

How to Update an Alarm Handler Soft IOC for an alhConfig-Style Configuration File

1. Log into the [ics-srv-softioc3](#) server. (Note that none of the cryo alarms are using alhConfig configuration files, so I don't have to talk about [cryo-srv-softioc2](#).)
2. The alhConfig files are in CVS and are loaded into the system directory under [/ade/epics/supTop/alhTop/cfg/](#)
Do a [cvs update](#) in that directory to get the updated file:

```
cvs update  
pamgurd@ics-srv01.sns.ornl.gov's password:  
cvs update: Updating .  
P CF-Site-ORNL_Util-Alarms.alhConfig
```
3. You might want to do the change in the [Devel](#) area first. The TOP directory for the soft IOC is [/ade/epics/iocTop/R3.14.8.2/Alarms/<sys>/Devel](#)
To build the new databases, screens and sequences to incorporate the change:

```
make alarm_apps
```

Reboot the soft IOC from the [Devel](#) area:

```
lxRestartDev <ioc name>
```

If you don't know the IOC name, look in the [iocBoot](#) area under the [Devel](#) directory you're in. If you still don't know, you could find the PV you just changed in a .db file in the [db](#) area. Or you could reboot them all.
 - a. You can test your change by opening edm from the [/ade/epics/iocTop/R3.14.8.2/Alarms/opi](#) directory on [ics-srv-softioc3](#), load the [AlarmNew.edl](#) screen and drill down to get to your alarm.
4. After your change looks okay, follow the same step as above in the production area [/ade/epics/iocTop/R3.14.8.2/Alarms/<sys>/<vers>](#)

```
make alarm_apps
```

Reboot the soft IOC from the production area:

```
lxRestart <ioc name>
```
5. On the [accl2](#) server, update the .alhConfig file under [/ade/epics/supTop/alhTop/cfg/<sys>](#) as in step 2 above if necessary.
6. Repeat step 3 on the [accl2](#) server. Make sure that the changes are available in the operations area.

A bit of explanation: Although the main configuration is specified in the [alhConfig](#) file in, it's wrapped in a new-style [xml](#) file to specify what the soft-ioc-based alarm handler needs. An example follows:

```
more /ade/epics/iocTop/R3.14.8.2/Alarms/CF/R1-0-7/alarmCfgs/CF.xml  
<?xml version="1.0" encoding="UTF-8" standalone="no"?>  
<!DOCTYPE alarmconfig SYSTEM "alarmconfig.dtd">  
<config rtype_file="rtypes/CF_rtypes.xml" sns_s="CF" sns_ss=""  
  abbreviation_file="abbreviations.xml" >  
<!-- rtypes location is defined relative to the alarm .xml file  
  (i.e., $TOP/alarmCfgs) -->
```

```

<!-- ALH_ABBREV in RELEASE defines the location of abbreviations.xml -
->
  <alh_config filename="CF/CF-Alarms.alhConfig"
    dictionary_file="CF_alh/CF_dictionary.xml"
    sns_s="CF" sns_ss="" />
<!-- ALH_CONFIG in RELEASE defines the location of .alhConfig files-->
<!-- dictionary file location is defined relative to $TOP -->
</config>

```

How to Add Annunciated Alarm PVs and Restart Soft IOC

1. Log into the [ics-srv-softioc3](#) server.
2. The [ICS_Anc.xml](#) file is in CVS and are loaded into the system directory under
[/ade/epics/iocTop/R3.14.8.2/Alarms/ICS/<ver>/alarmCfgs/](#)
add PVs in this [ICS_Anc.xml](#) file, like this

```

<pv name="PPS_Lin:PLC_A_MajMagFlt_Alarms:Calc" pv_only="1"
  desc="PPS Linac Magnet Fault" prio="elevated" > </pv>

```
3. You might want to do the change in the [Devel](#) area first. The TOP directory for the soft IOC is
[/ade/epics/iocTop/R3.14.8.2/Alarms/ICS/Devel/alarmCfgs/](#)
4. To build the new databases, screens and sequences to incorporate the change:
[make alarms](#)
which will update the summary and speak application.
5. Reboot the soft IOC [ics-ioc-lxalarm-anc](#):
[telnet localhost 7068](#)
[ctrl-x](#)
6. Reboot the soft IOC [ics-ioc-lxalarm-summary](#):
[telnet localhost 7069](#)
[ctrl-x](#)
7. Reboot the soft IOC [ics-ioc-lxalarm-speak](#):
[telnet localhost 7081](#)
[ctrl-x](#)
8. check into [CVS](#) by
[cvs -d \\$CVSROOT ci -m "add ..."](#)
9. After your change looks okay, you need check out in the production area (or create a new version)
[/ade/epics/iocTop/R3.14.8.2/Alarms/<sys>/<vers>](#)
10. On the [accl2](#) server, update the [ICS_Anc.xml](#) file under
[/ade/epics/iocTop/R3.14.8.2/Alarms/ICS/Devel/alarmCfgs/](#)

Do a `cv`s update in that directory to get the updated file:
`cv`s update
To build the new screens to incorporate the change:
`make alarm_apps`