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## Frame delivery in Foundation MAC

### *Tutorial on Foundation frame delivery and relay assumptions.*

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## Basic strategy background:

- Stations need connectivity with:
  - Stations in same BSS.
  - Stations in other BSS of the same ESS.
  - Stations on a wired Network.
  - Outside world via gateways.
- AP's maintain BSS connectivity knowledge.
  - List of associated stations.
  - Frames for non-associated stations are forwarded to the DS.
- Stations can be in a Power Conservation mode, but AP's will always be awake.
  - Destination PM status needs to be maintained in AP.
  - Stations in sleep mode can not maintain knowledge which other stations are in reach, and awake.
  - Only CAM station can do this.

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**Delivery strategy background:**

- **Most traffic will go outside the BSS.**
  - To shared resources on high speed wired segment.
  - To stations in an other BSS.
- **All local BSS traffic to stations using Power Save modes in practise needs to go through the AP.**
- **Only traffic between local stations that are continuous awake (CAM) can benefit from direct station-to-station delivery.**
- **AP Ack generation should not be time critical.**
  - No need to check that the final Destination is outside BSS or sleeping before frame is Ack'd.

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- **So default, all traffic from a station is send with the “ToAP” bit on, and is Ack'd by AP.**

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