

AN-019 CHARON-VAX & Alpha/OpenVMS host cluster configuration

Author: Software Resources International

Date: 22-May-2001

The CHARON-VAX implementation for OpenVMS/Alpha can form a VMS cluster with its Alpha host when the emulator runs VAX/VMS. This offers the possibility for VAX applications to store their data on the Alpha side and thus make that data easily accessible to other applications running on Alpha / OpenVMS. The procedure to do so is described in this application note.

Setting up a CHARON-VAX / Alpha cluster configuration is similar to installing and configuring a standard VMS Cluster. It is assumed that CHARON-VAX has a dedicated Ethernet adapter available in the Alpha host, which is connected to the same LAN as the Ethernet adapter used by the Alpha/OpenVMS system itself. The only additional step in the process is to release the Ethernet adapter to be used by CHARON-VAX from the Alpha cluster node (step 4).

These step-by-step instructions are provided as an example:

1. Register and load the CHARON-VAX license on the Alpha/OpenVMS system.
2. If DECnet-Plus is used on Alpha execute the script:

```
$ @NET$CONFIGURE ADVANCED
```

```
....
```

```
* Which configuration option to perform?          [1] : 3
```

```
%NET$CONFIGURE-I-SCANCONFIG, scanning device configuration - please wait
```

```
* Data Link name to use for EWA0 (DExxx/TULIP)? [CSMACD-0] :
```

```
* Routing Circuit Name for Data Link 'CSMACD-0'? [CSMACD-0] :
```

```
* Enable Phase-IV Addressing on Routing Circuit 'CSMACD-0'? [YES] :
```

```
* Data Link name to use for EWB0 (DExxx/TULIP)? [CSMACD-1] : none
```

```
....
```

```
* Do you want to generate NCL configuration scripts? [YES] : yes
```

```
....
```

3. Reboot
4. After system start, run the image LAVC\$STOP_BUS.EXE in Alpha/OpenVMS to deassign the cluster from the network adapter used by CHARON-VAX (EWB):

```
MCR SYS$COMMON:[SYSHLP.EXAMPLES]LAVC$STOP_BUS.EXE EWB
```

5. On the Alpha system cluster parameters should be set as:

```
VOTES          1
```

```
EXPECTED_VOTES 1
```

6. With the MKDISK utility create an empty disk image for CHARON-VAX.
7. Install OpenVMS on CHARON-VAX.
8. Add the cluster licenses to VAX/VMS.

9. Rename the CHARON-VAX disk to any unique name:

```
$ SET VOLUME/LABEL=CHRVAX DUA0
```

```
$ PRODUCT REGISTER VOLUME OVMSVAXSYS DUA0
```

10. Configure the VMS cluster on CHARON-VAX (in this example the system name is TST711):

```
$ @CLUSTER_CONFIG
```

```
Cluster Configuration Procedure
```

```
Executing on a VAX System
```

```
DECnet Phase IV is installed on this node.
```

```
This procedure has detected that the LANACP
```

```
LAN server process is running on this node.
```

```
....
```

```
Do you want LANACP instead of DECnet for cluster boot serving? [YES] NO
```

```
MAIN MENU
```

```
1. ADD TST711 to existing cluster, or form a new cluster.
```

```
2. MAKE a directory structure for a new root on a system disk.
```

```
3. DELETE a root from a system disk.
```

```
4. EXIT from this procedure.
```

```
Enter choice [1]:
```

```
....
```

```
Will the LAN be used for cluster communications (Y/N)? Y
```

```
Enter this cluster's group number: 4000
```

```
Will TST711 be a boot server [Y]? N
```

```
Will TST711 be a disk server (Y/N)? N
```

```
Does this cluster contain a quorum disk [N]? N
```

```
....
```

```
Do you want to run AUTOGEN now [Y]? N
```

11. Edit the file MODPARAMS.DAT:

Change value of the parameter VOTES to 0.

12. Run the AUTOGEN utility

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT
```