Multipath TCP Address Advertisement

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Address advertisement in RFC6824

- Issues
 - Security concerns
 - Fixed by the inclusion of HMAC in RFC6824bis
 - Reliablity concerns
 - ADD_ADDR and REMOVE_ADDR are not reliably transmitted
 - IP version field is useless
 - should be replaced by flags (at least Backup bit, see list)
 - Initial subflow always uses Addr ID = 0
 - Forces MPTCP stack to remember it local address identifier for the initial subflow
 - Implementation cannot maintain a global list of addresses

How to ease address management

- Two possibilities
 - Use empty ADD_ADDR on initial subflow to announce identifier

- Steal some bits in key from MP CAPABLE for
 - Backup bit
 - Address identifier of initial subflow

Proposal

- More discussion on the list on the management of addresses to clarify it in RFC6824bis
- Ask feedback from implementors who chose to not implement ADD_ADDR