

AN-025 The VAX/VMS licensing structure

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Date: 22-Apr-03

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 CHARON-VAX products, the VAX model they emulate and the respective Availability Code requirements:

<i>Product</i>	<i>Emulated VAX</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>
CHARON-VAX/Industrial	MV II (+)	18	*	100	*	230	50	*	*	50
CHARON-VAX/Industrial	VAX 3600 (ka650a.rom)	60	*	100	*	230	200	*	*	200
CHARON-VAX/Industrial	VAX 3600 (ka650b.rom)	*	100	*	*	50	10	*	*	10
CHARON-VAX/XM(+)	VAX 3100-96	60	*	100	*	230	20	*	*	20
CHARON-VAX/XL(+)	VAX 3100-98	60	*	100	*	230	20	*	*	20
CHARON-VAX/AXP +	VAX 3100-98	60	*	100	*	230	20	*	*	20

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 the available license units in the VAX system you want to transfer. The license data can be listed with the following VMS command: **\$ show license/units.**

Note that the first four Availability Codes (A - D) concern the various types of VMS systems that are not interchangeable. For instance, units for Availability Code "D" do not help if Availability Code "A" units are required.

For example:

VMS licenses for workstations cannot be used with the current CHARON-VAX models because VAX workstation licenses provide units for availability code "D", not for the currently required VAX "A" or server "C" units.

[30-18-025]