T tle: omme t o D-10747 (DRP)

Sour e:

o er the ollow g omme t o D-10747 (DRP). They re l e ollow : = m or te h-l, E = m or e tor l, m=m or te h l, e = m or e tor l.

1. ***re g T e ( )***

The metho or re g t e e r e l u e 8.17.1 o te t w th the u e o the U T -EX T_D S ttr ute: e the metho o 8.17.1 oe ot epe upo the U T-EX T_D S ttr ute, t e e t lly re er th t ttr ute u ele .

urthermore, the ee to re t e r e two ep r te t e :

- or g to l u e 8.1 .1 (ter l Up te), S mu t m e ele t o mo g route re e ve re tly rom S lo te other route g om , o th t t the vert e the ho e route to ll other S lo te t ow route g om
- or g to l u e 8.17 (De o Pro e), S mu t m e ele t o rom mo g ll route t -R - , reg r le o the lo t o o the S rom wh h they re le r e .

The text o 8.17.1 houl e exp e to re oth o the e tu t o ep r tely, o er the text o t e ppe x , “Sugge te Repl eme t Text or l u e 8.17.1” o p ge : t om-prehe the u e o U T -EX T_D S t l o expl tly re e the two tu t o wh h t e ee to e ro e .

2. ***put to the Degree o Pre ere e u t o (m)***

E rly u o S o the E route g proto ol ote th t the e l ty o g ve route houl ot epe o propert e o other route , ut o ly o t ow propert e . Th prem e lre y ommo te DRP' l u e 8.17, where t t te th t "The ele t o pro e orm l ze y e g u t o th t t e the ttr ute o g ve p th rgume t retur o - eg t ve teger e ot g the egree o pre ere e or the p th".

t ugge te th t th t oul e m e le rer y g the ollow g t teme t to ter the e o e te e o the e o p r gr ph: "The egree o pre ere e u t o or g ve p th h ll ot u e t put y o the ollow g: the ex te e o other route , the o -ex te e o other route , or the p th ttr ute o other route ".

The , the ext e te e houl e h ge ollow : "P th ele t o the o t o v u l ppl t o o the egree o pre ere e u t o to e h e le p th, ollowe y the ho e o the o e w th the h ghe t egree o pre ere e."

3. ***put to the Degree o Pre ere e u t o (m)***

E rly u o S o the E route g proto ol ote th t the e l ty o g ve route houl ot epe o propert e o other route , ut o ly o t ow propert e . Th prem e lre y ommo te DRP' l u e 8.17, where t t te th t "The ele t o pro e orm l ze y e g u t o th t t e the ttr ute o g ve p th rgume t retur o - eg t ve teger e ot g the egree o pre ere e or the p th".

t ugge te th t th t oul e m e le rer y g the ollow g t teme t to ter the e o e te e o the e o p r gr ph: "The egree o pre ere e u t o or g ve p th h ll ot u e t put y o the ollow g: the ex te e o other route , the o -ex te e o other route , or the p th ttr ute o other route ".

The , the ext e te e houl e h ge ollow : "P th ele t o the o t o v u l ppl t o o the egree o pre ere e u t o to e h e le p th, ollowe y the ho e o the o e w th the h ghe t egree o pre ere e."

4. ***St l ty o Route (m)***

The metho outl e l u e 8.11 l m te to the ete t o o tu t o wh h S re e ve route rom e t S, th route o t o e o the RD o te w th the lo l S the RD_P TH o the UPD TE PDU. Su h o t o r e whe the vert g S oper t g w th out te route g orm t o , ut the tu t o w ll re t y t el oo the urre t route g orm t o re e ve . We ote th t perm e t o ll t o ot per t u le two o t o o ur:

- The re e v g S e e to vert e ew route
- The other S e e to h ge t ele te route e ore the ew UPD TE PDU rr ve

ut the e o t o ot per t e tely u le there per e t y hro m etwee the UPD TE PDU ex h ge y the two S --th t , the UPD TE PDU lw y ro tr t.

However, the D-text or DRP ow pe e the t o o " tter" to the t mer u e to o trol the prop g t o o UPD TE PDUS, thu m g per e t y hro z t o extremely u l ely tu t o . Thu , lthough ot h rm ul, the metho o l u e 8.11 eem to e l rgely uper luou .

He e, ee o e e t ret g l u e 8.11, re omme th t t e elete t e t rety rom DRP. ypro u t o t elet o , ex o lo ger pert e t, houl there ore e elete well.

5. ***Exter l Up te (m)***

ote th t l u e 8.1 .2 (Exter l Up te) the pro e ure o l u e 8.1 .1 (ter l Up te) mu t e o e e ore prop g t g UPD TE PDU out o g ve route g om . However, we ee o re o or the urther re tr t o mpo e 8.1 .2 th t ter l vert eme t mu t e owl-e ge e ore the exter l vert eme t t e pl e. The e o p r gr ph o 8.1 .2 y th t th ee e "to ure th t o te t orm t o w ll e prop g te exter lly". However, or g to 8.15.2, the proto ol pe e o orre t ve t o to e t e eve o te y ete te : t merely reporte to y tem m geme t. other wor , re e pt o owle ge-me t (or l thereo) oe ot gu r tee o te y. Thu , the requ reme t to w t or owl-e geme t uper luou , re omme th t the e o p r gr ph o l u e 8.1 .2 houl e elete t e t rety.

. ***De t t o w th the RD (m)***

g ve S ru g t De o Pro e or er to ele t route to e t t o th t re lo te w th t ow route g om , there le rly o e e t ele t g p th th t le ve t route g om the l ter ome to t:

- The DRP S orw r g Pro e w ll ot perm t PDU to ollow u h p th yw y-- e the e t t o w th the RD, DRP w ll h the PDU over to the tr - om proto ol or orw r g.

- u h p th vert e exter lly, S other RD woul ete t SPDU loop g error e the RD o the vert g S' om woul ppe r tw e, there ore the vert e route w ll e r e error w ll e ote (RD_Route g_ oop).

lthough e e t lly u ele , u h ho e woul ot u e the DRP proto ol to re . However, eel th t there houl e re tr t o DRP th t pre lu e S rom ele t g route to e t t o w th t ow RD th t route h p th egme t th t l e out e the lo l RD. We ugge t th t t oul e pl e 8.17 (De o Pro e), ollow :

- the t l ze wor to the r t e te e o the e o p r gr ph:

  The ele t o pro e *or route to e t t o th t l e out e the lo l route g om* orm l ze ...

- ert ew th r p r gr ph:

  The ele t o pro e or route to e t t o th t l e w th the route g om h ll o er o ly lo lly ge er te route —th t , o route h ll e ele te who e RD_P TH ttr ute o t RD wh h ot o te w th the lo l RD or o e o the o e er t o to wh h t elo g .

7. ***x mum PDU S ze (m)***

le rly, whe t r t e OPE PDU to t te o e t o to e gh or g S, the lo l S oe ot ow the m x mum PDU ze th t t pro pe t ve p rt er w ll ept, oul u ow gly e OPE PDU th t l rger th the peer S' m x mum. Th houl ot e o ere error. There ore, ugge t rewor g the orre po g e r pt o l u e 7.2 ollow : "...u g e teger th t repre e t the m x mum um er o o tet th t th S le to h le y om g SPDU, other th OPE PDU."

8. ***Retr m o (m)***

l u e 8.5.3 e e t ot e g the o t o upo wh h retr m o houl e toppe the S- S o e t o houl e orte . ugge t g the ollow g text:

However, o owle geme t re e ve w th the t me pe e the Hol T me el o the e t S' OPE PDU, the the lo l S h ll ue Stop Eve t, e E SE PDU, e ter the OSE-W T t te."

9. ***RouteSele t o terv l (m)***

lthough the o t t v lue o 30 m ute or the RouteSele t o terv l how T le 4 w ll ot u e the proto ol to l, t w ll re ult low o verge e--o the ver ge, there w ll e 15 m ute " e t me" e ore ewly ele te route vert e . S e t ot t p te th t route w ll h ge very reque tly, the ee to vert e ewly ele te route w ll o ur rel t vely re-que tly well. However, whe ew route ele te , t e r le to vert e th t t o t mely . There ore, t re omme e th t th o t t e h ge to 1 e o .

10. ***om g Route (e)***

The l t p r gr ph o l u e . omewh t et hy oe ot equ tely portr y the more et le m ter l o ggreg t o th t pre e te l u e 8.17.5 t u l u e . S e th l u e orm t ve, t ee ot pre e t y te h l et l. te , t ugge te th t t woul e more help ul to elete t t e t rety, to the ollow g m ter l to the e o the prev ou p r gr ph:

or ex mple, t po le u er ert o tr t to ggreg te p th ttr ute , R , or e t re route , e r e more ully l u e 8.17.5 t u l u e .

11. ***er o egot t o (e)***

or l r ty, l u e 8.7 houl me t o th t the h ghe t ver o um er upporte y the lo l S o t e m ge o e t **ver o** .

12. ***H l g o SSSE DSSE (e)***

The m ter l l u e 8.12.3, tem " " " " pe o o tr t o the SSQOS DSQOS ttr ute . However, the text oe ot prov e equ v le t o tr t or SS SE UR TY DS SE UR TY, wh h re tre te ex tly the me w y DRP. There ore, re omme th t two ew tem e e to the l t, u g the text o ex t g " " " ', w th SE UR TY u t tute or QOS.

13. ***ex : ommo Su etwor (e)***

e o the u o t the erl meet g, t w gree th t DRP w ll e P ter- om route g proto ol, w ll ot ter e re tly to O S erv e . S e DRP ter e re tly o ly to SO 8473, u g t S P, the m ter l ex o lo ger relev t to the oper t o o DRP. There ore, re omme th t th orm t ve ex houl e elete .

However, el ev g t worthwh le to e r e how o e m ght ert th t p r o S re lo te o the me u etwor , ugge t th t the ollow g ote e e to l u e .9.2:

ote: the e e o mpleme t t o pe metho or ert g th t S l te m ge o e t **EXTER - S- E H ORS** lo te o ommo u etwor w th t el , g ve S et the l et me el o the SO 8473 PDU wh h e p ul te t SPDU to v lue o 1. S e the l et me el w ll e e reme te (to 0) y the r t etwor e t ty th t re e ve the e p ul t g PDU, the SPDU w ll ot e el vere to S th t lo te more th gle u etwor hop w y.

14. ***l u e 8.17.3 l u e 8.17. (e)***

The e l u e re log lly out o or er w th re pe t to the rem er o l u e 8.17. l u e 8.1 .3 (P th Sele t o) houl e move orw r , o th t t o ur mme tely ter urre t l u e 8.17; or o te y, the wor "p th ele t o " houl e h ge to "route ele t o "; lly, l u e 8.17. (ter t o w th Up te Pro e) houl e move mme tely ter urre t 8.17.2, "Up t g the o -R ". The , the l u e w ll e more log l or er o pre e t t o : De o Pro e , Route Sele t o , re g T e , Up t g the o -R , ter t o w th Up te Pro e .

15. ***l u e 8.17.4 to 8.17.5. (e)***

og lly, the m ter l pre e te the e l u e ot p rt o the De o Pro e . t u e e e t w y to org ze route g orm t o ter t h ee ele te . There ore, re omme th t the e l u e e re um ere u er ew 2 level l u e, to e e t tle "E e t Org z t o o Route g orm t o ".

1 . ***o te t o orm t o e (e)***

lthough re er er the o te t o DRP' route g orw r g orm t o e rom the text, th m ter l ot pre e te gle pl e w th the t r . t ugge te th t text houl e e to ex t g l u e .8 (Sele t g the orm t o e), th t t houl pre e t the t le how T le 1 o p ge 5, wh h olle t umm r ze orm t o out the R .

17. ***D4 Re ere e (e)***

The re ere e to " D4" gure 7 ppropr te e the term " D4" ot e e or me t o e ywhere the DRP text. To orre t th , the ollow g h ge houl e m e:

- h ge " D4 lgor thm" to " DRP he um lgor thm" gure 7
- ert l ogr ph re ere e to R 118 l u e 3 (" orm t ve Re ere e ")
- Prov e re ere e ex to the lgor thm e r pt o p rt o R 118 .

T le 1. The DRP orm t o e . The ex g v r le o te t o the R re how .

orm t o e	***exe y...***	***o t ...***
-R -	• ET o e t S • R - tt	• P th ttr ute • R
o -R	• R - tt	• P th ttr ute • R
-R -Out	• ET o e t S • R - tt	• P th ttr ute • R
	• R - tt • R	• ET o ext hop S • Output S P o lo l S • put S P o ext hop S

ote :

1. lo l opt o , S m y ele t to pply orm t o re u t o te h que to p th ttr ute R orm t o .
2. or e h e t S, g ve S m t -R - or e h R - tt (lu g the Empty R - tt) th t t upport .
3. S m t ep r te o -R or e h R - tt (lu g the Empty R - tt) th t t up- port .
4. or e h e t S, g ve S m t -R -Out or e h et o R - tt (lu g the Empty R - tt) th t t vert e to th t e gh or.
5. g ve S m t ep r te or e h et o R - tt (lu g the Empty R - tt) th t t h vert e to t e gh or S—th t , e h orre po to -R -Out.

To l t te the orw r g pro e , S org ze e h o t S to two o eptu l p rt : o e o t g orm t o or R lo te w th t ow RD, other or R lo te other RD (ee l u e 9). or exter l R , S urther org ze the orm t o e o whether the ext-hop- S lo te w th t ow RD or other RD (ee l u e 9.4, tem " " " "). lly, or tho e ext-hop S lo te t ow RD, the lo l S org ze the orm t o or g to pe orw r g me h m (ee l u e 9.4, tem " 1", " 2", " 3").

ppe x . Sugge te Repl eme t Text or l u e 8.17.1

8.17.1 re g T e mo g Route w th Equ l Degree o Pre ere e

Whe there re ever l route to the me e t t o th t ll h ve the me egree o pre ere e, S h ll hoo e gle route rom mo g them eterm t h o. Su h t e m y r e two tu- t o :

1. W th the ter l up te pro e , S mu t ele t gle route rom mo g tho e wh h t h re e ve re tly rom S lo te e t route g om .
2. W th the De o Pro e , S mu t ele t gle route rom mo g ll tho e o t e t -R - , reg r le o the lo t o o the S th t vert e them to the lo l S.

8.17.1.1 re g T e the ter l Up te Pro e

The ele t o pro e t e pl e two ph e . r t, the lo l S pru e the et o route w th equ l egree o pre ere e y ret g, or e h e t route g om , o ly o e o the te route th t t h vert e . Se o , the lo l S w ll ele t gle route rom mo g tho e ho e tep 1.

1. Sele t g S gle Route rom Tho e Re e ve rom ve e t RD:

   rom the route re e ve rom S lo te e h e t RD, the lo l S h ll ele t gle route, ollow :

   . the te route h ve e t l p th ttr ute or er o ly the EXT_HOP ttr ute, ele t the route th t w vert e y the S who e ET h the lowe t v lue whe t o - ere to e u g e ry teger.

   . the te route er o ly the r EXT_HOP U T -EX T_D S ttr ute , the lo l S' m ge o e t **ult ex t** TRUE, ele t the route th t h the lowe t v lue o the U T -EX T_D S ttr ute. the m ge o e t **ult ex t** l e, ele t the route vert e y the S who e ET h the lowe t v lue whe t o ere to e u g e ry teger.

   . the te route er y p th ttr ute other th EXT_HOP U T -EX T_D S , ele t the route th t w vert e y the S who e ET h the lowe t v lue whe t o - ere to e u g e ry teger.

2. Sele t g S gle Route or vert eme t:

   t the omplet o o th r t tep, the lo l S h orme et th t o t o e route th t w vert e y e h o t e t RD . rom th et, the lo l S h ll ele t the route th t w vert e y the S who e ET h the lowe t v lue whe t o ere to e u g e ry teger.

8.17.1.2 re g T e the De o Pro e

The ele t o pro e t e pl e two ph e . r t, the lo l S pru e the et o route w th equ l egree o pre ere e y ele t g gle route rom mo g tho e vert e y e h e t route g

om . Se o , the lo l S w ll ele t gle route rom mo g tho e ho e tep 1. Th ele t o pro e ept put ll route reg r le o whether they were vert e y S the lo l route g om or S e t route g om .

1. Sele t g S gle Route vert e y E h e t RD:

   The route th t re to e ex m e m y h ve ee vert e y the lo l S e ther re tly y S lo te e t RD, or they m y h ve ee re- tr ute to t y other S lo te the lo l S' ow RD. e ther o the e e , the RD o the e t RD (or RD) e eterm e y ex m g the l t RD l te the RD_P TH ttr ute o the te route .

   rom e h et o te route w th the me v lue or the r l t RD , the lo l S h ll ele t gle route, ollow :

   . the te route h ve e t l p th ttr ute or er o ly the EXT_HOP ttr ute, ele t the route th t w vert e y the S e t route g om who e ET h the lowe t v lue whe t o ere to e u g e ry teger. Otherw e, ele t the route th t w vert e y the S the lo l route g om who e ET h the lowe t v lue.

   . the te route er o ly o ly the r EXT_HOP U T -EX T_D S ttr ute , the lo l S' m ge o e t **ult ex t** TRUE, ele t the route th t h the lowe t v lue o the U T -EX T_D S ttr ute.

   the m ge o e t **ult ex t** l e, ele t the route vert e y the S e t RD who e ET h the lowe t v lue whe t o ere to e u g e ry teger. Other- w e, ele t the route th t w vert e y the S the lo l route g om who e ET h the lowe t v lue.

   . the te route er y p th ttr ute other th EXT_HOP U T -EX T_D S , ele t the route th t w vert e y the S who e ET h the lowe t v lue whe t o - ere to e u g e ry teger.

2. Sele t g S gle Route or vert eme t:

   t the omplet o o th r t tep, the lo l S h e t l he et th t o t o e route to e h o t e t RD . rom th et, the lo l S h ll ele t the route th t w vert e y the S who e ET h the lowe t v lue whe t o ere to e u g e ry teger.