Field Test of ISL

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1 Introduction

This document is the field test plan for the ISL software based on the 6000-500 CPU platform, secondarily extending to include the 6000 CPU family as supported by each family member, and the 9000 CPU. This support is a deliverable product in the release that the 6000-500 CPU is shipped with.

This plan covers the field test of the Initial System Load - ISL - software with the InfoServer 100 field test level software and a version of the VMS 5.4 field test software. Within the VMS 5.4 field test software are boot elements of the ISL code and runtime elements of the code. This field test is to test that those elements perform the function of installing the VMS software from a compact read-only disk onto a local disk on the client 6000-500 platform.

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2 What is a Field Test?

A field test is intended to test product(s) that may still be in development by placing it in a realistic user environment. Field test is also intended to complement the thorough system testing carried out by Digital.

Field test will also verify that the packaging is straightforward, that the product is customer-installable (where applicable), that the documentation is useful, correct and clear, and that the support arrangements are ready.

From the customers point of view, field test provides an opportunity to use a new or updated piece of software (or system), to assess how it would meet their requirements, and to contribute significantly towards hardware/software and system development.

Customers who are selected as field test sites must have the prerequisite hardware/software technical expertise, personnel, application knowledge, and commitment to test the hardware/software comprehensively.

3 Product Description

The Networked Initial System Load (ISL) Function in combination with the InfoServer 100 offers CD-ROM technology for 6000 platform systems directly on Ethernet to simplify the distribution of software in a networked environment. 6000 systems supporting networked ISL have the capability to do access compact disk distribution media from InfoServer 100 systems.
This solution is geared toward sites that can make use of remote installation media on their 6000 platform systems.

4 Schedule
This solution is part of the Mariah Field Test site plan and will commence field test as part of the field test update of that product. Customer field test update is scheduled to being in mid August.

5 Software Prerequisites
A field test update of VMS V5.4 software compact disk distribution media will be shipped to the customer sites as part of the package shipped to the sites. All the customer sites selected are under agreements for one of the platforms supporting this software, Mariah, InfoServer 100, VMS V5.4. The VMS V5.4 update package can be considered part of the testing of VMS V5.4 covered under the VMS license already in place. The software for the InfoServer 100 box will be shipped by Digital as part of the Server field test kit.

6 Hardware Prerequisites
Digital will provide the InfoServer 100 but the customer must have the ability to connect the box to either Ethernet thick or thin wire. In the case of thick wire the customer must have either an H4000 or a DELNI. In the case of thin wire the connectors are with the box. The server must be connected to the same Ethernet segment or via an Ethernet bridge to the booting client/6000 Platform system.

7 Field Test Objectives
The purpose of this field test is to demonstrate that, in representative customer environments, networked ISL has met the functionality, quality, and performance goals for the release being field tested. The product must be shown to be sufficiently effective and operable to be sent to a large VAX/VMS installed customer base and new VMS customers.

Digital seeks to select a minimum of three field test sites that will commit to participate in the field testing of the networked ISL software/hardware.

8 Field Test Requirements
Digital will provide the InfoServer 100 hardware and software discussed in previous sections of this plan. The customers environment for testing the networked ISL product must include an Ethernet to which is connected a 6000 based platform. This field test will not be providing the 6000 platform processors or terminals used in the field test.

9 Customer Field Test Site Requirements
The following requirements apply to all networked ISL field test sites:

• "All standard Digital Field Test Policies will apply. Variances from the standard field test agreement requires mutual consent by both Digital and the customer.
• Sites must be willing to perform significant product testing and provide feedback about aspects of the product.
The principal mechanism for reporting problems in the U.S. is via an on-line reporting system (accessible via a toll-free 800 number within the United States). Sites must, therefore, have a modem (at least 1200 baud) and a terminal which can be used for that purpose. As the customers selected are already VMS V5.4 field test sites the current QAR accounts and 800 number known by the customer should be used. The ESS QAR database has been set up for reporting problems and for inquiries about the ESS/networked ISL field test. The database to be selected from the QAR system is called ESS.

Digital is providing field test software and hardware that should not be considered perfect or error free. Remember that the purpose of the field test is to discover problems and report them to Digital so that they may be fixed. We cannot guarantee the operability of the software nor the effectiveness. However, every effort will be made to correct the problems that are found during the field test prior to FCS to ensure a quality product.

It is preferred that sites not use any unsupported hardware devices, unless specifically requested to do so by Digital. If a site wishes to use unsupported hardware or software, a prior agreement must be reached between the field test site and VMS Engineering via the QAR system. It is recommended that Initial System Installations involve homogeneous DEC equipment environments wherever possible.

### 10 Field Test Responsibilities

All of the field test responsibilities that apply to either the ESS field test of the Mariah field test also apply to this field test. These responsibilities include and are not limited to:

- Sign the field test license VMS V5.4 hardware addendum agreement.
- Install the FT hardware/software and VMS V5.4 FT update within two working days of its receipt. Customer must ensure that all necessary hardware (including cables and terminals) and prerequisite software are in place prior to field test start.
- Test the Initials System Load software for specified systems.
- Submit Quality Assurance Reports (QARs) for all problems with software or documentation. Submission of QARs should be on a daily basis if necessary.

The QAR (or Quality Assurance Reporting) is a vehicle for reporting problems and making inquiries and comments directly to VMS Engineering. Each customer should use their current V5.4 field test account.

- Respond to concerned parties Digital’s Product Management by phone polling and/or answer specific questions asked via the on-line QAR system or written poll.
- Return field test materials or sign certification of destruction letter at the conclusion of field test.

### 11 Networked Initial System Loading

With the introduction of InfoServer 100, Installation of the Operating System is possible from Compact Disks over the Ethernet. The Initial System Load software accesses blocks of data from the InfoServer 100 to read in Standalone backup. Standalone backup is the program that VMS uses to install its operating system from a source media to a destination media.
The booting of standalone backup from the InfoServer 100 box works as follows. The user interacts with the console terminal of the target CPU. For now this target CPU is a 6000-500 system. At the console the user determines the device to boot from. This is accomplished by typing the show Ethernet command at the console.

>>> Show Ethernet
XMI:B 08-00-0D-0B-79-40

From this display the user can see that the XMI address of the device is represented by the letter B. There is no BI designator for this type of device. The user then proceeds to enter the appropriate boot device qualifiers for the Ethernet device in the configuration, and the filename - ISL_LVAX.SYS - after the filename qualifier. The applicable boot command for the example above is:

>>> B/XMI:B/filename:ISL_LVAX EX0

Once this command is entered the InfoServer 100 box supplies the file ISL_LVAX.SYS to the requesting CPU. This file is loaded into the CPU and the header and menu for the Initial System Load Software is printed to the console terminal.

Initial System Load Function
1. Display Menu
2. Help
3. Choose Service
4. Exit

Enter a function ID:

There are four numbered options to the menu that the user can choose from. The first option redisplays the menu again. The second option lists a help file that explains what each menu command does. The third option is used to actually boot standalone backup. And the fourth option is used to halt the system. The fourth option is akin to the user halting the CPU with a control P.

The third option on the menu does all the work for booting. It is entitled "Choose Service". A service is a named set of blocks provided over the network to the user by the InfoServer 100. Each VMS installation CDrom is a named service, typically with a name of the form VMS0xx where xx designates the version, for example VMS054.

The user chooses this third option by entering the number 3 at the "Enter a function ID:" prompt. After the number 3 is typed, followed by a carriage return, a secondary menu appears on the screen offering the user two choices. These two choices allow the user the option of how to proceed; either option will boot standalone backup. Two options exist because only one option will not meet all of the users' needs. The two options are:

1. Find Services
2. Choose Known Service

Option 1 allows the user to see what services are available to boot from. This option surveys the network and displays on the console terminal what "services" are available to the user. Each service is shown in the format of a service name, server name, and Ethernet address. An example of the format is below:
service name  
server name  
ethernet address  

An example of a service name filled in is below:
VMS054  
ESL_08000D0A8866  
08-00-0D-0A-88-66  

For each service printed out a number is shown to the left hand side. This number is displayed so that the user can enter a number to boot from at the prompt following the display of all services. For example:

#1  
VMS054  
ESL_08000D0A8866  
08-00-0D-0A-88-66  

#2  
SYS4  
ESL_08000D0A8866  
08-00-0D-0A-88-66  

Enter a number >>>  

To boot standalone backup from VMS054, the user enters the number 2 at the prompt. Then the process of bringing standalone backup into the target CPU occurs and the user waits for the VMS banner to be displayed onto the screen. This is how the first option, the "Find Services" option, works.

The second option is much simpler. This options allows the user to enter a "known" service name to boot from. The user must now the name of the service to boot from prior to invoking this option. To use this option the user enters the value of 2, followed by a carriage return at the prompt as displayed in the example below.

1. Find Services  
2. Choose Known Service  

=> 2  

Then the user is prompted to enter the option to continue with. When the number 2, designating the option "Choose Known Service" is entered a prompt is displayed on the screen asking the user to enter a known service name. The format of this prompt is: "Enter a known service name:". The user can then enter a known service name, for example, VMS054.  

At this point the process of booting standalone backup begins and continues until finished.
12 Testing ISL

The testing and verification of ISL functionality and completeness consists of the user completely installing the VMS operating system onto a local disk on the client CPU from a compact disk located on the InfoServer 100. This process includes the following steps:

- Booting Standalone Backup
- Performing a backup operation from the CD to a local disk
- Rebooting the system and completing the installation of the Operating System

A successful installation yields a full operating system installation. As outlined above, the user first boots standalone backup. The directions on how to do this were included in the previous section. The directions and commands for the backup operation are listed in the installation guide for the applicable CPU. (These commands are not unique to the ISL process from the InfoServer 100 box and are not included here for brevity.) Directions for completing the installation, applying the savesets and MUP, are included in the installation guide. The only portion the users sees that is unique to an InfoServer 100 installation is the identification of the source media for the installation. The user must input the name DAD1 as the source media from the client CPU.