## Testing EPICS Extensions

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## 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/cls/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/Icls/epics/extensions/ChannelWatcher/R3.0.1/bin/rhel6x86_64/CWget |
| CWput | R3.0.1 | /usr/local/Icls/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/Icls/epics/extensions/labca/R3.7.2/bin/rhel6x86_64/ezcaVarArrayTest |
| flatdb | R2.7.00.1.0 | /usr/local/Icls/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/Icls/epics/extensions/gateway/R2.0.6.01.0.1/bin/rhel6x86_64/gateway |
| iocLogMsgServer | R1.6.0 | /usr/local/Icls/epics/extensions/iocLogMsgServer/R1.6.0/bin/rhel6x86_64/iocLogMsgServer |
| msgReceiver | R1.6.0 | /usr/local/Icls/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/Icls/epics/extensions/VisualDCT/R2.7.00.1.0/bin/rhel6x86_64/VisualDCT.jar |

alh

1. Log into Icls-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]$ $TOOLS/script/alarmtree.py LASR -o /tmp/alarmtree_LASR_R3-14-12.json
```

3. Log into Icls-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]$ $TOOLS/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 Icls-srv01 as physics3 and launch Iclshome->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 Icls-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 $EPICS_SETUP/epicsenv-7.0.2-1.0.bash
[physics3@lcls-srv01]$ $TOOLS/script/piopreset -t klys -b li22 -u 21
```


## caSnooper

1. Log into Icls-daemon10 as laci
2. Run:
```
[laci@lcls-daemon10]$ source $EPICS_SETUP/fixed-epics-setup.bash
[laci@lcls-daemon10]$ source $EPICS_SETUP/epicsenv-7.0.2-1.0.bash
[laci@lcls-daemon10]$ $TOOLS/script/doSnoop64.bash 10 20
SIOC:SYSO:ALOO: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
        lcls-daemon1.slac.stanford.edu:40207 @%m/%d/%Y 0.60
        7mcc.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
FBCK:BSY0:1:STATE NOT connected
KLYS:LI24:41:TRIG_DEVNAME NOT connected
KLYS:LI24:51:TRIG_DEVNAME NOT connected
TRIG:LI24:206:TREF NOT connected
@\%m/\%d/\%Y NOT connected
TRS2:SLEDFBCK:COMM:FRESH NOT connected
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

## ChanneIWatcher

1. Reserve MATLAB PVs (Iclshome->All->Matlab GUls->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.

## 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 Icls-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
N4 V4 (0019-08-20 15:15:01.994836
Checking V4 services 2019-08-20 15:15:01.994836
Testing optics service:
Running: eget -ts QUAD:LTU1:880:RMAT
\begin{tabular}{rrrrrr}
-0.156946 & -0.15959 & 0 & 0 & 0.391116 & 0.00540698 \\
0.0133542 & 0.0110122 & 0 & 0 & -0.0173222 & -0.00021337 \\
\(-1.05117 \mathrm{e}-06\) & \(-1.98485 \mathrm{e}-07\) & -0.0074217 & 0.479216 & 0.000110175 & \(1.87252 \mathrm{e}-06\) \\
\(1.12246 \mathrm{e}-07\) & \(2.11945 \mathrm{e}-08\) & \(-5.16277 \mathrm{e}-05\) & -0.0523249 & \(-1.17647 \mathrm{e}-05\) & \(-1.9995 \mathrm{e}-07\) \\
-0.000522173 & -0.00039278 & \(2.5574 \mathrm{e}-08\) & \(3.49462 \mathrm{e}-08\) & -0.0174609 & -0.000185892 \\
0.0346964 & 0.00655144 & 0 & 0 & -3.63658 & -0.0618066
\end{tabular}
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:SYSO: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:SYSO:500:PHOTONENERGY" "BLD:SYSO:500:POS_X" "BLD:SYSO:500:POS_Y" "BLD:SYS0:500:UND_ANG_X" "BLD:SYSO: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"
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"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"
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"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"
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"BPMS:LI21:901:X"
"BPMS:LI21:901:Y"
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"BPMS:LI22:601:Y"
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"BPMS:LI23:601:TMIT"
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"KLYS:LI27:11:PHAS_FAST"
"KLYS:LI27:21:BVLT_FAST"
"KLYS:LI27:21:PHAS_FAST"
"KLYS:LI27:31:BVLT_FAST"
"KLYS:LI27:31:PHAS_FAST"
"KLYS:LI27:41:BVLT_FAST"
"KLYS:LI27:41:PHAS_FAST"
"KLYS:LI27:51:BVLT_FAST"
"KLYS:LI27:51:PHAS_FAST"
"KLYS:LI27:61:BVLT_FAST" "KLYS:LI27:61:PHAS_FAST" "KLYS:LI27:71:BVLT_FAST" "KLYS:LI27:71:PHAS_FAST" "KLYS:LI27:81:BVLT_FAST" "KLYS:LI27:81:PHAS_FAST" "KLYS:LI28:11:BVLT_FAST" "KLYS:LI28:11:PHAS_FAST" "KLYS:LI28:21:BVLT_FAST" "KLYS:LI28:21:PHAS_FAST" "KLYS:LI28:31:BVLT_FAST" "KLYS:LI28:31:PHAS_FAST" "KLYS:LI28:41:BVLT_FAST" "KLYS:LI28:41:PHAS_FAST" "KLYS:LI28:51:BVLT_FAST" "KLYS:LI28:51:PHAS_FAST" "KLYS:LI28:61:BVLT_FAST" "KLYS:LI28:61:PHAS_FAST" "KLYS:LI28:71:BVLT_FAST" "KLYS:LI28:71:PHAS_FAST" "KLYS:LI28:81:BVLT_FAST" "KLYS:LI28:81:PHAS_FAST" "KLYS:LI29:11:BVLT_FAST" "KLYS:LI29:11:PHAS_FAST" "KLYS:LI29:21:BVLT_FAST" "KLYS:LI29:21:PHAS_FAST" "KLYS:LI29:31:BVLT_FAST" "KLYS:LI29:31:PHAS_FAST"
"KLYS:LI29:41:BVLT_FAST"
"KLYS:LI29:41:PHAS_FAST"
"KLYS:LI29:51:BVLT_FAST"
"KLYS:LI29:51:PHAS_FAST"
"KLYS:LI29:61:BVLT_FAST"
"KLYS:LI29:61:PHAS_FAST"
"KLYS:LI29:71:BVLT_FAST"
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"KLYS:LI30:11:PHAS_FAST"
"KLYS:LI30:21:BVLT_FAST"
"KLYS:LI30:21:PHAS_FAST"
"KLYS:LI30:31:BVLT_FAST"
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"KLYS:LI30:41:BVLT_FAST"
"KLYS:LI30:41:PHAS_FAST"
"KLYS:LI30:51:BVLT_FAST"
"KLYS:LI30:51:PHAS_FAST"
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"KLYS:LI30:61:PHAS_FAST"
"KLYS:LI30:71:BVLT_FAST"
"KLYS:LI30:71:PHAS_FAST"
"KLYS:LI30:81:BVLT_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:SYSO: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: DMP 1: 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:BVLT_FAST"
"SBST:LI21:1:PHAS_FAST"
"SBST:LI22:1:BVLT_FAST"
"SBST:LI22:1:PHAS_FAST"
"SBST:LI23:1:BVLT_FAST"
"SBST:LI23:1:PHAS_FAST"
"SBST:LI24:1:BVLT_FAST"
"SBST:LI24:1:PHAS_FAST"
"SBST:LI25:1:BVLT_FAST"
"SBST:LI25:1:PHAS_FAST"
"SBST:LI26:1:BVLT_FAST"
"SBST:LI26:1:PHAS_FAST"
"SBST:LI27:1:BVLT_FAST"
"SBST:LI27:1:PHAS_FAST"
"SBST:LI28:1:BVLT_FAST"
"SBST:LI28:1:PHAS_FAST"
"SBST:LI29:1:BVLT_FAST"
"SBST:LI29:1:PHAS_FAST"
"SBST:LI30:1:BVLT_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"

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"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:MPSCLASS07"
"TPG:SYS2:1:MPSCLASS8F"
"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"
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"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 Icls-daemon2 to point at /usr/local/lcls/tools/iocLogMsgServer/script/st.iocLogMsgServer64
2. Change /etc/init.d/st.fwdCliS on Icls-daemon2 to point at/usr/local/lcls/tools/fwdCliS/script/st.fwdCliS64
3. Restart /etc/init.d/st.iocLogMsgServer on Icls-daemon2
4. Restart/etc/init.d/st.fwdCliS on Icls-daemon2
5. Open Iclshome->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 <br> port | Beaco n Port | Beacon sent to | Document/Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LCLS |  |  |  |  |  |  |  |
| gwEbeam Serve | Serving LCLS PVs (Ebeam) to Photon | Readonly <br> Write for selected PVs | Iclsdaemon3 | 5080 | 5081 | 172.21.40.63 <br> (Photon Gateway Subnet) | Design <br> Admin <br> Allow all <br> Deny OTRS:DMP1:695:.* |
| gwEbeam ServeWF | Serving LCLS PVs (Ebeam) to Photon | Readonly <br> Write for selected PVs | Iclsdaemon3 | 5079 | 5081 | 172.21.40.63 <br> (Photon Gateway Subnet) | Deny all <br> Allow OTRS:DMP1:695:.* <br> (dedicated to serve XTCAV <br> OTRDMP camera image PV) |
| gwLCLS4F ACET | Serving LCLS PVs to FACET | Readonly | Iclsdaemon10 | 5070 | 5069 | $172.27 .75 .255$ <br> (FACETCA) | Design <br> Admin |
| gwLCLSP UB | Serving LCLS PVs to public | Readonly | Iclsprod01 | 5068 | 5069 | $134.79 .151 .255$ <br> (DMZ) | Admin |
| $\begin{aligned} & \text { gwLCLSA } \\ & \text { RCH0 } \end{aligned}$ | Serving LCLS and LCLS-II PVs to Archiver on DMZ | Readonly | Iclsprod01 | 5076 | 5069 | $134.79 .151 .255$ <br> (DMZ) | . ALLOW (default) <br> Deny a list <br> refer gwLCLSARCH*.dat |
| $\begin{aligned} & \text { gwLCLSA } \\ & \text { RCH1 } \end{aligned}$ | Serving LCLS and LCLS-II PVs to Archiver on DMZ | Readonly | Iclsprod01 | 5077 | 5069 | 134.79.151.255 <br> (DMZ) | .* DENY <br> Allow portion in the list refer gwLCLSARCH*.dat |
| gwLCLSA RCH2 | Serving LCLS and LCLS-II PVs to Archiver on DMZ | Readonly | Iclsprod01 | 5078 | 5069 | $134.79 .151 .255$ <br> (DMZ) | . ${ }^{\text {D }}$ DNY <br> Allow portion in the list <br> refer gwLCLSARCH*.dat |
| gwLCLSA RCH3 | Serving LCLS and LCLS-II PVs to Archiver on DMZ | Readonly | Iclsprod01 | 5079 | 5069 | $134.79 .151 .255$ <br> (DMZ) | . ${ }^{*}$ DENY <br> Allow portion in the list refer gwLCLSARCH*.dat |
| gwLCLS4L CLSII | Serving LCLS PVs to LCLS-II | Read and Write | Iclsdaemon10 | 5060 | 5069 | 172.27.131.255 ( LCLS2IOC) and 172.27.11.255 (MCCSRV |  |
| LCLS-II |  |  |  |  |  |  |  |
| gwLCLSII4 LCLS | Serving LCLS-II PVs to LCLS | Read and Write | Icls2daemon10 | 5060 | 5069 | 172.27.3.255 (LCLSIOC) and 172.27.11.255 (MCCSRV) |  |
| FACET |  |  |  |  |  |  |  |
| gwFACET 4LCLS | Serving FACET PVs to LCLS | Readonly | facetdaemon1 | 5070 | 5069 | $\begin{aligned} & 172.27 .11 .255 \\ & \text { (LCLSCA) } \end{aligned}$ | Design <br> Admin |
| gwFACET <br> PUB | Serving FACET PVs to public | Readonly | Iclsprod01 | 5063 | 5069 | $134.79 .151 .255$ <br> (DMZ) | Design |


| gwEXP2F ACET | Serving Fedora based PCOEdge Camera PVs in B244 to FACET controls | Readonly <br> Write allowed from facetsrv20 to slac-dev-fed | Iclsprod01 | 5062 | 5069 | facet-srv*: 172.27.72.28 172.27.72.22 172.27.72.23 | Not in use currently |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| gwFACET <br> ARCH | Serving FACET PVs to Archiver on DMZ | Readonly | Iclsprod01 | 5075 | 5069 | $\begin{aligned} & 134.79 .151 .255 \\ & (\mathrm{DMZ}) \end{aligned}$ | Allow all |
| Test Facilities |  |  |  |  |  |  |  |
| gwACCTE <br> STPUB | Serving Test Facilities PV to public | Readonly | testfacdaemon2 | 5048 | 5049 | 134.79.219.255 <br> (LCLSDEV) | doc |

## gwEbeamServe:

1. Change /etc/init.d/st.gwEbeamServe on Icls-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: DMP $1: 695$ : * PVs can be seen from Photon/PCDS subnet clients.
gwEbeamServeWF:
4. Change/etc/init.d/st.gwEbeamServeWF on Icls-daemon3 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwEbeamServeWF64
5. Restart gateway:
```
[laci@lcls-daemon3]$ /etc/init.d/st.gwEbeamServeWF restart
```

3. Verify that only OTRS: DMP 1: 695:* PVs can be seen from Photon/PCDS subnet clients.

## gwLCLS4FACET:

1. Change /etc/init.d/st.gwLCLS4FACET on Icls-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:
4. Change/etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
5. Restart gateway:
```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.
gwLCLSPUB:
4. Change /etc/init.d/st.gwLCLSPUB on Icls-prod01 to use CMDPATH=/afs/slac/g/lcls/tools/gateway/script/st.gwLCLSPUB64
5. 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 Icls-prod01 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLSARCHO_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 Icls-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:
4. Change/etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
5. 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 Icls-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 Icls-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 Icls-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:
4. Change/etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
5. Restart gateway:
[laci@lcls-daemon10]\$ /etc/init.d/st.gwLCLS4LCLSII restart
6. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.
gwEXP2FACET:
7. Change/etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
8. Restart gateway:
[laci@lcls-daemon10]\$ /etc/init.d/st.gwLCLS4LCLSII restart
9. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.
gwFACETARCH:
10. Change /etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
11. Restart gateway:
```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.
gwACCTESTPUB:
4. Change /etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
5. Restart gateway:
```
[laci@lcls-daemon10]$ /etc/init.d/st.gwLCLS4LCLSII restart
```

3. Verify that LCLS PVs can be seen from LCLS2IOC subnet clients.
gwCRYO4LCLS:
4. Change /etc/init.d/st.gwLCLS4LCLSII on Icls-daemon10 to use CMDPATH=/usr/local/lcls/tools/gateway/script/st. gwLCLS4LCLSII_64
5. 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

