We claim:

1. A method for establishing two-way push communication between a provider and a mobile device:

receiving an indication that a first provider has selected to receive push notifications from a set of one or more users;

receiving an indication that a first user has selected to receive push notifications from a set of one or more providers;

monitoring presence information associated with the first user and the first provider, the presence information indicating whether the first user and the first provider, respectively, are currently connected to a network and listening for push notifications; and

in response to receiving a push notification for the first user, identifying a current network location of the first user and forwarding the push notification to the first user; and

in response to receiving a push notification for the first provider from the set of one or more users, identifying a current network location over which the provider is listening for push notifications and forwarding the push notification to the first provider.

2. The method as in claim 1 wherein receiving an indication that the first provider has selected to receive push notifications from a set of one or more users comprises receiving an indication of a current network port to which the first provider is connected and listening for push notifications.

3. The method as in claim 1 wherein the push notification for the first provider comprises a read receipt indicating that a user associated with the push notification has read a push notification previously transmitted to the user by the provider.

4. The method as in claim 1 wherein forwarding the push notification to the first provider comprises selecting between a first gateway and a second gateway over which to transmit the push notification.

5. The method as in claim 4 wherein selecting further comprises:

measuring channel quality for packets transmitted between the first provider and a first gateway and between the first device and a second gateway; and

selecting between the first gateway and the second gateway based on the measured channel quality.

6. The method as in claim 5 wherein measuring channel quality comprises monitoring round trip times for packets transmitted between the first provider and a first gateway and between the first provider and a second gateway.

7. The method as in claim 6 further comprising:

selecting the gateway which has a relatively lower round trip time associated therewith.

8. The method as in claim 1 wherein if the channel quality measured between the first provider and the first gateway is within a specified threshold amount of the channel quality measured between the first provider and a second gateway, then employing a round robin scheme to select between the first gateway and the second gateway for transmitting the push notification to the first provider.

9. The method as in claim 5 further comprising:

maintaining a provider presence table on each gateway, the provider presence table containing an updated channel quality value associated with the connection between that gateway and each respective provider.

10. The method as in claim 9 wherein the channel quality value comprises a round trip time of packets transmitted between the gateway and the provider.

11. A system having a memory for storing program code and a processor for processing the program code to perform the operations of:

receiving an indication that a first provider has selected to receive push notifications from a set of one or more users;

receiving an indication that a first user has selected to receive push notifications from a set of one or more providers;

monitoring presence information associated with the first user and the first provider, the presence information indicating whether the first user and the first provider,

respectively, are currently connected to a network and listening for push notifications; and

in response to receiving a push notification for the first user, identifying a current network location of the first user and forwarding the push notification to the first user; and

in response to receiving a push notification for the first provider from the set of one or more users, identifying a current network location over which the provider is listening for push notifications and forwarding the push notification to the first provider.

12. The system as in claim 11 wherein receiving an indication that the first provider has selected to receive push notifications from a set of one or more users comprises receiving an indication of a current network port to which the first provider is connected and listening for push notifications.

13. The system as in claim 11 wherein the push notification for the first provider comprises a read receipt indicating that a user associated with the push notification has read a push notification previously transmitted to the user by the provider.

14. The system as in claim 11 wherein forwarding the push notification to the first provider comprises selecting between a first gateway and a second gateway over which to transmit the push notification.

15. The system as in claim 14 wherein selecting further comprises:

measuring channel quality for packets transmitted between the first provider and a first gateway and between the first device and a second gateway; and

selecting between the first gateway and the second gateway based on the measured channel quality.

16. The system as in claim 15 wherein measuring channel quality comprises monitoring round trip times for packets transmitted between the first provider and a first gateway and between the first provider and a second gateway.

17. The system as in claim 16 comprising additional program code to cause the processor to perform the additional operations of:

selecting the gateway which has a relatively lower round trip time associated therewith.

18. The system as in claim 11 wherein if the channel quality measured between the first provider and the first gateway is within a specified threshold amount of the channel quality measured between the first provider and a second gateway, then employing a round robin scheme to select between the first gateway and the second gateway for transmitting the push notification to the first provider.

19. The system as in claim 15 comprising additional program code to cause the processor to perform the additional operations of:

maintaining a provider presence table on each gateway, the provider presence table containing an updated channel quality value associated with the connection between that gateway and each respective provider.

20. The system as in claim 19 wherein the channel quality value comprises a round trip time of packets transmitted between the gateway and the provider.

We claim:

1. A method for establishing two-way push communication between a provider and a mobile device, comprising:

receiving an indication that a first provider has selected to receive push notifications from a set of one or more users;

receiving an indication that a first user has selected to receive push notifications from a set of one or more providers;

monitoring presence information associated with the first user and the first provider, the presence information indicating whether the first user and the first provider, respectively, are currently connected to a network and listening for push notifications; and

in response to receiving a push notification for the first user, identifying a current network location of the first user and forwarding the push notification to the first user; and

in response to receiving a push notification for the first provider from the set of one or more users, identifying a current network location over which the provider is listening for push notifications and forwarding the push notification to the first provider.

2. The method as in claim 1 wherein receiving an indication that the first provider has selected to receive push notifications from a set of one or more users comprises receiving an indication of a current network port to which the first provider is connected and listening for push notifications.

3. The method as in claim 1 wherein the push notification for the first provider comprises a read receipt indicating that a user associated with the push notification has read a push notification previously transmitted to the user by the provider.

4. The method as in claim 1 wherein forwarding the push notification to the first provider comprises selecting between a first gateway and a second gateway over which to transmit the push notification.

5. The method as in claim 4 wherein selecting further comprises:

measuring channel quality for packets transmitted between the first provider and a first gateway and between the first device and a second gateway; and

selecting between the first gateway and the second gateway based on the measured channel quality.

6. The method as in claim 5 wherein measuring channel quality comprises monitoring round trip times for packets transmitted between the first provider and a first gateway and between the first provider and a second gateway.

7. The method as in claim 6 further comprising:

selecting the gateway which has a relatively lower round trip time associated therewith.

8. The method as in claim 1 wherein if the channel quality measured between the first provider and the first gateway is within a specified threshold amount of the channel quality measured between the first provider and a second gateway, then employing a round robin scheme to select between the first gateway and the second gateway for transmitting the push notification to the first provider.

9. The method as in claim 5 further comprising:

maintaining a provider presence table on each gateway, the provider presence table containing an updated channel quality value associated with the connection between that gateway and each respective provider.

10. The method as in claim 9 wherein the channel quality value comprises a round trip time of packets transmitted between the gateway and the provider.

11. A non-transitory machine-readable medium having program code stored thereon which, when executed by one or more machines, causes the machines to perform the operations of:

receiving an indication that a first provider has selected to receive push notifications from a set of one or more users;

receiving an indication that a first user has selected to receive push notifications from a set of one or more providers;

monitoring presence information associated with the first user and the first provider, the presence information indicating whether the first user and the first provider, respectively, are currently connected to a network and listening for push notifications; and

in response to receiving a push notification for the first user, identifying a current network location of the first user and forwarding the push notification to the first user; and

in response to receiving a push notification for the first provider from the set of one or more users, identifying a current network location over which the provider is listening for push notifications and forwarding the push notification to the first provider.

12. The non-transitory machine-readable medium as in claim 11 wherein receiving an indication that the first provider has selected to receive push notifications from a set of one or more users comprises receiving an indication of a current network port to which the first provider is connected and listening for push notifications.

13. The non-transitory machine-readable medium as in claim 11 wherein the push notification for the first provider comprises a read receipt indicating that a user associated with the push notification has read a push notification previously transmitted to the user by the provider.

14. The non-transitory machine-readable medium as in claim 11 wherein forwarding the push notification to the first provider comprises selecting between a first gateway and a second gateway over which to transmit the push notification.

15. The non-transitory machine-readable medium as in claim 14 wherein selecting further comprises:

measuring channel quality for packets transmitted between the first provider and a first gateway and between the first device and a second gateway; and

selecting between the first gateway and the second gateway based on the measured channel quality.

16. The non-transitory machine-readable medium as in claim 15 wherein measuring channel quality comprises monitoring round trip times for packets transmitted between the first provider and a first gateway and between the first provider and a second gateway.

17. The non-transitory machine-readable medium as in claim 16 comprising additional program code to cause the machines to perform the additional operations of:

selecting the gateway which has a relatively lower round trip time associated therewith.

18. The non-transitory machine-readable medium as in claim 11 wherein if the channel quality measured between the first provider and the first gateway is within a specified threshold amount of the channel quality measured between the first provider and a second gateway, then employing a round robin scheme to select between the first gateway and the second gateway for transmitting the push notification to the first provider.

19. The non-transitory machine-readable medium as in claim **15** comprising additional program code to cause the machines to perform the additional operations of:

maintaining a provider presence table on each gateway, the provider presence table containing an updated channel quality value associated with the connection between that gateway and each respective provider.

20. The non-transitory machine-readable medium as in claim **19** wherein the channel quality value comprises a round trip time of packets transmitted between the gateway and the provider.

21. A system comprising:

a memory for storing program code and a processor for processing the program code to perform the operations of:

receiving an indication that a first provider has selected to receive push notifications from a set of one or more users;

receiving an indication that a first user has selected to receive push notifications from a set of one or more providers;

monitoring presence information associated with the first user and the first provider, the presence information indicating whether the first user and the first provider, respectively, are currently connected to a network and listening for push notifications; and

in response to receiving a push notification for the first user, identifying a current network location of the first user and forwarding the push notification to the first user; and

in response to receiving a push notification for the first provider from the set of one or more users, identifying a current network location over which the provider is listening for push notifications and forwarding the push notification to the first provider.

22. The system as in claim **21** wherein receiving an indication that the first provider has selected to receive push notifications from a set of one or more users comprises receiving an indication of a current network port to which the first provider is connected and listening for push notifications.

23. The system as in claim **21** wherein the push notification for the first provider comprises a read receipt indicating that a user associated with the push notification has read a push notification previously transmitted to the user by the provider.

24. The system as in claim **21** wherein forwarding the push notification to the first provider comprises selecting between a first gateway and a second gateway over which to transmit the push notification.

25. The system as in claim **24** wherein selecting further comprises:

measuring channel quality for packets transmitted between the first provider and a first gateway and between the first device and a second gateway; and

selecting between the first gateway and the second gateway based on the measured channel quality.

26. The system as in claim **25** wherein measuring channel quality comprises monitoring round trip times for packets transmitted between the first provider and a first gateway and between the first provider and a second gateway.

27. The system as in claim **26** comprising additional program code to cause the processor to perform the additional operations of:

selecting the gateway which has a relatively lower round trip time associated therewith.

28. The system as in claim **21** wherein if the channel quality measured between the first provider and the first gateway is within a specified threshold amount of the channel quality measured between the first provider and a second gateway, then employing a round robin scheme to select between the first gateway and the second gateway for transmitting the push notification to the first provider.

29. The system as in claim **25** comprising additional program code to cause the processor to perform the additional operations of:

maintaining a provider presence table on each gateway, the provider presence table containing an updated channel quality value associated with the connection between that gateway and each respective provider.

30. The system as in claim **29** wherein the channel quality value comprises a round trip time of packets transmitted between the gateway and the provider.