

# 1. Threads

## 1.1 Stack thread

: SIP Signaling 흐름과 SIP 객체들의 처리를 담당하는 Core Thread.

## 1.2 Net thread

: Network Data 송수신과 TCP Session을 관리하는 Thread.

## 1.3 Connect Thread

: TCP Connection 시도시 Blocking을 막기 위해 따로 구동하는 Thread.

## 1.4 Timer Thread

: Timer 기능을 수행하기 위한 Thread.

## 1.5 User Thread

: 예상되는 Programmer User의 Thread.

## 2. Queue Messages.

Message	Direction	Parameter
START	A -> A	Start parameter (ANY)
STOP	A -> A	none
ADD_UA	U -> S	IUa object pointer
REGIST_UA	U -> S	IUa handle
REMOVE_UA	U -> S	IUa handle
MAKE_CALL	U -> S	ICall object pointer, IUa handle
ACCEPT_CALL	U -> S	ICall handle
REMOVE_CALL	U -> S	ICall handle
ENET_MESSAGE	S -> N	raw data pointer, length
	N -> S	ITransaction handle, sockaddr
CHANGE_LISTEN_PORT	U -> S	TCP/UDP, TSAP port
	S -> N	
REMOVE_SOCKET_SET	S -> N	ITransaction handle
	N -> S	
CONNECTED	C -> N	socket, ITransaction handle
TIMER	T -> A	timer Id

- A : Any thread.
- U : User thread.
- S : Stack thread.
- N : Network thread.
- T : Timer thread.
- C : Connect thread.

### 3. Interested Queue message event

Message	Stack thread	Network thread
START	check	check
STOP	check	check
ADD_UA	check	
REGIST_UA	check	
REMOVE_UA	check	
MAKE_CALL	check	
ACCEPT_CALL	check	
REMOVE_CALL	check	
ENET_MESSAGE	check	check
CHANGE_LISTEN_PORT	check	check
REMOVE_SOCKET_SET	check	check
CONNECTED	–	check
TIMER	check	–

#### 4. Interested SIP message

Message	Send	Receive
REGISTER	check	NA
INVITE	check	check
CANCEL	check	check
BYE	check	check
OPTIONS	–	–
INFO	–	–
ACK	check	check
PRACK	–	–
UPDATE	–	–
SUBSCRIBE	–	–
NOTIFY	–	–
MESSAGE	–	–
REFER	–	–
100 Trying	check	check
180 Ringing	check	check
183 Session Progress	–	check
200 OK	check	check
302 Moved Temporary	–	–
400 Bad Request	check	check
404 Not Found	check	check
408 Request Timeout	check	check
486 Busy Here	check	check
487 Request Terminated	check	check