Fusion Embedded™ DHCP

Delivering a complete silicon and software solution for building a network and the devices connected to a network can be an extremely difficult task. Assigning and recording network addresses, and ensuring no two devices are given a conflicting IP address, can be virtually impossible. However, Fusion Embedded offers an easy-to-implement solution.

Fusion Embedded Dynamic Host Control Protocol (DHCP) Server and Client allows your network to automatically configure itself. With a centrally located DHCP server, client devices can be dynamically configured with the correct network parameters (e.g., IP address and subnet mask). This significantly reduces network administration effort and provides data integrity by ensuring a reliable, conflict-free configuration. Additionally, using dynamic addresses results in a more efficient use of your IP address space. When a networked device is not being used, it does not consume an IP address.

With Fusion Embedded’s total DHCP solution, you can easily implement client-side applications, server-side management, or both. Fusion Embedded DHCP is designed with easy-to-configure parameters for defining run-time options such as IP lease and pre-lease times. Fusion is designed with a rich set of built-in diagnostics to facilitate your product development and testing. Unicoi Systems utilizes easy-to-use APIs and provides sample code which enables you to launch your product to market in minimum time with maximum confidence.

Supported Options
- Lease time
- Renewal time
- Rebind time
- Netmask
- Broadcast address
- Router
- Host name
- Domain name
- All other RFC 2132 options supported through API
- Supports application program callback functions on DHCP state change

Fusion Embedded Protocols

Fusion Embedded DHCP Attributes
- Easy to Use API
- Robust Callbacks
- Support for all DHCP Options
- Address Validation
- Fully Configurable Lease Times

DHCP Features
- DHCP Client
- DHCP Server
- BOOTP compatible
- Built-in diagnostics
- Mature code deployed in a wide range of applications and backed by many years of embedded networking experience
- DSP, RISC, and microprocessor support
- (8-bit to 64-bit)
- Requires no operating system interfaces
- Completely portable.
- (processor and compiler independent)

RFC Compliance
- RFC 1541
- RFC 1542
- RFC 2131
- RFC 2132