Wireless Session Protocol (WSP):

WSP is a transaction-oriented protocol based on the concept of a request and a reply. Each WSP protocol data unit (PDU) consists of a body, which may contain WML, WMLScript, or images, and a header, which contains information about the data in the body and about the transaction.

WSP also defines a server Push operation, in which the server sends unrequested content to a client device. This may be used for broadcast messages or for services, such as news headlines or stock quotes, that may be tailored to each client device.

WSP provides applications with an interface for two session services. The connection-oriented session service operates above the reliable transport protocol WTP, and the connectionless session service operates above the unreliable transport protocol WDP.

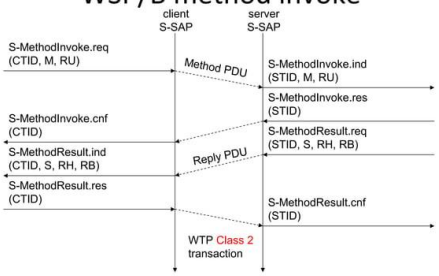
In essence, WSP is based on HTTP with some additions and modifications to optimize its use over wireless channels. The principal limitations addressed are low data rate and susceptibility to loss of connection due to poor coverage or cell overloading.

Wireless Session Protocol (WSP) provides the following services:

- Establish a reliable session from client to server and release that session in an orderly manner.
- Agree on a common level of protocol functionality using capability negotiation.
- Exchange content between client and server using compact encoding.
- Suspend and resume a session.
- Push content from server to client in an unsynchronized manner.

So basically at the service level, WSP is defined in terms of a collection of service primitives, with associated parameters. These service primitives define the interface between WSP and users of WSP in the WAE. At the protocol level, the WSP specification defines a PDU format used to exchange data between peer WSP entities.

WSP/B method invoke



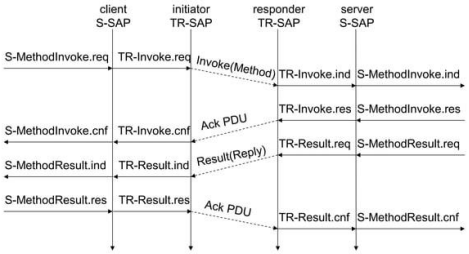
CTID: Client Transaction ID **M: Method Invoked** **RU: Request UR**

STID: Server Transaction ID **S: Response Status** **RH: Response Header**

RB: Response Body

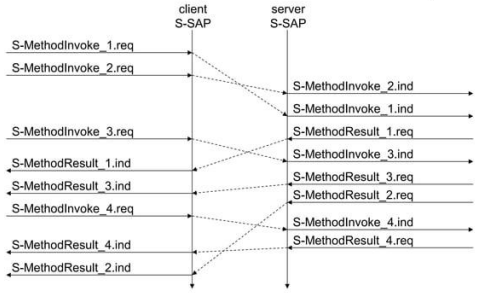
Source: Schiller

WSP/B over WTP - method invocation



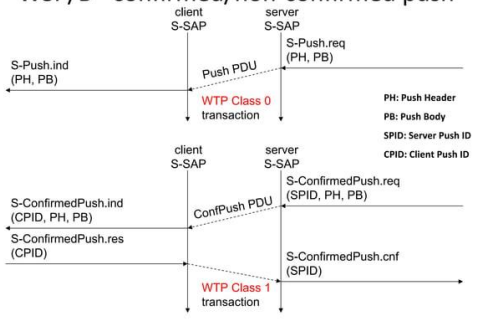
Source: Schiller

WSP/B over WTP - asynchronous, unordered requests



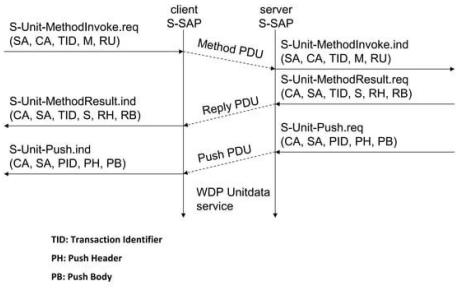
Source: Schiller

WSP/B - confirmed/non-confirmed push



Source: Schiller

WSP/B over WDP



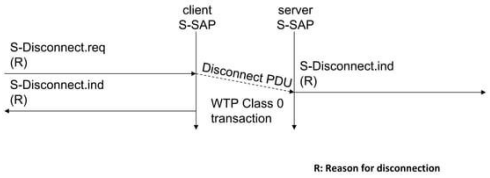
TID: Transaction Identifier

PH: Push Header

PB: Push Body

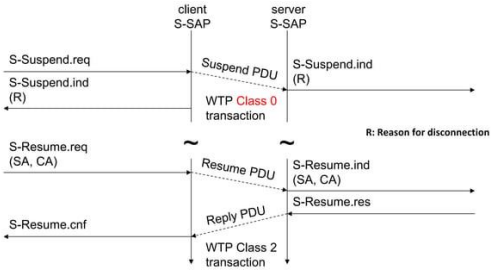
Source: Schiller

WSP/B session termination



Source: Schiller

WSP/B session suspend/resume



Source: Schiller