### AAA Support for ERP

draft-gaonkar-radext-erp-attrs (draft-dondeti-dime-erp-diameter) IETF-71, Philadelphia, PA

#### **Topics**

- ERP message transport via RADIUS/Diameter
- DSRK Request and Delivery
- rMSK delivery
- How to protect the delivery?

#### Carrying ERP Messages over AAA

- This part is easy
- ERP messages are carried just as EAP messages
- There are some straightforward details
  - NAS copies keyName-NAI TLV from EAP-Initiate/Reauth into User-Name attribute/AVP
  - Specification of which ERP messages are carried in which AAA messages
- Where unspecified, 3579 rules apply.

### Key Transport

- rMSK is transported using RADIUS-keywrap
  - Specify EAP rMSK as 2 (although it may be ok to reuse EAP MSK assignment for it)
- For DSRK request and delivery use RADIUSkeywrap
  - draft-zorn-radius-keywrap
  - That'll work for Diameter also

### DSRK Request using Keywrap

Length	Reserved	Enc Type		
App ID = EAP DSRK (number TBD)				
KEK ID = <null></null>				
KM ID = NULL@domain-name				
Lifetime = <null></null>				
IV = <null></null>				
Data = <null></null>				
	ID = EAP DS  KEK ID =  (M ID = NULL()  Lifetime =	ID = EAP DSRK (number T  KEK ID = <null>  (M ID = NULL@domain-nam  Lifetime = <null>  IV = <null></null></null></null>		

Enc Type = 0 implies the use of AES-KW; The request does not need to be encrypted!

# DSRK Keywrap

Type	Length	Reserved	Enc Type	
App ID = EAP DSRK (number TBD)				
KEK ID = KEK_ID				
KM ID = EMSKname@domain-name				
Lifetime = Lifetime				
IV = IV				
Data = DSRK				

# Questions?