

AUTOCONF Problem Statement

draft-baccelli-autoconf-problem-statement-01

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Status

- -00 published shortly after IETF66th
 - Addressed comments received during the meeting
- Few comments received on the ML
- -01 version out

Status (cont.)

- Alignment of -01 with the architecture draft
 - Terminology
- WG consensus required on key issues to go forward
 - some questions remain unanswered to date
 - What kind of devices are we configuring ?
 - MANET routers
 - MANET hosts
 - What are we configuring ?
 - Prefixes
 - Addresses
- Decision to be made about which document should contain these answers
 - All of these in the problem statement draft?

Current structure of PS draft (-01)

- Overview of the problem and terminology
- Deployment scenarios
- Problem statement
- Solution guidelines
- General requirements
- Security considerations

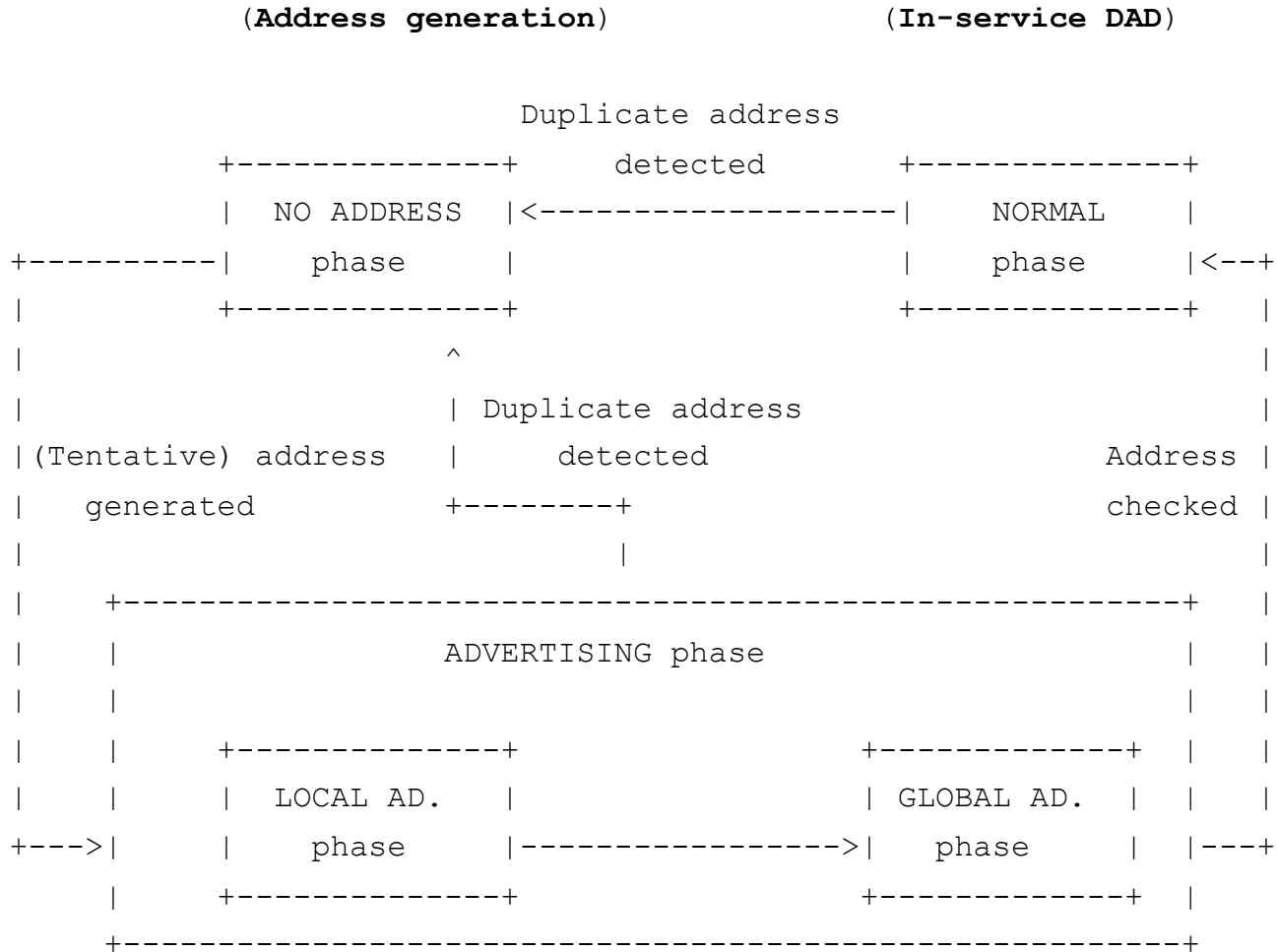
Problem Statement sec.

- **General goal:** configuration of one or more
 - unique local address in MANETs
 - global address for Internet traffic outside MANETs
- **Identified problems:**
 - Specific broadcast characteristics
 - IPv6 Autoconf cannot be applied
 - Dynamic topology
 - address uniqueness disrupted by partitions and mergers
 - Multiple gateways
 - address/prefix choice can impact application performance

Solution Guidelines sec.

- was: “Framework”
- Identification of three distinct phases:
 - Address generation
 - pre-service DAD
 - in-service DAD
- 4 models derived as combinations of these phases:
 - Full DAD
 - No DAD
 - No pre-service DAD
 - No in-service DAD

Full-DAD model



(Pre-service DAD)

No DAD model

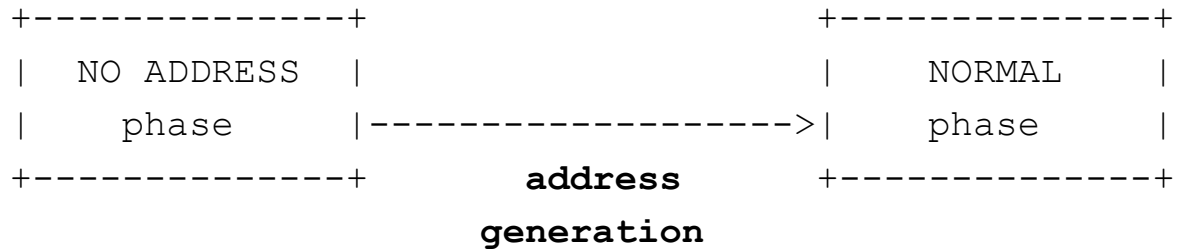


Fig. 2 Phases model without DAD.

No Pre-service DAD model

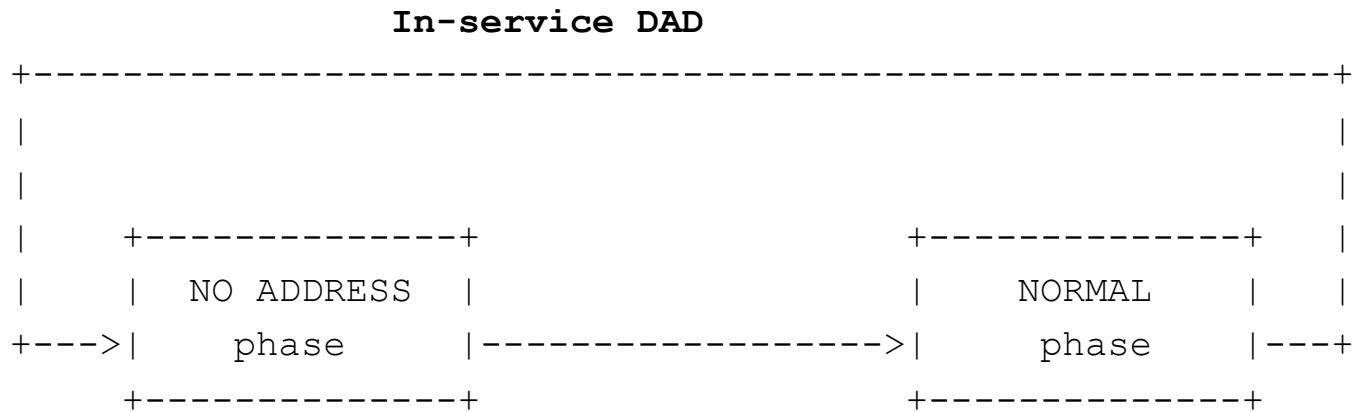


Fig. 4 Phases model without pre-service DAD.

No In-service DAD model

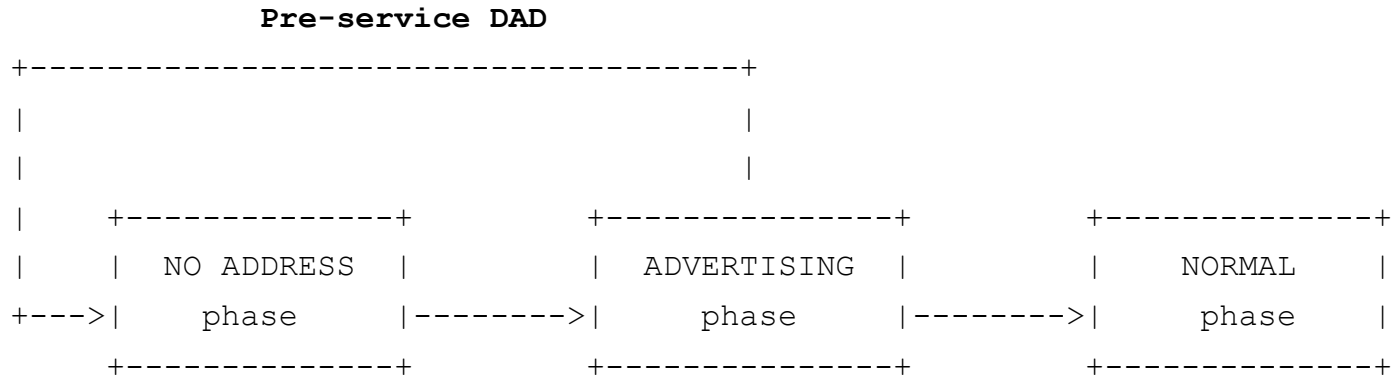


Fig. 3 Phases model without in-service DAD.

Next Steps

- Further alignment with arch. draft
 - In particular, regarding questions about
 - what kind of devices (routers/hosts)
 - what we are configuring (prefixes/ addresses)
- Do post your comments on the ML!

Thanks