CLAIMS

What is claimed is:

1. A method for wireless communications, comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

establishing a connection with a gateway device in a wireless network;

receiving a configuration packet from the gateway device that identifies home mobility options; and

processing at least one home network address from the home mobility options.

2. The method of claim 1, further comprising receiving a home network prefix from the home mobility options.

3. The method of claim 1, the configuration packet is associated with a protocol configuration option (PCO).

4. The method of claim 1, the gateway device is a packet data network (PDN) gateway.

5. The method of claim 1, further comprising bootstrapping via an Internet Key Exchange (IKE) protocol to determine the home network address.

6. The method of claim 1, further comprising decoding a home link address by processing advertised prefixes via a current access link and processing a home network prefix.

7. The method of claim 6, the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

8. The method of claim 1, further comprising preserving an Internet Protocol (IP) address when moving from a home link to a foreign link.

9. The method of claim 8, further comprising connecting to a home agent entity in which a previously allocated IP address indicates.

10. The method of claim 9, receiving the IP address via a protocol configuration option and employing the IP address over the foreign link.

11. The method of claim 1, further comprising providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

12. The method of claim 11, further comprising providing an automatic mapping between the GTP and the home agent by deriving APN types that point to a packet data network (PDN) gateway device.

13. The method of claim 12, the automatic mapping further comprising enabling at least one APN to indicate a GTP termination point that provides access to at least one PDN gateway device.

14. The method of claim 12, the automatic mapping further comprising enabling at least one home agent APN to indicate a dual stack mobile Internet Protocol (DSMIP) termination point that provides access to at least one PDN gateway device.

15. The method of claim 12, the automatic mapping further comprising enabling at least one local mobility agent APN to indicate a proxy mobile Internet Protocol (PMIP) termination point that provides access to at least one PDN gateway device.

16. The method of claim 11, further comprising mapping information between APN's via one or more interfaces.

17. The method of claim 1, the home network address is associated with a dual stack mobile Internet Protocol (DSMIP) or a proxy mobile Internet Protocol (PMIP).

18. A communications apparatus, comprising:

a memory that retains instructions for establishing a link between at least one wireless device and at least one gateway device, receiving dynamic assignments via the gateway device, and receiving a home network prefix via the assignments; and

a processor that executes the instructions.

19. The apparatus of claim 18, further comprising receiving a home network address via the assignments.

20. The apparatus of claim 18, the gateway device is a packet data network gateway.

21. The apparatus of claim 18, further comprising employing an Internet Key Exchange protocol to configure non-adapted devices.

22. The apparatus of claim 18, the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

23. The apparatus of claim 18, further comprising a component to preserve an Internet Protocol (IP) address when moving from a home link to a foreign link.

24. The apparatus of claim 18, further comprising a component to provide a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

25. A communications apparatus, comprising:

means for receiving home network link information via a wireless network;

means for receiving a dynamic configuration option packet across the wireless network; and

means for processing at least one home network address from the dynamic configuration option packet.

26. The apparatus of claim 25, the dynamic configuration option packet includes a home network prefix.

27. A computer-readable medium, comprising:

receiving a configuration option packet across a wireless network;

receiving a home network address (HNA) via the configuration option packet; and

receiving a home network prefix (HNP) via the configuration option packet, where the HNA or the HNP is employed to establish a home network connection.

28. The computer-readable medium of claim 27, the HNA or the HNP is associated with a dual stack mobile Internet Protocol (DSMIP) or a proxy mobile Internet Protocol (PMIP).

29. The computer-readable medium of claim 27, the configuration option packet is received from a network gateway device.

30. A processor that executes the following instructions:

receiving a dynamic network assignment across a wireless network;

processing a home network address (HNA) via the dynamic assignment; and

processing a home network prefix (HNP) via the dynamic assignment, where the HNA or the HNP is employed to establish at least one home network connection.

31. The processor of claim 30, the dynamic network assignment is associated with a component to move network assignments from a home link to a foreign link.

32. The processor of claim 30, further comprising a component to map protocols between at least two gateway components.

33. A method for wireless communications, comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

establishing a connection with a wireless device in a wireless network;

generating a configuration packet that identifies home mobility options; and

generating at least one home network prefix in accordance with the home mobility options.

34. The method of claim 33, further comprising generating a home network address in accordance the home mobility options.

35. The method of claim 33, further comprising utilizing a packet data network (PDN) gateway to generate the configuration packet.

36. The method of claim 33, further comprising bootstrapping via an Internet Key Exchange (IKE) protocol.

37. The method of claim 33, further comprising encoding a home link address by processing advertised prefixes via a current access link and processing a home network prefix.

38. The method of claim 37, the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

39. The method of claim 33, further comprising preserving an Internet Protocol (IP) address when moving from a home link to a foreign link.

40. The method of claim 33, further comprising providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

41. A communications apparatus, comprising:

a memory that retains instructions for establishing a link between at least one wireless device and at least one gateway device, generating dynamic assignments via the gateway device, and generating a home network prefix via the assignments; and

a processor that executes the instructions.

42. The apparatus of claim 41, further comprising generating a home network address via the assignments.

43. The apparatus of claim 41, further comprising employing an Internet Key Exchange protocol to configure non-adapted devices.

44. The apparatus of claim 41, the home network prefix is dynamically allocated to the user equipment.

45. The apparatus of claim 41, further comprising a component to preserve an Internet Protocol (IP) address when moving from a home link to a foreign link.

46. A communications apparatus, comprising:

means for generating home network link information via a wireless network;

means for generating a dynamic configuration option packet across the wireless network; and

means for processing at least one home network prefix in accordance with the dynamic configuration option packet.

47. The apparatus of claim 46, the dynamic configuration option packet includes a home network address.

48. A computer-readable medium, comprising:

generating a configuration option packet across a wireless network;

generating a home network address (HNA) via the configuration option packet; and

processing a home network prefix (HNP) via the configuration option packet, where the HNA or the HNP is employed to establish a home network connection.

49. The computer-readable medium of claim 48, the HNA or the HNP is associated with a dual stack mobile Internet Protocol (DSMIP) or a proxy mobile Internet Protocol (PMIP).

50. A processor that executes the following instructions:

generating a dynamic network assignment across a wireless network;

processing a home network address (HNA) via the dynamic assignment; and

generating a home network prefix (HNP) via the dynamic assignment, where the HNA or the HNP is employed to establish at least one home network connection.

51. The processor of claim 50, the dynamic network assignment is associated with a component to move network assignments from a home link to a foreign link.

CLAIMS

1. A method for wireless communications, comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

establishing a connection with a gateway device in a wireless network;

receiving a configuration packet from the gateway device that identifies home mobility options;

processing at least one home network address from the home mobility options;

determining whether the at least one home network address is associated with a dual stack mobile internet protocol based on the home mobility options; and

providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

2. The method of claim **1**, further comprising receiving a home network prefix from the home mobility options.

3. The method of claim **1**, wherein the configuration packet is associated with a protocol configuration option (PCO).

4. The method of claim **1**, wherein the gateway device is a packet data network (PDN) gateway.

5. The method of claim **1**, further comprising bootstrapping via an Internet Key Exchange (IKE) protocol to determine the home network address.

6. The method of claim **1**, further comprising decoding a home link address by processing advertised prefixes via a current access link and processing a home network prefix.

7. The method of claim **6**, wherein the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

8. The method of claim **1**, further comprising preserving an Internet Protocol (IP) address when moving from a home link to a foreign link.

9. The method of claim **8**, further comprising connecting to a home agent entity which a previously allocated IP address indicates.

10. The method of claim **9**, further comprising receiving the IP address via a protocol configuration option and employing the IP address over the foreign link.

11. The method of claim **1**, further comprising providing an automatic mapping between the GTP and the home agent by deriving APN types that point to a packet data network (PDN) gateway device.

12. The method of claim **11**, the automatic mapping further comprising enabling at least one APN to indicate a GTP termination point that provides access to at least one PDN gateway device.

13. The method of claim **11**, the automatic mapping further comprising enabling at least one home agent APN to indicate a dual stack mobile internet protocol termination point that provides access to at least one PDN gateway device.

14. The method of claim **11**, the automatic mapping further comprising enabling at least one local mobility agent APN to indicate a proxy mobile Internet Protocol (PMIP) termination point that provides access to at least one PDN gateway device.

15. The method of claim **1**, further comprising mapping information between APN's via one or more interfaces.

16. The method of claim **1**, wherein the home network address is associated with the dual stack mobile internet protocol or a proxy mobile Internet Protocol (PMIP).

17. A communications apparatus, comprising:

a memory that retains instructions for establishing a link between at least one wireless device and at least one gateway device, receiving dynamic assignments via the gateway device, receiving a home network prefix via the

assignments, determining whether the home network prefix is associated with a dual stack mobile internet protocol based on the dynamic assignments, and providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN); and

a processor that executes the instructions.

18. The apparatus of claim **17**, further comprising receiving a home network address via the assignments.

19. The apparatus of claim **17**, wherein the gateway device is a packet data network gateway.

20. The apparatus of claim **17**, further comprising employing an Internet Key Exchange protocol to configure non-adapted devices.

21. The apparatus of claim **17**, wherein the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

22. The apparatus of claim **17**, further comprising a component to preserve an Internet Protocol (IP) address when moving from a home link to a foreign link.

23. A communications apparatus, comprising:

means for receiving home network link information via a wireless network;

means for receiving a dynamic configuration option packet across the wireless network;

means for processing at least one home network address from the dynamic configuration option packet;

means for determining whether the at least one home network address is associated with a dual stack mobile internet protocol based on the dynamic configuration option packet; and

means for providing a mapping between a general packet

radio services tunneling protocol (GTP) and a home agent access point name (APN).

24. The apparatus of claim **23**, wherein the dynamic configuration option packet includes a home network prefix.

25. A non-transitory computer-readable medium comprising instructions executable to:

receive a configuration option packet across a wireless network;

receive a home network address (HNA) via the configuration option packet;

receive a home network prefix (HNP) via the configuration option packet, where the HNA or the HNP is employed to establish a home network connection;

determine whether the HNA is associated with a dual stack mobile internet protocol based on the configuration option packet; and

provide a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

26. The non-transitory computer-readable medium of claim **25**, wherein the HNA or the HNP is associated with the dual stack mobile internet protocol or a proxy mobile Internet Protocol (PMIP).

27. The non-transitory computer-readable medium of claim **25**, wherein the configuration option packet is received from a network gateway device.

28. An apparatus comprising:

a processor that executes instructions stored in memory, the instructions being executable to:

receive a dynamic network assignment across a wireless network;

process a home network address (HNA) via the dynamic assignment;

process a home network prefix (HNP) via the dynamic assignment, where the HNA or the HNP is employed to establish at least one home network connection;

determine whether the HNA is associated with a dual stack mobile internet protocol based on the dynamic assignment; and

provide a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

29. The apparatus of claim **28**, wherein the dynamic network assignment is associated with a component to move network assignments from a home link to a foreign link.

30. The apparatus of claim **28**, further comprising a component to map protocols between at least two gateway components.

31. A method for wireless communications, comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

establishing a connection with a wireless device in a wireless network;

generating a configuration packet that identifies home mobility options;

generating at least one home network prefix in accordance with the home mobility options;

determining whether the at least one home network prefix is associated with a dual stack mobile internet protocol based on the home mobility options; and

providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

32. The method of claim **31**, further comprising generating a home network address in accordance with the home mobility options.

33. The method of claim **31**, further comprising utilizing a packet data network (PDN) gateway to generate the configuration packet.

34. The method of claim **31**, further comprising bootstrapping via an Internet Key Exchange (IKE) protocol.

35. The method of claim **31**, further comprising encoding a home link address by processing advertised prefixes via a current access link and processing a home network prefix.

36. The method of claim **35**, wherein the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

37. The method of claim **31**, further comprising preserving an Internet Protocol (IP) address when moving from a home link to a foreign link.

38. A communications apparatus, comprising:

a memory that retains instructions for establishing a link between at least one wireless device and at least one gateway device, generating dynamic assignments via the gateway device, generating a home network prefix via the assignments, determining whether the home network prefix is associated with a dual stack mobile internet protocol based on the dynamic assignments, and providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN); and

a processor that executes the instructions.

39. The apparatus of claim **38**, further comprising generating a home network address via the assignments.

40. The apparatus of claim **38**, further comprising employing an Internet Key Exchange protocol to configure non-adapted devices.

41. The apparatus of claim **38**, wherein the home network prefix is statically configured at a user equipment or dynamically allocated to the user equipment.

42. The apparatus of claim **38**, further comprising a component to preserve an Internet Protocol (IP) address when moving from a home link to a foreign link.

43. A communications apparatus, comprising:

means for generating home network link information via a wireless network;

means for generating a dynamic configuration option packet across the wireless network;

means for processing at least one home network prefix in accordance with the dynamic configuration option packet;

means for determining whether the at least one home network prefix is associated with a dual stack mobile internet protocol based on the dynamic configuration option packet; and

means for providing a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

44. The apparatus of claim **43**, wherein the dynamic configuration option packet includes a home network address.

45. A non-transitory computer-readable medium comprising instructions executable to:

generate a configuration option packet across a wireless network;

generate a home network address (HNA) via the configuration option packet;

process a home network prefix (HNP) via the configuration option packet, where the HNA or the HNP is employed to establish a home network connection;

determine whether the HNA is associated with a dual stack mobile internet protocol based on the configuration option packet; and

provide a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

46. The non-transitory computer-readable medium of claim **45**, wherein the HNA or the HNP is associated with the dual stack mobile internet protocol or a proxy mobile Internet Protocol (PMIP).

47. An apparatus comprising:

a processor that executes instructions stored in memory, the instructions being executable to:

generate a dynamic network assignment across a wireless network;

process a home network address (HNA) via the dynamic assignment;

generate a home network prefix (HNP) via the dynamic assignment, where the HNA or the HNP is employed to establish at least one home network connection;

determine whether the HNA is associated with a dual stack mobile internet protocol based on the dynamic assignment; and

provide a mapping between a general packet radio services tunneling protocol (GTP) and a home agent access point name (APN).

48. The apparatus of claim **47**, wherein the dynamic network assignment is associated with a component to move network assignments from a home link to a foreign link.