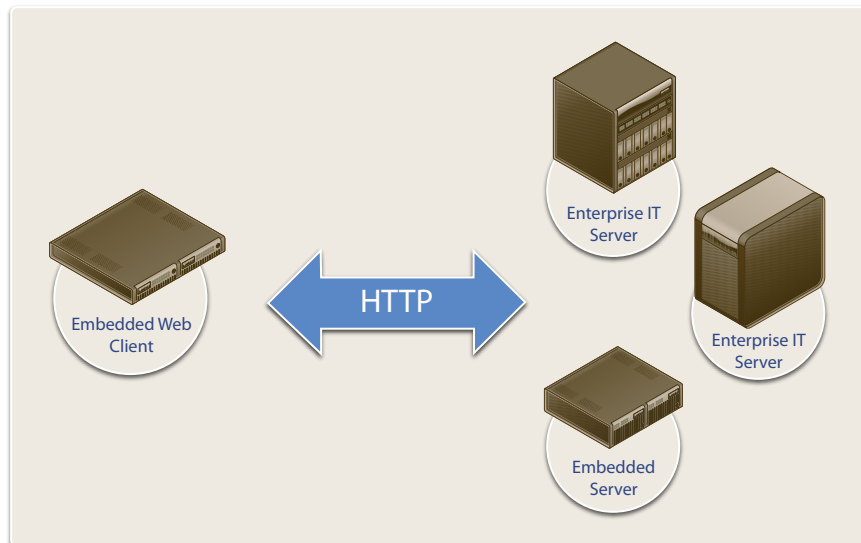


# RomWebClient AE™

## RomWebClient AE Benefits

- Proven technology deployed in 200+ million devices around the world
- Support for IPv6 and dual mode IPv4 / IPv6 operation
- Send and Receive HTTP objects in any format
- HTTP 1.0 (RFC 1945) and HTTP 1.1 (RFC 2616) compliant
- Supports HTTP methods GET, POST, HEAD, PUT, OPTIONS and TRACE
- Direct and Proxy server requests supported
- HTTP 1.0 and HTTP 1.1 persistent connections supported
- Support for Basic and Digest authentication (RFC 2617)
- Object caching, pipelined request, proxy authentication, large object streaming and HTTP cookie support
- Optional TLS 1.2 and SSL 3.0 are available via RomSTL
- Highly portable via field proven abstraction layer (Hardware, RTOS and TCP/IP stack)
- Interface files for leading RTOS vendors provided
- ANSI-C source distribution
- Compilation switches for size and speed trade-offs
- FIPS 140-2 and Suite B support

## Advanced Edition Embedded Web Client Toolkit



Allegro's RomWebClient AE toolkit allows your engineering team to leverage proven Web technology when creating custom networked embedded designs. The RomWebClient AE toolkit enables embedded engineering teams to build products that send and receive objects to and from any Web server using HTTP with full support for IPv6 and dual mode IPv4/IPv6 operation. For secure communications, RomWebClient AE is tightly integrated with Allegro's RomSTL TLS/DTLS/SSL toolkit allowing your design team to make full use of TLS 1.2 and SSL 3.0 with FIPS 140-2 and Suite B cryptography. By utilizing RomWebClient AE technology your embedded device can communicate with Cloud-based resources, download configuration files, retrieve software updates, retrieve "print-by-reference" documents or send status notifications to a remote sever.

## RomWebClient AE

The RomWebClient AE toolkit enables your embedded device to fully support HTTP 1.0/1.1 for sending and receiving HTTP objects in any format with any Web server. MIME definitions for all standard MIME object types are provided in addition to allowing support for non-standard MIME types. HTTP objects can be sent or received from memory or an optional file system. Both HTTP direct requests and proxy server requests are supported. For authentication, HTTP Basic and Digest methods are provided and are compliant with RFC 2617. The RomWebClient AE toolkit also has built-in support for advanced caching, pipelined requests, proxy authentication, large object data streaming, and HTTP cookies. Delivered as ANSI-C source code the toolkit is built upon a highly portable and field proven abstraction layer enabling it to work with any OS or TCP/IP stack.

Allegro Software Development Corporation  
1740 Massachusetts Avenue  
Boxborough, Massachusetts  
01719

+1 (978) 264-6600  
www.allegrosoft.com

*Allegro*

## RomXML AE™ and RomXOAP AE™

The RomWebClient AE toolkit is pre-integrated with Allegro's RomXML and RomXOAP toolkits allowing OEM manufacturers to easily build advanced device management architectures that require XML and SOAP based communications with Cloud-based resources. The RomWebClient AE toolkit includes support for integrated retrieval and transmission of XML objects when used in conjunction with the RomXML AE and RomXOAP AE toolkits. This allows your design team to create devices that initiate XML-based request/response protocols such as the Simple Object Access Protocol (SOAP) making them easier to integrate with enterprise information systems.

## RomSTL™

Security is always a concern when dealing with devices connected to the internet. RomSTL addresses the need for advanced security with integrated TLS 1.2 and SSL 3.0 support. With support for a variety of cypher suites (RCA, DHE, RC4, DES, 3DES, AES, SHA, CBC and MD5) and full integration with Allegro's optional FIPS 140-2 validated cryptography and Suite B, your development team can provide compatibility with all standard secure browsers. RomSTL also offers a built-in certificate authority, certificate import support and Basic and Digest Authentication under TLS/SSL. Compliant with IETF standards (RFC 5246 and RFC 3268), RomSTL provides RomPager AE with the advanced security functionality to meet your development team needs.

## RomCert™

The RomWebClient AE toolkits is tightly integrated with Allegro's RomCert platform independent implementation of the Online Certificate Status Protocol (OCSP) and the Simple Certificate Enrollment Protocol (SCEP). The combination of RomWebClient AE and RomCert toolkits makes embedding security certificate management into resource sensitive embedded systems and consumer electronics fast, easy, and reliable, while decreasing time to market.

## Highly Portable

RomPager AE is highly portable across RTOS and processor families. Delivered in ANSI-C source code all products utilize a field proven abstraction layer to enable portability with any RTOS, TCP/IP stack and file system environment. Interface files for leading RTOS environments are provided.

Feature	
Full source code	✓
High Performance	✓
Small RAM/ROM footprint	✓
GET,HEAD,POST support	✓
HTTP 1.1 persistent connection support	✓
Object caching support	✓
Pipelined request support	✓
Optional file system support	✓
Proxy authentication support	✓
Large object streaming support	✓
Basic authentication security support	✓
HTTP cookie support	✓
Dynamic variable insertion in HTML pages	✓
Compression of common HTML tokens	✓
Direct and Proxy server requests supported	✓
HTTP 1.1 PUT, OPTION, TRACE support	✓
HTTP Streaming support	✓
Digest Authentication	✓
External Password Validation	✓
State management support (URL, HTTP cookies)	✓
IPv6 and dual mode IPv4/IPv6 support	✓
Optional FIPS 140-2 and Suite B support	✓
Optional RomPager Secure (TLS 1.2/SSL 3.0)	✓