```
PAM TASK file for ALPN tests

These tests are for client connections and address PAM processing to ensure a protocol name has been found and matched, as set by the ALPN option in the PAM stack.

Tests are run under a client-2 environment and service_alpn2 entries for PAM authentication. The client-2 environment is used because it has the pam_permit.so module in its PAM stack, which is necessary for these tests. The service_alpn2 file has the ALPN option set and matches against the two protocol names, "wibble" and "fluffle", in that order. The pam_unix.so module is also present in the stack, so that the password for client-2 can be checked. Connections are made to a server that is configured to offer the protocol names "fluffle" and "wibble", in that order. Thus, if the client does not request any protocol name, or requests one that is not supported, the server will select "fluffle". If the client requests "wibble", it will be selected. If the client requests a protocol name that is not supported by the server, the connection should be rejected with a "no application protocol" error.

Further connections are made to check that the ALPN option is correctly parsing the service_alpn2 file. Finally, a connection is made to check that the ALPN option is correctly ignored if it is not followed by a file name.

****

exim_pam_init

exec /usr/sbin/exim -bV
exec /usr/sbin/exim -d -oX PORT_D -oP $exim_pid
sleep 1
client

exec /usr/sbin/exim -d -oX PORT_D -oP $exim_pid
sleep 1
client

****

exim_pam_fini

kill `cat $exim_pid`
wait
no_msg_check

****

exim_pam_setup_1

# Set up the server configuration

cp aux-fixed/exim_pam_conf.in1 $spool_directory/exim_pam_conf.in

****

exim_pam_setup_2

# Set up the server configuration

cp aux-fixed/exim_pam_conf.in2 $spool_directory/exim_pam_conf.in

****

exim_pam_setup_3

# Set up the server configuration

cp aux-fixed/exim_pam_conf.in3 $spool_directory/exim_pam_conf.in

****
```

```
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE IHSCH11F
-1 = '-1 INAPPLICABLE'
1 = '1 IN-SCHOOL'
2 = '2 OUT-OF-SCHOOL'

VALUE IHSED11B
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE KEYHSED
-1 = '-1 INAPPLICABLE'
1 = '1 HSDIP'
2 = '2 NOT HSDIP'

VALUE LFTDIF11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'

VALUE MARRY11B
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 MARRIED'
2 = '2 WIDOWED'
3 = '3 DIVORCED'
4 = '4 SEPARATED'
5 = '5 NEVER MARRIED'
6 = '6 UNDER 16 INAPPLICABLE'
7 = '7 MARRIED, SPOUSE IN HOUSE'
8 = '8 WIDOWED IN HOUSE'
9 = '9 DIVORCED IN HOUSE'
10 = '10 SEPARATED IN HOUSE'

VALUE MCA111F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE MCA112B
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE MCAMS11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE MCAWE11B
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE MILDIF11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'

VALUE MARRY11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NEVERMARRIED'
2 = '2 VERY GOOD'
3 = '3 GOOD'
4 = '4 FAIR'
5 = '5 POOR'

VALUE MOBL1F
-1 = '-1 INAPPLICABLE'
1 = '1 MOBILE'
2 = '2 NON-MOB'

VALUE MMEMP11F
-9 = '-9 NOT RASCRNINGD'
-1 = '-1 INAPPLICABLE'
1 - 999 = '1 - 999 NUMBER OF EMPLOYEES'

VALUE OFFHS11B
-9 = '-9 NOT RASCRNINGD'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE OTHWA11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE OTPRO11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PAIDEL11F
12 = '12 PAREL 12 RO 1'
13 = '13 PAREL 13 RO 1'

VALUE PID
101 - 501 = '101 - 401 PERSON NUMBER'

VALUE PICOM11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PKIND11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PKIWS11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PLYL11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PRIS11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PROV11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE PROF11F
-9 = '-9 NOT A RESPONDENT'
-1 = '-1 RESPONDENT IS NO WORKER'
2 = '2 RESPONDENT IS A PROXY'

VALUE RETSELF
-9 = '-9 NOT FIELDED/NON-RESPONSE RU'
-1 = '-1 INAPPLICABLE - NOT IN SAMPLE/R-1 ONLY'
10 = '10 RESERVE UR RESIDENTIAL, NOT FU ACTIVE HOU'
12 = '12 UR RESIDUAL, FT HOU (DUPE-SCOPE)'
13 = '13 UR RESIDUAL, NOT FT HOU (DUPE)'
14 = '14 UR NEAR HH, FT ACTIVE DUPL/INSCOPE'
21 = '21 INSTITUTIONALIZED WHOLE- RU ONLY'
22 = '22 INSTITUTIONALIZED PART- RU ONLY'
23 = '23 LEAVE INSTITUTION A FEW - RU ONLY'
24 = '24 SIDE IN DEPT DURING RU - RU ONLY'
31 = '31 INSTITUTIONALIZED'
32 = '32 INSTITUTIONALIZED UR HEALTH CARE FAC'
33 = '33 INSTITUTIONALIZED NON-HEALTH CARE FAC'
34 = '34 INSTITUTIONALIZED, NOT AS STUDENT'
35 = '35 MOVED, FT ACTIVE (OUT)'
36 = '36 INSTITUTIONALIZED (TYPE UNKNOWN)'
41 = '41 NEW MOVE-IN HOU'
42 = '42 PERSON MOV(-SCOPE) HU'
43 = '43 REASON UNK IN MOVED TO UNK LOCATION'
50 = '50 NEW CONSTRUCTION, NOT AS STUDENT'
51 = '51 NEWMOVER IN REF PERIOD'
61 = '61 INCEASED PRIOR TO REF PERIOD-A3/1'
62 = '62 INCREASED IN REF PERIOD-A3/1'
63 = '63 LEFT U.S. PRIOR TO REF PER-A3/1'
64 = '64 FT RCL, RCL FAC MOVE PRIOR REF PER-A3/1'
71 = '71 UNABLE NON-RES/RESIDENT RCHA, PR ONLY'
72 = '72 UNABLE NON-RES/RESIDENT RCHA, PR ONLY'
73 = '73 NOWHERE, NOT FT RCL, MOVED W/OUT KEY'
74 = '74 NOWHERE, NOT FT RCL, NOT TO A KNOWN KEY'
81 = '81 MOVED, FT STOU, NO KEEP, DATA INPUTED'

VALUE PSRL5H
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'
3 = '3'

VALUE RACE4
-1 = '-1 INAPPLICABLE'
1 = '1 ASIAN-NO OTHER RACE REPORTED'
2 = '2 ASIAN-OTHER RACE(S) REPORTED'
3 = '3 ALL OTHER RACE ASSIGNMENTS'

VALUE RACE8H
-1 = '-1 INAPPLICABLE'
1 = '1 BLACK-NO OTHER RACE REPORTED'
2 = '2 BLACK-OTHER RACE(S) REPORTED'
3 = '3 ALL OTHER RACE ASSIGNMENTS'

VALUE RACETHH4
-1 = '-1 INAPPLICABLE'
1 = '1 PERSON IS HISPANIC'
2 = '2 PERSON IS BLACK-NO OTH RACE/NOT HISPANIC'
3 = '3 PERSON IS ASIAN-NO OTH RACE/NOT HISPANIC'
4 = '4 OTHER RACE/NOT HISPANIC'

VALUE RACE9H
-1 = '-1 INAPPLICABLE'
1 = '1 WHITE-NO OTHER RACE REPORTED'
2 = '2 BLACK-NO OTH RACE REPORTED'
3 = '3 AMER INDIAN/ALASKA NATIVE - NO OTH RACE'
4 = '4 ASIAN - NO OTHER RACE REPORTED'
5 = '5 HAWAIIAN/PACIFIC ISLANDER-NO OTHR'
6 = '6 MULTIPLE RACES REPORTED'

VALUE RCHGF1F
-9 = '-9 DK'
-8 = '-8 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'

VALUE REGION1F
-1 = '-1 INAPPLICABLE'
1 = '1 NORTHEAST'
2 = '2 MIDWEST'
3 = '3 SOUTH'
4 = '4 WEST'

VALUE RENRS11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 - 31 = '1 - 31 DAY'

VALUE RENRM11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = 'JANUARY'
2 = 'FEBRUARY'
3 = 'MARCH'
4 = 'APRIL'
5 = 'MAY'
6 = 'JUNE'
7 = 'JULY'
8 = 'AUGUST'
9 = 'SEPTEMBER'
10 = 'OCTOBER'
11 = 'NOVEMBER'
12 = '12 DECEMBER'

VALUE RENRY11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
2008 = '2008 YEAR'

VALUE RENRS11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES, FIRST RESPONDENT'
2 = '2 NO, NOT FIRST RESPONDENT'
3 = NOT DETERMINED'

VALUE RFREL11B
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
0 = '0 SELF'
1 = 'HUSBAN'
2 = 'WIFE'
3 = 'SISTER/STEP/HALF'
4 = 'BROTHER/STEP/HALF'
5 = 'SON/STEP/FOSTER/ADOPT DAUGHTER'
6 = 'SON/DAUGTDIS SON'
7 = 'MOTH/STPMOTH'
8 = 'FATHER/STEPFATHER'
9 = 'MOTHER-IN-LAW'
10 = 'FATHER-IN-LAW'
11 = 'SISTER-IN-LAW'
12 = 'BROTHER-IN-LAW'
13 = 'DAUGHTER-IN-LAW'
14 = 'SON-IN-LAW'
15 = 'STEPMOTHER'
16 = 'STEPFATHER'
17 = 'GRANDMOTHER'
18 = 'STEPSON'
19 = 'GRANDMOTHER'
20 = 'STEPDAUGHTER'
21 = 'AUNT'
22 = 'UNCLE'
23 = 'NIECE'
24 = 'NEPHEW'
25 = 'COUSIN'
26 = 'GRANDSON'
27 = 'GRANDDAUGHTER'
28 = 'FEMALE PARTNER'
29 = 'MALE PARTNER'
30 = 'MOTHER'S PARTNER'
31 = 'FATHER'S PARTNER'
32 = 'SON OF PARTNER'
33 = 'DAUGHTER OF PARTNER'
34 = 'SON OF PARTNER'
35 = 'GREAT GRANDMOTHER'
36 = 'GREAT GRANDFATHER'
37 = 'GREAT GRANDDAUGHTER'
38 = 'GREAT GRANDSON'
39 = 'GREAT AUNT'
40 = 'GREAT UNCLE'
41 = 'GREAT NIECE'
42 = 'GREAT NEPHEW'
43 = 'FOSTER MOTHER'
44 = 'FOSTER FATHER'
45 = 'FOSTER DAUGHTER'
46 = 'FOSTER SON'
47 = 'FOSTER SISTER'
48 = 'FOSTER BROTHER'
91 = '91 OTHER RELATEL, SPECIFY'
99 = '99 NOT RELATED'

VALUE RFLEF11F
-1 = '-1 INAPPLICABLE'
'A' = 'A'
'B' = 'B'
'C' = 'C'
'D' = 'D'
'E' = 'E'
'F' = 'F'
'G' = 'G'
'H' = 'H'

VALUE RNRF11F
-1 = '-1 INAPPLICABLE'
10 - 999 = '010 - 999'

VALUE RRSC11F
-2 = '-2 INAPPLICABLE'
'01' = '01 PERSON IS NO WORKER'
'61' = '61 PROFI-ALL RU MEMBERS INCEASED'
'62' = '62 PROFI-ALL RU MEMB INSTITUT/ORCHARDS'
'63' = '63 PROFI-ALL RU MEMB DECEASED'
'70' = '70 ENTIRE RU MERGED WITH OTHER HU'
'71' = '71 RU CONSI; RU KILD BY MEMBERSG; IMELIG'
'72' = '72 RU CONSI; RU KILD BY MEMBERSG; ELIGIB'
'80' = '80 ENTIRE RU INCREASED BEFORE 1/1/08'
'81' = '81 ENTIRE RU INCREASED BEFORE 1/1/16'
'82' = '82 ENTIRE RU INCREASED AFT 1/1/16'
'83' = '83 RU INSTITUTED BEFORE 1/1/16'
'84' = '84 ENTIRE RU LEFT U.S. BEFORE 1/1/16'
'85' = '85 RU MOVED OUT OF SAMPLE AREA - UNKNOW'
'86' = '86 RU IMELIG, MEMBRY NEIB STUC'
'87' = '87 NEWHOM CONFL, RU ELIG BY MEM, IMELIG'
'88' = '88 RU MOVED OUT OF SAMPLE PERIOD'
'89' = '89 TOO ILL, NO PROXY'
'90' = '90 PHYSICAL/MENTAL INCOMPETENT, NO PROXY'
'91' = '91 REFUSAL BREAKOFF'
'92' = '92 FINAL BREAKOFF'
'93' = '93 UNABLE TO LOCATE'
'94' = '94 ENTIRE RU MOVED OR LEFT IN AFTER 1/1/16'
'95' = '95 RU NEW INSTITUT AFT 1/1/16, NO PROXY'
'96' = '96 RU DECEASED AFT 1/1/16, NO PROXY'
'97' = '97 RU MOVED OUT OF SAMPLE AREA - UNKNOWN'
'98' = '98 RU MOVED TOO FAR TO INTERVIEW'
'99' = '99 FINAL OTHER NONRESPONSE'

VALUE RTRL11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 VERY GOOD'
2 = '2 GOOD'
3 = '3 FAIR'
4 = '4 POOR'

VALUE RUCLA11F
-1 = '-1 INAPPLICABLE'
1 = '1 STANDARD RU'
2 = '2 CAPI RU'
3 = '3 STUDENT RU'

VALUE RUSIZ11F
-1 = '-1 INAPPLICABLE'
1 = '1 PERSON IN RU'
2 = '2 PERSONS IN RU'
3 = '3 PERSONS IN RU'
4 = '4 PERSONS IN RU'
5 = '5 PERSONS IN RU'
6 = '6 PERSONS IN RU'
7 = '7 PERSONS IN RU'
8 = '8 PERSONS IN RU'
9 = '9 PERSONS IN RU'
10 = '10 PERSONS IN RU'
11 = '11 PERSONS IN RU'
12 = '12 PERSONS IN RU'
13 = '13 PERSONS IN RU'
14 = '14 PERSONS IN RU'
15 = '15 PERSONS IN RU'
16 = '16 PERSONS IN RU'
17 = '17 PERSONS IN RU'
18 = '18 PERSONS IN RU'

VALUE RCHLW11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE SEX
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = 'MALE'
2 = 'FEMALE'

VALUE SLFCH11F
-9 = '-9 NOT RASCRNINGD'
-1 = '-1 INAPPLICABLE'
1 = 'SELF-EMPLOYED'
2 = '2 WORKS FOR SOMEONE ELSE'

VALUE STCK11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE SVC11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
995 = '995 NO SPOUSE/PARTNER IN HOUSE'
996 = '996 WAS/WILL STATUS UNKNOWN'
997 = '997 LESS THAN 1% YRS OLD'

VALUE SPOUSE
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 SPOUSE IN THE HOUSE'
2 = '2 SPOUSE NOT IN HOUSE'
3 = '3 UNMARRIED COUPLE'

VALUE STRHP11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'

VALUE STPHP11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'
5 = '5 COMPLETELY UNABLE TO DO IT'
6 = '6 COMPLETELY UNABLE TO WALK'

VALUE STPWS11F
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE TRIMM11B
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE UNRL11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE VARPSU
1 - 2 = '1 - 2'

VALUE VARSTR
101 - 1125 = '1001 - 1125'

VALUE WGTRS11F
0 = '0.000000'
755.674039 = '5141.014644 = 755.674039 + 5141.014644 WEIGHT'

VALUE WGTSP11F
0 = '0.000000'
671.765208 = '822R.595544 = 671.765208 + 822R.595544 WEIGHT'

VALUE WLKSF11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 NO DIFFICULTY'
2 = '2 SOME DIFFICULTY'
3 = '3 A LOT OF DIFFICULTY'
4 = '4 UNABLE TO DO'

VALUE WLKLM11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'

VALUE WRKLK11F
-9 = '-9 NOT RASCRNINGD'
-8 = '-8 DK'
-7 = '-7 REFUSED'
-1 = '-1 INAPPLICABLE'
1 = '1 YES'
2 = '2 NO'
```