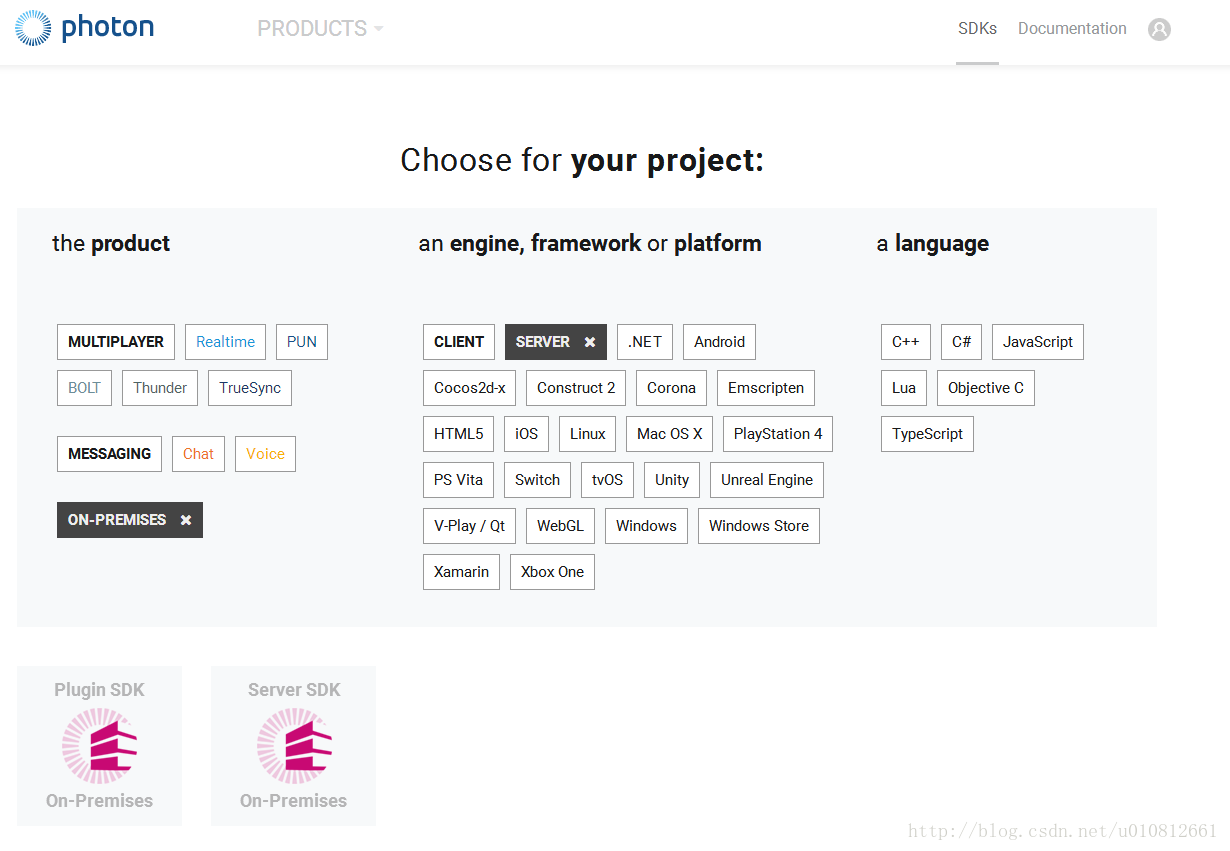
# **Photon Server游戏服务器教程（一）服务器配置**

Photon Server 是一款实时的Socket服务器和开发框架，开发非常快速，使用非常简单。服务端架构在windows系统平台上，采用C#语言编写。Photon Server客户端SDK提供了多种平台的开发API，包括DotNet、Unity3D、C/C++以及ObjC等。这个Photon Server游戏服务器教程系列主要时帮助大家去理解和使用，下面就来看看Photon Server的配置。

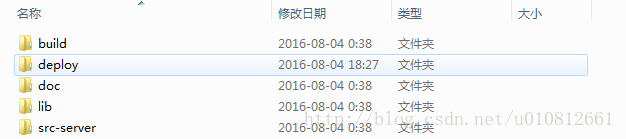
**一、PhotonServer的下载与解压：**

1.PhotonServe的官方网站https://www.photonengine.com/zh-CN/Photon ，进入到官网后点击SDKs,选择Server 工程，点击SeverSDK ON-PREMISES进行下载，需要注册一个账号。



2.百度云盘，链接：：https://pan.baidu.com/s/1nvyyC21 密码：brn6

3.把下载的文件解压到指定的盘符即可（文件路径最好不要含有中文），无需安装，我这里解压在D:\Program Files (x86)文件目录下。



1

解压后得到5个文件夹

2

build：编译配置有关的文件。

3

deploy :主要存放photon的服务器控制程序和服务端Demo。

4

doc：存放PhotonServer开发的相关API文档。

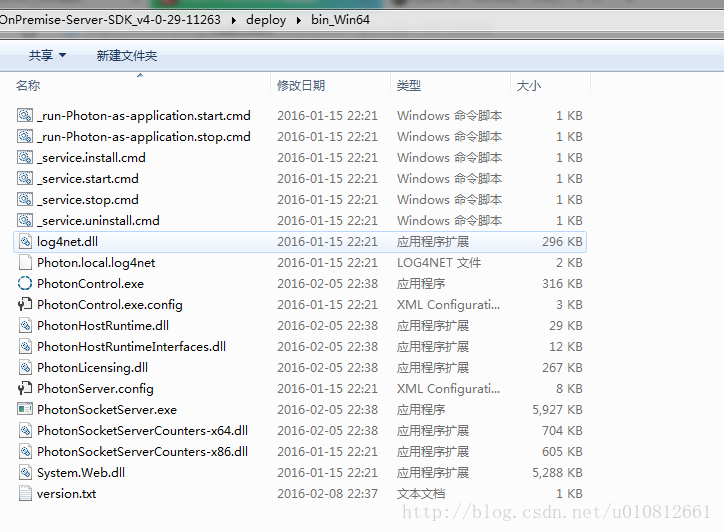
5

lib:存放PhotonServer开发的相关动态链接库。

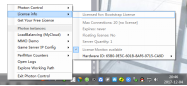
6

src-server:服务端Demo源代码

根据自己的电脑系统选择deploy文件夹下的bin\_Win32或者bin\_Win64文件下的PhotonControl.exe,点击运行Photon。

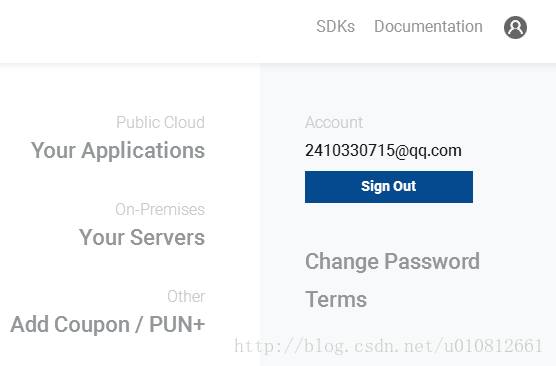


运行后会出现在右下角的托盘里

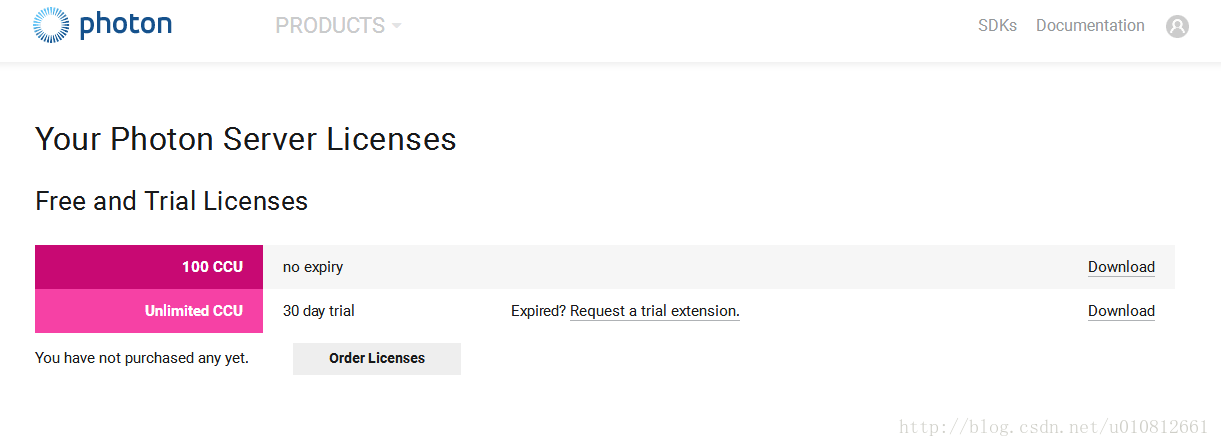


此时的Licenses 最大连接数量为20，如若想扩展到100，需在官网下载授权文件，放在deploy文件夹下的bin\_Win32或者bin\_Win64目录里面，下次运行时会自动识别授权文件。

选择 Your Server 选项



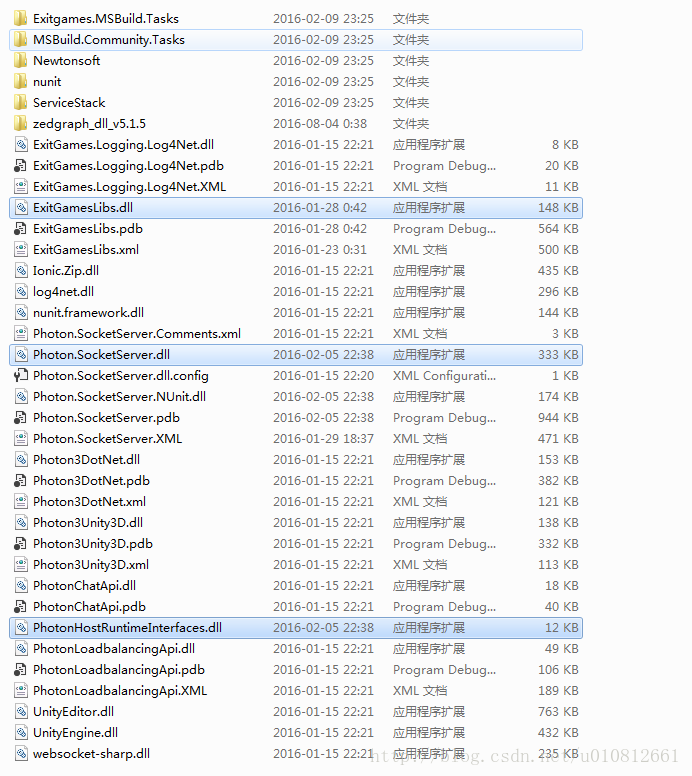
点击Download下载100 CCU文件即可。



**二、搭建自己的服务器**

1.下面我们开始搭建自己的第一个Photon Sever 服务器端程序，在Visual Studio 2013中新建一个MyGamePhotonServer类库工程。

2.在工程中添加一下三个引用，文件在PhotonServer解压目录的lib文件夹中，三个dll分别是：ExitGamesLibs.dll，Photon.SocketServer.dll，PhotonHostRuntimeInterfaces.dll



3.在此工程目录中添加入口类MyGameServer，继承ApplicationBase类，并实现其接口

1

using System;

2

using System.Collections.Generic;

3

using System.Linq;

4

using System.Text;

5

using System.Threading.Tasks;

6

using Photon.SocketServer;

7

namespace MyGamePhotonServer

8

｛

9

/// &lt;summary&gt;

10

/// 所有的server端 主类都要继承自ApplicationBase

11

/// &lt;/summary&gt;

12

public class MyGameServer:ApplicationBase

13

｛

14

/// &lt;summary&gt;

15

/// 刚一个客户端请求连接的

16

/// &lt;/summary&gt;

17

/// &lt;param name="initRequest"&gt;&lt;/param&gt;

18

/// &lt;returns&gt;&lt;/returns&gt;

19

protected override PeerBase CreatePeer(InitRequest initRequest)

20

｛

21

return new MyClientPeer(initRequest);

22

｝

23

/// &lt;summary&gt;

24

/// 初始化

25

/// &lt;/summary&gt;

26

protected override void Setup()

27

｛

28

｝

29

/// &lt;summary&gt;

30

/// server端关闭的时候

31

/// &lt;/summary&gt;

32

protected override void TearDown()

33

｛

34

｝

35

｝

36

｝

4.添加与客户端通信的类MyClientPeer， 需要继承ClientPeer类，并实现接口

1

using System;

2

using System.Collections.Generic;

3

using System.Linq;

4

using System.Text;

5

using System.Threading.Tasks;

6

using Photon.SocketServer;

7

namespace MyGamePhotonServer

8

｛

9

public class MyClientPeer:ClientPeer

10

｛

11

public MyClientPeer(InitRequest initRequest):base(initRequest)

12

｛ ｝

13

/// &lt;summary&gt;

14

/// 处理客户端断开连接后的操作

15

/// &lt;/summary&gt;

16

/// &lt;param name="reasonCode"&gt;&lt;/param&gt;

17

/// &lt;param name="reasonDetail"&gt;&lt;/param&gt;

18

protected override void OnDisconnect(PhotonHostRuntimeInterfaces.DisconnectReason reasonCode, string reasonDetail)

19

｛

20

｝

21

/// &lt;summary&gt;

22

/// 处理客户端的请求

23

/// &lt;/summary&gt;

24

/// &lt;param name="operationRequest"&gt;&lt;/param&gt;

25

/// &lt;param name="sendParameters"&gt;&lt;/param&gt;

26

protected override void OnOperationRequest(OperationRequest operationRequest, SendParameters sendParameters)

27

｛

28

｝

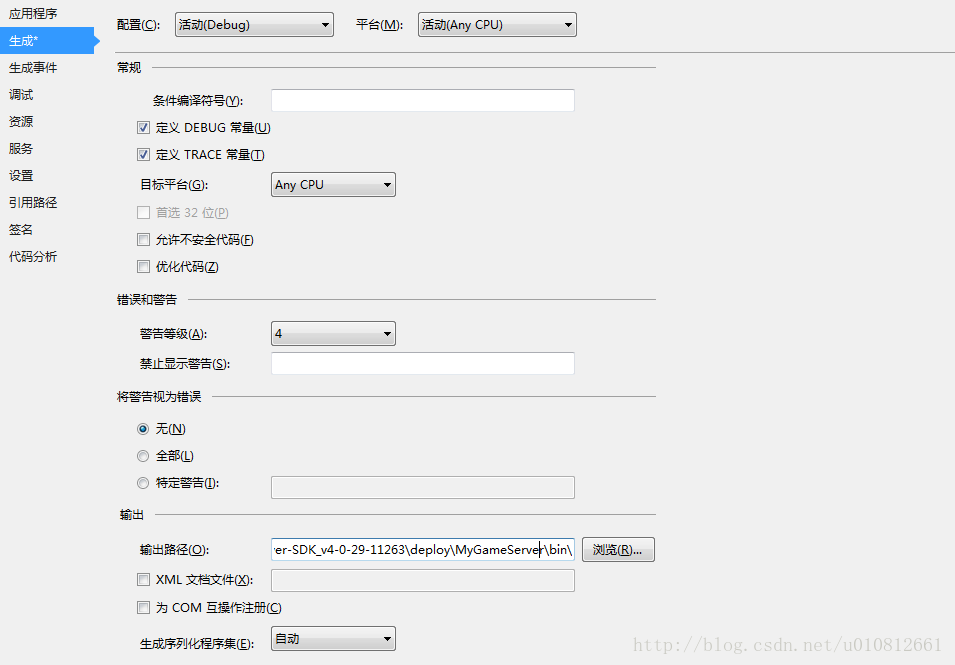
29

｝

30

｝

5.在deploy文件夹下新建一个MyGameServer\bin文件夹，在Visual Studio 2013中把我们刚创建的服务器程序MyPhotonServer部署在PhotonServer 中。



6.配置服务器：打开bin\_Win64（如果你是32的就打开bin\_Win32）文件夹下的PhotonServer.config，在Application标签下添加自己服务器配置文件。

1

&lt;Application

2

Name="MyGame"

3

BaseDirectory="MyGameServer"

4

Assembly="MyGamePhotonServer"

5

Type="MyGamePhotonServer.MyGameServer"

6

ForceAutoRestart="true"

7

WatchFiles="dll;config"

8

ExcludeFiles="log4net.config"&gt;

9

&lt;/Application&gt;

Name：这个就是程序名称

BaseDirectory就是我们发布后在deploy文件加下的路径：

Assembly：就是我们的类库工程生成的那个dll文件

Type：我们入口类的名称（要带上命名空间）

以下是完整的配置文件

1

&lt;?xml version="1.0" encoding="Windows-1252"?&gt;

2

&lt;!--

3

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4

Photon server configuration file.

5

For details see the photon-config.pdf.

6

This file contains two configurations:

7

"LoadBalancing"

8

Loadbalanced setup for local development: A Master-server and a game-server.

9

Starts the apps: Game, Master, CounterPublisher

10

Listens: udp-port 5055, tcp-port: 4530, 843 and 943

11

--&gt;

12

&lt;Configuration&gt;

13

&lt;!-- Multiple instances are supported. Each instance has its own node in the config file. --&gt;

14

&lt;LoadBalancing

15

MaxMessageSize="512000"

16

MaxQueuedDataPerPeer="512000"

17

PerPeerMaxReliableDataInTransit="51200"

18

PerPeerTransmitRateLimitKBSec="256"

19

PerPeerTransmitRatePeriodMilliseconds="200"

20

MinimumTimeout="5000"

21

MaximumTimeout="30000"

22

DisplayName="LoadBalancing (MyCloud)"&gt;

23

&lt;!-- 0.0.0.0 opens listeners on all available IPs. Machines with multiple IPs should define the correct one here. --&gt;

24

&lt;!-- Port 5055 is Photon's default for UDP connections. --&gt;

25

&lt;UDPListeners&gt;

26

&lt;UDPListener

27

IPAddress="0.0.0.0"

28

Port="5055"

29

OverrideApplication="Master"&gt;

30

&lt;/UDPListener&gt;

31

&lt;UDPListener

32

IPAddress="0.0.0.0"

33

Port="5056"

34

OverrideApplication="Game"&gt;

35

&lt;/UDPListener&gt;

36

&lt;/UDPListeners&gt;

37

&lt;!-- 0.0.0.0 opens listeners on all available IPs. Machines with multiple IPs should define the correct one here. --&gt;

38

&lt;TCPListeners&gt;

39

&lt;!-- TCP listener for Game clients on Master application --&gt;

40

&lt;TCPListener

41

IPAddress="0.0.0.0"

42

Port="4530"

43

OverrideApplication="Master"

44

PolicyFile="Policy\assets\socket-policy.xml"

45

InactivityTimeout="10000"

46

&gt;

47

&lt;/TCPListener&gt;

48

&lt;TCPListener

49

IPAddress="0.0.0.0"

50

Port="4531"

51

OverrideApplication="Game"

52

PolicyFile="Policy\assets\socket-policy.xml"

53

InactivityTimeout="10000"&gt;

54

&lt;/TCPListener&gt;

55

&lt;!-- DON'T EDIT THIS. TCP listener for GameServers on Master application --&gt;

56

&lt;TCPListener

57

IPAddress="0.0.0.0"

58

Port="4520"&gt;

59

&lt;/TCPListener&gt;

60

&lt;/TCPListeners&gt;

61

&lt;!-- Policy request listener for Unity and Flash (port 843) and Silverlight (port 943) --&gt;

62

&lt;PolicyFileListeners&gt;

63

&lt;!-- multiple Listeners allowed for different ports --&gt;

64

&lt;PolicyFileListener

65

IPAddress="0.0.0.0"

66

Port="843"

67

PolicyFile="Policy\assets\socket-policy.xml"&gt;

68

&lt;/PolicyFileListener&gt;

69

&lt;PolicyFileListener

70

IPAddress="0.0.0.0"

71

Port="943"

72

PolicyFile="Policy\assets\socket-policy-silverlight.xml"&gt;

73

&lt;/PolicyFileListener&gt;

74

&lt;/PolicyFileListeners&gt;

75

&lt;!-- WebSocket (and Flash-Fallback) compatible listener --&gt;

76

&lt;WebSocketListeners&gt;

77

&lt;WebSocketListener

78

IPAddress="0.0.0.0"

79

Port="9090"

80

DisableNagle="true"

81

InactivityTimeout="10000"

82

OverrideApplication="Master"&gt;

83

&lt;/WebSocketListener&gt;

84

&lt;WebSocketListener

85

IPAddress="0.0.0.0"

86

Port="9091"

87

DisableNagle="true"

88

InactivityTimeout="10000"

89

OverrideApplication="Game"&gt;

90

&lt;/WebSocketListener&gt;

91

&lt;/WebSocketListeners&gt;

92

&lt;!-- Defines the Photon Runtime Assembly to use. --&gt;

93

&lt;Runtime

94

Assembly="PhotonHostRuntime, Culture=neutral"

95

Type="PhotonHostRuntime.PhotonDomainManager"

96

UnhandledExceptionPolicy="Ignore"&gt;

97

&lt;/Runtime&gt;

98

&lt;!-- Defines which applications are loaded on start and which of them is used by default. Make sure the default application is defined. --&gt;

99

&lt;!-- Application-folders must be located in the same folder as the bin\_win32 folders. The BaseDirectory must include a "bin" folder. --&gt;

100

&lt;Applications Default="Master"&gt;

101

&lt;Application

102

Name="Master"

103

BaseDirectory="LoadBalancing\Master"

104

Assembly="Photon.LoadBalancing"

105

Type="Photon.LoadBalancing.MasterServer.MasterApplication"

106

ForceAutoRestart="true"

107

WatchFiles="dll;config"

108

ExcludeFiles="log4net.config"

109

&gt;

110

&lt;/Application&gt;

111

&lt;Application

112

Name="Game"

113

BaseDirectory="LoadBalancing\GameServer"

114

Assembly="Photon.LoadBalancing"

115

Type="Photon.LoadBalancing.GameServer.GameApplication"

116

ForceAutoRestart="true"

117

WatchFiles="dll;config"

118

ExcludeFiles="log4net.config"&gt;

119

&lt;/Application&gt;

120

&lt;!-- CounterPublisher Application --&gt;

121

&lt;Application

122

Name="CounterPublisher"

123

BaseDirectory="CounterPublisher"

124

Assembly="CounterPublisher"

125

Type="Photon.CounterPublisher.Application"

126

ForceAutoRestart="true"

127

WatchFiles="dll;config"

128

ExcludeFiles="log4net.config"&gt;

129

&lt;/Application&gt;

130

&lt;/Applications&gt;

131

&lt;/LoadBalancing&gt;

132

&lt;!-- Instance settings --&gt;

133

&lt;MyGameInstance

134

MaxMessageSize="512000"

135

MaxQueuedDataPerPeer="512000"

136

PerPeerMaxReliableDataInTransit="51200"

137

PerPeerTransmitRateLimitKBSec="256"

138

PerPeerTransmitRatePeriodMilliseconds="200"

139

MinimumTimeout="5000"

140

MaximumTimeout="30000"

141

DisplayName="MyGameDemo"

142

&gt;

143

&lt;!-- 0.0.0.0 opens listeners on all available IPs. Machines with multiple IPs should define the correct one here. --&gt;

144

&lt;!-- Port 5055 is Photon's default for UDP connections. --&gt;

145

&lt;UDPListeners&gt;

146

&lt;UDPListener

147

IPAddress="0.0.0.0"

148

Port="5055"

149

OverrideApplication="MyGame"&gt;

150

&lt;/UDPListener&gt;

151

&lt;/UDPListeners&gt;

152

&lt;!-- 0.0.0.0 opens listeners on all available IPs. Machines with multiple IPs should define the correct one here. --&gt;

153

&lt;!-- Port 4530 is Photon's default for TCP connecttions. --&gt;

154

&lt;!-- A Policy application is defined in case that policy requests are sent to this listener (known bug of some some flash clients) --&gt;

155

&lt;TCPListeners&gt;

156

&lt;TCPListener

157

IPAddress="0.0.0.0"

158

Port="4530"

159

PolicyFile="Policy\assets\socket-policy.xml"

160

InactivityTimeout="10000"

161

OverrideApplication="MyGame"

162

&gt;

163

&lt;/TCPListener&gt;

164

&lt;/TCPListeners&gt;

165

&lt;!-- Defines the Photon Runtime Assembly to use. --&gt;

166

&lt;Runtime

167

Assembly="PhotonHostRuntime, Culture=neutral"

168

Type="PhotonHostRuntime.PhotonDomainManager"

169

UnhandledExceptionPolicy="Ignore"&gt;

170

&lt;/Runtime&gt;

171

&lt;!-- Defines which applications are loaded on start and which of them is used by default. Make sure the default application is defined. --&gt;

172

&lt;!-- Application-folders must be located in the same folder as the bin\_win32 folders. The BaseDirectory must include a "bin" folder. --&gt;

173

&lt;Applications Default="MyGame"&gt;

174

&lt;!-- MyGame Application --&gt;

175

&lt;Application

176

Name="MyGame"

177

BaseDirectory="MyGameServer"

178

Assembly="MyGamePhotonServer"

179

Type="MyGamePhotonServer.MyGameServer"

180

ForceAutoRestart="true"

181

WatchFiles="dll;config"

182

ExcludeFiles="log4net.config"&gt;

183

&lt;/Application&gt;

184

&lt;/Applications&gt;

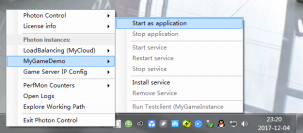
185

&lt;/MyGameInstance&gt;

186

&lt;/Configuration&gt;

7.启动服务器程序 MyGameDemo



到此为止我们的第一个Photon Server 服务器就搭建好了。

来自：https://blog.csdn.net/u010812661/article/details/78710548