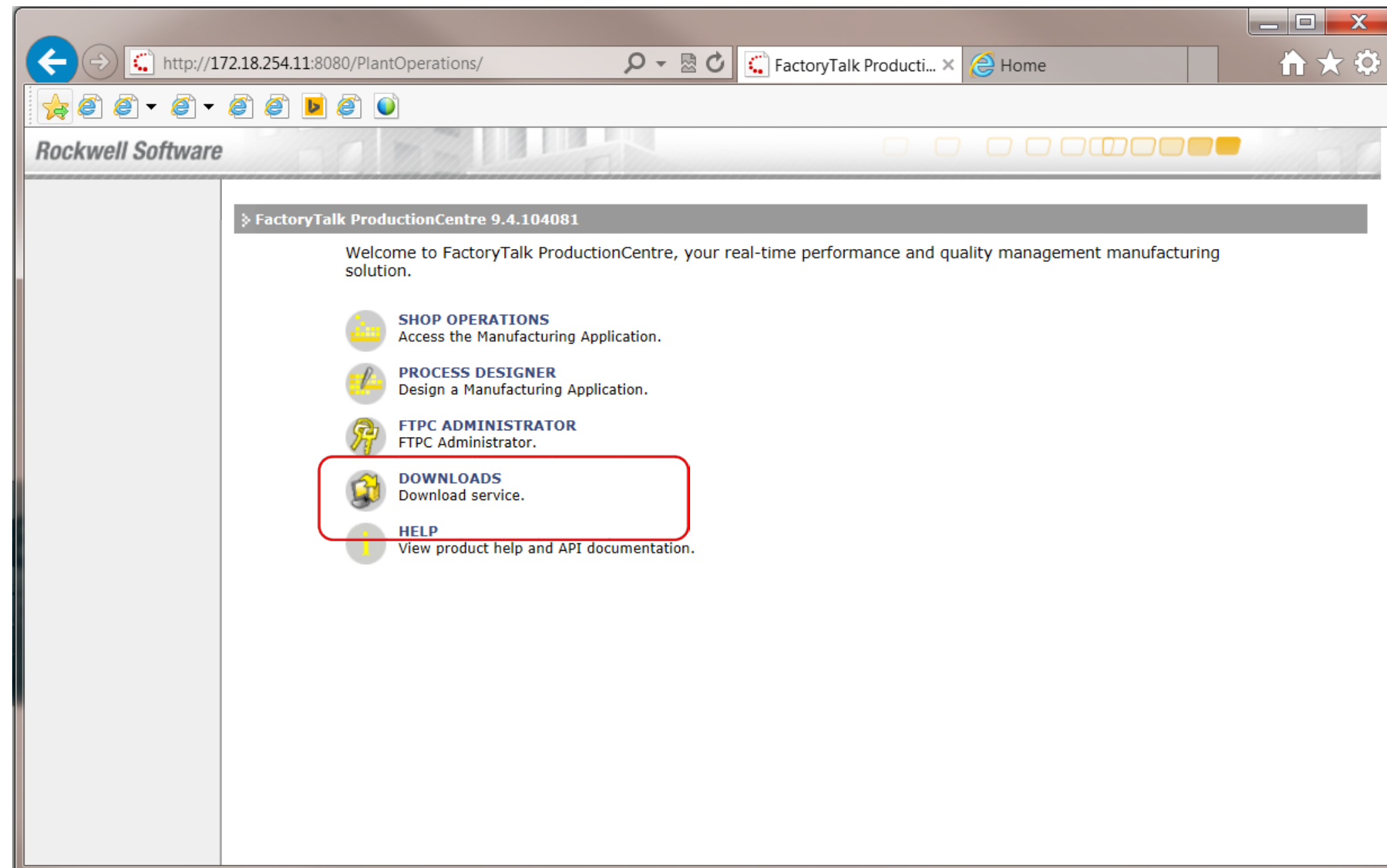
QA



# Shop Operations Server配置

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- 通过FTPC主页下载Shop Operations Server

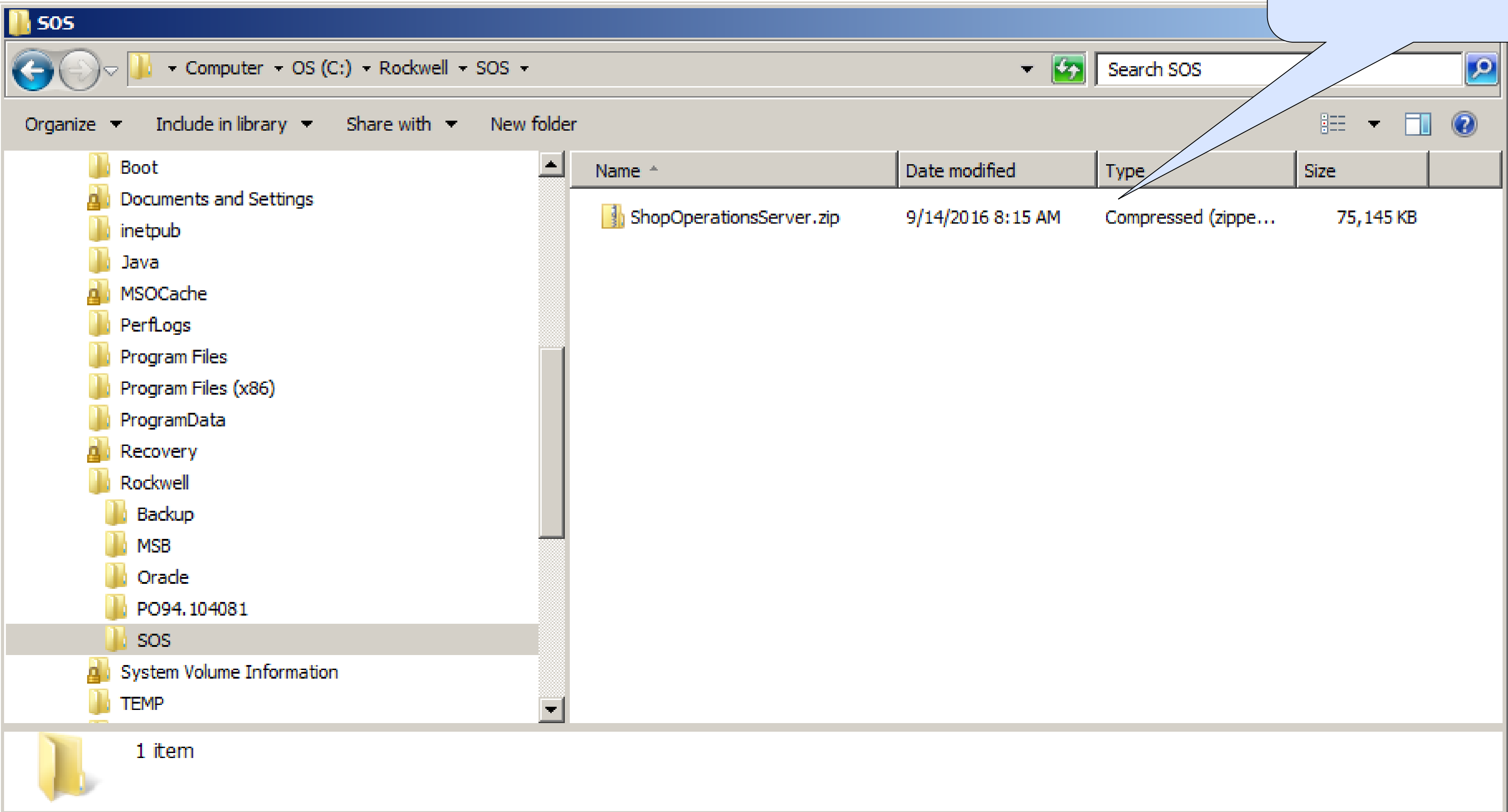


通过FTPC主页下载Shop Operations Server

<http://localhost:8080/PlantOperations//download.htm?downloadAddress=http://localhost:8080/PlantOperations#>

# Shop Operations Server配置

Shop Operations Server下载

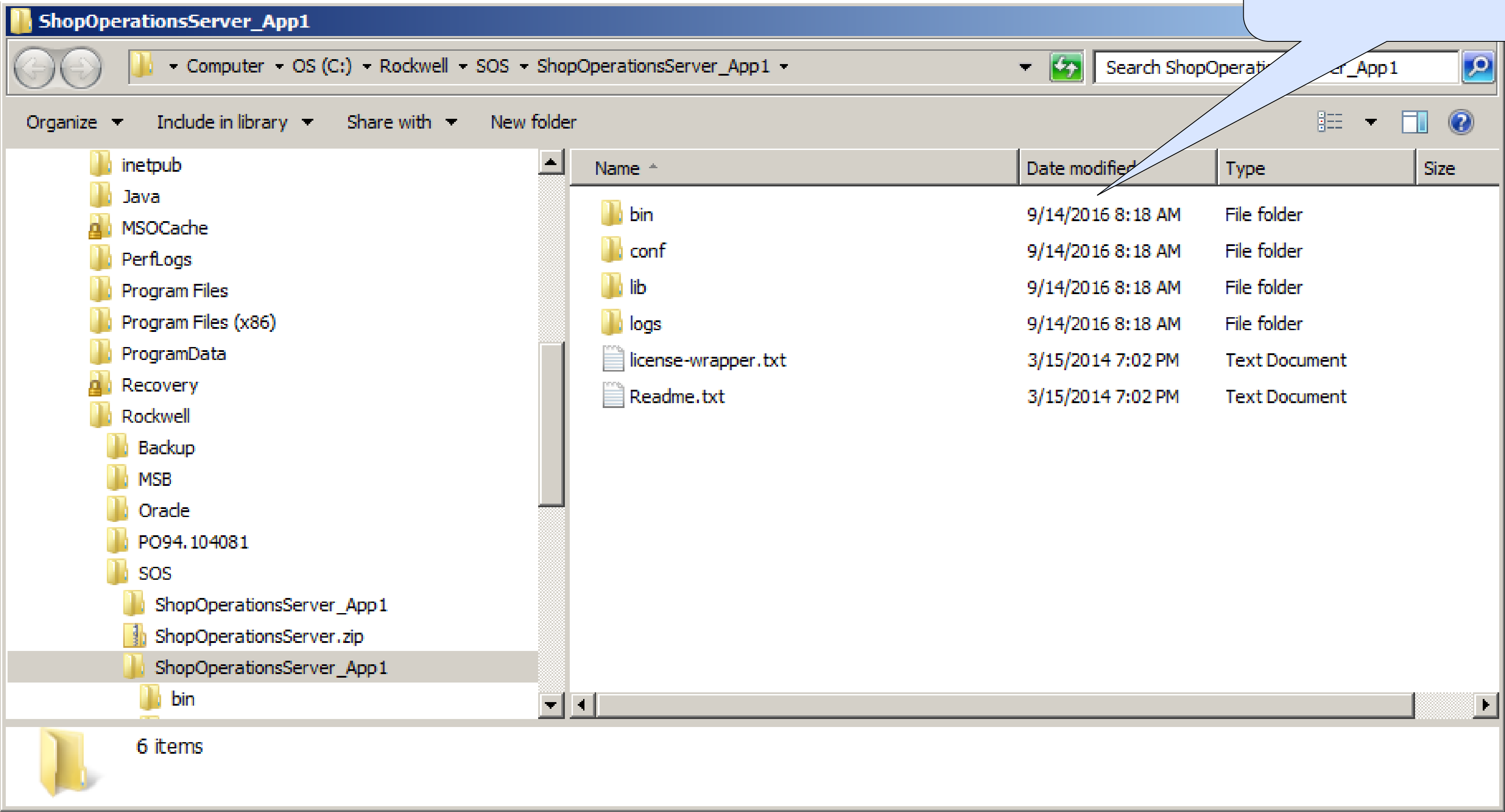


# Shop Operations Server配置



- Shop Operations Server文件夹

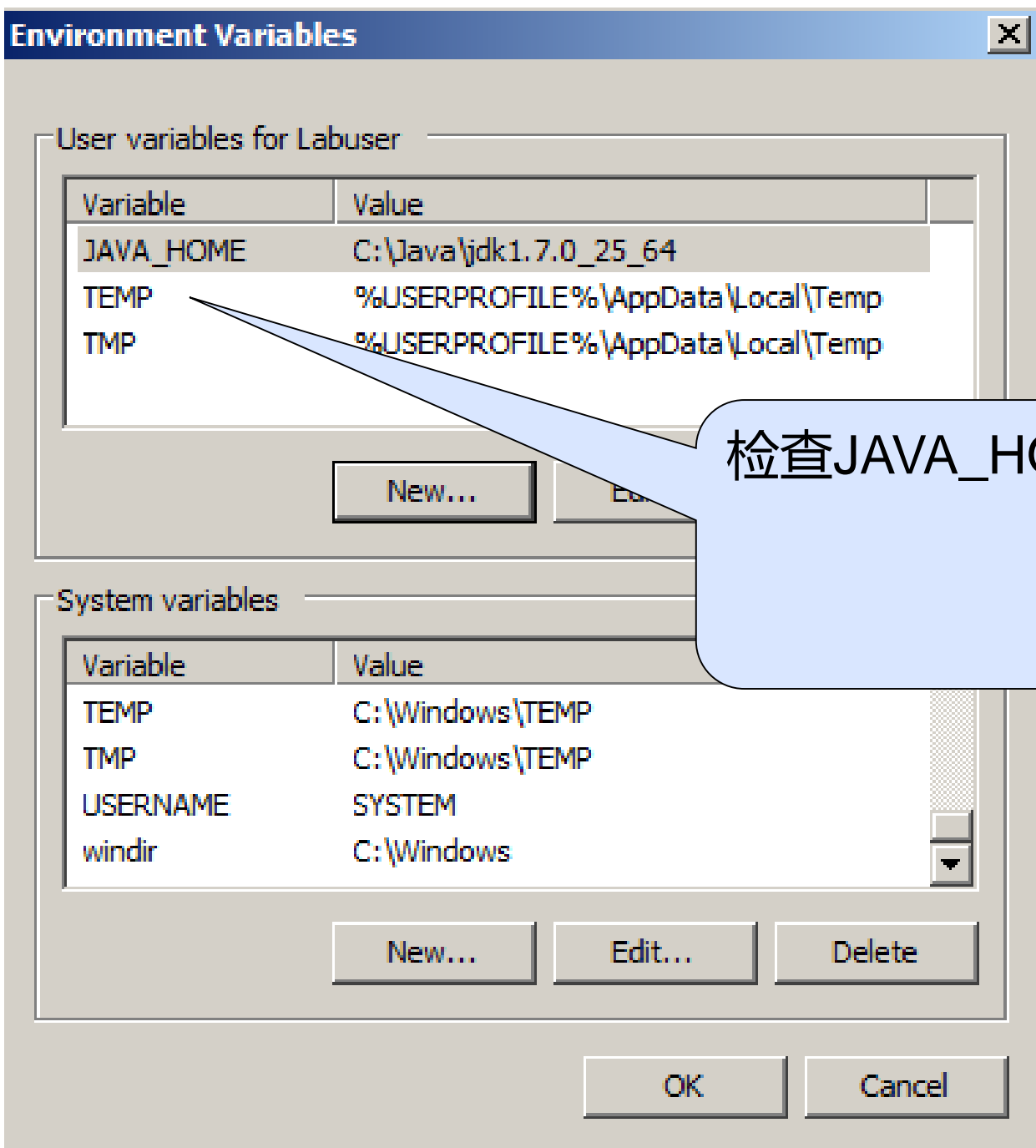
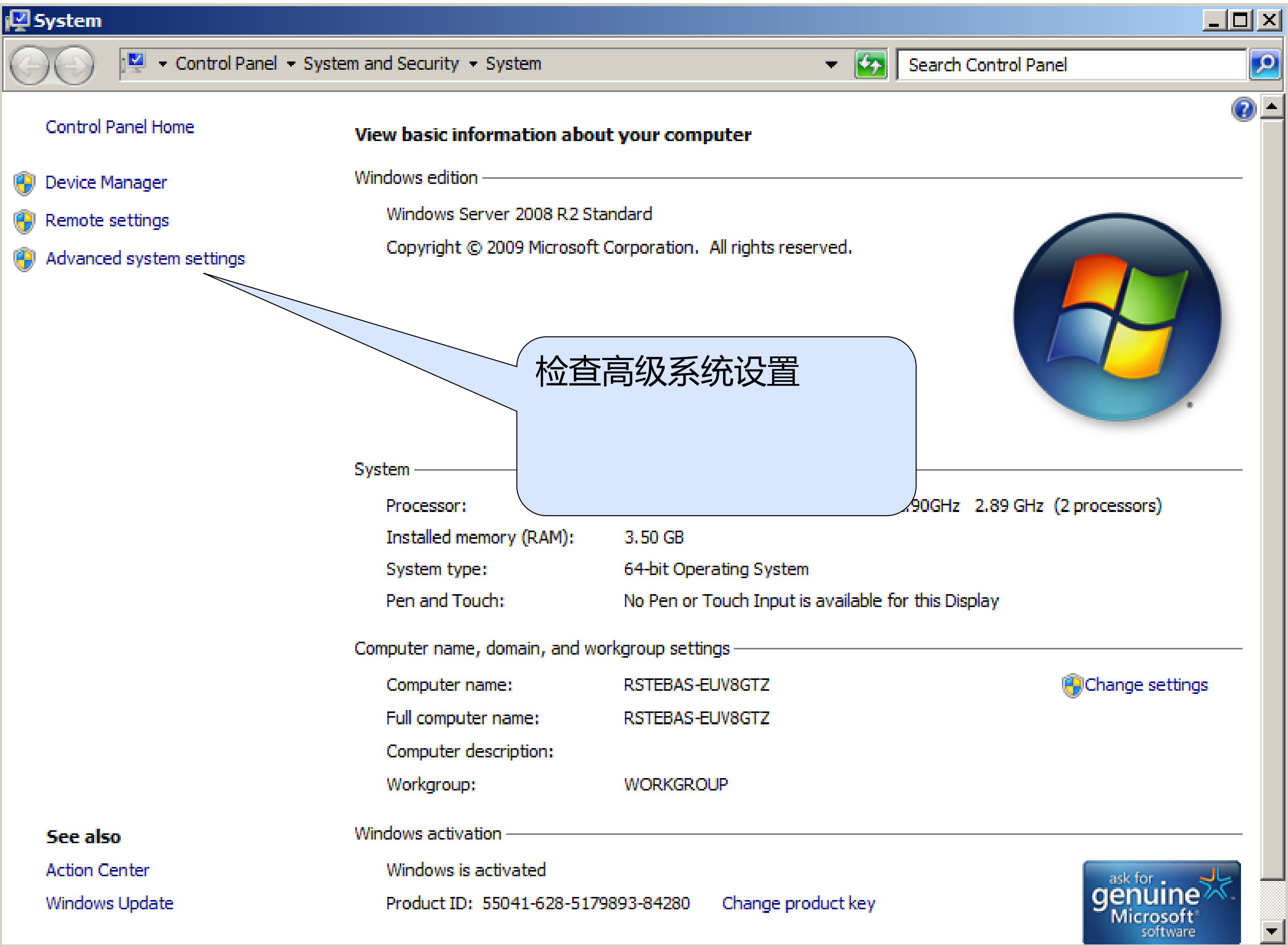
解压缩文件到本地





# Shop Operations Server配置

■ 设置JAVA\_HOME变量



# Shop Operations Server配置



- 运行Shop Operations Server服务

运行App.bat

bin

Computer > OS (C:) > Rockwell > SOS > ShopOperationsServer\_App1 > bin

Search bin

Organize Open Print New folder

Name	Date modified	Type	Size
App.bat	3/15/2014 7:02 PM	Windows Batch File	
encryptPassword.bat	3/15/2014 7:02 PM	Windows Batch File	
InstallApp-NT.bat	3/15/2014 7:02 PM	Windows Batch File	
runSos.bat	3/15/2014 7:02 PM	Windows Batch File	
ShopOperationsServer.xml	3/15/2014 7:02 PM	XML Document	
StartApp-NT.bat	3/15/2014 7:02 PM	Windows Batch File	
StopApp-NT.bat	3/15/2014 7:02 PM	Windows Batch File	
UninstallApp-NT.bat	3/15/2014 7:02 PM	Windows Batch File	
wrapper.exe	3/15/2014 7:02 PM	Application	20

Documents and Settings  
inetpub  
Java  
MSOCache  
PerfLogs  
Program Files  
Program Files (x86)  
ProgramData  
Recovery  
Rockwell  
Backup  
MSB  
Orade  
PO94.104081  
SOS  
ShopOperationsServer\_App1  
bin  
conf

App.bat  
Windows Batch File  
Date modified: 3/15/2014 7:02 PM  
Size: 1.38 KB  
Date created: 3/15/2014 7:02 PM

# Shop Operations Server配置

## ■ 命令行运行Shop Operations Server

```
ShopOperationsServer
wrapper --> Wrapper Started as Console
wrapper Launching a JVM...
jvm 1 Wrapper (Version 3.2.3) http://wrapper.tanukisoftware.org
jvm 1 Copyright 1999-2006 Tanuki Software, Inc. All Rights Reserved.
jvm 1
jvm 1 WARNING - Unable to load the Wrapper's native library because none of
jvm 1 the
jvm 1 following files:
jvm 1 wrapper-windows-x86-64.dll
jvm 1 wrapper.dll
jvm 1 could be located on the following java.library.path:
jvm 1 C:\Rockwell\SOS\ShopOperationsServer_App1\bin\
jvm 1 Please see the documentation for the wrapper.java.library.p
jvm 1 ath
jvm 1 configuration property.
jvm 1 System signals will not be handled correctly.
jvm 1
jvm 1 ShopOperationsServer.xml at: C:\Rockwell\SOS\ShopOperationsServer_App
jvm 1 1\bin\ShopOperationsServer.xml
jvm 1 dbString=jdbc:hsqldb:hsqldb://localhost/xdh
jvm 1 Connection obtained to existing database: org.hsqldb.jdbc.jdbcConnect
jvm 1 ion@1694ce18
jvm 1 Executing table create statements on HSQLDB.
jvm 1 No need to reattempt table creation as Table already exists: APPLICAT
jvm 1 IONLOG in statement [CREATE TEXT TABLE APPLICATIONLOG]
jvm 1 Executing write delay set statement on HSQLDB.
jvm 1 Completed setting write delay value for hsqldb in Environment.result
jvm 1 = 0
jvm 1 Communication Protocol is Auto-Query. Trying connecting to server
jvm 1 with RMI/IIOP first...
jvm 1 log4j:WARN No appenders could be found for logger (org.apache.log4j
jvm 1 .TimedSocketFactory).
jvm 1 log4j:WARN Please initialize the log4j system properly.
jvm 1 RMI/IIOP succeeded. Will use RMI/IIOP.
jvm 1 Sep 14, 2016 8:42:08 AM com.rockwell.eventmanager.EventManager Write
jvm 1 SEVERE: C:\Rockwell\SOS\ShopOperationsServer_App1\bin\ShopOperations
jvm 1 .jar\jacob.dll: Can't load IA 32-bit .dll on a IA 64-bit platform
```

命令行运行

```
ShopOperationsServer
jvm 1 Sep 14, 2016 8:42:13 AM EventSheetEnvironment login
jvm 1 SEVERE: DatasweepException with 1 errors:
jvm 1 Error Msg #1 Unknown Exception : The system could not log you on.
jvm 1 The user name and password are case sensitive, so make sure your user
jvm 1 name and
jvm 1 password were entered correctly. If you still cannot log on, your pa
jvm 1 ssword may have
jvm 1 expired or your account may be disabled. Please contact your system
jvm 1 administrator.
jvm 1 DatasweepException with 1 errors
jvm 1 at com.datasweep.compatibility.utility.ErrorHandling.createDatas
jvm 1 weepException(Unknown Source)
jvm 1 at com.datasweep.compatibility.utility.ErrorHandling.createDatas
jvm 1 weepException(Unknown Source)
jvm 1 at com.datasweep.compatibility.manager.ExceptionHandling.toDatas
jvm 1 weepException(Unknown Source)
jvm 1 at com.datasweep.compatibility.manager.ServerImpl.login(Unknown
jvm 1 Source)
jvm 1 at com.datasweep.compatibility.pnuts.EventSheetEnvironment.login
jvm 1 (Unknown Source)
jvm 1 at com.rockwell.eventmanager.EventManager.start(Unknown Source)
jvm 1 at com.rockwell.eventmanager.EventManager.main(Unknown Source)
jvm 1 at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
jvm 1 at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAcces
jvm 1 sorImpl.java:57)
jvm 1 at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMet
jvm 1 hodAccessorImpl.java:43)
jvm 1 at java.lang.reflect.Method.invoke(Method.java:606)
jvm 1 at org.tanukisoftware.wrapper.WrapperSimpleApp.run(WrapperSimple
jvm 1 App.java:240)
jvm 1 at java.lang.Thread.run(Thread.java:724)
```

未配置好，会报用户权限错误



# Shop Operations Server配置

## ■ 登录Shop Operations Server管理端

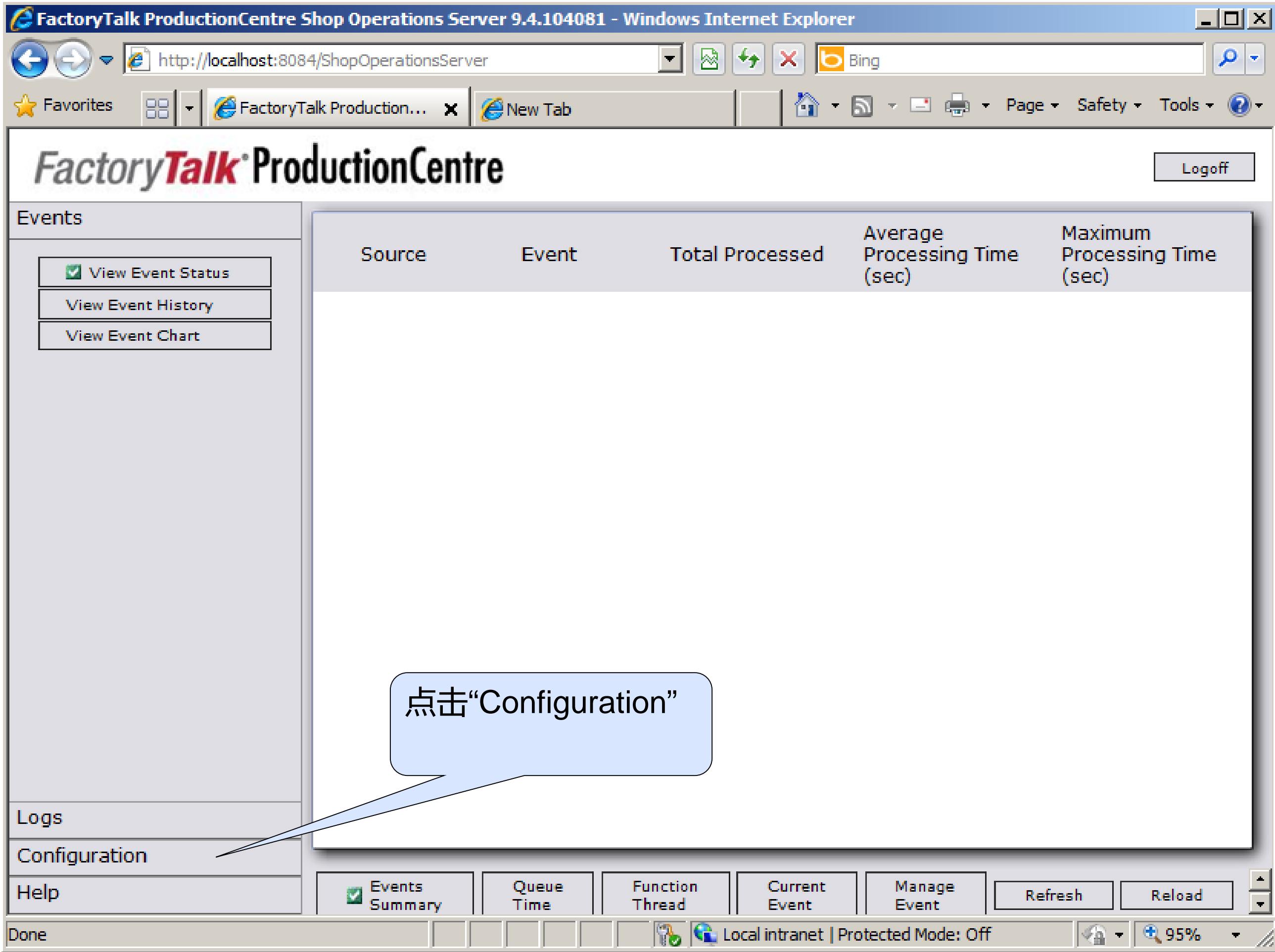


通过浏览器访问  
`http://localhost:8084/ShopOperationsServer`

输入用户名、密码

# Shop Operations Server配置

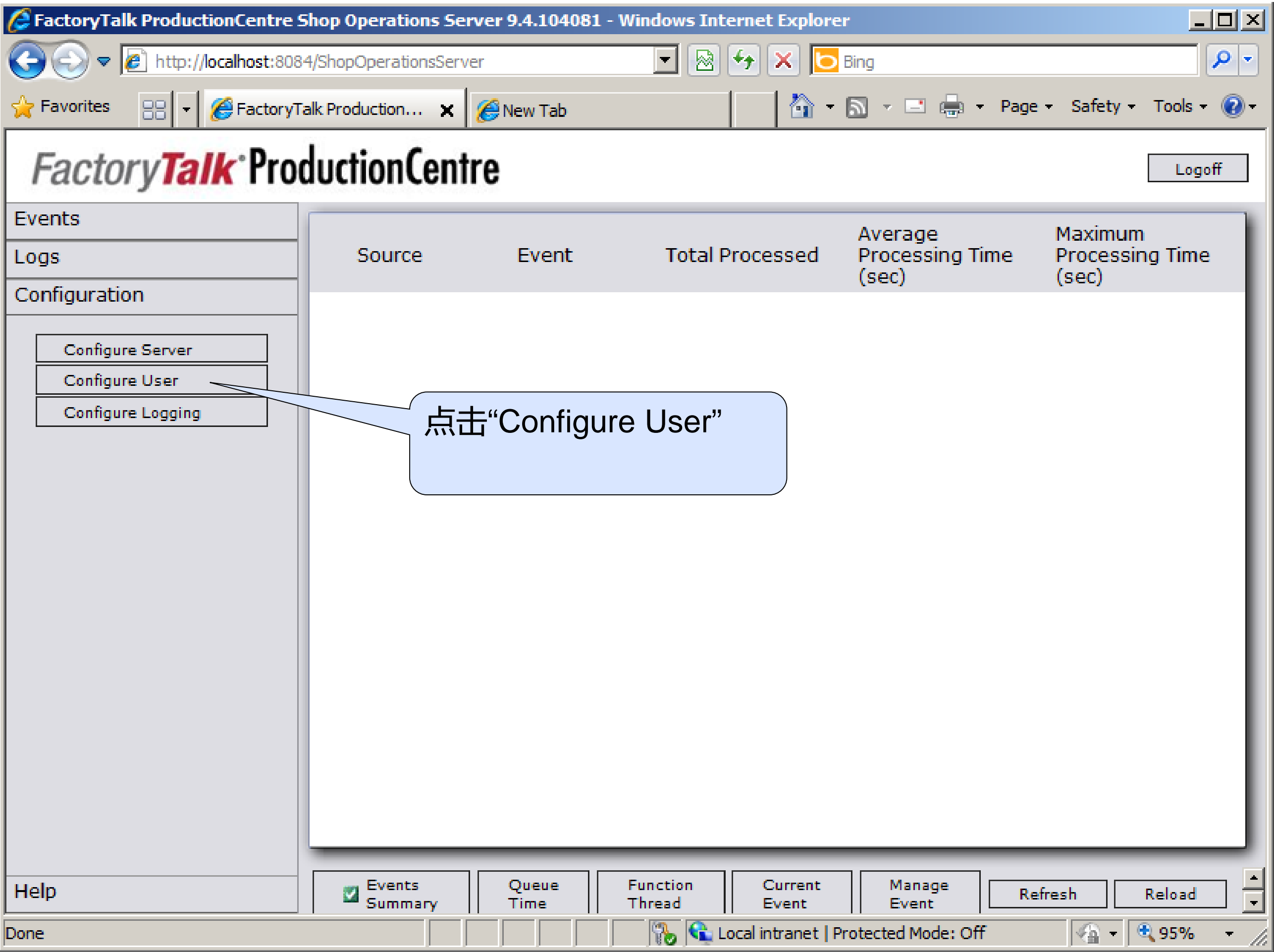
■ Shop Operations Server配置



# Shop Operations Server配置



- Shop Operations Server配置功能项目





# Shop Operations Server配置

## ■ Shop Operations Server配置用户

FactoryTalk ProductionCentre Shop Operations Server 9.4.104081 - Windows Internet Explorer

http://localhost:8084/ShopOperationsServer

FactoryTalk ProductionCentre

Logoff

Events

Logs

Configuration

Configure Server

☒ Configure User

Configure Logging

**New Settings**

User Name

Password

Confirm Password

**Active Settings**

User Name

Save Restore

Done

Local intranet | Protected Mode: Off

95%

输入用户名和密码，替代初始用户账号“admin”

点击“保存”

# Shop Operations Server配置



## Shop Operations Server配置服务

FactoryTalk ProductionCentre Shop Operations Server 9.4.104081 - Windows Internet Explorer

http://localhost:8084/ShopOperationsServer

FactoryTalk ProductionCentre

Events  
Logs  
Configuration

☒ Configure Server  
Configure User  
Configure Logging

**New Settings**

Event Sheet Name  Choose...

Station Name  Choose...

Web Server Port 8084

IIOP URL jnp://RSTEBAS-EUV8GTZ:1099

HTTP URL http://RSTEBAS-EUV8GTZ:8080

Statistics ☒ Enable

History Queue ☒ Enable

Failover ☐ Enable

MasterHost

SlaveHost

Failover Port 7700

**Active Settings**

Event Sheet Name

Station Name

Save Restore

选择Event Sheet ( 必选项 )

选择Station ( 可选项 )

设置该服务连接的FTPC应用服务地址

如果需要启用HA，勾选Failover为“Enable”

配置Failover服务

设置该服务的WebService端口号，默认8084

点击“保存”

Select Event Sheet

- ETL\_PMC\_BDC\_LOG
- ETL\_PMC\_BDC\_WebService
- ETL\_PMC\_BIW\_KPI
- ETL\_PMC\_BIW\_LOG
- ETL\_PMC\_STAMPING\_KPI
- ETL\_PMC\_STAMPING\_LOG
- ETL\_PMC\_TCF\_KPI
- ETL\_PMC\_TCF\_LOG
- ETL\_Quality
- ETL\_Quality\_20141126
- Event Sheet Test
- FTPC\_E1
- PDAWebService
- PMC\_BIW\_SOS

OK Cancel

# Shop Operations Server配置

## ■ Shop Operations Server配置服务

FactoryTalk ProductionCentre Shop Operations Server 9.4.104081 - Windows Internet Explorer

http://localhost:8084/ShopOperationsServer

FactoryTalk ProductionCentre

Logoff

Events

Logs

Configuration

☒ Configure Server

Configure User

Configure Logging

Help

**New Settings**

Event Sheet Name: Event\_Sheet\_Test [Choose...]

Station Name: [Choose...]

Web Server Port: 8090

IIOP URL: jnp://RSTEBAS-EUV8GTZ:1099

HTTP URL: http://RSTEBAS-EUV8GTZ:8080

Statistics: ☒ Enable

History Queue: ☒ Enable

Failover: ☐ Enable

MasterHost:

SlaveHost:

Failover Port: 7700

**Active Settings**

Event Sheet Name:

Station Name:

Save Restore

Done

Local intranet | Protected Mode: Off 95%



# Shop Operations Server配置

- 关闭Shop Operations Server命令行，重新运行

```
ShopOperationsServer
jvm 1 : configuration property.
jvm 1 : System signals will not be handled correctly.
jvm 1 :
jvm 1 : ShopOperationsServer.xml at: C:\Rockwell\SOS\ShopOperationsServer_App
1\bin\ShopOperationsServer.xml
jvm 1 : dbString==jdbc:hsqldb:hsq1://localhost/xd
jvm 1 : Will attempt to start hsql server as first connection attempt was not
successfaul.
jvm 1 : [Server@657430d3]: [Thread[Thread-1,5,main]]: checkRunning(false) ent
ered
jvm 1 : [Server@657430d3]: [Thread[Thread-1,5,main]]: checkRunning(false) exi
ted
jvm 1 : [Server@657430d3]: Initiating startup sequence...
jvm 1 : [Server@657430d3]: Server socket opened successfully in 1 ms.
jvm 1 : [Server@657430d3]: Database [index=0, id=0, db=file:C:\Users\Labuser\
Application Data\Rockwell Automation\FactoryTalk ProductionCentre\logs\Applicati
onLog\mydb, alias=xd] opened successfully in 162 ms.
jvm 1 : [Server@657430d3]: Startup sequence completed in 163 ms.
jvm 1 : [Server@657430d3]: 2016-09-14 09:46:43.511 HSQLDB server 1.8.0 is onl
ine
jvm 1 : [Server@657430d3]: To close normally, connect and execute SHUTDOWN SQ
L
jvm 1 : [Server@657430d3]: From command line, use [Ctrl]+[C] to abort abruptl
y
jvm 1 : Completed start of hsqldb
jvm 1 : dbString==jdbc:hsqldb:hsq1://localhost/xd
jvm 1 : Executing table create statements on HSQLDB.
jvm 1 : No need to reattempt table creation as Table already exists: APPLICAT
IONLOG in statement [CREATE TEXT TABLE APPLICATIONLOG]
jvm 1 : Executing write delay set statement on HSQLDB.
jvm 1 : Completed setting write delay value for hsqldb in Environment.result
= 0
jvm 1 : Communication Protocol is Auto-discovery. Trying connecting to server
with RMI/IIOP first...
jvm 1 : log4j:WARN No appenders could be found for logger (org.jnp.interfaces
.TimedSocketFactory).
jvm 1 : log4j:WARN Please initialize the log4j system properly.
jvm 1 : RMI/IIOP succeeded. Will use RMI/IIOP for this session...
jvm 1 : Sep 14, 2016 9:46:50 AM com.datasweep.core.eventlog.EventLog Write
jvm 1 : SEVERE: C:\Rockwell\SOS\ShopOperationsServer_App1\lib\NativeLibsWin32
.jar\jacob.dll: Can't load IA 32-bit .dll on a AMD 64-bit platform
jvm 1 : Service Event_Sheet_Test
-
```

# Shop Operations Server配置



- 查看Shop Operations Server运行日统计数据

FactoryTalk ProductionCentre Shop Operations Server 9.4.104081 - Windows Internet Explorer

http://localhost:8090/ShopOperationsServer

FactoryTalk Production... x New Tab

FactoryTalk ProductionCentre

Logoff

Events

☒ View Event Status

View Event History

View Event Chart

Source	Event	Total Processed	Average Processing Time (sec)	Maximum Processing Time (sec)
Event_Sheet_Test	afterStart	1	0.005	0.005
esTimer1	fired	5	0.005	0.014

Logs

Configuration

Help

☒ Events Summary

Queue Time

Function Thread

Current Event

Manage Event

Refresh

Reload

Done

Local intranet | Protected Mode: Off

95%

# Shop Operations Server配置

查看Shop Operations Server运行日志

FactoryTalk ProductionCentre Shop Operations Server 9.4.104081 - Windows Internet Explorer

http://localhost:8090/ShopOperationsServer

FactoryTalk ProductionCentre

Logoff

Events

View Event Status

☒ View Event History

View Event Chart

	Source	Event	Event Time	Queue Time (sec)	Processed Time	Processing Time (sec)
1	esTimer1	fired	9/14/16 9:49:33 AM	0.001	9/14/16 9:49:33 AM	0.004
2	esTimer1	fired	9/14/16 9:49:23 AM	0	9/14/16 9:49:23 AM	0.002
3	esTimer1	fired	9/14/16 9:49:13 AM	0.001	9/14/16 9:49:13 AM	0.002
4	esTimer1	fired	9/14/16 9:49:03 AM	0.001	9/14/16 9:49:03 AM	0.003
5	esTimer1	fired	9/14/16 9:48:53 AM	0.001	9/14/16 9:48:53 AM	0.005
6	esTimer1	fired	9/14/16 9:48:43 AM	0.001	9/14/16 9:48:43 AM	0.003
7	esTimer1	fired	9/14/16 9:48:33 AM	0.001	9/14/16 9:48:33 AM	0.004
8	esTimer1	fired	9/14/16 9:48:23 AM	0	9/14/16 9:48:23 AM	0.002
9	esTimer1	fired	9/14/16 9:48:13 AM	0.001	9/14/16 9:48:13 AM	0.003
10	esTimer1	fired	9/14/16 9:48:03 AM	0.001	9/14/16 9:48:03 AM	0.003

Logs

Configuration

Help

<< Oldest

< Older

100.00%

Newer >

Newest >>

Refresh

Reset

Done

Local intranet | Protected Mode: Off

95%

Shop Operations Server介绍

Shop Operations Server配置

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