

# CONFIGURING MOBILE-911 SERVER

## 1. Introduction

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The Mobile-911 Server has multiple functions. It provides a web server for Mobile-911 Clients. It also pushes out notifications to Apple's Push Notification Service, Google's Cloud To Device Messaging service (C2DM) and Blackberry's Push Service. The Mobile-911 Server must also communicate with WIN-911 through the Mobile-911 Bridge Services.

## 2. Configuring Ports

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Three of the TCP ports used by the Mobile-911 Server are configurable. The first is the web server port. This is the port that Mobile-911 Clients will connect through to access the web server, as such, you must allow incoming connections on this port through any firewalls or routers that may be between your Mobile-911 clients and the Mobile-911 Server.

The default port for the web server is TCP 59112.

The other configurable ports are used to provide communications between the Mobile-911 Server and WIN-911. The server does not communicate directly with WIN-911, rather it uses two services that must run on the same machine as WIN-911. These services are included in the WIN-911 install. They are "Mobile-911 Bridge Inbound" and "Mobile Bridge Outbound." The inbound bridge handles messages coming from the Mobile-911 Server, e.g., alarm acknowledgments and alarm requests. The outbound bridge sends messages from WIN-911 to the Mobile-911 Server, e.g., alarm notifications and report responses. Any firewalls or routers that sit between the Mobile-911 Server and WIN-911 must allow these ports through.

The default port for the inbound service is TCP 59110.

The default port for the outbound service is TCP 59111.

## 3. Push Notifications

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All three of the push notification services used by Mobile-911 have their own servers and communicate on different ports. The Mobile-911 Server must have network access to these servers in order to function. Mobile-911 Clients must also have internet access in order to connect with their vendor specific push service.

Apple: gateway.push.apple.com, port TCP 2195

Google: https://android.clients.google.com/c2dm/send port TCP 443

Blackberry: https://pushapi.na.blackberry.com port TCP 443

The Blackberry server address is specified in the serverconfig.xml file and may need to change based on your region.

#### 4. Certificates

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There are two certificates used by Mobile-911. The first is an SSL certificate generated at runtime that is used to secure Mobile-911's web server communications with HTTPS. This certificate is valid for 10 years from the date of install. You may regenerate this certificate by reinstalling the server or by running these commands from a command prompt with administrative privileges within your installation directory:

```
"req -x509 -subj /O=Specter/C=US/CN="Specter Instruments M9Cert" -nodes -passin pass:m9 -days 3653 -newkey rsa:1024 -keyout mycert.pem -out mycert.pem"
```

```
"pkcs12 -export -out ..\..\server.pfx -in mycert.pem -passout pass:m9 -name "Mobile-911 Certificate""
```

The second certificate is a P12 file located in the installation directory:

Certificates\_APN\_prod.p12. This certificate is used to identify the Mobile-911 Server to Apple's Push Notification service. This certificate expires yearly from the date that it was issued by Apple. The certificate included in the Mobile-911 Server V2 install expires February 1st 2013. It is extremely important that you contact Specter Instruments before this certificate expires to receive a new one. If this certificate is allowed to expire, messages to the Apple devices will not go through. Specter Instruments anticipates that it will have replacement certificates available two months before any certificate expires.

#### 5. Windows Firewall

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To allow a the Mobile-911 Server through your Windows Firewall in Windows 7, open your Windows Control Panel. Go to System and Security. Under the Windows Firewall, select "Allow a program through Windows Firewall." Click "Allow another program..." and browse to the Mobile-911 Server executable. By default it can be found at "C:\Program Files\Specter Instruments\Mobile-911 Server\Mobile911.Server.exe." Allow it to access both network public and private networks by checking both boxes under the "Network location types..." dialog.

You will also need to follow the same steps for the bridge services, if they are located on another machine. They can be found at:

"C:\Program Files\Specter Instruments\WIN-911 V7\Mobile-911 Bridge Inbound.exe"

"C:\Program Files\Specter Instruments\WIN-911 V7\Mobile-911 Bridge Outbound.exe"