

# Common Endpoint Locator Pools (CELP)

- ✿ **draft-crocker-celp**
  - ✗ Dave Crocker
  - ✗ Avri Doria
- ✿ **Multiple multiaddressing schemes**
  - ✗ Different approaches have different benefits
- ✿ **Proposal:**
  - ✗ **Share locator pools across independent associations**
  - ✗ Reduce multiaddressing control transaction costs
  - ✗ Improve availability of locator performance information

# Synergy Across Associations

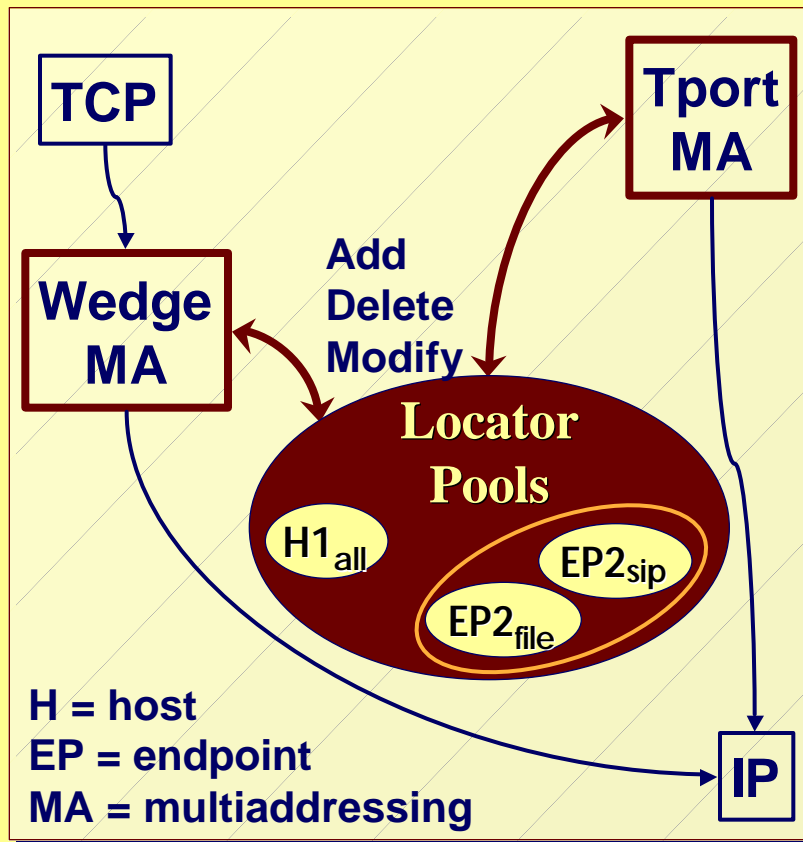
## ✿ Transport-based schemes

- ✗ Multiplex control exchange in data stream, so control data does not increase packet overhead
- ✗ Can naturally obtain path quality information

## ✿ Wedge-based schemes

- ✗ Multiaddressing for legacy transports
- ✗ Naturally independent of individual transport associations
- ✗ Can operate asynchronously of associations, deferring control exchanges, often needing no exchange
- ✗ Can maintain pools with different referential granularity

# Framework



## Variable granularity

- ✧ {local, remote}
- ✧ {local, remote, flow}
- ✧ {local, remote, protocol, port}
- ✧ {local, remote, type of service}

## Status

- ✧ Reachability
- ✧ Performance

# Issues

## • Path selection

- ✧ Which paths are available or better?
- ✧ Suggestion: *Defer generality; start with primary and fallback choices*

## • Local/Remote combinatorials

- ✧ Suggestion: *Defer generality; start with just {remote} or {local, remote}*

## • Security

- ✧ Different schemes have different degrees of security → concern about weakest participant affects entire service
- ✧ Maintaining synchrony among different modifiers of pool

## • Referential commonality

- ✧ Different schemes use different identifiers
- ✧ How to know that different locators refer to same endpoint?
- ✧ Suggestion: *That's what domain names are for...*

# Next Steps

- ✿ **Resolve**
  - ✿ Differential security issues
  - ✿ Near-term vs. long-term issues
  - ✿ Determining common endpoint referencing
- ✿ **Formulate CELP service model details**
  - ✿ Data structures
  - ✿ Operations