



rethink  
possible

# Network Friendly Webapps

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# Goal: rethink “connectedness”



- Especially on mobile, the Web is driving a network use explosion
- As with transportation and distribution, rethinking what it takes to “go there” or “have it delivered” can result in dramatic resource savings both personally and collectively
- Just assuming that devices will connect you as needed prevents opportunities for smarter connection use
- Infrastructure is often needed, before resource-efficiency is possible; augmentation of platforms (e.g. hybrid vehicles) is often needed prior to native support for efficiency (e.g. the EV)





# The Web platform needs resource-optimizing enhancements and extensions

- “always-on” apps can be “always-connected” without persistent or individual IP connections
- connectionless bearers can enable high efficiency for server-sent event delivery
  - SMS, OMA Push have supported this since pre-2000
  - In LTE, these enablers live on as SMS/IP, OMA SIP Push
- using the EventSource API, OMA has extended SMS & OMA Push support to Webapps
- the Webapps WG is addressing the same objective: Web API support for connectionless/shared event delivery methods



# Enabling better app design practices



- AT&T's goals for the MWABP: interoperability, usability, efficiency
- simple design choices can dramatically affect resource use
- tools can enable developers to assess and improve network/resource efficiency
  - [AT&T Application Resource Optimizer \(ARO\)](#)
- context APIs can help: anyone remember UWA DCO?
  - what networks are supported, available, active?
  - this knowledge can lead to opportunistic and resource-efficient design methods





# Promoting efficient deployment/delivery models

- installable Webapps can focus network use on dynamic content
  - more convergence is needed in packaging & persistence
- but there's more needed in the Web platform to support opportunistic, scheduled, and shared delivery
  - filesystem storage, and application-managed storage/cache APIs
  - contextual info APIs, e.g. network status
- until these needs are addressed, the Web platform will continue to need augmentation via device-local service enabler clients, accessed via Web APIs

