

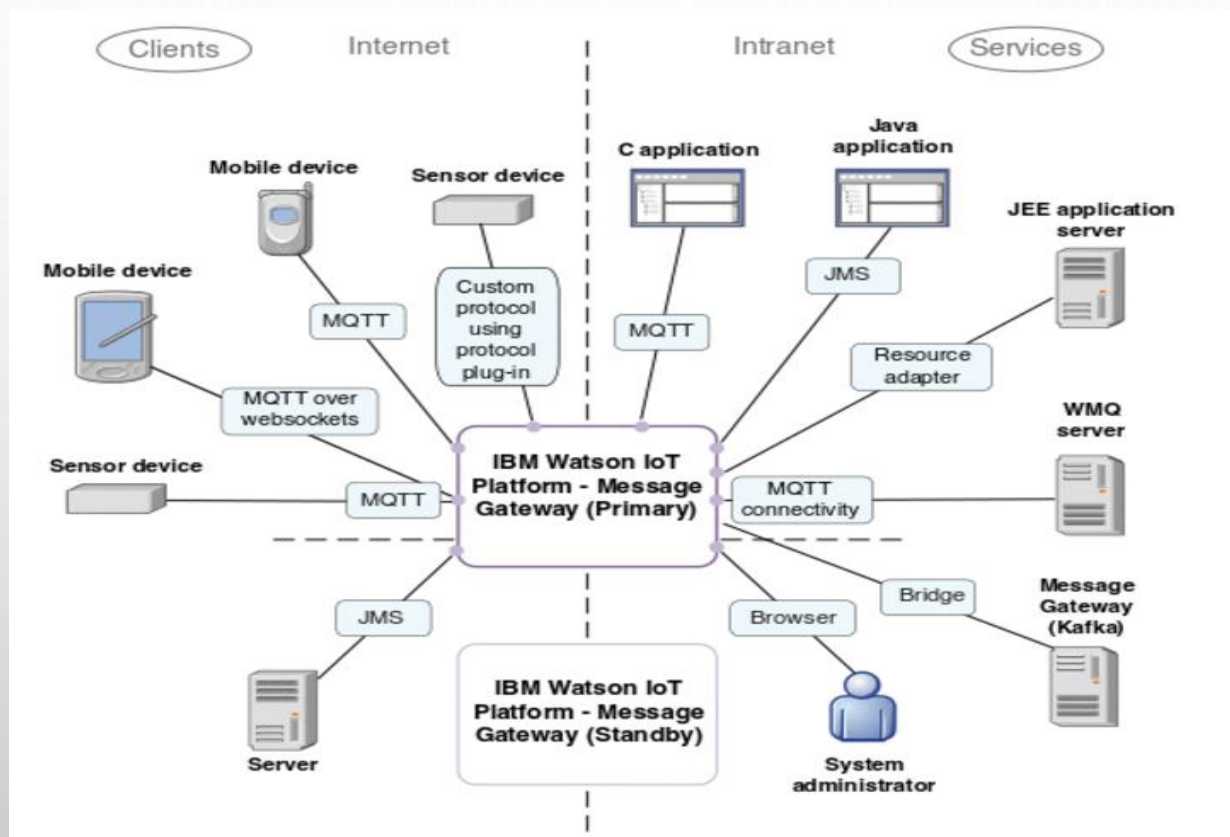


UNIT 5-PLATFORMS FOR IOT DEVELOPMENT



IOT PLATFORM ARCHITECTURE (IBM INTERNET OF THINGS & WATSON PLATFORMS)

- IS A DEPLOYMENT DIAGRAM THAT IS TYPICAL OF IBM WATSON IOT PLATFORM - MESSAGE GATEWAY APPLICATIONS. IN THE DIAGRAM, IBM WATSON IOT PLATFORM - MESSAGE GATEWAY CONNECTS MANY USERS AND DEVICES ON THE INTERNET TO SERVICES THAT ARE DEPLOYED ON AN INTRANET. THE USERS, DEVICES, AND SERVICES INTERACT WITH EACH OTHER BY EXCHANGING MESSAGES THROUGH IBM WATSON IOT PLATFORM - MESSAGE GATEWAY.





- IBM WATSON IOT PLATFORM - MESSAGE GATEWAY CONNECTS LARGE NUMBERS OF CLIENTS AND ROUTES LARGE VOLUMES OF MESSAGES. IBM WATSON IOT PLATFORM - MESSAGE GATEWAY SUPPORTS BOTH PUBLISH/SUBSCRIBE AND POINT-TO-POINT MESSAGING. LIKE IBM MQ, IT IS A SUBJECT-BASED PUBLISH SUBSCRIBE BROKER, NOT A CONTENT-BASED BROKER.
- UNLIKE A CONTENT-BASED BROKER, MESSAGE-CONTENT IS NOT QUERIED OR ALTERED BY IBM WATSON IOT PLATFORM - MESSAGE GATEWAY. NO USER-BASED APPLICATIONS CAN RUN ON IBM WATSON IOT PLATFORM - MESSAGE GATEWAY.
- IBM WATSON IOT PLATFORM - MESSAGE GATEWAY TYPICALLY SITS ALONGSIDE OTHER EDGE-OF-NETWORK DEVICES WITH THE SAME OBJECTIVES OF FORWARDING LARGE VOLUMES OF INTERNET TRAFFIC FROM MANY DIFFERENT CLIENTS.



CONNECTIVITY

- CONNECT CLIENTS TO IBM WATSON IOT PLATFORM - MESSAGE GATEWAY BY USING MQTT, OR JMS PROTOCOLS, WHICH ARE NATIVELY SUPPORTED.
- CONNECT CLIENTS TO IBM WATSON IOT PLATFORM - MESSAGE GATEWAY OVER A CUSTOM PROTOCOL BY USING THE PROTOCOL PLUG-IN. FOR MORE INFORMATION ABOUT INSTALLING YOUR OWN PROTOCOL, SEE [SUPPORTED PROTOCOLS](#).
- CONNECT IBM WATSON IOT PLATFORM - MESSAGE GATEWAY TO A IBM MQ NETWORK BY USING MQ CONNECTIVITY. FOR MORE INFORMATION ABOUT MQ CONNECTIVITY, SEE [MQ CONNECTIVITY](#).
- CONNECT IBM WATSON IOT PLATFORM - MESSAGE GATEWAY TO A JAVA™ PLATFORM, ENTERPRISE EDITION APPLICATION SERVER BY USING IBM WATSON IOT PLATFORM - MESSAGE GATEWAY RESOURCE ADAPTER. CONNECTING IN THIS WAY ALLOWS APPLICATION SERVER-BASED JMS MESSAGING, SUCH AS ASYNCHRONOUS MESSAGE DRIVEN BEANS, TO BE USED WITH IBM WATSON IOT PLATFORM - MESSAGE GATEWAY. FOR MORE INFORMATION, SEE [IBM WATSON IOT PLATFORM - MESSAGE GATEWAY RESOURCE ADAPTER](#).
- CONNECT YOUR STANDBY IBM WATSON IOT PLATFORM - MESSAGE GATEWAY SERVER TO YOUR PRIMARY IBM WATSON IOT PLATFORM - MESSAGE GATEWAY SERVER TO SET UP A HIGH AVAILABILITY (HA) PAIR. FOR MORE INFORMATION, SEE [HIGH AVAILABILITY](#).