

Testing EPICS Extensions

- [EPICS Extensions](#)
 - [alh](#)
 - [alhCUD](#)
 - [caCamcom](#)
 - [caSnooper](#)
 - [ChannelWatcher](#)
 - [CWget](#)
 - [CWput](#)
 - [edm](#)
 - [eget](#)
 - [fwdCliS](#)
 - [iocLogMsgServer](#)
 - [gateway](#)
 - [probe](#)
 - [StripTool](#)
- [Related articles](#)

EPICS Extensions

The following is a list of EPICS applications bundled as EPICS Extensions R.0.5.0:

Extension	Version	Executable
alh	R1.2.351.0.0	/usr/local/lcls/epics/extensions/alh/R1.2.351.0.0/bin/rhel6x86_64/alh
alh_DB	R1.2.351.0.0	/usr/local/lcls/epics/extensions/alh/R1.2.351.0.0/bin/rhel6x86_64/alh_DB
alh_printer	R1.2.351.0.0	/usr/local/lcls/epics/extensions/alh/R1.2.351.0.0/bin/rhel6x86_64/alh_printer
caCamcom	R2.0.0	/usr/local/lcls/epics/extensions/Camcom/R2.0.0/bin/rhel6x86_64/caCamcom
caSnooper	R2.1.2.30.1.0	/usr/local/lcls/epics/extensions/caSnooper/R2.1.2.30.1.0/bin/rhel6x86_64/caSnooper
ChannelWatcher	R3.0.1	/usr/local/lcls/epics/extensions/ChannelWatcher/R3.0.1/bin/rhel6x86_64/ChannelWatcher
CWget	R3.0.1	/usr/local/lcls/epics/extensions/ChannelWatcher/R3.0.1/bin/rhel6x86_64/CWget
CWput	R3.0.1	/usr/local/lcls/epics/extensions/ChannelWatcher/R3.0.1/bin/rhel6x86_64/CWput
edm	R1.12.105B1.2.0	/usr/local/lcls/epics/extensions/edm/R1.12.105B1.2.0/bin/rhel6x86_64/edm
eget	R0.0.00.0.1	/usr/local/lcls/epics/extensions/eget/R0.0.00.0.1/bin/rhel6x86_64/eget
ezcaVarArrayTest	R3.7.2	/usr/local/lcls/epics/extensions/labca/R3.7.2/bin/rhel6x86_64/ezcaVarArrayTest
flatdb	R2.7.00.1.0	/usr/local/lcls/epics/extensions/VisualDCT/R2.7.00.1.0/bin/rhel6x86_64/flatdb
fwdCliS	R1.2.6	/usr/local/lcls/epics/extensions/fwdCliS/R1.2.6/bin/rhel6x86_64/fwdCliS
gateway	R2.0.6.01.0.1	/usr/local/lcls/epics/extensions/gateway/R2.0.6.01.0.1/bin/rhel6x86_64/gateway
iocLogMsgServer	R1.6.0	/usr/local/lcls/epics/extensions/iocLogMsgServer/R1.6.0/bin/rhel6x86_64/iocLogMsgServer
msgReceiver	R1.6.0	/usr/local/lcls/epics/extensions/iocLogMsgServer/R1.6.0/bin/rhel6x86_64/msgReceiver
parsecasw	R1.0.3.00.1.0	/usr/local/lcls/epics/extensions/parsecasw/R1.0.3.00.1.0/bin/rhel6x86_64/parsecasw
probe	R1.1.8.00.1.0	/usr/local/lcls/epics/extensions/probe/R1.1.8.00.1.0/bin/rhel6x86_64/probe
procServ	R2.7.01.1.0	/usr/local/lcls/epics/extensions/procServ/R2.7.01.1.0/bin/rhel6x86_64/procServ
pvgetx	R0.0.00.0.1	/usr/local/lcls/epics/extensions/eget/R0.0.00.0.1/bin/rhel6x86_64/pvgetx
pvputx	R0.0.00.0.1	/usr/local/lcls/epics/extensions/eget/R0.0.00.0.1/bin/rhel6x86_64/pvputx
StripTool	R2.5.18.01.0.0	/usr/local/lcls/epics/extensions/StripTool/R2.5.18.01.0.0/bin/rhel6x86_64/StripTool
vdct	R2.7.00.1.0	/usr/local/lcls/epics/extensions/VisualDCT/R2.7.00.1.0/bin/rhel6x86_64/vdct
VisualDCT.jar	R2.7.00.1.0	/usr/local/lcls/epics/extensions/VisualDCT/R2.7.00.1.0/bin/rhel6x86_64/VisualDCT.jar

alh

1. Log into lcls-srv01 as physics with current 32-bit environment
2. Run:

```
[physics@lcls-srv01 ~]$ which alh
/usr/local/lcls/epics/extensions/extensions-R3-14-12/bin/linux-x86/alh
[physics@lcls-srv01]$ $T00LS/script/alarmtree.py LASR -o /tmp/alarmtree_LASR_R3-14-12.json
```

3. Log into lcls-srv01 as physics3 with default 64-bit environment
4. Run:

```
[physics3@lcls-srv01 ~]$ which alh
/usr/local/lcls/epics/extensions/R0.5.0/bin/rhel6-x86_64/alh
[physics3@lcls-srv01]$ $T00LS/script/alarmtree.py LASR -o /tmp/alarmtree_LASR_R7.0.2-1.0.json
```

5. Compare the two files and make sure that they match:

```
diff -y -d /tmp/alarmtree_LASR_R3-14-12.json /tmp/alarmtree_LASR_R7.0.2-1.0.json
```

6. Log into lcls-srv01 as physics3 and launch lclshome->All->Alarm Handler Tree and verify that the Alarm Tree Handler display comes up.

alhCUD

The PPS/BCS CUD reads a text file that alhCUD emits

alhCUD is looking at PPS PVs and waiting for them to change state, then writes to that text file.

So I changed the PPS access state of the LCLS Injector Vault, and watched an instance of the PPS/BCS CUD to see if the state change showed up on the CUD.

caCamcom

1. Log into lcls-srv01 as physics3 (with a default 64-bit environment)
2. Run (with permission from OPS):

```
[physics3@lcls-srv01]$ source $EPICS_SETUP/fixed-epics-setup.bash
[physics3@lcls-srv01]$ source $EPICS_SETUP/epicsenv-7.0.2-1.0.bash
[physics3@lcls-srv01]$ $T00LS/script/piopreset -t klys -b li22 -u 21
```

caSnooper

1. Log into lcls-daemon10 as laci
2. Run:

```
[laci@lcls-daemon10]$ source $EPICS_SETUP/fixed-epics-setup.bash
[laci@lcls-daemon10]$ source $EPICS_SETUP/epicsenv-7.0.2-1.0.bash
[laci@lcls-daemon10]$ $STOOLS/script/doSnooper64.bash 10 20
SIOC:SYS0:AL00:MODE          PRODUCTION
Checking connections for PVs from caSnooper output
input from /tmp/caSnooper.out
====> WILL CHECK CONNECTIONS FOR CASNOOPER OUTPUT
Starting CaSnooper 2.1.2.3 (7-3-2013) at Aug 20 15:08:44
EPICS 3.15.5-1.1.1
Individual Name is CaSnoop.test
Internal PV names are not being published

CaSnooper terminating after 20.00 seconds [0.33 minutes]
  Data collected for 20.00 seconds [0.33 minutes]

Aug 20 15:09:04:
There were 17555 requests to check for PV existence for 11703 different PVs.
  Max(Hz):    5.00
  Mean(Hz):   0.07
  StDev(Hz):  0.11
```

```
PVs with top 10 requests:
  1 mccas0.slac.stanford.edu:46638 TRS1:AS2:LOST:PAVE.VAL          5.00
  2 lcls-daemon1.slac.stanford.edu:40376 FBCK:BSY0:1:STATE         1.20
  3 lcls-daemon0.slac.stanford.edu:57669 KLYS:LI24:41:TRIG_DEVNAME 1.00
  4 lcls-daemon0.slac.stanford.edu:57669 KLYS:LI24:51:TRIG_DEVNAME 0.70
  5 lcls-daemon0.slac.stanford.edu:57669 TRIG:LI24:206:TREF        0.60
  6 lcls-daemon1.slac.stanford.edu:40207 @%m/%d/%Y                0.60
  7 mcc.slac.stanford.edu:1193      TRS2:SLEDFBCK:COMM:FRESH      0.55
  8 lcls-srv03.slac.stanford.edu:47925 USEG:UND1:1850:KEQ          0.50
  9 lcls-srv03.slac.stanford.edu:47925 USEG:UND1:1950:KEQ          0.50
 10 lcls-srv03.slac.stanford.edu:47925 USEG:UND1:1750:KEQ          0.50
```

```
====> NOW CHECKING FOR PVS THAT ARE NOT CONNECTING...
```

```
1 TRS1:AS2:LOST:PAVE.VAL NOT connected
2 FBCK:BSY0:1:STATE NOT connected
3 KLYS:LI24:41:TRIG_DEVNAME NOT connected
4 KLYS:LI24:51:TRIG_DEVNAME NOT connected
5 TRIG:LI24:206:TREF NOT connected
6 @%m/%d/%Y NOT connected
7 TRS2:SLEDFBCK:COMM:FRESH NOT connected
8 USEG:UND1:1850:KEQ NOT connected
9 USEG:UND1:1950:KEQ NOT connected
10 USEG:UND1:1750:KEQ NOT connected
```

```
-----
TOTAL COUNT OF DISCONNECTED PVS IN SNOOPER SAMPLE: 10
```

ChannelWatcher

1. Reserve MATLAB PVs (lclshome->All->Matlab GUIs->Matlab PVs->Matlab Support PVs, choose unreserved ones marked "spare")
2. Create list of test PVs from step (1), one per line
3. Open Message Log Viewer and filter for "Facility like "Channel"
4. Run: ChannelWatcher -f <filename from step (2)>
5. Verify that ChannelWatcher logs a message connecting to the PVs in the list from step (2)
6. Change the value(s) of the PVs in the list using caput
7. Verify that ChannelWatcher logs messages pertaining to each PV value change

CWget

1. Using reserved MATLAB PVs from ChannelWatcher test, run:
CWget <file with list of MATLAB PVs, one per line>
2. Verify with caget that the values returned match the actual current values of the PVs.

CWget [filename] > [output_file]

CWput

1. Using reserved MATLAB PVs from ChannelWatcher test, create file with one PV per line and

CWput [output_file_changes]

edm

eget

1. Log in as laci to lcls-daemon2
2. Check the output of v4_service_monitor cronjob and verify that eget ran successfully:

```
[laci@lcls-daemon2 ~]$ cat /tmp/v4_service_monitor.log
=====
Checking V4 services 2019-08-20 15:15:01.994836
Testing optics service:
Running: eget -ts QUAD:LTU1:880:RMAT
    -0.156946    -0.15959         0         0         0.391116    0.00540698
    0.0133542    0.0110122         0         0         -0.0173222   -0.00021337
-1.05117e-06  -1.98485e-07    -0.0074217    0.479216    0.000110175   1.87252e-06
 1.12246e-07   2.11945e-08   -5.16277e-05   -0.0523249  -1.17647e-05   -1.9995e-07
-0.000522173  -0.00039278    2.5574e-08    3.49462e-08   -0.0174609   -0.000185892
 0.0346964    0.00655144         0         0         -3.63658    -0.0618066
Returned status 0
Running: pvput -p ca MCCAS0:V4:OPTICS:STATUS 0
Old : 2019-08-20 15:10:02.227 (0) Running
New : 2019-08-20 15:15:02.171 (0) Running
Testing rdb service:
Running: eget -ts QUAD:LTU1:880:LZ
Returned status 0
Running: pvput -p ca MCCAS0:V4:RDB:STATUS 0
Old : 2019-08-20 15:10:02.410 (0) Running
New : 2019-08-20 15:15:02.336 (0) Running
Testing ds service:
Running: eget -ts ds -a name QUAD:LTU1:880:BDES
Returned status 0
Running: pvput -p ca MCCAS0:V4:DS:STATUS 0
Old : 2019-08-20 15:10:02.576 (0) Running
New : 2019-08-20 15:15:02.527 (0) Running
Testing hist service:
Running: eget -ts hist -q -a pv QUAD:LTU1:880:BACT -a from '5 seconds ago'
non-normative type
NTComplexTable
    string[] labels ["secondsPastEpoch", "values", "nanoseconds", "severity", "status"]
    structure value
        long[] secondsPastEpoch [1545406532]
        double[] values [-0.984402]
        int[] nanoseconds [440035058]
        int[] severity [0]
        int[] status [0]
Returned status 0
Running: pvput -p ca MCCAS0:V4:HIST:STATUS 0
Old : 2019-08-20 15:10:02.765 (0) Running
New : 2019-08-20 15:15:02.749 (0) Running
```

3. Run:

```
[laci@lcls-daemon2 ~]$ eget -ts ds -a tag=LCLS.BSA.rootnames
"ACCL:IN20:300:L0A_A"
"ACCL:IN20:300:L0A_P"
```

"ACCL:IN20:400:L0B_A"
"ACCL:IN20:400:L0B_P"
"ACCL:LI21:180:L1X_A"
"ACCL:LI21:180:L1X_P"
"ACCL:LI21:1:L1S_A"
"ACCL:LI21:1:L1S_P"
"BLD:SYS0:500:ANG_X"
"BLD:SYS0:500:ANG_Y"
"BLD:SYS0:500:BC1CHARGE"
"BLD:SYS0:500:BC1ENERGY"
"BLD:SYS0:500:BC2CHARGE"
"BLD:SYS0:500:BC2ENERGY"
"BLD:SYS0:500:CHARGE"
"BLD:SYS0:500:DMP_CHARGE"
"BLD:SYS0:500:ENERGY"
"BLD:SYS0:500:LTU250_POS_X"
"BLD:SYS0:500:LTU450_POS_X"
"BLD:SYS0:500:PHOTONENERGY"
"BLD:SYS0:500:POS_X"
"BLD:SYS0:500:POS_Y"
"BLD:SYS0:500:UND_ANG_X"
"BLD:SYS0:500:UND_ANG_Y"
"BLD:SYS0:500:UND_POS_X"
"BLD:SYS0:500:UND_POS_Y"
"BLD:SYS0:500:XTCAV_AMP"
"BLEN:LI21:265:AIMAX"
"BLEN:LI21:265:ARAW"
"BLEN:LI21:265:BIMAX"
"BLEN:LI21:265:BRAW"
"BLEN:LI21:266:AIMAX"
"BLEN:LI21:266:ARAW"
"BLEN:LI21:266:BIMAX"
"BLEN:LI21:266:BRAW"
"BLEN:LI24:886:IDES"
"BLEN:LI24:886:MASK"
"BLEN:LI24:886:POSN"
"BLEN:LI24:887:AIMAX"
"BLEN:LI24:887:ARAW"
"BLEN:LI24:887:BIMAX"
"BLEN:LI24:887:BRAW"
"BLM:LI24:707:QDCRAW"
"BLM:LI24:740:QDCRAW"
"BLM:LI24:807:QDCRAW"
"BLM:LI24:860:QDCRAW"
"BLM:LTU1:722:BLOSS"
"BLM:LTU1:732:BLOSS"
"BLM:LTU1:762:BLOSS"
"BLM:LTU1:772:BLOSS"
"BLM:LTU1:980:BLOSS"
"BLM:LTU1:BLF545:BLOSS"
"BLM:UND1:0235:QDCRAW"
"BLM:UND1:0835:QDCRAW"
"BLM:UND1:0845:QDCRAW"
"BLM:UND1:1021:BLOSS"
"BLM:UND1:1121:BLOSS"
"BLM:UND1:1135:QDCRAW"
"BLM:UND1:1145:QDCRAW"
"BLM:UND1:120:BLOSS"
"BLM:UND1:121:BLOSS"
"BLM:UND1:1221:BLOSS"
"BLM:UND1:1321:BLOSS"
"BLM:UND1:1421:BLOSS"
"BLM:UND1:1435:QDCRAW"
"BLM:UND1:1521:BLOSS"
"BLM:UND1:1621:BLOSS"
"BLM:UND1:1720:BLOSS"
"BLM:UND1:1721:BLOSS"
"BLM:UND1:1735:QDCRAW"
"BLM:UND1:1745:QDCRAW"
"BLM:UND1:1821:BLOSS"
"BLM:UND1:1921:BLOSS"

"BLM:UND1:2021:BLOSS"
"BLM:UND1:2121:BLOSS"
"BLM:UND1:221:BLOSS"
"BLM:UND1:2221:BLOSS"
"BLM:UND1:2321:BLOSS"
"BLM:UND1:2335:QDCRAW"
"BLM:UND1:2345:QDCRAW"
"BLM:UND1:2421:BLOSS"
"BLM:UND1:2520:BLOSS"
"BLM:UND1:2521:BLOSS"
"BLM:UND1:2621:BLOSS"
"BLM:UND1:2635:QDCRAW"
"BLM:UND1:2645:QDCRAW"
"BLM:UND1:2721:BLOSS"
"BLM:UND1:2821:BLOSS"
"BLM:UND1:2921:BLOSS"
"BLM:UND1:2935:QDCRAW"
"BLM:UND1:2945:QDCRAW"
"BLM:UND1:3021:BLOSS"
"BLM:UND1:3121:BLOSS"
"BLM:UND1:321:BLOSS"
"BLM:UND1:3221:BLOSS"
"BLM:UND1:3235:QDCRAW"
"BLM:UND1:3245:QDCRAW"
"BLM:UND1:3320:BLOSS"
"BLM:UND1:3321:BLOSS"
"BLM:UND1:421:BLOSS"
"BLM:UND1:4:BLOSS"
"BLM:UND1:521:BLOSS"
"BLM:UND1:621:BLOSS"
"BLM:UND1:721:BLOSS"
"BLM:UND1:821:BLOSS"
"BLM:UND1:8:BLOSS"
"BLM:UND1:920:BLOSS"
"BLM:UND1:921:BLOSS"
"BLM:UND1:BLF17:BLOSS"
"BLM:UND1:BLF1:BLOSS"
"BPMS:BSYH:445:TMIT"
"BPMS:BSYH:445:X"
"BPMS:BSYH:445:Y"
"BPMS:BSYH:465:TMIT"
"BPMS:BSYH:465:X"
"BPMS:BSYH:465:Y"
"BPMS:BSYH:640:TMIT"
"BPMS:BSYH:640:X"
"BPMS:BSYH:640:Y"
"BPMS:BSYH:735:TMIT"
"BPMS:BSYH:735:X"
"BPMS:BSYH:735:Y"
"BPMS:BSYH:910:TMIT"
"BPMS:BSYH:910:X"
"BPMS:BSYH:910:Y"
"BPMS:CLTH:140:TMIT"
"BPMS:CLTH:140:X"
"BPMS:CLTH:140:Y"
"BPMS:CLTH:170:TMIT"
"BPMS:CLTH:170:X"
"BPMS:CLTH:170:Y"
"BPMS:DMP1:299:TMIT"
"BPMS:DMP1:299:X"
"BPMS:DMP1:299:Y"
"BPMS:DMP1:381:TMIT"
"BPMS:DMP1:381:X"
"BPMS:DMP1:381:Y"
"BPMS:DMP1:398:TMIT"
"BPMS:DMP1:398:X"
"BPMS:DMP1:398:Y"
"BPMS:DMP1:502:TMIT"
"BPMS:DMP1:502:X"
"BPMS:DMP1:502:Y"
"BPMS:DMP1:693:TMIT"

"BPMS:DMP1:693:X"
"BPMS:DMP1:693:Y"
"BPMS:GUNB:314:STAT"
"BPMS:GUNB:314:TMIT"
"BPMS:GUNB:314:X"
"BPMS:GUNB:314:Y"
"BPMS:GUNB:925:STAT"
"BPMS:GUNB:925:TMIT"
"BPMS:GUNB:925:X"
"BPMS:GUNB:925:Y"
"BPMS:IN20:221:TMIT"
"BPMS:IN20:221:X"
"BPMS:IN20:221:Y"
"BPMS:IN20:235:TMIT"
"BPMS:IN20:235:X"
"BPMS:IN20:235:Y"
"BPMS:IN20:371:TMIT"
"BPMS:IN20:371:X"
"BPMS:IN20:371:Y"
"BPMS:IN20:425:TMIT"
"BPMS:IN20:425:X"
"BPMS:IN20:425:Y"
"BPMS:IN20:511:TMIT"
"BPMS:IN20:511:X"
"BPMS:IN20:511:Y"
"BPMS:IN20:525:TMIT"
"BPMS:IN20:525:X"
"BPMS:IN20:525:Y"
"BPMS:IN20:581:TMIT"
"BPMS:IN20:581:X"
"BPMS:IN20:581:Y"
"BPMS:IN20:631:TMIT"
"BPMS:IN20:631:X"
"BPMS:IN20:631:Y"
"BPMS:IN20:651:TMIT"
"BPMS:IN20:651:X"
"BPMS:IN20:651:Y"
"BPMS:IN20:731:TMIT"
"BPMS:IN20:731:X"
"BPMS:IN20:731:Y"
"BPMS:IN20:771:TMIT"
"BPMS:IN20:771:X"
"BPMS:IN20:771:Y"
"BPMS:IN20:781:TMIT"
"BPMS:IN20:781:X"
"BPMS:IN20:781:Y"
"BPMS:IN20:821:TMIT"
"BPMS:IN20:821:X"
"BPMS:IN20:821:Y"
"BPMS:IN20:925:TMIT"
"BPMS:IN20:925:X"
"BPMS:IN20:925:Y"
"BPMS:IN20:945:TMIT"
"BPMS:IN20:945:X"
"BPMS:IN20:945:Y"
"BPMS:IN20:981:TMIT"
"BPMS:IN20:981:X"
"BPMS:IN20:981:Y"
"BPMS:LI21:131:TMIT"
"BPMS:LI21:131:X"
"BPMS:LI21:131:Y"
"BPMS:LI21:161:TMIT"
"BPMS:LI21:161:X"
"BPMS:LI21:161:Y"
"BPMS:LI21:201:TMIT"
"BPMS:LI21:201:X"
"BPMS:LI21:201:Y"
"BPMS:LI21:233:TMIT"
"BPMS:LI21:233:X"
"BPMS:LI21:233:Y"
"BPMS:LI21:278:TMIT"

"BPMS:LI21:278:X"
"BPMS:LI21:278:Y"
"BPMS:LI21:301:TMIT"
"BPMS:LI21:301:X"
"BPMS:LI21:301:Y"
"BPMS:LI21:315:TMIT"
"BPMS:LI21:315:X"
"BPMS:LI21:315:Y"
"BPMS:LI21:401:TMIT"
"BPMS:LI21:401:X"
"BPMS:LI21:401:Y"
"BPMS:LI21:501:TMIT"
"BPMS:LI21:501:X"
"BPMS:LI21:501:Y"
"BPMS:LI21:601:TMIT"
"BPMS:LI21:601:X"
"BPMS:LI21:601:Y"
"BPMS:LI21:701:TMIT"
"BPMS:LI21:701:X"
"BPMS:LI21:701:Y"
"BPMS:LI21:801:TMIT"
"BPMS:LI21:801:X"
"BPMS:LI21:801:Y"
"BPMS:LI21:901:TMIT"
"BPMS:LI21:901:X"
"BPMS:LI21:901:Y"
"BPMS:LI22:601:TMIT"
"BPMS:LI22:601:X"
"BPMS:LI22:601:Y"
"BPMS:LI22:701:TMIT"
"BPMS:LI22:701:X"
"BPMS:LI22:701:Y"
"BPMS:LI22:801:TMIT"
"BPMS:LI22:801:X"
"BPMS:LI22:801:Y"
"BPMS:LI22:901:TMIT"
"BPMS:LI22:901:X"
"BPMS:LI22:901:Y"
"BPMS:LI23:201:TMIT"
"BPMS:LI23:201:X"
"BPMS:LI23:201:Y"
"BPMS:LI23:301:TMIT"
"BPMS:LI23:301:X"
"BPMS:LI23:301:Y"
"BPMS:LI23:401:TMIT"
"BPMS:LI23:401:X"
"BPMS:LI23:401:Y"
"BPMS:LI23:501:TMIT"
"BPMS:LI23:501:X"
"BPMS:LI23:501:Y"
"BPMS:LI23:601:TMIT"
"BPMS:LI23:601:X"
"BPMS:LI23:601:Y"
"BPMS:LI23:701:TMIT"
"BPMS:LI23:701:X"
"BPMS:LI23:701:Y"
"BPMS:LI23:801:TMIT"
"BPMS:LI23:801:X"
"BPMS:LI23:801:Y"
"BPMS:LI23:901:TMIT"
"BPMS:LI23:901:X"
"BPMS:LI23:901:Y"
"BPMS:LI24:201:TMIT"
"BPMS:LI24:201:X"
"BPMS:LI24:201:Y"
"BPMS:LI24:301:TMIT"
"BPMS:LI24:301:X"
"BPMS:LI24:301:Y"
"BPMS:LI24:401:TMIT"
"BPMS:LI24:401:X"
"BPMS:LI24:401:Y"

"BPMS:LI24:501:TMIT"
"BPMS:LI24:501:X"
"BPMS:LI24:501:Y"
"BPMS:LI24:601:TMIT"
"BPMS:LI24:601:X"
"BPMS:LI24:601:Y"
"BPMS:LI24:701:TMIT"
"BPMS:LI24:701:X"
"BPMS:LI24:701:Y"
"BPMS:LI24:801:TMIT"
"BPMS:LI24:801:X"
"BPMS:LI24:801:Y"
"BPMS:LI24:901:TMIT"
"BPMS:LI24:901:X"
"BPMS:LI24:901:Y"
"BPMS:LI25:201:TMIT"
"BPMS:LI25:201:X"
"BPMS:LI25:201:Y"
"BPMS:LI25:301:TMIT"
"BPMS:LI25:301:X"
"BPMS:LI25:301:Y"
"BPMS:LI25:401:TMIT"
"BPMS:LI25:401:X"
"BPMS:LI25:401:Y"
"BPMS:LI25:501:TMIT"
"BPMS:LI25:501:X"
"BPMS:LI25:501:Y"
"BPMS:LI25:601:TMIT"
"BPMS:LI25:601:X"
"BPMS:LI25:601:Y"
"BPMS:LI25:701:TMIT"
"BPMS:LI25:701:X"
"BPMS:LI25:701:Y"
"BPMS:LI25:801:TMIT"
"BPMS:LI25:801:X"
"BPMS:LI25:801:Y"
"BPMS:LI25:901:TMIT"
"BPMS:LI25:901:X"
"BPMS:LI25:901:Y"
"BPMS:LI26:201:TMIT"
"BPMS:LI26:201:X"
"BPMS:LI26:201:Y"
"BPMS:LI26:301:TMIT"
"BPMS:LI26:301:X"
"BPMS:LI26:301:Y"
"BPMS:LI26:401:TMIT"
"BPMS:LI26:401:X"
"BPMS:LI26:401:Y"
"BPMS:LI26:501:TMIT"
"BPMS:LI26:501:X"
"BPMS:LI26:501:Y"
"BPMS:LI26:601:TMIT"
"BPMS:LI26:601:X"
"BPMS:LI26:601:Y"
"BPMS:LI26:701:TMIT"
"BPMS:LI26:701:X"
"BPMS:LI26:701:Y"
"BPMS:LI26:801:TMIT"
"BPMS:LI26:801:X"
"BPMS:LI26:801:Y"
"BPMS:LI26:901:TMIT"
"BPMS:LI26:901:X"
"BPMS:LI26:901:Y"
"BPMS:LI27:201:TMIT"
"BPMS:LI27:201:X"
"BPMS:LI27:201:Y"
"BPMS:LI27:301:TMIT"
"BPMS:LI27:301:X"
"BPMS:LI27:301:Y"
"BPMS:LI27:401:TMIT"
"BPMS:LI27:401:X"

"BPMS:LI27:401:Y"
"BPMS:LI27:501:TMIT"
"BPMS:LI27:501:X"
"BPMS:LI27:501:Y"
"BPMS:LI27:601:TMIT"
"BPMS:LI27:601:X"
"BPMS:LI27:601:Y"
"BPMS:LI27:701:TMIT"
"BPMS:LI27:701:X"
"BPMS:LI27:701:Y"
"BPMS:LI27:801:TMIT"
"BPMS:LI27:801:X"
"BPMS:LI27:801:Y"
"BPMS:LI27:901:TMIT"
"BPMS:LI27:901:X"
"BPMS:LI27:901:Y"
"BPMS:LI28:201:TMIT"
"BPMS:LI28:201:X"
"BPMS:LI28:201:Y"
"BPMS:LI28:301:TMIT"
"BPMS:LI28:301:X"
"BPMS:LI28:301:Y"
"BPMS:LI28:401:TMIT"
"BPMS:LI28:401:X"
"BPMS:LI28:401:Y"
"BPMS:LI28:501:TMIT"
"BPMS:LI28:501:X"
"BPMS:LI28:501:Y"
"BPMS:LI28:601:TMIT"
"BPMS:LI28:601:X"
"BPMS:LI28:601:Y"
"BPMS:LI28:701:TMIT"
"BPMS:LI28:701:X"
"BPMS:LI28:701:Y"
"BPMS:LI28:801:TMIT"
"BPMS:LI28:801:X"
"BPMS:LI28:801:Y"
"BPMS:LI28:901:TMIT"
"BPMS:LI28:901:X"
"BPMS:LI28:901:Y"
"BPMS:LI29:201:TMIT"
"BPMS:LI29:201:X"
"BPMS:LI29:201:Y"
"BPMS:LI29:301:TMIT"
"BPMS:LI29:301:X"
"BPMS:LI29:301:Y"
"BPMS:LI29:401:TMIT"
"BPMS:LI29:401:X"
"BPMS:LI29:401:Y"
"BPMS:LI29:501:TMIT"
"BPMS:LI29:501:X"
"BPMS:LI29:501:Y"
"BPMS:LI29:601:TMIT"
"BPMS:LI29:601:X"
"BPMS:LI29:601:Y"
"BPMS:LI29:701:TMIT"
"BPMS:LI29:701:X"
"BPMS:LI29:701:Y"
"BPMS:LI29:801:TMIT"
"BPMS:LI29:801:X"
"BPMS:LI29:801:Y"
"BPMS:LI29:901:TMIT"
"BPMS:LI29:901:X"
"BPMS:LI29:901:Y"
"BPMS:LI30:201:TMIT"
"BPMS:LI30:201:X"
"BPMS:LI30:201:Y"
"BPMS:LI30:301:TMIT"
"BPMS:LI30:301:X"
"BPMS:LI30:301:Y"
"BPMS:LI30:401:TMIT"

"BPMS:LI30:401:X"
"BPMS:LI30:401:Y"
"BPMS:LI30:501:TMIT"
"BPMS:LI30:501:X"
"BPMS:LI30:501:Y"
"BPMS:LI30:601:TMIT"
"BPMS:LI30:601:X"
"BPMS:LI30:601:Y"
"BPMS:LI30:701:TMIT"
"BPMS:LI30:701:X"
"BPMS:LI30:701:Y"
"BPMS:LI30:801:TMIT"
"BPMS:LI30:801:X"
"BPMS:LI30:801:Y"
"BPMS:LTU0:110:TMIT"
"BPMS:LTU0:110:X"
"BPMS:LTU0:110:Y"
"BPMS:LTU0:120:TMIT"
"BPMS:LTU0:120:X"
"BPMS:LTU0:120:Y"
"BPMS:LTU0:130:TMIT"
"BPMS:LTU0:130:X"
"BPMS:LTU0:130:Y"
"BPMS:LTU0:150:TMIT"
"BPMS:LTU0:150:X"
"BPMS:LTU0:150:Y"
"BPMS:LTU0:170:TMIT"
"BPMS:LTU0:170:X"
"BPMS:LTU0:170:Y"
"BPMS:LTU0:180:TMIT"
"BPMS:LTU0:180:X"
"BPMS:LTU0:180:Y"
"BPMS:LTU0:190:TMIT"
"BPMS:LTU0:190:X"
"BPMS:LTU0:190:Y"
"BPMS:LTU1:250:TMIT"
"BPMS:LTU1:250:X"
"BPMS:LTU1:250:Y"
"BPMS:LTU1:290:TMIT"
"BPMS:LTU1:290:X"
"BPMS:LTU1:290:Y"
"BPMS:LTU1:350:TMIT"
"BPMS:LTU1:350:X"
"BPMS:LTU1:350:Y"
"BPMS:LTU1:390:TMIT"
"BPMS:LTU1:390:X"
"BPMS:LTU1:390:Y"
"BPMS:LTU1:450:TMIT"
"BPMS:LTU1:450:X"
"BPMS:LTU1:450:Y"
"BPMS:LTU1:490:TMIT"
"BPMS:LTU1:490:X"
"BPMS:LTU1:490:Y"
"BPMS:LTU1:550:TMIT"
"BPMS:LTU1:550:X"
"BPMS:LTU1:550:Y"
"BPMS:LTU1:590:TMIT"
"BPMS:LTU1:590:X"
"BPMS:LTU1:590:Y"
"BPMS:LTU1:620:TMIT"
"BPMS:LTU1:620:X"
"BPMS:LTU1:620:Y"
"BPMS:LTU1:640:TMIT"
"BPMS:LTU1:640:X"
"BPMS:LTU1:640:Y"
"BPMS:LTU1:660:TMIT"
"BPMS:LTU1:660:X"
"BPMS:LTU1:660:Y"
"BPMS:LTU1:680:TMIT"
"BPMS:LTU1:680:X"
"BPMS:LTU1:680:Y"

"BPMS:LTU1:720:TMIT"
"BPMS:LTU1:720:X"
"BPMS:LTU1:720:Y"
"BPMS:LTU1:730:TMIT"
"BPMS:LTU1:730:X"
"BPMS:LTU1:730:Y"
"BPMS:LTU1:740:TMIT"
"BPMS:LTU1:740:X"
"BPMS:LTU1:740:Y"
"BPMS:LTU1:750:TMIT"
"BPMS:LTU1:750:X"
"BPMS:LTU1:750:Y"
"BPMS:LTU1:760:TMIT"
"BPMS:LTU1:760:X"
"BPMS:LTU1:760:Y"
"BPMS:LTU1:770:TMIT"
"BPMS:LTU1:770:X"
"BPMS:LTU1:770:Y"
"BPMS:LTU1:820:TMIT"
"BPMS:LTU1:820:X"
"BPMS:LTU1:820:Y"
"BPMS:LTU1:840:TMIT"
"BPMS:LTU1:840:X"
"BPMS:LTU1:840:Y"
"BPMS:LTU1:860:TMIT"
"BPMS:LTU1:860:X"
"BPMS:LTU1:860:Y"
"BPMS:LTU1:880:TMIT"
"BPMS:LTU1:880:X"
"BPMS:LTU1:880:Y"
"BPMS:LTU1:910:TMIT"
"BPMS:LTU1:910:X"
"BPMS:LTU1:910:Y"
"BPMS:LTU1:960:TMIT"
"BPMS:LTU1:960:X"
"BPMS:LTU1:960:Y"
"BPMS:UND1:100:TMIT"
"BPMS:UND1:100:X"
"BPMS:UND1:100:Y"
"BPMS:UND1:1090:TMIT"
"BPMS:UND1:1090:X"
"BPMS:UND1:1090:Y"
"BPMS:UND1:1190:TMIT"
"BPMS:UND1:1190:X"
"BPMS:UND1:1190:Y"
"BPMS:UND1:1290:TMIT"
"BPMS:UND1:1290:X"
"BPMS:UND1:1290:Y"
"BPMS:UND1:1390:TMIT"
"BPMS:UND1:1390:X"
"BPMS:UND1:1390:Y"
"BPMS:UND1:1490:TMIT"
"BPMS:UND1:1490:X"
"BPMS:UND1:1490:Y"
"BPMS:UND1:1590:TMIT"
"BPMS:UND1:1590:X"
"BPMS:UND1:1590:Y"
"BPMS:UND1:1690:TMIT"
"BPMS:UND1:1690:X"
"BPMS:UND1:1690:Y"
"BPMS:UND1:1790:TMIT"
"BPMS:UND1:1790:X"
"BPMS:UND1:1790:Y"
"BPMS:UND1:1890:TMIT"
"BPMS:UND1:1890:X"
"BPMS:UND1:1890:Y"
"BPMS:UND1:190:TMIT"
"BPMS:UND1:190:X"
"BPMS:UND1:190:Y"
"BPMS:UND1:1990:TMIT"
"BPMS:UND1:1990:X"

"BPMS:UND1:1990:Y"
"BPMS:UND1:2090:TMIT"
"BPMS:UND1:2090:X"
"BPMS:UND1:2090:Y"
"BPMS:UND1:2190:TMIT"
"BPMS:UND1:2190:X"
"BPMS:UND1:2190:Y"
"BPMS:UND1:2290:TMIT"
"BPMS:UND1:2290:X"
"BPMS:UND1:2290:Y"
"BPMS:UND1:2390:TMIT"
"BPMS:UND1:2390:X"
"BPMS:UND1:2390:Y"
"BPMS:UND1:2490:TMIT"
"BPMS:UND1:2490:X"
"BPMS:UND1:2490:Y"
"BPMS:UND1:2590:TMIT"
"BPMS:UND1:2590:X"
"BPMS:UND1:2590:Y"
"BPMS:UND1:2690:TMIT"
"BPMS:UND1:2690:X"
"BPMS:UND1:2690:Y"
"BPMS:UND1:2790:TMIT"
"BPMS:UND1:2790:X"
"BPMS:UND1:2790:Y"
"BPMS:UND1:2890:TMIT"
"BPMS:UND1:2890:X"
"BPMS:UND1:2890:Y"
"BPMS:UND1:290:TMIT"
"BPMS:UND1:290:X"
"BPMS:UND1:290:Y"
"BPMS:UND1:2990:TMIT"
"BPMS:UND1:2990:X"
"BPMS:UND1:2990:Y"
"BPMS:UND1:3090:TMIT"
"BPMS:UND1:3090:X"
"BPMS:UND1:3090:Y"
"BPMS:UND1:3190:TMIT"
"BPMS:UND1:3190:X"
"BPMS:UND1:3190:Y"
"BPMS:UND1:3290:TMIT"
"BPMS:UND1:3290:X"
"BPMS:UND1:3290:Y"
"BPMS:UND1:3390:TMIT"
"BPMS:UND1:3390:X"
"BPMS:UND1:3390:Y"
"BPMS:UND1:3395:TMIT"
"BPMS:UND1:3395:X"
"BPMS:UND1:3395:Y"
"BPMS:UND1:390:TMIT"
"BPMS:UND1:390:X"
"BPMS:UND1:390:Y"
"BPMS:UND1:490:TMIT"
"BPMS:UND1:490:X"
"BPMS:UND1:490:Y"
"BPMS:UND1:590:TMIT"
"BPMS:UND1:590:X"
"BPMS:UND1:590:Y"
"BPMS:UND1:690:TMIT"
"BPMS:UND1:690:X"
"BPMS:UND1:690:Y"
"BPMS:UND1:790:TMIT"
"BPMS:UND1:790:X"
"BPMS:UND1:790:Y"
"BPMS:UND1:890:TMIT"
"BPMS:UND1:890:X"
"BPMS:UND1:890:Y"
"BPMS:UND1:990:TMIT"
"BPMS:UND1:990:X"
"BPMS:UND1:990:Y"
"FARC:GUNB:999:CHRG"

"FARC:GUNB:999:CHRGFLOAT"
"FARC:GUNB:999:CHRGUNC"
"FARC:GUNB:999:FCSTATUS"
"FARC:IN20:212:CHRG"
"FARC:IN20:898:CHRG"
"GDET:FEE1:241:ENRC"
"GDET:FEE1:242:ENRC"
"GDET:FEE1:361:ENRC"
"GDET:FEE1:362:ENRC"
"GDET:FEE1:363:ENRC"
"GDET:FEE1:364:ENRC"
"GJET:LTU1:927:MULT:QDCRAW"
"GUN:IN20:1:A"
"GUN:IN20:1:P"
"KLYS:DMP1:K1:FWD_A"
"KLYS:DMP1:K1:FWD_P"
"KLYS:DMP1:K1:KLYDRV_A"
"KLYS:DMP1:K1:KLYDRV_P"
"KLYS:DMP1:K1:PACOUT_A"
"KLYS:DMP1:K1:PACOUT_P"
"KLYS:DMP1:K1:VOLT"
"KLYS:LI20:51:BVL_FAST"
"KLYS:LI20:51:PHAS_FAST"
"KLYS:LI20:61:BVL_FAST"
"KLYS:LI20:61:PHAS_FAST"
"KLYS:LI20:71:BVL_FAST"
"KLYS:LI20:71:PHAS_FAST"
"KLYS:LI20:81:BVL_FAST"
"KLYS:LI20:81:PHAS_FAST"
"KLYS:LI20:K5:FWD_A"
"KLYS:LI20:K5:FWD_P"
"KLYS:LI20:K5:KLYDRV_A"
"KLYS:LI20:K5:KLYDRV_P"
"KLYS:LI20:K5:PACOUT_A"
"KLYS:LI20:K5:PACOUT_P"
"KLYS:LI20:K5:VOLT"
"KLYS:LI20:K6:FWD_A"
"KLYS:LI20:K6:FWD_P"
"KLYS:LI20:K6:KLYDRV_A"
"KLYS:LI20:K6:KLYDRV_P"
"KLYS:LI20:K6:PACOUT_A"
"KLYS:LI20:K6:PACOUT_P"
"KLYS:LI20:K6:VOLT"
"KLYS:LI20:K7:FWD_A"
"KLYS:LI20:K7:FWD_P"
"KLYS:LI20:K7:KLYDRV_A"
"KLYS:LI20:K7:KLYDRV_P"
"KLYS:LI20:K7:PACOUT_A"
"KLYS:LI20:K7:PACOUT_P"
"KLYS:LI20:K7:VOLT"
"KLYS:LI20:K8:FWD_A"
"KLYS:LI20:K8:FWD_P"
"KLYS:LI20:K8:KLYDRV_A"
"KLYS:LI20:K8:KLYDRV_P"
"KLYS:LI20:K8:PACOUT_A"
"KLYS:LI20:K8:PACOUT_P"
"KLYS:LI20:K8:VOLT"
"KLYS:LI21:11:BVL_FAST"
"KLYS:LI21:11:PHAS_FAST"
"KLYS:LI21:21:BVL_FAST"
"KLYS:LI21:21:PHAS_FAST"
"KLYS:LI21:31:BVL_FAST"
"KLYS:LI21:31:PHAS_FAST"
"KLYS:LI21:41:BVL_FAST"
"KLYS:LI21:41:PHAS_FAST"
"KLYS:LI21:51:BVL_FAST"
"KLYS:LI21:51:PHAS_FAST"
"KLYS:LI21:61:BVL_FAST"
"KLYS:LI21:61:PHAS_FAST"
"KLYS:LI21:71:BVL_FAST"
"KLYS:LI21:71:PHAS_FAST"

"KLYS:LI21:81:BVLТ_FAST"
"KLYS:LI21:81:PHAS_FAST"
"KLYS:LI21:K1:FWD_A"
"KLYS:LI21:K1:FWD_P"
"KLYS:LI21:K1:KLYDRV_A"
"KLYS:LI21:K1:KLYDRV_P"
"KLYS:LI21:K1:PACOUT_A"
"KLYS:LI21:K1:PACOUT_P"
"KLYS:LI21:K1:VOLT"
"KLYS:LI21:K2:FWD_A"
"KLYS:LI21:K2:FWD_P"
"KLYS:LI21:K2:KLYDRV_A"
"KLYS:LI21:K2:KLYDRV_P"
"KLYS:LI21:K2:PACOUT_A"
"KLYS:LI21:K2:PACOUT_P"
"KLYS:LI21:K2:VOLT"
"KLYS:LI22:11:BVLТ_FAST"
"KLYS:LI22:11:PHAS_FAST"
"KLYS:LI22:21:BVLТ_FAST"
"KLYS:LI22:21:PHAS_FAST"
"KLYS:LI22:31:BVLТ_FAST"
"KLYS:LI22:31:PHAS_FAST"
"KLYS:LI22:41:BVLТ_FAST"
"KLYS:LI22:41:PHAS_FAST"
"KLYS:LI22:51:BVLТ_FAST"
"KLYS:LI22:51:PHAS_FAST"
"KLYS:LI22:61:BVLТ_FAST"
"KLYS:LI22:61:PHAS_FAST"
"KLYS:LI22:71:BVLТ_FAST"
"KLYS:LI22:71:PHAS_FAST"
"KLYS:LI22:81:BVLТ_FAST"
"KLYS:LI22:81:PHAS_FAST"
"KLYS:LI23:11:BVLТ_FAST"
"KLYS:LI23:11:PHAS_FAST"
"KLYS:LI23:21:BVLТ_FAST"
"KLYS:LI23:21:PHAS_FAST"
"KLYS:LI23:31:BVLТ_FAST"
"KLYS:LI23:31:PHAS_FAST"
"KLYS:LI23:41:BVLТ_FAST"
"KLYS:LI23:41:PHAS_FAST"
"KLYS:LI23:51:BVLТ_FAST"
"KLYS:LI23:51:PHAS_FAST"
"KLYS:LI23:61:BVLТ_FAST"
"KLYS:LI23:61:PHAS_FAST"
"KLYS:LI23:71:BVLТ_FAST"
"KLYS:LI23:71:PHAS_FAST"
"KLYS:LI23:81:BVLТ_FAST"
"KLYS:LI23:81:PHAS_FAST"
"KLYS:LI24:11:BVLТ_FAST"
"KLYS:LI24:11:PHAS_FAST"
"KLYS:LI24:21:BVLТ_FAST"
"KLYS:LI24:21:PHAS_FAST"
"KLYS:LI24:31:BVLТ_FAST"
"KLYS:LI24:31:PHAS_FAST"
"KLYS:LI24:41:BVLТ_FAST"
"KLYS:LI24:41:PHAS_FAST"
"KLYS:LI24:51:BVLТ_FAST"
"KLYS:LI24:51:PHAS_FAST"
"KLYS:LI24:61:BVLТ_FAST"
"KLYS:LI24:61:PHAS_FAST"
"KLYS:LI24:81:BVLТ_FAST"
"KLYS:LI24:81:PHAS_FAST"
"KLYS:LI24:K5:FWD_A"
"KLYS:LI24:K5:FWD_P"
"KLYS:LI24:K5:KLYDRV_A"
"KLYS:LI24:K5:KLYDRV_P"
"KLYS:LI24:K5:PACOUT_A"
"KLYS:LI24:K5:PACOUT_P"
"KLYS:LI24:K5:VOLT"
"KLYS:LI24:K8:KLYDRV_A"
"KLYS:LI24:K8:KLYDRV_P"

"KLYS:LI24:K8:PACOUT_A"
"KLYS:LI24:K8:PACOUT_P"
"KLYS:LI24:K8:VOLT"
"KLYS:LI25:11:BVL_FAST"
"KLYS:LI25:11:PHAS_FAST"
"KLYS:LI25:21:BVL_FAST"
"KLYS:LI25:21:PHAS_FAST"
"KLYS:LI25:31:BVL_FAST"
"KLYS:LI25:31:PHAS_FAST"
"KLYS:LI25:41:BVL_FAST"
"KLYS:LI25:41:PHAS_FAST"
"KLYS:LI25:51:BVL_FAST"
"KLYS:LI25:51:PHAS_FAST"
"KLYS:LI25:61:BVL_FAST"
"KLYS:LI25:61:PHAS_FAST"
"KLYS:LI25:71:BVL_FAST"
"KLYS:LI25:71:PHAS_FAST"
"KLYS:LI25:81:BVL_FAST"
"KLYS:LI25:81:PHAS_FAST"
"KLYS:LI26:11:BVL_FAST"
"KLYS:LI26:11:PHAS_FAST"
"KLYS:LI26:21:BVL_FAST"
"KLYS:LI26:21:PHAS_FAST"
"KLYS:LI26:41:BVL_FAST"
"KLYS:LI26:41:PHAS_FAST"
"KLYS:LI26:51:BVL_FAST"
"KLYS:LI26:51:PHAS_FAST"
"KLYS:LI26:61:BVL_FAST"
"KLYS:LI26:61:PHAS_FAST"
"KLYS:LI26:71:BVL_FAST"
"KLYS:LI26:71:PHAS_FAST"
"KLYS:LI26:81:BVL_FAST"
"KLYS:LI26:81:PHAS_FAST"
"KLYS:LI27:11:BVL_FAST"
"KLYS:LI27:11:PHAS_FAST"
"KLYS:LI27:21:BVL_FAST"
"KLYS:LI27:21:PHAS_FAST"
"KLYS:LI27:31:BVL_FAST"
"KLYS:LI27:31:PHAS_FAST"
"KLYS:LI27:41:BVL_FAST"
"KLYS:LI27:41:PHAS_FAST"
"KLYS:LI27:51:BVL_FAST"
"KLYS:LI27:51:PHAS_FAST"
"KLYS:LI27:61:BVL_FAST"
"KLYS:LI27:61:PHAS_FAST"
"KLYS:LI27:71:BVL_FAST"
"KLYS:LI27:71:PHAS_FAST"
"KLYS:LI27:81:BVL_FAST"
"KLYS:LI27:81:PHAS_FAST"
"KLYS:LI28:11:BVL_FAST"
"KLYS:LI28:11:PHAS_FAST"
"KLYS:LI28:21:BVL_FAST"
"KLYS:LI28:21:PHAS_FAST"
"KLYS:LI28:31:BVL_FAST"
"KLYS:LI28:31:PHAS_FAST"
"KLYS:LI28:41:BVL_FAST"
"KLYS:LI28:41:PHAS_FAST"
"KLYS:LI28:51:BVL_FAST"
"KLYS:LI28:51:PHAS_FAST"
"KLYS:LI28:61:BVL_FAST"
"KLYS:LI28:61:PHAS_FAST"
"KLYS:LI28:71:BVL_FAST"
"KLYS:LI28:71:PHAS_FAST"
"KLYS:LI28:81:BVL_FAST"
"KLYS:LI28:81:PHAS_FAST"
"KLYS:LI29:11:BVL_FAST"
"KLYS:LI29:11:PHAS_FAST"
"KLYS:LI29:21:BVL_FAST"
"KLYS:LI29:21:PHAS_FAST"
"KLYS:LI29:31:BVL_FAST"
"KLYS:LI29:31:PHAS_FAST"

"KLYS:LI29:41:BVL_T_FAST"
"KLYS:LI29:41:PHAS_FAST"
"KLYS:LI29:51:BVL_T_FAST"
"KLYS:LI29:51:PHAS_FAST"
"KLYS:LI29:61:BVL_T_FAST"
"KLYS:LI29:61:PHAS_FAST"
"KLYS:LI29:71:BVL_T_FAST"
"KLYS:LI29:71:PHAS_FAST"
"KLYS:LI29:81:BVL_T_FAST"
"KLYS:LI29:81:PHAS_FAST"
"KLYS:LI30:11:BVL_T_FAST"
"KLYS:LI30:11:PHAS_FAST"
"KLYS:LI30:21:BVL_T_FAST"
"KLYS:LI30:21:PHAS_FAST"
"KLYS:LI30:31:BVL_T_FAST"
"KLYS:LI30:31:PHAS_FAST"
"KLYS:LI30:41:BVL_T_FAST"
"KLYS:LI30:41:PHAS_FAST"
"KLYS:LI30:51:BVL_T_FAST"
"KLYS:LI30:51:PHAS_FAST"
"KLYS:LI30:61:BVL_T_FAST"
"KLYS:LI30:61:PHAS_FAST"
"KLYS:LI30:71:BVL_T_FAST"
"KLYS:LI30:71:PHAS_FAST"
"KLYS:LI30:81:BVL_T_FAST"
"KLYS:LI30:81:PHAS_FAST"
"KMON:FEE1:421:ENRC"
"KMON:FEE1:422:ENRC"
"KMON:FEE1:423:ENRC"
"KMON:FEE1:424:ENRC"
"LASR:IN20:196:PWR"
"LASR:IN20:1:A"
"LASR:IN20:1:P"
"LASR:IN20:2:A"
"LASR:IN20:2:P"
"LASR:IN20:475:PWR"
"LLRF:IN20:RH:DGN_0_A"
"LLRF:IN20:RH:DGN_0_P"
"LLRF:IN20:RH:DGN_1_A"
"LLRF:IN20:RH:DGN_1_P"
"LLRF:IN20:RH:DGN_2_A"
"LLRF:IN20:RH:DGN_2_P"
"LLRF:IN20:RH:DGN_3_A"
"LLRF:IN20:RH:DGN_3_P"
"LLRF:IN20:RH:REF_0_A"
"LLRF:IN20:RH:REF_0_P"
"LLRF:IN20:RH:REF_1_A"
"LLRF:IN20:RH:REF_1_P"
"LLRF:IN20:RH:REF_2_A"
"LLRF:IN20:RH:REF_2_P"
"LLRF:IN20:RH:REF_3_A"
"LLRF:IN20:RH:REF_3_P"
"PATT:SYS0:1:MODIFIER1"
"PATT:SYS0:1:MODIFIER2"
"PATT:SYS0:1:MODIFIER3"
"PATT:SYS0:1:MODIFIER4"
"PATT:SYS0:1:MODIFIER5"
"PATT:SYS0:1:MODIFIER6"
"PATT:SYS0:1:NSEC"
"PATT:SYS0:1:PULSEID"
"PATT:SYS0:1:SEC"
"PCAV:IN20:365:A"
"PCAV:IN20:365:P"
"PCAV:IN20:365:PH1_0_A"
"PCAV:IN20:365:PH1_0_P"
"PCAV:IN20:365:PH1_1_A"
"PCAV:IN20:365:PH1_1_P"
"PCAV:IN20:365:PH1_2_A"
"PCAV:IN20:365:PH1_2_P"
"PCAV:IN20:365:PH1_3_A"
"PCAV:IN20:365:PH1_3_P"

"PCAV:LI21:300:A"
"PCAV:LI21:300:P"
"PCAV:LI25:300:A"
"PCAV:LI25:300:P"
"PCAV:LI25:300:PH3_0_A"
"PCAV:LI25:300:PH3_0_P"
"PCAV:LI25:300:PH3_1_A"
"PCAV:LI25:300:PH3_1_P"
"PCAV:LI25:300:PH3_3_A"
"PCAV:LI25:300:PH3_3_P"
"PCAV:LI29:100:A"
"PCAV:LI29:100:P"
"PCAV:LI29:100:PH4_0_A"
"PCAV:LI29:100:PH4_0_P"
"PCAV:LI29:100:PH4_1_A"
"PCAV:LI29:100:PH4_1_P"
"PCAV:LI29:100:PH4_3_A"
"PCAV:LI29:100:PH4_3_P"
"PICM:DMP1:698:P1_BLOSS"
"PICM:DMP1:699:P1_BLOSS"
"PICM:LTU1:220:P1_BLOSS"
"PICM:LTU1:252:P1_BLOSS"
"PICM:LTU1:28-6:P1_BLOSS"
"PICM:LTU1:28-7:P1_BLOSS"
"PICM:LTU1:28-8:P1_BLOSS"
"PICM:LTU1:280:P1_BLOSS"
"PICM:LTU1:29-4:P1_BLOSS"
"PICM:LTU1:29-5:P1_BLOSS"
"PICM:LTU1:29-6:P1_BLOSS"
"PICM:LTU1:29-7:P1_BLOSS"
"PICM:LTU1:29-8:P1_BLOSS"
"PICM:LTU1:420:P1_BLOSS"
"PICM:LTU1:450:P1_BLOSS"
"PICM:LTU1:480:P1_BLOSS"
"PICM:LTU1:722:P1_BLOSS"
"PICM:LTU1:732:P1_BLOSS"
"PICM:LTU1:762:P1_BLOSS"
"PICM:LTU1:772:P1_BLOSS"
"PICM:UND1:31-3:P1_BLOSS"
"PICM:UND1:31-4:P1_BLOSS"
"PICM:UND1:31-5:P1_BLOSS"
"PICM:UND1:31-6:P1_BLOSS"
"PICM:UND1:31-7:P1_BLOSS"
"PICM:UND1:31-8:P1_BLOSS"
"PICM:UND1:34-3:P1_BLOSS"
"PICM:UND1:34-4:P1_BLOSS"
"PICM:UND1:34-5:P1_BLOSS"
"PICM:UND1:34-6:P1_BLOSS"
"PICM:UND1:34-7:P1_BLOSS"
"PICM:UND1:34-8:P1_BLOSS"
"PICS:BSY0:1:R119BCH6"
"PICS:BSY0:1:R119DCH1"
"PICS:BSY0:1:R119DCH2"
"PICS:BSY0:1:R119DCH3"
"PICS:BSY0:1:R119DCH5"
"PICS:BSY0:350:IACT"
"PICS:BSY0:371:IACT"
"PICS:BSYA:1220:IACT"
"PICS:BSYA:1480:IACT"
"PICS:BSYA:2275:A:IACT"
"PICS:BSYA:2275:B:IACT"
"PICS:BSYA:2930:A:IACT"
"PICS:BSYA:2930:B:IACT"
"PICS:BSYH:520:1:IACT"
"PICS:BSYH:520:2:IACT"
"PICS:BSYH:762:1:IACT"
"PICS:BSYH:762:2:IACT"
"PICS:BSYH:836:1:IACT"
"PICS:BSYH:836:2:IACT"
"PICS:BSYH:847:1:IACT"
"PICS:BSYH:847:2:IACT"

"PICS:BSYH:854:1:IACT"
"PICS:BSYH:854:2:IACT"
"PICS:BSYH:905:1:IACT"
"PICS:BSYH:905:2:IACT"
"PICS:BSYN:84:IACT"
"PICS:BSYN:85:IACT"
"PICS:BSYS:67:IACT"
"PICS:BSYS:84:IACT"
"PICS:BSYS:85:IACT"
"PMT:DMP1:430:QDCRAW"
"PMT:DMP1:431:QDCRAW"
"PMT:DMP1:696:QDCRAW"
"PMT:IN20:511:QDCRAW"
"PMT:IN20:512:QDCRAW"
"PMT:IN20:621:QDCRAW"
"PMT:IN20:622:QDCRAW"
"PMT:IN20:761:QDCRAW"
"PMT:IN20:762:QDCRAW"
"PMT:LI21:285:QDCRAW"
"PMT:LI21:293:QDCRAW"
"PMT:LI21:301:QDCRAW"
"PMT:LI21:350:QDCRAW"
"PMT:LI21:401:QDCRAW"
"PMT:LI21:402:QDCRAW"
"PMT:LI24:705:QDCRAW"
"PMT:LI24:706:QDCRAW"
"PMT:LI28:750:QDCRAW"
"PMT:LI29:150:QDCRAW"
"PMT:LTU1:755:QDCRAW"
"PMT:LTU1:777:QDCRAW"
"PMT:LTU1:820:QDCRAW"
"PMT:LTU1:850:QDCRAW"
"PMT:UND1:0250:QDCRAW"
"PMT:UND1:0571:QDCRAW"
"PMT:UND1:0650:QDCRAW"
"PMT:UND1:1371:QDCRAW"
"PMT:UND1:1410:QDCRAW"
"PMT:UND1:2171:QDCRAW"
"PMT:UND1:2210:QDCRAW"
"SBST:LI21:1:BVL_T_FAST"
"SBST:LI21:1:PHAS_FAST"
"SBST:LI22:1:BVL_T_FAST"
"SBST:LI22:1:PHAS_FAST"
"SBST:LI23:1:BVL_T_FAST"
"SBST:LI23:1:PHAS_FAST"
"SBST:LI24:1:BVL_T_FAST"
"SBST:LI24:1:PHAS_FAST"
"SBST:LI25:1:BVL_T_FAST"
"SBST:LI25:1:PHAS_FAST"
"SBST:LI26:1:BVL_T_FAST"
"SBST:LI26:1:PHAS_FAST"
"SBST:LI27:1:BVL_T_FAST"
"SBST:LI27:1:PHAS_FAST"
"SBST:LI28:1:BVL_T_FAST"
"SBST:LI28:1:PHAS_FAST"
"SBST:LI29:1:BVL_T_FAST"
"SBST:LI29:1:PHAS_FAST"
"SBST:LI30:1:BVL_T_FAST"
"SBST:LI30:1:PHAS_FAST"
"TCAV:DMP1:360:A"
"TCAV:DMP1:360:P"
"TCAV:IN20:490:A"
"TCAV:IN20:490:P"
"TCAV:LI24:800:A"
"TCAV:LI24:800:P"
"TORO:CLTH:108:TMIT"
"TORO:DMP1:198:TMIT"
"TORO:DMP1:399:CHRG"
"TORO:DMP1:399:TMIT"
"TORO:DMP1:424:TMIT"
"TORO:DMP1:685:CHRG"

"TORO:DMP1:685:TMIT"
"TORO:DMP1:999:TMIT"
"TORO:GUNB:360:CHRG"
"TORO:GUNB:360:CHRGFLOAT"
"TORO:GUNB:360:CHRGUNC"
"TORO:GUNB:360:RAWSUM"
"TORO:GUNB:360:TOROSTATUS"
"TORO:IN20:215:TMIT"
"TORO:IN20:216:TMIT"
"TORO:IN20:431:TMIT"
"TORO:IN20:432:TMIT"
"TORO:IN20:791:TMIT"
"TORO:IN20:792:TMIT"
"TORO:IN20:971:TMIT"
"TORO:IN20:972:TMIT"
"TORO:LI21:205:TMIT"
"TORO:LI21:206:TMIT"
"TORO:LI21:277:TMIT"
"TORO:LI21:278:TMIT"
"TORO:LI24:707:TMIT"
"TORO:LI24:708:TMIT"
"TORO:LI25:235:TMIT"
"TORO:LI25:236:TMIT"
"TORO:LTU0:195:CHRG"
"TORO:LTU0:195:TMIT"
"TORO:LTU1:605:CHRG"
"TORO:LTU1:605:TMIT"
"TORO:LTU1:920:TMIT"
"TORO:LTU1:CH2:CHRG"
"TORO:LTU1:CH3:CHRG"
"TORO:LTU1:CH4:CHRG"
"TORO:LTU1:CH5:CHRG"
"TORO:LTU1:CH6:CHRG"
"TORO:LTU1:CH7:CHRG"
"TPG:SYS2:1:ACVADCA"
"TPG:SYS2:1:ACVADCB"
"TPG:SYS2:1:ACVADCC"
"TPG:SYS2:1:BEAMNRG01"
"TPG:SYS2:1:BEAMNRG23"
"TPG:SYS2:1:BEAMREQ"
"TPG:SYS2:1:BSAACTL"
"TPG:SYS2:1:BSAACTU"
"TPG:SYS2:1:BSAAVGL"
"TPG:SYS2:1:BSAAVGU"
"TPG:SYS2:1:BSADONEL"
"TPG:SYS2:1:BSADONEU"
"TPG:SYS2:1:BSAINITL"
"TPG:SYS2:1:BSAINITU"
"TPG:SYS2:1:CTRLSEQ01"
"TPG:SYS2:1:CTRLSEQ23"
"TPG:SYS2:1:CTRLSEQ45"
"TPG:SYS2:1:CTRLSEQ67"
"TPG:SYS2:1:CTRLSEQ89"
"TPG:SYS2:1:MPSCCLASS07"
"TPG:SYS2:1:MPSCCLASS8F"
"TPG:SYS2:1:MPSMSGCLASS07"
"TPG:SYS2:1:MPSMSGCLASS8F"
"TPG:SYS2:1:MPSMSGHDR"
"TPG:SYS2:1:MPSSTAT"
"TPG:SYS2:1:PHWAVELEN"
"TPG:SYS2:1:PIDL"
"TPG:SYS2:1:PIDU"
"TPG:SYS2:1:RATES"
"TPG:SYS2:1:TSL"
"TPG:SYS2:1:TSU"
"UBLF:UND1:500:AMAX"
"UBLF:UND1:500:ASUM"
"UBLF:UND1:500:BMAX"
"UBLF:UND1:500:BSUM"
"UBLF:UND1:500:CMAX"
"UBLF:UND1:500:CSUM"

```
"UBLF:UND1:500:DMAX"  
"UBLF:UND1:500:DSUM"  
"WIRE:IN20:531:MASK"  
"WIRE:IN20:531:POSN"  
"WIRE:IN20:561:IDES"  
"WIRE:IN20:561:MASK"  
"WIRE:IN20:561:POSN"  
"WIRE:IN20:611:IDES"  
"WIRE:IN20:611:MASK"  
"WIRE:IN20:611:POSN"  
"WIRE:IN20:741:MASK"  
"WIRE:IN20:741:POSN"  
"WIRE:LI21:285:IDES"  
"WIRE:LI21:285:MASK"  
"WIRE:LI21:285:POSN"  
"WIRE:LI21:293:IDES"  
"WIRE:LI21:293:MASK"  
"WIRE:LI21:293:POSN"  
"WIRE:LI21:301:IDES"  
"WIRE:LI21:301:MASK"  
"WIRE:LI21:301:POSN"  
"WIRE:LI24:705:MASK"  
"WIRE:LI24:705:POSN"  
"WIRE:LI27:644:IDES"  
"WIRE:LI27:644:MASK"  
"WIRE:LI27:644:POSN"  
"WIRE:LI28:144:IDES"  
"WIRE:LI28:144:MASK"  
"WIRE:LI28:144:POSN"  
"WIRE:LI28:444:IDES"  
"WIRE:LI28:444:MASK"  
"WIRE:LI28:444:POSN"  
"WIRE:LI28:744:IDES"  
"WIRE:LI28:744:MASK"  
"WIRE:LI28:744:POSN"  
"WIRE:LTU0:122:IDES"  
"WIRE:LTU0:122:MASK"  
"WIRE:LTU0:122:POSN"  
"WIRE:LTU1:715:IDES"  
"WIRE:LTU1:715:MASK"  
"WIRE:LTU1:715:POSN"  
"WIRE:LTU1:735:IDES"  
"WIRE:LTU1:735:MASK"  
"WIRE:LTU1:735:POSN"  
"WIRE:LTU1:755:IDES"  
"WIRE:LTU1:755:MASK"  
"WIRE:LTU1:755:POSN"  
"WIRE:LTU1:775:IDES"  
"WIRE:LTU1:775:MASK"  
"WIRE:LTU1:775:POSN"  
"XCS:DG1:IMB:01:SUM"  
"XPP:MON:IPM:02:SUM"  
"XPP:SB2:IPM:01:SUM"
```

4. Run:

```
[laci@lcls-daemon2 ~]$ eget -ts ds -a name=KLYS:%:KPHR  
"KLYS:LI20:51:KPHR"  
"KLYS:LI20:61:KPHR"  
"KLYS:LI20:71:KPHR"  
"KLYS:LI20:81:KPHR"  
"KLYS:LI21:11:KPHR"  
"KLYS:LI21:21:KPHR"  
"KLYS:LI21:31:KPHR"  
"KLYS:LI21:41:KPHR"  
"KLYS:LI21:51:KPHR"  
"KLYS:LI21:61:KPHR"  
"KLYS:LI21:71:KPHR"
```

"KLYS:LI21:81:KPHR"
"KLYS:LI22:11:KPHR"
"KLYS:LI22:21:KPHR"
"KLYS:LI22:31:KPHR"
"KLYS:LI22:41:KPHR"
"KLYS:LI22:51:KPHR"
"KLYS:LI22:61:KPHR"
"KLYS:LI22:71:KPHR"
"KLYS:LI22:81:KPHR"
"KLYS:LI23:11:KPHR"
"KLYS:LI23:21:KPHR"
"KLYS:LI23:31:KPHR"
"KLYS:LI23:41:KPHR"
"KLYS:LI23:51:KPHR"
"KLYS:LI23:61:KPHR"
"KLYS:LI23:71:KPHR"
"KLYS:LI23:81:KPHR"
"KLYS:LI24:11:KPHR"
"KLYS:LI24:21:KPHR"
"KLYS:LI24:31:KPHR"
"KLYS:LI24:41:KPHR"
"KLYS:LI24:51:KPHR"
"KLYS:LI24:61:KPHR"
"KLYS:LI24:81:KPHR"
"KLYS:LI25:11:KPHR"
"KLYS:LI25:21:KPHR"
"KLYS:LI25:31:KPHR"
"KLYS:LI25:41:KPHR"
"KLYS:LI25:51:KPHR"
"KLYS:LI25:61:KPHR"
"KLYS:LI25:71:KPHR"
"KLYS:LI25:81:KPHR"
"KLYS:LI26:11:KPHR"
"KLYS:LI26:21:KPHR"
"KLYS:LI26:41:KPHR"
"KLYS:LI26:51:KPHR"
"KLYS:LI26:61:KPHR"
"KLYS:LI26:71:KPHR"
"KLYS:LI26:81:KPHR"
"KLYS:LI27:11:KPHR"
"KLYS:LI27:21:KPHR"
"KLYS:LI27:31:KPHR"
"KLYS:LI27:41:KPHR"
"KLYS:LI27:51:KPHR"
"KLYS:LI27:61:KPHR"
"KLYS:LI27:71:KPHR"
"KLYS:LI27:81:KPHR"
"KLYS:LI28:11:KPHR"
"KLYS:LI28:21:KPHR"
"KLYS:LI28:31:KPHR"
"KLYS:LI28:41:KPHR"
"KLYS:LI28:51:KPHR"
"KLYS:LI28:61:KPHR"
"KLYS:LI28:71:KPHR"
"KLYS:LI28:81:KPHR"
"KLYS:LI29:11:KPHR"
"KLYS:LI29:21:KPHR"
"KLYS:LI29:31:KPHR"
"KLYS:LI29:41:KPHR"
"KLYS:LI29:51:KPHR"
"KLYS:LI29:61:KPHR"
"KLYS:LI29:71:KPHR"
"KLYS:LI29:81:KPHR"
"KLYS:LI30:11:KPHR"
"KLYS:LI30:21:KPHR"
"KLYS:LI30:31:KPHR"
"KLYS:LI30:41:KPHR"
"KLYS:LI30:51:KPHR"
"KLYS:LI30:61:KPHR"
"KLYS:LI30:71:KPHR"
"KLYS:LI30:81:KPHR"

fwdCliS

iocLogMsgServer

1. Change /etc/init.d/st.iocLogMsgServer on lcls-daemon2 to point at /usr/local/lcls/tools/iocLogMsgServer/script/st.iocLogMsgServer64
2. Change /etc/init.d/st.fwdCliS on lcls-daemon2 to point at /usr/local/lcls/tools/fwdCliS/script/st.fwdCliS64
3. Restart /etc/init.d/st.iocLogMsgServer on lcls-daemon2
4. Restart /etc/init.d/st.fwdCliS on lcls-daemon2
5. Open lclshome->All->Message Log... and verify that messages are coming through
6. Verify that messages are being added to the Oracle database

gateway

See: [Testing PV Gateways](#)

Name	Purpose	PVs served	Host	CAS port	Beacon Port	Beacon sent to	Document/Comment
LCLS							
gwEbeamServe	Serving LCLS PVs (Ebeam) to Photon	Readonly Write for selected PVs	lcls-daemon3	5080	5081	172.21.40.63 (Photon Gateway Subnet)	Design Admin Allow all Deny OTRS:DMP1:695:.*
gwEbeamServeWF	Serving LCLS PVs (Ebeam) to Photon	Readonly Write for selected PVs	lcls-daemon3	5079	5081	172.21.40.63 (Photon Gateway Subnet)	Deny all Allow OTRS:DMP1:695:.* (dedicated to serve XTCAV OTRDMP camera image PV)
gwLCLS4FACET	Serving LCLS PVs to FACET	Readonly	lcls-daemon10	5070	5069	172.27.75.255 (FACETCA)	Design Admin
gwLCLSPUB	Serving LCLS PVs to public	Readonly	lcls-prod01	5068	5069	134.79.151.255 (DMZ)	Admin
gwLCLSARCH0	Serving LCLS and LCLS-II PVs to Archiver on DMZ	Readonly	lcls-prod01	5076	5069	134.79.151.255 (DMZ)	. * ALLOW (default) Deny a list refer gwLCLSARCH*.dat
gwLCLSARCH1	Serving LCLS and LCLS-II PVs to Archiver on DMZ	Readonly	lcls-prod01	5077	5069	134.79.151.255 (DMZ)	. * DENY Allow portion in the list refer gwLCLSARCH*.dat
gwLCLSARCH2	Serving LCLS and LCLS-II PVs to Archiver on DMZ	Readonly	lcls-prod01	5078	5069	134.79.151.255 (DMZ)	. * DENY Allow portion in the list refer gwLCLSARCH*.dat
gwLCLSARCH3	Serving LCLS and LCLS-II PVs to Archiver on DMZ	Readonly	lcls-prod01	5079	5069	134.79.151.255 (DMZ)	. * DENY Allow portion in the list refer gwLCLSARCH*.dat
gwLCLS4LCLSII	Serving LCLS PVs to LCLS-II	Read and Write	lcls-daemon10	5060	5069	172.27.131.255 (LCLS2IOC) and 172.27.11.255 (MCCSRV)	
LCLS-II							
gwLCLSII4LCLS	Serving LCLS-II PVs to LCLS	Read and Write	lcls2-daemon10	5060	5069	172.27.3.255 (LCLSIOC) and 172.27.11.255 (MCCSRV)	
FACET							
gwFACET4LCLS	Serving FACET PVs to LCLS	Readonly	facet-daemon1	5070	5069	172.27.11.255 (LCLSCA)	Design Admin
gwFACETPUB	Serving FACET PVs to public	Readonly	lcls-prod01	5063	5069	134.79.151.255 (DMZ)	Design

gwEXP2F ACET	Serving Fedora based PCOEdge Camera PVs in B244 to FACET controls	Readonly Write allowed from facet- srv20 to slac-dev-fed	lcls- prod01	5062	5069	facet-srv*: 172.27.72.28 172.27.72.22 172.27.72.23	Not in use currently
gwFACET ARCH	Serving FACET PVs to Archiver on DMZ	Readonly	lcls- prod01	5075	5069	134.79.151.255 (DMZ)	Allow all
Test Facilities							
gwACCTE STPUB	Serving Test Facilities PV to public	Readonly	testfac- daemon2	5048	5049	134.79.219.255 (LCLSDEV)	doc

gwEbeamServe:

1. Change /etc/init.d/st.gwEbeamServe on lcls-daemon3 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwEbeamServe64
2. Restart gateway:

```
[laci@lcls-daemon3]$ /etc/init.d/st.gwEbeamServe restart
```

3. Verify that all LCLS PVs **except** for OTRS:DMP1:695:* PVs can be seen from Photon/PCDS subnet clients.

gwEbeamServeWF:

1. Change /etc/init.d/st.gwEbeamServeWF on lcls-daemon3 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwEbeamServeWF64
2. Restart gateway:

```
[laci@lcls-daemon3]$ /etc/init.d/st.gwEbeamServeWF restart
```

3. Verify that **only** OTRS:DMP1:695:* PVs can be seen from Photon/PCDS subnet clients.

gwLCLS4FACET:

1. Change /etc/init.d/st.gwLCLS4FACET on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4FACET64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4FACET restart
```

3. Verify that LCLS PVs can be seen from FACETCA subnet clients.

gwLCLS4LCLSII:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwLCLSPUB:

1. Change /etc/init.d/st.gwLCLSPUB on lcls-prod01 to use CMDPATH=/afs/slac/g/lcls/tools/gateway/script/st.gwLCLSPUB64
2. Restart gateway:

```
[laci@lcls-prod01]$ /etc/init.d/st.gwLCLSPUB restart
```


3. Verify that LCLS production PVs can be seen when running `lclshome` on LCLSDEV/LCLSDMZ nodes (e.g., `mcclogin`).

gwLCLSARCH0:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-prod01` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLSARCH0_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLSARCH0 restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwLCLSARCH1:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-daemon10` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwLCLSARCH2:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-daemon10` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwLCLSARCH3:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-daemon10` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwLCLSII4LCLS:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-daemon10` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwFACET4LCLS:

1. Change `/etc/init.d/st.gwLCLS4LCLSII` on `lcls-daemon10` to use `CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64`
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwFACETPUB:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwEXP2FACET:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwFACETARCH:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwACCTESTPUB:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

gwCRYO4LCLS:

1. Change /etc/init.d/st.gwLCLS4LCLSII on lcls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st.gwLCLS4LCLSII_64
2. Restart gateway:

```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.

probe

StripTool



Related articles

- [Testing PV Gateways](#)
- [Testing EPICS Extensions](#)