

CHARON-VAX

application note

AN-025 The VAX/VMS licensing structure

Author: Software Resources International

Date: 23-Jan-06

The VAX/VMS operating system uses the License Management Facility (LMF) to determine on which hardware platform the VMS operating system and its layered products can be used. The license requirement for a particular system can be seen as a two-dimensional array formed by:

1. The Availability Code which covers a particular aspect of software licensing. The current Availability Codes are identified with the letters A-I.
2. The number of units per Availability Code. This indicates the minimum number of units that are needed in a license to allow the capability defined by its Availability Code to function on a given hardware platform.

For example: A VAX 3600 system requires 60 units of Availability code A. A license that has 60 or more units for code A will allow the function defined by A (the operation of the base VAX/VMS operating system) to work. A license with less than 60 units of A will not allow base VAX/VMS operation on a VAX 3600.

The Availability Codes are defined as follows:

- A: VAX/VMS Capacity or OpenVMS Unlimited or Base
- B: VAX/VMS F&A Server
- C: VAX/VMS Concurrent User
- D: VAX/VMS Workstation
- E: VAX/VMS System Integrated Products
- F: VAX Layered Products
- G: Type: G, Reserved
- H: Alpha Layered Products
- I: Layered Products

The VMS license information is important when considering the transfer of a VMS system from a VAX hardware system to a CHARON-VAX emulator model. The VMS licenses coming from a VAX system will typically correspond precisely with the license requirements of that existing hardware VAX model.

The various CHARON-VAX implementations each emulate a specific VAX hardware model; hence have a minimum unit requirement for each Availability Code. If the VMS license on the existing hardware system does not have sufficient units for a specific Availability Code, the functions covered by that Availability code will not work on the emulated VAX model.

CHARON-VAX application note

The following table lists the VAX models that the CHARON-VAX products emulate and the respective Availability Code requirements:

Emulated VAX	A	B	C	D	E	F	G	H	I
MicroVAX 3100 Model 96	60	*	100	*	230	20	*	*	20
MicroVAX 3100 Model 98	60	*	100	*	230	20	*	*	20
MicroVAX 3600	60	*	100	*	230	200	*	*	200
MicroVAX 3600 <i>With dummy_vcb02 enabled</i>	60	*	100	100	230	200	*	*	200
MicroVAX 3900	60	*	100	*	230	200	*	*	200
MicroVAX 3900 <i>With dummy_vcb02 enabled</i>	60	*	100	100	230	200	*	*	200
MicroVAX II	18	*	100	*	230	50	*	*	50
VAX 4000 Model 106	60	*	100	*	230	100	*	*	100
VAX 4000 Model 108	60	*	100	*	230	100	*	*	100
VAX 6000 Model 610	81	*	*	*	400	1200	*	*	1200
VAX 6000 Model 620	119	*	*	*	600	1800	*	*	1800
VAX 6000 Model 630	143	*	*	*	600	2400	*	*	2400
VAX 6000 Model 660	220				600	2400	*	*	2400
VAXserver 3600	*	100	*	*	50	10	*	*	10
VAXserver 3600 <i>With dummy_vcb02 enabled</i>	*	*	*	100	50	10	*	*	10
VAXserver 3900	*	100	*	*	50	10	*	*	10
VAXserver 3900 <i>With dummy_vcb02 enabled</i>	*	*	*	100	50	10	*	*	10

The sign * indicates that the Availability Code is not relevant for the particular system.

When considering the transfer of a VMS system to a CHARON-VAX model, check that you possess the licenses required to run your software on your selected CHARON-VAX. Use the command `$ show license/units` to display the units required by any VAX or CHARON-VAX. Use `$ show license` to display your installed licenses.

Note that the first four Availability Codes (A - D) concern the various types of VMS systems that are not interchangeable. For instance, a license with units for Availability Code "D" only will not work on a system that requires units of Availability Code "A".

[30-18-025]