

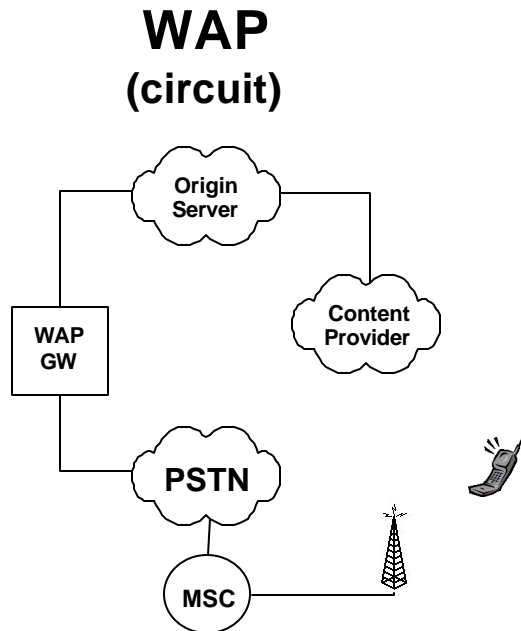
# WAP & iMode

Mobile in a Minuteä from:  
[www.mobileIN.com](http://www.mobileIN.com)

This paper compares and contrasts, Wireless Application Protocol (WAP), a protocol used to provide mobile data services, and iMode, a complete mobile Internet service. The purpose of this paper is to briefly discuss some of the technical differences between WAP and iMode rather than commercial aspects of either technology.

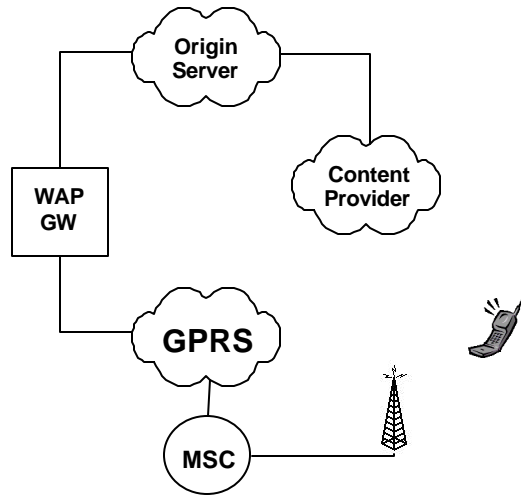
## Architecture

WAP uses a special language called Wireless Markup Language (WML) for communication between a special protocol conversion device called a WAP Gateway (GW) and content on the Internet. The WAP GW converts between WML and HTML, allowing delivery of WAP based content to a WAP capable mobile device.



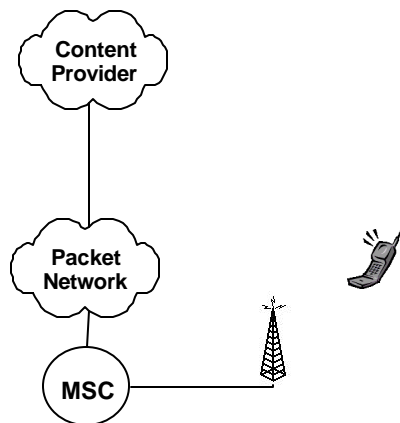
In most network today, the connection between the MSC and the GW is circuit switched as indicated in the illustration above in which the MSC must utilize the Public Switched Telecommunications Network (PSTN) to connect to the GW. As mobile network operators deploy next generation packet-data technologies such as General Packet Radio Service (GPRS), the connection between the MSC and the WAP GW will be upgraded to leverage the faster packet connection facilitated by the GPRS network.

# WAP (packet)



In contrast to WAP, iMode utilizes an overlay packet network for direct communications (no gateway needed) to the content providers on the Internet.

# iMode



## Protocols

While WAP uses WML, iMode uses a derivation of HTML called compact HTML (c-HTML). Being a sub-set of HTML, c-HTML is easier to learn and apply than WML.

It is likely that both WAP and iMode will evolve at some point to incorporate XML.

## Device Capabilities

WAP devices must support a WAP browser whereas iMode capable devices must be able to display information from c-HTML.

WAP devices display only text information whereas iMode devices display multi-color images.

WAP supports navigation between layered menus whereas iMode supports navigation through hyperlinks.

## Summary

While WAP and iMode have technical differences, they must support the same market for mobile data services.

## More Information

Learning modules provided by [www.mobileIN.com](http://www.mobileIN.com):

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- [Location Based Services](#)
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- [WAP & iMode](#)

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